

**Town of Duluth  
Planning Commission  
Meeting Minutes  
9/24/09**

The meeting was called to order at 7:05 p.m. by Vice Commission Chair, Mike Kahl.  
Roll Call: Present: Mike Kahl, Jan Green, Yvonne Rutford, Barb Crow, Bill Lannon,  
Seth Levanen

Absent: Dave Chura

Also present: Sue Lawson, Planning Director and John Kessler, Assistant Planning Director.

The Agenda for the evening was approved without changes.

The minutes from the August 27 meeting were approved without changes.

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**Variance Hearing -- Stoney Point Cottages, Odyssey Development**

Sue reviewed the history of Odyssey's work towards developing the Stoney Point site. In April of 2008 Odyssey came before the Commission with a request to subdivide the property and a variance request for placement of the home sites. The Commission approved the subdivision request and denied the variance. Odyssey appealed the decision on the variance to the Township's Board of Appeals (BOA) and the BOA upheld the Commission's decision. At this point, both parties, Odyssey and the Township, agreed to participate in a facilitated discussion. And now tonight, they are bringing a new variance before the Commission.

The preliminary plat has yet to go through the St Louis County process for approval. Odyssey suspended this process until they could get the variance situation straightened out. If the variance is approved tonight, they will bring the preliminary plat back before the County for approval and it then comes back to the Township for final approval.

This property is in zone district SMU-6 and is in the Shoreland Overlay District. According to the current Ordinance, homes in this zone district must be at least 125 ft from the top edge of the eroding bluff overlooking Lake Superior. With a variance, slope stabilization and toe revetment the structures can be placed closer to the lake than that 125 ft.

The variance Odyssey is requesting is for vegetative clearing and to grade the slope in an Erosion Hazard Area.

The criteria used for granting the variance are in the Ordinance. There are four criteria:

Sue read the criteria from Article X, Section 3E of the Ordinance:

**3E. Criteria for Decisions.** The Planning Commission shall always act with due consideration to promoting the public health, safety, and welfare, encouraging the most appropriate use of land and conserving property value, and shall permit no structure, building or use detrimental to a neighborhood.

- 1) The Planning Commission may authorize a variance from the terms of this Ordinance which will not be contrary to public interest where, owing to special conditions, a practical difficulty or particular hardship would be created by carrying out the strict letter of the Ordinance, and when the terms of the variance are consistent with the spirit and intent of this Ordinance and with St. Louis County's and Duluth Township's Land Use or Comprehensive Plan, if any.
- 2) "Hardship" as used in connection with the granting of a variance means that the property in question cannot be put to a reasonable use under the conditions allowed by this Ordinance; the plight of the landowner is due to circumstances unique to his property not created by the landowner. The variance, if granted, will not alter the essential character of the locality. Economic considerations alone shall not constitute a hardship if a reasonable use for the property exists under the terms of this Ordinance. No variance may be granted that would allow any use that is prohibited in the zoning district in which the subject property is located.
- 3) When in the opinion of the Planning Commission a variance may result in a material adverse effect on the environment, the appellant may be required by the Planning Commission to demonstrate the nature and extent of the effect.
- 4) It shall be the burden of the applicant to demonstrate sufficient hardship to sustain the need for a variance. Absent a showing of hardship as provided in Minnesota Statutes and this Ordinance, the Planning Commission shall not approve any variance. The Planning Commission may impose conditions in the granting of variances to insure compliance and to protect adjacent properties and the public interest.

The Comprehensive Land Use Plan (CLUP) details the vision for the future of the Township and the policy that will help achieve it.

Because the project is a subdivision, a Community Participation Report (CPR) is required. To satisfy this requirement, Odyssey held an open house at the Town Hall on September 3<sup>rd</sup> and presented their proposal to the Township. The applicant prepared a report summarizing and addressing the concerns, issues and problems that were raised at the open house. The applicant does not necessarily have to alleviate every concern.

Bob Ryan from Odyssey Development then spoke. He talked about the facilitated meeting that was held on Dec 13, 2008. He didn't want to overstate what happened in that meeting. He said that he understands that the meeting has nothing to do with the decisions the Commission ultimately makes. He recognizes that his interpretation of what happened at the meeting may be different from the Commission's. He also recognizes that people may have felt favorably at the time and may have since changed their minds. He said they spent 6 or 7 hours meeting, including touring the site. He felt that substantive things that came from the meeting. He read from the notes from the meeting taken by the Commission, "Commission members expressed general support for the concepts in the revisions to the project."

In addition, Bob reported, the facilitator of the meeting had said that he felt there was a sense of “substantial consensus, some of it grudging, as opposed to complete agreement.”

Bob summarized the project -- they want to build 8 homes on 20 acres with 2000 ft of lake shore.

