

**Borough of Ho-Ho-Kus  
Bergen County, New Jersey  
Planning Board Minutes  
January 8, 2015  
Work Session**

**Meeting Called to Order at: 7:38PM**

**Open Public Meetings Statement: Read into the record by the Board Secretary.**

**Roll Call:** Messrs. Berardo, Pierson, Reade, Cirulli, Newman, Councilman Rorty (absent), Chairman Hanlon, Mayor Randall (absent)

**Also in Attendance:** Gary J. Cucchiara, Esq., Board Attorney; Mr. Ed Snieckus, Borough Planner; Ms. JoAnn Carroll, Board Secretary.

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**Chairman Hanlon:** instructed Board to review minutes of 8/7/14, 10/9/14 and 12/4/14 which will be voted on at next week's meeting.

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**Ongoing Business:**

**Hollows at Ho-Ho-Kus, Chamberlain Developers, W. Saddle River**

**Road/Van Dyke Drive, Block 802, Lots 1, 2, 3, 4 and 10:** major subdivision application; the applicant proposes to construct and market single family dwelling units on each of the properties; major soil movement application.

Chairman Hanlon: introduced application; reviewed meeting procedures.

Mr. Whitaker: The application tonight will be for soil movement. Before we proceed, just for clarification administratively, one of the owners of the property, Bruce Costanza, passed away in November and it has come to my attention that there could be an objection at this point as to whether there is consent on behalf of the estate of Mr. Costanza to proceed with owner's consent. So, for the record, I'm going to provide you with a letter from counsel of the estate confirming that the beneficiary of the state consents to the continuation of the matter, and the objection that would be raised perhaps has now been obviously met and that the consent is now ongoing.

Mr. Inglima: Mr. Whitaker just handed me a copy of the letter that he described. For the record, Robert Inglima Jr., representing nine homeowners, nine sets of homeowners in the area of this property. I know that I had addressed this issue at the onset of the entire proceeding, but I would ask that there

would be an appropriate time, a clarification as to the current owner of the property and the fact that the current owner of the property continues to have an enforceable contract with the applicant, Chamberlain Developers Inc.

Mr. Whitaker: I will represent to the board that the contract is ongoing. I had some certification back in April of last year, submit another copy now.

Mr. Inglima: Only the trustees can act on behalf of the trust.

Mr. Whitaker: On the original application, trustees did sign, but I'll get that reconfirmed. With that said, I will call my first witness and only witness, Mark Palus, for the purposes of the soil movement application.

Chairman Hanlon: Just for the record, Mr. Palus has been sworn in.

Mr. Whitaker: Please just confirm on the record that you are still a licensed engineer in the state of New Jersey and other than being older, nothing has happened as far as your status is concerned. Is that correct?

Mr. Palus: That would be accurate, yes.

Mr. Whitaker: Have you prepared the soil movement application that's been submitted to this board and to the Borough of Ho-Ho-Kus in connection with this development?

Mr. Palus: Yes, I did.

Mr. Whitaker: Obviously, you are familiar with this application, but for the record, you testify that it pertains to the subdivision aspect. Is that correct?

Mr. Palus: That is correct, yes.

Mr. Whitaker: And at this point, you have an application made and filled out and completed with a plan that shows that soil movement. Is that correct?

Mr. Palus: That is correct, yes.

Mr. Whitaker: And the application that has been submitted is the application that is provided by the Borough of Ho-Ho-Kus for

submission for what would be referred to as a major soil movement application.

Mr. Palus: Correct.

Mr. Whitaker: Okay, what I would like you to do is to explain to the board, reviewing the plan, what the quantities are and what the purpose of the soil movement is for. I know it's fairly obvious it's for the development of the subdivision, but I wanted to just place it all on the record.

Mr. Palus: Sure. What we did is we broke the proposed soil movement into two different categories. One being for the infrastructure, which is the construction of road and the drainage improvements associated with the roadway construction. And the second being for the individual homes. So, for the infrastructure, we're proposing a total excavation of 1,050 cubic yards, a total fill of 490 cubic yards. Those are fairly concrete numbers based on proposed improvements as they are shown on the current plan. As we move on to the individual lot construction, as I testified to earlier, the proposed homes shown in this plan are conceptual by nature and the final rating and therefore the final soil moving numbers are going to be dependent on the specific developments of each of these lots. But using the conceptual lots as a basis, we have a net excavation of 5,945 cubic yards, a total amount of fill on site of 1,610 cubic yards. So, if we combine the infrastructure and the individual lots, you get a net excavation of 6,995 cubic yards and a net fill of 2,100 cubic yards, which means we will have a net excess of soil on the property at the end of the job, end of it, once everything is done of 4,895 cubic yards.

Mr. Whitaker: So, it would be correct to say that the 4,895 cubic yards would be the exportation part?

Mr. Palus: That's correct.

Mr. Whitaker: Now, you had testified that the quantities that have been calculated for the lots is somewhat conceptual in nature. Is that fairly common with soil movement applications?

Mr. Palus: Correct, especially on a large application just as this when, again, we've got 11 lots that will be created. The individual development of each lot is going to have some impact on the overall soil numbers, but within a reasonable margin of

error, I think the numbers I've given you will reflect what the scope of the project will consist of.

Mr. Whitaker: Now, you've had the opportunity of preparing this application to review the soil movement ordinance. Is that correct?

Mr. Palus: That's correct, yes.

Mr. Whitaker: And there are certain standards that are set forth in chapter 63 of your ordinance pertaining to the requirements in the guidelines for soil movement. You're familiar with those.

Mr. Palus: Correct, yes.

Mr. Whitaker: Based on the plan that you have submitted, is it correct to say that the applicant will be able to comply with those barriers, standards, and guidelines.

Mr. Palus: Yes, it is.

Mr. Whitaker: So, all of the required improvements and soil erosion aspects, if you will, will all be complied with.

Mr. Palus: Yes.

Mr. Whitaker: And in connection with the soil movement on each individual lot, those exact numbers will be further confirmed when an exact architectural plan and final building plan as part of the submission for individual permit is prepared and submitted to the Borough.

Mr. Palus: Correct. After the appropriate time, we'll give those exactly numbers on each individual lot.

Mr. Whitaker: Now, in connection with the soil movement for what you have testified to as being quote "infrastructure," those soil movement quantities pertain also to the various drainage improvements that would be installed.

Mr. Palus: That's correct, yes.

Mr. Whitaker: In connection with the soil movement aspect, have you had the opportunity to perform certain additional soil logs for the property itself?

Mr. Palus: Yes, we did. As I testified to earlier, on July 14th, we did three separate soil logs on the property, two of them being in what's being called the low area adjacent to West Saddle River Road in the southeast corner of the property. One was done in the southwest corner of the property just off of Van Dike Drive. Subsequent to that, on December 1st, we conducted two additional soil logs, which were intended to address the soil conditions in the area to propose storm water recharge basin, which would be underneath the right-of-way as per the current design. So, we did do two additional tests totals immediately in this area.

Mr. Whitaker: Now, it's my understanding that common practice is to take the final test soil logs before drainages install and not particularly at the junction when improvements are proposed.

Mr. Palus: It's certainly not out of the norm to do it at the end and during construction to make adjustments as needed.

Mr. Whitaker: Now, you recognize in this instance an issue was raised as to whether the soil log that you had submitted had different locations on the property, maybe different than the one where the drainage is now proposed to go and that that could create an adverse situation for the design. Is that correct?

Mr. Palus: That's correct. The previous tests were done about 150 to 200 feet away from the site. So, now we've done two holes directly in the area in proposed recharge basins.

Mr. Whitaker: Notwithstanding the fact that there have been expert testimony provided by the developer representatives that they felt it would be the same. You've gone out and had those done.

Mr. Palus: That's correct, yes.

Mr. Whitaker: Did anyone witness those test holes?

Mr. Palus: The Board Engineer, Mr. Hals, was present during the excavation process.

Mr. Whitaker: What date did that occur?

Mr. Palus: December 1st, 2014.

Mr. Whitaker: And do you have the results of those tests?

Mr. Palus: Yes, I do.

Mr. Whitaker: And what does that reveal?

Mr. Inglima: All right, I'm going to object at this point. Mr. Whitaker, I understand that this was done after he had completed his case on the subdivision, but Mr. Whitaker is now introducing or seeking to introduce information that requires the subdivision application to be reopened to the extent that anything was closed to the public involving the subdivision. The testimony that he appears about to induce from Mr. Palus will deal with the subdivision application. It will supplement testimony that was previously given with respect to soil logs that were performed that he described from I guess July. It will supplement testimony of Dr. Pazwash who testified at length regarding the subdivision, and it will certainly supplement testimony of Mr. Palus previously. So, as long as we have the understanding that I'm not going to be limited in terms of what I can ask Mr. Palus regarding these soil logs, I want that to be noted for the record that he is now supplementing the case that was provided for the subdivision, and this is not restricted merely to the soil moving application.

Mr. Whitaker: The purpose of bringing this before the board at this time is that there was a lengthy discourse in discussion and questioning by the objecting council and members of the public as to whether the design standards for the drainage could in fact be installed because of soil conditions. As part of soil movement, the board has to understand what the numbers would be for bringing in or exporting soil for the infrastructure. So, in order for me to clarify the correct numbers for the infrastructure aspect of the soil movement, I'm showing you soil logs that demonstrate that the soil does not have to be changed or modified in those areas where the drainage is being installed. And that's the sole purpose for it. The alternative I had was to wait and see until after an approval is granted, assuming that it is, and then submit the soil log which is typically done for the drainage area before the Borough engineer would approve the exact location to install the infrastructure. That's the sole purpose of it, is to take the mystery out of something that was raised once before. Otherwise, the soil movement quantities would have

had to change if we found that the soil there was adverse. There'd have to be either import going on or there would have to be exporting going on because the soil conditions were not correct. From the first day that we started with this, we had stated -

Mr. Inglima: Objected.

Mr. Whitaker: The first thing, we took a position that the soil would be acceptable, and all we're doing now is telling you that the soil is acceptable so it doesn't change our numbers in connection with the installation of the infrastructure. Common policy, that's what it is. We're not going back to go over drainage calculations and filibuster on something that we spent much too much time on already.

