



**CITY OF NORTH OAKS**

**Regular Planning Commission Meeting  
Thursday, February 25, 2021  
7 PM, Via Teleconference or Other Electronic Means Only  
MEETING AGENDA**

**Remote Access** - *Planning Commission members will participate by telephone or other electronic means pursuant to Minn. Stat. §13D.021. Any person wishing to monitor the meeting electronically from a remote location may do so by calling the following Zoom meeting videoconference number: 1-312-626-6799, Webinar ID: 899 8619 1334 or by joining the meeting via the following link: <https://us02web.zoom.us/j/89986191334>. Individuals wishing to monitor the meeting remotely may do so in real time by watching the livestream of the meeting on North Oaks Channel 16 and on the City's website. Due to the existing COVID-19 Health Pandemic, no more than five (5) members of the public may be in Council Chambers (Community Room, 100 Village Center Drive, MN) during the meeting. Once room capacity is met, anyone wishing to attend the meeting above the five (5) members of the public who may be present in the room during the meeting will be required to monitor the meeting remotely.*

**1. Call To Order**

**2. Roll Call**

**3. Pledge**

**4. Citizen Comments** - *Members of the public are invited to make comments to the Planning Commission during the public comments section. Up to four minutes shall be allowed for each speaker. No action will be taken by the Commission on items raised during the public comment period unless the item appears as an agenda item for action.*

**5. Approval of Agenda**

**6. Approval of Previous Month's Minutes**

6a. Approval of Planning Commission Minutes from November 10, 2020

[11.10.2020 Planning Commission Minutes - with Public comments.pdf](#)

6b. Approval of Meeting minutes from December 2, 2020 Planning Commission Meeting

[12.02.2020 Planning Commission Minutes.pdf](#)

6c. Approval of Meeting minutes from December 29, 2020 Special Planning Commission Meeting

[12.29.2020\\_Special\\_Planning\\_Commission\\_Minutes.pdf](#)

**7. Business Action Items**

7a. Review of Septic Variance application 20-06 for 33 Eagle Ridge Road

[Variance\\_PC\\_33\\_Eagle\\_Ridge\\_Rd\\_V2.0\(1\).pdf](#)

[KSD\\_SSTS\\_Design\\_Type\\_III\\_33\\_Eagle\\_Ridge\\_Road\\_9-19-20\\_Ver\\_3.0\\_reduced.pdf](#)

**8. Commissioner Report(s)**

**9. Adjourn**

**North Oaks Planning Commission  
Meeting Minutes  
City of North Oaks Community Meeting Room and Via Teleconference  
November 10, 2020**

**CALL TO ORDER**

Chair Azman called the meeting of November 10, 2020, to order at 6:00 p.m.

Pursuant to Minnesota Statute 13D.021, the meeting was conducted via Zoom, with Chair Azman and Administrator Kress present in the Council Chambers.

**ROLL CALL**

Present: Chair Mark Azman, Commissioners David Cremons, Jim Commissioner Hara, Stig Hauge, Nick Sandell, Grover Sayer III (joined the meeting at 6:10 p.m. after technical difficulties), Joyce Yoshimura-Rank.

Absent: None.

Staff Present: Administrator Kevin Kress, City Attorney Bridget Nason, City Planner Bob Kirmis, City Engineer Larina DeWalt.

Others Present: Videographer Maureen Anderson, North Oaks Company President Mark Houge, Gary Eagles.

A quorum was declared present.

**PLEDGE OF ALLEGIANCE**

Chair Azman led the Pledge of Allegiance.

**APPROVAL OF AGENDA**

Chair Azman noted one change as there are no meeting minutes to approve and they will deal with that at the next meeting. Item No. 6 will be removed from the agenda.

**MOTION by Yoshimura-Rank, seconded by Hara, to approve the agenda as amended.  
Motion carried unanimously by roll call.**

**CITIZEN COMMENTS**

None.

**APPROVAL OF PREVIOUS MONTH'S MINUTES**

This item was removed from the agenda.

**BUSINESS ACTION ITEMS**

**a. Public Hearing: Preliminary Plan/Preliminary Plat (Subdivision) Application - Red Forest Way South**

Chair Azman noted this public hearing is for the subdivision known as Red Forest Way South Phase 1, a portion of Site K in the Planned Development Agreement (PUD) between the Applicant and the City. The hearing will allow the public an opportunity to be heard.

- City Planner Bob Kirmis reported that the North Oaks Company (NOC) is seeking preliminary plan approval of Phase 1 of a two-phase single-family residential subdivision entitled Red Forest Way South. The subject site is located upon 91 acres of land located north of County Road H2 and west of Centerville Road. This is a two-phase subdivision and at this time only Phase 1 is under formal consideration. Phase 1 consists of 17 lots and one lot on which no dwelling unit is proposed. Phase 1 occupies the northwest area of the site. Phase 2 is conceptually illustrated in the southeast area of the site and incorporates a total of 16 lots. Combined Phases 1 and 2 results in a total of 33 single family lots proposed on the site. Considering that Phase 2 is conceptual at this point, it is illustrated basically for reference purposes, and it will be subject to future preliminary plan processing by the Planning Commission and City Council. As indicated by Chair Azman, this property occupies a portion of Site K as illustrated in the Easts Oaks PDA. Site K makes a specific allowance for detached single family dwellings, such as those proposed at this time. Presently, 41 lots exist within the Red Forest Way subdivision to the north; if they include the 73 additional lots which are proposed in Phase 1 and conceptually in Phase 2, a total of 74 dwelling units would exist within Site K. The East Oaks PDA provides for a total of 64 units upon Site K with a permitted density increase of up to 30% and that would result in a maximum of 83 units, thus the proposed 74 units are within the allowances provided by the PDA. According to the PDA and the City's zoning map, the City's Residential Single-Family Load (RSL)-PUD, residential single-family load density zoning district provisions apply to this property. Additionally, the southern 1/3 of the site lies within the shoreland management area of Black Lake which is designated as a natural environment lake. Mr. Kirmis summarized some comments in the report: as noted, this was previously subject to conceptual review by the Planning Commission, specifically back in February, the intent of the conceptual review was to provide feedback early on in the review process that can be considered by the Applicant as part of the refinement of the plan. For comparison purposes, the concept plan which was considered in February is incorporated into the report as Exhibit E, additionally, specific feedback provided by the Planning Commission is provided in a memo attached as Exhibit F. In considering preliminary plan applications, there are really two aspects of the review 1) the question, "Is it consistent with the East Oaks PDA and the purposes of that document?" In this regard, some of the various purposes of the PDA included intent to provide creative and flexibility in environmental design that is not provided via the strict enforcement or application of the City's subdivision and zoning ordinances. Additionally, the PDA is intended to encourage the preservation and enhancement of desirable site characteristics and significant wildlife habitat and also to encourage a more creative and efficient use of the land, and encourage a development pattern which is in harmony with the City's objectives for land use, residential density, environmental protection, and habitat conservation. Beyond that, it is important to consider the various regulations which are used to implement the East Oaks PDA. Basically, those

relate to regulations incorporated into the City's zoning and subdivision ordinances. A comment about the effect of preliminary plan approval: the Planning Commission should keep in mind that approval of the preliminary plan with or without conditions essentially represents approval of the design. It is at this stage where the acceptability of lot arrangements, street configurations, etcetera, are determined. While the City Council will consider a final plan application at some future point, it is really considered an implementation step intended to do what is needed to be done to implement the approved preliminary plan. Mr. Kirmis noted the City's existing 2030 plan and draft 2040 plan designate this site specifically for low-density residential use; specifically, the plan says only strictly single family detached housing is to be allowed with no multiple family attached residences allowed. The Comprehensive Plan also states that areas guided for low density residential use must place a heavy emphasis on the preservation and protection of the natural environment. The plan indicates uses with a low-density residential guidance may be developed with or without sanitary sewer facilities. Mr. Kirmis shared a comment about site access and subdivision design: as part of the previous concept plan review, the Planning Commission raised concern about the length of the incorporated cul-de-sac, which measured approximately 3,000 feet in length. Specific concern was cited related to the ability to provide emergency service provider access. In this regard, the Planning Commission suggested that the Applicant consider alternative access possibilities as part of the preliminary plan submission. In response, the proposed cul-de-sac has been eliminated in favor of an internal loop street which is accessed via a northern extension of Black Lake Road and a new access from Catbird Lane to the west. While the Catbird Lane access is considered positive from a traffic flow and safety standpoint, it is important to note that the access location varies from that shown in the conceptual street and access plan which is included in the East Oaks PDA as Exhibit B2. The plan illustrates two access points, but they differ from that which is presently proposed. It includes a connection to Black Lake Road which is provided in the submitted preliminary plan; however, it also illustrates a northerly connection to the subdivision. Considering that the property to the north has already been developed and an opportunity for a street connection is not possible, the street and concept illustrated in the plan cannot be achieved, literally. The proposed street configuration and access points are deemed to be well-conceived, final determination related to the acceptability of the access should be made by City officials. A comment on lots: The submitted Preliminary Plan illustrates a total of 33 lots for single family dwellings, and this compares to 34 lots which were illustrated on the previously submitted concept plan. Regarding lot size, the RSL - PUD zoning district imposes a minimum area requirement of 1.5 acres. In addition, properties which lie within the shoreland ordinance are to provide a minimum lot size requirement of 80,000 square feet. Staff is recommending as a condition of approval that the ordinary high-water level of Black Lake boundary be illustrated on the preliminary plan to confirm that lots which lie within the shoreland overlay district comply with that 80,000 square foot lot area requirement. A comment about outlot: As part of concept plan review, the Planning Commission raised some concern about a "flag lot" along the site's northern boundary. The flag lot was intended to incorporate a pole barn and deer barn which were intended to be torn down to accommodate future home construction. The

Planning Commission asked the Applicant to explore a reconfiguration of the lots in that area of the site, such that the “flag lot” could be eliminated. In response to that concern, the lot arrangement near the referenced out-buildings has been modified and the “flag lot” has been eliminated. In this regard, the pole barn and deer barn are proposed to occupy a separate outlot where no dwelling unit is proposed. While the outlot designation is understood to ensure that no additional dwellings will be provided, some concern exists related to the creation of an outlot within a registered land survey. Typically, they see outlots in plats which incorporate lots and blocks and right-of-way dedication, etcetera. Staff is recommending that the outlot be renamed and identified as a lot within the subdivision, with an acknowledgement that no new dwelling may be constructed upon it. A comment about staging: as indicated, the subdivision is intended to be created in two phases. As part of the previous concept plan review, the Applicant indicated that the first phase is expected to be complete in 2021 and the second phase is expected to be complete on or before the summer of 2025. As indicated, only Phase 1 is presently under consideration. In discussions with City Staff, the Applicant has indicated that consideration will be given to providing sanitary sewer and water service to Phase 2 of the development.

- Commissioner Hauge asked Mr. Kirmis to show the map he referred to (the appropriate map that shows the configuration as it is now suggested from the Company). He has seen it a couple of times but thinks people may be easily confused. He thinks the map is H or J.
- Engineer DeWalt said she believes Exhibit I shows the phases.
- Administrator Kress showed a map of Exhibit H onscreen.
- Mr. Kirmis said consistent with the Trail Easement Plan (see attached Exhibit M), an easterly trail connection has been proposed to an existing trail to the east. Specifically, a trail link is proposed between lots 6 and 7 of Phase 2. While details related to trail construction are considered a matter to be determined between the Applicant and NOHOA, Staff is suggesting that consideration be given to constructing the trail connection to the existing trail as part of Phase 1 development, considering the timeline for Phase 2 development.
- Mr. Kirmis continued with a comment about setbacks: Within RSL - PUD zoning district, a minimum 30-foot structure setback from all property lines is required. In addition, a 150-foot setback structure and sewage treatment setback required from the ordinary high-water level of Black Lake, specifically 150 feet. Staff is recommending that the preliminary plan be modified to illustrate that ordinary high-water level of Black Lake such that it can be confirmed that lots within the Shoreland overlay district which abut the ordinary high-water mark can satisfy that 150-foot setback requirement.
- As in the case of previously considered subdivision applications, an attempt has been made to provide some tree preservation efforts. While both the City’s Comprehensive Plan and the East Oaks PDA highlight the preservation of natural resources as a primary community objective, City ordinances do not include any specific tree preservation requirements. Recognizing the importance of this issue, it is recommended that certain recommendations as provided by the City Forester be satisfied to the extent considered practical. Those recommendations are included in the Staff report.
- Based on Staff review of the application, it is their opinion that the submitted Red Forest Way South preliminary plan is consistent with the East Oaks PDA and the Master

Development Plan and with conditions, will satisfy applicable zoning and subdivision ordinance requirements. As a result, Staff has recommended approval of the preliminary plan subject to the fulfillment of the ten conditions listed in the Staff report. Mr. Kirmis noted that Condition 10 of the list cross-references the comments of the City Engineer so they are incorporated by reference. Specifically, those comments are included in the Staff report.

- Commissioner Hara asked in looking at the new plat versus the original, is the far cul-de-sac that serves lots 5 and 6 materially different than the objection that it was a long way from the access point. In looking at the two different maps it looks like it is almost in the same spot.
- Mr. Kirmis explained the preliminary plan differs from the concept plan in that, and as part of the concept plan all lots were provided access from one single point. The end of the cul-de-sac, near the flag-lot measured approximately 3,000 feet in length, which is considered significant. The preliminary plan introduces the loop street and Phase 2 of the project would basically incorporate a cul-de-sac extension from that loop street. However, the cul-de-sac is significantly less than that which was illustrated on the concept plan in that two alternative access points are provided.
- Commissioner Hara said if the original plan was that this was to connect to Cherrywood, why wasn't the road connected into Cherrywood as per the PDA.
- Mr. Kirmis cannot speak to the previously approved subdivision; perhaps North Oaks Company President Mark Houge might be able to provide a historical perspective. As far as he knows, there was no street stub provided as part of that subdivision which would provide an opportunity for a connection.
- Commissioner Hara would like to know why there is a deviation from the original plan as Cherrywood was not developed that long ago, which is creating a deviation from the PDA for a second access off of Catbird; he asked why, when Cherrywood was developed, the road was not connected there. Lot 8 Cherrywood comes right off that outlot and looks like it would have been a relatively easy connection.
- Mr. Houge answered Mr. Commissioner Hara and said he was not here when that was designed, although Mr. Eagles is on the call tonight and can perhaps shed some light. His understanding is that the Company chose to develop this in phases and at the time it was deemed most appropriate to have a similar loop road going from Catbird Lane (what is now labeled as Cherrywood Circle) out and back. He does not know if it had to do with topography, but whatever the reason there was not an extension to the south. For those listening, the previous phases of Red Forest Way were developed several years ago and the most recent was Phase 2B which was completed in 2017. He asked Mr. Gary Eagles to offer any other comments relative to the history.
- Mr. Eagles said 2B was an extension of 2A, which was done 8-9 years ago. Due to physical constraints of wetlands and topography, NOC decided to do a loop road, Cherrywood Circle, rather than continue to the south.
- Commissioner Yoshimura-Rank asked regarding the issue of the outlot, has it been figured out, will it just be cornered off and remain a lot with a couple of buildings, or will it be donated to NOHOA as passive recreation.

- Mr. Kirmis does not know the conveyance but there was a concern about incorporating an outlot in a registered land survey (RLS). He noted it is a bit out of his area but he understands that it would be more appropriate to actually identify it as a lot. They still want to make sure it does not become a title to an additional lot, which is not anticipated. Therefore, there is a condition in the Staff report that it be acknowledged that it is not intended to be a site for a new dwelling. Mr. Kirmis' perspective is whatever the County recorder requires in terms of whether it is designated as outlot or lot and whatever is appropriate with the RLS.
- Commissioner Sayer said he has seen those designated as outlots before and has seen it go both ways. He asked who will own the lot long-term if there will not be a structure on it.
- Mr. Houge replied the long-term plan is for it to be retained by the NOC and it could become combined with the adjoining parcel to the east, which is the 45-acre parcel that the Hill House sits on. To Commissioner Yoshimura-Rank's question, at this point, NOC does not have specific plans for those buildings, they are anticipated to remain for the foreseeable future. There is no intent to put another home on that site.
- Commissioner Yoshimura-Rank is a believer that at some point they will start running out of room for septic systems in looking at the variances they see now. She asked why, especially Phase 2 with the lots adjoining the wetland, those weren't considered for City water/sewer and could hook up with whatever will be built at Island Field.
- Mr. Houge responded that NOC was following the guidance set forth in the Comprehensive Plan and in discussions with the Staff, they wanted to fully conform with both the PDA and the Comprehensive (Comp) Plan. The Company would be open to discussing that, and would want to make sure the Comp Plan is amended to accommodate it. At this point, in following the Comp Plan, it is identified as septic and well.
- Chair Azman asked City Engineer Larina DeWalt to share on the engineering comments of the report and then they can get to the Company, unless there are other questions.
- Commissioner Sandell noted one of the phases is looked at to be considered for sewer and water, so would one of the phases have a different designation in the Comp Plan than the other phase.
- Mr. Houge answered in NOC's proposal, they communicated it would all be septic and well given the current Comp Plan and they would be open to further discussions about sanitary sewer into this area. They are not proposing it to be different at this time.
- Commissioner Sandell thought he read somewhere that one of the phases was considered for water and sewer and he apologized.
- Chair Azman said actually, he thought he read the same thing and asked Administrator Kress to clarify.
- Administrator Kress said Phase 1 is proposed to be septic and well; Phase 2 is water and sewer for the White Bear Township portal. That would require a Comp Plan amendment, so at this time all they have is the concept series that is shown on the screen right now. Until something is submitted by the Company, it technically would have to be septic and well unless the Comp Plan is changed to reflect a difference from well and septic to water and sewer installation.



- Commissioner Cremons asked how difficult it is to amend the Comp Plan, because he thinks well and septic versus sewer and water on Phase 2 is a big deal and he would feel much more comfortable if everyone says that is where they intend to go and figure out the steps, they need to take on Phase 2.
- Administrator Kress said initially whoever the Applicant is would have to request a Comp Plan amendment of the Planning Commission, need a public hearing, the recommendation would go to the City Council for consideration of the Comp Plan change, and would make its way to Metropolitan (Met) Council for final designation.
- Chair Azman said at this point they don't even have approval of the current plan.
- Administrator Kress said at this point it would be extremely difficult, almost non-existent, if they were to try and propose that at this time to Met Council.
- Chair Azman said that prompts him to start thinking about proposed Phase 2.
- Kress said in general it is not a big deal, however in the 2040 Comp Plan is toward the end stages of its life, so to propose a change at this time would take a lot of time to fix.
- Commissioner Sandell asked if it is a zoning thing.
- Kress replied no.
- Mr. Kirmis said incorporated in the Comp Plan, both the existing 2030 plan and 2040 plan is a map which is identified Proposed Areas where Sanitary Sewer and Water would be provided, and this particular site is not identified as having municipal services. That map would have to be modified. One thing in regard to the processing of amendments, the Met Council will not accept Comp Plan amendments until such time as updates are approved by the City and the Met Council. Because the City's Comp Plan is in process, they will not accept an amended application. That change could be incorporated as part of the update, which they think is a cleaner path, basically changing the map as part of the final submission to the Met Council. There is really not an opportunity to amend the plan at this point.
- Chair Azman asked if there is engineering submitted that can demonstrate that the Phase 2 lots can handle septic to specific sites and if not, could that impact road location, lot size and placement for Phase 1.
- Administrator Kress said absent of a preliminary application, they have not reviewed any of that.
- Commissioner Sayer said in talking about Phase 2 and going through a Comp Plan amendment, or when the Comp Plan gets settled down, this is what is in the plan, when does NOC think Phase 2 will come online...will it be quite a way down the road when all of this has already transpired.
- Mr. Houge said as mentioned earlier, NOC does not see Phase 2 going forward for a couple of years, due to the absorption of lots in North Oaks. One of the Company's goals is to preserve value for all the residents in North Oaks, so one challenge in bringing this many lots on at one time is the value would erode both for the value of these lots as well as the adjoining properties within the community. They will have to see how the market responds to the Phase 1 lots but he would envision a couple years before they would be back in front of the Planning Commission looking at Phase 2, which may time out well to an amendment to the Comp Plan if that is what the City wants to pursue.

