

# Board of Adjustment Minutes

September 15, 2011

## 1. 3616 Edmund Boulevard (BZZ-5163, Ward 12)

**Variance:** John and Judith Reiling have applied for a variance to allow for development on or within 40 feet of the top of a steep slope to allow for the new construction of a single-family dwelling on Lot 1 of the property located at 3616 Edmund Boulevard in the R1 Single-Family District, SH Shoreland Overlay District and MR Mississippi River Critical Area Overlay District.

**Actions:** The Board of Adjustment adopted the findings and approved a variance to allow for the development, including a new single-family dwelling and driveway with retaining walls on or within 40 feet of the top of a steep slope on Lot 1 of the property located at 3616 Edmund Boulevard in the R1 Single-Family District, SH Shoreland Overlay District and MR Mississippi River Critical Area Overlay District, subject to the following conditions of approval:

1. CPED-Planning and all other applicable City departments review and approve the final plans.
2. Final plans must include soil, storm water, and vegetation information addressing conditions on the site and potential impact of the development.

**Matt Perry:** On to agenda item number 1, 3616 Edmund Boulevard. Ms. Sether.

**Shanna Sether:** Thank you Board Chair. Item number 1, our only item for discussion this evening, is for the property located 3616 Edmund Boulevard. John Reiling and his wife Judith are the applicants and property owners of the subject property and they are here to discuss their property as well. The request before us is a variance to allow for development on or within 40 feet of the top of a steep slope where the property is located within the Shoreland Overlay District. This is to allow of new construction of a single-family dwelling, driveway and retaining walls. The subject property is located here. It's actually two platted lots, and I'll show the Hennepin County map here in just a moment.

**Matt Perry:** Excuse me Ms. Sether, we've got – we're not seeing this on our screens.

**Shanna Sether:** There we are.

**Matt Perry:** Great, thank you.

**Shanna Sether:** Alright. Subject property is actually two platted lots, I'll show the Hennepin County map here in just a moment. The property owners currently own and reside at 3616 Edmund. They're proposing new construction of a single-family dwelling, driveway and retaining walls on the north lot, which is Lot 1. This property is located in the Shoreland Overlay District. This map is to identify the boundary created by the Shoreland Overlay. The subject property is also located in the Mississippi River Critical Area Overlay. The ordinances governing this particular zoning district are only relevant

to this property if it was in proximity to a bluff. The subject property is not within proximity to a bluff, therefore we rely solely on the development restrictions and variances authorized in the Shoreland Overlay District. So this is the map that's relevant to the proposed property and as you can see approximately 2/3 I would say, of the property is located within the Shoreland Overlay District. As I mentioned previously, the subject property is two platted lots, Lots 1 and Lots 2, the applicant is going to obtain a separate property identification number for Lot 1 if the variance is approved. Lot 2 will retain the existing single-family dwelling as it currently sits. This particular split does not require any additional land use approvals through the subdivision ordinance or the through the City of Minneapolis. It's simply administratively done through Hennepin County because these are two platted lots. The Shoreland Overlay boundary is created by a wetland. The Mississippi River is located here in this picture. The hatched area here is the wetland in question. The subject property is approximately 930 feet away from the wetland. If a property is located within 1,000 feet of a wetland, they are subject to the Shoreland Overlay boundary and therefore the Shoreland Overlay District regulations. Here's the proposed site plan for the new construction of the single-family dwelling. The relevant applications for today, relevant purview of the Zoning Board of Adjustment is as follows: All development that is within both the Shoreland Overlay and also with 40 feet of the top of a steep slope. So in this case, the particular area of development subject to review for today's variance is a cantilevered portion of the dwelling, roughly here, a balcony, a proposed driveway, and retaining walls adjacent to the driveway. So that is the relevant area for the subject variance before you today. The proposed single-family dwelling is also subject our administrative review guidelines for new construction, so we review each house based on design elements including exterior materials, roof pitch and style, the quantity of windows or fenestration in the building, et cetera. Staff has done a preliminary analysis and found that this particular dwelling does meet the points. It acquires 16 points, 15 would be the minimum. They were granted points for a basement, wood siding, providing 20 percent windows on each floor facing Edmund Boulevard, 10 percent windows facing both side property lines and the rear property line, and at least one deciduous tree in the front of the lot, and there are many. The Environmental and Transportation Committee of the Longfellow Community Council received this request and has submitted a letter that is attached in your packets today. In order to apply for this type of variance to allow for development within 40 feet of the top of a steep slope in the Shoreland Overlay District, the applicant must meet four criteria so I'm going to go through each one of those for you. These are also in the staff report for anyone else following along.

Number 1, that development must currently exist on or within 40 feet of the top of a steep slope and within 500 feet of the proposed development. Development does currently exist within 500 feet of the steep slope. The existing single-family dwelling at 3616 Edmund Boulevard is development that is within 500 feet of that existing steep slope. This adjacent house at 3600 Edmund may also be located within 500 feet. I believe it's actually quite a bit less.

Number 2, the foundation and underlying material shall be adequate for the slope condition and soil type. The applicant has hired architects and civil engineers and

landscape architects to review the proposed structure and propose the structure, and has provided detailed analysis that has been reviewed by Construction Code Services, and those are folks in the Building Code department that review for compliance with the International Residential Code; Public Works who reviews applications for storm water management and erosion; and then also Environmental Services which is a section within the Regulatory Services department. Based on their feedback and the proposed project area and surrounding properties, staff believes that the foundation and underlying material are adequate for this type of slope condition and soil type.

Number 3, the development shall present no danger of falling rock, mud, uprooted trees or other materials. Staff received an update today from the architect after his speaking with the property owner, and that originally there was an oak tree at the very front of the property that was damaged by lightning that was proposed to be removed. That oak tree is located here on the site plan. That oak tree is no longer proposed to be removed. They are going to salvage it and make sure it's protected and retained on the property. There will be a loss of two significant trees, of what staff would consider, but both of those trees are located outside of the Shoreland Overlay boundary. There are two maples that are about 12 inches in breast diameter height, about five feet high, and then there are quite a few smaller maples that will be removed in order to allow for the construction site of the single-family dwelling. So approximately in this location. However, as I just mentioned, none of those are located within the Shoreland Overlay and therefore are not subject to review. The architect has advised the property owner on the types of retaining walls that would be sufficient and would not required to provide footings and therefore no further damage or any erosion would occur in the proposed driveway either during or after construction. American Engineering and Testing Incorporated has provided and analysis of the soils and given several recommendations in addition and you have a copy of their report in your packets. They include the installation of a silt fence upriver from a culvert to prevent any potential erosion from entering the culvert that would eventually travel to the Mississippi River. I think this is an important note, or a time to talk about the culvert on the property. The history of the subject area, and not just the subject site, is that there was previously a ravine that went down to the Mississippi River. The Park Board filled in the ravine in order to allow for West River Parkway. This was done a number of years ago. Staff reviewed our 1940's atlas and West River Parkway was there at the time. So this was at least prior to 1940, we don't have an exact date. A portion of that ravine remains on the property and that's why we had the significant depression on the property. At the bottom of the ravine is a 30 inch culvert. That culvert connects to our storm water system in the City of Minneapolis. Public Works prepared this diagram, essentially this brown area shows the general area that tributes to the outfall which is this green triangle here. So the storm water's collected from all of these properties, travels together and finally comes out here to an outfall. That outfall is across Edmund Boulevard, across West River Parkway, there's a parking lot and a park that the Park Board owns, it travels down the hill and exits out of that culvert. Eventually it kind of flows into the Mississippi River. So again, the civil engineer's recommending that an additional silt fence be built up-river, if you will, from the culvert to prevent any potential erosion from entering that particular culvert and potentially traveling down to the Mississippi River. This proposed project must comply with the standards and ordinances

in the City of Minneapolis in addition to the International Residential Code. Public Works has made comment that the primary cause of erosion on this particular steep slope today is due to the impervious surface from the surrounding area and that the proposed project should actually reduce the erosion of topsoil and sedimentation into the Mississippi River. Environmental Services has outline parameters to maintain erosion on site, both during and after construction. Their comments are also attached. Based on this feedback, staff does not believe that the proposed development will present danger of falling rock, mud, uprooted trees or other materials.

The fourth criteria in order to apply for this variance, is that the views of the developed slope from the protected water shall be consistent with the natural appearance, any historic areas, and the surrounding physical contexts. The proposed project area's approximately 930 feet from the Mississippi River and wetland. The front of the property is heavily wooded and there is a bluff on the east side of West River Parkway, then travels down to the Mississippi River. Staff believes that the only potential to view any of this proposed project would possibly be during leaf off season. There will be no more visible than the surrounding area that is fully developed. Staff has made the following findings in support of the project and is recommending approval based on these findings. So these are the findings that are specifically relevant to the variance – the three findings. So for finding number 1, staff believes there are unique circumstances of the parcel that have created the practical difficulty. These circumstances have not been created by the applicant or persons presently having interest in the property. The existing property or project area is located within 40 feet of the top of a steep slope. Any repair, replacement, or improvement of any structures in this area would trigger a variance. The entire dwelling unit could be built outside of the Shoreland Overlay District boundary. As I mentioned, there is a cantilevered portion of the house and the balcony, but that is the only part of the dwelling itself that is actually located within the Shoreland Overlay District. However, access to the property could not. The Zoning Code requires that access be provided via walkway and/or driveway from a public street and public sidewalk. There is no way to provide access to the property without a variance to allow for development within 40 feet of the top of a steep slope. Therefore, the subject property cannot be developed without a variance to allow for development on or within 40 feet of the top of a steep slope. These are circumstances not created by the applicant. Under variance finding number 2, the variance specifically, as I mentioned, is for the cantilever, the balcony, the driveway and the retaining walls located on or within 40 feet of the top of a steep slope in the Shoreland Overlay District. The property is located about 930 feet to the Mississippi River and mapped wetland. The front of the property is heavily wooded and there is an additional bluff between West River Parkway and the Mississippi River. The intent of the ordinance of the Shoreland Overlay is to protect both water body and other property below a steep slope from erosion run off. The 30 inch culvert at the bottom of the steep slope is on the property. The culvert combines with other storm drains in the area, there's the map there, and it extends below both Edmund Boulevard and West River Parkway to the outfall just east of East 36<sup>th</sup> Street. The civil engineer has recommended the silt fence near the culvert to prevent erosion and sedimentation from potentially entering their culvert. Public Works has attached their comments, Environmental Services has attached their comments and Construction Code Services believes that it meets the International Residential Code for drainage. Based on

all of the analysis and feedback, staff believes that the Applicant has demonstrated that the necessary precautions will be taken to control erosion on site and the subject site will not significantly altered to adversely affect the water quality of the Mississippi River. Staff believes that the Applicant is proposing to use the property in a reasonable manner. Under finding number 3 for a variance staff believes that granting of the variance will not alter the essential character or be injurious to use and enjoyment of other property in the vicinity for or all the reasons previously mentioned. Further, we do not believe the proposed variance, or granting of this variance, will be detrimental to the health, safety or welfare for those utilizing the subject property or nearby properties. When a property is located in the Shoreland Overlay District we have three more findings. Under finding number 1 staff believes that the proposed project will prevent soil erosion and other possible pollution during and after construction. With the adherence to the recommendation and requirements from the civil engineer hired by the Applicant, Construction Code Services, Public Works, and Environmental Services. Number 2, staff believes that the proposed development will permit very limited site lines, again, due to the heavily wooded area and the bluff between this subject property and the Mississippi River. The third finding, there is no direct access to the Mississippi River so the third finding has been met and there's no access so it shouldn't change any access to the river. Based on all of those findings and feedback received by the engineers on staff, staff is recommending approval with two conditions. The first condition is that 1. CPED-Planning and all other applicable City departments review and approve the final plans; and number 2 final plans must include soil, storm water, and vegetation information addressing conditions on the site and potential impact of the development. That concludes my presentation. I can take any questions.

**Matt Perry:** Thank you Ms. Sether for your presentation. Let's see if there are any questions. Ms. Thompson?

**Ami Thompson:** I have a question presently, but I need to disclose, at the suggestion of a Minneapolis City Attorney, that the morning that I was appointed to the Board I had a conversation with Eileen Jones from Friends of the Mississippi River and I did not get any additional information that hasn't been presented to us already.