Mr. Inglima: I object to the characterization, filibuster. I have asked direct questions at all times for the proceeding, and I think that the record will clearly show that my questions were all relevant to the matters that are being submitted. However, Mr. Whitaker's offer of limitation is frankly outside the scope of what he can do at this point. He has opened the door. He has attempted to introduce information. I have no objection to him introducing the information as long as we'll have a clear understand that he has opened the door. I cannot be limited. I mean, I haven't even seen this information. Mr. Hals was at the site in December. December 1st, I think they said. First. And you know, I haven't seen any supplementary report from Mr. Hals. I'm not aware of any supplementary report having been submitted to the board. I mean, there have been no calculations. There has been no data. There have been no soil logs. There's nothing other than what Mr. Whitaker is introducing, his objection to my objection. Now, I don't have a problem with Mr. Palus talking about this, but I need to know at this point that the board is going to allow me to have time to review what he's submitted to be able to request that there is documentation and information that backs up the testimony that he's going to provide, and that if need be that I have an opportunity to address it with my own expert. I don't really know that I will, but I don't know what it says yet. And the fact of the matter is, there are so many unknowns, I want to make sure everybody understands my position for my clients before this starts getting on the record. I can't have a situation where later on everybody's gonna say, wait, wait, wait, you can't ask questions now. We're just talking about soil. So, that

was the reason for my statement, my objection, my request for an agreement of council for the parties that this is exactly what is going to take place. There will be no filibuster. It could be that the information is going to be provided won't raise any questions at all, but I don't know what it is, and I haven't seen it before this moment or before a moment from now, and therefore, I have to address this issue this way.

Mr. Whitaker: The proper that I'm making was, again, to educate that based on the soil conditions that will be testified to that no additional soil would have to be imported or exported for where the drainage or infrastructure is being installed. And that's the proper that Mr. Palus is going to offer. He will then be able to provide that soil log and if Mr. Inglima wishes to ask questions about how that test was performed and what the soil log indicates, I have no object to that. For the soil log testing that was done through December 1st, but I'm not going back to revisit other soil logs or another other aspect of the drainage system. It's merely to explain what the soil condition and the soil movement talks about was the conditions of soil. It's merely to talk about the soil condition on those two locations.

Mr. Cucchiara: Logs will be presented tonight, is that correct?

Mr. Whitaker: Yes. So, with that understanding, we can move on.

Mr. Cucchiara: I think so.

Mr. Inglima: No, I'm not gonna let you agree to be limiting - I don't want to ask about soil logs that were performed last July. I'm only interested in the information that this gentleman is going to submit tonight.

Mr. Cucchiara: Well obviously, you have the right to ask questions within the scope of this testimony tonight, and it appears that that may be the case. So, that should satisfy your concerns, correct?

Mr. Inglima: Except that we all know that my client's witness testified that no tests have been performed in the area where the proposed storm trap retention system was being proposed at the site. They are apparently now going to submit those logs or what they say are logs of that area. We'll hear the testimony. To the extent that it has a bearing on any calculations that were made for drainage, I don't know what

the answer is going to be. But to the extent that it does, I have to reserve the right to ask about it. But I'm not going to reopen the entire subdivision case from day one, and I don't want to go back to July or anything else. I just want to focus on this information, but I can't have somebody object later that because we're only dealing with the soil movement application, that those questions somehow exceed the scope of the direct testimony.

Mr. Cucchiara: I don't think I'm hearing that.

Mr. Whitaker: I never said that.

Mr. Inglima: Fine. We could've had a stipulation from the first moment.

Mr. Whitaker: We probably could've had -

Mr. Whitaker: What we were saying is that the objection got raised when I used the word soil log results that I'm reopening the subdivision. What I'm saying is I'm not, and as long as we're focusing on the soil log test of December 1st, I've stated to say that Mr. Inglima can ask questions about the soil log test of December the 1st. Obviously, he has a right to ask questions about it if I introduce it. And now I've heard from Mr. Inglima that he's not going back to ask questions about July, so that's refreshing.

Mr. Whitaker: Well, the proper at this point is to show that we did not have to bring in other soil or remove other soil. That's what the proper is for. And it's not to go back and redo the drainage design or talk about the drainage. Remember, the testimony of our experts and it was testified to by Mr. Hals in part of his review is that the final soil logs are done at the time you're on the site having worked on it to make sure the drainage systems can go in, in those particular locations. That's standard operating procedures. I understand it's been done that way before by the Borough where it's subject to. I brought this forward because it raised as such a question, and we spent an hour plus on questions about how can you approve the design of the drainage without knowing what the soil is in that location 150 to 200 feet away. So, what I didn't want is to have an objection pertaining to infrastructure where the objector says, well the soil quantities may not be right because you don't know what the soil is where you're going to put in the drainage,

and you might have to bring other soil in or take other soil out. And the proper I'm making is, we won't have to, and that's what this soil log indicates. That's the purpose behind it. Otherwise, I would've presented this soil log if and when approvals are granted as part of our submission to the engineer to get permits to build the infrastructure.

Mr. Cucchiara: Do you have anything further?

Mr. Inglima: No, you know what I said is how I view the situation and how I intend to precede, and we'll see what the data shows and get a copy of it, and then we can move on.

Mr. Whitaker: Okay, Mr. Palus then, we'll move on. Mr. Palus, you have prepared a revised soil log result report.

Mr. Palus: Correct, yes.

Mr. Whitaker: And is that one that's dated December 2nd, 2014?

Mr. Palus: Yes, it is.

Mr. Whitaker: I'd like you to explain what this report indicates by explaining what originally is in the report and what the revisions are.

Mr. Palus: Sure. Basically, it includes a repeat of the data from the first three tests tolls that were done back on July 14th, and that includes two additional soil logs, which have been identified as number four and number five, as I testified, which were done in the area the proposed storm water recharge system. And what the soil logs for number four and number five identify our soil as consistent in the area of proposed recharge basin and with what we observed other places on the property, so you've got similar permeability rates. You've got similar strata of soil, and we have similar depth to ground water. On one of the holes, we had no ground water or no signs of seasonal hardware cable encountered, and the second one, while we had no ground water, we did have modeling, which is an indication of staining of the soil, which is indicative of a seasonal high water table at 127 inches at its shallowest depth. So, based on these results, the assumptions that were made when the original soil moving calculations were done in regards to the storm water recharge basin remain valid, and so nothing has to say. As Mr. Whitaker was starting to say, there's no additional

excavation required beyond what we anticipated and no additional fill that needs to be brought in beyond what was originally contemplated, so basically we confirmed the assumptions made on the original soil moving calculations.

Mr. Cucchiara: You need this to be marked?

Mr. Whitaker: I'm just gonna mark it.

Mr. Inglima: Yeah, may I ask, just so the order of exhibits make some sense, if I could ask that a copy of the applicant's soil moving application and whatever attachments there are be marked as the next exhibit and then a copy of the soil moving plans that the applicant is submitting in support of the application, they be marked as the next exhibit and then this report dated December 2nd be marked.

Mr. Whitaker: Here's what I wanted to do. I wanted to do A16 as the exhibit would be the letter of Stephanie Tengi.

Mr. Cucchiara: All right, why don't we go back to that? That makes sense.

Mr. Inglima: Which letter is that?

Mr. Whitaker: A16 is the letter from Stephanie Tengi, Attorney to the estate, confirming that Mrs. Costanza, widow of Bruce Costanza, consents to the application. A17 would be the certification by Ms. Tengi. A18 would be the soil movement application. A19 would be the plan that accompanies that application. And A20 would be the soil logs with the date of December 2nd, 2014, prepared by Mark Palus on behalf of Map Engineering.

Mr. Whitaker: Asked if they accurately reflect the soil quantities that you previously testified to.

Mr. Palus: That's correct, yes.

Mr. Whitaker: I have no further questions, Mr. Chairman.

Chairman Hanlon: The question you mentioned, the fill was 2,000? I didn't get what the total number was on that.

Mr. Palus: The combined fill between infrastructure and conceptual lot construction is 2,100 cubic yards.

Chairman Hanlon: And pertaining to export, 5,000, I'm sorry, 4,895?

Mr. Palus: That's correct, yes.

Chairman Hanlon: That's roughly what, 300 trucks?

Mr. Palus: Depending on the size of the truck.

Chairman Hanlon: Give it 15.

Mr. Palus: If we're going to use 15 cubit yards that's about 320 trucks.

Chairman Hanlon: Why are you bringing fill in again?

Mr. Palus: It's not that we're bringing in fill. That's material that's going to be reused onsite. So that's site grading. That's not import material. Of the 6,995 total that we're going to excavate onsite, 2100 of it will be re-dispersed on site, leaving us with an excess of 4895, which will then be exported from the site.

Chairman Hanlon: Will you walk me through again why they need to export this much soil?

Mr. Palus: The bulk of it has to do with the individual lot constructions. If you go back to the numbers, the infrastructure, we had a little over 1,000 yards in cut just for the infrastructure. We started developing 11 single-family homes, foundations excavated, seepage pits excavated. It's really not a very large number. It sounds large once you throw all that combined, but if you take the 5945 and divide it by the 11 lots, it's 540 yards a lot. So, if we were talking about a single-family home, which is more seen on a more regular basis, the number 540 seems a little bit more within the typical frame of reference. It's the fact that we're talking about 11 lots that the numbers start to rise.

Chairman Hanlon: Mr. Pierson?

Mr. Pierson: In your experience, for all of this soil to move out during the construction of these 11 homes and the grading around and through the property, how long are we talking about?

Mr. Palus: It depends on how many homes are being built at once. If you do one at a time, obviously the soil moving intensity goes way down, but if the duration goes up. I mean typically, and

I know I'm not the developer here, but if you see two or three homes being built at a time, each home takes about a year to build, you're talking about roughly a three to four year process for a build out, and that's all depending on the economy, contracts of sale, individual buyers. I'm just giving you rough estimates.

Mr. Pierson: Yes, I understand. And over a three-year period, let's talk about the construction of a single edifice, one of the 11. What are we talking about in terms of the frequency of this soil being carried off site?

