> BEFORE THE RADNOR TOWNSHIP
> BOARD OF COMMISSIONERS
> DELAWARE COUNTY, PENNSYLVANIA

IN RE: Conditional Use Hearing of the Trustees of Dorrance Hamilton 3/15/1996 Revocable Agreement of Trust to Develop Properties at 208 and 228 Strafford Avenue and 18 Forrest Lane

Public hearing in the above matter held pursuant to notice on Wednesday, April 17, 2024, at the Radnor Township Municipal Building, 301 Iven Avenue, Wayne, Pennsylvania, commencing at 6:32 p.m., before Norma Gerrity, Professional Court Reporter.

BEFORE: MAGGY MYERS, President JAMES COATES, Member
JACK LARKIN, Member
JIM RILEY, Member
JOHN RICE, ESQUIRE, Solicitor
APPEARANCES: GEORGE W. BROSEMAN, ESQUIRE, for the Applicant

NOAH MARLIER, ESQUIRE, Special Counsel for Radnor Township

ALSO PRESENT: PEGGY HAGAN, Executive Assistant to Township Manager

NORMA GERRITY
Professional Court Reporter 14 Fetters Boulevard
Downingtown, PA 19335
610-246-2362

## I N D E X

## APPLICANT WITNESS:

PAGE
Robert M. Lambert, Jr. (Continued)
By Mr. Marlier
4
By the Parties 15
By the Board 24

Bernard S. Panzak, Jr.
By Mr. Broseman
By Mr. Marlier
80,100
By Mr. Rice
98
By the Parties
EXHIBITS
APPLICANT:


THE PRESIDENT: Welcome, everyone, to the Board of Commissioners conditional use hearing for Wednesday, April 17 th , 2024.

Please join me for the Pledge of Allegiance.
(Pledge of Allegiance) - - -

THE PRESIDENT: Thank you. Mr. Rice, do you want to start us off?

MR. RICE: Yes. Let me just recap where we left off. As everyone can see, we have four commissioners here tonight.

We have commissioners that have conflicts that are unable to attend. These meetings are recorded. We have transcripts.

And I think all of the board members are aware that they need to either watch the recording or read the transcript or both.

So with that, we left off, I believe, Mr. Marlier, you were recrossing Mr. Lambert.

MR. MARLIER: That's correct. I had not started my recross, $I$ don't believe. MR. RICE: All right. Okay.

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APPLICANT'S EVIDENCE

ROBERT M. LAMBERT, JR.,
having been previously duly sworn, was examined and testified further as follows:

RECROSS EXAMINATION

BY MR. MARLIER:
Q. Mr. Lambert, good evening. You testified that two or three questions that I asked of you on cross-examination were not relevant to conditional use but rather to a land development.

Do you remember that testimony?
A. Vaguely, yes.
Q. Let me just clarify. If changes were needed to be made to the application, the application that's in front of this board right now currently, if changes needed to be made
during land development, significant changes, that would require a submission of a new application; correct?
A. It depends what those changes would be. If you go back to 280-135 C, the conditional use, all right, what is required of us is:

A generalized site plan shall be submitted as part of any conditional use application.

It is not intended that such plan be engineered or contain a fixed architectural layout, such as would be required under Chapter 255, Subdivision of Land.

So that's going back to the general requirements.
Q. Understood. But let's talk about specifically, let's hone in a little bit.

If you were to -- you testified that you haven't spoken to the fire marshal, that that specifically would be something that would be done during land development; correct?
A. Yes. Typically we've done that during land development.
Q. But if the fire marshal during land
development had concerns over the layout of this development as you proposed it as is in front of this board for a conditional use hearing, you may have to make significant changes to the project as it is right now; correct?
A. I don't have those answers from him or concerns from him.

We have a full-access driveway that would provide access throughout the development, so I would not foresee any.

If they have comments, we would address them at that time.
Q. Let's talk about something a little more specific to fire safety.

I'll draw your attention to the radius, the sharper radius on Drive $B$, so the bottom right-hand corner, if you have the drive, it's a $U$ shape, right, $I$ think we're all familiar with that $U$ shape.

The bottom right-hand corner, we've talked about how that is a sharper radius than the bottom left-hand corner; right?
A. Correct.
Q. So if the fire marshal, for example,
on that came in and said, hey, listen, this is an issue, this would have to be softened a bit or softened significantly, that could have an impact on this proposal; correct?
A. So, number one, there's an exhibit, the turning template, that showed the fire apparatus of the fire department that was suggested we use in the past shows full access being able to maneuver that corner, so there would be no real reason to enlarge that radius.

But using your hypothetical, if we had to increase that radius, we would be able to accommodate changes to that within this plan, which would be a minor change to the plan.
Q. But the changes might be, for example, cutting into the open space, which is immediately adjacent; correct?

MR. BROSEMAN: I'm going to object.
This is total speculation. There is no evidence that any of these things would be required.

MR. RICE: The objection is overruled.
It's recross. He answering the question.
MR. BROSEMAN: And recross was,
specifically I objected last time.
He's been cross-examined now for hours and hours over several nights, taking our case out of order.

I objected last time, and Mr. Nelson said it would be strictly limited to the questions on redirect. This is beyond that.

MR. MARLIER: I don't believe that it is. He specifically talked about how many of the questions, in his opinion, that I've asked have been regarding land development, more appropriate for questioning during the land development process and not during the conditional use process, so I'm probing a little bit as to why he believes that's the case.

MR. RICE: I mean, I read the transcript, Mr. Broseman, and that was mentioned on a couple of occasions, that that would be a land development issue.

So he's opened up the door. He has a right --

MR. BROSEMAN: Not about the drive --

MR. RICE: Your objection is overruled.

MR. BROSEMAN: Not about the driveway. Not about the driveway radius.

MR. RICE: Continue, Mr. Marlier.
MR. BROSEMAN: There's no evidence about that.

MR. RICE: But he has a right to cross-examine anything he said.

MR. BROSEMAN: He's been cross-examining him for hours.

MR. RICE: There's no limit under the MPC. Give me some authority to prevent -as soon as you go to redirect, he has a right, as does every other party in this room, for recross, so that's the way it works, unfortunately.

Mr. Marlier, continue on.
BY MR. MARLIER:
Q. Mr. Lambert, if you were to soften that radius, you would have to potentially maybe cut into the green space, the open space; correct?
A. It may be modified, yes.
Q. And/or you may have to cut into the amount of townhomes or the size of the townhomes in that bottom right-hand corner of the development; correct?
A. Depending on what the concern is, there is a myriad of design solutions to that.
Q. Is it the intent of the developer to go through land development and then sell the rights to development to another company?
A. I am not a developer --

MR. BROSEMAN: I'm going to object. This was not part of redirect, what the developer was going to do, and the applicant is the owner of the property.

MR. RICE: What's the relevance of that, Mr. Marlier?

MR. MARLIER: I think during his recross, he talked about this process and going through this process, and I think that it would be relevant, but $I$ can move on, Mr. Rice.

MR. RICE: Thank you.
BY MR. MARLIER:
Q. Mr. Lambert, you testified that a
single-family home development would cause more earth disturbance than what is proposed.

Do you remember that testimony?
A. I do.
Q. Why is that?
A. Potentially it causes more. Right now we have the dedicated open space, and a single-family plan would not require open space, and it would open the, potentially the entire site to new homes.
Q. Is there any documents that show that comparison besides the one exhibit that's been put forward showing the single family or potential single-family home development?
A. No. That's the only potential single-family home development.
Q. So there hasn't been any other documents though to show, to buttress your testimony that there would be less open space?
A. No, but a single-family plan doesn't have the open space requirement. So we have the open space requirement, which is really keeping that two-acre area in the center, an acre of that is really undisturbed.

If you were creating single-family lots, you would likely use the entire area.

This lot, this zoning district, off the top of my head, $I$ believe, has a 7,000-square-foot lot requirement.

Given that smaller lot requirement, you will likely be disturbing the entire property.
Q. So let's just talk about that for a minute. So the open space, your testimony is that there will be, $I$ think this is what you testified to at the last hearing, very little earth disturbance in that open space area; correct?
A. I believe my testimony was there's roughly an acre of disturbance, and just using $I$ think it's Exhibit $A-12$, sheet five of 17 , there is a long dashed line with two dashes showing the limited disturbance, and really the center of the open space area is all undisturbed.
Q. You testified previously as to review letters from the township.

Just to be clear, the last review letters from the township for this development
came in August of 2023; correct?
A. I would have to check the date, but, yes, it was some time ago.
Q. You testified, you brought up what we've been referring to or $I$ 've been referring to as Hamilton-1, and that would be the conditional use hearing that started in 2020 for a different application, and that the current plan has more contiguous open space.

Do you remember that testimony?
A. Yes.
Q. Just to be clear, I want to clarify for the record, you indicated that it was denied because there was not enough contiguous open space.

But just to be clear, there was multiple reasons why that application was denied by the board. Do you recall that?
A. I don't have a copy of the decision, but, yes, there were a few reasons why it was denied, one being the open space and the stormwater management that was in that open space.

MR. MARLIER: Mr. Rice, I have no
further questions.
MR. RICE: We'll go to the residents for recross for anything that's been testified to by Mr. Lambert on redirect. I'll go through the list.

Amber Levy?

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(No response.)

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MR. RICE: Mr. Chawla?
(No response.)

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MR. RICE: John Clemente?
MR. CLEMENTE: No questions.
MR. RICE: Brian Curley?
MR. CURLEY: No questions on recross.
MR. RICE: Mark Gaeto?

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(No response.)

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MR. RICE: Cindy Hansen?

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RECROSS EXAMINATION

MS. HANSEN: Here. Here. I have some questions. Cindy Hansen. Hi.

When you were bringing up the comparison properties you were talking about in your rebuttal, $I$ just have a question.

Do you realize that you were comparing R-4 properties to R-5 properties?

THE WITNESS: I was comparing the type of development, so the multifamily development is really what $I$ was comparing.

It was looking at the section of the code, I believe it really related to the driveway, and how it applied the section of the code -- I'm pulling it up. Give me one second.

It's -- 255-40 refers to multifamily and attached-dwelling residential development, and there's standards associated with that.

That exhibit was going through, so that applies across all zoning districts, not just the $R-4$, the $R-5$, so that's what
that exhibit was talking about was really the driveways and how the township had interpreted the ordinance to apply to the driveway.

MS. HANSEN: Okay. But you do know that there's a pretty big difference between R-4 and R-5?

THE WITNESS: Yes. There's different requirements, yes, but again, the purpose of that is looking at the driveway, so looking at that 255-40 ordinance.

MS. HANSEN: Okay. Then I won't ask my second question. Thank you.

MR. RICE: Cas Holloway? Questions?
MR. HOLLOWAY: Yes. My name is Cas Holloway, 241 West Wayne Avenue, and I would like to ask Mr. Lambert some questions about your testimony at the last meeting.

I believe you put up a plan of Jardin?
MR. RICE: Please make sure you speak into the mic there.

MR. HOLLOWAY: I believe it was sheet six, seven, eight, and nine. It was right
after the Villa Strafford set.
THE WITNESS: So it was Exhibit A-25, sheets six through nine.

MR. HOLLOWAY: Yes. So I think sheet six had -- is that possible to put up? I guess we're not putting it up on the screen?

THE WITNESS: I can put it up on the screen, but what is the question?

MR. HOLLOWAY: On this Jardin, you have it listed as 237 West Wayne Avenue.

Actually, there's multiple addresses. The property that you showed as 237 is actually 243.

But the question $I$ have for you, on this breakdown, you mentioned, you say there's no sidewalks along the common drive, and that is not accurate.

This plan, there is a five-foot sidewalk running along that meets ADA compliance.

MR. RICE: Ask Mr. Lambert that question. Is he aware of that?

MR. HOLLOWAY: So is it possible to
put your presentation up on the screen? I think that will be a lot easier.

MR. RICE: Mr. Holloway, you need to ask him questions, not testify yourself.

MR. HOLLOWAY: NO, no.
MR. RICE: You can do that later, if you want.

MR. HOLLOWAY: So could we go back to your first sheet? There we go.

On this sheet you're showing no sidewalks along the common drive.

I'd like to ask you how you came to that conclusion.

THE WITNESS: So what's shown here is sheet nine of A-25.

The photograph is looking into the site, and you can see this is the common driveway. There's the mailbox there on the left-hand side.

How we came to the conclusion was there's no sidewalk on either side of this. There is a concrete area adjacent to the building.

When $I$ was there, $I$ didn't perceive
that as part of the driveway sidewalk.
MR. HOLLOWAY: Well, where I have the cursor right here, that's an ADA access, and that's a five-foot walkway.

There's a verge, a planting verge to the left of the drive, and you testified that this was a 20-foot drive.

That is correct. There is a waiver on our plan that provided for that.

But this is, there is a five-foot sidewalk that surrounds the entire office building that you mentioned on your plan.

So $I$ just, for the record, $I$ just wanted to make sure we clarify that our townhouse project does have sidewalks throughout the project.

One thing I would like to say as it relates to their plan, we do have parking in front of the garages similar to what they're proposing.

THE WITNESS: And when you get to the common driveway between the units, there's no sidewalk in that location.

MR. BROSEMAN: What sheet is that,

Rob?
THE WITNESS: Sheet ten.
MR. HOLLOWAY: No. There's -- what you don't see, this is a 20-foot drive, that's correct. There is parking at the end of the drive, and there's a turnaround area on the left.

You testified that there was, it was a dead end and there was no way to turn around, so that's not accurate.

THE WITNESS: Well, there is a dead end. There's parking at the end. You use the individual driveways to do like a $K$ turn to turn around.

MR. HOLLOWAY: I believe you also showed that on the record plan, if $I$ can bring that up.

And the -- if you look at the record plan, here is the five-foot sidewalk running right alongside.

The sidewalk runs all the way around, and this ADA access to this parking lot and the ADA access to the common area, and then there's a sidewalk in front of the, both
townhouse units on either side, so it's possible for the residents to walk.

I just want it to be clear that from a townhouse perspective, there are sidewalks and it was provided for. There were not sidewalks on both side of our common drive.

MR. RICE: Mr. Lambert, you're aware of that sidewalk?

THE WITNESS: Yes. As I said, I did not perceive the sidewalk under the overhang of the office building as a sidewalk per se along the driveway. I understand it provides circulation.

Likewise, the ones in the rear, it's kind of underneath an overhang of the structure, so it's really kind of at the garage door.

It might be that circulation, but it wasn't really a sidewalk per se from a township standard, but $I$ understand the point of the circulation.

MR. HOLLOWAY: Thank you.
MR. RICE: Thank you.
Ted Hymel?

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MR. RICE: Catherine Lafarge?

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(No response.)

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MR. RICE: Mary Ann Mahoney?
Questions?

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(No response.)

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MR. RICE: Jennifer Pechet?

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(No response.)

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MR. RICE: Margaret Ruschmann?

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(No response.)

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MR. RICE: Mr. Sareen?

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(No response.)

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MR. RICE: David Satterfield?

MR. RICE: Steve and Megan Scheri?

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(No response.)

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MR. RICE: John Schuda?

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(No response.)

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MR. RICE: Kaitlin Silver?

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(No response.)

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MR. RICE: Gregory Szary?
MR. SZARY: Here. No questions on cross-examination. Thank you.

MR. RICE: Sharon and David Willis?
MR. WILLIS: No questions.
MR. RICE: Cheryl Lutz?

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(No response.)

MR. RICE: Okay. Does the board have any final questions for this witness?

## EXAMINATION

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MR. RILEY: On sheet $A-12$-- sorry --A-12, sheet nine of 17 , it has the appendix D on the right side, standard erosion and sedimentation control, looks like standard notes on the right-hand side?

THE WITNESS: I'm reading my digital copy. It didn't have sheet nine.

MR. RILEY: Exhibit A-12.
THE WITNESS: I have sheet eight and sheet ten. Hang on one second.

MR. BROSEMAN: Here, Rob.
THE WITNESS: Oh, here we go.
MR. RILEY: So all this stuff on the right side, the standard plan to control erosion and sedimentation during construction.

THE WITNESS: Correct. These are typical notes that are required with the

NPDES permitting process.
So, obviously, as we've talked about before, after we go through this process and go into land development, we will go also through an NPDES permit.

MR. RILEY: And it's great that you have all that. The final one, the fine that somebody would get if they don't do something correctly, is $\$ 10,000$ a day. It's a big deal.

It's for construction, during construction, but also post construction, you have, you want to keep water off of other people's property post as well.

My question is, are there fines like that for post?

THE WITNESS: I'm not sure exactly what fines.

MR. RILEY: Under 33, all the way at the bottom, $\$ 10,000$ a day if you don't do that.

THE WITNESS: Right. That's for erosion and sediment control, but your question was for post development.

MR. RILEY: Post development if stormwater, the system doesn't work.

THE WITNESS: So they have a maintenance and operation agreement that they enter into.

It's a recorded document that gets recorded to talk about what has to be done, and there are obligations.

I don't have a copy of one in front of me, but there's obligations in there to maintain it.

I'm not aware of fines per se of, you know, something explicit like that.

MR. RILEY: $I$ know in the past and in Radnor that we're trying to handle stormwater, and even just putting in that stuff, it doesn't always work.

There's always something, you know, leaves on top that block it or something.

One year there was six inches of snow, and then freezing rain that went on top, it all froze, and then next came a rainstorm.

Everybody got flooded, lots that never got flooded before.

Can you say, since we are pre-construction, make it that this technology will do what you want it to do, but just in case some weird thing happens, make it better than the standard?

THE WITNESS: So my experience, when modern stormwater is installed on a property, $I$ use kind of the barometer, when we do have these extreme storm events, our phone rings off the hook, right.

And so we get constant calls for the following couple of weeks of, we had $X, Y$, Z storm problem.

The calls we typically get are from established areas that don't have stormwater. We typically do not get calls from properties that have stormwater, right.