Greg Schendel then presented an overview of the project. The zone district is SMU-6 which is shoreline, mixed use. There will be 8 single family homes. He said that they feel this plan fits the character of neighborhood. All of the lots are over 2 acres in size. The total development will be 18.83 acres after signing the agreement with the city donating land and securing right-of-way. All of the lots have a minimum of 200 ft of shoreline. They all meet side yard and road setbacks. Less than 25% of the site will be disturbed. The impervious surface will be less than 7%, including roads. They have a copy of the County’s approval of the wetlands delineation and they have County approval for the wetlands impact they applied for. They plan to impact about 2750 ft<sup>2</sup> which is less than 1 1/2 % of the wetlands. The sewer will connect to NSSD. Maintenance and architectural controls will be regulated under a homeowners association.

They have an agreement with the City of Duluth to make about 3.5 acres permanent public land with permanent lake access.

Greg listed the main concerns from the September 3, 2009 open house and summarized how they addressed them:

- Amount of Toe Revetment – They will install a stone toe revetment across the entire shoreline except for the very westerly end by the river.
- Clay Slumping -- clay soils that are not regraded to 3 to 1 may slump.
- Wetlands and Wetland Credits – They have not yet put out replacement plan or bought replacement credits.
- Driveways -- They will have 3 shared driveways instead of 8 individual ones.
- Revetment and Shoreline Maintenance – They will provide language in the homeowners’ association covenants and will set up a fund for maintenance.
- Technical Engineering Data – Odyssey put together a document of data and examples of similar engineering projects and distributed it to the Commission.
- DNR Permit – The DNR permit has been extended for three years.
- Erosion and Safe Slope – Rich Ojard from Krech and Ojard will address this later in the presentation.
- Landscaping Plan and Yard Size – Landscaping will be addressed later by Luke Sydow. In the association document it will be made clear that the homeowner must follow all Township rules and regulations pertaining to clearing of bluffs.
- Fire Protection – All roads will be designed to allow fire truck access and turnaround as required.
- Utilities Engineering -- All on-site utilities will be engineered to meet all code requirements.

Bob reviewed the primary concerns that the Planning Commission had had with the previous plan and the concerns that were raised in the facilitated working session: 1) setback, slope and building safety, 2) viewsheds, 3) revegetation, and 4) wetlands.

He showed a drawing of the current plan on screen. The new plan has areas that are not graded which results in a much more natural look and more screening. Also, all of the homes except for one have been moved back from where they were in the previous plan.

Regarding, the first of the four main concerns, setback, slope and building safety, the Commission wanted to see more engineering data, wanted protection for building foundations, and wanted approval of the foundation designs by an engineer. They also said that they wanted it made clear that the Township would not be held responsible for any potential failures. Odyssey has provided 104 pages of background material and engineering data that supports the 3 to 1 slope engineering. They have obtained engineer approvals for the foundations of each building to insure safety of the foundations. Regarding potential Township responsibility, Bob suggested that if the variance is approved, the Township include a stipulation that the Township has no liability and that approval of the variance in no way endorses the engineering plan. Odyssey plans to immediately contribute \$10,000 for future repairs. The money will go into the initial fund set up with the Association that will go into a reserve account and only be used for repairs to the site. It will also be stipulated in the Association documents that a correction will be required in the event of a failure. The Association has the authority to make special assessments on homeowners if needed. In addition, there will be required allocations from the budget each year so that the fund will continue to increase.

They have placed all of the buildings at slopes of 3.5 to 1 or greater and the foundations have been protected to a slope of 4 to 1. The setbacks for each home are as follow:

- Lot 1 -160 ft from O.H.W.
- Lot 2 -150 ft from O.H.W.
- Lot 3 -150 ft from O.H.W.
- Lot 4 -150 ft from O.H.W.
- Lot 5 -130 ft from O.H.W.
- Lot 6 -170 ft from O.H.W.
- Lot 7 -130 ft from O.H.W.
- Lot 8 -120 ft from O.H.W.

The average setback is 145 ft from the O.H.W.

Concerning viewsheds, the Commission wanted to retain the irregular character of the shoreline and wanted to retain some of the existing natural elements. There were also some requests for gaps in the toe revetment. Odyssey suggested using a “cone effect” to increase screening. They have positioned the homes on the lots with cones of clearing to the lake shore, leaving significant vegetation in place to the sides to enhance the view of the shore from the water. The cones of clearing will be graded to a slope that will protect the home and will be revegetated. He cautioned that areas that are left ungraded with

natural vegetation in place will continue to have some erosion. The engineers designing the revetment recommend retaining the toe across almost the entire development to protect the slope.

For the revegetation, the Commission said Odyssey would need to completely revegetate the disturbed areas, using species appropriate to the soil type. They also suggested phasing the project to allow vegetation to take before proceeding with the next phase. In response, Odyssey has developed a revegetation plan that will be presented by the landscape architect for the project. They will also phase the project as suggested by the Commission.