- Commissioner Yoshimura-Rank asked with the Villas at Wilkinson Lake, Nord, Anderson Woods, and now Gate Hill, is there hurry to look at Red Forest Way now or is it something they look at next year as NOC has a lot on their plate right now.
- Mr. Houge noted the type of lot proposed in Red Forest Way is very different from that proposed at Gate Hill and also the condominiums. That is purposeful, as NOC has received inquiries from residents and people interested in moving into North Oaks for different types of properties. He said it takes a long time to get through the process from the time they present a concept to the City to the time NOC can actually sell a lot to a homeowner. They will need these lots when they are delivered and they are very different from Gate Hill and Island Field and that is the reason NOC chose to go forward with the three projects.
- Commissioner Yoshimura-Rank asked if the lots are similar to Nord.
- Mr. Houge answered they are similar to Nord and NOC chose to start with that project because there is one lot left in Rapp Farm and just a few lots left in Red Forest to the north. They will hopefully have lots available in Nord soon and these lots will be at least a year behind those in Nord.
- Commissioner Yoshimura-Rank asked if the Nord lots will be ready next year.
- Mr. Houge noted they hoped the lots would be ready this fall and have run into a few stumbling blocks. At the latest, they would be ready in the spring of 2021; given there are only 12 lots, that supply will not last very long. Thus, it will become that much more important that NOC has more lots available.
- Commissioner Hara asked how many lots are left in Cherrywood.
- Mr. Houge answered presently there are 9 lots left and they are in discussions with buyers on two lots, and possibly a third. They could be down to 6 lots shortly.
- Commissioner Yoshimura-Rank asked if NOC has a developer in mind for Red Forest Way South.
- Mr. Houge said he assumes she is asking about a builder.
- Commissioner Yoshimura-Rank replied yes.
- Mr. Houge replied historically these lots have been made available to any homeowner who has a qualified builder and they can choose to bring a builder in to this project and would be subject to Architectural Supervisory Committee (ASC) approval. He noted they do not envision this development being dedicated to any one builder and would leave that up to the homeowner.
- Commissioner Cremons said regarding the issue with the 1,000-foot shoreland management area related to Black Lake, which appears to cut significantly into this development, he asked if there is reliable information as to where the shoreland management area boundaries are.
- Mr. Kirmis said they do have a zoning map which illustrates the boundaries of the shoreland overlay districts within the City. However, it is at a high-level view of boundaries; what Staff is asking for here is a little more detail related to the ordinary high-water level and the resulting shoreland area boundary which relate to topography and elevations on site. They can look at the zoning map, which is very generalized, but are looking for more detail so there is more assurance that the lots within the Shoreland overlay district meet that 80,000 square foot minimum area requirement.

- Mr. Houge stated NOC provided some clarity on this to Kress through a drawing (Kress put the map onscreen). He said the red line at the top of the page is essentially the demarcation of the 1,000 feet from the ordinary high-water mark. As mentioned earlier, those lots that fall within that area conform by virtue of their size and NOC provides for additional setback that is also required in the shoreland district. This is the specific area that Commissioner Cremons was referring to.
- Chair Azman asked who created the drawing.
- Mr. Houge replied NOC's Civil Engineer created the drawing.
- Chair Azman asked when the drawing came in.
- Kress believes it was this afternoon.
- Commissioner Cremons asked if Staff has had the opportunity to confirm that the lots that are in Phase 1 and also within the management area do conform to the requirements, as it sounds like a short period of time to apply a fairly complicated set of rules to these properties.
- Mr. Kirmis said Staff basically took that boundary which was illustrated on the zoning map and attempted to overlay it upon the site as part of their review. They do recognize that is a very generalized line depicted at a Citywide scale and are looking for more detail. He noted he has not looked at this in detail and he does not think Ms. DeWalt has, either. Generally, it seems to be similar to what they had anticipated as using the zoning map as a guide.
- City Engineer Larina DeWalt noted she has not had much time to look at this drawing in detail as they just received it today based on their request for additional information on the plans to demark that line. It appears that those lots do conform to the 80,000 square foot requirement; she would have asked the developer offline in a review how that line was arrived at. She assumes there was not field verification of the ordinary high-water level but that it was created by a 3D surface created off of the existing topographic survey. If that is the case, she would ask that if they move to final plan approval, on the final construction plans there is field verification of that ordinary high-water level and not an interpolation based on the existing conditions. That would be her only comment at this point on this map.
- Commissioner Sayer said this submission is essentially a start of satisfying condition 5a which says in the Staff recommendation: this Applicant's engineer shall confirm and identify the DNR ordinary high-water elevation. He said maybe that should be clarified to say it will be done with field verification, which is his understanding of how that is normally done if it is to be done the right way. They go out and identify where it is in the field and then measure from there.
- Ms. DeWalt agreed with that assessment of the 5a condition.
- Commissioner Yoshimura-Rank asked regarding wetland No. 4, it looks like in one of the maps that it abuts Catbird Lane and Black Lake Road and in the delineation study it said it was quite full or saturated with water, even along the fringe. Even with the buffer, she is wondering if that will be a problem down the road with the road right there.
- Ms. DeWalt thinks that is a good question to ask. In terms of preliminary plan review, they look at grading plans and do not have a storm water management report which would identify high water levels and specific drainage into those wetlands. She cannot comment on

the elevation of the high-water level expected to be there. It is a requirement and a condition for future plan development to provide those calculations, analysis, and report, which would detail that information.

- Chair Azman asked if that would be part of the final plan approval.
- Ms. DeWalt said that is correct.
- Chair Azman asked Ms. DeWalt to give any engineering comments on her thoughts and then get to the public hearing.
- City Engineer Larina DeWalt said gave a high-level review, as Mr. Kirmis went into lots of detail. She said this review is focused on Phase 1 of the Red Forest Way South development which is 17 single family lots accessed by a loop road. Primarily proposed to have a rural section for the majority of it, with a small portion proposed to be curb and gutter for drainage purposes. In the Staff packet, there are approximately 13 pages of engineering comments. She said hopefully that illustrates the plans were reviewed in great detail and that most of them are very technical in nature and are not concerning in and of themselves; it just illustrates that these are preliminary plans and the design has not been baked through all the way. Ms. DeWalt noted a couple items to call out as far as comments that would materially change the design. She mentioned a section of roadway is proposed to be curb and gutter with storm sewer and according to the North Oaks Comp Plan, through the ordinances, it indicates the City will maintain the present rural character of the road system, so she has noted in her comments that she would like the Applicant to complete an alternate design concept for that section of roadway to demonstrate the feasibility of a rural section. If that is able to be done, that conversion may eliminate the need for storm sewer in that area. Ms. DeWalt stated regarding septic versus sewer, there is the Comp Plan consideration, and as far as the question regarding soils and area available, the Applicant's engineer did in-situ soil assessment for subsurface sewage treatment systems. That soil assessment is illustrated on the plans and in looking at most of the grading plans and detailed plans, there is a tan shaded area showing the suitable soil areas for septic systems. Further, the septic areas proposed are shown as rectangles and there are two on each lot; Applicant has illustrated on the plans that there is sufficient suitable soil area for two septic systems per the code. There are a number of areas where those septic site locations encroach into the setback, so this would be another condition of approval for final plans; that the plans need to be addressed so that there is no encroachment into the setback areas. Ms. DeWalt said the focus was mostly on Phase 1, there were a couple items on Phase 2 that she noted based on a cursory review of the plans. Regarding wetlands, as the Commissioners can see the extension from Black Lake Road is shown within the setback area of wetland 2 and potential buffer areas of wetland 2 and 3, so she wants to note that for the road construction extension, a variance may be required through Vadnais Lakes Area Water Management Organization (VLAWMO) for this road construction and will need to be addressed. Regarding wetland buffers and setbacks, setback is shown; with future plan development they will require that a current wetland functional assessment report is done for all the wetlands so that those appropriate buffers can be determined, shown on the plans, and designed accordingly.

- Commissioner Hara said it seems to him that they need to be looked at, at the same time. He goes back to what has already been established in previous plan reviews that the maps they are using are old and not up-to-date and not always accurate, so that is a concern. Going back to Cherrywood, when that was plotted it probably seemed that was a good call to do it that way, but now they have the adjacent development coming and realize there should have been a road that went through and now they have to change what was intended in the PDA to put another access point in. As Phase 1 is developed and the roads are put in, and then they go on to Phase 2, will they be in the same situation. He noted it seems like that must at least be part of the plan – that these are compliant and buildable lots that meet all the requirements without plotting them and knowing they will need to approve a variance for putting septic in setbacks, which is not an ideal way to start a development.
- Chair Azman said as an observation, it is really hard to just set Phase 2 aside now and focus on Phase 1, rather than considering both and the bigger picture. He asked to hear from the Applicant to provide comments.
- Mr. Houge noted they have talked about many of the things he would have mentioned in his formal remarks. They touched on the reason for the phasing, and to Commissioner Hara's comment, NOC did take a little more time to look at Phase 2 to make sure that it does work so they do not run into the problems mentioned earlier [regarding Cherrywood]. At this point, NOC does not intend to go in to any detailed engineering but at a high level they believe what is shown is something that conforms to both the PDA as well as something they would be comfortable building. The one thing that has not been discussed is that the location of the roads as currently proposed were intended to follow the existing farm roads as best they can, which helps to preserve the existing trees. In several other meetings it has been noted that their interests are aligned; the Company would like to preserve as many of the significant trees as possible and one way they did that with Red Forest Way is to follow the existing farm roads. Mr. Houge said they do have some questions about the City Engineer's comment relative to the curb and gutter; although NOC totally agrees that the preferred design is a rural section, curb and gutter does allow them to minimize/reduce the grading in some cases and in turn, save some trees. There is a tradeoff there that they can talk through going forward. Mr. Houge offered to answer any questions from the Commissioners.
- Commissioner Cremons asked about the outlot, relating to the owners of the adjacent properties, is NOC willing to commit that there won't be any development of any kind on the outlot. It will stay the way it is now with the buildings that are there or the right to remove those buildings but will not be anything else.
- Mr. Houge replied in essence, the short answer is yes. The PDA lays out what NOC can and cannot do and there is a restriction on the adjoining parcel which is 45 acres and by combining this with that larger parcel they would stay consistent with the PDA. They do not see any development happening on that outlot.
- Chair Azman asked for a motion to open the public hearing.

**Hauge moved, Sayer seconded, to open the public hearing at 7:10 p.m. Motion carried unanimously by roll call.**

- Thomas Dybsky, 9 Catbird Lane, has lived at the address for about 22 years. He, along with two colleagues tonight, represent the residents from Red Forest Way and Catbird Lane and have some issues relative to the new road coming on to Catbird. He noted recently they learned that a new road was dumping on to Catbird Lane to be servicing 30+ homes now being considered under Red Forest Way South development. This road has raised several concerns. Mr. Dybsky said all of them have been in this North Oaks community for 25-35 years and when they purchased their property on Catbird 22 years ago from Dick Leonard, at the time Mr. Leonard said nothing will be built across Catbird, because of the wetlands. He understands homes will come into play and does not have an issue with that. However, the road is something entirely different because as that road comes on to Catbird, there is now traffic coming into their living rooms. They think that will have a direct impact on the values of their homes, as well as an impact on the safety, security, and the environment. He thinks as they saw tonight, this road from his perspective was almost an afterthought. It was not in the 1998 EAW (environmental assessment worksheet) or the 1999 PUD (planned unit development), in fact they did not even see it in Exhibit E which was posted in February of this year. It seems that this was an afterthought and did not have a thorough investigation in terms of impact on the community. In looking at Exhibit H, Mr. Dybsky said they are concerned that this road does in fact encroach on wetlands; and they do not feel that the wetlands mapped out by the NOC a number of years ago are expansive enough. They believe those wetlands go further south than what is currently marked. Additionally, they have never seen any current environmental impact analysis, although it has been done in the past. They believe things have changed and would like to see something current as they have some serious concerns with that. Finally, Mr. Dybsky noted they do not see the practicality of this road dumping on to Catbird Lane, as people come out, they will still need multiple turns and will go on a road that is already very stressed and there is concern that it is even wide enough. The main drive of Catbird Lane is just a short distance down from where they would be coming out anyways. A proposal or consideration that they would like the Commission to give is as follows: 1) as residents of Red Forest Way and Catbird Lane, they strongly oppose this road. As such they would ask that members of this Planning Commission to join the residents on a walkthrough to discuss current plan and consider more reasonable alternatives to this road. They would like to know when and who made the decision for this road to occur, despite not being part of the original PUD or EAW or even maps from earlier this year. They ask for an updated comprehensive environmental impact study to be completed and shared. Until these steps have been taken, they ask that it not move forward with this plan. He said again, this is their lives and community and they do not see a need to rush into this. As heard tonight, there is a lot more work and analysis that needs to be done, so what is the rush. Mr. Dybsky noted many of them are long term residents of North Oaks and believe that they earned due consideration. As a community, what they are most disappointed with is that they have seen in other development projects, such as the east side development has been conducted, it feels that it is done under a veil of secrecy; there has been little to no communication or transparency with the residents, no consideration for the impact on the value of their homes, security, and environment. About two years ago, Mr. Dybsky went to the NOC with four other residents in the Catbird area

because of the east side development and some irregularities that they saw. As part of that discussion, he asked what the pink flags across Catbird in the wetlands were for. The response he received was that it was a mistake and should not have happened. He knows that was not the truth; the plan was underway and that was a perfect opportunity for the NOC to sit with them and tell them the plans and direction and receive input. If it would have been done two years ago, they would not be having this discussion today about the road coming on to Catbird. He noted that is not the legacy he has experienced for the 33 years he has lived in North Oaks and they would like that consideration.

- Jim Peyton, 4 Catbird Lane, has lived in North Oaks for just over 20 years. He thanked the Planning Commission for the opportunity to have a hearing and to be able to raise their voices about this particular development. He understands that this is a critical gate in the process, as from here, if the Commission chooses to proceed with the preliminary plan it is forwarded to the City Council and they have a very short time to make those plans final. As such, they want to pose some questions. Two years ago, or so when he first heard of this development through neighbors, many heard about the initial plans and the road coming all the way from Centerville Road into the heart of North Oaks through Catbird Lane. Thankfully, the citizens brought their concerns to the Planning Commission and the City Council and were able to reign things in a bit and turn the focus around to the PDA and PUD and being compliant with those plans that were done in 1999. That was a great victory and the initial plans were also small, high density lots and they were able to back things off and get it compliant with the PDA. He is glad to hear the statements around whether the current development plan on the table meet the PDA as that is very important. Mr. Peyton said since the time of the initial plan, they have seen the plan submitted back in February that had the long cul-de-sacs in there and there were not any roads coming into Catbird Lane. He noted the agenda for this meeting is the first time it really came to their attention that there were plans with this road coming in and that is a pretty significant change. They appreciate the fact that the Commission is going to be very deliberate about the changed plans and looking at them. Mr. Peyton has a couple of questions. First, what other alternatives can be or have been considered for that development as far as roads in to Catbird Lane. He said the first area talked about was on the north in Cherrywood and it seemed like there were opportunities to go in there but the Commission has explored those. There is also Red Forest Way on the north side and it seems like there would be room to go in there, which would allow more than one exit out of that neighborhood into the rest of North Oaks. The current plan calls for a lot of the traffic from the development to the north of Red Forest as well as this new development in Phase 1 of Section K spilling traffic down Catbird Lane or down Black Lake Road, which both funnel in to Bent Tree Lane so it ends up with a lot of traffic being funneled down one section. If they could open it up to Red Forest Way, it would allow them to split some of that traffic to go to the north and go west from there, as well as go south. It seems like with a configuration, there are wetlands on both sides of where these roads are, but they would avoid the wetland where it is dumping into Catbird Lane and would come in right across Catbird Lane, down and out Red Forest Way. That is one of the questions he has. The second question from Mr. Peyton has to do with timing; if the Planning Commission approves this preliminary plan, the City Council has a very short period of time

to approve those plans. Is there any thought to letting the new City Council review and approve these plans, as in about 60 days or so there will be a change of City Council, since they will have to be the ones that must govern to these plans going forward.

- Steve Healy, 1 Catbird Circle, has three areas he would like to cover. First is understanding the proposal itself; reading the materials, and being here tonight, it sounds like what was in the packet as Exhibit E was, until February, what was being proposed. Now it has been modified to Exhibit H which is what dumps out on to Catbird Lane. His question is, has there been a previous opportunity for the public to comment on that change. Secondly, he understands the area can be developed and NOC has every right to develop it, but he wants to make sure as that happens, not only the roads in the new development are treated appropriately, but the roads leading into it will need care. Bent Tree, Catbird Lane, Black Forest Lake Road, are in tough shape today and the request is as they agree on something that works for everyone and as the development moves forward, taking care of the roads are part of that plan. The third area relates to the homeowners on Catbird Lane; all of them bought their homes and invested significant amounts of money into those homes and were being guided by a plan that until a few months ago did not contemplate any roads dumping out on Catbird Lane. It was never contemplated in any previous documentation. Earlier today, NOC talked about preserving value and he thinks everyone would agree that if this road dumps out into someone's homes and have dozens of lights running across your house every night, it will do nothing but take away from the value of the homes. He thinks NOC, and he would request the Planning Commission really needs to consider the full impact of what they're being asked to do. It is not the right plan today, it needs to be changed, and the homeowners on Catbird Lane need to be considered.
- Mr. Dybsky asked in terms of the Planning Commission's process, what happens from here and will they receive response to any of these questions.
- Chair Azman said they would try. Process-wise they will see if anyone else is online who would like to comment. If nothing is left, they will close the public hearing and open it up for discussion among the Commissioners and to ask questions of Staff and the Applicant to get answers to the questions presented if possible.
- Mr. Peyton received a text question from his wife Anne Peyton; she asked regarding the environmental impact study and the precautionary principle...has the study been updated as it has been a long time since the last study. There were some questions earlier from the Commission around the environmental impact and if that study would be renewed.
- Chair Azman asked if anyone participating online had their hands up for public comment.
- Mary Dybsky had her hand up but technical difficulties occurred. Chair Azman asked Ms. Dybsky to email him her question.
- Chair Azman asked if anyone participating online had their hands up for public comment.
- Mary Dybsky had her hand up but technical difficulties occurred again.
- Chair Azman asked if anyone participating online had their hands up for public comment.
- Administrator Kress asked Mr. Grahek to raise his hand and test the platform.



- Kevin Grahek tested the platform and it worked. Mr. Grahek is at 11 Catbird Lane and thanked the residents who came to the meeting and noted they summed it up well and he does not need to add any additional comments.
- Mary Dybsky called Thomas Dybsky and he held the phone up to the podium microphone. She said she echoes Commissioner Hara and others and says there seems to be some real uncertainties that need to be addressed and maybe it is a more complex undertaking and perhaps more time is needed to study. She noted it was mentioned before that residents were informed and there was discussion with residents; she explained that nobody in the area was ever informed or contacted and discussion was never initiated.
- Chair Azman asked if anyone else had any comments or hand up online for public comment.
- Anne Peyton 4 Catbird Lane called Jim Peyton and he held the phone up to the podium microphone. She noted that her husband Jim expressed most of what she wanted to say but added some additional comments. She believes that North Oaks roads have a very beautiful and unique configuration and so traffic challenges do not and never will support heavy trucks and major construction. Ms. Peyton said unless they are all willing to sacrifice the current ecosystem and safety, first, she witnessed too much heavy construction on their roads and she again said there is no way the roads in her area can support anymore construction without reconfiguring the roads and changing the way the builders do their business. She clarified when there is construction in her neighborhood and other neighborhoods in North Oaks; most of the construction vehicles are parked out on the North Oaks roads and makes it almost impossible to pass or navigate the roads safely. This is something that needs to be considered.
- Chair Azman asked if anyone else had any comments or hands up online for public comment.
- There were no additional comments.