So the systems are functioning, even in extreme storm events, right, they're absorbing the water, capturing it, and controlling it is typically what we see.

Can a system account for every variable? I don't think one can.

We'll put in enough kind of measures and kind of backup areas where the way the site is arranged, we will be capturing, even if you get that large snowstorm with sleet and then rain, the way that the site is oriented and graded, we will be capturing a lot of that water, even if you get, you know, the first inlet overflows, it's going to get to then likely a second inlet, and we have a little bit of redundancy in that system.

MR. RILEY: And then as part of your design during construction, would you guys, would somebody go out and check that it is to spec, within tolerance?

THE WITNESS: Yes. So the conservation district and the township will be doing inspections during construction to make sure that measures are being installed per the plan.

There's requirements, if they have an overflow of any erosion and sediment control measures, what they have to do to remediate those.

And my experience is that both the township and the conservation district keep on top of the construction site.

MR. RILEY: Thank you.
MR. RICE: Any other questions?
MR. LARKIN: I have a couple questions.

Mr. Lambert, on redirect examination you were asked if it's common for stormwater management facilities to be underneath common open space.

Do you recall that?
THE WITNESS: I believe the question was a little bit different than that.

MR. LARKIN: I am quoting the transcript.

THE WITNESS: Okay. The way I recall it was that it was clarified to say underneath green space.

It doesn't necessarily have to be under, quote, "common open space," but it was clarified, $I$ believe, under green space.

MR. LARKIN: Well, let me start with
that maybe.
Would it change the answer that you gave if $I$ were to represent to you that while reading from the transcript, it says:

In your experience, is it common for stormwater management facilities to be underneath common open space?

THE WITNESS: Yes, they can be under common open space.

MR. LARKIN: Okay. Is it common for that?

THE WITNESS: We did a project in Tredyffrin. We have a stormwater system that's directly underneath the common open space or common area of that property.

MR. LARKIN: Any latter that you are aware of?

THE WITNESS: As far as the, under common open space, I'm using that term very, you know, defined in the ordinance, I'm trying to think of the projects I've done with common open space.

I'd say more of the projects we have don't have a required common open space,
but $I$ would say that we've done many stormwater systems under green areas, under green lawns, under athletic fields.

We've done many underground stormwater systems with various green features on top of them.

MR. LARKIN: Understood. I wanted to explore that a little, because you said you didn't quite remember the question as I read it. Let me go back to what $I$ wanted to ask you originally.

Is there stormwater management facilities under the open space in the plan that is currently proposed?

I understood the answer was no originally, but from the answer you gave on redirect, it seems like I may have been wrong.

THE WITNESS: So using -- I'm happy to pull it up, if you'd like. A-12, sheet four, the darker green area was the common open space in the center of the property.

In the bottom right-hand and left-hand corners of that, there are kind of dashed
rectangles, and those are stormwater management systems.

On the left-hand side of that page is a zoning summary. There's an open space requirement which identifies that the minimum open space is 25 percent.

Of that 25 percent, $I$ believe it was ten percent, $I$ can quote the code section if you like, may be stormwater management.

The zoning summary on the left-hand side identifies that 7.9 percent of the common open space has stormwater under it.

So there are -- the corners of it do have stormwater management under it, but it's within the township's allowable amount of stormwater.

MR. LARKIN: Got it. There is a broken line in the dark green area that seems like it sort of bypasses the -- it's labeled as PCSM BMP infiltration bed number two and PCSM BMP infiltration bed number one.

I had innately assumed that that broken line represented the limit of the
common open space, but $I$ understand that you'd be saying that, no, those infiltration beds are in the common open space?

THE WITNESS: Correct.
MR. LARKIN: Got it. Can you describe those beds? What are they?

THE WITNESS: They will be underground beds. I believe they're currently designed as a storm brick system.

So from grade, you would have open lawn, right, or, in the instance of PCSM infiltration bed number one, it's underneath parking and part of that open space, and so really it's just an open lawn, is what you're going to see above that.

There may be an observation port or a small access port to that, but really you're going to perceive it as open lawn there.

MR. LARKIN: Got it. Are those bricks, I assume, manmade objects?

THE WITNESS: Yes, they are. It's a,
it's a -- there are various proprietary stormwater products, and basically stormwater is creating a void space, and those systems are simply creating a void space under there.

It's a manufactured product that, you know, instead of using a pipe and stone system, we were using the storm brick system.

MR. LARKIN: And I assume that they would have an ascertainable location on or above the ground?

THE WITNESS: You would not know where it is under the ground, aside from any observation ports.

MR. LARKIN: But that location could be ascertained. I mean, they're going to be plottable on a map. You could use some kind of a --

THE WITNESS: They'd already be shown on a plan. It would be based on the construction as-built.

But from a physical standpoint looking at it, if you were standing there looking
at the grass, you would not be able to ascertain the load of that stormwater system.

MR. LARKIN: Okay. I want to be cautious not to get into true crossexamination and talk to you about your direct testimony, but in light of what you just said, $I$ do want to ask a question.

On direct you said: We are proposing no structures within the common open space.

Why are these not structures?
THE WITNESS: These are storm -- it's stormwater management, and so $I$ can go back to the common open space.

MR. BROSEMAN: And I'm going to
object. I believe, even though you've said you don't want to cross-examine the witness, you're cross-examining our witness, and $I$ object.

MR. LARKIN: Well, I don't think why is a question subject to cross-examination, not good cross-examination anyway.

MR. RICE: Your objection is noted in the record, $M r$. Broseman, but the board up
here is sitting as judges, so it's not really cross-examination.

MR. BROSEMAN: Yes, they're judges that aren't supposed to do crossexamination.

MR. RICE: They can ask whatever questions they want to ask.

THE WITNESS: So I refer to 280-91 A: Not less than 25 percent of the tract area shall be designated in the subdivision or development plan as common open space.

Common open space may not include required buffer yards, floodplain, or wetlands.

No more than ten percent of the required common open space may be used to meet the plan's stormwater management requirements, and all required common open space shall be contiguous unless the board of commissioners approves otherwise.

So I would say that the proposed stormwater PCSM infiltration beds are meeting planned stormwater management requirements and do not exceed ten percent
of the common open space.
MR. LARKIN: Understood. And this is really why it's not cross-examination.

I want to give you the opportunity to explain this to me, because $I$ have the question, how do you square that with 280-91, Sub D, which concludes:

Areas set aside for common open space shall contain no structure other than a structure related to outdoor recreational use.

THE WITNESS: I wouldn't consider the, you know -- it depends what your definition of "structure" would be.

MR. LARKIN: Is "structure" given in the zoning definitions?

MR. BROSEMAN: Mr. Larkin, the ordinance specifically allows stormwater management systems under the common open space. This township put that in the code. That's why it's allowed.

MR. LARKIN: Okay. So I'm left with the same question. How do you square that with Subsection D?

THE WITNESS: I don't think that under the township definition that this would qualify as a structure.

MR. LARKIN: I don't want to leave it there. I'm going to ask you the question why.

THE WITNESS: Because a structure was anything constructed or erected on the ground, so this is kind of under the ground. It's not on the ground.

MR. LARKIN: And you're looking at -I apologize. Give me a moment.

THE WITNESS: 280-4 B, the definition.
MR. LARKIN: Thank you. I see:
Anything constructed or erected on the ground or attached to the ground, including, but not limited to, buildings, sheds, manufactured homes, and other similar items.

This term includes any manmade object having an ascertainable stationary location on or in land or water, whether or not affixed to land.

MR. BROSEMAN: I'm going to object
again.
Mr. Larkin is an attorney. He's a litigator, $I$ believe. He's cross-examining our witness.

MR. RICE: He's testing your witness's testimony and he's asking questions.

MR. LARKIN: If $I$ were cross-examining you, Mr. Lambert, I would have stopped asking questions and then $I$ would have just relied on the previous testimony.

I want to figure out why is it not a manmade object having an ascertainable stationary location on or in land or water, whether or not affixed to land.

MR. BROSEMAN: Why did the township amend the ordinance to allow stormwater management in common open space?

MR. RICE: Mr. Broseman, you're out of order. Let him answer the question, not you. Let him answer the question.

MR. BROSEMAN: I'm objecting.
MR. RICE: He can answer it or he can't answer it.

MR. BROSEMAN: We're trying to get a
fair hearing here, and our witness is being cross-examined.

MR. RICE: You complained about the length of the cross-examination, and you're objecting to things that you can't object to.

I understand. Make your argument down the road when you file whatever brief you're going to file.

So, Mr. Lambert, if you can answer the question.

THE WITNESS: It's a stormwater facility meeting the ordinance, which is permitted under the common open space.

MR. LARKIN: Okay. Those are the questions that $I$ have.

MR. RICE: Any other board questions?

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(No response.)

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MR. RICE: I think we're done with Mr. Lambert. Thank you, Mr. Lambert.

THE WITNESS: Thank you.
(Witness excused.)

MR. RICE: Mr. Broseman, do you have another witness?

MR. BROSEMAN: I do. I'm going to call Mr. Panzak. We might need a short break to coordinate our exhibits, if that's okay, no more than five minutes.

MR. RICE: That's fine.
MR. BROSEMAN: Thank you.
(Recess taken.)

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MR. RICE: Okay. Mr. Broseman, are you ready for your next witness?

MR. BROSEMAN: Yes.
MR. RICE: Okay. We'll have him sworn in.

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BERNARD S. PANZAK, JR.,
having been first duly sworn, was examined and testified as follows:

THE WITNESS: Bernard Panzak,

$$
\begin{aligned}
& \mathrm{B}-\mathrm{E}-\mathrm{R}-\mathrm{N}-\mathrm{A}-\mathrm{R}-\mathrm{D}, \text { middle initial } \mathrm{S}, \text { Panzak, } \\
& \mathrm{P}-\mathrm{A}-\mathrm{N}-\mathrm{Z}-\mathrm{A}-\mathrm{K} .
\end{aligned}
$$

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## DIRECT EXAMINATION

BY MR. BROSEMAN :
Q. Bernie, can you describe your professional and educational background?
A. Yes. I have a Bachelor of Science Degree in Landscape Architecture from Pennsylvania State University.

I've been a registered landscape architect in the Commonwealth of Pennsylvania for 36 years. I've been a principal at our firm, Glacken Thomas Panzak, for 25 years.
Q. And you've put up on the screen

Exhibit A-21.
(Applicant's Exhibit A-21 was marked
for identification.)

BY MR. BROSEMAN :
Q. Is this a written summary of your educational and professional background?
A. Yes, it is.
Q. Have you been recognized as an expert witness as a landscape architect before numerous municipal bodies, including zoning hearing boards and governing bodies like the board of commissioners?
A. I have, yes.

MR. BROSEMAN: I would like to offer Mr. Panzak as an expert in landscape architecture.

MR. RICE: Mr. Marlier?
MR. MARLIER: I have no questions.
MR. RICE: Okay. Then Mr. Panzak, I'm certainly familiar with Mr. Panzak, and he'll be accepted as an expert witness in landscape architecture.

And we have A-21; right, George?
MR. BROSEMAN: I can give you a copy if you don't have one.

MR. RICE: Well, the neighbors may want copies, if you could make some available.

MR. BROSEMAN: Yes, I have that.
Would you like me to hand them all out to
you all? I'll give one to Mr. Marlier.
BY MR. BROSEMAN :
Q. Mr. Panzak, are you generally familiar with the properties that are the subject of this application as well as the general area around the property?
A. Yes, I am.
Q. Is your firm the landscape
architecture firm for the project that is the subject of these proceedings?
A. Yes, it is.
Q. Did your firm prepare the proposed landscape and lighting plan for the project that are at sheets 10 through 14 of the initial conditional use plan set that are part of Exhibit A-1?
A. Yes.
Q. And during a prior installment of this hearing, the applicant, through Mr. Lambert, introduced Exhibit $A-12$, which were the revised conditional use plans, and those plans had a drawing schedule on the first page, and they had sheets one through 12, and Mr. Lambert testified about this at the time, but sheets 13 through 17
were crossed out in red, meaning that they were not included in $A-12$.

Those sheets are the sheets that your firm has prepared, the landscaping and lighting plans; correct?
A. Yes, they are.
Q. And did you revise those sheets of your plan set to address, to basically match up with Exhibit A-12?
A. We have, yes.
Q. And are revised plan sets, your plan sheets, now marked $A-22$ ?
A. Yes, they are. They can be seen on the screen in the lower right-hand corner.
(Applicant's Exhibit A-22 was marked for identification.)

MR. BROSEMAN: I do have some copies of these that $I$ can hand out as well.

We have been also giving all of the
exhibits electronically, which we will
continue to do.
MR. RICE: Okay.

BY MR. BROSEMAN :
Q. So, Mr. Panzak, would you identify these by each sheet, please?
A. Yes. Exhibit A-22 consists of five sheets. Sheet 13 would be the existing conditions and tree inventory plan.

Sheet 14, LP-1, is the landscape plan.
Sheet 15 is LP-2, which would be landscape details and notes.

Sheet 16 is the lighting plan, and sheet 17, LI-2, would be lighting details.
Q. Now, these all have an initial date of 5-18-23 and the last revision of 3-05-24?
A. That's correct.
Q. Were these plans also revised to address the review memo from the township arborist, John Hosbach, which review memo has been entered into the record at Exhibit A-9.C?
A. Yes, they have been.
Q. And did you prepare a response memo to A-9.C?
A. Yes, we did.
Q. And that's what we've marked as Exhibit A-23?
A. Yes, that's correct.
(Applicant's Exhibit A-23 was marked for identification.)

MR. BROSEMAN: And that is, and I'll hand out copies of these.

BY MR. BROSEMAN :
Q. This is addressed to John R. Hosbach, H-O-S-B-A-C-H, from you and it's dated 3-05-24, March 5, 2024; correct?
A. Correct.
Q. So $I$ want to focus on the landscape plans first. I believe we want to look at sheet 14 of 17 of Exhibit A-22, which is also sheet LP-1; is that correct?
A. That's correct.
Q. And referring to this sheet and other sheets that you see appropriate, would you describe the proposed landscaping plan for the project?
A. I would, and something's frozen --
Q. Well, I have handed out paper copies, so you can refer to that, if you're broken.
A. I guess the essentials are still remaining on the PDF. So this is Exhibit A-22, sheet 14 , which is the landscape plan.

And I believe the plan encourages conservation as it takes advantage of this large common open or central open space to preserve a significant stand of trees on the property.

This is one of the most significant pieces of wooded area within that property. Tree preservation is also quite evident along both Eagle Road and Strafford Avenue.

The plan, Exhibit A-22, sheet 13 , the tree inventory plan, if $I$ can get back to that, illustrates the limit of disturbance, which $I$ believe Mr. Lambert has described in his testimony. It's a line, a long dash, a couple of short dashes.

And then there's also a tree preservation line shown on this plan, which is shown as an $X$ with a long dash.

This tree protection line is also detailed on the erosion and sedimentation control plan that was found on Exhibit $A-12$, sheet 16 of 17.

For those who may not be aware, the tree protection fence in Radnor Township is required to be a six-foot chain-link fence.

So when that fence does go in in advance of construction, there's very little ability for contractors to enter into that area.

The remainder of the common open space would be landscaped with additional trees and lawn. It will also contain an informal natural pervious path.

This has not been completely decided upon. It could be mowed lawn. It could be wood chips or mulch, something in that vein, again a natural pervious path.

It is shown to be four feet in width on our plan, and it runs through the central open space.

We believe this sizeable open space with its open lawn and trail winding through the central wooded area and open space areas will significantly add to resident wellness and enjoyment in this passive recreation area.

Referring back to the areas of tree preservation along Strafford Avenue and Eagle

Road, we believe we are able to better preserve the existing vegetative character of the community for the residents traveling along the public way.

With the density modification option, we feel we can provide a greater degree of tree preservation within that central open space area and along the adjacent streets. This is accomplished by internalizing the design.

Along the perimeter streets, our plan limits access points to only two along Strafford Avenue.

Continuing at the street frontage, we have added sidewalks to Eagle and Strafford to continue to provide greater local pedestrian connectivity.

Now, looking at other property boundaries, with the density modification alternative, a 25-foot buffer is required and provided along all residentially-zoned properties that abut our property.

This buffer area has been densely landscaped, as you can see on the plan, Exhibit A-22, sheet 14, LP-1.

In addition, we are suggesting the removal and replacement of the existing solid six-foot perimeter fence with a new and improved fencing to strengthen the visual screening along those properties.

The rest of the plan is significantly landscaped, and because this will be an HOA, we anticipate landscaping at a high, uniform, and very well-maintained level.

Internal driveways have been reviewed with our engineer to include ample space between driveways so that shade trees and flowering trees may be added and included in the driveway area to improve the aesthetics along that vehicular way.

Other border and open space areas like Eagle Road have buffer requirements that have been calculated per the township ordinances and landscaping provided.

Likewise, along Eagle Village, certain buffer requirements have been calculated and those areas landscaped as well.

In addition, there will be other areas of landscaping that are not included in township requirements such as foundation landscaping
around buildings, but this will be a part of the land development process later in the process, and there may be other high-visibility areas that will be amply landscaped, such as entry areas to the property.
Q. Now, Mr. Panzak, you mentioned the relatively large area that you could preserve in the central common open space.

The plan does show some tree removal in that area; is that correct?
A. Yes, there would be some tree removal.
Q. And what type of trees are being removed in that area?
A. Well, in general there would be invasive or dead, diseased, or dying trees that would be removed.

Those are the only types of trees that would be taken out of what would be open space areas at this time.
Q. And those are shown on your tree inventory, which is sheet 13 of 17 , as well as on the plans, the trees that are marked for removal?
A. Yes.
Q. And we'll get to this in a little bit,
but you spoke generally about the landscaping plan, but the plans have a lot of detail on them about what and how many trees and shrubs would be planted and their locations; correct?
A. That's correct.
Q. And there's a significant amount of trees and shrubs being provided?
A. Yes, there are.
Q. In the zoning ordinance, there's Code Section 280-91.B regarding common open space.