Greg Schendel addressed the concerns the Commission had regarding wetlands. The Commission's primary concerns were with the accuracy of the wetland survey and with the amount of wetlands disturbance. The wetlands delineation plan came with the property when they purchased it. It is dated October 7, 2005. They walked the complete site with the St. Louis County Wetlands Technical Advisory Committee on October 19, 2005. They received approval of the delineation on October 28, 2005 from this Committee. They presented the plat and development plan to the Wetland Technical Advisory Committee and received approval for a wetlands impact of 2750 ft<sup>2</sup>. This spring the wetland delineation expired. They contacted Scott Smith of the St. Louis County Planning Department. He instructed them to have the existing delineation reviewed, rewalked and reflagged by the engineers. This was done on September 15 and 16, 2009. On September 17, 2009, they rewalked it with the St. Louis County Wetlands Technical Advisory Committee. At this time two more areas were added to the survey. St. Louis County gave preliminary approval for the revised delineation on September 21, 2009. Greg pointed out that the plan for the development works around existing wetlands with minimal impact.

Bob introduced Rich Ojard, owner of Krech and Ojard, to talk about the shoreline stabilization.

Rich Ojard said that he has been doing this work for 34 years and has been doing shoreline work for the last 20 years. He has not had one failure; all of his projects have performed as designed. He says that time has shown that the 3 to 1 slope is the slope that works in this area. If a slope is not at 3 to 1 it will eventually get to 3 to 1. But the only way it works is if the toe is protected. Without toe protection, the toe will move back and the angle will change. The project on the other side of the Sucker River looks like it has failed because the slope was not graded to 3 to 1 and now flows over the revetment. The revetment has not failed but it looks like a failure. He did not work on this project because they were not willing to grade the slope back to 3 to 1. He wanted to point out that the areas between the cones that are being left ungraded and with natural vegetation will eventually go to 3 to 1 also. His firm recommends grading the whole slope to 3 to 1. He said the revetment will not fail, but at these ungraded areas, like the project on the Sucker River, it might look like it has failed.

They have moved the building sites back to a 3.5 to 1 slope and have set the foundations at a 4 to 1 slope for further protection. He said that the entire toe must be revetted in order to protect the shoreline. He said that he will not work on the project if the entire toe is not protected. They have also had the soils analyzed independently. He said that the success of engineering firms is based on reputation and he will not jeopardize that by recommending something that will not work.

Barb asked what the oldest shoreline stabilization project is that he is aware of that is still working. Rich said his first one was 20 years ago, and the person he learned from, Gene Clark, has projects that are 25 to 30 years old. Barb asked if they could be guaranteed then for 30 years. Rich said they absolutely could. Barb said that if she were buying, she would want a 100 yr guarantee. She said that a document she read, "Living on the Coast," put out by the U.S. Army Corps of Engineers, said that erosion of the lake bed in front of the toe could undermine the revetment from the front. Is this something he has seen?

Rich said that even if a revetment does fail, you can fix it. Regarding undermining the toe from the front, he said that there will probably be a little bit of erosion. It is meant to erode some. He took the example of Knife River Beach shoreline. He said the Corps of Engineers drove some sheet metal in to protect the harbor. When the water rushes in, it hits this hard surface and comes back and scours the lake bed. A rock revetment takes wave energy and dissipates it so the water does not develop big scouring action. It doesn't alleviate erosion but minimizes the impact. His revetments are rocks wrapped in fabric and are a somewhat flexible structure that allows for some movement and settling. He has not seen any major movement on any of his projects.

Jan said that they included a project near the Scenic Café in their list of example projects. Rich said the project he worked on that is included in the examples is between Jan's house and the Little Sucker River. They put a stone revetment in there and the slope is flowing over the revetment. The one Jan was referring to was done by St Louis County.

Luke Sydow, the landscape architect for the project, presented the proposed landscaping details. The triangles in front of the homes are areas that will be revegetated. They will blend bulldozer lines with the natural vegetation lines. There will be a lot more plantings along the edge of the cleared areas. Trees and plants and shrubs will help hold the slope together and provide an aesthetic plus. The ravine will remain open and natural. Runoff water will be captured with raingardens on either end of the development and then routed to the lake through French drains.

Jan said that looking at the shoreline stabilization materials, on map number 7 there are diversion berms in front of each area. How does the landscaping deal with the berms?

Luke said that water coming down throughout the site in this area, plus the rainwater from the roofs, will be diverted by the berm and controlled by sending it through a vegetative best management practice system to control how the water gets down to the lake.

Sue asked how the swale that is created will be revegetated. Luke said that the area right around the house will be done by the homeowner. The slope will be hand-seeded and double sided jute fabric will be used. They will use deadfalls to naturalize the project. Sue said that when she adds up the plants used to landscape Lot 4 on the plans, she gets 10 deciduous and 13 evergreen trees and 12 shrubs. She felt that this was not very many trees per acre.