**Commissioner Cremons moved, Commissioner Yoshimura-Rank seconded to close the public hearing at 7:39 p.m. Motion carried unanimously by roll call.**

**b. Discussion/Action: Preliminary Plan/Preliminary Plat (Subdivision) Application - Red Forest Way South**

- Chair Azman noted this is the time to have discussion on this particular application. He noted there were some questions by community members on timing issues and the environmental impact study, which he thinks may have been referencing the environmental assessment worksheet that was part of the PDA. He asked for some comment from Staff or consultants on that particular issue, or if any Commissioners had any comment.
- Commissioner Hauge asked in order to make it a little structured, could Mr. Kress or Chair Azman summarize the comments from the citizens and from Commissioner Hara; he noted there were technical issues during the public hearing and it would be good for everyone to have it summarized.
- Administrator Kress sent a summary document earlier today and asked Ms. DeWalt to start going through that list.

- City Engineer DeWalt listed the comments and concerns delivered briefly before the meeting:
  - A comment about the EAW and the PUD not mentioning the road and that the early documents suggested the road might be connected to Cherrywood development.
  - There was mention of the road potentially encroaching on the wetlands on the east side of Catbird.
  - A question regarding current environmental impact analysis and concerns regarding an update to environmental analysis.
  - A question regarding viability of alternatives to what is being proposed.
  - A proposal asking members of the Planning Commission to join residents on a walk to discuss the current plan.
  - A question asking who made the decision for the new road, despite it not being on the original PUD or the EAW.
  - Residents asked that an updated, comprehensive environmental impact study be completed and asked that until those steps have been taken the plan not move forward.
- Ms. DeWalt noted that Mr. Kirmis takes thorough notes during the public hearing and if there are additional comments raised, he may be able to provide a summary.
- Commissioner Hauge said there was an additional comment about the high-water level at Black Lake.
- Chair Azman stated it had to do with having an appropriate map of the ordinary high-water mark in order to determine the shoreland ordinance and the obligations of lots that fall within the shoreland ordinances.
- Commissioner Hara noted Commissioner Sayer brought up the fact that it may need to be looked at in the field at a high-water mark with an actual field dimension and not rely on some of these older maps.
- Ms. DeWalt said before the meeting started, there was discussion about condition 5a and adding in field verification to that condition.
- Commissioner Sayer said that is correct and is his recollection of that dialogue; that it would be inputted into 5a and it may already be there but clearly, they will go out into the field, do the measurements, and find out where those flood lines are.
- Commissioner Hauge said that is a very good suggestion and he will support that.
- Commissioner Hara stated if they approve tonight, regardless of what they find out from that actual measurement, the plan is approved.
- Commissioner Sayer said his understanding is that this is preliminary.
- Commissioner Hara noted in reading what it says, if the Commission says “Aye” on this tonight, it is approved for this body, although it still needs to go to City Council. It can be subject to conditions, but the Commission is approving it.
- Chair Azman noted Commissioner Hara is right, if the Commission votes approval and it goes up to the Council and they approve it, there are conditions that they would have to comply with and if they recommend imposing the condition of 5a to Council, they would

have to comply with that. The implications of that may mean the design would have to change. He does not want to get too far afield.

- Commissioner Hauge stated there are many comments that people were concerned about and had discussed quite seriously among themselves and the NOC needs to answer those.
- Commissioner Sayer noted some other questions he wrote down including concern about the existing roads, and the other had to do with congestion as the construction vehicles come along and homes are built. He said the last one might be the easiest and he has an idea on how to resolve it. He asked Mr. Houge if the outlot could be reserved as a sort of staging area where trucks could park when they have to be parked in the area to minimize the impact on existing roads.
- Administrator Kress asked if the outlot would serve as a construction inlet.
- Mr. Houge answered the NOC could take that into consideration; he clarified they are asking if they could take the construction vehicles in via that outlot in some way. He noted the issue becomes they are crossing private property to get there which is owned by Doug and Mari Harper and he cannot make that promise without speaking to them. He noted there is congestion sometimes when there are construction activities and there is no place to park on the lot where the home is being built. They try to be dutiful with the builder and the deputy sheriff to restrict parking to one side of the street, given that is the City's ordinance and what NOHOA's rules require. He said sometimes people do come and go from the construction sites and they don't always know to park on only one side of the street. Mr. Houge said they try to make staging areas available whenever possible on adjoining lots and these are less of a problem because they are generally larger than a lot, they would be building on in Rapp Farm.
- Commissioner Hauge said Commissioner Sayer also suggested a parking area so they could actually park off of the road and away from the actual construction which would be helpful, perhaps even near the pole barn area.
- Mr. Houge said they can definitely try to find a parking spot for workers; however, they are bringing tools and materials in so they will need to be realistic about how it is managed.
- Commissioner Cremons has some sympathy for these people on Catbird that their expectations of the property have changed by this access. The original plans that the Commission looked at earlier this year involved the long cul-de-sacs and asked what the thought process was behind eliminating those and putting the Catbird connection in.
- Mr. Houge said he can give his perspective on it; it was somewhat in response to concern by the fire marshal as well as dialogue with Staff on this being the preferred alternative. He asked to defer to Mr. Kress and Mr. Kirmis on that.
- Administrator Kress showed the concept plan from December 30, 2019 onscreen.
- Commissioner Hauge remembered the cul-de-sac being very long and he believes it was a comment from Commissioner Hara pointing out the length of the cul-de-sac.
- Administrator Kress pointed out on the map from the concept plan the flag lot that was previously in the plan, multiple cul-de-sacs, dumping on to Black Lake.
- Chair Azman recalls comments asking if there was an alternative to try and reduce the length of that because of emergency vehicles getting back there.

- Commissioner Hara had a thought, noting he went and looked at this and walked around there and he also empathizes with the folks on Catbird Lane, this proposed road is essentially right in the middle of someone's house. He asked if there is a way to make it work so they can pick up the lot to the north and to configure things so it connects to the existing road. He said the argument that the cul-de-sac is long from one plan to the other doesn't seem that materially different between the plans.
- Commissioner Sayer said he has seen a lot of these developments over the years, and emergency vehicles like to be able to loop around. He asked why couldn't they loop around and T right in to that road rather than into the back of someone's house or living room window.
- Chair Azman stated that is a question for City consultants and a reaction from the Applicant.
- Mr. Houge said there are tradeoffs with all of these designs; some of the issues have been referred to. One benefit of the loop road is it takes a bit of pressure off the Black Lake Road connection and splits the traffic between two locations. He noted NOC is always getting requests from the fire marshal to make the cul-de-sacs shorter even though North Oaks has a lot of longer cul-de-sacs in North Oaks and that has become the norm. They looked at where they could tie in to Catbird Lane on that north leg, and NOC will always be mindful not to encroach on the wetlands, so this current location works and the grades provide for it because there was a farm road in this proximity years past. If they were to move it further north, in looking at a 2-dimensional drawing he agrees it would be nice to line it up directly with the Red Forest Way street to the west. The challenge NOC ran into was trying to navigate the wetlands and the grade; he said they can change the grade to a certain extent, but it would require pretty much taking all the trees out in proximity to those lots. He noted again, there are tradeoffs. Mr. Houge said the current proposed location seemed to be the best in terms of compromise and perhaps it could be adjusted slightly to move a bit further south so it lines up more with the property lines as opposed to coming in through the middle of a lot. These are things NOC can adjust in the final plan review and once they get out in the field, to make sure everyone agrees on what those tradeoffs are relative to the trees, for instance.
- Commissioner Hauge said he hears Mr. Houge say it is still possible, but not desirable, to take the road north, and negotiate the wetland, although he cannot see that from the map.
- Mr. Houge replied NOC did look at that and he is not sure it is possible. He stated they can sure take another look at it; there is another drawing that might illustrate the point and it may also help to get Ms. DeWalt's perspective, but in looking at Exhibit K, it shows the proposed location and on sheet 5c of 6 they can see by virtue of the lines being close together, it demonstrates that there is a great degree of slope and grade change so it would be a pretty steep road coming from the top end of that road loop down to Catbird. This was another concern and his understanding of good street design is they do not want excessive slope, especially in this climate with snow and ice. He said they can make the road flatter in its current location rather than moving it to the north. When introducing the third dimension it gets more complicated, however, he is not saying it is impossible. What is proposed is much preferable from an engineering point-of-view.
- Ms. DeWalt added that it appears there is probably about 30-35 feet of grade change from the intersection at Red Forest Way and Catbird from where the intersection is to the approximate

farm road location adjacent. That is a substantial amount of grade change to make up; to Mr. Houge's point, they may be able to make it work, it is several hundred feet that they would be making the grade change up between. However, the more grade change they have to make up, the larger the grading limits, the additional trees would need to come out. As they have seen in developments like Nord, when there is a lot of grading, there are a lot of trees that come out. The more grade change there is, the wider the grading limits will be. She agrees that following the alignment of the existing farm road minimizes that work. She is not saying it cannot be done, but she would have to see a concept grading plan showing what the impacts are.

- Commissioner Hara said Nord was pretty flat and asked where she is talking about a grade change there, as he walked the entire stretch of road before they put anything in.
- Ms. DeWalt said if there is a flat site, they do not have to make up the proposed grade to the existing grade, but there was discussion at NORD where there is the cul-de-sac and they have to tie into the existing grade and do not want to go at too steep a slope. They need a horizontal distance to make up that grade change. Instead of there being a 75-foot cul-de-sac, there was 200 feet of grading limits, and that is how it works. They need to make up that grade between proposed and existing. The greater the change in grade between proposed and existing, the wider the impact width will be.
- Commissioner Cremons likes the suggestion of at least looking at moving the Catbird entrance to the south, cutting across the corner of the first lot so that it empties out between B560 and C560 and at least it does not target one property. They also need to keep in mind that it will not be hundreds of cars per day, it will be a sporadic series of cars coming through from a relatively limited neighborhood. He said he was just driving around North Oaks yesterday and tried to figure out how many cars get lights shined into their house because the roads bend around. He noted it is something most of "us" encounter in one form or another. He thinks they could diminish the impact on that one property without having to redo the entire neighborhood. He would support taking a look at that alternative of moving the entrance to the south a little bit.
- Chair Azman asked which entrance.
- Commissioner Cremons replied the northern entrance on to Catbird...they would push it south 20-30 feet and take off a corner of Lot 1 so the road empties on to Catbird on the lot line of the lots across the street as opposed to directly into Mr. Dybsky's home.
- Commissioner Hauge asked if it would be possible to go out and take a look at this tomorrow with NOC, as there is a certain level of uncertainty and perhaps Commissioner Cremons' suggestion may solve the problem, but it is hard to envision.
- Chair Azman noted there was some talk about going north and there was talk about an elevation change, but there are elevation changes all over the City.
- Commissioner Hauge stated it is not like this is mountainous area, it is flat everywhere with respect to where he comes from in Norway.
- Mr. Houge responded it may help to look at sheet 5c of 6 which may answer Commissioner Hauge's question, the grading sheet that shows topography. It appears that it is relatively flat on that lot south of the road, which tells him they probably could move that further south to maybe align with the lot line on the west side of the road. It would require NOC to change a

couple of lots on the south side of the road to make sure they have ample square footage, septic and so forth. From a topography point-of-view, they can see that it is relatively flat there.

- Commissioner Hara asked if the Catbird folks would have an opportunity to look at the new proposed plan and comment on that before the Commission approves and says go ahead.
- Chair Azman said from a timing standpoint, the deadline on this application is January 15 for the 120-day review. By no means is there a rush to get it done now. He would rather take it slow and take another look at things and come back if they need to for further discussion. He said the whole thing kind of makes him uncomfortable.
- Commissioner Yoshimura-Rank agreed and said she would like to go as a group and walk the whole area.
- Commissioner Hauge agrees with Commissioner Yoshimura-Rank, at least those on the Commission that want to go, and take a look themselves because there are certainly questions here that he does not feel comfortable with. Also, they will have several meetings before the new year so they can revisit this in a quick manner after answering the questions they have uncertainties about.
- Commissioner Sayer noted that is his observation as well, he recalls a number of meetings scheduled and they ought to be able to find time to look at this and still meet the January deadline.
- Commissioner Hauge said this is the reason they wanted to summarize; they want to look at where the road comes in, and where the neighbors are upset because it will shine light into their living room windows. They want to see that. Also, there are additional alternative roads and ways those roads could go and they want to see that. It is probably not that difficult to walk the area and take a look as they must answer that properly – they cannot hand this over to the City Council the way it is right now.
- Commissioner Yoshimura-Rank said it would be nice to see the lay of the land, especially if they are talking about removing a lot of trees and also how close the wetland is to the road.
- Commissioner Sayer noted not all of the lots will be preserved.
- Chair Azman would like to look at a couple of options, rather than just moving the road south a little bit, as they are still dealing with cars and headlights going right into the home. He is not convinced that some elevation change is something that is out of the question. He gets the feeling that tonight is not the night to vote on this one.
- Commissioner Hara commented on the actual usable lot size and asked if Staff has studied that and are okay that the proposed lots with the shoreline issue and wetlands all meet the requirements for size.
- Mr. Kirmis said Staff was looking for the ordinary high-water level of Black Lake to be identified, as well as the boundary of the 1,000-foot shoreland overlay district depiction to verify that lots comply with lot area requirements as well as setbacks. Based on the information provided in the zoning map, Staff found that the lots do meet the requirements but would like to verify that with more detailed information. Some of that was sent over this afternoon.

- Chair Azman said he received the items in the packet where there was a lot of colored highlighting of the different ordinances that come in to play, but his concern is if they do not know exactly where the 1,000-foot Shoreland setback is, then they do not know exactly which lots would be impacted.
- Commissioner Cremons asked when they can get field verification of the boundary and an accurate drawing of the 1,000-foot line for the Commissioners to look at so that it isn't an issue. Right now, they are operating off of some fuzzy facts. He asked if someone could get out there, determine where the boundary is, draw the line in a place where they know it is the correct location and then the Commission can look at it and verify that the lots meet the requirements.
- Mr. Eagles said the trail around Black Lake is definitely above the OHW, so what NOC has surveyed is a little downstream of the trail. If they walk the trail, it will be at least above the OHW and they can get a pretty good idea of what the 1,000 feet is from that. He said there is not going to be a substantial change from what NOC has provided with what the zoning map shows.
- Mr. Kirmis noted Staff would like to see it depicted on the preliminary plan, both the OHW level and the 1,000-foot shoreline boundary. They want to confirm that the lots meet the area requirements of the shoreland ordinance.
- Commissioner Cremons said it would be helpful to have the septic systems shown within the boundaries of the lot and no longer in the setbacks. He noted they have a chance to correct some of these elements that do not work right now, so when they look at the plan for preliminary approval, they don't have to deal with this stuff again. He would like to get as many of those things out of the way as possible so when they send it to the Council, they have confidence that the Commission has approved something that meets the code and the PDA.
- Mr. Eagles asked to comment on septic design and said the designs shown are just placeholders and they were set just basically to show relative size and what the requirement is for a septic drain field size. Those are not depicted exactly where they could go, or the shape that they could be to fit the requirements. They can adjust those to show a more accurate depiction of where they would lay out.
- Ms. DeWalt noted they should be shown so they are not encroaching within the setbacks and if that can easily be done, it should be done.
- Mr. Eagles said NOC would work with their septic designer and he can adjust those.
- Commissioner Cremons would like Attorney Nason to explain the 1.25 and the 1.45 acre calculations and what gets counted and what doesn't.
- Attorney Nason said the issue is the gross density requirement. She noted onscreen some depictions of what they had put together regarding some of the terms and what is required for the area requirements. Within each PUD phase, the area requirement in the RSL zoning district is that they have a gross density of 1.45 acres. Gross density is defined as the total areas within a planned unit development or a phase, excluding DNR protected waters, DNR protected wetlands and VLAWMO designated wetlands, divided by the total number of dwelling units. There are other definitions included, including gross lot area and suitable site. For example, suitable site is a usable site of at least 25,000 contiguous square feet for

lots which is what they have here. A usable site area is the area of the lot excluding all required setbacks, easements, and wetlands, and during subdivision process only when calculating the usable area of a proposed lot, the sub-divider can include any trail easements over 2,000 square feet. She invited Mr. Kirmis to speak.

- Mr. Kirmis started with suitable area and said to him, that could easily be called suitable area or to accommodate sanitary sewer, or to onsite septic. Specifically, two area requirements are identified for properties with a central sewer system, at least 15,000 contiguous square feet must be provided on a lot. For individual sewage treatment systems, 25,000 contiguous square feet must be provided. To Mr. Kirmis, that term is specific to sewer service, there is a certain amount of area on a lot depending on the type of sewer service provided to the lot. It is a term that gets mixed up – does suitable mean the same as usable – he explained usable area is similar to what in most client cities they talk about buildable area. What is left after imposing easements, setback requirements, wetland buffers...how much of that is actually usable when those restrictions are placed on the property. Lot size, according to the definition within the ordinance, a lot cannot be less than 1.25 acres. The average size of a lot within a subdivision must be at least 1.45 acres in size. Lot size excludes lakes, DNR protected wetlands, and VLA WMO designated wetlands. What is intended to be depicted on the graphics, for instance the lot size graphic, it identifies a DNR protected wetland so that cannot be included in the lot size. If it is not protected, it can be included in the gross lot area. Typically, lot size, the legal description of the lot a person purchases; they own “this amount” of land. Getting in to the term “usable area” they are subtracting all these various restrictions that limit the area of a site upon which structures can be built.
- Commissioner Cremons said that makes sense and it is important to know.
- Chair Azman asked Mr. Kirmis, regarding how these lots are designed, the conclusion of the consultants is that they appear to comply.
- Mr. Kirmis replied in the affirmative.
- Chair Azman asked about storm water management and he does not see any specific or separate storm water parcels, other than the outlot that NOC says they will hang on to. There is no separate lot that is dedicated as something that might be expected to transfer to NOHOA as a storm water collection basin.
- Ms. DeWalt said that is correct, all storm water management facilities are proposed to be under easements.
- Chair Azman stated in NOHOA’s letter, they continue to be concerned about responsibility for ownership and maintenance. On page three, paragraph 7 of the letter, it says “NOHOA is reviewing the concept of storm water infrastructure and the impacts of ownership and maintenance responsibilities and are not quite at a point where comment can be provided.” In the meantime, what does the Planning Commission do. He asked Ms. DeWalt if traditionally the City would own these and maintain them. He noted here they do not see that and it continues to be an issue for Mr. Azman. Perhaps it is more rhetorical or open-ended but he does not see an answer for it and if they move towards approving these plans and kick the can down the road as to who will maintain these things.
- Attorney Nason noted this is one of the challenges in North Oaks; the proposal is to require the storm water pond easements and also require that there would be a storm water



maintenance agreement. This would be entered into between the City and the Company and would be a condition of development contract approval. The maintenance obligation could then be transferred to a homeowner or NOHOA; typically, when it is a homeowner's responsibility it is done in a commercial development and is part of the property, so it is a bit strange to have it in this residential setting. Ultimately, the City would seek to make sure someone is maintaining that storm water facility appropriately. If they are not, the City could step in, which is not the typical role for the City in North Oaks with respect to these facilities, from her understanding. In other cities, typically they would get a grant and easement to the city but that is not how it is set up in North Oaks. Moving forward, Ms. Nason thinks this will be a challenge the City has to figure out how best to deal with.