In your CV at Exhibit A-21, it had mentioned you had served on an open space board and a shade tree advisory committee.

Do your experiences serving on the open space board and the shade tree advisory committee, as well as your years of experience as a landscape architect, give you insight on the common open space being provided with this plan?
A. Yes. One thing $I$ do understand and realize is that through the density modification option, that open space is required and provided, and that in other development options that large, open space will not be there in other development options.
Q. Section 280-91.B says the common space shall be land which is appropriate and in suitable condition for recreation, park site, school ground, woodland conservation, or other similar recreation or open space purpose.

Are you generally familiar with that provision?
A. Yes, I am.
Q. And do you believe the common open space that is shown on this plan complies with that provision?
A. I believe it does. We would not be a park site, a school ground, but in terms of woodland conservation, $I$ think this is an exhibit of how that's done and how that's realized within this particular development option.

We are not constrained in this area by steep slopes or wetlands or anything else. It's generally a flat site.

We are providing or suggesting the provision of an open space pathway, a natural path, and this would traverse woodland areas as well as open areas.
Q. So by not having constraints on the
site, you mentioned the lack of constraints and also the general flat nature.

Is it your professional opinion that this is land that is appropriate and in suitable condition for common open space?
A. Yes, I do.
Q. And you mentioned woodland conservation. Do you believe that it will serve other open space purposes?
A. Yes. Woodland conservation is a valued asset as part of any open space, and we have the opportunity to take advantage of that, and $I$ think that will provide the residents of this community a valued asset.
Q. And there are parts of the open space that weren't within the tree protection zone that you mentioned.

Is it your professional opinion that all of the open space will provide for open space purpose?
A. Yes, absolutely. Once the project is built out, that land will be just that, open land. It will be landscaped and pathways provided through that area.
Q. I'd like to turn to sheet 16 of 17 of A-22, which is also LI-1.

Is this the proposed conceptual plan for lighting along the proposed common internal drives within the planned community?
A. Yes, it is.
Q. And can you describe this plan?
A. Yeah. This plan shows an array of post lamps, a total of nine, to be exact. Those lamps would be in a mounting height of about 14 feet.

They're scheduled to be full-cutoff fixtures with house-side shields. They are, we believe, attractive pedestrian-scale lamps.

We provide zero footcandles at property lines, and $I$ guess really this is a lighting plan that's intent is to provide sort of points of light along the driveway areas. In contrast, it's not an attempt to fully light the travel way.

We think that there will be residential-scale lighting on buildings to round out the community aesthetics in terms of security lighting in the evening.

We've located those lights on the side of the street where the sidewalk is. So along that driveway, there would be lighting for residents to walk and operate through the course of the evening.
Q. And you mentioned a few terms. I just wanted to clarify for the record.

They seem intuitive of what they would mean, but you mentioned a full-cutoff fixture. Can you describe what that means?
A. A full-cutoff fixture allows no light to be sent up into the atmosphere or up into the sky, so everything is downward cast.

These fixtures would not allow for glare and to become a nuisance for the residents of this community or the surrounding community.

And I guess I would add one other thing, is that these lights are all internal to the community and with intervening buildings and landscaping would further screen any amount of light that was being produced for these post lamps.
Q. And I think you mentioned something about shields. Can you explain what they are?
A. Yes. A house-side shield is a
physical barrier that's placed typically on the back of a light fixture, and in this case, it would be on the back, which would fully cut off any amount of light that would be flowing from that light source in a direction of our units.

They're in relatively close proximity along the sidewalk in front of some of the units, and we would not want to create, as I said before, a nuisance with the light being projected backward.
Q. And will any of the lights proposed along the internal common driveway shine directly into habitable dwelling windows located inside or outside of the development?
A. They will not. As $I$ just described, the house-side shields will cut that off. They are full-cutoff fixtures, and again, being internal to the site, relatively low pedestrianscale mounting height.

And I guess the other thing to mention about the lighting is that it's a warmer light, more of an incandescent type of, they call it color temperature, so it more leans to the
incandescent as opposed to the bright white light.
Q. And the details, you've mentioned some of the details of these light posts, the height and some of the specifications.

Are they shown on sheet 17 of 17 , also referred to as LI-2 on Exhibit A-22?
A. Yes, they are.
Q. You mentioned a term "footcandles," and your plan on exhibit, sheet 16 of $A-22$, has a series of very small numbers all throughout the plan.

Are they footcandle measurements?
A. They are footcandle measurements.
Q. And without going, just generally, is that a measure of light?
A. Yeah. It's a measurement of light intensity as it hits the ground surface.
Q. And does this show that there are zero footcandles at the property lines for the property, particularly along the properties that front on Grant Lane?
A. Yes, absolutely, zero footcandles at that point, yeah.
Q. So is it fair to say that that means that the lights you're proposing would not be shining into the homes of those properties?
A. They would not.
Q. I want to ask you a general question about all of your plan sheets.

We first talked about landscaping, and then we talked about lighting, but I'm asking you generally about all of the plan sheets.

In the general conditional use submission requirements at Code Sections 280-135.C and $\mathbf{F}(2)$, and Mr. Lambert referred to this several times, it references a general site plan being submitted.

It is not intended that such a plan be engineered or contain a fixed architectural layout, such as would be required under Chapter 255, Subdivision of Land.

The plan shall, however, demonstrate compliance with all applicable standards for approval of the conditional use, including those cited in Subsection $F$ below.

And $F$ says that in addition to the generalized site plan, the plan should show the
applicant's intentions with regard to the following, and two is:

Location, approximate dimension and arrangement of all areas devoted to ground cover, trees, screening and buffering, other planting, open space, recreation, and similar purposes, as applicable.

In your professional opinion, do the plans meet and exceed these requirements?
A. Yes. The plans are almost all fully engineered and designed in a way that would be appropriate for a land development submission.

We've provided subdivision and land development tree requirement coordination.

We've also added the tree replacement requirements of Chapter 263, the tree code, so all of our replacement trees are coordinated and identified in chart form on Exhibit A-22, sheet 13, EX-1, the inventory plan, tree inventory plan.
Q. And in Code Section 280-135.G(2) (f) and (i), there's a reference to conceptual landscaping plans; is that correct?
A. That's correct. These are well
developed beyond conceptual.
Q. So Section $G(2)(f)$ says that the conceptual landscape plans should show locations of trees and shrubs and other landscape improvements.

These plans show all of those details;
correct?
A. Yes, they do. Trees, shrubs, fencing, natural pervious path, all at a preliminary plan level for both the landscape plan and the lighting plan.
Q. And it also indicates that improvements to the streetscape adjacent to the property boundaries should be provided for.

Your plans address the streetscape of Strafford Avenue and Eagle Road along the property boundaries; correct?
A. Yes, they do. We provide, as $I$ mentioned earlier, sidewalks for connectivity, pedestrian safety.

In some of those cases, there are retaining walls that are required to add that sidewalk. We've added street trees along Eagle.

Along Strafford there is a significant
amount of preserved trees, and generally speaking the existing trees do satisfy the street tree requirements along Strafford.
Q. And $I$ just remembered one thing $I$ forgot to ask you about lighting. Is there some existing street lighting?

I presume there are township streetlights along Strafford Avenue in the vicinity of the property?
A. Yeah. I'm not sure exactly whose responsibility those lights are, but there are -we observed four streetlights along Strafford Avenue and no lighting along Eagle Road.

Those are -- those light locations are shown on the lighting plan with an asterisk.

So directly across from one of our driveway entry points is a streetlight, township or state maintained, and then another one across from the other driveway entry point.

There's one in between, as you can see where my mouse is there, and then there's another streetlight at the corner of Eagle and Strafford.
Q. And for the record, you were referring to Exhibit A-22, sheet 16 of 17 , LI-1?
A. That's correct.
Q. Jumping back to a landscaping question --
A. If I could just make one additional comment regarding the last question.
Q. Sure.
A. The footcandle points that are shown on the lighting plan do not take into account the streetlights that are along Strafford, so just for clarity.
Q. And for clarity, the footcandle measurements you did were to address the lights that were shown on your proposed plan that the applicant is proposing; correct?
A. That's correct.
Q. Code Section 280-91.G discusses a required buffer.

Can you review that provision and describe how the plans comply with that provision?
A. Yeah. Code Section 280-91.G states there shall be a buffer of 25 feet along all property lines which abut residentially-zoned districts which shall not contain any roads,
structures, parking areas, et cetera, and shall be planted in accordance with a plan which shall be approved by the board of commissioners at the time of final approval.

As previously described, we've got 25-foot buffers along our residential adjacent properties, along Grant Lane to the left or west and along the Forrest Lane property that drops below the main rectangle of the site.

It comes up the other side and is terminated at the residential property at the interface of Eagle Village.
Q. And the plans show the planting that's proposed in these buffer areas?
A. That's correct.
Q. There's a Code Section 280-95.A(4).

Would you review that provision and describe how the plans comply?
A. Yes. 280-95.A(4): Landscaping shall be regarded as essential to every development plan. Not only must natural features, trees and slopes of the site be preserved, but careful attention must be given to landscaping of parking areas and providing for street trees.

As shown on Exhibit A-22, sheet 14 of 17, sheet $L P-1$, we fully landscaped the entire property, with particular intensity around the site boundaries, particularly along the residentially-zoned districts, as mentioned previously.

We've gone over the areas of tree preservation in the central open space and along Strafford and Eagle Roads.

We've worked with our design engineer to allow for ample space along our internal drive for shade trees, and there are no other natural features or natural slopes that would need to be addressed in this case.
Q. And there's a Code Section 280-95.A(5).

Would you review that provision and describe how the plans comply with that provision?
A. Yes. 280-95.A(5) requires seeding or sodding and other planting shall be applied to stabilize topsoil on steep slopes and to enhance the appearance of open areas.

There's some very limited slopes that
were manmade when Eagle Road was created. There will be stabilization through the use of ground cover and/or sod or seed along those areas.

The pervious portions of the site will also include seeding or sodding, as we determine, through the course of the land development process.

There will also be other landscape beds, as I mentioned, at foundation areas and entry areas.

There will be likely bedded areas under the density of buffer trees and shrubs that are arrayed around the perimeter.

And all of these things would be there to stabilize the slopes and topsoil and any exposed areas through the construction.

There are seeding notes listed on the construction stage 11 and 12 on sheet six of 17 of Exhibit A-12, which is the erosion and sedimentation control plan, and sheet nine of Exhibit A-12, which is the E\&S detail.
Q. The conditional use standards did not require this, as we went over, but do these plans show compliance with the township tree
replacement and planting requirements outside of the zoning ordinance that are found in other chapters of the code, including Chapter 263, trees, and Chapter 255, the Subdivision and Land Development Ordinance?
A. Yes. As my previous testimony stated, all required plantings are shown on these plans and are compiled on compliance charts on sheets 13 of Exhibit A-22, the tree inventory plan, as well as sheet 14 , landscape plan.

All of our calculations and ordinance requirements are summarized on those plans, yeah.
Q. And, in your experience, are the landscaping plans in compliance with these requirements in Radnor Township done typically during land development or at the time of grading permit?
A. Yes, they are.
Q. And at that time, are these plans reviewed by the township's shade tree commission?
A. Yes, they are. Yes.
Q. And in your professional experience working with the shade tree commission in Radnor Township and the township arborist, are you
typically able to work out any particular concerns or issues regarding landscaping, tree removal, and tree replacement at that time?
A. Yes. I've found that to be a very open and interactive process.

Typically that involves a site visit, where we literally walk out and look at the site and assess our plans versus what's on the site, and we do work out the details sometimes at that point.
Q. You mentioned that one of the objectives of the landscaping plan for the site was to maintain the character of the existing street frontage of the property along Eagle Road and Strafford Avenue.

You described generally how the plans achieved those objectives and other objectives.

Did your firm prepare some images to show the existing and proposed use of the property along Eagle Road and Strafford Avenue?
A. We did. We felt it was important to show what the edges of the property would look like from the public travel way, and if our computer is cooperative --
Q. I'm going to hand up -- are these images at A-24?
A. Yes, Exhibit A-24a through e.
$\qquad$
(Applicant's Exhibits A-24a-e were marked for identification.)

MR. BROSEMAN: We're going to take a moment and see if it can be revived on the screen, if that's okay.
(Recess taken.)

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MR. BROSEMAN: Thanks, Rob. Thanks for the chance to put that back up. BY MR. BROSEMAN :
Q. By reference to these exhibits, Mr. Panzak, would you describe the existing and proposed conditions along the property frontage along Eagle Road and Strafford Avenue?
A. Yes. What we have on the screen is Exhibit A-24, and we start with A-24a.

There's a small key map, which I'm sure you're all familiar with by now, and we are
starting on Eagle Road near Eagle Village, and we're going to make our way up Eagle Road toward the intersection of Strafford Avenue.

We will then turn left and work our way, $I$ guess, northward or westward along Strafford Avenue, and I will describe the existing condition and the proposed condition, and each of these exhibits has just that.

The top section is the existing condition, and then we try to, to the best of our ability, show an artist's rendition of what we believe the condition will look like perhaps shortly after it would be planted.

So current condition along Eagle starting at --
Q. You're at A-24a?
A. A-24a, starting at Eagle Village. This is the existing condition. There's some fencing. You can see the slopes, the rise up from Eagle Road to the top of the embankment.

There is currently an entry/exit point to this property, a gated entry/exit point, and you can also see the existing trees that are there currently.

And the thing that you can't see real well, right at the entry point, there are stone entry walls on either side of that driveway that are covered in ivy.

And if we switch down to the proposed condition, we will be, as $I$ mentioned earlier, adding some retaining walls to be able to add the sidewalks that have been so critical to the pedestrian connectivity in the area.

So you're seeing a retaining wall along the street line. You're also seeing that sidewalk. We've got some human forms shown there that would indicate walkers along that sidewalk.

You're looking at street trees and also replacement trees that make up the streetscape.

There would be several removals of existing trees in this area. I know that this tree has demised in the course of our project (indicating).
Q. Which tree are you referring to in which part of the exhibit?
A. It's a central tree on the property behind the existing fence that is located on the
existing streetscape photograph.
Q. Would it be the third tree from the left of the existing driveway?
A. Third or fourth, depending on what we've got there, yeah.

So, you know, to further describe what you're seeing, there would be townhouse units. This would be the end of a townhouse unit.

Our driveways are intervening between this townhouse unit and the next one. You begin to see --
Q. When you're saying "this townhouse unit," can you be more descriptive for the record?
A. Yes. This would be townhouse unit number one as shown on all of our plans. The open space in between, moving to the north, again would be driveways and open space in this area.

And then there is another townhouse unit, which I believe is townhouse 38. So we're showing townhouse 38 in this exhibit.
Q. And, for the record, on this particular A-24a, on the left side of each image, existing and proposed, would be where the Eagle

Village Shopping Center is?
A. Yes, that's correct.
Q. And to the right side is headed toward the intersection of Eagle Road and Strafford Avenue?
A. That's correct.
Q. Thank you.
A. The right side of this exhibit is about mid block between Eagle Village driveway and Strafford Avenue.

So starting where we left off, the existing condition you see --
Q. You're on $A-24 b$ now?
A. A-24b, you're seeing the existing condition again on the top graphic. There is a fence also in this exhibit. It's a four-foot estate fence at this location.

There are a variety of shrubs and, of course, trees that make up this streetscape area.

You're also, if we move down to the proposed condition, you're again seeing the townhouse unit that goes from unit 38 to unit 33 closest to Strafford Avenue. There are a variety of existing trees that would remain.

Again, we made assessments in the field as to trees that would be dead, diseased, or dying, and we've attempted, to the best of our ability, to remove certain features that we know would be removed, and we are showing trees that we believe would be preserved along these areas.

Again, including the sidewalk along that side of Eagle and its associated retaining walls and also the array of landscaping, both shade trees, flowering trees, and evergreen trees, along with upgraded estate fencing to round out the streetscape.

And just to reiterate, the right side of this exhibit, both existing and proposed, would be Strafford Avenue.

So moving on to Exhibit A-24c, the very left side of both of these exhibits would be looking southwestward along Eagle Road, so the left side is the Eagle Road and Strafford Avenue intersection.

And reviewing the existing conditions at that point, several, many large trees and fencing. No sidewalk shown.

I probably should have mentioned that
on the existing condition of the previous exhibits, but there are no sidewalks currently. This is one of the entry points or entry driveways. So you see how that would open up at that point.

And what you're looking at on the proposed piece of $A-24 c$, as we move to the center of this exhibit, is the previously-mentioned townhouse unit 33 , the end of that unit.

And then we go across the driveway, and then you're starting to see what we believe would be the condition of townhouse, the end of townhouse unit 32 .

So our driveway, continuation of the sidewalk, how we are dealing with the existing streetscape from a landscape standpoint, preservation of trees, where possible, and then the supplement of new, proposed, replacement, or buffer screening trees along the perimeter.

Moving on to $A-24 d$, this is the central section of three sections along Strafford Avenue, and what we're looking at on the existing condition is a very, is a relatively denselypopulated streetscape of existing trees.

This is our main open space area, and we are really proposing that very few trees in this area are removed.

Again, as previously stated, only trees that would be compromised, diseased, or dying trees would be eliminated from this streetscape area, and again supplemental trees provided where needed and to the extent possible within the context of the existing trees to remain.

So we believe that the vast majority of this section will remain very much like it is perceived today.

And our last exhibit, streetscape exhibit along Strafford Avenue is A-24e. This is the furthest western or northwestern exhibit section.

Again, the top band is presenting the existing condition, which shows an array of existing trees.

This is where the driveway, the existing driveway is to the previous home site that was located on the property.

And to the right side of this exhibit,
you will notice a large tree with a bit of a bend to it. Right in that area is where the end of the property line is.

So we are actually depicting a very small piece of the adjacent neighboring property at that point.