Luke said that they want it to look natural and it will not look natural if they put in a lot of trees that are the same size. He expects there to be self-seeding of birch and alderberry. The shrubs they plan to use grow rapidly and cover a lot of ground –like serviceberry.

Bob pointed out that the Ordinance does allow for viewsheds.

Sue said that one way to create a viewshed is to let the vegetation grow and create the viewshed as it grows up.

Jan said she would like to see the plan include some additional native vegetation that does well on the shore like ninebark, arrowwood, wild rose, cedar, and red osier dogwood. Luke said that they anticipate that those species will self-seed. Jan thought they should look at what vegetation exists in other areas of Sucker Bay and encourage those plant varieties. Don't depend totally on self-seeding.

Bob then presented the variances Odyssey is requesting. The first is to allow selective tree and shrub clearing and bank regrading to construct and install selective bank stabilization and toe revetment. He said that when you look at the Ordinance and look at the many references about not taking out vegetation in context, that the intent is about stopping erosion. The Ordinance says that a developer can clear cut if it is a part of a development plan. This clearly shows that the Township is not against clearing vegetation, it is just that you cannot remove vegetation at the bluff and allow it to erode. He read out loud from the Ordinance, Article VI, Section 2.B.2: "Removal of vegetation limited. Removal of woody vegetation shall be restricted on bluffs, steep slopes and within the structure setback area to maintain stable soil conditions."

Bob said that Odyssey's entire proposal is about providing a stable slope and preventing erosion. He then read from the Ordinance Article VI, Section 2.A.2.c: "Soil exposure is limited to less than 5% of surface area well distributed throughout the filter strip." He said that existing soil exposure at the site is 70 to 85% of the surface area, which is 14 to 15 times worse than allowed in the Ordinance. After they are done regrading and revegetating, the soil exposure at the site will be 0%.

The second of the two variances is to allow the homes to be placed closer to the shore than the 125 ft from the top of the eroding bluff that the Ordinance dictates for homes in an Erosion Hazard Area. Bob read from the Ordinance Article VI Section 3.b.5, "Structures and soil absorption areas shall be setback 125 ft from the top edge of the

eroding bluff, and where slumping is evident... The above standard may be modified by variance if the landowner provides technical data proving a different recession rate or that the Erosion Hazard Area, although correctly estimated, can be mitigated by structural protection.” They believe that they are providing the engineering that mitigates the impact and therefore should be granted a variance.

This language allows them to move homes forward if they can structurally eliminate the impact.

Jan said that for the purpose of the process, their application should be amended to reference the particular sections of the Ordinance that apply, like they are doing now. She said that this should be in the application to be a part of the record.

It was thought that having the hearing and the record from the hearing, including the minutes and the record of decision and the paper copy of the presentation, would be adequate for the record, but it was agreed that Odyssey would amend the application to include the portions of the Ordinance that are applicable.

Bob outlined how the variances they were requesting met the criteria for granting a variance. The first question is, What special conditions, practical difficulty or particular hardship would be created if the variance were not granted? Can the property be put to a reasonable use without the variance?

- 1) The proposed plan maintains the existing character of the community. It is consistent with the Township’s CLUP and the Zoning Ordinance and the neighborhood.
- 2) The proposed plan provides maximum screening from Lake Superior.
- 3) The proposed plan preserves the natural features of the shoreline with selective bank stabilization and the revetment.
- 4) The proposed plan works with the natural physical characteristics of the land, and is ecologically sensitive. They have placed the homes to have minimal impact and have a permanent erosion control plan.
- 5) The eroding shoreline is a practical difficulty and a special condition that is unique to the property and wasn’t created by the landowner.
- 6) If the variances were not granted, it would cause a hardship. A large portion of the site would be unbuildable and unmarketable. Erosion into Lake Superior would not be addressed. It would force them to develop the property as a Planned Unit Development. They believe it does not have a reasonable use under our Ordinance without the variance.

Bob also wanted to point out that in minutes from the last hearing on April 24, 2008 their attorney felt that the lack of vegetation on the site would allow the Commission to grant a variance using a special condition. In addition, the Township’s attorney encouraged the Commission to look at the variance request in terms of a practical difficulty as well as a hardship.

The second question for granting a variance is 2) Will the variance request fit in with the essential character of the neighborhood and if so, how? He said that the whole

neighborhood is single family homes, which is exactly what they are proposing to build. It is not a commercial property and absolutely fits into the neighborhood.

#### Questions from the Commission

Yvonne wanted clarification. She felt like a lot of Odyssey's presentation tonight addressed the suitability of the subdivision and how it fit with the character of the neighborhood and the Township's CLUP, etc. But the subdivision has already been approved, at the April 24, 2008 hearing, and the Findings of Fact from that hearing clearly state that the subdivision is consistent with the vision and policies of the Comprehensive Plan. It's the variances that they should be addressing now – how the *variances* fit with the vision of the CLUP and with the character of the neighborhood. Question 2 from page 5 of the application asks “Will the variance request fit in with the essential character of the neighborhood and if so, how?” She felt that Odyssey's list of answers to this question addressed the preliminary plat as opposed to the variance.