- Chair Azman asked with the existing applications that have been recommended by the Commission and have gone up to the Council for approval, what has happened. Has there been an actual agreement submitted to the City for approval.
- Attorney Nason replied no, because that would be done at the time of final plan approval. Bear in mind, there are any number of storm water ponds all across the City.
- Chair Azman said perhaps none have been submitted to the City, and asked what is the status, are there any discussions, draft agreements circulating, as at some point, something will need to happen on these.
- Attorney Nason stated correct, that is a bigger problem for a future date, with respect to some applications that have been approved so far, it was a requirement of the preliminary plan application to have a storm water facilities maintenance agreement be entered into between the Company as the property owner and the City. She said nothing has been executed yet, there have been no draft documents circulated in that respect, but it is an ongoing challenge.
- Chair Azman does not know that he would want the City to be in that responsibility to do it. He noted at this time, he does not think they can do anything more because there is more to be done by consultants, perhaps a trip organized out to the property. He suggests if the Commission can go without a quorum, then they would not have to provide notice of a special meeting and would be logistically easier. He announced it is likely that everyone will go out at some point, just not as a quorum.
- Mr. Houge requested if the Commissioners would like to tour, NOC would like to accompany the groups as there are locked gates and difficulties with going out on their own. He said the Commission can determine how large the group needs to be and NOC would try to accommodate their schedules.
- Chair Azman said absolutely they will seek permission or cooperation for that.
- Commissioner Sayer said in particular, unless it is marked, they need to know where the proposed road cuts into Catbird Lane.
- Ms. DeWalt suggested that NOC stake the alignment in the field, possibly edges of wetlands and other things that would be of significance and interest to the group, making the potential trip effective and productive. This way, the issues that have been raised can be discussed productively in the field.
- Commissioner Hara noted there are some markings out there and he does not know what it designates, but it looks like the road on the map.

- Chair Azman asked Mr. Kress what his thought is on having a group go out.
- Administrator Kress said about the only time they could go as a group would be the following Thursday when they have a meeting scheduled, but it would be after hours and dark out. He suggested going in groups of two if possible and scheduling them at different times so there is not a quorum.
- Chair Azman clarified for everyone, that four is a quorum, so three would be the limit.
- Attorney Nason took some notes and wants to make sure from a consultant Staff side she understands what the Planning Commission is looking for at its next meeting information-wise. She noted there is a question regarding taking a look at where the road comes in off Catbird Lane; there is a request to view the location in the field; and there was a request to the Company to take a look at alternative locations for that road – perhaps shifting it south, and she though she heard Mr. Houge say that is something the Applicant would be able to do. She said perhaps that is something that could be staked in the field, as well, so if there is a minor access modification to that road, the Planning Commission can see that. Ms. Nason stated there is also discussion about taking a look at ways alternative roads could go and she did not hear feedback from the Company about that suggestion. She would like to clarify what the expectations of Planning Commission are, as they have plans submitted before them and must evaluate them. The Company can modify them as they see fit or are able to and she is concerned about what the expectations of Planning Commission are with respect to some of the discussion topics. She deferred to the Applicant to respond to that. A third issue raised as far as a staff concern was to request the Applicant to provide updated plans that show the location of the ordinary high water (OHW) level of Black Lake and the 1,000 foot setback from the OHW and show on the plans so Staff is able to definitively confirm that the Phase 1 lots comply with the size requirements for the shoreland overlay district. Obviously, if there are any issues with the Phase 2 lots, those would be adjusted before any formal application would be brought in if needed. She asked if she is missing anything.
- Commissioner Cremons noted they also talked about having the lots be shown with the septic systems out of the setback and located on the lots.
- Attorney Nason said that is correct and thanked him.
- Chair Azman understands the idea of having the loop road from a safety standpoint because then they do not have to turn around the larger emergency vehicles. There was a potential discussion of moving the Catbird connection south but is there also an opportunity to talk about moving it north to meet up with Red Forest, he knows the discussed elevation and he is not particularly convinced that is a reason to dispense with it out of hand.
- Commissioner Sayer said his intention is to walk through the field and see how steep that hill is. If it is really steep, that is a big problem. He would like to get a visual of the elevation measurements. He realizes they will get close to the wetland if they move the road over there and perhaps there are ways to avoid impacting that, but asked to add that to the list.
- Attorney Nason suggested looking to the Applicant to ask whether they have any interest in looking at proposing that type of amendment to their submitted plans to show a different road, or are they willing to look at some minor road revisions, but they have submitted the plans and are looking for Planning Commission to make a decision on the plan submitted.

- Chair Azman noted, obviously NOC gave a lot of thought to moving that road north and they do not think it works well, but he would welcome the opportunity to demonstrate that when they are out in the field. He said they can look at all these things and provide feedback as to why NOC thinks the current location would work better than further north and they are open to have that discussion. NOC would try to flag these locations so the Commissioners can see what the impact would be, typically they would mark the center line of the road and he does not think any of that survey work has been done yet, so they would have to see how quickly the surveyor can get out and mark those locations. NOC has completed some work to get the drawings updated and they can add those to the sets the Commission receives beforehand and make adjustments to the septic layouts as best they can. His suggestion in looking at the northerly location is to combine the site visit with some of the other practical issues they ran into when they picked the current location.
- Commissioner Sayer said in terms of timing, it looks like the Commission has a scheduled meeting on November 19, 2020 and another on December 2, 2020. He asked if these things can be accomplished the December 2, 2020 meeting.
- Chair Azman said he thinks it is workable.
- Administrator Kress noted most people may be traveling during Thanksgiving week and Staff is trying to get information done on November 19, 2020. He said to keep in mind the Island Field public hearing on December 2, 2020, as well.
- Mr. Houge noted NOC should be able to get the stakes placed within a few days. If Commissioners' schedules permit, they should be able to do site visits within the next week, starting Monday, November 16, 2020.
- Chair Azman said to see how it goes as he is not personally ready to commit to putting it on November 19, 2020.
- Administrator Kress said they would have to get the information out to the Planning Commission either Friday, November 12, 2020 or Monday, November 16, 2020. He noted Staff can share things on the fly, as well, as see where they are at come December 2, 2020.
- Chair Azman said there has been a decent amount of public input here and they never like to hear concerns about lack of knowledge or transparency, so he thinks they should up their game a bit and make sure if there are revisions to these plans, they get them out for people to look at. He knows they scheduled a number of meetings and asked what is left.
- Administrator Kress noted they have a meeting scheduled for November 19, 2020 but there is nothing on for that so it will likely be cancelled. December 2, 2020 is for Island Field, and December 31, 2020 but the Commission will probably need to look at rearranging December a bit.
- Mr. Houge asked for clarification. He believes he heard that the Commission would like ample time to look at the updated drawings as defined by if NOC got the information to them by Friday of this week, which would be November 13, 2020. The other question was when could the Commission get out and walk the site and if they could get it staked on or before Monday, November 16, 2020, then they would have Monday through Thursday to walk the site before the next meeting. If that works for their schedule, he thinks the Company can commit to get that done.

- Chair Azman said he would like to see how it goes. He thinks they are moving forward in measured steps and that is the best way to go.
- Commissioner Yoshimura-Rank asked if the Commissioners should email Mr. Kress to set up the site visits.
- Administrator Kress answered yes, he will get some times from Mr. Houge and set things up in blocks of two or three Commissioners at a time.
- Mr. Houge said he thinks he and Mr. Eagles' schedules are pretty flexible so they can meet the groups out at the site and try to accommodate their schedules.
- Attorney Nason said in looking at her notes, there were a few other comments raised that have not been specifically addressed. Several citizen comments were related to potential environmental impacts and the environmental impact study related to the development. There were also questions regarding the roads, as well. Would the Commission ask that Staff prepare a response to those comments and feedback or would they like to have a discussion about those things now.
- Chair Azman said in his notes, he has alternatives, timing, environmental impact issue, traffic, wetland impacts, etcetera. He asked if there are specific questions from anyone now, or basis to suggest an updated environmental study, rather than trying to respond to that on the fly.
- Commissioner Cremons would like to know whether they are legally required to do any environmental assessment or whether it is discretionary. Also, where the road ends up being located will drive the environmental piece, so doing an actual environmental study before they have an idea of where the proposed road will be, would be premature. He thinks they should find out that answer from Attorney Nason and Mr. Kirmis.
- Attorney Nason said regarding the question about the environmental impact study, what is being referenced there is the Environmental Assessment Worksheet (EAW). There was an EAW completed for the entire East Oaks development before the 1999 PDA was executed and was part of the process during the subdivision at that time. It was determined at that time that there was not a likelihood of any substantial environmental impacts and was no need for an Environmental Impact Study (EIS) to be prepared. **If there is a negative declaration, which there has been in this case, but before a project has received all approvals or been implemented; if it is determined by the RGU -Regional governing unit (which is this case would be the Council), that a substantial change has been made in the proposed project or has occurred in the project circumstances which may affect the potential for significant adverse environmental affects not addressed in the existing EAW, then they would need a new EAW.** There are some standards with respect to those significant environmental impacts. Nothing proposed so far seems to rise to the level of meeting that definition of a significant environmental impact. With respect to the development site, the developer has provided information with respect to wetland impacts and other similar impacts. She wants to clarify as she heard several residents express comments and concerns related to environmental impacts so it would be helpful to understand. Some of those wetland impacts are shown in the preliminary plan submissions by the Company. At this time there is no mandatory legal requirement for the City to take any specific action with respect to that.
- Ms. DeWalt added that EAWs do not expire.

- Commissioner Cremons said that answers his question.
- Chair Azman said they had this discussion on prior applications.
- Ms. DeWalt said they had this conversation on Anderson Woods.
- Chair Azman thinks even in 2019 in a broader aspect. He believes he recalls a need for an evaluation as to whether there has been a material change and what that means in order to even begin to think about whether they can demand a new, supplemental, or updated EAW.
- Ms. DeWalt is not sure she was around for that discussion, but in prior preliminary plan approval discussions they had the conversation and clarified that as Attorney Nason noted, a substantial change is what may affect the potential for significant adverse environmental impacts. Substantial change, of course, is not defined, but also Minnesota rules governing EAWs do not have thresholds for changes that would require a new EAW. Therefore, it is discretionary.
- Commissioner Cremons asked procedurally, what does the Commission need to do in order to postpone the consideration of the preliminary approval to the subsequent meeting.
- Commissioner Sayer said they are scheduled on November 19, 2020 and should they hold that date open just in case.
- Administrator Kress does not think they would have the information by that date to present to the Planning Commission. He thinks they are looking more at December 2, 2020 at this point and the Commission would table the discussion until then.

**MOTION by Commissioner Hauge to table the discussion.**

- Chair Azman noted they went through some of these issues with Nord and for those the Commission kept the public hearing itself open. Here, the hearing portion is not the public comment section of the hearing. He wants to make sure procedurally they do not get caught having to do a series of motions in order to undo what they did.
- Commissioner Hauge agrees with all the comments they have made, they have decided to go out and study in the field, and no decision has been taken. He noted he has made the motion and if he gets a second, they can still discuss it.

**Commissioner Sayer seconded the motion.**

- Commissioner Sayer sympathizes with the neighbors who have come out tonight and appreciates the opportunity to see with his own eyes how that road shines in to someone's house and what the hill to the north is like.
- Commissioner Hauge agrees with Commissioner Sayer, he understands the neighbors' comments and hopes they can find a better solution for the neighbors than what is on the table right now.
- Commissioner Sayer said for clarification, Commissioner Hauge is moving to table the discussion until December 2, 2020.
- Commissioner Hauge said that is correct.

**Motion carried unanimously by roll call.**

**COMMISSIONER REPORTS**

Commissioner Yoshimura-Rank congratulated Commissioner Hara and also thanked Commissioner Sandell and Chair Azman for running because she thinks that is a real dedication to the community and she appreciates all of the participation.

Chair Azman noted this may be Commissioner Hara’s last meeting with the Commission and with the Certificate of Election coming through, he will be sitting with the City Council. He noted it has been good to work with Mr. Commissioner Hara.

Commissioner Hara said it has been good to work with them, also, and thanked the Commission.

**ADJOURN**

**MOTION by Yoshimura-Rank, seconded by Cremons, to adjourn the Planning Commission meeting at 8:54 p.m. Motion carried unanimously by roll call.**

\_\_\_\_\_  
Kevin Kress, City Administrator

\_\_\_\_\_  
Mark Chair Azman, Chair

Date approved\_\_\_\_\_



Recently we learned that a new road, dumping onto Catbird Lane, servicing some 30+ homes is now being considered in the Red Forest Way South development plan. We have several concerns with this new development.

1. When we purchased our properties several years ago, and then again in reviewing the 1998 EAW, and the 1999 PUD there was never any mention of this road. In fact these early documents suggested that this road might be connected to the Cherry wood development.
2. Recently, in reviewing respective maps it appears that this road may encroach on the wetlands on the east side of Catbird.
3. Additionally, we have never seen any current environmental impact analysis and have serious concerns in this regard.
4. Finally, we do not see the practicality of this road, given that Black Lake Rd., the main South entrance is a short distance away. Thus it seems that there may be several more viable alternatives.

**Proposal:** Given the present application as a community we strongly reject it. As such we ask the following:

1. We invite members of the Planning Committee to join us on a walk through to discuss the current plan and consider other more reasonable alternatives.
2. We'd like to know when and who made this decision for the new road, despite not being on either the original PUD or EAW.
3. We ask that an updated comprehensive Environmental impact study be completed and shared with us.
4. And we ask that until these steps have been taken that this plan not be move forward.

As many of our Red Forest Way and Catbird neighbors have been in this community for 2 or even 3+ decades we believe we have earned due consideration. It is most disappointing to see how this and other development projects have been conducted under the veil of secrecy. There has been no communication or transparency with the residents, nor consideration for the impact on the value of their homes. This not the No. Oaks Legacy we have come to know.

**North Oaks Planning Commission  
Meeting Minutes  
City of North Oaks Community Meeting Room and Via Teleconference  
December 2, 2020**

**CALL TO ORDER**

Chair Azman called the meeting of December 2, 2020, to order at 6:00 p.m.

Pursuant to Minnesota Statute 13D.021, the meeting was conducted via Zoom, with Chair Azman and Administrator Kress present in the Council Chambers.

**ROLL CALL**

Present: Chair Mark Azman, Commissioners David Cremons, Jim Hara (arrived at 6:10 p.m.), Stig Hauge, Nick Sandell, Grover Sayer III, Joyce Yoshimura-Rank (arrived at 6:07 p.m.), and City Council Liaison Rick Kingston.

Absent: None

Staff Present: Administrator Kevin Kress, City Attorney Bridget Nason, City Planner Bob Kirmis, City Engineer Larina DeWalt.

Others Present: Videographer Maureen Anderson, North Oaks Company President Mark Houge. A quorum was declared present.

**PLEDGE OF ALLEGIANCE**

Chair Azman led the Pledge of Allegiance.

**APPROVAL OF AGENDA**

**MOTION by Sayer, seconded by Sandell, to approve the agenda as amended. Motion carried unanimously by roll call.**

**CITIZEN COMMENTS**

Chair Azman noted one agenda item for Red Forest Way has a closed public hearing and there are some residents present that would like to make further comments and this is the appropriate time to do that.

Tom Dybsky, 9 Catbird Lane, thanked Chair Azman for allowing a few minutes to speak. He thanked Mark Houge, Gary Eagles, and the Commission for taking time to consider the residents on a new road coming onto Catbird. As longtime residents of North Oaks it is very important to him to have the Commission and Company listen and consider their concerns regarding the Red Forest Way project. In particular, he thanked Mark Houge for orchestrating six or so walkthroughs since the last meeting. On November 16 and 17, 2020 there were walkthroughs, and again in a follow up call that Mr. Dybsky, his wife, and John Guider had with Mr. Houge and Mr. Eagles on November 25, 2020, the following has been agreed to: the new road coming on to Catbird Lane will be 24 feet wide with two soft shoulders on either side of 2 feet. The road will be moved approximately 100 feet south from the current markings. Mr. Dybsky believes Mr. Eagles has shown a map of that revision. The NOC has agreed to provide and plan 15-20 natural barriers such as hardwood trees, evergreens, and bushes to protect 9 Catbird Lane and 7



Catbird Lane from oncoming headlights and noise with the new traffic as a result of this road. The barriers will be planted on both properties as well as across, to the east of Catbird where the road comes around. In talking with NOC, residents will work with them in selecting the appropriate barriers, and the revised plan shows the trees at the end of that road on the west side of Catbird in a straight line and he noted aesthetically and practically that may not work. NOC has agreed that the neighbors can work with them in the placement of those barriers. Mr. Dybsky said another interesting point is how much will be cleared when they put the road in and how open will that area be, and the City Forester is somewhat concerned about how wet the soil will be and if it is too wet, it will not be able to sustain cedar trees. Finally, with all of the roads being put in, as well as the 30-plus homes that will be built in the Red Forest Way development, it is all east of Catbird. The residents on Catbird, Black Lake Road, and Red Forest Way are very concerned about heavy construction traffic. Mr. Houge has agreed to provide temporary access off Centerville Road for construction equipment and heavy vehicles. This consideration was very important and it is very much appreciated that NOC would take that into consideration. Mr. Dybsky appreciates the fact that the NOC and Planning Commission have been working with them in a very collaborative manner and this is critical to come to a good resolution and all parties can be happy. He asked that they continue to inform residents as the Red Forest Way South development progresses. Mr. Dybsky submitted a document to the Commission with the points laid out and agreed to.

Steve Healy, 1 Catbird Circle, thanked the Commission for the opportunity to make comments. He believes the roads in North Oaks are in need of repair as evidenced by the home owners' association (NOHOA) asking for over a 15% increase in the 2021 HOA fees with the largest portion of this increase being directed to the roads. There has been discussion about having the heavy construction equipment come in via a service road accessed from Centerville Road, and he requests this be included in the project approval, as it will be a lot safer and less wear-and-tear on the roads, and will be similar to what is going on in the other sites where final areas of North Oaks are being developed. Mr. Healy said they would like to thank the Board and the North Oaks Company for taking the time to listen and work with them to come to a good compromise.

Rich Dujmovic thanked the Planning Commission, he has been watching all of the meetings from home and the last meeting was great and very, very encouraging. He addressed the NOC, and said he was very encouraged by the collaboration and respect for citizens; it seems that there were multiple perspectives shared in the last meeting, a bunch of alternatives that were batted around, a great deal of flexibility was shown by the NOC, and respect by the Planning Commission of the various perspectives. He also thinks there was good technical discussion as to why some of the solutions were viable and others were not. Ultimately, he saw collaboration that got to a better solution and a mutually beneficial solution that could work for everyone with just a little bit of compromise and it was wonderful to see. He specifically thanked the NOC because there were multiple walkthroughs of the site that were granted over multiple days, sometimes twice in a day. NOC was very accommodating to the residents of North Oaks, giving multiple opportunities to go look at the site. NOC did not look at just one option but multiple, and they were able to explain why they preferred one over another. He saw great partnership, respect, and seeking that mutually beneficial solution; he loves that behavior and this is exactly what they have all been looking for, he saw it from all parties and thinks it is remarkable.

Chair Azman thanked the residents of the Red Forest Way area for working with NOC and coming to City Hall to express the discussion they had so the Commissioners could all hear an update.

### **CONSENT AGENDA**

#### **a. Approval of Planning Commission Meeting Minutes of October 29, 2020**

**MOTION by Yoshimura-Rank, seconded by Cremons, to approve the Minutes of the October 29, 2020. Motion carried unanimously by roll call.**

### **BUSINESS ACTION ITEMS**

#### **a. Public Hearing: Preliminary Plan/Preliminary Plat (Subdivision) Application - Island Field**

Chair Azman opened the public hearing at 6:21 p.m. to consider an application for the subdivision of Island Field known as site H in the Planned Development Agreement (PDA) between the Applicant and the City. This hearing will allow the public an equitable opportunity to be heard on the application and the Planning Commission will consider the comments of Staff and the Applicant, as well.