So if we move down to the proposed condition, again we're looking at this elevation area where our second driveway meets Strafford Avenue, and we are looking at, this would be townhouse unit number 21 in this location, and then our entry area, and then townhouse unit number 20 on the right side of this driveway.

And as previously described, we are proposing to retain as much of that street, the healthy streetscape trees as possible.

And then where the intervening driveway regrading and disturbance would happen, we would be adding our driveway trees and any additional supplemental landscaping that would present this as a beautified streetscape area.
Q. Thank you. Mr. Panzak, in your professional opinion, do the features of the landscaping plan and lighting plan that you have
focused on and with regard to the landscaping plan, including extensive plantings, the large common open space, the buffers, maintaining the character of the streetscape along Eagle and Strafford Avenue, help to mitigate adverse impacts on the surrounding properties and neighborhood?
A. I believe it does, yes.
Q. In your professional opinion, will the proposed use have any adverse impacts related to, impacts on landscaping and lighting that would not normally be associated with a similar townhome development?
A. They would not.

MR. BROSEMAN: That's all I have for Mr. Panzak at this time.

MR. RICE: Mr. Marlier?
MR. MARLIER: If $I$ could have five minutes, like Mr. Broseman had, to set up some exhibits.

MR. RICE: Okay. We'll take five.

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(Recess taken.)

MR. RICE: Okay. We're going back on the record. Mr. Marlier, cross-examination.

MR. MARLIER: Thank You, Mr. Rice.

CROSS EXAMINATION

BY MR. MARLIER:
Q. Mr. Panzak, you testified that with other options, not the proposal, but other options that are in the code, that the large open space would not be there, I believe is how you testified.

Do you remember that?
A. Yes.
Q. Just to be clear, it might not be required, but this property can be developed as a large open space with potentially a smaller amount of single-family homes; correct?
A. Yes. I was mainly thinking about the exhibit that was presented previously as the single-family plan.
Q. You're referring to the plan that the developer put together, the one sheet showing a
potential single-family home development; correct?
A. Yes.
Q. You testified about the lighting. I'm going to try not to stick around too much here, but if we could talk about the lighting for just a moment.

So if we could look at A-22, I believe it's sheet 16?
A. Yes. That's the lighting plan.
Q. You talked about the light posts and the light that they would cast out, and $I$ believe you said there was some sort of shield, I think it's a house-side shield?
A. Yes.
Q. If we could just look at townhome 17, for example. Between 17 and 16 , there is a lamppost in front of that; correct? That triangle is showing a lamppost?
A. Yes.
Q. So the house-side shield would keep the light going from townhome 17 to 16; correct?
A. Yes.
Q. Would the light go into townhome 24,
which is directly across?
A. No, it wouldn't.
Q. Why is that?
A. I could have described it earlier during testimony. On that same sheet, sheet 16 of Exhibit A-22, there is a graphic called an iso footcandle diagram in the lower right-hand side of the page, and that shows the distribution of footcandle light distribution, and we've superimposed that footprint on the plan, as well as run this point-to-point footcandle array that you see in the small pinpoint locations across that sheet 16 , and that's where you begin to understand the limits of the throw of the light.
Q. So when you say "house-side shield," it's not just the house side. Is there a shield in front of the light?

How does that work? Why does it not get to townhome 24 ?
A. It's just the internal optics that are utilized in lampposts. They're, in the lighting world, there are many different shapes of these footprints.

There's a full symmetrical array.

There's what's called a forward throw, which projects light even further across a parking lot or a roadway.

In this case, we've selected an optical package that really is limited and throws light side to side and not forward, and then the house-side shield is also mitigating any light trespass to the rear.
Q. Understood. So I assumed the house-side shield was what was keeping the light, but there are other factors that you have?
A. Correct.
Q. You mentioned that much of the tree replacement requirements would be addressed or could be addressed in land development, and it's your testimony that you've exceeded requirements; right?
A. Yes.
Q. But you did point out that a lot of this would be fleshed out in land development; correct?
A. Yes.
Q. But just to be clear, if there were health, safety, and welfare concerns, let's say,
about stormwater runoff, those health, safety, and welfare concerns would be important to a conditional use hearing; correct?

MR. BROSEMAN: I'm going to object.
THE WITNESS: Yes.
MR. BROSEMAN: That's a legal question.

MR. MARLIER: I think Mr. --
MR. RICE: Overruled.
Go ahead, Mr. Panzak. You can answer.
THE WITNESS: Could you restate the question, please?

MR. MARLIER: Sure.
BY MR. MARLIER:
Q. You've stated that there was, some of these issues regarding landscaping would be fleshed out during land development, but my question is if there were concerns about health, safety, and welfare with this development regarding stormwater runoff, you would agree that that would be important to discuss during a conditional use hearing; correct?
A. I believe that was information that Mr. Lambert has commented on, and I'm not really
qualified to state whether removal of trees and stormwater management would be affected here.
Q. You've been qualified as an expert in landscape architecture, but you don't believe you're qualified to testify as to whether -- the removal of trees and the impact on stormwater management? Is that your testimony?
A. Yeah. I don't believe that I'm qualified to comment on stormwater management relative to removal of trees.

I think the provisions that are in place on the engineering documents will protect health, safety, and welfare issues during construction, and $I$ would rely on that information.
Q. Let me just ask a very general question or a very basic question, $I$ think.

Landscaping can have an effect on stormwater management; correct?
A. I believe that landscaping and trees are a renewable resource that can be and are constantly refreshed. New trees today can become the canopy of the future.

And I think construction activities
are a relatively small moment in time and stabilization will happen, new trees will be planted, trees have been preserved.

And I think this ecosystem will move forward in a more healthy way with this development versus where we are today with the condition of the tree canopy.
Q. I'm not saying that this development is going to take away all the trees, but let's just say this development was going to take away every single tree on this property.

You would agree with me that that would have an impact on the stormwater management, correct, relative to where it is today with the amount of trees it has?

MR. BROSEMAN: Mr. Marlier, you're assuming no new trees will be planted in your hypothetical?

MR. MARLIER: Correct.
BY MR. MARLIER:
Q. No new trees, all the trees are taken away relative to where it is right now. There would be an effect on the stormwater management; correct?
A. Yes.
Q. Okay. So we agree that landscaping does have some impact, we don't know, we're trying to flesh out, this board is trying to figure out what that impact might be based on this plan, but there is some impact from landscaping on stormwater management; correct?
A. Yes, in that hypothetical where we're removing trees and nothing's going back, but we know that there's an ample replacement package, additional trees for driveways and buffers.

This is not a static one-time effect. It's an opportunity that will be built out and re-stabilized, and again, as I stated earlier, multiple trees replacing ones that have been removed.

This would all be township-required calculations, and a significant amount of replacement trees will be added to the property.
Q. I'd like to direct your attention to A-24 again, $d$, and also on e. It shows the two drives that are proposed; correct?

So we're looking at $24 d$ and $24 e$. The renderings for the proposed show the drives that
are proposed by the applicant; correct? 24d?
A. Yes. Yes, correct.
Q. Just to be clear, these drives aren't to scale; correct?
A. Yes. As I stated earlier, we did our best to provide a rendering and an artist's depiction of what this might look like, and exact scale is within reason, but it was not calculated or engineered significantly.
Q. I'd like to go back to the landscaping. How many trees are going to be removed from the property?
A. Healthy trees removed, 115.
Q. And unhealthy trees? I'm not sure --
A. There's a total of 225 trees to be removed, which would include 115 healthy trees and -- okay. 225 trees total, 115 healthy, 110 declined and diseased trees.
Q. And how many will be planted?
A. Total trees proposed would be 332.
Q. And what will the maturity of these trees be?
A. We have got 186 deciduous trees. Of that 186, 142 are large canopy trees, 44 would be
flowering understory trees, and 146 trees would be evergreen tree varieties, larger evergreen tree varieties.
Q. And what would the height of the evergreens be?
A. At planting, the township requirement is eight to ten feet.
Q. And your testimony is they would be that eight to ten feet?
A. Yes.
Q. And the large canopy trees?
A. The large canopy trees, the township requires a caliber in sizing, and these would be installed at a two- to two-and-a-half-inch caliber size.
Q. I don't know what a caliber size is. Could you explain that?
A. Yeah. Caliber is the measurement of the diameter of the trunk at the root ball height.

The industry talks about diameter at breast height. The nursery industry sizes their trees just above the root flare at the root ball.

So a two- to two-and-a-half-inch
caliber tree is the measurement of the trunk size above the root ball.
Q. You've testified that you, I believe that you are removing as few trees as possible; correct?
A. Yes.

MR. BROSEMAN: I'm going to object. I think it was along the street frontages, he testified.

MR. RICE: What's the objection?
MR. BROSEMAN: I think he didn't state the question, state the testimony accurately.

MR. MARLIER: I think that's proper for redirect. I think it can be clarified.

MR. RICE: The objection is overruled. Go ahead, Mr. Marlier.

BY MR. MARLIER:
Q. I'm going to bring up what's been previously marked as A-4 A.

Mr. Panzak, are you familiar with this document? I believe we've been calling it the neighbor plan?
A. I've seen this plan. It hasn't been a
plan that I've studied or prepared any critical landscape assessment on.
Q. Well, looking at A-4 A, you can see on the left-hand side along the Grant Lane side, there's more buffering on that side than the plan that's before this commission, before it right now; correct?
A. Correct.
Q. And so in that buffering area, as a landscape architect, you could utilize that buffering area to put more plantings in, correct, because there's more space?
A. Yes.
Q. So there's a plan that has been submitted by the applicant itself that shows that there could be more buffering along the Grant Lane side?
A. Yes, correct.
Q. And just to be clear, you've balanced the preserving of trees with the applicant's desire to have 38 townhomes; correct?
A. Yes.
Q. And you've balanced preserving trees with the developer's desire to include a
stormwater management program under the open space; correct?
A. Yes.
Q. So I think you testified to this, but I want to be clear for the record.

What else is going to be along the buffers besides the trees? You mentioned fencing?
A. Yes. Along the Grant Lane neighbors, the Forrest Lane neighbors, and along our boundary with Eagle Village, there would be solid six-foot fence provided.
Q. The new trees being put in, we just talked about the height.

They would be, the height of new trees proposed, that would be shorter than many of the trees you're taking down; correct?
A. Yes.
Q. And, obviously, trees that are newer and newly planted, they wouldn't be as full as trees that have been growing or are currently on the property; correct?
A. Well, not necessarily. Sometimes, and we see it with white pine trees, of which there
are many along the property border, lose their lower branches and become very open at the ground plane, so essentially what was once a buffer tree is no longer really providing that buffer.
Q. Understood. Have you reviewed the township comprehensive plan?
A. I have not.
Q. Did you know that the township code states that to accomplish the township's land use objectives within a density modification development, conditional use development plans shall be reviewed in conjunction with the municipal comprehensive plan?

You didn't know that?
MR. BROSEMAN: I'm going to object, because he didn't say he didn't know that.

MR. MARLIER: That's my question.
BY MR. MARLIER:
Q. You didn't know that?
A. I understood that that is the case, that it is being -- that it does need to relate to the comprehensive plan.
Q. Has your plan indicated all of the trees with a diameter, we were just touching on
this a few moments ago, a height of 30 feet or greater?
A. I don't understand that question.
Q. Have you marked all the heritage trees at the site?
A. We know where all the heritage trees are, yeah.
Q. Do you know how many there are, off the top of your head?
A. There are 30 heritage trees.
Q. And are all of those trees being preserved?
A. They are not.
Q. How many are being taken down?
A. Twenty-two. Of that 22, 15 of those trees have been determined to be declined or diseased, seven trees, heritage trees have been determined to be healthy that we were taking down, and eight trees are being preserved.
Q. I guess if we were to look at where those seven healthy heritage trees would be, let's go to your Exhibit A-22, sheet 13.

Are you able to point out where those seven heritage trees are, the healthy ones?
A. With some time, I could.
Q. Let me ask you this. Are those heritage trees where the townhomes will be built? Is that why they're being taken down?
A. You're asking where the preserved trees are or the ones that are being taken down?
Q. You were discussing seven healthy trees, heritage trees, that are going to be taken down, and I couldn't fathom why you would take down a heritage tree that's healthy if it's in green space or the open space that's indicated in the development plan.

So is it safe to assume that those seven heritage trees would be where the townhomes are proposed to be built?
A. They're arrayed, yeah, across the site where townhomes would be or grading or, you know, some other development activity.
Q. If you had a townhome development proposal that was less than 38 townhomes then, theoretically we could save those seven heritage trees; correct?
A. Yeah. And as I've stated earlier, I think we're able to remove trees, if approved.

And with compensation that's called out in the ordinance, the canopy restoration would take place, $I$ believe, over time and build back any losses that would be incurred by these trees you're referring to.
Q. How long would it take the large canopy trees that are going to be planted to grow to the size of a heritage tree?
A. It could take 50, 60 years.
Q. And how long for the evergreens?
A. I'm sorry. I didn't understand that question.
Q. There's 146 evergreens that are going to be eight to ten feet tall.

How long would it take for them to be the size of these seven heritage trees that are being removed?
A. I don't understand the relationship between heritage tree and evergreen tree.
Q. A heritage tree has to do with the size of the root, correct, the size of the trunk?
A. Correct.
Q. So, I'm not a landscape architect, but I would assume the size of the trunk at the root
level, if it's a heritage tree, it's a certain width, large, mature, and the 146 evergreens that are going to be planted would not be that; correct?
A. Correct.
Q. So how long would it take for those 146 evergreens to become them?
A. Well, again, depending on growth rate, you know, that might take place in 30,40 years.
Q. Is all the landscaping shown relative, on the documents that you put into the record tonight or marked, are they relative to -- is there anything on those plans that show how close they are in proximity to utilities, underground utilities?
A. I believe we show the utility easements, and we are outside of those required easements.

The township actually dictates setbacks of landscaping and other structures from underground stormwater management, so that's also a control, and we've complied with those controls.
Q. You were, Mr. Panzak, a witness in
what has been called Hamilton-1; correct?
A. Yes.
Q. Does the correct plan that's before this board right now conserve more trees than that plan or less?
A. I haven't reviewed Hamilton-1 in some time, so I am not able to comment on that.

MR. MARLIER: Just one moment.

MR. RICE: Mr. Marlier, while you're looking, a question about the $D B H$ versus the measurement at the root ball.

So the diameter at breast height, that measurement of a tree, what are we talking about in terms of the seven heritage trees?

What is the size that we're talking about removing?

THE WITNESS: Well, the heritage tree designation starts at 30 inches.

MR. RICE: Right, but what are the seven being removed? Is it 30 ? Or is it 40? Is it 50?

THE WITNESS: Oh.
MR. RICE: I just want to get a number.

THE WITNESS: Right. I've got a 32. I've got a 41. I've got a 33, a 32, a 35 and a half, a 31, and a 46 and a half.

MR. RICE: And are they shade trees or ornamental trees or are they evergreen?

THE WITNESS: Primarily shade -deciduous trees. I've got a black cherry, a pin oak, a red oak, another red oak, red oak, red oak, sugar maple, and one white pine.

MR. RICE: Okay. I have just one other question about trees, and we will get back to Mr. Marlier.

Norway maples, are they all staying? Because there's a lot of them on your chart which say they're invasive/volunteer.

Are they staying or are they being removed?

THE WITNESS: Only the items with the dark shading at the number would be removed.

MR. RICE: Oh, okay. You're talking about the tree inventory chart?

THE WITNESS: That's correct, on Exhibit A-22, sheet 13.

MR. RICE: Got it. I'm sorry.
Mr. Marlier, go ahead.
MR. MARLIER: Thank You, Mr. Rice.

CROSS EXAMINATION (Resumed)

BY MR. MARLIER:
Q. I was just asking about the underground utilities.

So if you look down at Forrest, to the property that's just off in the rectangle, you have the basin, $I$ think it's basin five.

Is it your testimony that the landscaping to the left and right of that basin is sufficiently far away per the code?
A. Yes.
Q. And it's your testimony that there won't be any -- you're not concerned with any influx or infiltration, I\&I, with the stormwater management that's under there leading into

Forrest Lane?
A. Yeah. We've kept the adjacent vegetation outside of the setback buffers.
Q. I brought up on the screen $A-12$, sheet five, and the dotted line, $I$ think you testified to this, that shows the limit of earth disturbance; correct?
A. Yes.
Q. And so, just so $I$ understand what that means, within the dotted line in the open space, your testimony is there would not be earth disturbance; is that correct?
A. Well, outside that line. Inside would be disturbed. Outside would not be disturbed.
Q. So just to be clear about what's inside and outside.

So outside is along the townhomes, not in the middle in the open space, but to the other side of the dotted line closest to the townhomes?
A. Well, in the center open space area where you do see that large dashed, long dashed line, inside of, well, yeah, inside of that area is preservation, is not disturbed.

There are two different things. One
is not shown here, which is the tree preservation fence.

There are pieces of area outside of the limit of disturbance line that are not included in the tree preservation area.

So you will have areas that have no impact on trees, even though there's no disturbance there.
Q. Well, let me try to clarify for myself and for the record.
A. Okay.
Q. So you have the open space?
A. Yes.
Q. And you have a dotted line that kind of has the two little circles along it as well, and it kind of wraps around, through the open space, around the townhomes, like a U?
A. Yes.
Q. What does that indicate?
A. May I use the mouse? This area is not part of the limit of disturbance. There is significant tree preservation in this area.

If you cross this line around the townhomes and around those driveways, there is
disturbance.
That line that we've been referring to work its way around the site. You can see, if you can see where my mouse is at this point, on the townhome side of that line is disturbed land.

In this case, there's a tree protection fence preserving these trees. That's the six-foot fence, chain-link fence that the township requires that $I$ mentioned earlier.

So everything in here would be off limits to construction and contractors and machinery. That line works its way around the property.

It's very narrow here, so there is some area of non-disturbance, a little piece here, a little piece there, and you can see it works its way around.