Mr. Palus: You'll see the bulk of it done when the foundation is installed, but that's where the majority of the soil moving comes. So, that will be over a relatively short period of time, you know, say a week or so to excavate the foundation. And then, for an extended period of time when the home is being built, not too much activity occurs on site because it doesn't make sense to finish grading when you've got trucks and equipment going in and out of the house as it's being built. But at the end of the project when they start final landscaping and finish grading, that's when you'll see a little bit more soil moving going on.

Mr. Pierson: So, the initial pace or however you want to describe it, when you're digging the foundation and whatever, it would be a more intense duration.

Mr. Palus: Measured in periods of days.

Mr. Pierson: Right. And then later on, when you're grading the property overall, there'd be some additional -

Mr. Palus: Correct, it would not be the same intensity as when the foundation is constructed. More of that would be onsite. Ideally, the builder is going to recognize how much material they're going to need at the end to do the finished grading, and ideally they'll leave that stockpiled on site during construction of the home. So, at that time, there's not trucking in and out of the site. It's a matter of just moving soil on the site itself. So, if you're looking at truck traffic, you're going to see a burst of activity when the job begins associated with the installation of the foundation.

Mr. Pierson: And much more of that off of the property than later on when it's being reused within the property.

Mr. Palus: Definitely. The numbers are smaller and most of it - if the builder is doing an efficient job which is going to be in their own interest because it's cost effective, they should be able to keep the amount of soil that they need on property that they're going to use for final grading, as opposed to trucking it out at the beginning and having to truck it back in. If you build like that, you don't stay in business very long.

Mr. Reade: With the number of trees being removed and the soil removals, what kind of erosion controls are you going to - how it gonna to be maintained?

Mr. Palus: Sure. The project is going to act like any other project of this nature. It's gonna have to receive approvals from the Bergen County Soil Conservation District, so standard measures which are shown on this plan include filter fabric fencing surrounding the area of disturbance.

Mr. Palus: Filter fabric fence. Storm access pads, which are tracking pads so as trucks enter and leave the site, it's basically a real clean blanket so you're not tracking soil out into the road. Stock piled topsoil. Topsoil is a valuable commodity. You don't want it to be buried somewhere or lost. When you're talking about doing finished grading, you want to re-spread out your topsoil, so you can grow grass. So, there's a series of certain erosion measures, which are required by the county, and they also do inspections during the installation process or during the construction process, and that's standard for any project of this nature. So, we would of course be held to the same requirements.

Mr. Reade: Are those maintained assertively during the course of the entire project?

Mr. Palus: Yes.

Mr. Whitaker: And as for your ordinance guaranteeing that it's being done properly because the ordinance requires bonding for that. I'm not sure you're familiar with it because it's a larger project than normal, but on a major, bondage is required in chapter 63.

Chairman Hanlon: Mr. Cirulli?

Mr. Cirulli: Can you show us the location of the various test

holes? I'm particularly interested in test hole number four taken in December.

Mr. Palus: What I have here is a larger scale version of the last sheet on the soil log results, which we just provided to you.

Mr. Palus: This depicts the overall property proposed right away, the cul-de-sac as well as the location of the proposed recharge basin. So, test hole four is located on the east side of the proposed recharge basin. Test hole five was done at the western extreme of the basin.

Mr. Cirulli: Okay. I know that test hole number four, the test had to be stopped.

Mr. Palus: Yes. As I testified, these are extremely sandy soils, which from a recharger permeability standpoint is very good news. From an attempt to excavate a deep, narrow hole, it's difficult. So, we did get down to 11 feet, and at that point, every time you took a pocket out, two more pockets fell in from the side. So, without hooking up an extremely large area, that's from a practical standpoint how far we were able to get down in that test hole.

Mr. Newman: Is it your opinion that the test hole number four and test hole number five are very similar to the original test holes in composition of the soils?

Mr. Palus: Absolutely, yes.

Mr. Newman: Okay. What portion of the soil is going to be retained on site? I'm assuming the topsoil, you're not gonna truck out because you're gonna want to use that again.

Mr. Palus: Correct.

Mr. Newman: But would you keep the same soil which is good for draining and truck away the other stuff as part of your...

Mr. Palus: There's very little soil on the site that is not considered sandy in nature. Different soils are good for different purposes. The sandy soil makes it very good for drainage but sometimes not as good for final grading, just because if you picture trying to grade a beach. Sand blows and moves around. So, if you have some of the material soils with a

little bit different particles, the clay, the silts for doing a little bit more of the fine grading, that would be appropriate as a sub layer to the top soil. A majority of the soil that's going to be exported is going to be the sandier material, just because that's the vast majority of what the soil is on site.

Chairman Hanlon: Is there any anticipation of bringing additional topsoil on the property?

Mr. Palus: Not at this time. There is extensive topsoil in other areas of the property. If you look at some of our soil lines, we've got 24 inches of topsoil, 28 inches of topsoil. So, just by the nature of the site over the years, there's been a substantial deposit of topsoil on site. So, if it is carefully stripped and stockpiled, it should be adequate for re-dispersement at the end of the project. And again, as I testified earlier, the topsoil is a valuable commodity. It's in the builder's or developer's best interest to make sure that it's preserved and used properly. Because otherwise you end up having to pay for something that you had for free.

Mr. Inglima: Mr. Palus, you were asked a question by Mr. Reade, I believe, with respect to soil erosion control measures, and you answered that it was indicated on the plans. Is it indicated on sheets 12 or 13, your plans?

Mr. Palus: I don't believe so. I think you'll see those under the soil erosion seven flow sheets. The appropriate pages for that would be five, sheet six, and sheet eleven.

Mr. Whitaker: And that's on the exhibit A6.

Mr. Palus: Correct. All of this is part of the September 3rd version of my plans.

Mr. Inglima: Now Mr. Palus, you indicated in your direct testimony that the soil moving application is consistent with the plans that were identified by you in the course of the hearing tonight.

Mr. Palus: The soil moving application was submitted sometime in July, and then there were subsequent revisions applied in September. So, the numbers changed as a result of that. So, the application is consistent. However, some of the numbers could change.

Mr. Inglima: So, when we're talking about A18, we're talking about the application. If there is a date of May 22, 2014. Am I reading it correctly? Was a copy of that application physically marked tonight?

Mr. Whitaker: Yes. The application was marked as A18.

Mr. Inglima: The form I previously received was the municipal form that's a two-page document. It bears signatures that are dated May 20 and May 22. I think those are the only dates on the form, and it's accompanied by a copy of the soil moving and tree removal plan. Two sheets. One of two, and two of two, which bear a date of May 12, 2014.

Mr. Palus: Those were the original submissions. The plans had subsequently been revised and then the reports request the soil moving plans, the sheets of one of two and two of two have been incorporated into the overall plans, which is how we got the 13 sheets.

Mr. Inglima: So, now we've got a revised application although not a new revised application form. You've given notice of this hearing – Actually, you gave notice of the hearing last year, but obviously that notice has continued to tonight. And accept for the quantities of soil that you described in your testimony, correct?

Mr. Palus: Can you repeat that?

Mr. Inglima: You had provided notice of this application. It says Mr. Whitaker on behalf of the applicant, right? And that notice contains the quantities that you described in your testimony tonight, right? I'm not trying to cross you up.

Mr. Palus: I didn't provide the notice, so I can't really answer that.

Mr. Whitaker: I don't understand your question, Mr. Inglima.

Mr. Inglima: I just want to confirm that the notice for this hearing was consistent with the quantities that you described in your testimony.

Mr. Whitaker: We noticed for a hearing. Your ordinance says we have to notice for a hearing. The notice doesn't require us under your ordinance to even specify numbers. We did file it and put approximate numbers in.

- Mr. Inglima: I'm not trying to trip him up. I just want to have a sequence of questions that make sense to the Board. So, you put in a notice that was published in the record on October 12, 2014, and I'll read from it. I'm representing to the Board that this a true statement, what the notice contains. It says that you have an excavation of approximately 6,995 cubic yards, embankment of approximately 2,100 cubic yards, and exportation of approximately 4,895 cubic yards, right?
- Mr. Whitaker: I'm reading along with you. That's what my notice says, yes.
- Mr. Inglima: And that's what you just testified to on direct, right?
- Mr. Whitaker: We testified to a different number on – well, I'll let him answer, but the one number I think is a bit different. It's 6,995.
- Mr. Palus: I think, just to describe it before here, I think Mr. Inglima is trying to say that the application was filled out in May as an estimated cubic yards of soil be moved of 6,645 cubic yards on it. Subsequent to that, the plans were revised based on changes made to the drainage concept. That changed some of the soil movement numbers on it. So, the plans were updated to incorporate new soil moving number, which are the numbers that I testified to earlier. Those same numbers are the same numbers that were provided in the notice by Mr. Whitaker. So, the plans started off in one format as they routinely do. There are modifications made during the application process. It involved the updating of soil moving numbers. The plans were updated to have the current numbers. The notice was made with the current numbers. Hopefully, that clears it up for you.
- Mr. Inglima: I'm looking at sheet 13 of 13, which was marked a few minutes ago as A19. And it gives the soil moving quantities of 6,995 cubic yards of cut, 2,100 of fill, and a net export of 4,895. Is that right?
- Mr. Palus: That's what it says.
- Mr. Inglima: Is that correct?
- Mr. Palus: Yes.
- Mr. Inglima: Okay, now you developed those calculations from the plans

that are submitted as part of A6, right?

Mr. Palus: That information is included in the plans, which has been identified as A6, yes.

Mr. Inglima: And I noticed on soil moving plans sheet 13 of 13, which was marked as part of A19, you indicate various cross sections at stations along the proposed roadway, is that correct?

Mr. Palus: Refer to the plans.

Mr. Inglima: Yeah, perhaps it would help the board if you could put a copy of sheet 13 up on the easel.

Mr. Palus: Okay.

Mr. Inglima: I had a question pending. You have cross-sections on the drawing that show the areas of the proposed cul-de-sac, do you not?

Mr. Palus: It was cross-sections of the proposed right-of-way.

Mr. Inglima: Of the proposed cul-de-sac.

Mr. Palus: The entire right-of-way.

Mr. Inglima: Where are the locations of each of those stations shown on other plans that you've submitted to this Board?

Mr. Palus: Yes.

Mr. Inglima: I said where. In other words, what plans, what sheets show the station locations?

Mr. Palus: Referencing A6 again, it is shown on sheet four.