**Matt Perry:** Alright. Thanks and we'll make sure that's on the record. Mr. Cahill?

**Sean Cahill:** Thank you Mr. Chair. Ms. Sether I had a quick question regarding the reports we've received. I know we received a number, particularly one from a professor at the University of Minnesota conflicts with our staff's findings. Do you see any differences to what could account for that difference as to what could account for that difference, or any explanation?

**Shanna Sether:** What I can say for a project like this is when it's under review by the City of Minneapolis and that's who holds the jurisdiction. The first relevant department that does the review is Planning, and that would be ourselves. After that there is also Public Works, the engineers, who have reviewed it and believe that the proposed project will meet or exceed all of the requirements established within their ordinance and standards. It will also be reviewed by Environmental Services for an erosion control permit. They will specifically be reviewing for any potential erosion. They believe it

meets all of their criteria and all of their requirements and also, finally, it will meet - the proposed project will have to be reviewed for compliance with the Building Code. So the Minnesota State Building Code and the International Residential Code from Construction Code Services. If there is conflict between those two, the City of Minneapolis has jurisdiction to authorize permitting for this particular dwelling and proposed project in addition to retaining walls and the driveway. So it has been reviewed and found to be in compliance with all of those ordinances. It's important to note that most of those reviews were actually done prior – or after the public hearing. So given the amount of testimony and the amount of feedback that we have received for this proposed project, we had all of the engineers and folks from the City of Minneapolis review it ahead of time so we could make sure would could adequately address the findings today.

**Sean Cahill:** Thank you. Then just on one of the points that you made that the Public Works made the comment that their findings really concern the runoff from other properties and that the runoff and the erosion is primarily caused by runoff from other properties in the area, correct?

**Shanna Sether:** They had stated that the erosion that it's been happening with this particular steep slope over time has been altered based on existing impervious surface and that it's only from the surrounding properties because this site has not yet been developed. There were no previous structures on this site previously.

**Sean Cahill:** So when you say impervious structures we're talking about the roofs of other people's houses running off in the back yard.

**Shanna Sether:** Roofs, driveways, patios, decks, gazebos, et cetera. Anything that is not pervious like groundcover, landscaping.

**Sean Cahill:** So the property in question actually serves as a drainage for everyone else's property.

**Shanna Sether:** That is my understanding from Public Works.

**Sean Cahill:** Thank you.

**Matt Perry:** Thank you Mr. Cahill. Mr. Sandberg?

**Dick Sandberg:** Thanks Mr. Chair. Thanks Ms. Sether. A couple of areas you cite the opinions of the Public Works Department that this project should reduce erosion from the lot upon completion, does that really mean that the building – the structure and additional impervious surface on this will lot will make it better as far as erosion goes?

**Shanna Sether:** That's my understanding from Public Works.

**Dick Sandberg:** Can you explain that any further? How that is possible? It doesn't seem intuitively obvious.

**Shanna Sether:** My understanding from Public Works is that initially – it essentially stabilizes the soils. Prevents the – it directs water drainage to landscaped areas that are relatively flat in area. So they don't believe that – and they're also going to be able to improve an existing swale here as well, so they don't believe that erosion will be able to occur at the same rate because the runoff will not be necessarily directed straight to the culvert. Unfortunately, I'm not an engineer so I can't address more specifically that that, but that's my understanding from them.

**Dick Sandberg:** Okay, thank you and I've got one follow-up question. Is the driveway on this surface have any special technology beyond the gabion support walls to make it less impervious? I know there are some things such as pervious pavers and so forth.

**Shanna Sether:** The proposed driveway does not include any pervious pavers. For the City of Minneapolis ordinances pervious pavers are still considered to be impervious surface.

**Matt Perry:** Alright, any other questions of staff? Ms. Thompson?

**Ami Thompson:** Can you clarify – I'm struggling with the word "reasonable". When we read over what we should be considering. It seems in this part – in this case particularly rather objective. Can you give me some guidance when I'm thinking about the word "reasonable" as far as reasonable use? Or perhaps maybe could you respond to – if this is an appropriate time let me know - like to respond to some of the kind of thoughtfully presented other interpretations of this reasonable or not that was given to us by residents or experts.

**Shanna Sether:** I would say that generally there is not specific guidance, in either in the statute or the Zoning Code, for you to determine what is or what is not reasonable. That's a decision that's going to be made by the Zoning Board of Adjustment. Staff believes that, as the ordinance states, the Applicant is proposing to use the property in a reasonable manner. This is a buildable lot within the City of Minneapolis. It's platted as such. The Applicant has been able to demonstrate that it is buildable without significant off-site impact. That's how we determine that the use is reasonable. If the Board of Adjustment does not believe that is the case, then you would have to make a finding to that effect.

**Ami Thompson:** Thank you, that actually helps. And I have one more question and it's about how you noted that even if the entire building were to be built outside of the District they would still need a variance for the driveway and walk?

**Shanna Sether:** Yes.

**Ami Thompson:** Would this – is this a variance like fence variances where you can't stipulate – like if we would say, if we were to grant a variance for a driveway and a walk can we say just for driveway and walk or is it only – is it just a variance or not?

**Shanna Sether:** You absolutely could limit the scope of the proposed variance. If the Board of Adjustment decides to approve the project and only approve the driveway/walkway – in this case the driveway is also acting as the walkway ...

**Ami Thompson:** Okay.

**Shanna Sether:** ... and deny development for the construction of the single-family dwelling within the Shoreland Overlay District. So it is within your ability as the Board of Adjustment to determine that that particular portion of the project does not comply with the findings.

**Ami Thompson:** Thank you very much.

**Matt Perry:** Alright, any other questions of staff? I have a couple of clarifications I'd like to make just so that we get them out of the way and they don't come up later. In the Staff Report on pages 2 and 3 you go through four items: to apply for a variance to allow for development on or within a 40 feet of a steep slope or bluff the following four items must be met. That's not for discussion here. We wouldn't be here if those were not met, is that true?

**Shanna Sether:** That is correct.

**Matt Perry:** Ok so, to my colleagues and to the public, we're not here to discuss those items. We're here to discuss the three findings, the three general findings and the three additional findings necessary for the Shoreland Overlay District. In the staff report I also have a question on page 5. It says near the top of the page: "Also, Environmental Services has outlined the parameters to maintain erosion on-site", does that mean minimize?

**Shanna Sether:** Oh ...

**Matt Perry:** If it means maintain I don't know what that means.

**Shanna Sether:** ...sorry. One of Environmental Services requirements is that if there is erosion on the site it's maintained on the site. So it is to maintain it on-site. That would be its minimum code so that would be – that's why we had multiple engineers review this for all of the standards. That's one of their scopes for review is that if there is erosion it's maintained on the site and does not travel to other sites including the Mississippi River.

**Matt Perry:** Okay, that helps clarify that, and I think I'm going to try to maybe help Ms. Thompson on her question regarding reasonableness and it maybe will head off some, again, some questions or comments going down the road here as we go through these proceedings. For reasonableness, we don't have to find – this doesn't have to be the "most" reasonable use. It just has to be reasonable. As I read through the many pages of written testimony we got I noticed that there was, by one person, a claim that it had to be the "most" reasonable. I just want to make sure that people understand it just has to be "a" reasonable use, from our judgment.

**Shanna Sether:** That's correct.

**Matt Perry:** Alright. Great. Does that prompt and questions from anybody else?

**Shanna Sether:** Thanks very much.

**Matt Perry:** Great, thank you. Before we start I'm going to have the Applicant speak. Is the Applicant here? Okay, there you are. Great. Before we start, I'm just going to outline a couple of procedural notes. Each Board member received their packets last Friday, September 9<sup>th</sup>, they're quite hefty, there's a lot of material in them. It is the presumption of this Chair that all of the Board Members have fulfilled their responsibilities in reviewing the material in this packet. Written material received is considered part of the public record and is public testimony. If you've submitted something in writing there is no need to repeat what you wrote, but you may highlight key points within the allotted time that we have for you to speak. We want to make sure to hear from everyone who wants to give testimony today so that we can make the most informed decision possible. If someone has already made a point you want to make you can just say I agree with what the previous speakers have said. And I'm ask in a minute just how many people are interested in speaking so I can get a judgment of how much time I'll allocate for each person. Another procedural note is the Chair does not vote except in the case of a tie. Those doing some quick arithmetic will see that we have an odd number of people without me so I will not be voting. My job here is to keep the meeting moving along in a fair way. Lastly, please keep your comments on the matter before us. If you stray from them I'm going to need to interrupt you and ask you to confine your comments on the variance being requested. I'll try not to do that in a rude way, and I hope you don't take it that way, but I will interrupt you and ask you to come back so that we are respecting everyone's time and that we are being true to the scope of what this Board is being asked to rule on. And with that, would the Applicant like to provide some testimony? And if you could give your name and address for the record. I guess I should do it before I start, can I get a show of hands on how many people are interested in speaking on this? Okay, could you keep your up please, just for a minute? Okay, I think what we'll do, the Applicant, because they are the Applicant can – I'm going to let you do your – proceed with your presentation. Those who are speaking after you will get three minutes whether you're speaking for or against. So if you would proceed sir. Again your name and address for the record.

**John Reiling:** I'm John Reiling, I live at 3616 Edmund Boulevard and I'm the Applicant, along with my wife for this variance.

**Matt Perry:** Thank you.

**John Reiling:** First of all I want to thank everyone here for an opportunity to request a variance and have the ability to have the public forum. We have had a fair amount of neighbors ask us about coming to support the project and we have told them not to come. And the reason is that we don't want to create any more contention or neighborhood issues than has already been raised by the people who are against this project. We noted

– you noted one of the important changes in terms of the project was that a major oak tree as you go into the project that has been harmed. We’re going to move the road so that we go around that tree to assure that that tree exists. And secondly, in terms of the plans, there was a basement underneath the garage and we’re moving that basement. So we kind of materially lessened the square footage, in part because we didn’t want to have less foundation work being done. Obviously we gotta put frost down there. This property, by the way, is dominated by oak trees. If you look down from Google Earth on it it’s an oak canopy that exists. There’s trees that run through it, but it really is dominated by oak trees. A very beautiful lot. And I have just a few pictures here that I just want to plow through here just to kind of show you kind of the details of this and then there’s kind of one substantive point that I want to make relative to this. Okay so if you look at this first picture you can see across there where we have a dot where approximately where the culvert it.

**Matt Perry:** Sir, you know if you would like, staff can help you with putting that on the overhead so that the public can see. We have this.

**John Reiling:** Very cool.

**Matt Perry:** For the record, ...

**John Reiling:** Alright, so.

**Matt Perry:** ...for the public, we have copies of this but I just want to make sure everybody else can see what we’re looking at.

**John Reiling:** Okay, so this is – I’m standing about right above where the sewer – the storm water management system – major sewer comes out and starts down the river. So that’s where I’m standing right now. If you look, I put two lines on both sides of the – of approximately where the lot is. And you not that I am looking – you see a car on the left hand side, that’s the River Boulevard, you see a car further on, and that is Edmund Boulevard. So this culvert goes underneath Edmund Street – Edmund Boulevard, the River Boulevard, and then the boulevard that is next to the river. That’s part of the Minneapolis Park system. On the right hand side there you can see the little line there we have, and that’s the corner of the property in which the driveway go into. Okay, the next page is just a – is the survey that has been used by Shanna. The thing that I wanted to point out in there is where these major oak trees are. You can see that there’s one near the front, that’s the one that has problems. There’s kind of one in the middle a little bit, another one on the edge, and one in back in the part of the property that is not in the overlay district. Those are the four major oak trees that dominate the canopy of this property. And you also note that this area is – has kind of a flatness to it. That edge has a flatness to it where from there it drops down into the gully and then on the other side from the back of the property it drops down in the gully. We’ll have no construction, obviously, within the critical overlay district because we want to build on the flat part, obviously. Okay next is a picture looking from the middle of the property out to Edmund. So this is trying to kind of show you these oak trees. You can see a big oak