So, generally speaking, there is disturbance along the Eagle Village side, and that line works its way up and around.
Q. Thank you. So, in other words, we're looking, what you've just been describing is a dotted line that is solid in some places, circles in others, and it wraps around the property, but
specifically in the open space, it wraps around like a U; correct?
A. Yes.
Q. But inside that, your testimony is that there won't be earth disturbance?
A. That's correct.
Q. Are there going to be trees removed inside that?
A. Yes, only the unhealthy, diseased, or dying trees.
Q. Will there be trees planted inside that shape, that $U$ ?
A. Yes, there would be.
Q. And it's your testimony that removing those trees and planting trees does not qualify as earth disturbance?
A. Well, digging a hole and planting a tree, $I$ don't consider that earth disturbance, because we're planting it, and we're mulching it, and that's not what $I$ would define as earth disturbance.

Earth disturbance is really the limit of grading and construction, and that is what that line is intended to depict.

I've never had any challenge of tree planting within a limit of disturbance outside of the technical machine regrading and construction area.
Q. Have you spoken with the Delaware County Conservation District about this project generally?
A. No, I have not. That's not typical for landscape architects.
Q. I'm going to remain on $A-12$. Go back to sheet three.

This shows the existing features. These existing features are going to be removed; correct?
A. Sheet three?
Q. Correct.
A. Yes.
Q. And when we were just looking at the earth disturbance, the sheet that shows the earth disturbance and the limits of the same, are any of these features within the area that shows there would not be disturbance?
A. It's hard to tell without the superimposing of these features on the -- or
having the limit of disturbance shown on this plan.
Q. So your testimony is you're not sure? You can't tell from just looking at these two sheets?
A. Yeah, I cannot tell.
Q. Will there be -- strike that. You did testify that there will be trees planted along Grant Lane, correct, the Grant Lane properties?
A. Yes.
Q. I'd like to switch over to lighting, if $I$ could. Are you installing metal or fiberglass pole streetlights?

And I know that some of this was testified to potentially and introduced just this evening, but we did just receive these this evening, so $I$ just want to clarify.
A. Yes. The specified lights are metallic lamps.
Q. Metallic lamps, but not fiberglass?
A. No.
Q. And will they have underground conduits?
A. Yes.
Q. Will there be any lighting closer to the property line along Grant Lane or Eagle?
A. There would not be any additional lighting along those areas that you just mentioned.
Q. If there were, if this project was 32 townhomes, let's say, instead of 38 , there would be less light emanating from the property, correct, less need for as much lighting?
A. Fixtures that would be associated with dwelling units are typically quite small and inconspicuous, and $I$ would not consider that level of lighting to be problematic or disturbing of surrounding neighborhoods.
Q. So it's your testimony it will be the same amount of street lamps, or street posts, light posts if the property was developed as 32 townhomes or less?
A. If the driveway was of similar size, I would think that we would have these nine street lampposts there.
Q. So the lighting is, is it your testimony the lighting is what it is as proposed because of the length of the driveway, Drive $A$
and Drive $B$ ?
A. I think I stated earlier in testimony that our intention was not to fully light the driveway but rather provide points of light along it. We could have reduced this number of lights.

We felt like this was the appropriate amount of light given its location and the type of development it is.
Q. If this were, if this board were to determine that Drive $A$ and Drive $B$ were, in fact, streets and should be held to that standard, would the lighting be sufficient per the code?
A. I think so, yes.
Q. You testified that you are familiar with Hamilton-1. I'm not sure if you can answer this question, but if you can.

Does the current plan have less light on the property than that plan?
A. As I said, I haven't looked at Hamilton-1 in a while and don't know the exact number of lampposts that we used on that particular plan.
Q. Would there be any lighting proposed along Eagle Road?
A.

There is no lamppost provided at this time and none anticipated.
Q. And the same for Strafford? It's just the two posts that are indicated toward Strafford Avenue, but not along Strafford Avenue; correct?
A. Correct.
Q. And what tests have you done to determine what light would leave the property, if any?
A. I'm not sure $I$ understand the question.
Q. Have you done any tests to determine what light would emanate from the property as the development is proposed, let's say, into the neighbors' property on Grant Lane?
A. Yes. The point-to-point diagram that's shown on Exhibit $A-22$, sheet 16 , it's very hard to read, but nevertheless it's there showing footcandle levels at each one of those points, and we believe that there are zeros at the property line.
Q. And how do you determine the footcandle -- you may have testified to this, but briefly, how do you determine that footcandle?
A. There's a Visual software, a software called Visual, and each fixture has a file associated with it, and you give it an attribute, which would be the type of fixture that you're using, the exact fixture that you're using and at what mounting height.

And once you've added all of that information into the program, you can ask it for these points, and that's what is shown on LI-1, sheet 16 of A-22.

MR. MARLIER: Thank You, Mr. Panzak.
I have no further questions.
MR. RICE: Okay. Neighbor questions.
Neighbor questions?

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CROSS EXAMINATION

MR. RICE: Amber Levy?
MS. LEVY: Yes. Amber Atwood Levy,
Radnor Conservancy. I just wanted to talk about lampposts real quick.

Do you know, are these full-cutoff
lampposts? Are they dark sky friendly?
THE WITNESS: Yes.

MS. LEVY: Great. And you had mentioned that there's additional housing lighting and safety lighting.

Would that also be dark sky friendly?
THE WITNESS: Not having developed an architectural package, $I$ don't know the answer to that.

MS. LEVY: Okay. Could they be?
THE WITNESS: I certainly think they could be.

MS. LEVY: Okay. What is the qualification that was used to define "decline"? You've referenced a lot of trees in "decline."

How do you define them? Is it like an ISA TRAQ usage, the Tree Risk Assessment Qualification that's used?

THE WITNESS: Well, $I$ am going to describe that we had brought onto our team an arborist to make these assessments, and that's the individual that has made the assignments of declined or diseased.

I'm not aware of a specific TRAQ or other criteria that was part of that
assessment.
MS. LEVY: Okay. Got it. And what percentage of this landscape design includes trees that are native to Southeastern Pennsylvania?

THE WITNESS: Almost -- well, almost all of it in the deciduous realm would be considered native.

In the landscape architectural world, we have trouble with native evergreens, and we oftentimes use other trees that have proven to be good performers, not invasive, and would avoid things like I have described earlier with white pines, where the intent of buffering is lost over time.

So less of a percentage of natives on the evergreen side.

MS. LEVY: Yes, no, I understand. Those white pines start just to fall apart.

What about the shrubs? What percentage of the shrubs are native to Southeastern Pennsylvania?

THE WITNESS: Those particular shrubs are not native. And again, we see ill
performance of native shrub materials, evergreen shrubs particularly, not the deciduous side, but where evergreens are required.

You know, our rhododendrons and our mountain laurels oftentimes are just not robust performers, and we believe that there are other shrubs that do perform much better in terms of providing screening, more robust growth, faster growth than some of our natives.

MS. LEVY: Okay. What is the -- and forgive me if this is something that people know and $I$ just don't know this.

But what is the manner in which topsoil is preserved in the areas of disturbance to kind of protect that bio-culture of the topsoil that's in existence right there and those microorganisms?

THE WITNESS: Well, in the areas of disturbance, it's a general requirement that topsoil be stripped and stockpiled onsite, and that once the construction
activity is concluded, that soil would be re-spread on the pervious, remaining pervious areas of the site to provide a growing medium for sod and seed and other landscape plants.

MS. LEVY: Is that amended once -- do you put like compost or anything like that and then it's added in case there is more that is needed when it goes back onto the property?

THE WITNESS: It's typically not amended. We believe that the topsoil that's in place provides a reasonably good growing medium, and that's typically what's re-spread across the site without amendment.

MS. LEVY: Got it. How far away is the tree protection fence set from the trees?

THE WITNESS: I would say that varies and in some cases would be within drip lines and other cases would be at the drip line area.

MS. LEVY: And is it your opinion that
that is far enough back from the drip line of those mature trees to preserve enough of the root structure for those trees to not have a negative impact or create any die-back on those large trees that are close to that fence line?

THE WITNESS: I think we've tried very hard to make assessments and to consider the trees that are there.

And in terms of doing the best we can, we've made decisions of what we made, and we believe that where we're at is within reason to save these trees.

MS. LEVY: Okay. And my final question, what is the size of the tree protection space within the open space?

I believe it's my understanding that it's about an acre of open space on this plan.

How much of that is this preserved conservation space, as you're calling it?

THE WITNESS: I don't have that number. I've heard acre, two acres talked about, but I'm not able to testify to an
exact area of preservation.
I believe you're referring to the center section?

MS. LEVY: Yes, that large center section, yes.

THE WITNESS: Yeah. I don't know the answer to that.

MS. LEVY: Okay. All right. Thank you.

MR. RICE: Mr. Chawla?
(No response.)

-     -         - 

MR. RICE: John Clemente?
MR. CLEMENTE: No questions.
MR. RICE: Mr. Curley?
MR. CURLEY: Brian Curley, 136
Fairfield Lane.
Sir, Mr. Panzak, just so I'm clear, when you propose to put together your landscape plan, do you review or look at the proposed stormwater plan in terms of the location of trees that would be removed and trees that will be planted?

THE WITNESS: I absolutely looked at the proposed stormwater management plan. I'm not sure $I$ understand the question.

MR. CURLEY: Okay. Well, like, for instance, we're talking about this common open space that you're not going to disturb, yet the stormwater plan is talking about putting in some type of underwater basin there, so I'm confused about how you can put in an underwater basin and not disturb it.

Can you clarify?
MR. BROSEMAN: I'm going to object. The plan showed this. We talked about it.

MR. CURLEY: I'm just seeking clarity.
MR. BROSEMAN: The undisturbed area was not where the open space was -- or the stormwater management was.

MR. RICE: Mr. Panzak, can you answer that question?

THE WITNESS: Sure. Roughly what Mr. Broseman said, the stormwater management basins are not within the preserved or undisturbed open space area, and we would
have to analyze specific areas, because there are currently many open space areas located on the existing site, and the removal of trees versus the replacement of trees is a very specific thing.

And we definitely take into account the proposed stormwater management, as we take into account all the other features that are being proposed, including site utilities.

So, you know, the landscape plan has been fully integrated into the overall development plan and $I$ believe is an appropriate landscape plan for this development.

MR. CURLEY: Okay. This might be an obvious question, but does the removal of trees impact soil infiltration?

THE WITNESS: I am not a soil scientist, so I am not going to be able to answer that question.

MR. CURLEY: Any thoughts about whether planting trees would improve if there was an infiltration?

THE WITNESS: I think, to my way of thinking, those are two separate issues.

I think soil is, has a certain
characteristic. It is either permeable or it has certain characteristics.

And trees apply to them or not, $I$ think, is, are two different, two different issues, in my view.

MR. CURLEY: Okay. But if there was a section of this property where there was a failure of soil infiltration, and you're planning on either removing trees or planting trees, don't you think there would be some impact?

Because there was a review done by Hilbec in 2019 in the southwest corner, left bottom corner of the property where there was a failure of soil infiltration testing, yet you're talking about removing trees and possibly putting in stormwater basin.

And I'm confused as to why trees would, why you can't answer that trees would help or not help that situation.

THE WITNESS: Yeah, I'm not going to be able to comment on soil infiltration and stormwater management.

MR. CURLEY: Okay. Thank you.
MR. RICE: Mark Gaeto?
(No response.)

MR. RICE: Cindy Hansen?
MS. HANSEN: Cindy Hansen. I just have one question.

You're talking about a lot of protection and shading, and $I$ was just wondering, was there any consideration for the houses that are across the street on Strafford Avenue for the exit with 76 cars or more vehicles coming in and out of the development with the headlights coming out and turning and going down the street?

The existing residents, it seems to me, would be at a disadvantage from this plan, with both exits coming out.

THE WITNESS: Well, all I can say to that is that there are two driveway points
there, and that would be, $I$ think, a minimum amount of entry and exit points, whereas there may be the possibility of another development type or style that would have many more driveway curb cuts and things along Strafford Avenue.

MS. HANSEN: There could be one on Eagle Road though, and that's a commercial development there.

THE WITNESS: Yes, and that's not the plan that's being discussed.

There's only so much we can do in terms of an exit or entry point in terms of how landscaping could or could not mitigate headlights.

MS . HANSEN: Okay. Thank you.
MR. RICE: Cas Holloway?
MR. HOLLOWAY: No, thank you.
MR. RICE: Ted Hymel?

-     -         - 

(No response.)

-     -         - 

MR. RICE: Catherine Lafarge?
(No response.)

-     -         - 

MR. RICE: Mary Ann Mahoney?
(No response.)

-     -         - 

MR. RICE: Jennifer Pechet?

-     -         - 

(No response.)

-     -         - 

MR. RICE: Margaret Ruschmann?

-     -         - 

(No response.)

-     -         - 

MR. RICE: Mr. Sareen?

-     -         - 

(No response.)

-     -         - 

MR. RICE: David Satterfield?
MR. SATTERFIELD: Yes. Dave
Satterfield, 207 Strafford.
You mentioned a solid fence around, I think it was Eagle and Grant.

What type of fence would be along

Strafford?
THE WITNESS: We were thinking that we would replace the Eagle and Strafford fencing with estate fencing, four-foot open estate fence.

MR. SATTERFIELD: Okay. And you talked about preserving the treeline along Eagle.

Is that part of the rationale for why there was no entrance onto Eagle?

THE WITNESS: NO.
MR. SATTERFIELD: No? So it's not a reason to not have an entrance there?

THE WITNESS: That's correct. Under this proposal, many of the trees in that particular zone would be removed due to -well, some would be removed due to disease and demise, but as I'm looking at that area now, the trees that are, they're mainly proposed trees and very few existing trees.

MR. SATTERFIELD: Okay. It seems like that would be a nice place to plan an entrance. I think we talked about that before.

We talked about the lighting dispersement to people on Grant, but how about along Strafford?

Is there any light dispersement to any of the homes along there?

THE WITNESS: Yeah. We're showing the footcandle cutoff at the property line areas as zeroing out at that point.

And because of the style and the optics of the post lamps that we're proposing, those areas would be very limited in terms of any light spillage.

And I believe you may have heard my testimony about the existing lighting along Strafford, and there are two existing streetlights roughly at the two entrance driveways that we have.

MR. SATTERFIELD: Okay. Have you done any examination of the amount of trees that could be preserved if you were to do a single-family plan as opposed to the townhome thing?

THE WITNESS: The single-family plan demonstration that has been shared in these
hearings would imply that there would be a significant amount of disturbance due to street right-of-way development, the houses themselves, the driveways, the stormwater management.

So it's our opinion that the density modification option in the plan that you see before you would give us the opportunity to preserve many more trees than a single-family plan would.

MR. SATTERFIELD: It just seems to me like a single-family plan with less buildings, more spaces between the buildings could allow more opportunities for landscaping and tree preservation, because you have more green space. You would have less structures.

So it just seems like a plan that could be created that could preserve more trees that way.

THE WITNESS: Yeah. Like I said, I think that in lotting out the site before you build the home, provide the driveways, provide the on-lot storm water management,
each lot would have its own stormwater management plan, $I$ think the impact to the site would be greater than what we're able to do in terms of the overall open space preservation.

MR. SATTERFIELD: Thank you. That's all.

MR. RICE: Steve and Megan Scheri?

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(No response.)

MR. RICE: Mr. Schuda?

-     -         - 

(No response.)

-     -         - 

MS. MAHONEY: Mahoney. Can I ask a question?

MR. RICE: Mary Ann Mahoney?
MS. MAHONEY: I just have a really simple question. These big trees that you say you're going to take out, they have to have huge root systems that go deep.

How long would it take a tree to compensate, to catch the same amount of
water that a huge tree would take?
THE WITNESS: Yeah, I am not an expert on trees and absorption of water, so I really can't comment to that.

But, as I've stated in testimony previously, the code prescribes certain amounts of compensation for the larger trees, and any tree, for that matter, and we are providing six trees for any tree 30 inches and above.

MS. MAHONEY: Is that good compensation, you mean?

THE WITNESS: Yes.
MS. MAHONEY: So you're just going to have more trees, but the depth will take years.

THE WITNESS: Yeah. You know, regarding depth --

MS. MAHONEY: I'm just worried about catching the amount of water. That's all.

THE WITNESS: Yeah. Regarding root zones and depth, $I$ think it's --root zones tend to spread out, and they're not necessarily that deep.

Each tree might have its own unique characteristic of root depth, but it's a common misconception that big trees have deep, deep roots. Generally root zones are spread out.

MS. MAHONEY: So if you put a, say you take a tree out that you know has deep roots, you're going to put a similar tree in there like it?

THE WITNESS: Well, you know, this is, as I've described in testimony, vegetation, trees are renewable. We take some out. We put some in.

Theoretically, those are being planted in areas and in ways that would be appropriate to the new features that are located on the site, and that over time, this new crop of trees and landscaping becomes the canopy of the future.

With respect to stormwater management, we're not only planting those trees and in addition many trees for one tree, which will be the canopy of the future, but there is provided engineered stormwater
management associated with this plan, whereas there is none today.

So we believe that from a stormwater management standpoint, we're going to be on the positive side of that.

MS. MAHONEY: Thank You.
THE WITNESS: You're welcome.
MR. RICE: Kaitlin Silver?
(No response.)

MR. RICE: Gregory Szary?
MR. SZARY: Yep. Gregory Szary, 6 Forrest Lane.

So you had mentioned an exchange rate, the tradeoff of new plantings for the heritage trees, and $I$ believe you said it was six trees for a 30 -inch, so six two-and-a-half-inch caliber trees equate to a 30-inch or greater heritage tree.

And what was the largest, the size of the largest?

THE WITNESS: The largest heritage tree? I believe it's 46 and a half.

MR. SZARY: Okay. What is the height of the street lighting poles?

THE WITNESS: Mounting height is 14 feet.