Mr. Inglima: Okay, so since information that has a bearing on the soil moving calculations are there on the soil moving application, it's contained on sheet four, should we agree that sheet four is also a part of the exhibit that was just marked a few minutes ago as A22? A22?

Mr. Whitaker: No objection.

- Mr. Inglima: So, if you'll look at sheet four, you'll see the locations of each of those stations, and they start with the boundary line, the easterly boundary line of the site, is that correct?
- Mr. Palus: They start out on West Saddle River Road, yes.
- Mr. Inglima: Right where the applicant site meets the right-of-way line of the street, right?
- Mr. Palus: I haven't checked that... Yes.
- Mr. Whitaker: The answer was yes.
- Mr. Inglima: Did you perform any soil moving quantity cross-sections of any other part of the site other than what's shown on sheet 13?
- Mr. Palus: No.
- Mr. Inglima: Why not?
- Mr. Palus: Didn't need to.
- Mr. Inglima: So, you're saying that you can calculate the soil moving quantities with accuracy on all of the other areas of the site without the use of cross-sections?
- Mr. Inglima: How did you do it?
- Mr. Palus: By taking general areas of each individual lot, determining what the existing grade is, the average existing grade within that area, what the average proposed rate is, and basically it's just a square footage times depth of the fill or cut and that gives you soil movement in that area, and you repeat the process in multiple areas throughout the site.
- Mr. Inglima: Now, on several of the proposed lots, you've got significant changes in grade more than several feet. Isn't that correct?
- Mr. Palus: That's correct.
- Mr. Inglima: So, when you made those calculations, did you use an average amount of fill or cut for those areas, or did you use some specific calculation methodology.
- Mr. Palus: I used the exact method I just described to you.

- Mr. Inglima: And when you performed the calculation of those individual lots, did you provide a log or a table or any other data that shows how you developed the quantities that you indicate for each of those proposed lots?
- Mr. Palus: I kept a running account for myself for my own calculation purposes, and then I provide a breakdown by each individual lot. I don't provide a breakdown of the sub-area of each lot, but I do give you a breakdown of each lot, and that's provided on sheet 13 of the plan marked as A6, A21, A22.
- Mr. Inglima: The lot that is on the north side of the end of the cul-de-sac. With respect to proposed lot nine, you've indicated on your sheet 13 that there will be site-grading cut of 150 cubic yards and no fill. Is that correct?
- Mr. Palus: Let me check that. There is no site fill grade, correct.
- Mr. Inglima: So, you took the entire parcel that is designated on your plans, A6, sheet six as proposed lot nine, and you performed the calculation on all four corners, for lack of a better word, of that lot.
- Mr. Palus: Not all four corners. The area surface of the lot, yes.
- Mr. Inglima: And you satisfied yourself that you're only going to have the quantity of soil moved for that lot that you've indicated in the table for proposed lot nine on sheet 13.
- Mr. Palus: Again, these are approximate calculations done for conceptual homes, so yes, I was satisfied.
- Mr. Inglima: If someone was to propose a dwelling on that lot that was going to be higher than the existing topography in that area, what would they have to do in order to gain an approval?
- Mr. Palus: They would have to submit an individual plot print to the Borough for there to be an approval of the soil moving out of that property prior to any building permits being issued.
- Mr. Inglima: So, we don't know whether or not you're going to do exactly what you're proposing on the table for lot nine.
- Mr. Palus: I've testified dozens of times at this point that these are conceptual homes and that the individual home construction

will be subject to individual specifics on building each property and that the design for those individual lots will be submitted to the Borough officials for their review and approval.

Mr. Inglima: I'll take you one lot to the east toward West Saddle River Road, proposed lot ten. You indicate in your table that there will be 75 cubic yards of cut but 415 cubic yards of fill. Now, is that disparity between the amount of soil that is moved on proposed lot ten and that which you show for lot nine, is that because of the retaining wall you're indicating on the east side of that proposed lot.

Mr. Palus: Correct. Those are two different lots with two very different topographies. So, they have two very different soil movement numbers associated with them.

Mr. Inglima: Well, in order to develop a new residence on proposed lot ten, is it necessary to build a retaining wall and to move the quantity of soil that you've indicated on the plan?

Mr. Palus: The amount of soil that is shown on the plan to be moved is indicative of the proposed grading associated with the conceptual home. The individual lot construction on each property will involve specific homes and specific soil moving numbers, which will be submitted to the Borough officials for their review and approval before any building permits are secured on individual lots.

Mr. Inglima: Well, let's go back to my question. Is it necessary in your experience as an engineer, a professional engineer, to move the quantity of soil that you're indicating on the plan for proposed lot ten in order to develop a residence, single family home, on that proposed lot.

Mr. Palus: It would depend on the exact nature of the home. If you build the exact home that proposed here, then yes, those would be representative soil moving numbers.

Mr. Inglima: Those would be –

Mr. Palus: Representative soil moving numbers.

Mr. Inglima: Now, a question had been asked, I believe, by one of the Board members as to why so much soil had to be moved. Is there any basis for your proposal to move this much soil that

has a bearing on the soil moving application? In other words, were you instructed to fill these proposed lots as they're shown on sheets five and six, or is this something you determined on your own?

Mr. Palus: I provided the individual grading plan based on my engineering judgment expertise. I was not directed on the format of how to grade the individual lots.

Mr. Inglima: You referred a number of times to conceptual homes. My question to you is if they're conceptual homes, why are you seeking a soil moving permit for this much soil movement? Why not just show the road? Why would you be showing all of the details that – for example, on proposed lot ten, the proposed fill, the –

Mr. Palus: The individual conceptual homes were shown to demonstrate to the board that each of the proposed lots that we're trying to create are feasible for construction, that we're creating viable building lots. I testified, I've lost count now how many times, that these are conceptual homes and that individual home construction will be subject to additional Borough builder approval. At that time, we will have specific soil moving numbers for each of these lots. That's why I broke the soil movement numbers out from each infrastructure and then for additional lot development. The infrastructure I testified, I'm comfortable those are solid numbers. We know what infrastructure we're proposing. That's not gonna change. An individual homeowner could come in and decide if they want a different style home and decide they want an individual style home. They would like a swimming pool. They would like a garage. They would like a flatter backyard. They'd like a tiered backyard. All of those are going to have impacts on individual lot construction. That's why we need to come back to the municipality for approval on an individual lot construction basis.

Mr. Inglima: You indicated in response to a question proposed to you by Mr. Whitaker whether you were familiar with the Ho-Ho-Kus soil moving ordinance, chapter 63, and you indicated that you were. Are you familiar with the rights that would accrue to a developer as a result of approval by this board of the soil moving application you submitted?

Mr. Palus: Specifically, what rights are you referring?

- Mr. Inglima: The rights to construct improvements in accordance with the plans that were approved as part of the soil moving application. I'm not asking you to apply legally but legally, generally -
- Mr. Whitaker: I don't understand the gist of the question. Are you familiar with rights?
- Mr. Inglima: Yes. Is he familiar with what would happen in the development process if this board granted an approval of the soil moving permit that has been proposed by the applicant. The quantities shown on the plan and the grading information that's shown on sheets five and six of the site plan.
- Mr. Whitaker: That's cause for a legal conclusion. This is an engineer testifying as to the quantities proposed.
- Mr. Inglima: Well, he did give an opinion with respect to the ability of the developer to conform with or comply to all of the different requirements of the soil movement ordinance, chapter 63. So, I certainly think it's within the ambit of his direct testimony to ask him what rights a developer would have as a result of a grant of an approval.
- Mr. Cucchiara: Do you have knowledge of that, Mr. Palus? Do you need to review the ordinance?
- Mr. Palus: I don't have a specific legal opinion on that matter.
- Mr. Inglima: Okay, I'll ask it a different way. If the approval was granted for the soil moving permit and the plans that are shown that have been previously marked in this hearing, wouldn't the developer be able to construct improvements exactly as they're shown on this plan?
- Mr. Palus: No.
- Mr. Inglima: Why not?
- Mr. Palus: Because we've already stipulated that individual lot construction plans will be submitted for each individual lot on a specific basis, based on the exact homes that are being built, and those individual lot plans will be submitted to the Borough officials for their review and approval. So, the builder does not gain the right to build houses just because

they're shown conceptually on a subdivision plan. They would have to go through the process of submitted individual plans. It's on most of the front pages of the sheets. I've said it a hundred times. I don't know any other way to convey that to you.

Mr. Inglima: That's okay. I'm not insulted by the way you colored your answer, but I will state for the record that there is a difference between various types of soil movements in this town, isn't there, in terms of the quantity of soil that's moved and what it involves in terms of a review process?

Mr. Palus: There is a difference between a minor and a major soil movement permit, yes.

Mr. Inglima: So, if someone came in after the subdivision is approved, and whatever you stipulate as part of this application, they come in and they don't meet the threshold for soil movement on an individual lot, that would require them to be back before this planning board, then this board would never see the plan, isn't that correct?

Mr. Whitaker: Objection. This is call for a legal conclusion now.

Mr. Cucchiara: Could you rephrase that?

Mr. Inglima: He already stated his opinion that the applicant has to come back here.

Mr. Palus: I didn't say they had to come back here. I said the plans would have to be submitted to the Borough officials.

Mr. Inglima: Oh. So, the Planning Board would not have an opportunity to act upon an application where it's a ministerial soil permit, is that correct?

Mr. Whitaker: Objection, again. It calls for a legal conclusion. It calls for something administratively that's handled by the Borough of Ho-Ho-Kus. It's beyond the expertise of this engineer.

Mr. Inglima: Well, let me ask you if I may of the applicant through his attorney. Is the applicant stipulating that it will not have rights with respect to the movement of soil on proposed lots one through eleven as a result of the grant of a soil moving permit as part of this application process?

Mr. Whitaker: Absolutely not. The applicant will have rights.

Mr. Inglima: So, going back to my original question, Mr. Palus, which was based on the exact plan that he has designed and submitted to this board. Isn't it true that if this board approves a soil movement permit application for all of the details shown on these plans, that a developer or a property owner of any of these lots would be permitted by law to construct improvements in accordance with the approved plan.

Mr. Whitaker: It calls for a legal conclusion, but I think everyone in the room would agree that if a permit is issued for that amount of soil, then the applicant has certain rights. I don't understand what the issue is.