tree on the left-hand side there, another major oak tree on the right-hand side there, that's the one that's kind of in the middle, and then you can see this oak tree right here. So the driveway is going to come from Edmund and kind of go right up the gut here. By the way, these dimensions here – this is about 23 feet between these two oak trees. This is about 30 feet between these two oak trees. So we have good room to build a retaining wall which will have no foundation in it. This will be a straight retaining wall. And by the way, the question was asked earlier about whether or not we'll have porous materials so the water could go through it, and we're going to work on that. Because that – you know, if there's a compression issue around the root system that's something then we want to mitigate, obviously. Okay, next picture is turning around 180 degrees. This is looking – where this driveway is now we're looking back to the flat part of the property so you can see we kind of drive around that edge and go into the property. And then if you see where I'm standing right now and if you would go to the back of the property and turn left, the next picture is a picture of kind of the flat part of the property. This is where the foundations would be built and the structure would occur is that flat part. And to the left of that you can kind of see the slope starting down there, and that's – you'll probably see that's where the critical access area starts and we will not be building on that. We ask to cantilever a little bit of the house over that. We'd like to get reasonable square footage where this ends up to be about 1,100 square feet of house without the garage that we will have. So this is a very small house which we're very excited about the opportunity to build it. So next picture is a picture of the culvert, I showed you where this was on the first map and this is that little 30-inch culvert that goes under all these streets okay? Now I want to spend a second to talk about this storm water system here. There are about, according to my count, and I think I'm doing this right where you can see there is one, one, one and then once in a while it looks like there's storm sewers on both sides of the street there, but when I add all this up, there's about 70 storm openings that feed into the – down to the river from all these places. So the impact that our house would have on the storm water system, at least from my perspective, is you know from a civil engineering's standpoint is just negligible. It's just not material to what will happen given that. Okay and if you look down towards the river there, we have two dots where we think our culvert actually connects. And if you look beyond that, you can see one more red line that connects over to the left there too. Okay, so if we continue, I want to show you how that storm... (end of tape) ...all the pipes except for one have connected in now to this pipe here. And you can see at one point, this pipe was connected to, you know, like it had an elbow there but it looked like had broke off over time. But this is where all that storm water feed into down towards the river. If you turn to the next page, this is where either our culvert or that – the next red line down culvert, feeds in. I had a hard time, I tried to find out about this but I had a hard time, but this is where a culvert feeds in. If you see, I'm down at the river looking upstream. So you can see the pipe that has come down from that top one, continued down the river - and by the way, below this going down to the river, this pipe just continues down to the river. In the next picture is a picture of when it's getting very close to the river you can see that that major storm water culvert buries into the soil. And I don't know what happens to, I tried to walk the river edge and I cannot – there's no opening down at the river where you know, you can see the water draining into the Mississippi, it just buries in here so I'm not sure at that point what happens to that design of the water. And then final page is the page – I'm standing

in the water now on the Mississippi looking upstream. And you can see that, obviously, the nature of that valley has no wetlands associated with it. I mean this is draining down a culvert that is going into the Mississippi River, but there's no wetlands in that and obviously there's 70 storm sewers that are feeding that. Okay, so that's what I wanted to show you folks. I'll be glad to answer any questions. And then I've asked if I could have my – the lead architect introduce himself and talk about, for just a couple minutes, about the project and then we have – he also has brought a couple of the technical people here if you have any detail questions about the project.

**Matt Perry:** Okay, any – could you pronounce your last name again?

**John Reiling:** Reiling.

**Matt Perry:** Reiling? Any questions for Mr. Reiling? Yes, Mr. Cahill?

**Sean Cahill:** Thank you Mr. Chair, thank you Mr. Reiling, just something brief. I know it's not within the requirements of the variance, but I'm just curious if you had any plans to replace the trees you'd be losing in the construction of the house?

**John Reiling:** The trees – no we're going to take down that tree.

**Sean Cahill:** Okay, but any of the other large trees, are you going to replace any of those?

**John Reiling:** We're not – the two large, the big oak trees it's our intention to save all those oak trees. So the only trees that we're taking out are trees that in that flat part...

**Sean Cahill:** Yup.

**John Reiling:** ... and there's a couple maple trees like that. We could plant trees down in the gully more, but I hate to say this but that gully is so dominated by that oak that I'm not sure if they grow effectively. But if the group would want us to plant more trees down there we'd be glad to do it.

**Sean Cahill:** I'm just curious, thank you.

**Matt Perry:** Any other questions for Mr. Reiling? Yes, Ms. Thompson?

**Ami Thompson:** Thank you. You touched on this, but can you explain why it wouldn't be sufficient to build the entire structure outside of the district?

**John Reiling:** Well, we – you mean the cantilevered part?

**Ami Thompson:** Yes.

**John Reiling:** The reason we've asked for the cantilevered part is that without it we – the first floor of this would be about maybe 900 square feet and we just – you know we want to create a place where we can live there for the rest of our lives, so we want a bedroom, a bathroom, a great room kind of on the first floor, and we had a difficult time trying to cram that into 900 square feet. We don't think it will cause any harm to cantilever out, because again, the roof lines are going to into the gully, their not going down that slope. And in fact, in a way, that cantilever kind of protects the steep slope a little bit more because, obviously, it's not you know, the rains and stuff it's not going on that, it's going on that roof that goes over to the side. That's the rationale behind it.

**Matt Perry:** Any other questions of Mr. Reiling?

**Judith Reiling:** (unintelligible – not at microphone) may I testify as his wife?

**Matt Perry:** You can provide public testimony just like with the rest of the folks, and you'll get three minutes.

**John Reiling:** Okay, so Judith's making the point that at one point there was discussion about not trying to put all this on one floor and actually going up two floors. So we stay out of the overlay district totally but go up to a second floor and we just don't think, relative to the neighborhood and relative to our purposes that that was the best solution.

**Matt Perry:** Alright, thanks. So what I'm going to do now, I'm going to take more testimony, but I'm going to let you know that the Vice-Chair, Mr. Ditzler here, is going start timing people and there's this irritating beeping noise that happens after three minutes expires and then we'll ask you to wrap up your comments when you hear that. So people who would like to speak in favor of this application – yes sir, your name and address for the record.

**Peter Kramer:** Thank you, thank for the opportunity, I'm Peter Kramer, I'm the architect for the project. I office at 2929 4<sup>th</sup> Avenue South. And I'll be very brief because I think Ms. Sather did a very good job of presenting the project to you and we had a number of meetings with her and other staff and based our solution, really on the issues around both the overlay and the access to the property. And I think John covered a lot of the major points. I would like to indicate that our Civil Engineer, Steve Pellinen here to answer any questions that you might have relative to the storm water control, erosion, and that sort of thing. The soil testing was done by American Engineering and those reports were given to the City. Our structural engineers are Mattson Macdonald, they did not come tonight but they would be available to discuss these cantilevered issues that we're doing. We're cantilevering a number of parts of the building, including the piece that extends over the overlay, with an effort to protect that site and protect the oak trees. So there's additional cost in that, but the owner very much wants to protect the trees and the steep slope that leads down to the storm sewer outlet. And Chuck Stewart from Close Associates Architects, landscape architects, is here if you have any questions relative to the protection of the trees and also the future landscaping. There'll be no sod on the site, it'll all be very natural and there probably some additional planning done, but

probably not trees because it's pretty heavily treed now. The house, as John indicated, is pretty modest in size. It's a one-story, one level house with some – a small amount in the lower level or basement. And I think John indicated that we had actually reduced the size of the basement as a part of this design process. It was not showing in the original plans. And I think, as Shanna said, we built the building within the setbacks as required by the Zoning Ordinance, the height limitations and scored 16 on the residential requirements Richter Scale. So I'm available for questions if you have any.

**Matt Perry:** Okay, any questions? And I should say that if anybody has any questions of someone who's speaking just let me know. Otherwise, thank you very much for your testimony. Mr. Keobounpheng?

**Souliyah Keobounpheng:** Thank you Chair, I have a question for architect. Thank you Mr. Kramer. Could you or your civil engineer comment on the issue with the retaining wall to hold back the driveway without frost footings for retaining all that back?

**Peter Kramer:** The design of the retaining wall?

**Souliyah Keobounpheng:** In terms of the compression in the soil and all that. I just want maybe a confirmation that that is, you know, that the retaining wall doesn't just slip down the gully after a while because it can't retain all the soil behind it.

**Peter Kramer:** Why don't I ask Steve or Chuck to answer that?

**Souliyah Keobounpheng:** Sure, it's just to elaborate on your findings that that would be supported.

**Peter Kramer:** Chuck would you like to answer that?

**Chuck Stewart:** Thank you Board, my name is Chuck Stewart with Close Landscape Architecture. We office at 400 1<sup>st</sup> Avenue North, Suite 528, just down the road. Part of what we wanted to do with this, since we have – this is the driveway location that we're given, considering at the low point and then at the high point, and we want to come in t an area that shoots between the two gaps and so what we're proposing to do, and you know, part of this final engineering of this has to be done yet, but part of what we're proposing to do is to sort of make a small cut to step and then tie everything together across so it will be one mass that will be level on two edges and so it won't have the shift. And that will be under review too, by engineers.

**Souliyah Keobounpheng:** Okay, thank you.

**Matt Perry:** Alright, thanks. I think those are the questions, thanks for your testimony. Oh, Mr. Cahill?

**Sean Cahill:** Thank you Mr. Chair, one brief question. How does your plan in your outline, how is that going to prevent erosion on the property?

**Chuck Stewart:** We'll use standard erosion protection techniques during construction and we'll – part of our effort in building a team here of civil engineering and landscape architects is to use the standard appropriate techniques for erosion control during construction and then also design both our retaining walls and the foundation walls and the slopes and so on, around the building to minimize erosion – or maintain it as is indicated in the report. You should know that over the years there's been a considerable amount of erosion into that site and there's a fairly deep overlay of silt and clay that has collected from the neighborhoods over a fairly porous understory of sand and gravel. So early on we thought about that the porosity of the soil would take care of all that, but some of it is because of the fact that it's been filled in. That it doesn't work as well as it used to.

**Sean Cahill:** Thank you.

**Matt Perry:** Alright, thanks for your testimony. Is anybody else here to speak in favor of this application? I see no one. There was something that Mr. Kramer brought up about whether we had something in our report. As I said before we have lots of, lots of things in our report. I had staff produce a list for us. There are a list of 38 different documents from people, I think probably 39 people represented. So everyone from the Mississippi Watershed Management organizations, organizations Friends of the Mississippi, the Department of Interior, we have this information so and we have read it. So just to be aware of that. Alright. People who would like to speak in opposition? I guess that would be the rest of you. So if you want to just step forward, give your name and address and as I said, 3 minutes. And let's get going.

**Dan Kelly:** Chair Perry, and members of the Board, my name is Dan Kelly. I'm an attorney at the Felhaber Law Firm and we're at 220 South Sixth Street. I will attempt to abide by the 3 minute requirement as best I can. I think it's important when the Board consider this variance that it understand and remember exactly what must occur. What it must find in order to grant the variance. First of all, the variance ordinance says that a variance may be granted. So your decision here today is not whether you must do something, it's whether you should do something. All of these requirements could be met and you still might not decide that it's the best thing. And you have to recall and remember at all times that it's flexible, that it may be. But it can only be granted when each of the elements, each of the findings is made and this Board must receive evidence. And I think Chair Perry talked to the fact that there are 39 different pieces of evidence and we're going to hear some testimony here today from some experts. And so it can't be the belief of the staff. That's not evidence. It's got to be reports, it's got to be expert testimony, it's got to be evidence upon which you base your opinion, not just beliefs. And according to the Minnesota Supreme Court, a decision that is predicated on insufficient evidence is - would be arbitrary and would be capricious. And so I think it's critical to remember the evidence at all time. I'm going to rattle through – you're aware of required findings and ...

**Matt Perry:** We are.

**Dan Kelly:** ... I'm going to skip and address two of them quickly. The second two. The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the Comprehensive Plan. According to the staff report, the intent of the ordinance is to protect both the water body and the other properties located below a steep slope from erosion and runoff. Take that intent, apply the evidence that is before you. There's an e-mail, a simple e-mail, nothing more than an e-mail, that says – from the City, from the Public Works Department, that says the project should reduce the erosion and the project can be successfully completed without having a negative impact on the storm water runoff. That, without any additional evidence. But if you take the evidence that's actually submitted, and this from an expert that was actually - Mr. Reiling retained, if you looked at the summary of the runoff rates, it's not neutral, it's not *de minimis*, in fact, it's substantial. That a 24-hour storm, let's take a two-year storm, would go from 85 cubic feet to 511 cubic feet. That's evidence, that's what is need to be considered by this Board. Look to the staff report with respect to engineering. It says that civil engineers are recommending that a silt fence be installed upstream at the edge of the culvert to prevent erosion from going into the Mississippi. That doesn't indicate that there's not going to be erosion, quite the opposite. It indicates what's going to happen to that erosion, that it's presumably going to fall or be stopped by a silt fence. But again, that is a mitigating factor to erosion which need not occur and there would be no need for the silt fence. If you look to the required finding, again the evidence that is required by this Board, the proposed ...(timer beeping) That would be the irritating sound versus for instance, my voice. And I will quickly wrap up.