MR. SZARY: Okay. So a lamp head is at 14 feet?

And what is the height of the canopy of the proposed planted trees at the street area?

THE WITNESS: Those trees would be 12 to 14 feet.

MR. SZARY: So the lamp head is going to be in the trees basically?

THE WITNESS: We've, well, at planting, there is many different tree species that are arrayed along the driveway, so unless we talk about a specific lamp.

But we tried to keep trees away, to some degree, from the lampposts.

MR. SZARY: How many lampposts are being proposed on the drives?

THE WITNESS: There's nine.
MR. SZARY: Nine lamps? Okay.

THE WITNESS: Yeah.
MR. SZARY: And your photometric study for light bleed off of the site considered only those nine lamps?

THE WITNESS: That is correct.
MR. SZARY: So no consideration for any floodlights or other exterior ornamental lights or any bleed from the interior of the building to the property line?

THE WITNESS: Yeah. Our test is a conceptual plan that provides evidence that we can effectively satisfy ordinance requirements, and those building-mounted lights don't come into consideration at this level.

MR. SZARY: Okay. When you first began your design process on this project, were you given the townhouse layout, the locations of the townhouses to work with?

THE WITNESS: Yes.
MR. SZARY: Okay. So you're given a base plan showing where the houses would be; is that correct?

THE WITNESS: That is correct.
MR. SZARY: Were you asked to rearrange the townhouses to suit preservation of the trees onsite?

THE WITNESS: We worked with the engineers to look at the edges of the disturbance area, and we did interact and look at areas where there could be the savings of a tree here or there, and that's what we did.

MR. SZARY: So there was some movement of the buildings relative to an attempt to preserve trees?

THE WITNESS: Well, not necessarily the buildings, but the grading perhaps associated with the edges of the building sites and other features that are part of the plan, stormwater management, for example.

MR. SZARY: So it sounds to me then that what you're saying is you were asked to preserve as many trees as possible given a given townhouse layout.

THE WITNESS: Yes.

MR. SZARY: Okay. Is that the intent of the township's ordinances for preserving trees?

We're not talking about protecting trees during construction, but preserving trees, in your opinion.

THE WITNESS: Yeah. I think we're being asked to save trees where possible, and that's what we set out to do.

MR. SZARY: I'd like to talk about the artistic renderings. Is it possible for you to call up the exhibits, 24-A? A-24 rather.

You can stay on those three images that are along Strafford Avenue. You may have to close some of the other ones.

THE WITNESS: What did you want to -is this what you wanted?

MR. SZARY: Strafford Avenue, if you have it.

THE WITNESS: Okay.
MR. SZARY: Can you explain in just two sentences how these renderings are created?

THE WITNESS: Yes. We went out, we photographed the streetscape, and we identified generally what trees we were seeing in those views.

We cross-referenced that with our existing conditions plan and then had this integrated process of, you know, we believe these trees are going to be removed for driveways and other features and, you know, we attempted to vacate areas on the existing photograph where those removals would happen.

And then, of course, we did the best we could with trying to represent the proposed townhome features and our proposed landscaping overlaid on top of all of that.

MR. SZARY: Okay. Can you point out for us where in the existing Exhibit A-24c, where the existing structures are on that existing photograph, that line of trees?

THE WITNESS: You're asking for the existing structures that are interior to the site?

MR. SZARY: Yes.

THE WITNESS: Yeah, I can't locate the existing structures.

MR. SZARY: Do we see any trees, any existing structures in this view, which is 24d?

THE WITNESS: I can't locate them.
MR. SZARY: And do you see any in this view of 24e?

THE WITNESS: No.
MR. SZARY: So these images appear to be touched up to remove those structures?

THE WITNESS: No. We didn't actively look to remove existing condition features.

MR. SZARY: But they're not visible.
THE WITNESS: They're not visible, no.
MR. SZARY: But you can see them from the road, but they're not showing up in your photograph.

So that's not a true representation of what those views are.

THE WITNESS: I will testify that we didn't actively remove existing structures from the existing photographs.

MR. SZARY: That's all I have for now.

Thank you.
MR. RICE: I lost my list. I know Cheryl Lutz was on there and Dave and Sharon Willis.
(Discussion off the record.)

MR. RICE: Do any other residents have any questions whose name $I$ haven't already called?
(No response.)

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MR. RICE: Okay. Let's go off the record.

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(Discussion off the record.)

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MR. RICE: The hearing is continued to April 30th, 6:00 p.m.

MR. BROSEMAN: 6:30 p.m.
MR. RICE: 6:30 p.m. Sorry. And we'll pick up with Mr. Panzak that night.

THE PRESIDENT: All right. Now we
have a motion to adjourn. I need a motion.
MR. RILEY: I'll make a motion to adjourn.

THE PRESIDENT: Second?
MR. LARKIN: Yes, second.
THE PRESIDENT: All in favor, say aye.
(The Board unanimously responds aye.)

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(Proceedings concluded at 9:47 p.m.)

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## CERTIFICATE OF REPORTER

I, Norma Gerrity, a Professional Court Reporter, do hereby certify that the foregoing record is a true and accurate transcript of my stenographic notes in the above-captioned matter.

Norma Gerrity
Professional Court Reporter




|  | ```118:22, 119:9, 120:4 current \([3]\) - 13:8, 71:14, 108:17 cursor \({ }_{[1]}\) - 19:3 cut [4]-9:22, 10:1, 58:4, 58:17 cutoff [6]-56:12, 57:9, 57:11, 58:18, 110:22, 124:7 cuts [1] - 121:5 cutting [1] - 7:16 CV [1] - 53:11``` <br> dark [4]-32:18, 99:23, 110:23, 111:4 <br> darker [1]-31:21 <br> dash [2] - 48:16, 48:20 <br> dashed [4] - 12:18, $31: 24,101: 21$ <br> dashes [2] - 12:18, 48:17 <br> date [2] - 13:2, 46:12 <br> dated [1] - 47:10 <br> Dave [2] - 122:20, 136:3 <br> David [3]-23:1, $23: 20,122: 19$ <br> DBH [1] - 98:13 <br> dead [4]-20:9, 20:11, $52: 15,75: 2$ <br> deal [1]-25:10 <br> dealing [1] - 76:15 <br> decided [1] - 49:11 <br> deciduous [4] - 88:23, $99: 10,112: 7,113: 3$ <br> decision [1]-13:19 <br> decisions [1]-115:11 <br> decline [2] - 111:13, <br> 111:14 <br> declined [3]-88:18, 94:16, 111:22 <br> dedicated [1]-11:7 <br> deep [5] - 126:22, <br> 127:24, 128:4, 128:7 <br> define [3]-104:20, <br> 111:12, 111:15 <br> defined [1] - 30:20 <br> definitely [1] - 118:6 <br> definition [3]-37:13, $38: 2,38: 13$ <br> definitions [1] - 37:16 <br> degree [2]-50:6, $130: 20$ <br> Degree [1] - 42:10 <br> Delaware [1] - 105:5 <br> demise [1] - 123:18 <br> demised [1] - 72:19 <br> demonstrate [1] - | $\begin{aligned} & \text { 124:24 } \\ & \text { denied }[3]-13: 13, \\ & \text { 13:17, 13:21 } \\ & \text { densely }[2]-50: 22, \\ & 76: 23 \\ & \text { density }[6]-50: 5, \\ & 50: 18,53: 20,67: 12, \\ & \text { 93:10, 125:6 } \\ & \text { department }[1]-7: 7 \\ & \text { depict }[1]-104: 24 \\ & \text { depicting }[1]-78: 4 \\ & \text { depiction }[1]-88: 7 \\ & \text { depth }[4]-127: 15, \\ & 127: 18,127: 22, \\ & \text { 128:2 } \\ & \text { describe }[12]-33: 6, \\ & 42: 7,47: 20,56: 7, \\ & 57: 10,64: 19,65: 17, \\ & 66: 18,70: 18,71: 6, \\ & 73: 6,111: 19 \\ & \text { described }[8]-48: 15, \\ & 58: 16,65: 5,69: 16, \\ & 78: 14,82: 4,112: 14, \\ & 128: 11 \\ & \text { describing }[1]- \\ & 103: 22 \\ & \text { descriptive }[1]-73: 13 \\ & \text { design }[6]-10: 6, \\ & 28: 13,50: 9,66: 10, \\ & 112: 3,131: 18 \\ & \text { designated }[1]-36: 10 \\ & \text { designation }[1]- \\ & 98: 21 \\ & \text { designed }[2]-33: 9, \\ & 61: 11 \\ & \text { desire }[2]-91: 21, \\ & 91: 24 \\ & \text { detail }[2]-53: 2,67: 21 \\ & \text { detailed }[1]-48: 22 \\ & \text { details }[6]-46: 9, \\ & 46: 11,59: 3,59: 4, \\ & 62: 6,69: 9 \\ & \text { determine }[6]-67: 5, \\ & 108: 10,109: 8, \\ & 109: 12,109: 22, \\ & 109: 24 \\ & \text { determined }[2]- \\ & 94: 16,94: 18 \\ & \text { developed }[4]-62: 1, \\ & 80: 17,107: 17,111: 5 \\ & \text { developer }[4]-10: 7, \\ & 10: 10,10: 13,80: 24 \\ & \text { developer's }[1]- \\ & 91: 24 \\ & \text { development }[56]- \\ & 4: 18,5: 1,5: 21,5: 23, \\ & 6: 1,6: 2,6: 9,8: 12, \\ & 8: 14,8: 21,10: 4, \\ & 10: 8,10: 9,11: 1, \\ & 11: 14,11: 16,12: 24, \\ & 15: 11,15: 12,15: 20, \\ & 25: 4,25: 24,26: 1, \\ & 36: 11,52: 2,53: 22, \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |


flooded [2] - 26:23, 26:24
floodlights [1] - $131: 7$
floodplain [1] - 36:13
flowering [3] - 51:12,
75:10, 89:1
flowing [1] - 58:5
focus [1] - 47:13
focused [1]-79:1
following [2]-27:12,
61:2
follows [2] - 4:9, 41:22
foot [10]-17:19, 19:4,
19:10, 20:19, 49:3, 51:3, 74:16, 92:12, 103:8, 123:4
footcandle [11] -
59:13, 59:14, 64:7,
64:11, 82:7, 82:9,
82:11, 109:19,
109:23, 109:24,
124:7
footcandles [4]-
56:15, 59:9, 59:20,
59:23
footprint [1] - 82:10
footprints [1] - 82:23
foregoing [1]-138:7
foresee [1]-6:10
forgive [1]-113:13
forgot $[1]$ - 63:5
form [1]-61:18
forms [1]-72:12
Forrest [5]-65:8,
92:10, 100:14,
101:1, 129:14
forward [4]-11:13,
83:1, 83:6, 86:5
foundation [2] -
51:24, 67:9
four $[6]-3: 13,31: 21$, 49:15, 63:12, 74:16, 123:4
four-foot [2]-74:16, 123:4
fourth [1]-73:4
freezing [1] - 26:21
friendly [2] - 110:23,
111:4
front $[9]-4: 23,6: 2$, 19:19, 20:24, 26:9, 58:8, 59:22, 81:18, 82:17
frontage [3]-50:13, 69:14, 70:19
frontages [1] - 90:8
froze [1] - 26:22
frozen [1]-47:22 full $[9]-6: 8,7: 8$, 56:12, 57:9, 57:11, 58:18, 82:24, 92:20, 110:22
full-access [1] - 6:8
full-cutoff [5]-56:12,
57:9, 57:11, 58:18, 110:22
fully $[6]-56: 19,58: 4$,
61:10, 66:2, 108:3,
118:12
functioning [1] -
27:19
furthest $[1]$ - 77:16
future [3]-85:23,
128:19, 128:23
G
$\mathbf{G}(\mathbf{2})\left(\mathbf{f}_{[1]}-62: 2\right.$
Gaeto [2] - 14:18, 120:5
garage [1] - 21:17
garages [1] - 19:19
gated [1] - 71:22
general [9]-5:14,
44:5, 52:14, 55:2,
60:5, 60:10, 60:13,
85:16, 113:22
generalized [2]-5:7,
60:24
generally [11] - 44:3,
53:1, 54:6, 54:19,
59:15, 60:9, 63:1,
69:16, 103:18,
105:7, 134:3
Generally ${ }_{[1]}$ - 128:4
George [1]-43:17
Gerrity [2] - 138:6,
138:13
given [7] - 37:15,
65:23, 108:7,
131:19, 131:22,
132:22, 132:23
Given [1] - 12:6
Glacken [1] - 42:15
glare [1] - 57:15
governing [1] - 43:5
grade [1] - 33:11
graded [1] - 28:6
grading [4]-68:16,
95:17, 104:23,
132:15
Grant [11]-59:22, 65:7, 91:4, 91:16,
92:9, 106:9, 107:2,
109:15, 122:23,
124:2
graphic [2] - 74:15, 82:6
grass [1] - 35:1
Great [1] - 111:1
great [1]-25:6
greater [5] - 50:6,
50:15, 94:2, 126:3, 129:20
green $[10]-9: 22$,
29:19, 29:22, 31:2,
$31: 3,31: 5,31: 21$,
32:18, 95:11, 125:16
Gregory [3]-23:17,
129:12, 129:13
ground [13]-34:12,
34:14, 38:9, 38:10,
38:16, 54:4, 54:13,
59:18, 61:4, 67:2,
93:2
grow [1] - 96:7
growing [3]-92:21,
114:4, 114:14
growth [3] - 97:8, 113:10
guess [7] - 17:6, 48:1, 56:16, 57:17, 58:21,
71:5, 94:20
guys [1] - 28:13

| $\mathbf{H}$ |
| :---: |

habitable [1] - 58:14
half [6] - 89:14, 89:24,
99:6, 129:19, 129:24
Hamilton-1 [5] - 13:6,
98:1, 98:6, 108:15,
108:20
hand [17]-6:17, 6:20,
6:22, 10:3, 18:19,
24:11, 31:23, 32:3,
32:10, 43:24, 45:14,
45:20, 47:7, 70:1,
82:7, 91:4
handed $[1]$ - 47:23
handle [1] - 26:15
Hang [1] - 24:16
Hansen [4]-14:22, 15:3, 120:9, 120:10
HANSEN [6] - 15:2,
16:5, 16:12, 120:10, 121:7, 121:16
happy [1] - $31: 19$
hard $[3]$ - 105:23,
109:18, 115:8
head [4]-12:4, 94:9,
130:5, 130:12
headed [1] - 74:3
headlights [2] -
120:18, 121:15
health $[4]-83: 24$,
84:1, 84:18, 85:13
Healthy [1]-88:13
healthy [9]-78:16,
86:5, 88:16, 88:17,
94:18, 94:21, 94:24,
95:7, 95:10
heard [2]-115:23,
124:13
hearing [10] - 3:3, 6:3, 12:12, 13:7, 40:1,

43:4, 44:19, 84:3,
84:22, 136:19
hearings [1] - 125:1
height $[14]-56: 10$,
58:20, 59:4, 89:4,
89:20, 89:22, 92:14,
92:15, 94:1, 98:15,
110:6, 130:1, 130:3,
130:7
held [1] - 108:11
help [3] - 79:5, 119:24
hereby [1] - 138:7
heritage [21] - 94:4,
94:6, 94:10, 94:17,
94:21, 94:24, 95:3,
95:8, 95:10, 95:14,
95:21, 96:8, 96:16,
96:19, 96:20, 97:1,
98:17, 98:20,
129:17, 129:20,
129:23
Hi [1] - 15:3
high [2] - 51:8, 52:3
high-visibility ${ }_{[1]}$ 52:3
Hilbec [1]-119:16
hits ${ }_{[1]}$ - $59: 18$
HOA [1] - $51: 7$
hole [1] - 104:17
Holloway [4]-16:14,
16:16, 18:3, 121:17
HOLLOWAY [12] -
16:15, 16:23, 17:4,
17:10, 17:24, 18:5,
18:8, 19:2, 20:3,
20:15, 21:22, 121:18
home [6] - 11:1,
11:14, 11:16, 77:22,
81:1, 125:23
homes [5] - 11:10,
38:18, 60:3, 80:19,
124:5
hone [1] - 5:17
hook [1] - 27:10
Hosbach [2] - 46:17, 47:9
HOSBACH [1] - 47:10
hours [3]-8:2, 8:3,
9:11
house [9]-56:13,
58:1, 58:17, 81:14,
81:21, 82:15, 82:16,
83:7, 83:10
house-side [8] -
56:13, 58:1, 58:17,
81:14, 81:21, 82:15,
83:7, 83:10
houses [3] - 120:15,
125:3, 131:23
housing [1] - 111:2
huge [2] - 126:22,
127:1
human [1]-72:12