Mr. Inglima: So, this Board is being asked, Mr. Palus, to approve a plan that reflects contours and grading that is being proposed solely by you. Is that what I get from your answers to my prior questions?

Mr. Palus: The plans were prepared under my direct supervision.

Mr. Inglima: You didn't answer my question. You said that you used engineering judgment to determine the amount of grading that would be shown on each of the proposed lots that are shown on your plan, sheet five and six. Is that correct?

Mr. Palus: I did say that.

Mr. Inglima: Okay, so what this Board is being asked to approve or act upon, I should say, is a soil moving application that is the product of your own engineering vision for this site and not based on any particular development requirements of the applicant.

Mr. Whitaker: Objection. Before the application was submitted, obviously the applicant reviewed it and approved it.

Mr. Inglima: Is the witness going to answer the question? I'd like you to answer the question.

Mr. Whitaker: The question is, did he review what was submitted with the principles of Chamberlain Developers before the application was submitted.

- Mr. Palus: You asked me earlier if I received direction from anybody as to how to do the grading, and I indicated that I used my engineering judgment and expertise in determining the appropriate grading for each individual lot. And that's true. Once the plans were completed, it would be standard protocol to give you client an opportunity to review them before you submit it on their behalf. I think that's common sense.
- Mr. Inglima: I'm asking what was done in this case.
- Mr. Palus: I just told you what was done.
- Mr. Inglima: So, are you saying that my last question to you is a fair statement?
- Mr. Palus: It was a question. It wasn't a statement.
- Mr. Inglima: This is cross-examination. I posed a particular proposed set of facts to you and asked you to confirm or deny them. The set of facts are very clear. That this plan reflects your vision for the site and not the direction of or the requirements of the applicant.
- Mr. Palus: You have to define direction.
- Mr. Inglima: You indicated that the application, the soil moving application – when I refer to application tonight, it's gonna be soil moving application unless I state otherwise. You indicated that the quantities and the other information in the soil moving application match the plans that were submitted and marked A6. Is that correct?
- Mr. Palus: Yes.
- Mr. Inglima: Now, after the date that those plans were submitted, there were changes discussed before this board by both you and Dr. Pazwash, isn't that correct?
- Mr. Palus: The client did modify on a couple of occasions, yes.
- Mr. Inglima: The calculations that you described tonight come directly from sheet 13 of A6. You're saying tonight that those plans or the design shown on those plans A6 has changed. Why did the calculations change?

- Mr. Palus: The plans didn't change. The plans changed in March of 2014 and again in September 2014. They have not changed September of 2014. The next revision date on exhibit A6 is September 3<sup>rd</sup>, 2014.
- Mr. Inglima: September 6<sup>th</sup> is the plan.
- Mr. Palus: September 3<sup>rd</sup>.
- Mr. Inglima: I'm sorry, September 3<sup>rd</sup>. A6. That's the plan. So, that's the plan that shows the scour hole coming into the southeast corner of the site in proposed lot five. Did you change that?
- Mr. Palus: That is not the change in my plans, no. That's still there.
- Mr. Inglima: Is that part of the applicant's current proposal, may I ask, from anyone?
- Mr. Whitaker: That was a stipulation that would be removed.
- Mr. Palus: The plans were not revised. There was an exhibit and testimony provided that we would eliminate the scour hole and utilize seepage pits along the right-of-way of West Saddle River Road, but the formal plan has not been revised.
- Mr. Inglima: Have you reviewed the exhibit that was previously marked by Dr. Pazwash during his testimony? I'm sure to find the number here.
- Mr. Palus: A11 was dated October 23, 2014.
- Mr. Inglima: I'm referring to A12, actually. It's a plan that Dr. Pazwash had identified. Did you review that plan, A12?
- Mr. Palus: I'm gonna have to see a copy of that plan to see if it's familiar.
- Mr. Inglima: If Mr. Whitaker will agree, I have a copy of it. I believe this was previously marked as A12.
- Mr. Inglima: If I can direct your attention to the easterly boundary of proposed lot five, which is the frontage of the outer applicant site on West Saddle River Road near the southeast corner of the entire parcel. That shows the seepage pits that Dr. Pazwash talked about, right.

- Mr. Palus: Yes, it does.
- Mr. Inglima: So, he's got three seepage pits along the west side of the right-of-way line, so in other words, on the applicant site.
- Mr. Palus: These seepages were actually proposed and designed by my office, on my plan. This is Dr. Pazwash's reproduction of the plan.
- Mr. Inglima: Yes, but it's not shown on sheet five of A6.
- Mr. Palus: Right. Again, this is a supplemental exhibit provided to the board after concern was expressed over the scour hole design to provide an alternative identified by three seepage pits along the west side of West Saddle River Road. The plans have not been updated to formally show that improvement, but it was presented to the board.
- Mr. Inglima: So, the seepage pits that are shown on A12 are part of the current proposal. How much soil movement is associated with the excavation for each of those three seepage pits?
- Mr. Palus: Approximately 30 cubic yards.
- Mr. Inglima: So, your numbers have to be increased then by 90 cubit yards at least.
- Mr. Palus: If you were to include those three seepage pits, yes.
- Mr. Inglima: They are on the applicant's site, are they not?
- Mr. Palus: They're in the municipal right-of-way.
- Mr. Inglima: There is a right-of-way line shown on this drawing.
- Mr. Palus: At the edge of lot five.
- Mr. Inglima: So, you're saying that the excavation activities that are associated with the three seepage pits will all be in the public right-of-way of West Saddle River Road?
- Mr. Palus: Based on the design provided by office and presented to this Board, yes. The three seepage pits will be located entirely within the West Saddle River Road right-of-way.
- Mr. Inglima: Is there any basis for excluding the calculations of that

excavation from your application?

Mr. Palus: They're not a part of the current plan.

Mr. Inglima: You just said they're part of the current plan.

Mr. Palus: No. They're not on A6. They're a part of the ultimate exhibit presented to this board. The plans were not updated, so the soil movement numbers were not updated.

Mr. Whitaker: Let me make a stipulation to the Board. The applicant has proposed a number of different modifications to the plan. The applicant has not each time there has been a minor modification made revised every application and every plan. It's never done that way. For instance, the applicant has said if you want sidewalks, we will build them. That would change the quantity. But if you don't want them, that would change the quantity of the soil. Likewise, if you want these three seepage pits and recommend that there be three or two or one – there was a discussion, if you recall, about maybe it would be two rather than three in those scour holes that obviously the soil movement application would be modified to reflect whatever the quantity would be. It would be a quantity that would have to be moved based upon what you would want to see. Now, if we're going to spend the evening talking about the amount of soil being moved on the basis that something the Borough would want to see done, I don't believe that's productive. We've given it to the Borough to say if these are improvements you want, we are more than willing to do them, and obviously common sense dictates that would change the quantity of soil. At the end of the day, what's the problem with the change of the quantity of the soil? Another truck coming there to take soil away for an improvement the Borough wants? I don't think that line of questioning – and I know he has a right to ask and cross-examine, but I'm saying I don't know what the direction is and what the purpose of it is if it's improvements that the Borough would want to see. Obviously, and the board is familiar with the soil movement process, and the board is familiar that in any soil movement application, in this municipality or other municipalities, there is fluctuation on quantities based upon what the final result and plan would be.

Mr. Inglima: Was that an objection?

Mr. Whitaker: It certainly was. It was an explanation of why I've objected.

Mr. Inglima: I don't think it has resolved the issue. The question is –

Mr. Whitaker: Well, the objection is the relevancy.

Mr. Inglima: Really? When I ask this witness about how much soil is going to be excavated for three seepage pits that are shown on his plan that are shown on Dr. Pazwash's plan that are stipulated to be part of the application, that's irrelevant?

Mr. Whitaker: If the Borough wants it, and that's the way we had left it, that is relevant, and that question is there. But if the question or the direction is that each time we make an offer to the Borough, we have to revise the soil movement application, I would object to that because that's not a procedure that's used.

Mr. Inglima: Mr. Palus, have any of your calculations included the three seepage pits?

Mr. Palus: Other than the one I just gave you verbally tonight, no.

Mr. Inglima: Have any of your prior calculations included any activities for road widening on the west side of West Saddle River Road along the frontage of the applicant site?

Mr. Palus: The soil moving in that area is relatively minimal. We've got three to four-foot widening at 2 percent grade. So, the numbers there aren't really relevant to the overall scheme of numbers in this application.

Mr. Inglima: Is your answer no?

Mr. Palus: The answer is I did not include them because they are not significant enough to warrant inclusion.

Mr. Inglima: How do you determine how significant a calculation is? I mean, in this municipality, you need to calculate the quantity of soil that's moved, no matter how small it is. Why would you exclude anything?

Mr. Palus: Because when you're looking at an overall development, and there's a scale of estimation involved, the base of the numbers you're talking about become rounding errors.

- Mr. Inglima: Are there any other areas of the site or the development activities that will be necessary in accordance with the development of the subdivision that's shown that you have excluded based on the analysis or the perception or the practice that you just described in answering my prior question?
- Mr. Palus: I believe I have provided comprehensive overview of the proposed soil movement on the site, and I have provided the necessary information associative for engineering review and judgment of the project.
- Mr. Inglima: Have you previously testified in these proceedings that there would be an embankment or a berm or any increase in the elevation of the topography of the frontage of proposed lots eight, nine, ten, and eleven or any combination or one of them along the south side of Hollywood Avenue to serve as a location for trees to be installed?
- Mr. Palus: The discussion at that time was potential for a berm or a fence or different improvements in that area, but they are not a part of the current plan.
- Mr. Inglima: Are they part of the current proposal? Has the applicant stipulated that it will install such a berm or an increase in the topography or elevation of the areas of the site that are just south of Hollywood Avenue for purpose of installation of plantings?
- Mr. Whitaker: We have stipulated that if the Board wanted those types of improvements that the plan would be modified, again, based upon input that we would get from your planner as to what we would think would be appropriate there.
- Mr. Inglima: Is it fair to say that your calculation of soil moving quantities do not include any additional soil that would be used for the purpose I just described?
- Mr. Palus: The soil movement numbers that I provided the board with do not include those numbers because that improvement is not a part of the current plan which the numbers were based. If, again, the board or municipality wants the berm, as an example, installed, then the numbers would be updated to reflect that. I can only testify and tell you that if that berm were to be installed, it would be utilizing some of the excess soil on site, so it would not result in any

additional excavation. It would actually reduce the amount of export from the site. So, it would reduce intensity of soil movement from what was presented on the current plans. So again, it goes back to those handful of items that the board would impress some influence on and those options are incorporated and then the plans would have to be updated accordingly. You can't go and update the plans every time you have a conversation with the board over a certain topic. We'd never get anywhere. We'd be forever revising the plans.