**Matt Perry:** Please.

**Dan Kelly:** The critical component here is that injurious to the use or enjoyment of other property in the vicinity. If you look to the staff report, the staff report does not address it. Does not address whether or not it's going to be injurious to the issue, or to the use or enjoyment of property in the vicinity. It simply does not address that. What it does say is that construction at the top of a steep slope would likely not be detrimental to the health. That's not the standard. You have to find evidence that it would not be detrimental to the health. Even if you read the staff report, staff doesn't find that. Staff finds that it would be likely not to do so. So based upon that alone, I believe this Board of Adjustment cannot and should not grant this variance. Lastly, I would say I'm certainly willing to sit down only slightly over my time commitment, but there are experts from the University of Minnesota, tree experts and other experts and I would ask that this Board be somewhat flexible in the 3-minute time limitation when they're speaking. Because they have made - they don't have property there, but they've made the effort to come here today and enlighten this Board and I'd appreciate that flexibility. Thank you.

**Matt Perry:** You're welcome. Thanks for your testimony. And to that end I want to say that the 3-minute rule's to respect everybody's time and keep on track. If Board members have questions of someone who's speaking, that's – we can take some more time. And in addition to that, I want to remind folks we have read through the material. One of our Board members told me before this meeting, they had spent multiple hours

reading through the material. So we have read through the material of the experts who have provided testimony. I just want to keep reminding you of that so – I heard someone say, what’s the order? So that it feels a little bit more structured, if you wanted to queue up in front of the podium you may do so, and maybe that will help. You’re the first in line sir. Your name and address please?

**Manuel Jordan:** My name is Manuel Jordan, I’m with Heritage Shade Tree Consultants, I’m out of 2018 Texas Avenue South in St. Louis Park. And I was asked to come and give an opinion on what the impact of this proposed construction will be on the trees. Specifically ...

**Matt Perry:** I’m not going to take away from your time, but I just want to let you know we have read your reports so if you want to highlight something...

**Manuel Jordan:** I will.

**Matt Perry:** ... in that ...

**Manuel Jordan:** Yes.

**Matt Perry:** ...please do.

**Manuel Jordan:** The highlights are that the construction of the driveway is going to impact significantly the – pretty much all these large, significant trees. Specifically, the small fine roots. Small fine roots are used by trees to take up nutrients and water. Without them trees go into decline, trees die. The installation of them is going to impact specifically to the north of the property there, with having that retaining wall there, water will no longer move down slope. It will all get pooled up on top there. That’s going to lead to root suffocation, root loss, root damage and eventually trees dying from that. And we’re talking about a time frame anywhere three to five years. Something like that. The impact on the tree and this will be the southwest corner of this – sorry the 30-inch oak, as they put it here. That tree right there – thank you very much – the impact of the pruning that they’re talking about doing by the root cutting is not necessarily what we call the best management practice in terms of how they’re planning on doing it, just doing a random cut when maybe all they have to do is just some cantilever kind of cuts in there, and that’s going to lead to further tree decline and quicker acceleration. Especially if the implant – the recommendations of the architect if trying to help the trees out through the construction process and adding fertilizer and things like that, that leads to quicker tree decline when you have tree root loss. Because trees have to spend energy to take up nutrients and in the process of doing that, so if you have a tree with a low amount of nutrients, I’m sorry, a low amount of energy stored in there and you take away root system, and you add fertilizer and force it to spend energy that it’s supposed to be using for defense and creating new roots and to force it to spend it, to take up these nutrients, that’s going to lead to a quicker pattern of decline and then the plant being susceptible to different types of pathogen damage. Then the last portion here, in regards to the retaining wall, specifically that big oak tree that they have right next to it, there was a 36-inch tree,

the steps that the architect mentioned before about to have a solid base on that, that the councilman (sic) had asked questions about? It's very interesting because you have to cut into the soil and then build up and then cut in and build up. So the process of cutting, you will not only be damaging small fine roots but likely large support structural roots which could possibly, to the trees, failing structurally. What does that mean? Tree wind fall, tree uprooting, that's what that means. Okay, the other portion there is nobody's considered the weight of - it's the great that there's permeable. I'm glad that they went through those efforts, but the weight of that itself? Any roots that are there that are not harmed by the process will be killed by simply the process of having too much weight on top of them, and that's going to compact soils, that's going to limit their tree's potential to the gas exchange that they need to do to be able to survive and thrive down the road. So again, that will accelerate a pattern of decline, and so you'll end up with having a property instead of these magnificent oaks that are there right now that will look like - in the winter time without leaves that's what they're going to look like in the spring time (timer going off) and in the summer time. And in the last portion, is we're talking about a clearcut in top part of there. So what does that mean for the properties adjacent to them? They're going to go from looking at live wood to dead wood, which is the wood side that they're going to be having. Any questions?

**Matt Perry:** Does anybody have any questions? Mr. Ditzler.

**Matt Ditzler:** Thank you Chairmember Perry. Thank you sir for your testimony. Do you have any suggestions, if we go under the assumption that the lot is a buildable lot and therefore that the Applicant has to have access off of Edmund in order to do that, do you have any suggestions as far as what they could do from the driveway standpoint that would be able to not harm the trees?

**Manuel Jordan:** Yeah, build a bridge. A bridge driveway. If you can do something, if that's even feasible. But when you put things on top of things, on top of things, on top of things, that's weight. That weight will compact soil and that will lead to root damage right there. If you had something - you know it's kind of like if you had - in a wetland area, so you can either build a bridge or you can fill and build on top of that. We're talking about filling and building on top instead of raising things up and building over. That would be a solution.

**Matt Ditzler:** Okay, I have quick follow-up question. You're findings that have to do with the damage that would be done to these trees ...

**Manuel Jordan:** Yes.

**Matt Ditzler:** ...would the damage be the same if the lot was completely flat? My question is, is the slope of the lot - does that affect this potential damage that the Applicant would do to the trees, or if this was a flat lot and the plan was the same and the trees were the same and the topography was just flat and they were going to put this driveway in, would it still have the same negative effect on these oaks or is the slope an additional factor in this case? I didn't see that in your letter.

**Manuel Jordan:** If the weight of building that would be the same?

**Matt Ditzler:** Everything is the same, the lot is just flat as opposed to a slope.

**Manuel Jordan:** Yes, and then they put the same amount of fill ...

**Matt Ditzler:** Yes.

**Manuel Jordan:** ...the same amount of material? Yes, the impact would be the exact same ...

**Matt Ditzler:** So the slope ...

**Manuel Jordan:** thing ...(unintelligible – two people speaking)

**Matt Ditzler:** ...does not come into effect?

**Manuel Jordan:** It's the weight.

**Matt Ditzler:** It's the weight. Thank you.

**Manuel Jordan:** It's the weight that has to do with it.

**Matt Perry:** Any other questions of Mr. Jordan? Yes, Ms. Thompson?

**Ami Thompson:** I remember reading in the materials about the risk of oak wilt. Can you speak to that a little bit and does that have to do about when the time of year? Is that a risky thing based on the time of year you build? Because I also remember reading in the geotechnical report that there would be dangers of building frozen soils, or using frozen materials and I would assume oak wilt is insect-related? Maybe you could speak to that and the timing?

**Manuel Jordan:** Yeah, oak wilt, the relation with insect is that insects are part of the vector that's one of the molds of it's spreading from one center to another. And then when it gets established in the center then it gets spread via the roots. If one tree gets infected all these large trees likely have connective roots, and assuming that the construction doesn't damage them, so that connectivity is lost, then potentially all of them, if one tree gets infected all them can get infected by oak wilt. Now a way to minimize that is you don't touch the trees in the high risk or the low risk period of oak wilt. High risk period goes from April to about July and the then low risk goes from July to about end of October. Now low risk doesn't mean no risk. It means that the risk gets lower and lower the farther you go down the – the longer the season goes anything closer to the dormant season. So if are looking at doing root cutting in the spring time, like it was mentioned in one of the things I saw, then that would be not necessarily an issue for oak wilt if they do this before April. So if they do this before all the spores become

active and the insects that spread the disease become active too, then you can mitigate that. The problem with that though, is that the trees are at their most vulnerable. Because all the energy that they store, now they're spending it all to make leaves so they have virtually nothing left for defense or any kind of other mechanisms like that to protect themselves. The pruning? They did address that. Talk about doing the pruning of above ground tissue during the winter time. That is perfectly appropriate and assuming that the construction activity works well and that they respect and don't damage any of the branches at any point, especially during the high risk period. Then you can quite likely mitigate the potential for oak wilt on that site.

**Ami Thompson:** Thank you.

**Matt Perry:** Thanks, are there any other questions of Mr. Jordan? I don't see any, thanks for you're your help.

**Manuel Jordan:** Thanks for your time.

**Matt Perry:** Yes sir, your name and address for the record please?

**Randall Wetherille:** My name is Randall Wetherille. I live at 7730 County Road 26, Minnetrista, Minnesota and I'm speaking tonight on behalf of Rona Wetherille who is the homeowner at 3600 Edmund Boulevard. Material I have to present is not going to be something heard already and I'd like to put this picture up if we can get this. I'd like to start off with a significant concern of Mrs. Wetherille, my mother. This is her house viewed from the north on 36<sup>th</sup> Street. Her front yard sits here, it runs downhill and essentially is an extension of the area that's being filled in for the driveway. That's a significant drainage feature for her property, for her house, her front yard, and I have been there during a moderate storm and there is a lot of water that runs under that. Her concern is that if the driveway retaining walls are put across there, that cuts off a fairly large drainage feature of her property essentially creating a small lake there. Now the real thing that I think people are missing the point here is the historical perspective of this property. Prior to 1973, this property held a orphanage. That orphanage was torn down some time, I believe, in the 1960's - maybe early 1970's, and divided into 13 lots by a developer by the name of Al Fessenden. Now my parents, Robert and Rona Wetherille, bought the first lot, which is on the corner, the 3600 block, and at the time when they built their house I was living with them. I was in college so I lived in that house for six years so I think I've got pretty good recollection of what was going on at that time. The three lots that are the Reilings' lots were originally bought as three lots by Dr. Irving and Dr. Dorothy Bernstien. Their original plan was to build a house in the center lot and have all three lots combined into one. They quickly discovered that that was not practical because the house they wanted build, if it were put in the middle of the ravine would be too far from either edge for them to install a driveway. So they settled on moving the house farther south, combining the southern two lots and building their driveway along the very edge of the southern lot. That left the third lot, which I will call the 3614 lot, which is the one in question. At the time Mr. Fessenden, both of the Bernstiens, and everybody else living there were of the unanimous opinion that that third lot was

unbuildable. As Mr. Reiling himself has admitted, the flat spot in the back corner of the lot is really too small to put a useful house on. Drs. Bernstein (timer beeping) offered my parents the opportunity to buy the lot. Subsequent owners on occasion have also offered that, but for the last 40 years nobody has made a serious effort to develop that lot or to sell that lot because it has simply become all five owners of that property have just viewed it as an attachment to that bigger lot. An unusable but necessary attachment and that's I think the key issue here because that there should not be a reasonable expectation that that lot is buildable.

**Matt Perry:** Alright. Thanks, thanks.

**Randall Wetherille:** Thank you very much.

**Matt Perry:** And I think your mom was the only one who submitted testimony in actual handwriting, not computer print out. If I recall correctly.

**Randall Wetherille:** That's I'm sure correct.

**Matt Perry:** Yes sir, your name and address for the record please.

**Rory Steeler:** Hi, my name's Rory Steeler, I'm a planning and land use specialist for the National Park Service, Department of Interior. Our office in downtown St. Paul.

**Matt Perry:** Alright. Thank you.

**Rory Steeler:** We did submit a comment letter, it's understood (sic) that you guys did or have a chance to review that.