Greg said that the preliminary plat and the variance are so intermixed it is hard to pull them apart. They both agreed that the 6 points on page 4 of the variance application fit the question better.

Yvonne asked for clarification of point 6 on page 4 of their application, that not granting the variances would force them “to develop the property in an alternate manner that is not consistent with the existing character of the neighborhood.”

Bob said that when they considered developing the land as a Planned Unit Development (PUD) the general feeling was that it would be too much like a resort and not fit the character of the neighborhood. It was thought a subdivision with standard lots and single family homes would fit into the neighborhood better than a PUD.

Barb said that she would like to see the bluff line drawn in on the site drawings. By her estimation from looking at the contours on the drawings, 645 ft would be the top of the bluff.

Bob said that looked like a pretty good average. But if they measured 125 ft from that line, it would force the majority of the homes back into the wetlands.

Barb said that the setback, without a variance, would be about 225 ft if you measure from the top of the bluff. In the variance application the setback required by zone is listed as 100 ft. She said that that number should actually be 225 ft.

Bob said that if the grading and engineering is allowed, the setback would be 100 ft.

Barb said that she wanted to see the difference between the two numbers, what the setback would be without a variance vs. what the setback would be with the variance. Bill said that if they used the setback as set in the Ordinance without a variance, then there would be no need for erosion control. By moving the homes closer to the lake,

erosion control measures would be put in place and it could be argued that fixing the erosion problem in that area is an overall positive thing. Greg agreed and pointed out that testimony at the previous hearing indicated that clay going into the lake is a natural and, therefore, a good thing. He said that they could not find any research to support this. So yes, stabilizing the shoreline would be a benefit to the lake.

Public testimony:

Mike read the Communication Agreement for Public Meetings in its entirety.

Marty Helmer said that from his point of view as a citizen of the Township, Stoney Point is a prize piece of land. Odyssey bought the land legally and has subdivided the land legally. The lots are buildable lots as they are and the Township has good guidelines in place for doing this. He felt that Odyssey wants to change the master plan by changing the shoreline. He felt that both public hearings got bogged down in technical data on shoreline restoration when the real issue is that Odyssey just wants to put the houses as close to the lake as they can for marketability. He would actually like to see Odyssey give the land to the people of the Township. But since he knows that won't happen, he would like to see them put the houses further back. He suggested putting up cupolas for better views of the lake or gazebos to be closer to the lake. Or just take lawn chairs down to the shore and have a fire pit.

John Green spoke next. He is a retired geology professor from UMD. He taught environmental geology for many years. Concerning the Amity Creek erosion stabilization project that was referred to earlier in the meeting, he wanted to point out that in the newspaper, one of the government employees involved in the project was quoted making a wry comment that the armoring involved in stabilizing the creek is definitely not a natural condition for the creek to be in.

He then read from a statement he had prepared (see attached):

In earlier hearings on this project I have expressed skepticism as to the success of this plan, and I continue to believe that homeowners will be subject to significant and unnecessary risk of slope failure under this revised plan.

Although the engineers claim that a 1 to 3 slope will be stable and cite several examples of North Shore erosion-control projects that they claim have such slopes, three crucial factors do not appear to have been adequately considered.

First, the height of the eroding slope is important. The higher the bank the greater the weight of the soil, which constitutes the downward force that must be exceeded by the strength of the sometimes saturated clay to prevent failure. Many if not all of the examples referenced by the engineer involve considerably lower banks and are thus inherently more stable than those at Sucker Bay.

Second, time is a major factor. Planning for eroding shorelands like this must take the long view. Coastal erosion guidelines commonly consider time frames of 50 to 100 years to allow an actively eroding slope to achieve true stability once erosion of the

toe has been stopped. A landowner, having invested considerable sums in the property, does not want to see a failure develop a few decades down the line. None of the erosion control examples referenced by Krech Ojard mention how long they have been in place, but certainly none are close to 50 years old. As mentioned in my earlier testimony and in the attached document from Bayfield County, Wisconsin a slope of 14 degrees or 1 to 4 is considered the appropriate angle for stability of similar clay banks in that area. I believe the 1 to 3 “stable slope” angle is basically untested or undocumented on the North Shore.

Third, these figures for stable slopes assume no added weight or load on top of the bank. Any such extra load – such as a house – would increase the potential for failure beyond what might be achieved by engineering a “stable” slope on the soil itself. Largely for this reason, slope setbacks are a standard requirement in land-use plans, including those referenced for Bayfield County. This 75 foot setback is from the top of the “stable slope,” not from the top of the original slumping slope.