City Planner Kirmis said the NOC has requested preliminary plan approval to allow the construction of a 2-phase, 74 unit condominium building upon site H, commonly referred to as the Island Field site. The site overlays 22 acres of land south of the Gate Hill parcel, just west of Centerville Road. Of the 74 proposed dwelling units, 62 are proposed to be 2 bedroom units and 12 are proposed to be 3 bedroom units. Also included is a guest suite which does not qualify as a dwelling unit as it does not contain independent cooking facilities and therefore qualifies as a dwelling unit as defined by the zoning ordinance. In addition to the guest suite, the building will include some common spaces, including a community room and exercise room, and outdoor gathering spaces include patio decks, walking paths, and a community garden. The applicant is proposing to subdivide the property into two lots, which correspond with two phases of development. Specifically, an approximate 12 acre southern parcel is proposed, and an approximate 10 acre northern parcel is proposed. Phase 1 would overlap the southerly parcel and would include a 37 unit condominium building. Phase 2 would basically be an addition to that phase, also including 37 dwelling units. According to the East Oaks PDA, the City's Residential Commercial Mix (RCM-PUD) zoning district provisions apply to this property. The proposed condominium building is planned to be served by municipal sewer and water. The site is proposed to be accessed from the East; the single point along Centerville Road is approximately 20 feet south of County Road H2 and this location is consistent with what was previously depicted on concept plan drawings. The Staff report includes a discussion of lot area and density. The City Council has established that 74 dwelling units are allowed upon this 22 acre site and that determination results in a certain residential density which will be applied. The City's RCM zoning district does not impose a minimum lot area requirement; however, it does establish that ¼ acre of land is required per dwelling unit. That equates to approximately 11,000 square feet per unit. The density of the proposed site, using the gross density definition provided

in the ordinance is approximately 9,000 or 9,600 square feet per unit depending upon whether or not the Centerville Road right-of-way is included in that calculation. The proposed density as a result of the allowed 74 units is slightly higher than would otherwise be applied in an RCM zoning district. As stated previously, the East Oaks PDA says in the cases of conflict that the PDA provisions do apply; Staff felt it was worthy to mention that. Also included in the Staff report is a reference to floor area ratio, which is defined as the ratio of the floor area of all buildings of the gross lot area, excluding two-thirds of any wetland. The PUD district requires a full area ratio of 37.5% and the Applicants have indicated that a total of 17.3% floor area will be proposed in the project. In the Staff report, they are not sure whether the reference to the exclusion of two-thirds of wetland areas has been incorporated so they are asking for clarification on that. A couple of comments on lot configurations; as mentioned, the two lots correspond to the two phases of development which are proposed. In regard to modifications to the subdivision design, Staff recommends that the entire turnaround area near the building entrance be included in Phase 1 of the project and therefore included in parcel 1 so that lot line would be modified somewhat to include that turnaround area. Secondly, Staff recommends that prior to building permit issuance, parcels 1 and 2 be combined such that the side lot line which is illustrated is eliminated and does not intersect the building. The intent there is to avoid the creation of a non-conforming setback condition. Perhaps the item of most interest is related to structure height. According to the PDA, the maximum building height within the RCM-PUD district is 35 feet, and for walkout homes, 45 feet. The RCM district further states that “no building shall exceed a basement and two full stories or 35 feet at the front elevation.” The City’s zoning ordinance defines building height as the vertical distance from grade to the top ridge of the highest roof surface. Using the City definition of building height, it appears that the condominium measures 43 feet in height from grade to top ridge of the highest roof surface. In that regard the structure exceeds the 35 foot height requirement established by the PDA. As a condition of preliminary plan approval, Staff recommends that either the building design be modified to meet the 35 foot height requirement or a PDA amendment is processed and approved to accommodate the proposed structure height. A comment about building materials, according to the submitted building elevations the condominium is to be finished in a combination of stone and brick veneer, some fiber cement panels and glass. While building colors are not specified, the elevations do illustrate earth tone finishes. Neither the RCM-PUD district nor the PDA impose specific finish material requirements; however, it is the opinion of Staff that the proposed building finishes are very high quality and exceed standards commonly applied in other communities. Staff thinks it is a good design. A comment about recreational facilities, the Applicant has been working with NOHOA to determine if there are any recreational improvements which would be beneficial to provide upon the site. Staff encourages the Applicant to continue working with NOHOA in this regard. A comment about trails, consistent with the trail easement plan, the preliminary plan illustrated two trail connections which are intended to link the subdivision to the trail system. Also, regarding off-street parking, within RCM-PUD districts, a parking supply requirement of 2 spaces per unit is imposed and one of those two spaces must be enclosed. In addition, the PDA states that one space per dwelling unit must be provided in a shared, off-street location, specifically referring to guest parking. Applying the parking supply requirements of the PDA a total of 222 stalls are required, specifically 148 for

the dwelling units and 74 for guest parking. Appropriately the site plan illustrates 222 stalls. Mr. Kirmis noted that of the 74 guest parking stalls, 18 are intended to be proof-of-parking. Proof-of-parking refers to situations where the Applicant feels that the City's parking supply requirements are excessive, they will illustrate them on a site plan which demonstrates they can construct them if needed, however, they would like the opportunity to construct a lesser amount initially to see if those additional stalls are in fact necessary. The idea is not to construct more stalls than are needed. Typically Staff finds this an acceptable practice as it results in less impervious surface coverage as they do not want an excessive amount of parking if it really isn't needed. As part of the Staff review, they recommend that the City reserve the right to require full off-street parking (the additional 18 stalls), if it is determined that need exists. Provided all the conditions identified in the Staff report are satisfied, it is the opinion of Staff that the preliminary plan meets the requirements in intent of the PDA of the City's subdivision and zoning ordinances and recommends approval subject to those conditions identified in the Staff report which includes a condition related to addressing the building height issue.

- City Engineer DeWalt gave engineering comments which start on page 38 of the Planning Commission packet. She noted she will not go into detail as many of the comments are repeats from previous development sites as far as getting the plans from preliminary to final. She noted the development team was going to do a brief presentation so it may be best to answer any questions after that presentation.
- Commissioner Hara said on page 38 it is a cursory review and asked how thorough and in-depth that review on the application is, as there are a number of pages with comments similar to what they have seen in other applications.
- Ms. DeWalt said the review is as thorough as can be with preliminary plans; as noted, they anticipate the development plans to evolve with final development, so the review is done on a preliminary plan set and although there are many comments that are similar, it is based on the fact that they are preliminary in nature. She said they do not go through and review pipe slopes, for example, but they do a review of the grading utilities, setbacks, and said 11 pages of comments is fairly thorough and based on preliminary plan set.
- Commissioner Sayer asked about the building height and the restriction in the PDA of 35 feet, is that an interpretation or if that is crystal clear in the PDA.
- Administrator Kress pulled up the original PDA on screen.
- Attorney Nason noted the specific references are found in the 7<sup>th</sup> Amendment and contain a number of performance standard deviations, and each site has specific language with respect to height of buildings. She said there are references to the height of buildings (Mr. Kress pointed it out on page 227 of the City's website on screen). Looking at the specific site itself, there is language that references the RCM zoning district. She noted there are several references to the height with respect to the RCM zoning district.
- Chair Azman noted language on Section IV Performance Standards, paragraph three, subparagraph b) maximum building height.
- Attorney Nason noted they are trying to find that on screen.
- Chair Azman said he thinks it is on Page 4 of 11 of the 7<sup>th</sup> Amendment.

- Attorney Nason said to answer the question on whether it is clear in the PDA that 35 feet is the height requirement or maximum that applies to this particular development site, from Staff's perspective the answer is yes.
- Commissioner Cremons asked if it is also clear that it is measured to the highest point of the roof.
- Attorney Nason said that is correct.
- Chair Azman asked where they are looking when identifying how the measurement is taken. When he looks at the maximum building height and he sees language that says "measured from the lowest finished grade established," but where does it tell the Commission how high they go.
- Mr. Kirmis said building height is included in the zoning ordinance definition section.
- Chair Azman asked if that is in the PDA as well or if they have to look to the zoning ordinance.
- Mr. Kirmis answered it is in the zoning ordinance, but he thinks it is reiterated in the Staff report.
- Attorney Nason noted Mr. Kress now has the language on screen from Page 4 of 11, looking at 3b, it is the reference to the height limitation.
- Commissioner Cremons asked if it makes sense to listen to North Oaks Company President Mark Houge and then get back into this as there are several issues that are quite important and somewhat technical. He noted Mr. Houge has already responded by letter and Commissioner Cremons would like to hear what he has to say and then get back into these issues.
- Chair Azman agreed and noted he was trying to get the easy questions dealt with.
- Commissioner Cremons had an easy question and asked regarding the floor area ratio. It seems to him they are not even close as they are less than half of what would be permitted in terms of the floor area ratio on the site. The issue as to including or not including wetlands does not seem like it is material as that issue seems to be safe on this development.
- Mr. Kirmis agreed.
- Mr. Houge noted NOC has representatives from HP Holdings, Inc. (developer of the building itself); Jeff Schoenwetter is one of the owners, along with Eric Doty the project manager, and Tom Wasserman from Brown Architectural. At some point Mr. Houge may turn to them and ask them to make comments. Mr. Houge thanked the Chair and members of the Commission for taking the time to review this and for looking at the memo he sent out earlier that morning. He pointed out the PDA has some inconsistencies in it relative to the table; when looking at the other parcels that are zoned RCM-PUD, it clearly states the building height is 47 feet. He is not sure why that was not repeated for Island Field given that it is the same zoning, but it is NOC's position that any of the sites allowed to have a multi-family building should have the same zoning height restriction applied. It is not appropriate to apply a different height to different sites with the same zoning ordinance. He said it is also interesting to note that Rapp Farm has the ability for buildings to be built at 47 feet in height; at one point, NOC was thinking it might be a site where there could be an apartment or condominium but decided not to pursue that. Mr. Houge asked the Commissioners to keep

that in mind as they go through the presentation. He noted as one enters the site from Centerville Road, the intent is to have a crossing through a wetland that looks and feels somewhat like a bridge although it will be an on grade crossing. As one moves into the site there will be a divided median and that will be a place identifying it as a private road and ask those that are not residents or invited guests to turn around and leave. There is a space to the north of the driveway that is an area not planned to be built upon and they are having conversations with NOHOA about potential recreation facilities there and it is a work in process at this point. Proof of parking was mentioned and that occurs at Waverly Gardens, as well, there is a section on the north side of their building that is set aside for proof of parking, it has not been used in over 10 years and Mr. Houge doubts that it ever will be, but it is a way to deal with that zoning requirement. There is an internal trail system surrounding the building which connects to the NOHOA trail system at two points from the southwest corner and the northwest corner. He noted they are very pleased about how the building is positioned on the site; in thinking about the footprint of the building compared to the size of the site, it is a very small footprint and it is tucked into the side of the hill. Mr. Houge asked the development partners to speak to the vision behind the building, the elevations submitted earlier – and noted the challenge with building height is trying to make the building more interesting and more of a residential feel, different from an apartment since it is an owned facility. It has to be of a high quality with interest.

- Mr. Jeff Schoenwetter said they are very proud to be part of the presentation this evening and are excited to be in North Oaks. They have assembled a fabulous team for the project including Sather Bergquist, Firm Ground, Tom Wasserman, North America Bank, North Oaks Corporation, and Homestead Partners. He said the Commissioners have before them a palette of natural inspiration for a lodge-like structure. The condominium has only 10 homes per floor, per wing, so it is a very low-density project. When looking at some of the inspiration it comes from an architectural Adirondack/Yellowstone lodge and something that speaks in brand back to the flavor of some of the history of North Oaks and the Hill family. It will be rich in history, feature luxury modern features, custom options, and standard design efficiencies and will create relative affordability. Going from the exterior influences to the interior influences, they have a flavor that starts to develop which is color, natural palettes, and other things that they are hearing feedback from designers and architects that it is what the market is asking for. In concert with the professionals at Firm Ground and the designers, the project will evolve to 4-6 standardized selection palettes that will involve wallpaper, carpet, color palettes, and finishes. In certain circumstances, customers will be able to leave those pre-determined palettes and invest the time and energy in customizing those, and in some circumstances customers will actually be able to start with a blank slate. Mr. Schoenwetter noted they have tried to create a hospitality feel when walking into the property, there is a concierge desk, a large fireplace anchoring the main lobby, and small niches for breaking out in private conversations or waiting for an activity in the public space. He showed a slide for Unit 8, regarding the interior of the actual units, there are six different perspectives within the actual units. He stated there will be highly detailed finishes, including crown moldings and custom finishes, name brand partners – the same people who just completed the Meyer Place Condominium in Wayzata on Lake Minnetonka including

Kohler, SubZero, and Wolf. He noted the incredible use of glazing, custom windows and said every single home on every floor has a deck, patio, or combination. The first floor is at grade, so the 10 units in each wing on the first floor will have the lifestyle option to open their patio door and walk out on their lawn. He said especially for those with pets, people really like that ingress and egress from the individual units. He showed a slide of Unit 12 with a bit of a different flavor with a softer rounding of some of the archway openings, and bringing some details in to some units reminiscent of architecture that would not be considered modern, but classic lodge such as something found in Vail, Colorado. He said they want to bring these designs before the Commission to help have an appreciation for the hard work the architects and designers have done, and the commitment that the ownership group at Homestead Partners has to this project. They have sought to have a low-density environment, huge acreage, a long sweeping driveway sense of arrival, and a very private, secure, comfortable, safe destination for clients.

- Mr. Houge said it was really important to put a three-story building on this site for reasons of making sure they could get the economies necessary. NOC is looking for a high-value type building which by definition means it has to be both high-quality and affordable, and by going to the third level it improved upon the cost effectiveness of the design relative to vertical circulation. Another unique thing about building a condominium is the need to do something better than one would find in an apartment; for instance, ceiling heights. In apartments where the bottom line is keeping the costs as low as possible, one can get by with lower ceiling heights. However, NOC envisioned this project as being something very enduring, something where residents coming out of their home in North Oaks would want something of similar quality to what they are used to, and by definition that requires higher ceilings, in particular in common areas. He noted that was part of the challenge in coming up with the building design.
- Commissioner Cremons said as a matter of procedure, the Commission has a PDA and a zoning code. They do not have the authority to change either one on their own and asked if that is correct. Their job is to make sure a project meets the requirements so they can approve it and it can go forward. He noted this building looks beautiful, and if the PDA clearly says 35 feet he does not see how they can go forward with a 43 foot building as it is a deviation from the PDA without any amendment or any other permission. There is a similar issue with the density, as it still looks like this site cannot accommodate 74 units and meet the .25 acre requirement of the zoning code. He said those are his only two elements in this, but in looking at them, he does not see this project complying with the PDA or the zoning code and would like the Commission to comment on what they should do.
- Commissioner Sayer said the PDA trumps the zoning code so if they differ in what they say, the PDA trumps that. His initial question was if there was an interpretation issue in the PDA and it seems that perhaps there is. The NOC says one thing and Staff thinks another. One thing the Commission could do is say to the Council that they are the final say, the contract party, the NOC is the contract party, the City is the contract party. So the City Council should interpret it and if they interpret it as 35 feet, then it is non-compliant; if the City Council says it is 47 feet they are the other party to the contract. He said that works only if

there is a clear interpretation issue, otherwise they are asking the Council to amend the PDA and there is a process to be followed in order to do that.

- Chair Azman thinks they should get into these questions and they are pretty significant. However, he does not want to forget the public hearing portion of this. He wonders if there are any easier questions before the public hearing portion and then they can address some of the heavier topics thereafter.
- Tom Wasserman said typically they see Planning Commission make recommendations to the City Council based on the proposed changes to zoning and planning, so he thinks they are within their rights if they like what the team has done, they have the opportunity to vocalize support for the project even if there is a variation in height. The opinions of this group matter to the City Council in terms of their final decision making process.
- Commissioner Sandell asked if the 45 feet and the grade at the bottom starts at the floor of the garage or the floor or the lower level of the residential units.
- Mr. Kirmis noted there is a reference “as measured from the elevation” and that is the lower level of the residential units. He said they do not consider this a walkout residential project.
- Commissioner Sandell asked why it wouldn’t be considered a walkout if the developer/builder just demonstrated that the people on the main level will have walkout access.
- Mr. Houge said what may not be clear until studying the drawing very carefully, is that the grade is at the same level on all four sides of the building. What was alluded to earlier is if one is on the first floor of the unit, they are able to walk out onto the lawn and it is depressed only where they must lower the grade to get into the garage. Mr. Houge’s understanding of measuring is if one is standing at the front door walking into the building, that adjoining grade or lawn is where one would measure to the roof.
- Mr. Kirmis agreed.
- Mr. Wasserman said that elevation is maintained around the entire building except for the ramp to the garage.

**MOTION by Hauge, seconded by Yoshimura-Rank to open the public hearing on Island Field. Motion carried unanimously by roll-call.**

Chair Azman opened the public hearing at 7:06 p.m.

Chair Azman asked if anyone wanted to speak regarding Island Field Site H. There were no attendees online or in-person who chose to speak. He asked if North Oaks Home Owners’ Association (NOHOA) submitted a letter.

**MOTION by Yoshimura-Rank, seconded by Sayer to close the public hearing on Island Field. Motion carried unanimously by roll-call.**

Chair Azman closed the public hearing at 7:10 p.m.



**b. Discussion/Action: Preliminary Plan/Preliminary Plat (Subdivision) Application - Island Field**

- Commissioner Cremons noted Commissioner Sayer raised some good points, one of which was the PDA trumping the zoning code. He asked Staff if there is anything in the PDA that eliminates the .25 gross acre density requirement in the zoning code or is that still something they need to face on this property.
- Mr. Kirmis said in his opinion establishing the number of dwelling units allowed on a particular site establishes the maximum density with that determination. Basically, the number of acres or square footage of a property divided by dwelling units, whatever that result is, is the density requirement. That is established by the PDA and he does not think the intent is to go back and alter the number of allowed units.
- Commissioner Cremons said by that logic, the .25 acres is irrelevant, because it is mentioned in the report.
- Mr. Kirmis noted it is, and the reason is to bring it to the Planning Commission's attention that the requirement does exist in the RCM district. If there was no PUD applied to a project and this was just developed without any sort of previous PDA that specified dwelling units, that development project would have to adhere to that .25 acre requirement. In this case, the number of units per site has already been determined.
- Attorney Nason said the question is, does anything in the PDA explicitly alter that density requirement for the development site. There is nothing that says instead of .25 acres they could have .15 or .10 or .20 acres per dwelling unit. The logical exercise to reach the conclusion that the density would be permitted is to say the PDA establishes a certain number of dwelling units per site and it has been interpreted by the Council that the number of dwelling units allowed on that site are 74. That calculation is reached by taking 35 (the number of dwelling units allowed on the site), multiplying it by the permitted density bonus/density increase amount, and adding into that the commercial acreage conversion dwelling units. Therefore, the developer has indicated that they want to take their remaining commercial acreage and convert it to dwelling units. The logic that is employed is to get to the point where they can have 74 dwelling units on site, which essentially modifies the gross density requirement, is to say that because the site supports 74 dwelling units (if that is how the Council interprets that contract), then that implicitly allows the density of 74 dwelling units on that site.
- Commissioner Cremons said it sounds like the density issue is off the table, and they are all satisfied that 74 units on this site is permitted by the PDA as ratified by the Council. That brings them back to the height issue.
- Chair Azman is not convinced that is necessarily the end of the discussion. He understands that there are dwelling units permitted and there is a resolution by the Council, but he thinks they must harmonize the dwelling unit resolution with the other portions of the PDA and the zoning ordinance in order to figure out what is permitted here and what is not. He is not personally convinced that one trumps the other, but that they need to be harmonized. It does not say NOC automatically gets 74 despite whatever else is there; it simply says here is the maximum number that can be permitted. As he reads the PDA there are a number of other

provisions that might apply or come into play. He noted he did all the calculations to try and figure out what would be permissible if they harmonize the 74 units with the density.