**Matt Perry:** We did.

**Rory Steeler:** And I just want to emphasize that this property is entirely within our park. Our park is a 72 mile corridor from Dayton all the way down to Hastings and John and Judith can be proud owners to say that they're within a National Park. They can tell their friends and family, you know, do you live in a National Park? Did you know we did? It's kind of a special thing and we were established in 1988 for that reason. The Mississippi River is a special river along with the corridor of that – along with its corridor. Upon being established in 1988 we established our Comprehensive Management Plan. That was established through coordination with the State and every local government within our corridor. There are 25 of them. Minneapolis being one of them. And in that we decided that it would be best for us not to create another layer of government. We all know how that works, it bogs it down and so we chose to rely on the Mississippi River Corridor Critical Area State Program and to administer and manage the critical resources within the Mississippi River Corridor. Through consultation with some experts we have significant concerns with the decisions that will be made here at 3616 Edmund Boulevard. We fear that these may impact the river bluff system. The erosion and sedimentation that could potentially leak into the Mississippi River presents a harm

and a threat. Each time a variance is allowed to circumvent these rules that have been in place to protect the river it's one notch and as our Superintendent likes to say, each time this happens eventually we might run out and it's not going to be the significant area it once was. So I'm sure these resources were one of the reasons that John and Judith decided to live here and move to this property. The rules were in place when they moved there. The National Park Service urges you to consider this and adhere to the regulations and stated in the Shoreland and Mississippi River Critical Area and I thank you. If you have any questions please let me answer. I do have brochures if some of you weren't aware that we are a park.

**Matt Perry:** If you want to submit any material for us you can give it to the clerk and she can distribute it. I would have one question unless somebody does. Mr. Ditzler?

**Matt Ditzler:** Thank you Chair Perry. Have you had any conversations with the Department of Public Works for the City of Minneapolis regarding this application?

**Rory Steeler:** No, I have not. I was able to see their comments within the staff report and application and we have not been able to discuss with them the findings. Thank you.

**Matt Perry:** Is there anything that is not in your letter that you would like to share with us that's a concern?

**Rory Steeler:** We laid it out in the letter and what I've said now and I just want make sure that the importance is known.

**Matt Perry:** Okay, great. Thanks for your time. Any other questions? Alright thanks for your testimony. Who's next?

**Joe Magner:** Mr. Chairman, Board, Professor Joe Magner, the University of Minnesota, 1390 Echols Avenue, St. Paul. I am going to present to you some new information that was not in my letter this evening. In item number 3 I talked about shallow ground water management and based on the work that was conducted by American Testing, I was able to discover some new information that I think you'll find important in making this decision tonight. And what I discovered was that – well prior to that, my graduate student did some additional work. Here you can see where Lake Calhoun is, you come over Lake Street, drop down, you look at this area circled, it shows that back in 1874 we were dealing with a wetland area here. And the work that was done by American Testing helps me confirm why this area might have been wet. And what they discovered was that there's some shale at depth there. Okay this, now you have to think subsurface now, this represents movement of water not by storm sewer but by what's happening in the subsurface environment. And what I want to get to, given my limited time frame, is a follow-up on what Manuel Jordan talked about in terms of the removal of trees, the damage of trees and just what these trees do in terms of how they manage and move water. If these tree roots are not capable of performing their job, because of the shale that exists at depth there, water builds up. There's already been some evidence that at times there's been a high water table that's gone back and has caused some material damage

and has caused some of those land owners to install the sump pump to deal with that ground water management issue. So there is an off-site impact that's occurring here as a result of a new discovery that was made by American Testing in terms of understanding the nature of a shale zone here that influences how water moves through the subsurface. And so my concern is that based on removal of even some trees, and the potential damage in loss of trees long term, is that we're going to have some impact with respect to managing that ground water table and how that in turn might affect the adjacent neighbors. My graduate student is going to come along and follow-up a little more on off-site impacts in terms of what's going to happen to the shear stress impacts and erosion that takes place on the ravine and so at that point if you have some questions why don't we wait until after my graduate student talks?

**Matt Perry:** Is there any questions of ... I have a question if you would sir. Are you suggesting that no trees can be removed from this lot or there will be, I'm not sure what the right terminology is for the effect that you're saying will be caused by the removal of trees, but are you suggesting no trees can be removed without some negative effects?

**Joe Magner:** Right, if you remove some trees there will be some negative impacts. Now, quantifying those negative impacts really is a function of what kind of precipitation occurs, what type of sump pump activity occurs in the adjacent area. Okay, this is a whole 'nother issue that simply hasn't been raised by anybody yet, and that is management of the ground water table as a result of the geologic characteristics that are found under it. Not only this site, but adjacent sites.

**Matt Perry:** Okay. Is it only the oak trees, or any trees? Because when someone builds a house they're going to have cut down some trees.

**Joe Magner:** That's correct. And if you go back to my previous slide, I was showing basically what that root structure looks like.

**Matt Perry:** Alright.

**Joe Magner:** Okay, obviously the larger trees have deeper root structures. Some of those structures can extend down through some of the fractures and cracks within the shale.

**Matt Perry:** It just seemed when I read your report, and based on what you said, you are almost suggesting that no trees could be removed from this property without – you were not recommending any trees be removed from this property.

**Joe Magner:** Well, I think when you stop to consider the fact that the watershed itself has already undergone a significant change. There's a significant amount of water moving through this system here. Really at this point, what we need in order to maintain the ecosystem surfaces and protecting the ravine and protecting the Mississippi River, what we really need to do is turn this lot into a rain garden of sorts. Into a mitigative

measure that can buffer and attenuate the insults of the storm water activity that's already occurring on the site.

**Matt Perry:** You just were much more eloquent in saying what I thought you were saying. Thank you. Thanks for your testimony. Mr. Cahill has a question for you.

**Sean Cahill:** Thank you Mr. Chair, thank you Professor. Just a brief question. You mentioned negative effects. What are we talking about? Is it like flooding basements?

**Joe Magner:** Like basically flooding basements. So essentially what's happening is water sitting on top of that shale. Okay, when you get a storm event, okay, pretty much it's going to stay on top of that shale. It's going to move laterally. It's generally gonna move towards the lowest point and as a result it'll emerge to the – from the subsurface to the surface at that point. So some of the calculations that were made using the rational formula in terms of runoff coming off of roofs, that's only telling part of the story. There's a whole 'nother part of the story that's occurring in the subsurface. Okay, we describe that, I teach that, it's called variable source area and it's basically bringing into consideration the subsurface component of how water moves. That simply hasn't been addressed here.

**Sean Cahill:** So in addition, is there any danger to say the structure or the topography as it exists? Are we talking that if there's enough water along that shale it's going to start to wash away that cliff side or some of the steep slopes? Is that a risk here?

**Joe Magner:** Well, you mean is the steep slope on the lot going to collapse?

**Sean Cahill:** Shift or move or yes, collapse.

**Joe Magner:** I don't believe so. I think you'd have to have some fat clays in order for some type of plainer failure or some type of other rotational failure occur. Based on the report – test report by American Testing, I didn't see that type of soil material.

**Sean Cahill:** Okay, thank you.

**Matt Perry:** Mr. Keobounpheng?

**Souliyahn Keoubounpheng:** Thank you chair. Thank you Professor. A question regarding your comment regarding this becoming a rain garden. For all the neighbors in the area and 70 culverts that divert storm water through the area, it would seem to me that it already is a rain garden. And water absorption through the trees and other properties and on this property. Let's say that a house was to be built here, would neighbors planning ten trees each, would that help mitigate some of the water absorption that occurs here?

**Joe Magner:** You mean going back to the size of the watershed, if we could plant more trees, if all the neighbors ...

**Souliyah Keoubounpheng:** Sure.

**Joe Magner:** ...would plant more trees?

**Souliyah Keoubounpheng:** Sure, all the neighbors have more trees, they would absorb more water, less water goes into the culvert, less water goes into the Mississippi River. And also, it seems like when there's a heavy rain in this particular location, because it is a bowl, water intuitively I'm thinking water is just going to run down into the bowl and then run out. It's not going to absorb on the side of the hill. It's absorbing around it, you know, hundreds of feet around the bowl possibly? Rather than absorbing on the slope, on an 18 percent slope of that hill that's there?

**Joe Magner:** With the steeper slope it's gonna tend to run off more.

**Souliyah Keoubounpheng:** Sure.

**Joe Magner:** I mean, so it's more on the flatter areas where you can get infiltration.

**Souliyah Keoubounpheng:** Correct, so ...

**Joe Magner:** Yeah, if you can more vegetation, yes you can sort of offset that. However, there's enough plumbing already in place that I don't know that adding ten more trees within that small watershed would necessarily offset the loss of the trees that are present on this lot.

**Souliyah Keoubounpheng:** Sure, I understand that, and also my point is that it would seem that the - intuitively I'm thinking that preventing water from actually getting into the bowl in the first place would be more of help than ...

**Joe Magner:** Yes.

**Souliyah Keoubounpheng:** ... (unintelligible) the trees on-site.

**Joe Magner:** Yeah, I mean that's if you look at the direction that we're moving in as a state. We're trying to mitigate excess on site. Okay, that's just the direction that we're moving in. We're beyond that in this watershed here. And it seems to me that by taking off the last defense here, we're now going to increase the velocity, the (unintelligible) bank shear stress that's going to be applied to the soils and the ravine, which again, my time is - I've probably used up my time and let my graduate student explain part.

**Souliyah Keoubounpheng:** Thank you.

**Matt Perry:** There's one more question that - Mr. Finlayson has a question for you sir.

John Finlayson: Thank you Chair Perry and Professor. In your opinion if none of these houses had been built it'd be one thing, I mean that's a retrospective view which we can't

really use. But in terms of contribution to overall runoff, what in your opinion – let's hypothetically say this property is built as planned. On a percentile basis given that there are approximately 70 properties draining in, what is the contribution of this one new proposed property in light of all the other properties that are contributing water?

**Joe Magner:** Contribution in terms of water? Or contribution in terms of sediment and potential pollutant transport? There's several questions you're – I think ...

**John Finlayson:** Particularly in water volume and sediment.

**Joe Magner:** Water volume may be only 1/70. Okay, there's probably – the amount of precipitation that's going to fall directly over that lot isn't going to be that much different than what falls over the other lots. But given its proximity to the ravine and its outlet, there could a lot more sediment delivery. There's a thing what's called sediment delivery ratio, so if you look at sediment that will come from another part of the watershed it's potential to actually get delivered to the ravine is much less than sediment coming off of that lot getting delivered to the ravine then.

**John Finlayson:** Thank you.

**Matt Perry:** Thank you very much sir. Who's next? Your name and address for the record?

**Linse Lahti:** My name is Linse Lahti and my address is 413 Cedar Avenue in Minneapolis.

Matt Perry: Thank you.

**Linse Lahti:** I am Joe Manger's graduate student and I'm here to talk today about the ravine more so. So the hydrology of the area, the subsurface flows, the overlay flows. The hydrology does not abide by parcel boundaries per se. So this is a view looking in the ravine, looking at the outfall. You'll see the updated outfall structure is designed to emit the WPA walls and the WPA walls in the ravine extend along the perimeter of the ravine. And they divide the steep slopes of the ravine from the public trail that runs around there also. The outlet is pointed at the north ravine that you can see there, and if you look at the walls of the north ravine there are bare pieces of soil on those walls. And this is one portion in particular focuses where I just want to point out that there are WPA walls on the structure here and they're standing on about a foot of soil. And then that shadowing below them is where erosion is already occurring and it's cutting back under the wall. And then below that, that whole kind of muddy looking slide, is actually a location in the ravine where there's constantly water seeping out of the side of the bank. So you're always seeing subsurface flows here. And it's not just after a rain event, I was there on Tuesday and we haven't had rain for quite a while. Still plenty of water moving out at all times. In other locations in the ravine, there's a lot of bare soil and when the overland flows are channeled through that outlet they have a potential to run up against these places and further erode the soil. When you get out of the ravine and start walking

along the trail, you can see here ... (end of tape) ...at present, and that location where the walls are tilting actually is over that one bare soil photo I showed you where the WPA walls on top where there's subsurface flows moving. So the subsurface flows appear to be eroding the soil there causing failure of those existing wall. And in the 2002 report by Great River Greening, they indicated that there was ground water seeps on site, and they were causing erosion, and as a result they had to put in a board walk, and that's located right here, right at the site where seeing those subsurface flows. If you were to look at the left in the ravine, the wall goes up a little bit. It's still all below grade, but there's a lot of water seeping through there at all times as well. There's other places where there's erosion along the trail. This is right behind the outfall structure. There's a sinkhole that's formed. Subsurface flows have been eroding soil over time and when they can no longer support the topsoil it falls down and creates a sink. So this photo was taken in June and I went back this past Tuesday and saw that the hole had eroded back into the footpath of the footpath of the trail, the Winchell Trail. And if you look into the sinkhole you can see that it's hollow and the cavern extends much further back under the trail. (timer beeping) The topsoils just haven't fallen yet. So if you were to continue on that path back up the hill, you're headed towards the bike path and East River – or West River Road, excuse me. And if you walk up there and turn around you'll see the sinkhole on the trail as well as a new sinkhole that has formed. I've made many visits between June, July, August and then on Tuesday I noticed this. So when the water erodes it's solely kind of creeps back and erodes more and more and more. And within 90 days, just the subsurface flows in this area that are contributing to this area have caused about a 15 to 20 foot slice of erosion and the sinkholes that you can see and if there's more that's back there you just can't see it yet. So just examined the local area and this is what we've seen.