Hymel [2] - 21:24,
121:19
hypothetical $[3]$ -
7:11, 86:18, $87: 8$
I

I\&I [1] - 100:23
identification [4] -
42:20, 45:17, 47:4, 70:6
identified [2]-61:18,
134:3
identifies [2]-32:5, 32:11
identify [1] - 46:2
ill [1] - 112:24
illustrates [1] - 48:14
image [1] - 73:23
images [4]-69:18,
70:2, 133:14, 135:10
immediately [1] - 7:16
impact [11] - 7:3, 85:6,
86:13, 87:3, 87:5,
87:6, 102:7, 115:4,
118:18, 119:14,
126:2
impacts [3] - 79:6,
79:10, 79:11
imply [1] - 125:1
important [3] - 69:21,
84:2, 84:21
improve [2] - 51:14, 118:23
improved [1] - 51:3
improvements [2] -
62:5, 62:13
incandescent [2] -
58:23, 59:1
inch [3]-89:14, 89:24, 129:19
inches [3] - 26:20,
98:21, 127:10
include [5] - 36:12, 51:11, 67:5, 88:16, 91:24
included [4]-45:2, 51:13, 51:23, 102:5
includes [2] - 38:20,
112:4
including [7] - 38:17,
43:4, 60:21, 68:3,
75:7, 79:2, 118:9
inconspicuous [1] 107:12
increase [1] - 7:12
incurred [1] - 96:4
indicate [2] - 72:13,
102:19
indicated [4] - 13:13,
93:23, 95:11, 109:4
indicates [1]-62:12



| 24:24, 46:9, 67:17, | 109:19, 120:11, | $53: 21,54: 16,125: 7$ | $33: 14,65: 1,65: 23,$ | permitting ${ }_{[1]}-25: 1$ |
| :---: | :---: | :---: | :---: | :---: |
| 138:9 | $1: 7,128:$ | options [4] - 53:2 | 83:2 | pective [1] - 2 |
| nothing's [1] - 87:9 <br> notice [1] - 78:1 | $\begin{aligned} & \text { One [4] - 19:17, 26:20, } \\ & 53: 19,101: 24 \end{aligned}$ | $\begin{gathered} 53: 24,80: 10,80: 11 \\ \text { order [2] - 8:4, 39:19 } \end{gathered}$ | $\begin{gathered} \text { part }[13]-5: 8,10: 12, \\ 19: 1,28: 12,33: 14, \end{gathered}$ | $\begin{gathered} \text { pervious }[6]-49: 10, \\ 49: 14,62: 9,67: 4, \end{gathered}$ |
| NPDES [2] - 25:1, 25:5 | one-time [1]-87:12 | Ordinance [1]-68:5 | 44:15, 52:1, 55:11, | 4:2, 114:3 |
| uisance [2] - 57:15, | ones [5]-21:14 | ordinance [11]-16:3, | 22, 102:21 | phone [1]-27:10 |
| 58:10 | :15, 94:24, 95:6 | $1,30: 20,37: 18$, | 111:24, 123:9 | photograph [5] |
| number [12] | 33:16 | 9:16, 40:13, 53:9, | 132:17 | 18:16, 73:1, 134:11 |
| 20, 32:21, 33:13, | onsite [2]-113:24 | $8: 2,68: 11,96: 2$, | particular $[7]$ - 54:16, | 134:20, 135:18 |
| 73:16, 78:11, 78:13, | 132: | 131:1 | 66:3, 69:1, 73:23, | photographed [1] |
| 99:3, 99:23, 108:5, | open [101] - 7:16 | ordinances [2] | 8:22, 112:23, | 134:2 |
| 108:21, 115:23 numbers [1]-59:11 | 9:22, 11:7, 11:8, 11:9, 11:19, 11:21, | 51:17, 133:2 |  | photographs [1] - |
| numbers [1] - 59:11 <br> numerous [1] - 43:3 | $\begin{aligned} & 11: 9,11: 19,11: 21, \\ & 11: 22,12: 10,12: 13, \end{aligned}$ | oriented [1] - 28:6 originally [2] - 31: | particularly [3] - $59: 21,66: 4,113:$ | 135:23 |
| nursery [1] - 89:22 | 12:20, 13:9, 13:14, | 31:1 | parts [1]-55:15 | 131:2 |
|  | 13:21, 13:22, 29:11, | ornamental [2] - 99:8, | party [1] - 9:1 | physical [2] - 34:23 |
| 0 | 29:21, 30:7, 30:9, | 131: | passive ${ }_{[1]}-49: 2$ | 58 |
|  | 24, 31:13, 31:22, |  |  | pick [1]-136:23 |
| oak [5] - 99:11, 99:12 <br> object [12]-7:18, | $32: 4,32: 6,32: 12$,$33: 1,33: 3,33: 11$, | $\text { outdoor }[1]-37: 10$ | $49: 14,54: 22,62: 9$ | $103: 15,103: 16$ |
|  |  | outside [9] - 58:15, | pathway [1]-54:21 | pieces [2] - 48:9, |
| $\begin{aligned} & \text { object }[12]-7: 18, \\ & 10: 11,35: 16,35: 19, \end{aligned}$ | $\begin{aligned} & 33: 1,33: 3,33: 11, \\ & 33: 14,33: 15,33: 20, \end{aligned}$ | $68: 1,97: 17,101: 3$ | pathways [1]-55:23 | 102:3 |
| $38: 20,38: 24,39: 12,$ | $\begin{aligned} & 33: 14,33: 15,33: 20 \\ & 35: 10,35: 14,36: 11, \end{aligned}$ | 101:13, 101:16, | PCSM [4] - 32:20, | pin [1]-99:11 |
| $\begin{aligned} & 38: 20,38: 24,39: 12, \\ & 40: 5,84: 4,90: 7, \\ & 93: 15,117: 13 \\ & \text { objected [2]-8:1, 8:5 } \end{aligned}$ | 36:12, 36:16, 36:18, | 101:17, 102:3, 105:2 | 32:21, 33:12, 36:22 | pine [2] - 92:24, 99:13 |
|  | 37:1, 37:8, 37:19, <br> 39:17, 40:14, 48:6, | Outside [1] - 101:14 | PDF [1] - 48:2 | pines [2]-112:14, |
|  |  | overall [2]-118:12, | Pechet [2]-22:13, | 11 |
| objected [2]-8:1, 8:5 <br> objecting [2] - 39:21, | 49:7, 49:16, 49:18, <br> 49:19, 49:20, 50:7, | 126:4 | 122:7 | pinpoint [1]-82:1 |
| objecting [2] - 39:21, 40:5 |  | overflow [1] - 28:2 | pedestrian [5] - 50:15, | pipe [1] - 34:7 |
| $\begin{gathered} \text { objection [5] - 7:22, } \\ 9: 1,35: 23,90: 10, \end{gathered}$ | $\begin{aligned} & 49: 19,49: 20,50: 7, \\ & 51: 15,52: 8,52: 18, \end{aligned}$ | overflows [1] - 28:8 | 56:14, 58:19, 62:20, | place [5] - 85:12, 96:3, |
|  | $\begin{aligned} & 53: 10,53: 12,53: 15, \\ & 53: 18,53: 21,53: 23, \end{aligned}$ | overhang [2]-21:11, | 72 | 97:9, 114:13, 123:22 |
|  |  | 2 | pedestrian-scale [1] - | placed [1] - 58 |
| objectives [4] - 69:12,69:17, 93:10 | 53:18, 53:21, 53:23, 54:5, 54:9, 54:21, | overlaid [1] - 134:16 | 56:14 | places [1] - 103:23 |
|  | 54:23, 55:5, 55:9, 55:11, 55:15, 55:19, | Overruled [1] - 84: | Pennsylvania [4] | plan [117] - 5:7, 5:10, |
| $\begin{aligned} & 69: 17,93: 10 \\ & \text { objects }[1]-33: 23 \\ & \text { obligations }[2]-26: 8 \text {, } \\ & 26: 10 \end{aligned}$ | 55:11, 55:15, 55:19, | overruled [3]-7:22 | 42:11, 42:13, 112:5, | 7:13, 7:14, 11:8, |
|  | $\begin{aligned} & 55: 22,61: 6,66: 8, \\ & 66: 23,69: 5,73: 17 \end{aligned}$ | $9: 2,90: 16$ | 112:22 | 11:20, 13:8, 16:20, |
| observation [2] - <br> 33.18, $34 \cdot 15$ | $\begin{aligned} & 73: 18,76: 4,77: 1, \\ & 79: 3,80: 11,80: 18, \end{aligned}$ | own [2]-126:1, 128:1 | people [2]-113:13, | 17:19, 19:9, 19:12, |
|  |  | owner [1] - 10:14 |  | 19:18, 20:16, 20:19, |
|  | $\begin{aligned} & \text { 79:3, 80:11, 80:18, } \\ & \text { 92:1, 93:2, 95:11, } \end{aligned}$ | P | per [7]-21:12, 21:19, | $4: 21,36: 11,44:$ |
| observed [1] - 63:12 <br> obvious [1] - 118:17 | 101:10, 101:18, |  | 26:12, 28:20, 51:17, | :15, 45:8, 45:11 |
| obviously [2] - 25:2, | 101:20, 102:12, | P-A-N-Z-A-K [1] - | 100:19, 108:12 | $6: 6,46: 7,46: 10,$ |
| occasions [1] - 8:20 | $\begin{aligned} & 102: 16,104: 1, \\ & 115: 16,15: 18 \end{aligned}$ | p.m [4] - 136:20 | perceive [3] - 18: $21: 10,33: 20$ | :20, 48:3, 48:4, |
| OF ${ }_{[1]}-138: 3$offer $[1]-43: 8$ |  | 136:21, 136:22 | perceived [1]-77:13 | 8:23, 49:16, 50: |
|  | 117:24, 118:2, <br> 123:4, 126:4 | 137:10 | $\text { percent }[7]-32: 6 \text {, }$ | :23, 51:6, 52:9, |
| offer ${ }_{[1]}$ - 43:8 office [2]-19:11, |  | package [3] - 83:5 | $\text { 32:7, 32:8, } 32: 1$ | :2, 53:18, 54: |
| office [2]-19:11, | 123:4, 126:4 | 87:10, 111:6 | $36: 9,36: 15,36: 2$ | :3, 56:7, 56:8, |
| 12:11, 113:6 | operate [1] - 57:4 | page [3]-32:3, 44:22, | percentage $[3]$ | 17, 59:10, 59:12, |
|  | opinion [9] - 8:11, | 82 | 112:3, 112:1 | :6, 60:9, 60:14, |
| on-lot [1] - 125:24 |  | Panzak [21] - $41: 6$ | 112:21 | $: 15,60: 19,60: 24$ |
| Once [1]-55:21 once [4]-93:3, 110:7, | 55:3, 55:18, 61:8, | $41: 24,42: 1,42: 15$ | perform [1] - 113:8 | :19, 61:20, 62:9, |
| $\begin{aligned} & \text { once }[4]-93: 3,110: 7 \text {, } \\ & 113: 24,114: 6 \end{aligned}$ | $125: 6,133: 6$ | 44:3, 46:2, 52:6, | $\begin{aligned} & \text { performance [1] - } \\ & \text { 113:1 } \end{aligned}$ | $\begin{aligned} & 2: 10,62: 11,63: 15, \\ & 4: 8,64: 13,65: 2, \end{aligned}$ |
| one [33] - 7:5, 11:12, | opportunities [1] - | 70:18, 78:22, 79:16, | pel | $5: 21,67: 20,68: 9$ |
| 13:21, 15:16, 24:16, 25:7, 26:9, 27:24. | 125:14 <br> opportunity [4] - 37:4, | 80:9, 84:10, 90:21, | $\text { 112:12, } 113$ | :10, 69:12, 78:24, |
| $32: 22,33: 13,43: 19,$ | $\begin{aligned} & \text { opportunity }[4]-37: 4, \text {, } \\ & 55: 12,87: 13,125: 9 \end{aligned}$ | $\begin{aligned} & 77: 24,110: 11 \\ & 16: 19,117: 19 \end{aligned}$ | perhaps [2]-71:12, | $\begin{aligned} & 9: 2,80: 22,80: 23, \\ & 1: 10,82: 10,87: 6, \end{aligned}$ |
| 44:1, 44:23, 48:8, | opposed [2]-59:1, | 136:23 | 132:15 | $: 10,82: 10,87: 6,$ |
| 57:17, 63:4, 63:16, |  | PANZAK $_{[1]}-41: 20$ | perimeter [4]-50:10, <br> 51:3, 67:13, 76:19 | $\begin{aligned} & 1: 23,90: 24,91 \\ & 1: 5,91: 14,93: 6 \end{aligned}$ |
|  | optical [1] - 83:5 | paper [1] - 47:23 | permeable [1]-11 | 93:13, 93:22, 93:23, |
| $\begin{aligned} & 63: 18,63: 20,64: 4, \\ & 69: 11,73: 10,73: 16 \end{aligned}$ | 124:10 | park [2] - 54:3, 54:13 | permit [2]-25:5, | 95:12, 98:3, 98:5, |
| 76:3, 80:24, 87:12, |  | parking [8] - 19:18, | 68:17 | 106:2, 108:17, |
| 98:8, 99:12, 99:14, | option [4] - 50:5, | 20:5, 20:12, 20:22, | permitted [1] - 40:14 | 108:18, 108:22, |