- Commissioner Cremons put it in to context and said it is the difference between 74 units and 62-64 units based on the areas given for the site and the wetland areas. He clarified it is 10-12 units.
- Chair Azman asked if they analyze it using parcel 1 and parcel 2 or using the combined parcels. To him, that is where the 62-64 difference came out.
- Commissioner Cremons asked if the Planning Commission talks about this at length and tries to make an analysis, will it make any difference if the Council has already said there are going to be 74 units on the site. He noted they all have things to do with their time and he is perfectly willing to deliberate over it if it can make a difference, but if the outcome is ordained that it is 74 no matter what, then they do not need to spend a lot of time on it. One issue about this site from the very beginning has been density; the moving commercial rights onto this site, adding the 30% gross up-factor. This site has always been a very dense development – a beautiful building, but a dense development. It is well beyond what was contemplated when the PDA and zoning were contemplating what was going to happen on Centerville in this area. Again, it may not make any difference.
- Commissioner Hara said they talked about that conversion factor a couple of meetings ago. The language says “full acres” and that is a partial acre, which is 3 units and does not get them to the right density. He asked when did it go from a discussion at the Planning Commission to the Council approving it, as they never really concluded that discussion in a Planning Commission meeting.
- Chair Azman said as a practical matter, once the City Council makes a decision, the Planning Commission does not have an opportunity to challenge that. It is a directive from the Council on that particular issue; the Council has decided that 74 units have been permitted. However, he is not convinced in reading some of these other materials that it means one automatically gets that and it trumps the zoning requirements in the zoning ordinance. If he is not mistaken, there may have been some issues in a prior Black Lake submission that had problems with lot size. He does not see anywhere in the PDA that says just because they get their units doesn't mean that they don't have to comply. If there is a conflict among the PUD controls, there is a hierarchy of what items control and what don't, and as he is reading the PDA it seems to suggest that hierarchy occurs after final plan approval, if there is conflict. He said they are not even there yet, so what hierarchy applies if there is a perceived conflict among various documents.
- Attorney Nason said to the extent that something is dealt with or addressed in the PDA, the PDA does trump. The PDA is essentially a zoning contract whereby the City and the North Oaks Company sat down and provided a variety of flexibilities with respect to these different development sites. To answer the question of whether there is a conflict at any point in the interpretation which document controls, it is the PDA.
- Chair Azman asked doesn't the PDA incorporate the zoning ordinance.
- Attorney Nason stated the PDA references the zoning ordinance, yes. Essentially if there is something continued within the PDA that modifies the provisions of the zoning or subdivision ordinance, to the extent that the PDA modifies those provisions, that is what is

applicable to the particular development site. To the extent that the PDA does not modify those particular zoning ordinance requirements, then the underlying zoning ordinance requirements would apply.

- Chair Azman asked if the PDA modifies the area density requirements.
- Attorney Nason said with respect to the Council's interpretation of the PDA, as the governing body for the City, that is the interpretation they have taken regarding adoption of the resolution determining that the site would support 74 dwelling units. It is an interpretation that says that is what is allowed under the terms of the PDA. By saying the site supports 74 dwelling units, the Council is reading the PDA as having those dwelling units be permitted on the site and allowed, and aggregating any underlying density requirements that would otherwise preclude that type of development density on the site. That is the interpretation the Council is taking of the PDA.
- Chair Azman does not want to quibble too much, but the resolution discusses the calculations the Council went through and the resolution finally as adopted says, "that Island Field may be developed with 74 dwelling units based on the following calculation." He does not want to nitpick but is still not convinced that the resolution (which is not an agreement) decided NOC automatically gets 74 units. He noted he is not trying to rob the NOC of any of their units, but the PDA is what it is and it is presented to the Planning Commission and he still has concerns that there needs to be the ability to harmonize, as this can't be the first time something has arisen and they have harmonized things in the past.
- Commissioner Sandell said if they are looking for differing opinions, he actually differs, as he listens to that and the way Attorney Nason explained it with the PDA being an agreement, that could have a whole host of different exceptions to any one of these ordinances; explicitly agreeing that this unit count is going to be acceptable at that spot. If the Planning Commission were to do that with an asterisk, the way Chair Azman was reading that resolution, it would say "would allow 74 units" but also need to be in compliance with all of these various ordinances for Commissioner Sandell to think that the 74 units is not allowed. He reads it that the 74 number was an agreement between the City and the NOC and that would trump any type of particular ordinance related to that.
- Chair Azman said paragraph 2 of the resolution also specifically states that it outlines "the Council's current understanding and interpretation of the language of the PDA as the date of the resolution." He noted it does not grant any development related approvals, such approvals may only be granted as part of a formal development application process. He is having some trouble being convinced.
- Mr. Houge asked to add some perspective from the NOC's viewpoint. They are talking about a relatively small difference depending on whether they look at parcel 1 or parcel 2 being a comparison of .23 acres per unit versus .25 and it is a little larger when looking at parcel 2. However, he would still argue it is not hugely significant and in the range of 10-20%. He thinks it would be good for the Planning Commission to consider the fact that oftentimes these projects get built on sites that are roughly 3 acres for a building this size. In other words, a 60,000 square footprint building and most of them are built on sites that are just slightly larger than the footprint of the building. What they have here is 22 acres and what is confusing when looking at the floor area ratio is the fact that it is a 3-story building

really diminishes the density and impact on the site. He noted a 60,000 square footprint on 22 acres is roughly 15% the size of the building and he asked people to consider that as they are looking at it, as NOC did that purposefully as there are economies in building a 2-story versus a 3-story. It also lends itself to preserving the natural environment when there is a smaller building footprint. Mr. Houge submits that this is a very low-density development.

- Commissioner Sayer asked Mr. Houge what is the average price point per unit.
- Mr. Houge asked Mr. Schoenwetter to speak to that.
- Mr. Schoenwetter said they would be able to speak to that if they knew what they were building, as cost has something to do with value and the economy of scale as proposed. They would have some units in the \$500,000-\$600,000 range, and other units that may be somewhat more money. The investment opportunity for certain residents to combine two units and perhaps invest slightly more than \$1,000,000 would also exist if someone was looking for square footage more in keeping with the home they were perhaps currently living in. The market says that most of these homes will be a move down in square footage for the residents and perhaps this will not be their only home; there may be a home in a warmer climate for a portion of the year as well.
- Commissioner Sayer responded if the price point on the low end is \$500,000, 12 units is \$6,000,000. He noted that is what they are talking about taking off the NOC. He thinks they need to approach this with caution and if they want the Council to have a further interpretation on the number of units permitted – and he thinks that is how they get to the density modification from what is required under the zoning – is that Council spoke and said 74 units can go on this site. Anything that might not harmonize with that anywhere else, again, Council spoke in its interpretation and again, it is \$6,000,000. He noted they just heard earlier how the NOC was so accommodating to some of the North Oaks citizens in moving things around and getting lights out of people’s windows and they are talking about a small little postage stamp in this 12 acre site to preserve as much of the natural as they can. They are also talking about having a recreational area in some of the vacant area and he would like to encourage the Company to be generous, because they have been generous; NOC can continue to do so as long as “we are generous with them.” In any event, he thinks the Council has spoken on the 74 unit issue.
- Commissioner Yoshimura-Rank noted she thinks the Council has said up to 74 units. She does not think that is in stone and she thinks it is the Planning Commission’s duties to interpret the roles that are before them.
- Commissioner Hauge agrees with Commissioner Yoshimura-Rank, but what he hears is that Chair Azman is arguing with the City Attorney about the interpretation here. He also hears Commissioner Cremons say the density isn’t really an issue, and he hears Commissioner Sayer say that the density issue has been dealt with by the City Council. He asked Chair Azman why is feeling uncomfortable and asked for clarification so Commissioner Hauge can understand where they are going with this.
- Chair Azman said ultimately they will have to come to a vote but there are still more issues to work with. He does not know that he is necessarily arguing with Attorney Nason, but he is not convinced that interpretation is correct. He thinks the resolution provides a calculation for that particular site and there can be up to 74 dwelling units and it still needs to go through

the application process. The PDA says the maximum density for each site shall be in accord with the PDA and the development guidelines. Overall density, density transfers, use conversions shall be determined by the PDA and the development guidelines. He certainly understands there is a dollar figure here, but the Applicant and the City signed off on an agreement and that is what controls. They did not sign off on 85 units or 100 units, they signed off on something that says what it says. When the Applicant comes to the City or the Planning Commission, it is his duty to look at it and make a decision based on what the documents tell him.

- Commissioner Sandell said the exception here is to the City's zoning ordinance and not the PDA and asked if that is correct. He said if they were to grant an exception, it would not be an exception to the PDA, rather it would be to the City's zoning ordinance. He still stands by what he said - 74 units is what the City said and agreed to – but if the Commission moves forward with it, they are not moving forward with an exception to the PDA, they would be potentially recommending an exception to the zoning ordinance and asked if that is correct.
- Chair Azman thinks what Attorney Nason is saying is that the PDA controls and the resolution is an expression of the City's belief as to what the PDA says and so there is no real exception needed.
- Commissioner Sandell said even from a very conservative perspective, he agrees there is not an exception to the PDA, but if they wanted to continue that conversation, they'd still be talking about an exception to the zoning ordinance and not to the PDA. That is another path they could take to get to resolution: to consider an exception to the zoning ordinance for this.
- Commissioner Cremons thinks the PDA automatically supersedes the zoning ordinance when there is a conflict. When they signed the PDA, in essence they did just what Commissioner Sandell is talking about. He doesn't think they need to go back and change the zoning code to address this. Commissioner Cremons also noted he has an issue with density, but the question is whether it is going to make any difference. It does bother him that this issue that was before the Planning Commission in the fall was taken away by the Council so they could make a decision when the Commission was in the middle of deliberating over the issue of counts. The Council just said they "were not going to bother with that, we've decided it, it's done." Commissioner Cremons does not disagree with Attorney Nason's analysis and he does not think the Commission has the ability to deprive them of the right to develop 74 units, but he still has a problem with the density issue even though it does not translate to what he sees as a legal remedy for them.
- Attorney Nason said with respect to what the resolution says and unfortunately it is not before the Planning Commission, and she does not know if the Commissioners have had time to review it. The resolution was just an expression of the Council's interpretation and understanding with respect to dwelling unit counts at the time. That is all that resolution is period. With respect to the density and the question of what the density is allowed on site, there are three different approaches that the Council will have to take when interpreting the PDA. The first approach is to say that based on the language of the PDA as articulated previously, it is deemed that 74 dwelling units may be developed on the site and therefore, that inherently aggregates or modifies any density limitations to the contrary. A second interpretation is not withstanding the fact that the developer has the right to construct up to

74 units, there is nothing by way of that right that aggregates the other requirements of the PDA with respect to density and therefore the development is limited to the density that can be sustained on the site based on the calculations found in the zoning ordinances as to gross density. The third approach is that there could be some ambiguity and maybe the Council thinks it is best to develop the site as presented by developer and they want to accommodate that and therefore will propose an amendment to the PDA that specifically addresses this exact concern to clarify what the density allowed on the site it. To the extent that a 74 dwelling unit condo building would exceed any currently permitted density that can be changed, as can the height issues. If the Council and the Planning Commission support the project as the project is proposed and wants to avoid any ambiguity and clarify position, one way to do that is to amend the PDA to specifically articulate and clarify those positions.

- Commissioner Hara commented the height issue has been an issue with residents building homes in North Oaks for quite a few years and to his knowledge, it has never deviated from the 35 foot height. He asked what position they put themselves in if the Planning Commission decides this will be okay for the developer but the next homeowner that comes and wants to exceed 35 feet, how can they approve one and not the other.
- Mr. Houge gave some historical perspective that there are some homes in Rapp Farms that are over 35 feet. There was a period of time within the City that it was interpreted to be the midpoint between the low and the high edges of the roof. He wants to clarify that there are homes in North Oaks that are taller than 35 feet.
- Commissioner Hara said they have cleaned up the interpretation so it is pretty clear on what the measurement of starting and stopping point are.
- Mr. Houge knows there were some changes that occurred and he does not know all the history behind it.
- Mr. Schoenwetter said they took a real hard look at the site and they could design to a standard from the front door up three levels and that could be 30-35 feet; their design evolved around what looks right and what is the approachability from both a brand and a flavor for the community. They are not after excessive height from an entitlement standpoint – they are after doing the right project and they are convinced that a three-story building is right for many reasons, including the efficiency of the construction. Another very important reason is it that is less sprawl, less hardcover, and therefore less impact on the site. Then they need to put a roof on the building and in their opinion, it would just be wrong to put a flat roof on the building and they do not think that would be appetizing at all. From integrity of design standpoint, what the Planning Commission has before them is driven by trying to do the right thing for the site. It is nice that it happens to fit into the box, but it also is very honorable that it be the right thing.
- Commissioner Hara would counter that, while the argument is well stated, every architect for every person that wants to build a house above 35 feet would have the same arguments that it fits the house and what they are trying to achieve with high ceiling heights. The challenge here is how they approve this for the developer yet still hold fast on the 35 foot limit. He noted there are some homes in Rapp Farm that are above 35 feet but two years ago they cleared that up so there is no ambiguity about where to measure from and to. He agrees with the design, he likes the way it looks and they are not able to get the same look and high

ceilings by taking 8 feet off of it, but the bigger question is how do they deal with that with the whole community's interests in the future for other homes such as Red Forest Way.

- Mr. Wasserman said one way to look at it is a commercially zoned property versus a residentially zoned property. One can make the argument very clearly, and it has been made in other communities, that there are rules that apply to residential design and development, and a second set of rules that apply to the commercial development. In some other communities the height is set at the midpoint of the slope rather than the top of the slope, so that is not inconsistent in other locations. He is aware that has been differently defined here and he thinks that was part of the discussion before he got here is understanding why the building is the height it is and why it works as well as it does. He noted they were looking at a footprint that is economical and does not over-cover this piece of property, as it is a beautiful piece of property and it made sense to look at how to sight the building so they are actually improving the site. How do they "be a good neighbor," how does it work visually, from a density standpoint, and also the design patterns. He noted people like to look at buildings with multiple roof heights, and this building does that; it accomplishes that in the middle which is basically a one-story chalet and that portion is lower than the 35 feet and there are the two wings comprising the residential units that are 35 feet to be even and have varying slope roofs above that. The rooflines add aesthetic to the project that makes it desirable to the people in the neighborhood that want to relocate. He noted Mr. Schoenwetter is amazing at understanding his client here, he has built homes for these folks, and he gets what they want when they are looking to simplify their lives with a nice condominium here and perhaps another in a different state. They are not trying to force height just to force height but because they are dealing with a condominium product, they need to be able to go to a 10 foot or possibly even 12 foot ceiling in the third floor vaults and that is what people are looking for at this level in the marketplace. They cannot do an 8.5 or 9 foot ceiling like Waverly Gardens, as that is a typical apartment height and is not what people are looking for in ownership units. Those are basically the fundamentals of how they get to height for a building like this.
- Attorney Nason said regarding the height issue, within the East Oaks PDA development area, there are 15 development sites; 5 sites are zone RCM, which is what the Island Field site is zone. Those sites are E1, E2, and E3, as well as G, and H. Sites E1, E2, and E3, in looking at Appendix 1 to the PDA, have specific language that allows a 47 foot high building. Site G and H do not have similar language, and therefore the height restriction that applies is that 35 foot maximum. With respect to the Rapp Farms development, there are 2 sites within the East Oaks development area: site D and site F that are zoned RMM. Attorney Nason clarified Rapp Farms is not zoned the same as Island Field. In the RMM zoning district, the height limitation is the same as that found in the RSL which is 35 feet. With respect to site D, there is a provision in Appendix 1 that allows for height of up to 47 feet. As to the question of what the height limitations apply to the Red Forest Way development, the answer is that of the RSL zoning district, or 35 feet. With respect to the question of what should the building height be versus what can the building height be; what can the building height be is controlled by what is articulated and written in the PDA. Whatever the logic was behind not having higher building heights on this particular development site predates Attorney Nason's

experience working with the City. However, it is what is written in the PDA and if Planning Commission should think it is a good design, they could recommend that the Council approve the proposed building with the higher height, but that approval would have to include (based on Attorney Nason's interpretation of the PDA) an amendment to the PDA with respect to that height maximum for this development site.

- Commissioner Sayer does not have the documentation in front of him, and asked regarding site G and site H of the RCM, is it silent as to height, or does it expressly say 35 feet.
- Attorney Nason said Table 1 has some specific requirements. G and H do not have any specific height exemptions, they are both zoned RCM. She noted on page 4 of 11 has maximum building height requirements and that is where it says specifically "maximum building heights in the RCM and RMM PUD zoning districts principal and attached accessory buildings, 35 feet; or for lots suited for walkout homes, 45 feet at the back and on the sides measured from the lowest finished grade established by the City-approved grading plan and otherwise measured consistent with the zoning ordinance. Except that multi-story and multi-family dwellings are allowed as further provided in section 5." Attorney Nason said if they were to step outside of the PDA and just look at the City's zoning ordinance, and were talking about a development that was occurring within the City of North Oaks but outside of the East Oaks development area, they would then be looking at the City's zoning ordinance, which says the RMM maximum height for a building essentially follows back to the RSL height maximum which is 35 feet.
- Commissioner Hauge clarified what Attorney Nason is saying is that it is very clear that the height of the building should not exceed 35 feet and asked if that is correct.
- Attorney Nason replied that is correct.
- Commissioner Hauge said it seems like the height of the building is the bigger issue of the two they have discussed. The density, while Chair Azman is concerned, it is fairly clear that the City Council has taken a decision on 74 units, and Commissioner Hauge thinks that is right. The height issue seems to be a bigger problem. In order to change the height issues, it must be done by the City Council and asked if that is correct.
- Attorney Nason replied that is correct.
- Commissioner Hauge said the Planning Commission could decline this application and asked what would happen at that point, would it go to the City Council with that recommendation, but the City Council could still make a decision despite what has been suggested and asked if that is correct.
- Chair Azman replied that is correct.
- Commissioner Hauge said whether they accept or decline it goes to the City Council and they will make a decision.
- Administrator Kress answered that is correct.
- Commissioner Hauge noted they are taking a beautiful construction, which he thinks looks magnificent, and making a flat roof solution instead. He said this could be fine, he is for contemporary solutions to the architecture, but it certainly will be a totally different building than what they are seeing on the drawing and a different atmosphere. Again, the decision is really up to the City Council, not with the Planning Commission.



- Commissioner Cremons said they could recommend that it is approved subject to an amendment of the PDA to clarify the density issue and to increase the height so that the PDA and the building will mesh.
- Commissioner Hauge said that sounds like a very smart solution and he likes that approach. It is a very serious decision to decline this concept based on these two issues, and perhaps only one of them.
- Commissioner Cremons said the PDA has proven so important and controversial over the last couple of years, that anything done that is directly contradictory to the PDA just opens a huge can of worms.
- Commissioner Hauge does not disagree with that and thinks Commissioner Cremons is right; however, at the end of the day it goes to someone else to decide. Basically the Planning Commission is deciding on the architecture because there will be three stories, 74 units, and it will be this construction or a more flat roof, modern construction.
- Commissioner Cremons noted they all want the best possible project for the City and they want a project where the units will be desirable; the PDA should not design the building, but the Planning Commission cannot ignore the PDA. He thinks they need to tweak the PDA as to this one site and this one issue, perhaps including the density, also. Then the respect for the PDA is clear.
- Commissioner Hauge understands and does not disagree. He said for example, if someone goes forward with a motion to deny this application and it goes out of their hands, it goes to the City Council for a decision. That is one road on the height issue.
- Commissioner Yoshimura-Rank thinks the PDA has served the Commission well and they have used it as a guiding light for all the other subdivisions. She is kind of amazed that all of a sudden they think they can throw it out the window.
- Commissioner Sandell does not think anyone is saying to throw it out the window, but sometimes he does not know that the Planning Commission focuses on the spirit of what is being proposed. Throwing out another hypothetical situation, the floor area ratio seems like it is well within their zones right now. If the Commission denies this to say they do not want the extra 8 feet, the NOC has the opportunity to sprawl this out across two levels and now it covers a much larger footprint of the entire land. He noted that is not what they want either, and that is not the spirit of what they are trying to do. However, NOC is well within their rights to do that and he is not sure if they would, if it is economically attractive or if there is demand for that. Ultimately, the Planning Commission made a decision on the variance to this height rule that really did not negatively impact a lot of the things they value. Then it opens the door to potentially things that they do value more; potentially NOC would be grading larger portions of natural or preserve land. The conversation they are having is warranted and he does not think it is throwing out the PDA, but is also looking at the realities and some of the spirit behind this; potentially throwing out a recommendation for approval with a contingency that there is an amendment is another way to handle what Commissioner Hauge just said but from an opposite perspective.
- Commissioner Sayer noted that is exactly what he is worried about, also; that the NOC would come back to the Commission with a product that has a flat roof, that is sprawled out, for all they know it will be low-income tax credit units. What is before the Commission is

something that maybe fits within the PDA and maybe it does not; He is beginning to be persuaded that it does not currently. However, it is a product and if people know the Hill family, they are trying to recreate their ski lodge and in doing so, are perpetuating their legacy and doing all of this down by Centerville. He noted they did not hear anyone from the community come in and complain about it tonight, and it is absolutely beautiful. He thinks they should move forward with this, send it to the Council, and let them know they may want to take a closer look at the density piece and also look into their interpretation. In looking at the agreement, he does not know why they specified a building height with the other two RCM pieces, but not these two. It seems like an omission, but it is there. He said the City Council can look at that and decide.