Finally, the revised development plan involves “undisturbed areas” between the slope-cutback areas in front of the houses. These may not be disturbed by the development, but it must be recognized that they will continue to slump, fail and erode both into the lake and onto the adjacent cut-down aprons, leaving a continuing poorly-vegetated erosion hazard.

Phil Meany spoke next. He lives on the shore near the Sucker River and said his property is similar to the Stoney Point property. He said he has had to move his house 180 ft back from the shoreline. Slumping can occur 160 ft back from the actual lake. He said that slumping is a kind of erosion that cannot be compared to shoreline erosion. Overburden can get too heavy with trees, moisture and soils. It does not behave like clay soils, but instead slumps away from the bluff. You cannot fill in behind it when it gives way. He also noticed that the word “bluff” doesn’t show up on the plans and wants to know where it would be on the drawings. He thought the bluff as shown in the drawings for the April hearing were higher. He said that small lakes have a different dynamic to them than large lakes. This shoreline would be protected by large sized rocks, and it would be hard to call it a natural shoreline. It will just be a rock shoreline. He thought the whole development should be moved back. But he also sees that it is a tradeoff between the wetlands behind the proposed home sites and moving the houses as close as possible to the lake. He said that no matter what you do, you will not be able to stop the erosion process. Heavy rains will have to find their way back down to the shore. He has put pipes in under his property to carry the water to ponds and then into the lake. He said that the erodable area will be hit by the lake from the front side, and by runoff on the back side. He distributed a handout (see attachment.)

Larry Burkhard said he would like to see strict requirements on the revegetation. He said he would like to see the vegetation growing in a sustainable manner before any houses are put in. Growing things in clay is not a trivial task, nor is dealing with deer and other conditions on the shore.

Tony Fladmark said that she agrees that single family homes fit the character of the neighborhood. She is concerned that they will be used as rentals or sold as vacation

shares. She thought two driveways would be better than the three Odyssey has proposed. She was also concerned about the pullout area beyond the proposed development. She wanted to know how far the riprap would go in that direction. There is already an erosion problem there and wherever riprap ends, there is always a swirling effect which could exacerbate erosion there. She does not think the vegetation plan as proposed provides enough screening from the lake. She would like Odyssey to increase the amount and size of vegetation, including larger trees. Deer will eat smaller trees. The eroding shoreline creates a practical difficulty, but it is a common difficulty. So there is a practical difficulty, but not a special condition. She does not think a variance for setback is necessary. She thinks most of the lots are buildable and marketable with a 125 ft setback. But she also said that she appreciates the amount of work that has gone into the proposed plan and thinks that it is not a bad plan.

Dave Mount, 6926 App Rd., spoke, saying that he was speaking as a citizen and not as a member of the Town Board. He said that his comments are not necessarily for or against the proposal. He would rather not see this piece of shoreline developed. But it is clear it is going to be developed in some fashion; it is the right of a landowner to do it. So it is not as much about whether we want it to happen as it is about how it is going to happen. If the Commission approves the variances with conditions, he is concerned about how they will enforce those conditions. The hearing tonight is about approving the overall plan. Individual Land Use Permits (LUPs) will still have to be issued for each home. It would be possible for the Commission to require that all of the conditions be in place – erosion mitigation, revegetation, etc. before a permit is issued for any lot. Issuing or not issuing LUPs is a mechanism that could be used as a hammer by the Town to make sure the conditions are met.

Like Barb, he was also concerned about what the project might look like in 100 years. One way to look at it is to consider what might happen if this property were to be developed with homes placed at the allowed setback without shoreline stabilization. In 100 years, the shoreline will move back some amount. At some point in the future, it is very likely that some kind of erosion mitigation would be needed on these sites to protect the homes. So one way to look at it, is that we are getting in on erosion control ahead of the game. The Commission can put conditions on what is done and has some control over the process. As he understands the Ordinance, an owner can put in a toe revetment with the DNR's approval, but doesn't need the Township's approval. Working with Odyssey could be considered an opportunity to have the shoreline stabilization done in a way that helps meet our broad goals and vision.

Then, speaking as a Supervisor on the Town Board, Dave said he wanted to encourage the Commission to move deliberately on this. A lot is at stake. It is important that the Commission crafts its decision in a way that meets everyone's expectations to the extent possible. If denied, it could be litigated. The Findings of Fact must be considered carefully either way. There is flexibility in the 60 day rule if they don't want to reach a decision this evening.

Valerie Brady spoke next. She works for the University of Minnesota as an aquatic ecologist. She studies wetlands and Great Lakes shorelines. She said that in studying a lot of the stream erosion and clay erosion in this area, she has developed a hypothesis that when the land was deforested it changed the nature of the landscape. She believes that streams and the landscape are still readjusting to the deforestation. Research done in areas on the east coast has shown that this readjustment can take hundreds of years. Her proposal to the Commission is that if the variances are approved, to use it as an opportunity for research. They could look at areas where the slope is graded and reshaped versus areas where it was left alone. Many agencies are interested in this kind of research. It could be an opportunity to get data and make more informed decisions in the future. There is background data available for Sucker Bay.