Mr. Inglima: Do your calculations for fill include driveways that are shown on the plan?

Mr. Palus: They include the grading associated with construction of the driveway, yes.

Mr. Inglima: When you say grading, do you mean that you have taken into account how much soil would be necessary below and on either side of the driveway?

Mr. Palus: The change in grades associated with the construction of the driveway, yes.

Mr. Inglima: Is the driveway material considered fill?

Mr. Palus: Not in my estimation, no. You're talking about an asphalt driveway?

Mr. Inglima: yes.

Mr. Palus: No.

Mr. Inglima: Is there anything in the municipal code that states that they should be excluded from the calculation of fill?

Mr. Palus: The definition of soil is any earth, sand, clay, loam – this is from 63-2. Any earth, sand, clay, loam, gravel, humus, rock, or dirt without regard to the presence or absence therein, organic matter, including any synthetic substance used as a substitute or in conjunction with soil but not limited to asphalt and concrete. I did not include asphalt as part of the soil moving calculations.

Mr. Inglima: It is includable as fill under the ordinance, correct?

Mr. Palus: Potentially, based on the reading of the ordinance, yes. But from a practical standpoint, asphalt driveways, concrete walkways, curbs, these items are not included in the soil movement numbers.

Mr. Inglima: When you calculated the amount of excavation and/or fill that would be required in conjunction with the proposed storm trap system, is it fair to just call it storm trap? I don't have to describe the detention system, am I correct? Did you calculate the areas that would excavate that would be used for the gravel underneath the storm traps?

Mr. Palus: Yes.

Mr. Inglima: There was testimony by Dr. Pazwash, and I'm not sure if you testified to it, but I know he did, about the fact that the amount of gravel may change depending on the needs of the applicant, the considerations affecting drainage at the site, and the structure requirements for the street. Did you calculate the amount of excavation based upon the minimum amount of gravel that would be required for the project or some larger number? Did you have a question, for example?

Mr. Palus: I calculated the amount of gravel based on the depth of gravel shown on the plans marked A6, so I estimated approximately a foot and a half of gravel underneath the chambers. Dr. Pazwash testified to it sometime during installation it's necessary to provide maybe two feet of gravel or only one foot of gravel. I did not take into any account any potential variations from that but went off of the one and a half, which is the standard number. Again, I would represent that any change going from one effort of gravel and if it changes to 12 inches or 24 inches would be a diminutive modification to the overall soil moving number on site.

Mr. Inglima: Does the amount of gravel that you calculate extend beyond the perimeter of the storm trap walls or is it located based on your plans only within the envelope of the structure itself?

Mr. Palus: The area considered in the footprint of the storm trap structure itself.

Mr. Inglima: Isn't it true that you would have to extend the stone bed underneath the proposed storm trap for some distance beyond the outer walls of the structure?

- Mr. Palus: That would depend on the soil conditions of the manufacturer's specifications. That's a decision that would have to be made by the manufacturer at the time of installation.
- Mr. Inglima: You indicated in test hole four that the banks continually were caving in when you were performing the test. Do you know at one point that was occurring in relation to the depth of excavation that's necessary for the installation of the proposed storm trap?
- Mr. Palus: I believe it indicated it happened at 132 inches, which is 11 feet down. Hole four located at elevation 110, so that would be four-feet, elevation 99.
- Mr. Inglima: With respect to the calculation of the soil movement quantities for the seepage pits, did you use the excavation that would be required just to make the holes where the stone is indicated on your plan?
- Mr. Palus: I don't follow.
- Mr. Inglima: You depict each one of these seepage pits.
- Mr. Palus: Correct.
- Mr. Inglima: As a square.
- Mr. Palus: Yes.
- Mr. Inglima: Which I believe in the course of prior testimony by Dr. Pazwash was described as the extent of the stones surrounding the individual seepage pit structures.
- Mr. Palus: Typically, the seepage pit is round, and the excavation is square, and the round seepage goes in the middle of that square, so the soil moving numbers take into account the entire excavation, including the soil.
- Mr. Inglima: Now, you calculated for your purposes of the soil application just the area of the square or, in the case of double seepage pits, rectangles that are formed by the surrounding stone, correct?
- Mr. Palus: Correct. I think what we allocated was probably 35 cubic

yards per seepage pit.

Mr. Inglima: Did you include in the calculation of fill for the site the amount of stone that would be installed around each seepage pit.

Mr. Palus: The stone was not included in the soil moving calculations.

Mr. Inglima: The previous section of the soil ordinance indicated that stone should've been included in the fill. Is that correct?

Mr. Palus: Depending on your definition of stone. It talks about gravel in here, but gravel is considered a component of soil. The gravel imported associated with the construction of the seepage pit was not included.

Mr. Inglima: The question was asked of you earlier how many truck trips would be necessary in order to remove the soil that is indicated as your net export. You indicated it was... 320. Is that correct?

Mr. Palus: Yes, it is.

Mr. Inglima: That's just to remove soil that has to be removed from the site.

Mr. Palus: Correct.

Mr. Inglima: How many truckloads of soil and gravel would have to be brought to the site in the course of the construction activities of what is shown on the current sheets five and six?

Mr. Palus: There's no soil coming onto the site, it would be none. Individual gravel would have to be calculated, just like the amount of concrete that would have to be brought onto the site, the amount of concrete pipe. When you read the soil-moving ordinance, it talks about including any synthetic substance used as a substitute or in conjunction with soil. We're not substituting soil with gravel or asphalt. We're not using that as stone material. In my opinion, it wouldn't be appropriate to include those items in the soil movement numbers, so I didn't. And in my experience and in multiple other personnel of municipalities, those items are not included either. Soil is meant to indicate the natural materials onsite. We don't go into soil moving calculations for each individual construction item such as the concrete

curb or asphalt driveway, or roof leader.

Mr. Inglima: Your response, I believe, to a question from one of the board members to describe the soil moving – I’m sorry, sediment control plan, the soil erosion and sediment control measures that would be employed in the course of construction at the site.

Mr. Palus: Yes.

Mr. Inglima: Would it be fair to say that those measures are shown on sheets five and six of your plan?

Mr. Palus: Graphically, yes.

Mr. Inglima: You indicate, if I can draw your attention to sheet five, you indicate the installation of a – it says prop. Proposed overall stabilized construction access pad at 28 feet by 100 feet.

Mr. Palus: Yes.

Mr. Inglima: At the easterly terminus of the proposed cul-de-sac.

Mr. Palus: That’s correct.

Mr. Inglima: Now, that would be basically gravel, right? Stone.

Mr. Palus: That’s a detail. It is, in essence, an inch and a half, two inch, two and a half inch stone over a boulder background. It is laying on the ground so that it starts coming in and out of the site, which has disturbed earth on it, no longer vegetatedSo, as you drive over this pathway as you move from the blanket, it helps knock some of the mud off so you don’t track mud out into the roadway.

Mr. Inglima: Now, you’re indicating that stone bed to be installed over 100 feet in length of that roadway right over the proposed storm traps.

Mr. Palus: Potentially, yes. Generally, what the soil conservation wants to see is they want to see where you’re coming in and out of the site. The attempt would be to access the site in the area that proposed wildlife. During the installation of the storm traps, obviously the blanket would not be able to be in place in that location, but once the storm traps are in place, then the wheel blanket could be reestablished and put back on

top of it. You can drive on top of it when there's asphalting. You can certainly drive on top of it when there's a wheel-cleaning blanket.

Mr. Inglima: Now, when the storm traps are installed, would it be fair to say that in normal construction process involving a new roadway, new drainage facility, that when you install the storm trap structure, you're also going to install the other catch basins and subsurface utilities that are necessary to provide for drainage removal from that area of the site.

Mr. Palus: The storm trap would probably go in first only because it's the deepest item. The connections to that storm trap via inlets or draining pipes, that can be done at a later date. There's no reason why it all has to be done simultaneously.

Mr. Inglima: I'm just curious. Is there any reason why you selected the new roadways intersection with West Saddle River Road to be the location where a tire-cleaning blanket, for lack of a better word, is going to be installed at the site?

Mr. Palus: It's lack of a better description, they extend your construction location for a wheel cleaning blanket to place that at the area to do – propose right away, accessing the property. If we were to go somewhere out, you'd have to remove the trees and the vegetation in that area obviously to extend the road to West Saddle River Road. If we were to put the wheel cleaning blankets in further to the north, there might be additional tree removal along West Saddle River Road that would require us to divide that access. At the end of the job, we didn't need to take those trees down. So, you're gonna take the trees down anyway where the new right-of-way meets West Saddle River Road, it makes sense to use that for your access point of the property.

Mr. Inglima: Well, there is a driveway leading from the site to Hollywood Avenue, isn't there?

Mr. Palus: Correct.

Mr. Inglima: Why don't you put the wheel-cleaning blanket there?

Mr. Palus: It's very close to that location. In fact, it overlaps the current driveway.

Mr. Inglima: Well, why would you put a wheel cleaning blanket where

you're going to be putting a storm trap system, all of your catch basins that collect and run off from the new street and near driveways and homes that you're gonna be constructing? Why wouldn't you put the stone wheel-cleaning blanket in the location where it would be able to exist throughout the duration of the construction?

Mr. Palus: It's possible that during construction that the builder developer chooses to alter the location of the wheel-cleaning blanket. It's subject to approval by the Bergen County Soil Conservation District. So, as long as it's within their approved limits of locations, there's some flexibility to move that around during construction. It doesn't have to stay in one place the entire time. In fact, it doesn't have to be shown specifically where it is on this plan. Site situations may dictate that it needs to be moved or altered at some point during the process. And again, during the entire process, it's under the jurisdiction of the Bergen County Soil Conservation District.