| 128:8 | 66:15 | 8, 46:10 | 2:8 | 69.6, 69.7, 69.8, |
| :---: | :---: | :---: | :---: | :---: |
| Roughly [1] - 117:21 | section [10]-15:13, | 105:15 | :12, 74:18 | $69: 12,77: 22,94: 5,$ |
| $\begin{aligned} & \text { roughly [2] - 12:16, } \\ & \text { 124:16 } \end{aligned}$ | $\begin{aligned} & 15: 15,32: 8,71: 9, \\ & 76: 21,77: 12,77: 1 \end{aligned}$ | $\begin{array}{r} \text { sheet }[45]-12: 17 \\ 16: 23,17: 4,18 \end{array}$ | $\begin{aligned} & \text { 112:20, 112:21, } \\ & 112: 23,113: 2,113: 8 \end{aligned}$ | $\begin{aligned} & 95: 16,103: 3,114: 3, \\ & 114: 15,118: 3, \end{aligned}$ |
| und [2] - 56:22, | 6:3, 116:5, 119:10 | :10, 18:15, 19:24, | side [43] - 18:1 | 18:9, 125:2 |
| 5:12 | sections [1] - 76:2 | 24:8, 24:13 | 1, 21:1, 21:6 | 6:3, 128:1 |
| run [1]-82:11 | ns [1] - 60, | 24:15, 24:16, 31:20, | :9, 24:11, 24:20 | 131:3, 134:23 |
| running [2] - 17: | ity $[1]-56: 23$ | 6:3, 46:11, 47:14 | 32:3, 32:11, 56:13, | sites [1] - 132:1 |
| . | sediment [2]-25:23, | 5, 47:18, 48:3 | 1, 58:1, 58:17 | sitting [1] - 36: |
| 84:1, 84:20 | 28:22 | 12, 48:23, 50:24, | 65:10, 72:3, 73:23 | situation [1] - 119:2 |
| runs [2]-20:21, 49:16 | se | 21, 56:1, 59:6 | 74:3, 74:8, 75:8 | six [12] - 16:24, 17 |
| Ruschmann [2] - $22 \cdot 17.122 \cdot 11$ | $\begin{aligned} & \text { 24:10, 24:21, 48:22, } \\ & 67: 20 \end{aligned}$ | $\begin{aligned} & \text { 59:10, 61:18, 63:24, } \\ & 66: 1,66: 2,67: 18, \end{aligned}$ | $\begin{aligned} & 75: 13,75: 17,75: 19, \\ & 77: 24,78: 13,81: 14, \end{aligned}$ | $\begin{aligned} & 17: 5,26: 20,49: 3, \\ & 51: 3,67: 18,92: 12 \end{aligned}$ |
|  |  | 80:2 | 2:7, 82:1 | $103: 8,127: 9,129: 18$ |
| S | ing [3] - 66:20 | $\begin{aligned} & : 9,82: 5,82: 13, \\ & :: 22,100: 4,101: \end{aligned}$ | $\begin{aligned} & 82: 16,83: 6,83: 7, \\ & 83: 10,91: 4,91: 5, \end{aligned}$ | six-foot [4]-49:3, $51: 3,92: 12,103$ |
| $\begin{aligned} & \text { safe }[1]-95: 13 \\ & \text { safety }[7]-6: 14 \text {, } \\ & 62: 20,83: 24,84: 1, \\ & 84: 19,85: 13,111: 3 \end{aligned}$ | $\begin{aligned} & \text { seeing }[6]-72: 10, \\ & 72: 11,73: 7,74: 14, \\ & 74: 21,134: 4 \end{aligned}$ | 10 | 10 | size [13]-10:2, 89:15, |
|  |  | 109:17, 110:10 sheets [14]-17:3 | $\begin{aligned} & \text { 03:5, 103:19, } \\ & \text { 12:17, 113:3, } \end{aligned}$ | $89: 16,90: 1,96: 8,$ |
|  | 7.21, 134.4 | 44:14, 44:23, 44:2 | sidewalk [20]-17:2 | 18, 107:19 |
|  | selected [1]-83: | :7, 45:1 | 21, 19:1, 19:1 | 115:15, 129:2 |
| $\begin{aligned} & \text { Sareen }[2]-22: 21, \\ & 122: 15 \end{aligned}$ | sell [1] - 10:8 <br> sent [1] - 57:12 <br> sentences [1]-133:23 | :5, 47:19, 60:6 | 23, 20:19, 20:2 | sizeable [1] - 49:18 |
|  |  | 60:9, 68:8, 106: | 20:24, 21:8, 21:10, | sizes [1] - 89:22 |
| $\begin{aligned} & \text { satisfy [2] - 63:2, } \\ & 131: 13 \end{aligned}$ |  | shield [8]-58: | 21:19, 57: | sizing [1] - 89:13 |
|  | $\begin{aligned} & \text { sentences }[1]-133: 23 \\ & \text { separate }[1]-119: 2 \end{aligned}$ | 81:13, 81:14, 81:21, | 58:8, 62:23, 72:12, | sky [3] - 57:13, |
| SATTERFIELD ${ }_{[7]}$ - 122:20, 123:6, | series [1]-59:11 | $82: 15,82: 16,83: 7$ | $2: 13,75: 7,75: 23$ | 110:23, 111: |
| 123:12, 123:21, | serve [1] - 55:8 |  | sidewalk | sleet [1]-28:5 |
| $\begin{aligned} & \text { 124:18, 125:11, } \\ & 126: 6 \end{aligned}$ | $\begin{aligned} & \text { served }[1]-53: 12 \\ & \text { serving }[1]-53: 14 \end{aligned}$ | $\text { , } 58: 17$ | $18: 11,19: 15,21:$ | $\begin{gathered} \text { slopes }[7]-54 \text { : } \\ 65: 22,66: 13, \end{gathered}$ |
|  |  | shine [1] - 58:13 | 21:6, 50:14, 62:19, | 66:24, 67:15, 71: |
| $\begin{aligned} & \text { Satterfield [3]-23:1, } \\ & \text { 122:19, 122:21 } \end{aligned}$ | $\begin{aligned} & \text { set }[7]-17: 1,37: 8, \\ & 44: 15,45: 8,79: 19 \\ & 114: 18,133: 9 \end{aligned}$ | shining $[1]$ - 60 | $72: 8,76: 2$ <br> significant $[9]-5$ : | $\begin{aligned} & \text { small }[7]-33: 19, \\ & 59: 11,70: 23.78: 5 . \end{aligned}$ |
| save [3]-95:21,$115: 13,133: 8$ | setback [1] - 101:3 <br> setbacks [1] - 97:20 | short [2] - 41:6, 48:17 | $6: 4,48: 7,48: 8,53: 6$ | $\begin{aligned} & \text { 59:11, 70:23, 78:5, } \\ & \text { 82:12, 86:1, 107:11 } \end{aligned}$ |
|  |  | shorter [1] - 92:16 | 24, 87:18, | smaller [2] - 12:6, |
| savings [1]-132:9 <br> scale [5] - 56:14, | sets [1] - 45:11 <br> seven [10]-16.24 | shortly [1] - 71:1 | significantly ${ }^{\text {[4] }}$ | 80:18 |
| $\begin{aligned} & \text { scale }[5]-56: 14 \text {, } \\ & 56: 22,58: 20,88: 4 \text {, } \\ & 88: 8 \end{aligned}$ |  | show [15]-11:11 | significantly $[4]-7: 3$, 49:21, 51:6, 88:9 | snow [1] - 26:20 |
|  | $\begin{aligned} & \text { seven }[10]-16: 24, \\ & 94: 17,94: 21,94: 24, \end{aligned}$ | $60: 24,62: 3,62: 6$ | Silver [2]-23:13, | snowstorm [1] - 28 : <br> sod [2] - 67:3, 114: |
| 88:8 <br> schedule [1] - 44:22 | $\begin{aligned} & 95: 7,95: 14,95: 21, \\ & 96: 16,98: 17,98: 23 \end{aligned}$ | $: 24,69: 1$ | 129:8 | sodding [2] - 66:2 |
| scheduled [1] - 56:12 | 96:16, 98:17, 98:23 several [4]-8:3, | 22, 71:11, 87:24, | similar [7] - 19:19 | 67:5 |
| Scheri [2]-23:5, | $60: 13,72: 17,75: 22$ | $\begin{gathered} 97: 13,97: 16 \\ \text { showed }[4]-7: 6 \end{gathered}$ | $\begin{aligned} & 38: 19,54: 5,61: 6, \\ & 79: 12,107: 19,128: 8 \end{aligned}$ | soften [1] - 9:20 <br> softened [2]-7:2, 7:3 |
| school [2] - 54:4, | shade [9]-51:12, 53:13, 53:15, 66:12, | $17: 13,20: 16,117: 14$ | simple [1] - 126:20 | softened [2] - 7:2, 7:3 |
|  |  | showing [11] - 11:13 | simply [1] - 34:4 | soil [7] - 114: |
| $\begin{aligned} & \text { Schuda [2] - 23:9, } \\ & \text { 126:12 } \end{aligned}$ | $\begin{aligned} & \text { 68:20, 68:23, 75:10, } \\ & \text { 99:7, 99:9 } \\ & \text { shading [2] - 99:23, } \end{aligned}$ | $\begin{aligned} & \text { 12:18, 18:10, 73:21, } \\ & 75: 5,80: 24,81: 19, \end{aligned}$ | $\begin{gathered} \text { single }[15]-11: 1, \\ 11: 8,11: 13,11: 1 \end{gathered}$ | $118: 18,118: 1 \mathrm{c}$ |
|  | shading [2]-99:23, 120:13 <br> shall [13]-5:7, 36:10, | 9:18, 124:6, | 16, 11:20, 12:1, | 119:18, 120:2 |
|  |  | 131:23, 135:1 | :19, 80:22, 81:1, | solid [4]-51:2, 92:1 |
| $\begin{gathered} \text { screen [9] - 17:7, } \\ \text { 17:9, 18:1, 42:16, } \end{gathered}$ | $\begin{gathered} \text { shall }[13]-5: 7,36: 10, \\ 36: 19,37: 9,54: 2, \end{gathered}$ | shown [21] - 18:14 | 124:21, | 103:23, 122:22 |
|  | 60:19, 64:22, 64:24, | 8:19, 48:20, | 4:23, 125:10 | solutions [1] - 10:6 |
| $\begin{aligned} & 45: 14,57: 20,70: 10 \\ & 70: 21,101: 4 \end{aligned}$ | 65:1, 65:2, 65:19, | $\begin{aligned} & : 15,52: 20,54: 10, \\ & : 6,63: 15,64: 7, \end{aligned}$ | le-family [13] | Sometimes [1] - 92:23 |
|  | shape $[3]-6: 18,6: 19$, | 64:13, 66:1, 68:7 | 1, 11:8, 11:1 | im |
|  | shape $[3]-6: 18,6: 19$, 104:12 | 73:16, 75:23 | 16, 11:20, 12:1, | sorry [3] - 24:7, 96:11, |
| $\begin{array}{r} 61: 5,76: 19,113: 9 \\ \text { se }[3]-21: 12,21: 19, \end{array}$ | shapes [1]-82:22 | 102:1, 106:1, | 19, 80:22, 81:1, | 100:5 |
| 26:12 | shared [1]-124:24 | 109:17, 110 | , 124:23, | Sorry [1] - 136:2 |
| second $[6]-15: 17$, 16:13, $24: 16,28: 9$, | Sharon [2]-23:20, | $\begin{gathered} \text { shows [10] - 7:8, 56:8, } \\ 77: 19,82: 8,87: 21, \end{gathered}$ | $\begin{gathered} 125: 10,125: 12 \\ \text { site }[34]-5: 7,11: 10, \end{gathered}$ | sort [3] - 32:19, 56:17, |
| $78: 9,137: 5$ | 136:4 sharper [2] - 6:16, | $91: 15,101: 6,$ | $18: 17,28: 3,28: 5$ | 81:13 |
| Second [1]-137:4 | sharper [2]-6:16, | $05: 12,105: 1$ | :3, 54:3, 54:13, | sounds [1] - 132:20 <br> source [1]-58:6 |
| Section [8]-53:10, | $\text { sheds }[1]-38: 18$ | 105:2 | :19, 55:1, 58:19, | Southeastern [2] |
| $\begin{aligned} & 54: 1,61: 21,62: 2, \\ & 64: 16,64: 21,65: 16, \end{aligned}$ | Sheet [6]-20:2, 46:5, | shrub [1]-113:1 | 60:13, 60:24, 65:9, | 112:5, 112:22 |
|  |  | shrubs [11]-53:3, | 65:22, 66:4, 67:4, | southwest [1] - |


| 119:16 | stabilize [2] - 66:22, 67:15 | 48:11, 49:24, 50:11, 50:14, 62:16, 62:24, | submitted $[3]$ - $5: 8$, 60:14, 91:15 | T |
| :---: | :---: | :---: | :---: | :---: |
| 75:18 | stabilized [1] - 87:14 | 63:3, 63:8, 63:12, | Subsection [2] - |  |
| space [101]-7:16, | stage $[1]-67: 18$ | 63:22, 64:9, 66:9, | 37:24, 60:22 | talks [1] - 89:21 |
| 9:22, 11:7, 11:8, | stand [1] - 48:7 | 69:15, 69:20, 70:20, | sufficient ${ }_{[1]}$ - 108:12 | tall [1] - 96:1 |
| 11:19, 11:21, 11:22, | standard [6]-21:20, | 71:3, 71:6, 74:4, | sufficiently ${ }_{[1]}$ - | team [1] - 111:19 |
| 12:10, 12:13, 12:20, | 24:9, 24:10, 24:20, | 74:10, 74:23, 75:15, | 100:19 | chnical [1] - 105:3 |
| 13:9, 13:15, 13:21, | 27:5, 108:11 | 75:19, 76:21, 77:15, | sugar [1] - 99:12 | technology [1] - 27:3 |
| 13:23, 29:11, 29:19, | standards [3]-15:20, | 78:9, 79:5, 109:3, | suggested [1] - 7:8 | Ted [2]-21:24, 121:19 |
| 29:21, 29:23, 30:7, $30: 9,30: 15,30: 19$, | 60:20, 67:22 standing [1]-34-24 | $\begin{aligned} & \text { 109:4, 109:5, } \\ & \text { 120:16, 121:6, } \end{aligned}$ | suggesting $[2]-51: 1$, 54:20 | $\begin{aligned} & \text { temperature }[1] \text { - } \\ & 58: 24 \end{aligned}$ |
| $\begin{aligned} & 30: 9,30: 15,30: 19 \\ & 30: 22,30: 24,31: 13, \end{aligned}$ | standing [1] - 34:24 <br> standpoint [3] - 34:23, | $122: 21,123: 1,$ | $\begin{aligned} & 54: 20 \\ & \text { suit }_{[1]}-132: 3 \end{aligned}$ | template [1]-7:6 |
| 31:22, 32:4, 32:6, | 76:16, 129:4 | 123:3, 124:3, | suitable [2] - 54:3 | ten [8]-20:2, 24:16, |
| 32:12, 33:1, 33:4, | start [4]-3:10, 29:24, | 124:15, 133:15, | 55:4 | 32:8, 36:15, 36:2 |
| 33:15, 34:3, 34:5, | 70:22, 112:19 | 133:19 | summarized [1] - | 89:7, 89:9, 96:14 |
| 35:10, 35:14, 36:11, | started [2]-4:2, 13:7 | street [19] - 50:13, | 68:12 | tend [1]-127:23 |
| $\begin{aligned} & 36: 12,36: 16,36: 19, \\ & 37: 1,37: 8,37: 20, \end{aligned}$ | starting [5] - 71:1, <br> $71: 15,71 \cdot 17,74: 11$ | $\begin{aligned} & 57: 2,62: 23,63: 2, \\ & 63: 6,65: 24,69: 14, \end{aligned}$ | $\begin{aligned} & \text { summary }[3]-32: 4, \\ & 32: 10,42: 23 \end{aligned}$ | $\begin{array}{\|c} \hline \text { term [3] - 30:19, } \\ 38: 20,59: 9 \end{array}$ |
| 39:17, 40:14, 48:6, | 76:11 | 72:11, 72:14, 78:15, | superimposed [1] - | terminated $[1]$ - 65: |
| 49:7, 49:17, 49:18, | starts [1] - 98:21 | 90:8, 107:16, | 82:10 | terms [11]-54:13, |
| $\begin{aligned} & 49: 20,50: 7,51: 11 \\ & 51: 15,52: 8,52: 18 \end{aligned}$ | states [2]-64:21, 93:9 | $\begin{aligned} & \text { 107:20, 120:15, } \\ & \text { 120:19, 125:3, } \end{aligned}$ | superimposing [1] - | 56:23, 57:6, 98:17, $113.9,115: 10$ |
| $\begin{aligned} & 51: 15,52: 8,52: 18 \\ & 53: 10,53: 12,53: 15, \end{aligned}$ | static [1]-87:12 | $\begin{aligned} & 120: 19,125: 3 \\ & 130: 2,130: 8 \end{aligned}$ | 105:24 | 113:9, 115:10, |
| 53:18, 53:21, 53:23, | stationary [2] - 38:21, $39: 13$ | streetlight $[2]$ - 63:17, | $\begin{aligned} & \text { supplement }{ }^{[1]} \\ & 76: 18 \end{aligned}$ | $\text { 124:12, } 126: 4$ |
| $\begin{aligned} & \text { 54:1, 54:5, 54:10, } \\ & 54: 21,55: 5,55: 9, \end{aligned}$ | stay [1]-133:14 | $\begin{gathered} 63: 22 \\ \text { streetlic } \end{gathered}$ | supplemental [2] | test [1]-131:11 |
| 55:11, 55:15, 55:19, | staying [2]-99:17, | $63: 12,64: 9,106: 13,$ | 77:7, 78:2 | testified [22]-4:9, |
| 61:6, 66:8, 66:11, | steep [2]-54:18, | 124:16 | surface [1]-59:18 | 12:12, 12:21, 13:4, |
| 73:17, 73:18, 77:1, | 66:22 | streets [3] - 50:8, | surrounding [3] | 14:4, 19:6, 20:8, |
| $\begin{aligned} & \text { 79:3, 80:12, 80:18, } \\ & 91: 12, ~ 92: 2, ~ 95: 11, ~ \end{aligned}$ | stenographic [1] - | $\begin{gathered} 50: 10,108: 11 \\ \text { streetscape }[14]- \end{gathered}$ | 57:16, 79:6, 107:14 | $\begin{aligned} & 41: 22,44: 23,80: 9, \\ & 80: 13,81: 4,90: 3, \end{aligned}$ |
| 101:10, 101:18, | 138:9 | 62:13, 62:15, 72:16, | surrounds [1] - 19:11 |  |
| 101:20, 102:12, | Steve [2]-23:5, 126:8 | 73:1, 74:19, 75:12, | switch [2] - 72:5, | $06: 15,108: 14,$ |
| 102:17, 104:1, | Stick [1]-81:5 | 76:16, 76:24, 77:7, |  | 109:23 |
| 115:16, 115:18, | still [1]-48:1 | 77:14, 78:16, 78:21, | sworn [3] - 4:8, 41:17, | testify [5] - 18:4, 85:5, |
| 115:21, 117:6, | stockpiled [1] 113:23 | 79:4, 134:2 |  | 106:8, 115:24, |
| 117:17, 117:24, | stone [2] - 34:7, 72:2 | strengthen [1]-51:4 | 82:24 | 135:21 |
| 118:2, 125:16, 126:4 | stopped [1] - 39:8 | strictly ${ }_{[1]}$ - 8:6 | system [8]-26:2, | testimony [29]-4:19, |
| spaces [1] - 125:13 speaking [2] - 63.1, | storm [7]-27:9, | strike [1] - 106:7 | $27: 23,28: 11,30: 13,$ | 11:3, 11:19, 12:10, |
| $\begin{aligned} & \text { speaking } \\ & \text { 103:18 } \end{aligned}$ | 27:13, 27:20, 33:10, | stripped [1] - 113:23 <br> structure [8]-21:16, | $33: 10,34: 8,34: 9$ | 12:15, 13:10, 16:18, 35:7, 39:6, 39:10, |
| spec [1]-28:15 | 34:8, 35:12, 125:24 | $37: 9,37: 10,37: 14$ | 35:3 | $48: 16,68: 6,82: 5,$ |
| species [1]-130:16 | stormwater [53] - <br> 13.22, 26:2, 26:16, | 37:15, 38:3, 38:7, | $31: 2.31: 5.32: 2 .$ | 83:16, 85:7, 89:8, |
| specific [5] - 6:14, | 27:7, 27:16, 27:17, | 115:3 | $34: 4,37: 19,126: 22$ | 90:12, 100:17, |
| 111:23, 118:1, | $29: 10,30: 6,30: 13,$ | structures [11] | Szary [3] - 23:17, | 00:21, 101:11, |
| 118:5, 130:18 | $\begin{aligned} & \text { 29:10, 30:6, 30:13, } \\ & 31: 2,31: 4,31: 12, \end{aligned}$ | 35:10, 35:11, 65:1 | $\text { 129:12, } 129: 13$ | 04:4, 104:14, |
| specifically [6] - 5:17, | 32:1, 32:9, 32:12, | 97:20, 125:17, | $\operatorname{SZARY}_{[26]}-23: 18,$ | 06:3, 107:15, |
| 5:20, 8:1, 8:10, | $32.1,32.9,32.12$, $32 \cdot 14,32 \cdot 16,34 \cdot 2$ | 134:19, 134:22 | $129: 13,130: 1$ | 7:23, 108:2, |
| 37:18, 104:1 | $34: 3,35: 2,35: 13$ | 135:2, 135:4, | $130: 5,130: 12,$ | 24:14, 127:5, |
| specifications [1] - | 36:17, 36:22, 36:23, | 135:11, 135:22 | 130:21, 130:24, | 128:11 |
| 59:5 | 37:18, 39:16, 40:12, | studied [1] - 91:1 | 131:2, 131:6, | testing [2] - 39:5, |
| specified [1] - 106:18 | 84:1, 84:20, 85:2, | study [1] - 131:2 | $\text { 131:17, } 131: 22,$ | 119:19 |
| speculation [1] - 7:19 | 85:6, 85:9, 85:19, | stuff [2]-24:19, 26:17 | 132:2, 132:11, | tests [2]-109:7, |
| spillage ${ }_{[1]}$ - 124:12 | 86:13, 86:23, 87:7, | style [2] - 121:4, 124:9 | 132:20, 133:1, | 109:12 |
| spoken [2]-5:19, | $92: 1,97: 21,100: 23,$ | Sub [1] - 37:7 | 133:10, 133:19, | themselves [1]-125:4 |
| 105:5 | 116:22, 117:2, | Subdivision [3]-5:13, | 133:22, 134:17, | theoretically [1] - |
| spread [4]-114:2, | 117:7, 117:18, | 60:18, 68:4 | 134:24, 135:3, | 95:21 |
| 114:15, 127:23, | 117:22, 118:7, | subdivision [2] | 135:7, 135:10, | Theoretically [1] - |
| 128:5 | 119:20, 120:3, | 36:10, 61:13 | 135:14, 135:16, | 128:14 |
| square [2]-37:6, | 25:4, 126:1, | subject [3]-35:21, | 135:24 | thinking [3]-80:20, |
| 37:23 | 128:20, 128:24, | 44:4, 44:10 |  | 119:2, 123:2 |
| stabilization [2] - | 129:3, 132:18 | submission [3]-5:2, |  | third [1] - 73:2 |
| 67:2, 86:2 | Strafford [39]-17:1, | 60:11, 61:12 |  | Third [1]-73:4 |