**Matt Perry:** Mr. Ditzler and then Mr. Keobounpheng.

**Matt Ditzler:** Thank you Chair member Perry. I'm sorry, I missed your name.

**Linse Lahti:** Oh, Linse.

**Matt Ditzler:** Linse, thank you for your testimony Linse. Your presentation deals with, obviously this is not the subject site, this is down ...

**Linse Lahti:** Correct.

**Matt Ditzler:** ... close to the river and this is the situation as it presents itself right now, as of today.

**Linse Lahti:** Correct.

**Matt Ditzler:** Okay, so my first question is, can you comment on how common this subsurface flow and erosion along the river, how common it is?

**Linse Lahti:** I personally have not done surveys up and down the river so ...

**Matt Ditzler:** Okay. My second question is, you didn't make any comment as to how regarding the subject at hand, how the granting of this variance will impact any of this. Can you speak to that quantitatively or not?

**Linse Lahti:** Quantitatively? No.

**Matt Ditzler:** Yes. Thank you.

**Matt Perry:** Alright. Mr. Keoubounpheng?

**Souliyahn Keoubounpheng:** Thank you Chair, thank you Linse. I have a question regarding the erosion. A previous picture you showed of a boardwalk that was built to mitigate some of the erosion, so the ...

**Matt Perry:** Do you want the slide back up?

**Souliyahn Keoubounpheng:** No, that's fine. I guess what I'm saying here is that there are in certain instances, and in particular this instance, you do build structure to maintain, you know, a manmade path or in our particular case maybe a house too? Actually hold back soil, control erosion, and it seems like the soil condition in this area, it's not – because it is on a slope, it is on a bluff, it's not going to absorb. It's going to run off. So what the introduction of control elements, retaining walls, boardwalks and things like that, in your opinion is that one example that – how we can control some of these things?

**Linse Lahti:** The retaining wall proposed on this site does not account for the water that flows off of the impervious roof and goes right down to the swale that sends water out the culvert across the street here.

**Souliyahn Keoubounpheng:** Okay, so in this particular case we have two things that are happening here, we don't want – there's a lack – we want drainage, but yet we drain it it's going to erode. So it's – I'm trying to understand. I'm trying to wrap my mind around two conflicting, you know, issues that are here.

**Linse Lahti:** So I guess a big point to make here is that with the development of the area, and we talked about the neighbors' properties and the impervious surfaces that they provide that are channeled through the property in question today, it seems based off of what's happening hydrologically, just across the street, that the area's already kind of reaching a threshold limit. And that to keep pushing it in the wrong direction would, you know, further exacerbate what we're seeing here. So I think that's my point.

**Matt Perry:** Alright, any other questions? Thanks for your testimony.

**Linse Lahti:** Okay, thank you.

**Peter Lundstrom:** Alright, thanks for the chance to speak. My name is Peter Lundstrom and I live a few blocks up from this site on 3312 Edmund Boulevard. I'm a

complete layman, but as I read Dr. Magner's report this is how I understand it and I'll put it in what I hope is simpler language and then everyone can correct or confirm as needed. What's going to happen with water coming off these roofs is that all of the water that was going into this ravine, rain garden is now going to go on to much less available soil. So now we've got less soil that has to carry more water. This is loading things up and the issue is not whether or not the ravine can pass water, so to speak, the issue is, you know, how the water is managed. It needs to go down to the water table and it needs to go up through the trees, sort of like a rain garden. When the trees are gone, when the impervious surfaces are added, that water goes down into less soil and goes faster. That increases pressure, that increases turbulence, it carries more solids, it runs into a rain head currently that Dr. Manger has described as being unstable. And he's also said that the culvert – apparently, the way I read this, and I'll have to clarify this I think, is that the culvert on the property in question doesn't tie into a larger culvert. It comes out on the other side of West River Road as outfall, which I think is a technical word for waterfall. There's a lot of erosion right there that's already there. There's unstable areas around what's already eroded. They stand in danger from the water from the ravine, of further erosion and of course then it starts to eat up the Winchell Trail which is a national historical feature. So that's how I read this, and of course, as water goes down, if there's more water – this is a shallow water table area, pressure increases and that's part of what increases the chances of more water in related basements. Fixing all of this after it gets out of the ravine is going to cost way, way more than fixing it while it's still in the ravine being handled the way it's been handled for about a billion years, going down to the water table up through the trees. And the final thing I guess I think of here is something that I heard about whaling. Where the person who described whaling said that every part of the whale is used industriously and efficiently and that nothing is wasted except the whale. And I think that that's what's going on here. (beeper going off)

**Matt Perry:** Alright.

**Peter Lundstrom:** Thank you very much.

**Matt Perry:** Who's next?

**Eldon Burow:** My name is Eldon Burow and I live at 3715 48<sup>th</sup> Avenue South in Minneapolis.

**Matt Perry:** That was Burow sir?

**Eldon Burow:** Yes.

**Matt Perry:** Yup, thanks.

**Eldon Burow:** Burow, B-U-R-O-W. And my question has nothing to do with water or flowage or any of that sort, it has to do with the step back. And we have a building that's sited on this site which is about something in the neighborhood of 60 feet set back from the property line or street. When all the other houses in the community are, at least on

my street, are about 30 feet or so setback, and the question may be to the Board and staff et cetera, how do we get this condition? Shouldn't this building also align with all the others in that common dimension?

**Matt Perry:** You can make rhetorical questions, but if you have questions like that you'll have speak with staff after the hearing.

**Eldon Burow:** It's directly to you and the staff.

**Matt Perry:** You'd have to – I mean, you can make that as a rhetorical question, but we're not here to answer questions like that. We're here to take your testimony and consider that testimony.

**Eldon Burow:** It is rhetorical and as you say, but I think it's instrumental as to where the building is located on that site and consequently the drainage and other complexities.

**Matt Perry:** Right. And I'm not meaning to make a point that you're testimony is not bringing weight to the conversation, I'm just saying we can't engage in a dialog. Thank you very much for that insight. Yes ma'am, your name and address please?

**Joyce Denham:** My name is Joyce Denham and I live at 3312 Edmund Boulevard. I believe that this development plan is not a reasonable use of this property because it involves shoe horning a large house and a garage and a very heavy road onto what is left of a significant working ravine which is continuous (sic) with, continuous (sic) with the ecosystem of the Mississippi River and it's banks. The plan concerns a small economic gain for one homeowner by selling off their current house and building a new one on their so-called empty lot. An ecologically important ravine. And they have told me that this is the motivation for their plan. In other words, there's no problem with anyone wanting to make an economic gain off their property, but what I'm saying here is that it is not due to any hardship on their part. That the must build a house in this ravine. But it will mean an economic loss for surrounding homeowners. I believe it will increase water in their basements, which are already dependent on sump pumps and it will probably decrease their property values. It will damage the character of the neighborhood and it will damage a very important ecosystem. Long before the current owners of this property purchased it regulations were already in place to protect it from over development. This is a platted lot, I am told, I have not seen that myself, but I am told that it is a platted lot. But it is not actually a buildable lot. If it is buildable as it is, we would not be here today and they would not be applying for a variance to change the regulations that are protecting it. The proposed building project does involve a steep slope already protected by regulations that were enacted to protect the river. So I suggest, being there is no hardship here, that instead of adding more impervious surfaces, covering up virtually all of this ravine, that we encourage the current owners of this property, along with their neighbors, to invest in erosion abatement, and to preserve this important ravine and its vegetation so that it can continue to handle all of the water that it must handle. As we know, the Mississippi River gorge is a National Park and this ravine is part of that ecosystem and it is already very over taxed by impervious surfaces around it. As owners

of River Road property, we are really stewards of a national treasure. It does not ultimately belong to us, but to everyone. So we are counting on our Zoning Board to ensure that we act as stewards of this property and of all River Road property, not as mere consumers of it. This is not just any city lot. It involves a national park (beeper going off) and I just want to say in closing that my husband and I understand their position. We also own River Road property. We had the very same idea that they did. We also own a triple lot. Part of it is heavily wooded and undeveloped, so to speak, and we also talked to the City about doing the very same thing. Building on our extra heavily treed lot, selling off the already developed part of our lot with the nice house on it. We could make some extra money if we did that. The City planners said a resounding no. Not along the River Road, no more over-development, never, ever again. We are not the only ones on the River Road who have been told this. I believe we are stewards of this national treasure on which we're privileged to live. Thank you.

**Matt Perry:** Alright, thanks for your testimony. And I distinctly remember reading your written testimony which was quite inspiring. Thanks. Does anybody else wish to speak against this application? Yes, sir. And by now you know the drill, ...

**Karl Elser:** My name is Karl Elser ...

**Matt Perry:** ... name and address?

**Karl Elser:** ... and I live on 3634 47<sup>th</sup> Avenue South.

**Matt Perry:** I'm sorry, I interrupted you. Your name again please?

**Karl Elser:** Karl Elser.

**Matt Perry:** Thank you.

**Karl Elser:** And I'm 47<sup>th</sup> Avenue South. We've heard a lot of things about this area and what I'm picking up after reading the Shoreland Overlay's, the Mississippi River Critical Overlays, that this whole area is unique. It's not just this lot, but it's a lot of the lots around there. And this unique bluff is fragile and I don't think it's suitable for development. The adjacent neighbors have experienced water damage and soil erosion requiring investment of considerable time and money to remediate the problem. The City of Minneapolis approved development of this delicate area over 30 years ago without the benefit of today's data and testimonies. It is regrettable that the City made the mistake and allowed several of the houses to be built. Namely, 4622 Glabe Lane and 3618 Edmund Boulevard, those are uniquely on some of the slopes that we're concerned about. These regulations that we see and are reading, are protecting what's left of the slope that is held in place by the mature trees and the undergrowth. So I'm questioning, is the City willing to accept the liability and go against the experts that developed the Overlay regulations. Are they willing to ignore the concerns of the experts that spoke today and if wrong, will the City of Minneapolis accept the financial responsibility to remedy any

adverse effects of the proposed development and make the surrounding neighborhood and public lands whole again? Thank you.

**Matt Perry:** Alright, thank you sir. Is anybody else here to speak against? Yes sir. Name and address please.

**Dwight Anderson:** Dwight Anderson, 4622 Glabe Lane. First I will respond to finding 3 required by the Minneapolis Zoning Code for variances. Proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, welfare of the general public or those utilizing the property or nearby properties. The size of the home, the footprint is 2,239 square feet. The gross floor area is 3,694 square feet. This is from Shanna's worksheet. The house and garage cover most of the 64-foot back of the lot from north to south with 5-foot setbacks. From east to west the roof is 63-foot long. This requires essentially a clearcut of about 25 trees on the back of the lot just behind the slope. The house roof is a single direction shed roof that slants toward my property and my property has an elevation that's 3½ feet lower. With one inch of rain about 1,100 gallons of water come my way. Because of the short setbacks some of it goes down the ravine, some of it comes into my back yard, probably into my basement. With 2 inches of rain it's 2,200 gallons. Considering the house at 4617 East 36<sup>th</sup> Street with one inch of rain, a single direction shed roof garage roof will dump 325 gallons into a flat area. And this area has essentially no drainage mechanism. Second, the MRCCA standards for bluff apply. This is as laid out by Irene Jones of FMR, and I'm using her words, unless the required variance must be applied to the entire property, not just the Shoreland Overlay, the current staff report does not address impacts to bluff slopes for the entire property. Specifically, bluff standards apply to the entire MRCCA, not just the Shoreland Overlay and therefore, the entire parcel. City Code for the MRCCA overlay apply it by 1.7. Development on bluffs or within 40 feet of the top of a bluff. Development not otherwise governed by Section 551.68 shall not be located on a bluff or within 40 feet of the top of a bluff except where approved by a variance.