Mr. Whitaker: And we would stipulate, obviously, that we will follow the requirement and guidelines of the Bergen County Soil Conservation District who has jurisdiction.

Mr. Inglima: Is the roadway, at the very least, the base course of the roadway going to be installed before the houses are constructed?

Mr. Palus: Typically.

Mr. Inglima: So, at that point, you wouldn't have a stone wheel-cleaning blanket anymore, would you?

Mr. Palus: You still would.

Mr. Inglima: On top of the road itself?

Mr. Palus: You could either have it on the road itself and certainly on each individual rock, which is why we have individual wheel cleaning blankets shown for each property. So, just like each individual lot is going to have to go through the municipality for review and approval for specific homes, it also has to go to the soil conservation district. So, they're going to see it again, and there will be individual wheel cleaning blankets on each lot as they're built. So, you have the big one on the road for the infrastructure improvement,

and you're gonna have individual wheel cleaning blankets on each lot during the construction of those individual properties.

Mr. Inglima: So, you don't see any problems with soil that is coming off of the tires or trucks using West Saddle River Road getting in to the drainage system along that roadway.

Mr. Palus: That's why we're proposing the wheel cleaning blankets. And we also have inlet protection filters behind the ball of the proposed inlets, another requirement of the soil conservation. Those are to remain in place for the duration of the project until final stabilization occurs.

Mr. Inglima: Let's go back to your soil log results that you submitted tonight. When did you prepare this report?

Mr. Palus: It's dated December 7<sup>th</sup>.

Mr. Inglima: So, over a month ago, you prepared a report that you're submitting to everyone for the first time tonight. Is that a fair statement?

Mr. Palus: The report is dated December 2<sup>nd</sup>. It says it on the first page.

Mr. Inglima: Yes, you prepared it December 2<sup>nd</sup>. When did you submit it to Mr. Hals?

Mr. Palus: I assume this evening. I provided copies of the report to the applicant's attorney.

Mr. Inglima: I'm sorry, I didn't hear that.

Mr. Palus: I provided copies of the report to the applicant's attorney.

Mr. Inglima: Now, you indicated in your prior testimony that you repeated the information from the test holes one, two, and three. When you say repeated, I thought you meant that you had performed new soil logs. You simply transposed the data that was contained in your prior report into this one.

Mr. Palus: That's correct.

Mr. Inglima: Okay. So, everything that you show for test holes one, two, and three was, as it says, taken or developed by you on July

14<sup>th</sup> of last year.

Mr. Palus: That's correct.

Mr. Inglima: So, the only new data in this report is test hole four and test hole five.

Mr. Palus: Test holes four and five were the ones done on December 1<sup>st</sup>.

Mr. Inglima: Why did you do these tests on December 1<sup>st</sup>?

Mr. Palus: It's when myself, the engineer, the applicant, and the applicant's contractor, and the property owner were available.

Mr. Inglima: But why did you do the test at all? I mean, you had come in before with a plan. You had changed the plan in the course of these hearings. You had done test holes one, two, and three. Why did you wait until December 1<sup>st</sup>?

Mr. Whitaker: I have an objection to the question. It's basically irrelevant. We did the test. The timing of when we the test –

Mr. Cucchiara: Well, I believe he explained the reasons why he did it in his testimony.

Mr. Inglima: I'm asking why he did it December 1<sup>st</sup>.

Mr. Palus: Because that's when all parties involved were available.

Mr. Inglima: Do you know the last time that it had rained before December 1<sup>st</sup>?

Mr. Palus: I don't know that I have that.

Mr. Inglima: Do you have with you the file that contains information regarding the test hole tests of December 1<sup>st</sup>?

Mr. Palus: Yes, I do.

Mr. Inglima: Did you take any photographs of the work that was being performed at that time?

Mr. Palus: I did not, but I believe the applicant did.

Mr. Inglima: Does anyone have those photographs with them?

- Mr. Palus: I do not.
- Mr. Inglima: Who did the excavating work? Mr. O'Donovan?
- Mr. Palus: Yes.
- Mr. Inglima: Was it performed in the same manner that you had described in your prior testimony with respect to test holes one, two, and three?
- Mr. Palus: You would have to refresh my mind to memories of what specific measure you're talking about.
- Mr. Inglima: I was trying to make it shorter. Just tell us how it was performed? How did you do the test and compile the data that's shown for test hole four and test hole five.
- Mr. Palus: The contractor, Dave O'Donovan, the track machine. He was excavating the soil bucket-by-bucket, eye on the side of the hole. I was standing at the end of the hole and watching the excavating the soil bucket by bucket. I was standing at the end of the hole watching the excavation as it took place, watching the soil as it came out of the hole and documenting the different soil layers and writing them down. It was different information you write down for soil layers. The soil texture, the soil type, the course fragments, the structure, the consistency, the color, so all of this information was being recorded as he was excavating.
- Mr. Inglima: So, you're the person who literally recorded the information.
- Mr. Palus: I literally wrote this down.
- Mr. Inglima: Was Mr. Hals present during the entire time that you were compiling the data?
- Mr. Palus: I'm almost certain he was there the entire time. I know he was there. I'm pretty sure he was there the entire time.
- Mr. Inglima: Did he make his own observations regarding the conditions of the soil that was being excavated?
- Mr. Palus: You would have to ask Mr. Hals.
- Mr. Inglima: Did you take any samples of the soil for testing off site?

- Mr. Palus: Yes, I did.
- Mr. Inglima: What samples did you take?
- Mr. Palus: I took a sample out of test hole number five at a depth of 96 inches. We put two replicate samples. We did two permeameter test samples.
- Mr. Inglima: Did you perform any permeameter tests at the site?
- Mr. Palus: No. The soil conditions on site, as I testified, were extremely sandy, and the soil logs indicates that it was caving in at a depth of 96 inches. There would not have been a safe place to dig, so under that situation, you take a disturbed sample as the best opportunity you have. So, the sample was taken from the pile as it was coming out of the hole at a depth of 96 inches. The samples were protected and transferred offsite and tested.
- Mr. Inglima: When you take the samples, you said you're taking them from the soil that was excavated. So, after it has fallen out of the excavating bucket.
- Mr. Palus: Correct.
- Mr. Inglima: So, it's loosely packed at that point and in the same condition it was when it was in the ground.
- Mr. Palus: There's engineering judgment allocated to this. The soil in the ground was loose to begin with. There are certain soil conditions where that might not be appropriate or it might not give you the same results. But based on the observed in situ soil conditions, it is reflective of what we were seeing once it had been excavated. And again, the soil testing procedures do allow for taking a disturbed sample if it's not possible to take an undisturbed sample. Certainly in the prime as a safety in the situation, there was no way it would've been safe to take a sample at a depth of 96 inches in this test hole.
- Mr. Inglima: The results of your permeameter testing, are they reflected in the test hole five data?
- Mr. Palus: Yes, they are.

- Mr. Inglima: And that would be the 20 inches per hour?
- Mr. Palus: That's correct.
- Mr. Inglima: Did you review any of the information that you compiled from test soils four or five with Dr. Pazwash?
- Mr. Palus: Not directly. I know I provided the applicant and the applicant's attorney. I don't know if it was passed on to him.
- Mr. Inglima: But you never spoke to him or had any contact with him about the results.
- Mr. Palus: I don't remember having specific conversation regarding results of test holes four and five with Dr. Pazwash. Again, I was just looking to make sure that it wasn't going to alter our soil movement numbers we were talking about.
- Mr. Inglima: At the time that you did the work that you compiled in this report as test hole four and five, did you do any other excavations at the site? Any other test holes, any other soil studies, any other review of conditions of the topography or the soil quality at the site?
- Mr. Palus: Well, certainly the topography in looking around the property.
- Mr. Inglima: No, were you doing things that were in the nature of a test or disruptive type of procedure?
- Mr. Palus: There were no other excavations or samples taken or any other testing processes undergone.
- Mr. Inglima: Oh, I just have one other question for you. There's a reference. You indicated previously that you prepared the application form.
- Mr. Palus: This is the soil moving application form?
- Mr. Inglima: That's what I'm referring to.
- Mr. Palus: I filled out the technical information on it, yes.
- Mr. Inglima: Did you prepare the truck route information?
- Mr. Palus: Yes, I did.

- Mr. Inglima: You suggest that the truck route would include West Saddle River Road.
- Mr. Palus: Yes.
- Mr. Inglima: Why would you want to use West Saddle River Road?
- Mr. Palus: That's the nearest route.
- Mr. Inglima: Well, the site is bounded on three sides by roadways.
- Mr. Palus: Correct.
- Mr. Inglima: Why did you pick West Saddle River Road as the first street upon which the soil would leave the site in the truck rather than Hollywood Avenue?
- Mr. Palus: Hollywood Avenue is a county road. It's a much busier road. The county is not going let you have a construction entrance coming in and out of there when you have other options. So, you wanna go West Saddle River Road then to Hollywood Avenue. So, you're using Hollywood Avenue, but you don't come out onto a busy street like that. From a safety standpoint, that doesn't make good sense.
- Mr. Inglima: This was a determination made by you.
- Mr. Palus: I'm the one who completed this form.
- Mr. Inglima: Did you have any conversations with anyone at the municipality regarding the use of West Saddle River Road for soil movement?
- Mr. Palus: I did not.
- Mr. Inglima: We're talking about 320 dump trucks full of soil.
- Mr. Palus: That was the estimate testified to, yes.
- Mr. Inglima: Did you have any conversations with any representatives of the county of Bergen with respect to the use of Hollywood Avenue for that purpose?
- Mr. Palus: We had not, no.

Mr. Inglima: Did you have any conversations with anyone from the Bergen County Soil Conservation District regarding the use of either roadway for soil moving activities at the site?

Mr. Palus: No, it would be outside of their area of jurisdiction. They have no enforcement based on that.

Mr. Inglima: So, you're saying that the Bergen County Soil Conservation District would not be involved itself in the role of consideration of which roads to use?

Mr. Palus: Correct.

Mr. Inglima: You indicate in this description of where the soil would go that it would go to route 17 north.

Mr. Palus: Correct.

Mr. Inglima: Out of Borough Ho-Ho-Kus.

Mr. Palus: Yes.

Mr. Inglima: Is there any particular basis for you saying that that's where the soil is going go?