In addition she wondered if there might be a way to get together with the Minnesota Board of Water and Soil Resources and make some kind of trade concerning the wetlands. She said that wetlands appear to be delineated all over the place. Which is more important, shoreline or wetlands? In this case, it may be that shoreline protection is more important than the loss of some of these wetlands. She hoped that people would be reasonable and look at the big picture of what is best for the area instead of going by the strict letter of the law.

Jan Green said that she tried that already and the Technical Advisory Committee was not willing to consider it.

Wayne Dahlberg spoke. He is a Township resident and was on the Planning Commission for 6 years in the late 80s early 90s. He then took a year off before becoming the interim Planning Director which lasted for 10 ½ years. He has historical perspective. In 1991, with assistance from the Arrowhead Regional Development Commission, they went through the North Shore Management Plan (NSMP) and incorporated what was germane to the Township Ordinance. The NSMP stated goal for shoreline alteration was “to maintain the natural character of the north shore as much as possible and minimize soil erosion while allowing for permitted development under the NSMP.” Objective 5 of this goal was “to encourage restoration of disturbed areas along the North Shore where feasible.” The normal formula for structure setback in erosion hazard areas is the erosion rate in feet times 50 plus 25 ft. In other words, as is the case here, if the erosion rate is 2 ft per year, it is  $(2 \times 50) + 25$  or 125 ft. However, in item 2 of Section F, it says, “Structure setback and location of soil absorption areas can be modified by variance if the landowner provides technical data proving a different recession rate or that the erosion hazard, although correctly estimated, can be mitigated by structural protection.” This is a mechanism by which development happens on the shore. The variance is not meant to be a hardship-driven variance; it provides for a landowner who is willing to go to the lengths necessary to mitigate erosion difficulties. Wayne said that “variance” is the wrong word for what is intended by this language. Over time “variance” has become associated primarily with hardship, but there is also language concerning reasonable difficulty and difficulty of a situation. In 2005 the Ordinance was updated. Much of the same language was carried over, including this language. Wayne read Article VI, Section 3.B.5 from the current Ordinance: “Structures in soil absorption areas shall be set back 125 ft from the

top edge of the eroding bluff, and where slumping is evident, the setback shall be measured from the uppermost shear zone (point at which the soil separates and slumping begins). Sewage treatment systems shall not be located within the structure setback area. The above standard may be modified by variance if the landowner provides technical data proving a different recession rate or that the Erosion Hazard Area, although correctly estimated, can be mitigated by structural protection.” There are a lot of questions about where the slump line is on this property. It isn’t shown on most of the maps Odyssey provided. He has one map from the package showing the 100 ft setback line but that also has topography on it. On this you can see where the slump line most likely is based on topography. For the most part, where the apparent slump line is is considerably closer to the shore from the 100 ft line. Wayne said that he feels that Odyssey has gone through the proper steps of going through the Ordinance and the NSMP and is showing how they propose to comply.

Wayne said that he was at the last Planning and Zoning meeting where there was a discussion about making decisions on variances, especially concerning practical difficulty and hardship. He hoped that the Commission would keep this discussion in mind as they moved forward with a decision.

Wayne also wanted to comment on the concept of neighborhood. All up and down the shore there are lots that are 2 acres or less. There are also numerous subdivisions with lots that are less than 1 acre in size. We inherited these whether we like them or not. Odyssey’s plan for the Stoney Point site is a better scenario than what much of the Township has.

Although 200 ft gives separation between the homes, Wayne said that he was sorry the plan had moved away from a clustered housing concept. He had numerous discussions with Odyssey in the latter part of his term as Planning Director. They talked openly about the merits of clustered housing concepts. Clustered housing frees up some of the site that might be more sensitive. The concept gives the flexibility to move units around while not sacrificing density. In addition, infrastructure such as sewer and water can be shared more efficiently.

He said that he liked how Odyssey combined the driveways. He said they ended up with three driveways because the ravines make it difficult to have just two. He said that the Township has the proper tools in the CLUP and Ordinance to do a good job with whatever decision the Commission makes.

Barbara Johnson spoke. She said that they have cabins on Stoney Point. The tall trees on their property were planted 64 to 67 years ago. The smaller trees were planted 45 years ago. So when referring to natural vegetation, she hopes that everyone realizes that it takes a very long time for trees to grow and this should be considered in what the Commission decides.

A motion was made and passed to close the public testimony portion of the hearing.

Mike first asked Sue what would happen if the Commission, since only 6 of the 7 members were present tonight, had a tie vote. Sue was not sure. He then said that they have put a lot of time and effort into the process over a long period of time. If the Commission is not ready to make a decision tonight and needs more time to digest all of the material that was received this week, that would be okay.