- Commissioner Yoshimura-Rank said historically, this site was zoned for 35 units and then they went to 48 units and now are at 74 units; now they are going from 35 feet to 45-47 feet. She said it has kind of taken on a life of its own.
- Mr. Houge asked to add some observations. He noted it is unfortunate that there is this confusion created by the PDA and in several cases where there are sites subject to the RCM-PUD zoning, it expressly states 47 feet, and at the same time, this site is the same zoning classification RCM-PUD and for some reason that same statement was not written in the PDA. He thinks it is important that if the Planning Commission likes the design of this building, they make a recommendation for approval and leave it to the City Council to determine how to resolve the inconsistency of the language of the PDA as it appears that does need to happen either in the form of a resolution or an amendment. He thinks there is a risk if the Commission were to suggest that it be denied or not make a recommendation, the Council may be confused as to what the Commission's preferences are on the design of the building. He recommends that the Commission approve with the condition that the Council resolve this issue on the building height.
- Chair Azman said it is not that they do not like the building, but rather their charge is to make a determination and recommendation to the City Council as to whether the application fits within the PDA and either it does or it does not. With the height and the lot area, strictly speaking it does not in Chair Azman's opinion. He noted it is important for the building to look good; however, if a plan is presented that is not consistent with the documents, that is really the Applicant's issue, not the City's issue. While it may feel good, the parties negotiated the agreement a long time ago and for whatever reason they put in 47 and they didn't put in 35 and it wasn't an accident. He thinks they are very close on the lot area and it does not bother him that much. Technically, in his opinion it is in consistent, the height is a problem, and what does the Commission do. Chair Azman noted they are supposed to be doing the legwork of the Council and he does not think it is appropriate to say the Council "will do whatever, so what difference does it make what the Planning Commission does." The Commission is supposed to figure it out and make those determinations as to whether or not this complies or fits. This is something the parties agreed to 20 years ago and updated 10 years ago. It is important for the Planning Commission to make a decision as to what they think is in the best interest of the City based on the PDA agreed upon. If there is a way to put something like that in the conditions, perhaps that is the way to do it, and then send it up to the Council with comments. If there is a vote for denial, they must be very specific as to why

the recommendation is a denial. He stressed that while they think the building looks good and the NOC has put in the time and the effort to create a drawing and high-quality building, it still has to fit within the PDA and that means something. He is struggling with this one, but the document says what it says.

- Mr. Wasserman asked if it is within the Planning Commission's purview to recommend variances based on their review of the project overall and weigh in on the pieces that are appreciated for this project, for example, the smaller footprint, the elegance of the building, etcetera. If they move to approve it with conditions and the City Council looks at a variance to the PDA, that sends a positive message about the things the Commission likes about the project rather than just being totally stuck on the passage within the PDA that they feel limits their approval.
- Chair Azman noted their charge is to make recommendations on the application in light of the PDA that the parties agreed to. One always feels a struggle when a very beautiful project is put before them and asks how they could deny it; the reason is that it does not meet the qualifications in the PDA. If they bring something that is beautiful and meets the PDA they are happy to make a recommendation up to the Council. In the past they have put restrictions in there that deal with some of these issues. He does not think they can lose the fact of their charge as Planning Commissioners and what the Council expects them to do. He agreed with Commissioner Sayer that nobody came and objected to this project and he was frankly very surprised. He noted there was a letter from NOHOA and he would like to make sure it goes in to the record. Commissioner Yoshimura-Rank is also right – they originally started at 35 units and now they are more than double that number.
- Administrator Kress said Kristi Elfering, the NOHOA Engineer has her hand up.
- Commissioner Sayer said part of what has happened in the conversion from commercial to residential and there is an agreement where the Council tried to interpret the density piece. He noted they can send it to them again and ask if this is what they meant. On the height piece, it seems that it was an omission as it was called out everywhere else but not here.

**MOTION by Sayer to approve this application subject to conditions that Staff has recommended and subject to the City Council revisiting their interpretation of the number of units to clarify what was meant by their resolution, and also resolving the height issue.**

- Commissioner Cremons asked what the process is for amendment of the PDA, noting he thinks there would be a public hearing. He thinks people will love it and he has no doubt that the 47 foot height variation for this site would be approved, but he thinks there is a procedure set out in the PDA that the Commission cannot ignore.
- Attorney Nason said it depends on whether or not it is a minor or major amendment. There is a process spelled out within the PDA; a minor amendment requires a majority vote of the Council to approve, and it states within the PDA that it is up to the Council as to whether or not there is required to be a public hearing before amendment. Attorney Nason's recommendation is, if there are changes to a zoning component of the PDA (of which height and density would be), to have the potential amendment sent to the Planning Commission for

comment, review, and a public hearing prior to consideration by the Council. That process is not spelled out as explicitly in the PDA.

- Commissioner Cremons thinks they are talking about minor changes here, so with a minor change, he asked if the Council just vote on it or is there still the requirement of a public hearing.
- Attorney Nason said the way the PDA is written, a major amendment is defined as one that increases density within the development area by more than 10%; that is the only amendment that would require a super-majority vote of the Council. All other amendments are considered minor. The language in the PDA simply says, “The Council shall determine if a public hearing is required.” Attorney Nason recommends that this be treated as a zoning ordinance amendment, meaning it would go to Planning Commission for a public hearing, consideration, and recommendation before it goes to Council. Again, the process in the PDA does not provide that much detail with respect to minor amendments.
- Commissioner Cremons said to be clear they are not looking to delay Mr. Houge’s project, or to redesign the project; he does not think anyone in the meeting opposes what they have seen tonight. It is just the question of procedure. Commissioner Cremons said to seek the amendment on the most expedited process possible under the PDA with a statement of the Planning Commission’s support for the project and see if they can get it done pretty quickly and without a lot of damage. He said it would be limited only to site H.
- Commissioner Sayer noted that based on what he just heard, it sounds like the Council could decide it as a minor issue. The question to the Council would be if they have already decided on the zoning interpretation in the other resolution. If the answer to that is no, it sounds like there is more of a public process required as that would now be a major amendment.
- Commissioner Cremons said the way Attorney Nason described the resolution from the Council, they really haven’t decided that issue yet, either. They have basically said what they think but have not taken a definitive decision on that point. The 74 units should be clarified but it does not sound like that necessarily makes the height and density issue on this site automatically into a major issue that would trigger a hugely complicated process.
- Attorney Nason shared her screen with the language regarding minor and major amendments to the PDA. It read “a major amendment is one that changes the permitted land use within the subject property and increases the total number of permitted housing units within the development – the entire project – by more than 10%, and all other amendments are minor amendments.”
- Commissioner Sayer said the motion would be to approve the application subject to all Staff’s recommendations and for the Council to consider amending the PDA as needed to accommodate the density and height.
- Commissioner Cremons would leave out the “as needed” because even though the Planning Commission is an advisory role, Staff has determined that it is needed.
- Commissioner Sayer is okay with that.

**AMENDED MOTION** by Sayer, seconded by Hauge, to approve the application subject to all Staff’s recommendations and for the Council to consider amending the Planned Development Agreement (PDA) to accommodate the density and height.

- Mr. Houge asked if Mr. Schoenwetter could make one last comment before the vote.
- Mr. Schoenwetter thanked the Commission and said the deliberation has been wonderful. He is enthused to hear the warm reception to the project and he knows the architects are very proud of those comments. From his standpoint, he is hopeful the Planning Commission will give specific direction to the design team in the sense that the developer/architects believe there are 74 units and that the height of the structure complies; the challenge is the question. Do they like a pitched roof so the design is that of a lodge, or do they prefer a flat roof which would be a different flavor and not as preferable in his mind; however their architects have been successful with many apartment projects with flat roofs. They did not ask for that initially but a vote for the project as presented suggests to him that the Commissioners prefer a pitched roof; a vote against the project would suggest that in order to comply, they should start investing time, energy, and money in a flat roof. As one of the Applicants tonight, he would like to leave the meeting with an understanding as to whether there is a preference for a lodge or a traditional apartment.
- Chair Azman said they do not get into too much architectural design. The issue for the Commission is whether the design submitted complies with the PDA. He believes it was said earlier that everyone likes the design, but are stuck in the spot where the PDA says 35 feet pretty clearly and undeniably so. He said it puts the Commission in a tough spot as it is a beautiful building but it is not compliant.
- Commissioner Sayer clarified they want to keep the quality with a pitched roof, and it is in the best interest of North Oaks to have a really nice looking structure there.
- Commissioner Hauge is not an architect but was told once by an architect that the design of the roof really gives the concept of the architecture.
- Commissioner Cremons said he thinks they make the PDA fit the design that everyone likes, so if they need 45 or 47 feet they should be clear on that so when the PDA amendment process goes forward they give the Applicant what they need. He thinks the roof looks great as designed and the PDA needs to reflect the ability to build that roof.
- Chair Azman feels like it would not have mattered what was submitted, the same arguments would have been presented that it fits, or it is compliant, or it should be approved. He does not think that is the way it should operate.
- Commissioner Sandell said to that point, he knows it has been thrown around that the height is 47 feet, but he believes it is 43 feet. Part of this is that it is a reasonable difference; it is not a 75 foot proposal and he thinks that comes into play.
- Chair Azman asked if the Applicant proposes a sub-association.
- Administrator Kress answered in the affirmative.

**Amended motion** carried by roll call vote as Commissioners Sayer, Sandell, Hauge, and Cremons voted for. Commissioners Yoshimura-Rank, Hara, and Azman voted against.

**c. Discussion/Action: Preliminary Plan/Preliminary Plat (Subdivision) Application - Red Forest Way South**

- Chair Azman noted they have already had the public hearing and previously decided to close the public hearing, adjourn, and do some further investigation. He said a number of the Commissioners, if not all, were able to go out for a site visit for Red Forest Way to take a look at road configurations, trees, and other issues. He pointed out that neighbors who met with North Oaks Company have submitted a document outlining general understanding of what the Company has agreed to do and they also spoke during the public comment portion of the meeting. Consultants prepared a supplemental report and Chair Azman asked that to be presented.
- City Planner Kirmis said as a follow-up to the November 10, 2020 meeting, the NOC has provided some additional information related to the application. Specifically, a new plan set has been received which responds to some of the primary issues which were raised at the November meeting: the proposed street access location to Catbird Lane, a question about the boundaries of the Ordinary High Water Level (OHWL) of Black Lake, and the boundaries of the Shoreland Management Overlay District which is measured 1,000 feet from that OHWL of Black Lake. He asked Mr. Houge to walk through the response to those issues as part of the revised materials that have been received.
- Mr. Houge stated NOC was happy to accommodate tours and to work with neighbors and members of the Planning Commission. They were able to look at the proposed location in the field after the surveyor staked that location and determined the road could be moved further south, approximately 100 feet. NOC will work with neighbors to place some trees strategically upon their property as they wish and will also look at doing some additional screening on the property on the east side of the road which is part of the development. NOC identified the OHWL setback on all the documents and believe they can accommodate the requests of both neighbors and Staff to make the current design work as requested.
- Commissioner Cremons noted the NOC's presentation describing the barrier of trees and what Mr. Dybsky had indicated – about 20 trees or a number that was significantly higher than what he thought the NOC was proposing. He wants to be sure there is an understanding between the Company and the neighbors as to how that will work and be implemented.
- Mr. Houge answered the NOC had their engineer draw something that depicts 8 trees on the west side of Catbird Lane, which was prior to the last conversation with the neighbors across the street. He noted the neighbors had some additional ideas and NOC is comfortable with that and agreed to what they presented in the letter to the Planning Commission.
- Commissioner Cremons asked based on past history, how will everyone know that it has been done in accordance with that agreement.
- Mr. Houge noted some emails confirming the understanding as well as the letter that Mr. Dybsky presented to the Planning Commission. He suggests having that in the file but will defer to Attorney Nason or Administrator Kress.
- Administrator Kress noted it is currently item 13 in the resolution. Aside from that, they would be happy to accept any agreement between the Company and the individual party. He cannot say there is anything the City can do beyond that.
- Attorney Nason said to the extent that the developer and the adjacent property owners are in agreement on how to address the screening, it is also something that could be put into the

development contract because the developer is saying they are willing to comply with the condition.

- Commissioner Cremons said it seems like there has been a lot of good faith in resolving that issue and he thinks that is great; he wants to be sure that there will not be a future issue as to what was agreed to at this point. Commissioner Cremons said Mr. Dybsky referred to the road moving 100 feet to the south, and when doing the tours it did not look like it moved that far, although it looked like a really good solution. He asked if it is clear to everyone where the road will be and if it is 100 feet of change.
- Mr. Houge noted he did not take a tape measure out to measure it, but he knows there was some speculation that it was possibly 50 feet that it would be moved. In reality, scaled off the drawing it was more like 100 feet. The impediment is, beyond that there is a hill that rises rapidly going south and everyone is in agreement they does not want to cut into that hill for this road.
- Commissioner Hauge thinks it followed the old farm road. He noted on the drawing where the road is put in, it shows that it comes out in between the two lot lines.
- Chair Azman asked to show page 17 of 36, drawing 2 of 6. He pointed out that not only has NOC agreed to this, but also the two owners are also in agreement with this road relocation and the screening. He likes the idea of having something in the conditions or agreement.
- Commissioner Sandell asked if it has been determined when the screening will go up; would it be when the project starts or when the project is complete.
- Mr. Houge answered NOC would be happy to do the trees when they start the construction process. He said they do not want to put the trees in before the construction because things happen, but the trees on the west side of the road could be put in at the beginning of the project. The trees on the east side will have to be done at the end as there will be so much construction activity and they would not survive, so they will need to be one of the last things to be done.
- Chair Azman is there is a reasonable date restriction they can put in, perhaps a certain amount of time after conclusion of road construction or 6 months after the first lift goes down. Unless people are satisfied that paragraph 13 is sufficient as he does not want to overcomplicate it.
- Administrator Kress said they may want to refer that to the City Forester on the Spring and Fall planning schedule.
- Commissioner Sandell also does not want to overcomplicate it but does want it to be memorialized.
- Mr. Dybsky asked to speak.
- Chair Azman noted this is not part of the public hearing but welcomed Mr. Dybsky.
- Mr. Dybsky said Gary Eagles put together a map with the new road and Mr. Dybsky was told it was 100 feet. The point is that they must move that road at least that distance or he will have headlights in his front window. He was relying on what Mr. Eagles had told him. Secondly, it would seem like they would want to wait until the road was finished before planting so they can see the impact of the traffic and how it will come around that road. To

Mr. Dybsky, on his property and Mr. Guider's property, they can put the trees up after they see where the road ends up. They could do the east of Catbird whenever that makes sense.

- Mr. Houge noted it is very typical in development agreements that there be a clause relative to finishing landscaping and this could be handled the same way. NOC would put up cash escrow in lieu of a bond and they would not get that cash back until they complete that element of the development agreement. He thinks it is wise to wait until construction is done if the neighbors are comfortable with that and they know exactly what they are dealing with. NOC will be obligated to complete the work before receiving their cash escrow fully refunded.
- Chair Azman asked to show page 36 on the screen as he thought it was most helpful to see an aerial of where the road would go. He clarified that this is the understanding between the neighbors and NOC. He said regarding construction access, the Applicant has some updates on that.
- Mr. Houge said there is currently a crossing between Island Field and Red Forest Way and that would be the best place to bring in construction equipment materials for the construction of the road. It was suggested to use the driveway to the Hill Farm and house, but that is not built to a standard that would withstand construction traffic as it is radically less capable than a typical road in North Oaks and would pretty much destroy that driveway. They can use this temporary access road during the construction of the streets; NOC does not know how long it will take to build the homes but within any luck and interested people they can build a number of them early which will make it easier to access some of it from Centerville Road. Most likely it will take five years or longer to build on all those lots; when the homebuilders come in selected by the residents, they will have to come in on the normal City streets for the building of the home.
- Chair Azman asked when the temporary road would go in.
- Mr. Houge noted there is a road there now and it has a culvert that is failing and needs to be repaired. Once it is repaired they will have to get the entrance from Centerville Road across that little section of wetland, so it should time out pretty well that sometime next summer when they are starting Island Field, if it is approved, they would also look at accessing Red Forest Way from the same site.
- Chair Azman asked if the farm road is on the north side of Island Field.
- Mr. Houge replied it moves from the center at Centerville Road and then swings to the north so it ends up leaving the very northwest tip of Island Field and that is where the culvert is.
- Chair Azman asked if that is where all construction access will originate from so they avoid interior access.
- Mr. Houge said as a practical matter, they will need to access some from the west, as well. All the major equipment or import of sand can come from the east, but he cannot say that a truck will not either get lost or need to come in from the west occasionally. However, that can be greatly minimized; he noted they will need to greatly police this as everyone will not be NOC's employees.
- Chair Azman asked Administrator Kress if there is a restriction or condition in the approval for the traffic. He would like some condition that for all reasonable purposes that access road



be used. When things are done, he wants to be very sure that road goes away rather than morphing into some type of access road going into that area as it is only temporary.

- Mr. Houge thinks it is the location of the future trail, which by definition would mean the road would have to go in deference to that trail.
- Attorney Nason said it sounds like the Planning Commission would like to see some type of condition imposed as part of any work done either prior to final plan approval or as a condition of the development contract that all construction-related traffic for the subdivision (and not the houses) access the development site through an eastern side exterior entrance to be provided by the Company to minimize the use of internal roads as is feasible. She thinks that can be incorporated into any pre-final plan approval agreements and the development contract.
- Chair Azman said regarding Island Field, something will be built there at some point, and asked how this access road will impact the ability to be used if Island Field will be developed.
- Mr. Houge said calling it a road is too much, it will be a path that construction vehicles can travel down, vehicles used to driving off-road and not on bituminous pavement. The condominium building will probably take 13 months to construct so that should give ample time. While the building is being built, NOC will hold off any permanent road construction such as putting the pavement down, and will have an area roughed in on the northwest corner which would give access to the proposed lift station. It is effectively a path that is sufficient to hold up to trucks that will service the lift station. As a practical matter they can make it work easily as long as the two projects are on a similar schedule.
- Chair Azman noted the development of the subdivision itself will use this access, but when homes are starting to be constructed – he noted there was some concern about home construction trucks that could also cause some damage, be intrusive, or noisy. He asked what the position of the Company is on having that available for home construction activity.
- Mr. Houge said it is impossible for him to predict when those homes would be constructed and they ran into this in one other situation and regretted not being clearer about this; he wants to be clear that if the homes are built while they can still bring materials in across Island Field, they will do that. However, it is unlikely that the homes that are built in the area referred to as Red Forest Way South will be built that quickly. In construction of a home, there are a couple things that impact the road: an excavator brings in a backhoe to dig the basement, ready-mix trucks bringing concrete for the basement walls, and lumber loads. It is relatively insignificant compared to when they are hauling in semi loads of gravel to build a road. Realistically, the building of the homes will happen over a span of five or more years. They will do everything they can to bring in equipment from the east but he wants to be totally candid that those homes will be built long after the development is completed in terms of the roads and that will have to come in from the west.
- Chair Azman noted a condition that Attorney Nason and Administrator Kress can work on regarding the access site for all reasonable purposes, and another condition dealing with the homeowners and the screening. He said they have updated plans showing the new location of the road. Chair Azman asked Ms. DeWalt to help him understand why it is not good planning to have the road exit onto Catbird at Red Forest so it would be like a 4-way stop.