**Matt Perry:** Sir, I just want to point out something to you. Technically this is not a bluff.

**Dwight Anderson:** Ah, it is a bluff. I'm ...

**Matt Perry:** I'm sorry it's not.

**Dwight Anderson:** ...I'm leading to that, okay? 551- 551.46 definitions, bluff, a steep outcropping, hill, cliff or embankment along a river or stream with an average slope of 18 percent or greater measured over a horizontal distance of 50 feet or more and that rises at least 25 feet above the ordinary high water mark of the proposed water. Based on the definition in City Code, this site includes a bluff. Mississippi River Critical Area is considerably larger than the Shoreland Overlay. (beeper going off) It's mislabeled on Shanna's figure. The main reason for this is because of the bluffs which often extend further than 300 feet from the river. Thus the boundary was set specifically so as to

incorporate all primary, most secondary bluffs along the river. Places such as the gorge in Minneapolis and the west side of St. Paul offer a clear example of how this boundary was drawn to incorporate the river's bluffs. Our interpretation is that anything that meets the definition of bluff, 18 percent slope, 25 foot rise, 50 foot run, within the boundary of the critical area, is therefore a bluff. A requirement that it is along a stream or river is redundant.

**Matt Perry:** Okay, could ....

**Dwight Anderson:** All bluffs ....

**Matt Perry:** ...could you wrap it up sir, please?

**Dwight Anderson:** Pardon?

**Matt Perry:** Could you wrap it up please sir>

**Dwight Anderson:** Yeah. Okay. In the words of Irene Jones, okay, if the rules don't apply to this lot, show me the lot. If the rules don't apply, show me the lot. Okay, this is a dangerous experiment.

**Matt Perry:** Alright thank you sir.

**Dwight Anderson:** (unintelligible) you should deny the variance.

**Matt Perry:** Okay, thanks sir.

**Dwight Anderson:** Thanks for your service on this committee.

**Matt Perry:** You're welcome.

**Elaine Anderson:** Hi, I hadn't planned to speak but I want to answer your question about establishing a rain garden. I'm Elaine Anderson, I live at 4622 Glabe, and I'm in the house that should never have been built. My house is perched on bluff and we were there – within one year we saw that our yard was going down the ravine. And an architect, a landscape architect, stopped and said you better do something. So after three different nurseries, including Bachman's, and five years of planting we now have enough planting and enough trees to withstand the river that comes down after every storm. The planting, the replanting was caused because everything washed away. We'd plant it and it would wash away. Bachman's came out, they replanted. We planted disgusting trees and disgusting foliage just to hang on to the roots. We have Creeping Charlie all among our trees in order to hang on to the soil because we were losing our lot right down to the river, and of course that can't do much for the big culvert.

**Matt Perry:** So how does this have to do with the variance?

**Elaine Anderson:** Well, you said maybe you could stop some of the erosion by having a rain garden. It's impossible to get anything going because there's such a canopy. And that's why everything either washed out or got no sun. I mean, I can't have a flower back there. It is dark, it is overhung, to try to establish ten new trees per homeowner would be exceedingly difficult. It took us five years to get what we got.

**Matt Perry:** Okay.

**Elaine Anderson:** Any questions? It's simply – it is house that should not have been built, perched on the edge of the ravine and causing a lot of problems and I think we've settled it, but it's been very difficult.

**Matt Perry:** You're talking about your home.

**Elaine Anderson:** I'm talking about my home.

**Matt Perry:** Okay, so you're not talking about ...

**Elaine Anderson:** So in answer to ...

**Matt Perry:** ... the property before us?

**Elaine Anderson:** ...your question about every owner putting in ten trees, it's impossible with the canopy...

**Matt Perry:** Okay.

**Elaine Anderson:** ...the lack of light...

**Matt Perry:** I, I ....

**Elaine Anderson:** ...and the fact that you can't get the root system down.

**Matt Perry:** Alright.

**Elaine Anderson:** Anyway, just a personal aside.

**Matt Perry:** Yup. Thanks for that insight. Is anybody else that would like to speak against this application? Anyone? Alright. We will close the public hearing. There may be some questions of staff that will come up and of course as I said at about 2 hours ago, we would entertain questions from staff if Board members had that after all this testimony. Before we get going I do want to remind Board members to please address each other and not the public. And – but before that happens, I think the information that we got from the public and all the experts has been absolutely tremendous and is going to lead to a – I think an extremely informed discussion and decision. So with that, Board comment? Mr. Ditzler?

**Matt Ditzler:** Thank you Mr. Perry. I'd like to start by asking a question of staff, I'm sorry, is that okay? Ms. Sether?

**Matt Perry:** Sure. We are all – I think everybody's going to be much wiser about multiple fields.

**Matt Ditzler:** I'm riveted with suspense, I can't wait. I've a tree question to start with. Sorry.

**Shanna Sether:** Alright.

**Matt Ditzler:** If I owned this lot, or any lot that's in the Shoreland Overlay District, whether it has a slope on it or not, and it's undeveloped and I'm not planning on developing it, but it has two very large oak trees on it and I'm running short on firewood for this winter and I would like to go in and cut down one of those oak trees to use in my fireplace, as sad as that might be, would I have to check with the City before I did that? If I'm not clear cutting, I'm just taking down two very large beautiful trees.

**Shanna Sether:** The answer is no. You do not need any specific City approval to remove a tree on your lot. The only place in the ordinance where there are strict regulations about removal is a variance as required in the Shoreland Overlay District for clear cutting of a lot.

**Matt Ditzler:** Okay.

**Shanna Sether:** If you were to remove two trees that's deemed to be clear cutting.

**Matt Perry:** Could I add a clarification though? And this is brought up in testimony ...

**Matt Ditzler:** Sure.

**Matt Perry:** ... by one of the, I think one of the tree experts that we got from was that if it's – I'm forgetting the terminology in this but, a shared property tree. There are some constraints.

**Matt Ditzler:** Excellent clarification. I will amend my hypothetical scenario to that. If the trees were completely contained within the property boundaries, but excellent question, if it wasn't a shared tree, if it was a tree – two trees in the middle of my lot and I want to cut them down for firewood, I'm not developing this lot, but I'm just going to cut them down, do I have to check with the City if I'm in the Overlay District before I do that?

**Shanna Sether:** You do not.

**Matt Ditzler:** Okay, that's the only question I have for staff. I do have a couple of other comments for the Board.

**Matt Perry:** Okay.

**Dick Sandberg:** Mr. Chair, I do have a follow-up question on the same topic.

**Matt Perry:** Well – on the same topic? Is yours related in the same topic?

**Souliyah Keobounpheng:** No.

**Matt Perry:** Okay, so Mr. Sandberg and then Mr. Keobounpheng.

**Dick Sandberg:** I'm sorry to interrupt, but Ms. Sether thank you. If we're considering in our decision the clear cutting option, but it's not on the portion of the lot which is in the Shoreland Overlay District can we still use that as part of our decision that clear cutting is occurring on lot which is partially within the Shoreland Overlay District?

**Shanna Sether:** Staff's understanding that the portion of the lot where tree removal will occur, and keep in mind, the tree removal is going to be less than 12 inches in breast diameter height which is not determined to be a significant tree, there will only be two trees lost in that area. They are all outside of the Shoreland Overlay District boundary, therefore not under your jurisdiction, nor ours. So you – is the question whether or not you could place a condition regarding tree preservation? Okay.

**Dick Sandberg:** Just whether that should be part of our consideration.

**Shanna Sether:** I would say that you should keep your review relevant to the area on the lot for which the variance is sought and that would be specifically addressing the driveway, retaining walls, cantilevered portion of the dwelling and balcony. Thanks very much.

**Matt Ditzler:** I have a second question for Shanna.

**Matt Perry:** Okay, you're (unintelligible) Mr. Keobounpheng, but is this related to your first question?

**Matt Ditzler:** No, it's not a tree question if that's ....

**Matt Perry:** Okay, why don't we have Mr. Keobounpheng go and then Mr. Ditzler?

**Souliyah Keobounpheng:** Thank you Chair, I don't have a question for staff, but maybe she can chime in but – I just mainly want to make a comment about the variance. I mean it's a – I'm a little conflicted between what I've heard. Enormous testimony on both sides from the engineering data and also from environmental issues as well that comes before me. You know, looking at this property it's a private property, how do you

weigh private property rights? And when you look at this it is a reasonable request when you look at it. There's practical hardship because it is overlapping the Shoreland Overlay. But then when you dig deep into it, it is sitting on this gully and that's where I'm having a little bit of a conflict about if this was a flat piece of land in the Overlay District, it would be less difficult to make a decision on, but since this has an elevation change of two digit degrees maybe I'd like to hear more from my fellow Board members on this issue a little bit more before I can even maybe make a decision. So I'm kind of a neutral at this point, a little conflicted still.

**Matt Perry:** Alright. Mr. Ditzler?

**Matt Ditzler:** Ms. Sether, it sounds like that the Applicant has changed a little bit of the design by eliminating part of the basement. I don't know if you've had a chance to recalculate, but I'd like to know if that change is incorporated, what is the square footage of the foundation of the project?

**Shanna Sether:** I believe that they'll still need to do footings, if I heard the architect correctly, but essentially the building footprint comes out to be 2,239 square feet with the single-family dwelling is about 1,656, garage at 583 square feet, so that's 2,239 total for footprint.

**Matt Ditzler:** Okay, that includes the house and the garage and the elimination of this extra basement space, does not affect the amount of cantilevering over into the district which is why we're here.

**Shanna Sether:** I don't believe that'll change the impervious surface, it'll just change the amount of area disrupted for either a basement or instead, footings.

**Matt Ditzler:** Okay. Thank you very much.

**Shanna Sether:** Sure.

**Matt Ditzler:** I guess my two comments for the Board is the first, regarding the mature trees. In the fact that I don't think that the slope, from the tree experts and testimony and letters, it doesn't appear that the slope comes into much play with saving the giant oak trees. It appears that the pressure and that the design of the driveway would affect the trees whether they've been on a steep slope or not. I know we've heard lots of other recent applications regarding saving old trees and building close to them. I guess it's kind of my two cents that if – since the trees are entirely on the lot, that's a risk that the Applicant seems to be willing to take and mitigate the best that they can. I don't – considering that they're entirely on the lot I don't know how they really factor into this. I'm going to have to probably ask Board Member Finlayson since he's the most seasoned here, I can't remember hearing an item like this where we have all of the departments of the City saying one thing, and the experts that have been hired by the opposition saying another. Because what I'm struggling with is who do we believe? Not who do we believe, but who do we put more credence in? Because the people at the City, in Public

Works, Environmental Services, and Zoning, whatever, they all say that this is okay and I'm trusting that they have the City's best interest in mind. Not the property owners, not theirs, the City's best interest in mind. I'm not an engineer, I sell real estate, I don't understand engineering. So I'm relying on them to give accurate detail. And now we have the opposition which has submitted incredibly – very credible people to say the opposite. And I can't remember an item where we've had this juxtaposition before.

**Matt Perry:** Rather than putting Mr. Finlayson on the spot, I would direct that question to staff. And the question really is, I think you addressed it a little bit, about the role of the governing municipality. There are obviously a lot of relationships between the State, the Federal government, and so forth who are involved in this, but I'd like to have staff weigh in on this.

**Matt Ditzler:** That was just a comment, but...

**Matt Perry:** They need to weigh in on this.

**Jason Wittenberg:** Board members, Jason Wittenberg, Planning Manager in Community Planning and Economic Development. It's a complex question Mr. Ditzler and as I think Board members acknowledge you've received a pretty incredible amount of evidence in this particular case and some of it conflicts, and I don't know that I have a satisfactory answer for you other than to say that that's why we have you in this position is to weigh that evidence and make a sound decision about which evidence you think is most compelling based on everything that's been put in front of you. Based on the motivations, perhaps, of those who've submitted the evidence and keeping in mind that ultimately you need to think about if a approved, are there mitigating – are there conditions that could be in place that could mitigate the negative impacts that were identified by those who say that there would negative impacts.

**Matt Ditzler:** I appreciate that. It was really more of a question to talk to the Board about ...

**Matt Perry:** True.

**Matt Ditzler:** ...and then the last thing I want to say is it's obvious from both sides that there are 70 – how many ever properties, storm sewers that basically that have been funneled into this property for I don't know how many years, that have eroded it to the point that it's that it's at, or have compromised it to the way that it's at ...