Jan agreed that the Commission might not be ready to make a decision. She talked about scheduling and the 60 day rule.

Dave Mount said that the Commission can take a 60 day extension on the 60 day rule if they need it and don't need the consent of the applicant to do this.

Jan made a motion to introduce the following draft resolution for discussion. Seth seconded the motion.

**RESOLUTION:**

**Resolution of support for the variances requested by Odyssey Development for the Preliminary Plat Submittal for Stoney Point Cottages Subdivision with conditions that are mostly information in nature.**

**REASONS:**

Sufficient technical information has been submitted to satisfy Town of Duluth Zoning Ordinance #3, Article VI, Sec. 3 (1-5) requirements for a variance in the Lake Superior Shoreland – Erosion Hazard Areas. Specifically technical data that the Erosion Hazard Area “can be mitigated by structural protection” was submitted in the document entitled “ Stoney Point Cottages: Shoreline Stabilization, Technical Data, Project History, Engineering Calculations” dated September 21, 2009, with explicit mitigation given in the following:

- Letter from Krech Ojard, dated July 2, 2007
- Diagrams and maps in the sections of the Preliminary Plat Submittal, dated September 21, 2009, entitled:
  - Shoreline Stabilization (project No.051404)
  - Preliminary Plat proposal.

In the latter section the cross section which shows a 4:1 foundation protection line is important for erosion hazard mitigation. However, it should be understood that there is still risk of erosion in this bluff of unstable soils, as testimony in this hearing and previous hearings has shown. Research has documented that there is not an inherent 1:3 “stable” slope in these glacial red clay soils.

The technical information in these two documents submitted by Odyssey Development and referenced above also address the variances required from Article VI, Sec. 2, A (1) & (2) and B (1), (2) & (3).

**CONDITIONS:**

There is additional information that has been verbally referenced by Odyssey Development in previous formal hearings and open house. Therefore, conditions are

attached to this resolution that require timely submittal to the Township Planning Director and the Chair of the Planning Commission as follows:

1. The preliminary subdivision plat approval by St. Louis County Planning Commission with any conditions that were required.
2. The final wetland delineation report by the County's Wetland Technical Evaluation Panel.
3. The wetland replacement plan and wetland credits required for wetland mitigation.
4. Any amendments or corrections to the DNR Division of Waters protected waters permit #2008-0218, Shoreline Stabilization, Stoney Point Development Plan.
5. The Minnesota Pollution Control Agency's NPDES/SDS Permit for Construction Stormwater and the required final stormwater pollution prevention plan (SWPPP) that explains how they will control stormwater.
6. Copied of the final deeds filed to fulfill the Real Estate Exchange Agreement between Odyssey Development and the City of Duluth which was approved by the Duluth City Council on July 10, 2006 by resolution 06-06-021, [This covers approximately three acres at the mouth of the Little Sucker River conveyed to the City of Duluth in exchange for land owned by the City for the easement for the Congdon Blvd. that is with this preliminary plat.]
7. The vegetation restoration and landscape plan for each lot. Also the implementation of the plan including planting, construction, monitoring and maintenance. The planting should cover the species of plants used, their amounts and placement. This condition is to satisfy requirements in the Town's Comprehensive Land Use Plan and Zoning Ordinance for both visual quality and erosion control. [Experience and field observations indicates that some of the best shrubs and trees for this Lake Superior clay shoreline are red-osier dogwood, arrow wood, wild rose, ninebark, white cedar and white spruce.]

**SCHEDULE:**

Because this is a phased development with lots 1 and 2 developed first, there is the opportunity to learn from experience. As each land use permit is given for each house construction, the conditions that are attached to this variance resolution apply unless they are modified by subsequent variance applications and approvals.

Sue talked about the technicalities of making amendments to a resolution that is on the floor. Jan's resolution is a motion to approve the variances with conditions.

Yvonne and Barb expressed the need for additional time to consider all of the information presented tonight. Barb made a motion to suspend the hearing and to take it up again at the October 22 meeting at 7:00 pm. It passed unanimously.

Dave Mount reminded the Commission about the open meeting laws.

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## **Planning Director Report**

Sue reported that the Town Board approved the amendments to the zoning ordinance.

Regarding the Bieraugel lawsuit, the Board is having a closed meeting tomorrow to discuss the suit with the Bieraugels.

Jan asked for additional information from Odyssey. She wanted a delineation of the homeowners' responsibilities and a statement that the Township had no responsibility. She also wanted a map with the setbacks for each lot.

Greg asked what Dave Chura's role would be when the hearing reopened, since he was not at the meeting tonight.

Sue said he will participate, having the minutes, all of the documents, and the presentations from tonight to review.

## **Old Business**

There is a meeting with the Town Board on short-term rentals at 6 pm on October 22, before the Planning Commission meeting.

There were no concerns from the audience and the meeting adjourned at 10:15.