Mr. Palus: Once you come off Hollywood Avenue, the next main thoroughfare is going to be Route 17. So, just like it says in the small print here in the bottom, the trucks and equipment use arterial roads and limit trucking on local streets. The goal is to not take truck traffic and drive around the municipality. It's to get on a major thoroughfare as quickly as possible. That's why we're getting to 17 and moving on. Where eventually it's going to go, I don't know. It's going depend on who needs the soil at that time. Based on the nature of the application process, it's hard to commit somebody to taking soil sometime within the next 12 months. You're going need a specific site to bring the soil to, and at that time, the final destination will change. But ultimately, the goal is to get the trucks onto a state highway as soon as possible as opposed to the local municipal streets.

Mr. Inglima: So, you were just picking the path that took you to the highway.

Mr. Palus: The goal was to get to the highway.

- Mr. Inglima: Okay.
- Mr. Palus: It opens up our options to whether the material is going to upper Saddle River, Saddle River, Upstate New York. At that point, you have more and more options for where you can get the soil as opposed to when you're just moving streets in the locals.
- Mr. Inglima: So, you have no particular destination in mind. You just picked the shortest route to the highway.
- Mr. Palus: At this point, we don't have a destination. It's impossible to find somebody saying that they accept the soil when there's an indeterminate amount of time where the soil could be available.
- Mr. Inglima: I'm just asking the applicant whether they're ruling anything out. I haven't had an opportunity to review, obviously, the exhibit that was presented tonight, the soil log results. Obviously, I haven't had an opportunity to show it to my client's engineer. I would like an opportunity to have Mr. Miller look at it and give me whatever input he may have regarding the information shown there. Obviously, I am not a soil scientist. I can't possibly pine or tell what the heck it means, so I would request an opportunity to do that. I assume that Mr. Palus will be available at the next hearing date. This would be, I guess, next Thursday. So certainly, if I did have any questions that resulted from Mr. Miller's review of this, I will commit at this time to ask him at that time. I just don't know what they could be, and I don't want to be limited. But it would be just to the extent of this information as it's bearing on the application, and I can't tell that answer.
- Mr. Whitaker: The information is there for the purpose of showing no additional soil would need to be moved and the drainage infrastructure can be placed there. So, for that limited purpose, fine.
- Mr. Inglima: Well, it's certainly being submitted into the universe of exhibits that have been admitted in this case, and certainly I don't expect that the applicant is going to say he won't rely on it for some other purpose in connection with the subdivision, so I certainly don't want to be limited in terms

of how I may be able to ask questions about this data. I hope everyone understands that. If I had received it on December 3<sup>rd</sup>, I wouldn't have much to say about the matter.

Mr. Whitaker: I'm not so sure of that.

Mr. Inglima: Thank you. At this point, I have no further questions.

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**Please Note: a 20 minute break is taken at this time of the meeting  
9:35PM.**

**Meeting reconvened at 9:55PM**

**Roll Call Taken:**

**In Attendance:** Messrs. Berardo, Pierson, Reade, Cirulli, Newman, Chairman Hanlon

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Chairman Hanlon: What I'd like to do now is open to the public to ask questions of the Soil Moving Application presentation this evening. But first, Mr. Snieckus had a comment.

Mr. Snieckus: I just had some quick clarifications on our memorandum of October 1, 2014. I just wanted to add the applicant's response to them. One of the issues that we were identifying in the report was the issue for tree preservation and removal, as we had gone through in the earlier iterations of the plans. We were talking about the sequence of construction – I think you actually alluded to it that you were going to have the initial clearing or limits of clearing established on the soil erosion instead of the control plan, but then you were going to go to a more detailed, larger clearing limit as a result of the lot development; asking for line work to be cleared up.

Mr. Palus: So you're talking about the disturbances for the infrastructure and the disturbance for individual lots?

Mr. Snieckus: Correct.

Mr. Palus: Sure.

Mr. Snieckus: Thank you. Also, in addition to that, we had asked for a sequence of construction for tree preservation.

Mr. Palus: Sure, yes.

Mr. Snieckus: Okay. And then you also had a minor other clarification regarding when you do – for the infrastructure improvements, I think you should also include the building demolition, the existing house and accessory structure. It seems like that would be probably part of that initial construction because you'd be creating the lots at that point in time, I would imagine.

Mr. Palus: In the cul-de-sac, the pavement of the proposed cul-de-sac actually extends into the current home. I would suggest maybe it would be used as a sales trailer or a construction trailer, rather?

Mr. Snieckus: Okay, if you just delineate that on the plan, that's all.

**Mr. Paul Lewis, 14 Brandywine Road:** asked questions of Mr. Palus.

**Ms. Sharon Gomez, 37 Van Dyke Drive:** asked questions of Mr. Palus.

**Mr. Jim Albes, 31 Valley Forge Way:** asked questions of Mr. Palus.

**Mr. Steve Reilly, 26 Sleepy Hollow Drive:** asked questions of Mr. Palus.

**Ms. Victoria Petrock, 61 Cleverdon Road:** asked questions of Mr. Palus.

**No further questions from the public; public portion of the meeting closed at this time.**

Mr. Whitaker: Just a few, Mr. Chairman. Mr. Palus, in connection with your development of the soil movement plan pertaining to the 11 residential lots, you testified that you use quote what you consider acceptable engineering standards in the design. Is that correct?

Mr. Palus: Correct.

Mr. Whitaker: And after you did that design, did you have the opportunity to review it with the applicant and get the applicant's consent to submit it?

Mr. Palus: Sure. Once the initial plans were prepared by my office, they were provided to the applicant for their review and comment or approval before they were submitted on his behalf.

Mr. Whitaker: Now, you recognize the applicant is in the business of constructing homes and has an expertise there. This is not their first venture.

Mr. Palus: That's my understanding.

Mr. Whitaker: And so on the basis of that, your submission – would it be correct to say your submission of the plan was for the purposes of determining that the applicant was satisfied with what you were proposing?

Mr. Palus: Correct. They're my client. They're paying the bill. They have the right to take a look at what I've done for them.

Mr. Whitaker: So although you've designed it, it wasn't designed unilaterally by you without the consent and approval of the applicant?

Mr. Palus: No, absolutely not.

Mr. Whitaker: Thank you. That's all the questions I have.

Mr. Inglima: Yes I have a couple – quick follow up to some testimony that Mr. Palus provided on cross by the public, if you just give me a second so I can find it. You were asked – I'm sorry. Ready? Mr. Palus, you were asked by Mr. Riley why the testing that is reflected in your soil log exhibit was performed. And in response to his question, you gave a different answer than the answer that you gave to me. You said you were confirming that the assumptions of Dr. Pazwash were valid, with respect to his calculations. I took down what I could as you were saying it, but that's the gist of it. What assumptions were you referring to in your answer to Mr. Riley?

Mr. Palus: I was trying to explain to him that what we were looking at doing is Dr. Pazwash had provided the design of the recharge system which is going to be underneath the right of way. And that involved obviously an underground vault that's been testified to significantly in previous hearings. And that vault is of a certain depth and requires a certain depth of excavation, and assumes certain soil conditions at that depth. So we needed to make sure that the soil in that area was going to basically accommodate his design, and that we weren't going to have to provide an alternate design or modify the design to the limit that it would change the soil moving numbers that we've been discussing all night.

Mr. Inglima: So you're simply referring to soil movement calculations?

Mr. Palus: Yes.

- Mr. Inglima: There are no other assumptions by Dr. Pazwash that you were seeking to support, reinforce, or clarify by doing that soil log?
- Mr. Palus: None. I think we're here for soil movement.
- Mr. Inglima: I know what we're here for. You don't have to keep telling me. Did you perform any calculations with respect to the capacity of the proposed detention facility or revisit or verify or confirm any calculations based on the soil logs that you performed on December 1?
- Mr. Palus: No.
- Mr. Inglima: Were there any specific issues that Dr. Pazwash had asked you before you performed the December 1 soil logs to investigate on his behalf?
- Mr. Palus: No.
- Mr. Inglima: Thank you. No further questions.
- Mr. Whitaker: Mr. Chairman, this would conclude the applicant's presentation pertaining to the soil movement aspect.
- Chairman Hanlon: Yes, sir.
- Mr. Whitaker: For the record, I want to just place on the record two stipulations. There is a section within your Soil Movement Ordinance, Section 63-17. Sometimes you have had an applicant come before you and request waivers from some of those provisions. There's no waiver request being made by the applicant as it pertains to the regulations.
- Mr. Whitaker: The second aspect is that the soil movement amounts that we have provided to you were based upon plans recognized that there may and could be revisions to the plan, based upon the input provided by board members as to what they would want to see, or recommendations made by your board professionals. And the applicant therefore would amend its plan accordingly if there was a requirement by the board to make a modification to the plan. I used the example earlier, but I want to place it on the record. The example I used is there would be soil movement occurring if we install the sidewalk.

If we didn't install the sidewalk, there wouldn't be. So the number could fluctuate on infrastructure pertaining to what the final result would be, whether it be a sidewalk, whether it be a berm, or I guess, in the most interesting way is that the board required us to plant two shrubs somewhere; yes, we'd be moving soil for that. So it has to understood that that the numbers that are provided to a board does anticipate some calculation fluctuation in those numbers. And that's with any application that I've ever brought before this board pertaining to soil movement not only in this town but in other towns. It's recognized that it is what conceptually is looked upon being but it is subject to being modified. With that, we conclude.

Chairman Hanlon: Okay. You're going to have Mr. Palus back here next Thursday, am I correct?

Mr. Palus: Correct.

Chairman Hanlon: Based on the time we have here, the original intention was to have the Borough Engineer make a presentation to the Board. Based on the time, I don't feel it's proper to force him to push through something for the next ten, 15 minutes, get done, have the public wait for a period of time and come back next week. So what I will do, if we can Mr. Inglima, if you can keep your presentation within reason next week, I would like to do is follow up it up with Mr. Hals' presentation and Mr. Snieckus right behind him if I can do that for the public – with the Board – gentlemen, and the public would ask questions and make presentations. That's the intention.

**Motion to Adjourn:** Reade, Pierson  
**All in Favor**

**Meeting adjourned at 10:45PM.**

Respectfully submitted by:

JoAnn Carroll  
Planning Board Secretary  
August 4, 2015