**Matt Perry:** I think technically, one would say there are 70 properties contributing to storm water runoff in the Mississippi River. Not necessarily to this property.

**Matt Ditzler:** Right.

**Matt Perry:** This property is yet another one that is contributing, or will. Mr. Finlayson?

**John Finlayson:** Thank you Chair Perry, and with all due deference to putting me on the spot. The last person able to that was my mother. What you asked, Board Member Ditzler, is really – it's an interesting question. I can answer it this way. For a living I'm a real estate appraiser, and I don't deliver facts, I deliver opinions. And if you have five different appraisers you're likely to get five different values. And it's in the nature of things. And if somebody is presenting a case, be it the City, their going to go to their experts and their going to get their opinions. And someone else who is opposed to this is going to go around looking for experts and their going to find them. And I think all the areas that we've covered are areas that have a similarity in a way to the appraisal of real estate. Values. What's going to occur with this particular situation? So what we're looking at really is a series of opinions. The City has an opinion and some of the people who are here definitely have presented opinions in opposition. And then additionally, I would point out that the Applicant made a point of stating that he asked people who favored his particular position, not to come. So perhaps what we've heard is the Applicant has a *gravitas* of so much and some of it, it could have been additional, just isn't there so we just take it for what it is for the position the Applicant stated. And then we have the position taken by the people who are in opposition to this. I haven't fully considered this at this point, but one of the questions – one of the answers I got was that this property, if there are 70 properties contributing, it's contributing 1/70<sup>th</sup> of the water. So maybe the water's quantified as 1/70<sup>th</sup> and so at this point in time then we're left with silt. And obviously there's plenty of silt on this property already. Some of the comments about the soil were that it's well covered with silt at this point from the contributions from the surrounding properties over the years. So the Applicant has been the beneficiary of a gift of silt from the surrounding neighborhood. So if we look at this particular property then we're saying, okay, it's getting 1/70<sup>th</sup> of the water and then okay, what happens to the water that lands on this particular property? Is this a particularly large house in the scheme of things? Not in particular. I mean it's got a footprint, it's 2,200 – if I can put my eyes on – 2,239 feet which is not particularly – there's some 50's 60's ramblers in the area that run close to 3,000 or more. So what is the contribution of 2,239 within the context of the lot? And then you start to look at within the confines of this lot that is not the house, and not the garage, and not the driveway, or any particular patios or walks that are there, then what can be done to mitigate runoff. To hold in pond, to keep silt from moving and there's probably been more attention paid to the particular ponding of water and control of silt on this house than the other 69 properties in the area in aggregate. Because this one is the last one in line, so it's getting scrutiny, and everyone else just built there's the way they wanted to and they've been operating – we had this one lady testify that they've been applying mitigation and I understand their concerns of losing their lot is not a particularly good thing. So at any rate, my opinion isn't completely formed, but I offer to you what I have offered just as an answer to your inquiry.

**Matt Perry:** I would like to ask my Board members to keep in mind that we have, as I said at the beginning, we're working with our three findings. And if we are not in agreement with staff we need to find for why we are not. And then there are three particular finds for the Shoreland Overlay District. So I say that because I don't think, as Mr. Finlayson was sort of alluding to or maybe implying, I don't ever want to put words

in Mr. Finlayson's mouth, but we are not here to solve the watershed management problem that clearly has developed over many, many years. Way back to when the Park filled in the ravine down by the river some time before 1940. Ms. Thompson, can you give us a – drive us toward ...

**Ami Thompson:** Yes.

**Matt Perry:** some kind of action?

**Ami Thompson:** Yes, I can. The testimony today has convinced me that development on this slope would cause risk to the slope and therefore the water body. Ecological, environmental risk. Therefore, I disagree with number 2. I think that if we approve this variance it would be not to keeping in with the spirit and intents of the ordinance.

**Matt Perry:** Alright. So are you making a motion? Are you, what are you doing?

**Ami Thompson:** I am not yet making a motion. I'm just stating ...

**Matt Perry:** To keep the – I see Mr. Sandberg – I just want remind folks of one other thing as you're thinking about this. The property owners have a right, not only a right but a need, a requirement, to get from the road to their home and a driveway. They have to be able to get into their lot. Mr. Sandberg?

**Dick Sandberg:** Yeah, thanks Mr. Chair. I was also thinking about the 1/70th issue of this property with regard to the system that's being collected there and I think this property is one property in which we have the opportunity to make a decision because it's within the Shoreland Overlay District and it does contain a steep slope. The other properties were built and maybe they shouldn't have been built. Maybe they're contributing to water going into the river, but this is one property on which we have an opportunity to make a decision. And if we do make a decision to approve this variance we're adding impervious surface to a significant portion of the flat – the small flat portion of this particular lot. So I think that we are making a decision to make things worse. That we're adding impervious surface close to a steep slope which is something which our Zoning Code wants us to consider. So I'm not ready to make a decision yet at this point, but I think there is some more thinking that goes beyond the 1/70<sup>th</sup> contribution to this. In addition, the Zoning Code asks us to consider erosion – particularly erosion on that steep slope, but I think we also have to consider the erosion from any additional water that occurs downstream within the drainage system closer to the river, and we've seen evidence of that today. So I'm thinking that we have a lot of – a fairly tough decision on this particular issue.

**Matt Perry:** And given the amount of time and effort that everybody has put in and the amount of time we spent here tonight it's clear it's going to be a difficult decision. I have another question of staff. Just clarity here. Again, on page 5 of the report, Environmental Services weighed in – if the variance were granted are those in effect, not

necessarily conditions, but requirements for the building owner to meet? We've gotta have this computer thing shut down here because we can't see what's on the overhead.

**Shanna Sether:** Here's a copy of the e-mail from Environmental Services. These are requirements of the Code, these are not conditions, necessarily, of approval.

**Matt Perry:** Okay. Requirements of the codes

**Shanna Sether:** Yes.

**Matt Perry:** Regardless of what we do, that has to be done.

**Shanna Sether:** That is correct.

**Matt Perry:** Alright, thanks. Mr. Ditzler, oh Mr. Ogiba what – we haven't heard from you.

**Dan Ogiba:** I know, I think you were starting to wonder if I was silent today or something. First off, I want to say this is – it's great to hear the amount of testimony we have from both homeowners and experts and everyone, in that there are some – it's an absolutely beautiful portion of the City and a place that I'm proud to call home. In looking at all the testimony and reviewing all of this I kept coming back to point 3. Looking for the idea that the proposed variance, and I paraphrase, be injurious to other properties in the vicinity. And I guess I kept waiting and looking for some specific ways that granting this variance was going to be injurious to specific homes, or homeowners, or properties of the - adjacent to this property. I think what we're presented today is a great problem for which we all should have concern, but I don't think that the weight of that necessarily should be carried by Mr. and Mrs. Reiling and the addition of their driveway and cantilevered roof into the Shoreland Overlay District. I'm trying to be brief based on time. But that being said, looking at this and weighing the testimony I would actually like to entertain a motion to support staff's decision and grant this variance as requested.

**Matt Perry:** Are you making that motion?

**Dan Ogiba:** I am making that motion. Yes.

**Matt Perry:** Is there a second for that motion?

**John Finlayson:** Second.

**Matt Perry:** Alright, is there any further discussion? I think we've heard – Mr. Cahill, have you talked ...?

**Sean Cahill:** I'll make a few brief comments (unintelligible) comment to you. I'd just start with my first concern is that I find it a bit difficult when clearly there's a concern for

what the property's going to do to the neighborhood. But at the same time, it's kind of we're looking at the homeowner saying thank you for keeping this space undeveloped for X amount of years that you've had it. Thank you for paying all those taxes on it. Thank you for keeping it up, but now you can't do anything with it. I've got a real problem with pulling the rug out from under the homeowner's seat and letting them walk away with – empty handed. I've a real problem with that. On the flip side, I do think that possibly something can be brought back them and you know, they can look at new plans and see how creative we can get. We heard a bridge mentioned for a driveway, I don't even know if that's feasible or appropriate. But it's something saying it's not done yet and nor do I think it should be over but given the testimony I have heard from, not the neighbors but I particularly point to Professor Meyer's (sic) report and the arborists, it gives me pause and I just think it's worth some further reflection. So I say in the interest of possibly looking into this further and looking at mitigation and having a greater conversation, I would support denying the variance.

**Matt Perry:** Other comments? Ms. Thompson?

**Ami Thompson:** I just – I want to elaborate a little bit more on my concerns about the slope and it has to do with the trees on the slope and I think the slope is very relevant because in relation to the loss of trees, because the trees are holding the slope in place in two ways. Their canopy is ... (end of tape) ...so when the trees died I suspect that steep slope would be exposed to extreme erosion which would have a negative impact on the slope and then ultimately the Mississippi River. So my concern is about the stability of the slope and building on the slope and if that is even possible to do that in a sustainable way that won't cause damage. I am doing this based on the evidence that we've received today, but filtering through my knowledge – I have a degree in Conservation and Environmental Science. So I'm filtering what I've been hearing today amongst what I've learned and it makes me very concerned. So and I hear what Chair Perry said about the owner needing to get access to their site and so before I would entertain the idea of approving the variance for the driveway and the walkway and the house, I would be willing to maybe consider just a driveway or a walkway. And maybe they could build their house outside the steep slope ordinance area. Just an idea.

**Matt Perry:** Alright. Any other discussion? Mr. Sandberg?

**Dick Sandberg:** Yeah, thanks Mr. Chair. Mr. Ogiba brought up the point of finding number 3 and not injurious to neighboring properties. I did recall testimony from, I think it was Mr. Wetherille, about his mother's property potentially being impacted by the driveway blocking off water runoff on the slope that is shared between this property and the neighboring property. So I think the driveway could have an impact on the neighboring properties' drainage systems and I think that's a – that might be grounds for considering finding number 3 in favor of the neighbor.

**Matt Perry:** Okay. I have a question of staff and then Mr. Ditzler. What is the City's requirement for keeping your water that falls on your property on your property?

**Shanna Sether:** Generally the requirement is to retain your own water on your property, so I can't tell you. Obviously, there's water runoff from one property to another. But ideally, and I believe where the Public Works standards are, and it's not in the Zoning Code, is you drain right onto your property. And that's an important note also in the International Residential Code during construction and I believe after, and that drainage must be maintained on site. If it's not maintained on site, it's supposed to be directed through a curb cut or a walkway into the public right of way. Ideally not over towards a storm drain. But essentially, you're supposed to be draining your property – or draining on your property. So storm water hits your roof, it's supposed to be maintained or left on site.

**Matt Perry:** That's a City – Public Works requirement.

**Shanna Sether:** It is.

**Matt Perry:** Okay. Mr. Ogiba?

**Dan Ogiba:** Just to respond to your concerns about that. The two words that I got that I took into consideration in my comment – in the testimony that was offered there was no expert testimony given to say that that would happen. It was believed it could happen, was the words that I had written down from the 3600 and then the use of probably would case to 4622. So my – the reasoning for my statement was that no expert testimony was given on that and that it was simply what I looked at as hearsay that these things may happen or could happen with the development of this property.

**Matt Perry:** Okay, any other comments on the motion that's on the floor? Mr. Ditzler?

**Matt Ditzler:** I would agree with the comments of my fellow Board member. I would support the motion in the fact that I believe that the concerns of my fellow Board members have with the motion. I believe that the departments that the City has set up, Environmental Services and Public Works will address those. I believe that they are better experts in those fields than I am and I trust them to mitigate those situations and review these plans to make sure that those items are taken care of, and so I will support this motion as it's stated for those reasons.

**Matt Perry:** Alright. Any other comments? Will the clerk please call the roll?

**Clerk:** Mr. Cahill?

**Sean Cahill:** No.

**Clerk:** Mr. Ditzler?

**Matt Ditzler:** Yes.

**Clerk:** Mr. Finalyson?

**John Finlayson:** Aye.

**Clerk:** Mr. Keobounpheng?

**Souliyahn Keobounpheng:** Yes.

**Clerk:** Mr. Ogiba?

**Dan Ogiba:** Yes.

**Clerk:** Mr. Sandberg?

**Dick Sandberg:** No.

**Clerk:** Ms. Thompson?

**Ami Thompson:** No.

**Clerk:** The motion passes.

**Matt Perry:** Alright. That means the variance request as – the variance as requested is approved. For everyone, thank you for your time and all the testimony that you gave. For those who are not happy with the outcome, you can see staff for what you can do next.