- Engineer DeWalt said at a high-level, she does not believe that design was studied, as she has not seen a study showing it. From reviewing the grading plans and site plans, she understands that it would be difficult to follow that alignment based on the grades, which would require more disturbances of the forested areas, and if they tried to align the road to be a traditional 4-way intersection at 90 degrees it would require wetland impacts to the north. She is also not sure how the lot layouts would be able to align on either side of that road with the lots to the north having already been basically developed and sold.
- Commissioner Cremons said somewhere in the documents, he did not see the map showing the 1,000 foot Shoreland Management Overlay District boundary. It is his recollection that a couple of lots in Phase 1 looked like they were partially within that boundary and he wants to be sure that those lots meet the Shoreland Management criteria which are different than for the other lots.
- Mr. Kirmis noted that is illustrated on the plan set and showed a map onscreen and said it is very lightly drawn.
- Ms. DeWalt said Staff reviewed that as shown, and the lots do comply.
- Commissioner Cremons asked Mr. Houge about the passive private open space as it related to Phase 1. It had previously been indicated in the resolution that it would be transferred when Phase 1 was platted; Mr. Houge had indicated in a memo that it is the Company's preference that it not be transferred until the entire development is done. Commissioner Cremons would like to know why and how they assure if Phase 2 ends up being delayed or not developed that the property ends up being transferred.
- Mr. Houge said as a practical matter, NOC has always recorded easements for trails and how they connect to the open spaces at the time the area was developed. Given they are not developing the area immediately contiguous to the open space, it would be impractical to try to deed that over and convey that until such time that they know exactly where those trails will go. They have a proposal right now which NOC has no intention of changing but it would be subject to Phase 2 being approved as drawn today. He noted there is access from the south off the Black Lake Trail for people to gain access.
- Commissioner Cremons asked how they are assured if Phase 2 does not get developed, that the property ultimately is transferred. In looking at the RLS, there was only a tiny bit of the open space area that abutted Phase 2 and it looked like about 90% of the boundary was opposite Phase 1. If the property is transferred, easements can go anywhere on that property, but it will be under the control of NOHOA. It seems to him it would be neater and cleaner to take care of that with Phase 1.
- Mr. Houge said if they are talking about the same open space, it is the one to the south, which only abuts Phase 2 lots; NOC is in a contract by virtue of the development agreement to convey that property, so both the City and NOHOA are assured that they will get that property. He noted they typically transfer those when they do the abutting developments.
- Commissioner Cremons said he must have been looking at the wrong open space.
- Mr. Houge noted he may have been looking at the out lot with the barn, that will not be conveyed to NOHOA, but will most likely be combined with the property to the east which is where the Hill House is.

- Administrator Kress said for reference those are conditions 3 and 4 in the resolution of approval. He said they spoke internally about condition 3, noting he touched base with NOHOA Staff and the same process was described that Mr. Houge just described.
- Mr. Houge just read the NOHOA letter earlier in the afternoon and it was not a concern of theirs.
- Commissioner Cremons asked if condition 4 is okay.
- Mr. Houge replied yes, that is fine.
- Chair Azman asked what the recommendation is with condition 3.
- Administrator Kress said they could strike condition 3 if they wanted to.
- Chair Azman asked if there is a way to re-word it.
- Administrator Kress said it is a bit unnecessary; they called it out but it is in the PDA that they will have to convey it over.
- Commissioner Cremons stated they will be coming back to Phase 2 anyway; they have a separate approval process they need to go through at that time and that would be the time to deal with it.
- Chair Azman asked if open space management is in any of the other conditions.
- Attorney Nason said there are only 4 private passive open space areas within the confines of the East Oaks development, one was adjacent to site A which has already been developed, the second is included within the Nord development site and will be conveyed, the third is for the East Preserve site, and the fourth is this site. This is not something that the Planning Commission has dealt with in any other applications recently. If the Commission is comfortable with the Applicant's recommendation that the passive private open space be required to be conveyed at the time of further subdivision of Phase 2, that could be included in a motion if the motion was to approve the resolution recommending approval with that change.
- Administrator Kress noted it would read Phase 2 instead of Phase 1 in condition 3.
- Mr. Houge said they would be fine with that change, clarifying it would read the same except that it would say "conveyed as a part of Phase 2 subdivision."
- Administrator Kress replied that is correct.
- Mr. Houge agreed they are fine with that.
- Commissioner Cremons said in paragraph 13 of the conditions, line 3 says the word "existing" but it should be "exiting" as related to Catbird Lane.
- Commissioner Yoshimura-Rank asked about the possibility of Phase 2 being on City sewer and water and the Comprehensive Plan.
- Administrator Kress noted right now the Comp Plan only allows for water and sewer in well and septic form. In the Phase 2 design, they would have to change the Comp Plan to allow for municipal water and sewer.
- Commissioner Yoshimura-Rank noted Mr. Kirmis said it might be possible to change the map.
- Administrator Kress said through a formal amendment, they could change it to a municipal water and sewer structure which will have to be done if they continue on with the proposed

design of Phase 2. Otherwise they would have to propose well and septic based on the existing Comp Plan.

- Commissioner Yoshimura-Rank asked if the Comp Plan is finalized.
- Administrator Kress said the Comp Plan has not been finalized but they will not allow any resubmissions so the City cannot amend any maps within the Comp Plan currently, because it is in Met Council's hands. It is expected at the time Phase 2 is presented, they could go through with a Comp Plan amendment, considering that the Council would have to be on board with it as well as the Planning Commission recommending it. He noted there are a lot of assumptions and if the Council and Planning Commission do not want to do that, they would tell the developer no and that they are leaving the Comp Plan as-is and submit it as well and septic.
- Chair Azman asked if they had any idea on when Met Council would even give an answer.
- Administrator Kress said it has been pretty silent on Met Council's part for a lot of cities. He believes a couple weeks ago there was some correspondence but was not substantial. He asked about Commissioner Yoshimura-Rank's concern.
- Commissioner Yoshimura-Rank said right now it is septic and well and the idea was to possibly have it be City water and sewer because of all the wetlands in Phase 2.
- Administrator Kress said that was a bit of a Staff recommendation to the Company, that it might make more sense to do water and sewer.
- Mr. Kirmis said that change could be incorporated as part of the formal update, so it wouldn't be a separate amendment, if Planning Commission and Council are okay with that change.
- Commissioner Yoshimura-Rank asked regarding the delineation study that was done in 2018, is there ever a follow up study to see if the wetlands are healthy or is it just a one-time deal.
- Administrator Kress said it is part of the MN-RAM report that the developer is required to do.
- Ms. DeWalt said the wetland boundary and type that was done in 2018 was approved by the LGU, it goes through the technical evaluation panel and that approval is good for five years. If the development is approved within that five years then the wetland boundary and type does not have to be redone. If the development is not done within that time period, it is typical for that boundary and type to be updated. Sometimes when developments are phased and in process, surveyors and contractors work together and may notice that there are changes to the topographical conditions that may warrant some slight revisions to that boundary to update the design. Typically the boundary is shown on the design plans and that is used for the preliminary layout of the subdivision and it is designed from there based on the City and wetland LGU policies, which in this case is Vadnais Lakes Area Water Management Organization (VLAWMO).

**MOTION by Yoshimura-Rank, seconded by Cremons, to recommend approval of Resolution 2020-08 Preliminary Plan/Plat subdivision Red Forest Way South Phase 1 as amended. Motion carried unanimously by roll call.**

- Chair Azman pointed out that Attorney Nason and Administrator Kress were going to work on an access and asked if that would be “as amended,” as well.
- Attorney Nason said that is where they would include it. The motion as passed did not include a specific reference to add as a condition access to the development site through the Island Field parcel. She said they will reference it at the City Council and if there is preliminary plan approval they will include that as a condition.
- Administrator Kress clarified as part of the final plan approval it would be incorporated into the developer’s agreement.
- Chair Azman noted the Commission is directing Staff to make sure the Council knows about that access restriction as part of a final approval.

**MOTION by Sayer, seconded by Yoshimura-Rank, to amend the original motion to include the access restriction condition. Motion to amend carried unanimously by roll call.**

**COMMISSIONER REPORTS**

None

**ADJOURN**

**MOTION by Cremons, seconded by Yoshimura-Rank, to adjourn the Planning Commission meeting at 9:23 p.m. Motion carried unanimously by roll call.**

\_\_\_\_\_  
Kevin Kress, City Administrator

\_\_\_\_\_  
Mark Chair Azman, Chair

Date approved\_\_\_\_\_

**North Oaks Planning Commission  
Meeting Minutes  
City of North Oaks Community Meeting Room and Via Teleconference  
December 29, 2020**

**CALL TO ORDER**

Chair Azman called the meeting to order at 6:00 p.m.

Pursuant to Minnesota Statute 13D.021, the meeting was conducted via Zoom, with Chair Azman and Administrator Kress present in the Council Chambers.

**ROLL CALL**

Present: Chair Mark Azman, Commissioners David Cremons, Stig Hauge, Nick Sandell, Grover Sayre III, Joyce Yoshimura-Rank.

Absent: None.

Staff Present: Administrator Kevin Kress, Septic Inspector Brian Humpal.

Others Present: Videographer Maureen Anderson

A quorum was declared present.

**PLEDGE OF ALLEGIANCE**

Chair Azman led the Pledge of Allegiance.

**APPROVAL OF AGENDA**

**MOTION by Yoshimura-Rank, seconded by Cremons, to approve the agenda. Motion carried unanimously by roll call.**

**CITIZEN COMMENTS**

Chair Azman called three times for citizen comments in the chambers and via Zoom. There were no citizen comments.

**BUSINESS ACTION ITEMS**

**a. Consider recommendation of approval/denial of septic and retaining wall setback variance for 3 Raccoon Road**

Chair Azman stated there must be three separate factors shown for a variance. Reasonableness (the property owner must propose a use that is reasonable), uniqueness (the factor involves uniqueness due to the property and not due to the conduct of the owner), and the essential character is not changed by approval of the variance. Other factors that can be considered include harmony with other land use control and some economic factors however those are really a product of the three original factors. He does not believe there are any neighborhood submissions but the Planning Commission must be careful and cannot base a decision on neighborhood opposition alone. Rather, decisions must be based on the three factors identified earlier which are generally called practical difficulties.

Commissioner Hauge thinks North Oaks Home Owners' Association (NOHOA) has filed an opposition, or at least sent a letter earlier in the day at 4:10 p.m.

Chair Azman asked Staff to make a presentation and then they can enter NOHOA's statement into the record, take questions from the Commissioners, and hear from the Applicant.

Septic Inspector Humpal said the variance is for 3 Raccoon Road and the Applicant is requesting a variance for the secondary 5,000 square foot sub surface sewage treatment system which would encroach 3 feet (he noted that should be corrected to 23 feet) into the north property line setback, and 23 feet into the required 75-foot setback from Pleasant Lake. Inspector Humpal noted this is not the corrected version of the document.

- Commissioner Cremons stated the survey the Commissioners received is the one NOHOA is objecting to and is the incorrect one. The first time they have seen the corrected version is when Inspector Humpal just circulated it. He has not seen the correct setbacks to the property line.
- Commissioner Sayre agreed.
- Administrator Kress showed the correct survey onscreen dated 12/9/2020.
- Commissioner Hauge asked if NOHOA objects to the old survey drawing and not to the new one.
- Administrator Kress said that is correct.
- Commissioner Hauge wants to be sure.
- Administrator Kress noted he spoke with NOHOA's Executive Director Griffin and Engineer Elfering this morning when they noticed it was the older version.
- Commissioner Cremons noted NOHOA does not like the fact that the planned system is that close to NOHOA property as shown on the new survey.
- Administrator Kress stated that is correct. Their main concern is the distance from their trail as well as the retaining wall encroaching into the setback areas.
- Commissioner Hauge clarified there is still concern and asked if that is correct.
- Administrator Kress answered that is correct. He showed the retaining walls that extend into the road easement area on the screen and pointed them out as NOHOA's concerns. Typically, they would see a 25-foot setback and the eastern side extends about 4 feet past and the west side is approximately 55-60 feet. One question for the Applicant is if the retaining walls are necessary or if they can provide some type of alternate vegetative wall.
- Inspector Humpal explained the Staff report is mostly correct but he was a bit surprised because Pleasant Lake was not capitalized in his and he had corrected that earlier. He also added an addition under the approval motions.
- Staff clarified that the version Inspector Humpal sent later in the afternoon was emailed out to everyone and was replaced within the packet on the website.
- Commissioner Cremons asked what they are talking about in terms of retaining walls – are they five feet high concrete or something else.

- Administrator Kress stated he would like the Applicant to share as Staff discovered late the previous week that it was considered a structure and would need a variance because it extends out past the setback area.

Inspector Humpal began his presentation again. The Applicant is requesting a variance for the secondary 5,000 square foot sub surface sewage treatment (SSTS) system which would encroach 23 feet (which needs to be corrected from 3 feet) into the required 30-foot north property line setback, and 23 feet into the required 75-foot setback from Pleasant Lake. In addition, a variance is needed due to the lack of the required 12 inches of suitable soil; the change from 3 feet to 23 feet is due to the correction in the survey. The property has been previously developed the reconstruction of the house will be in the same vicinity as the existing house and will use the existing SSTS that was found compliant by others. Due to the wetlands located on the south and west sides of the property, this area appears to be the only viable location for a future SSTS. Based on these facts, it is the Staff's opinion that the Applicant has met the requirements for variances as outlined in Section 151.078 of the code. Staff is in agreement with the designer Matthew Summers that the proposed location of the 5,000 square feet appears to be the most viable location for a secondary SSTS. This would be the minimum variance which would alleviate the practical difficulties.

- Commissioner Yoshimura-Rank asked if the system that is in use right now is the original system or if it is a second system.
- Inspector Humpal noted it is a second system that he believes was installed in the 1980's,
- Commissioner Cremons thinks it said 1996 in the report. The property was developed in 1951.
- Commissioner Hauge noted this would be the third system on the property.
- Inspector Humpal explained it would be the second system, if the original was from the original construction and there was a replacement in 1996, this would be the second.
- Chair Azman said the new spot they are talking about tonight would be a potential third.
- Inspector Humpal answered that is correct.
- Chair Azman clarified that it is Inspector Humpal's opinion that there does not appear to be any other reasonable or viable option on the property to select a third site.
- Inspector Humpal said ultimately whether they redevelop this house or not, if they needed a future septic system here, this is really the only area available.
- Commissioner Hauge said the Commission has touched upon this problem before and they always say they need two septic locations. He asked what happened to the original location and can that be redeveloped or re-done to have a new, third septic system in the first location.
- Inspector Humpal said when the property was developed it was before the City had any codes pertaining to septic systems requiring a certain amount of area available for septic systems. The technology back then usually consisted of cesspools which are open bottom tanks that sit in the water table and don't provide any treatment. He noted the wonderful thing about cesspools is the footprint was very small. Codes have matured and as they have a better understanding about waste water treatment, they need more area for these things. He



does not know exactly what they had for that first system, but more than likely it was cesspools and those new tanks for the most recent system are probably located in that same vicinity right now. There is a mound system which provides the treatment of the waste water before it gets back into the groundwater. That would have been a separate area from where that original system had been located.

- Commissioner Yoshimura-Rank noted on page 10 it said the future designer at the time of eventual SSTS replacement could situate the final mound in such a way as to meet the 75-foot lake setback and at least meet the State property line. She asked if that is correct.
- Inspector Humpal assumes that was based on the prior survey. More than likely, they will be able to meet the 75-foot setback to the lake with the actual system. North Oaks' code requires them to have 5,000 square feet of area and they will probably not need a total of 5,000 square feet for that future system, so they can potentially shift the actual system that will be constructed in the future further south to meet that setback.
- Commissioner Hauge said the type of septic system they are talking about here is a Type 4 or a Type 3 and asked if that is correct.
- Inspector Humpal answered in the affirmative.
- Commissioner Hauge asked if the technology that Type 4 represents requires a smaller area than Type 1.
- Inspector Humpal answered somewhat; some will depend on site conditions and soil conditions. Typically, there is some reduction in size but there are a number of other factors that play into that as well.
- Commissioner Cremons said without this variance, a new home could not be built on the site, and asked if that is correct.
- Inspector Humpal said that is correct.
- Commissioner Yoshimura-Rank said the 75-foot setback is a Minnesota rule and asked if the Planning Commission has the right to give variances for that.
- Inspector Humpal believes they have reached out to the DNR and there was some other information they received on that.
- Administrator Kress stated the DNR basically said if the City was comfortable with the design, they could move forward with it. They did not object to the design; he noted he sent both of the proposals with the setbacks. They also reached out to Vadnais Lakes Area Water Management Organization (VLAWMO).
- Commissioner Cremons said they are talking about a variance to setbacks, which means the Commission is changing the City's code and asked if that is correct.
- Administrator Kress answered yes, basically they are lying outside of what is stated in the City code.
- Commissioner Cremons stated if they have the right to do that, don't they also have the right to vary the City code relative to the 5,000 square feet and do they have the option of saying "we're not terribly comfortable with building this close to the trail, and the property line either, but we will approve the variance that will allow the installation of a 3,000 foot system." When the time comes for the home owner to put in the system, they will have to

figure it out or come back to the Planning Commission to expand the area. He asked if they have that flexibility.

- Administrator Kress said regarding the 5,000 square foot and the 12% far; they could potentially get a variance for but he cannot say he has ever seen one with the City of North Oaks.
- Commissioner Cremons said designating a smaller area would protect that boundary to the edge of the property line and the trail so the property owner would have to find a way to accommodate the septic system while not infringing so closely to the trail. If they could not do that in the future then they would have to come back and ask for a variation on it. He noted that is just a thought.
- Inspector Humpal said if the property owner requested, for example, a 3,000 square foot variance, they will still have property line setback variances.
- Chair Azman asked how close the 5,000 square feet is to the edge of the property line.
- Inspector Humpal said it is 7 feet at the closest point.
- Chair Azman clarified they are 23 feet into it and asked if that is correct.
- Inspector Humpal replied that is correct.
- Chair Azman clarified the system could be a Type 3 or 4.
- Inspector Humpal said Type 3 or 4 and he would have to work with the property owner a bit; he does not know if they drop the square footage if they would still need a variance. He'd like to think they wouldn't because if they could meet the lake setback it would be very limited on what would be available.
- Commissioner Sayre asked if they drop the square footage will they have the same quality of a system.
- Inspector Humpal noted it might force them into an area that might be less suitable within that 5,000 square feet. Typically, these systems need to be laid out properly on the contours and that is why they want 5,000 – it does not necessarily mean that they need 5,000 for the system but it gives some flexibility on how that system is placed on the area.
- Chair Azman asked about a condition that would impose a burden on the owner to move it as far north as possible, within the 5,000 square feet.
- Kathryn Alexander asked to give some information that may help the Commissioners. Back in 2014, they were granted a permit to build this house. The homeowner, for personal reasons, put it on hold. In 2019 they were told they could still do the same. At some point, North Oaks decided they need a secondary septic system and she is not sure of the timeline. She said Wenck went through the report on the main septic system to show that it is in good working order, it is very effective. If for some reason it failed, the chances of reusing that same septic site are very, very good. She said there are many other types of septic systems that North Oaks does not recognize because they want a standard system; there are some other options other than making sure a 5,000 square foot secondary system would work.
- Commissioner Hauge asked why is the City asking for another system, if the current system is in working order.
- Inspector Humpal explained North Oaks code requires them to have a future septic area, regardless of whether or not they have a working system today. He said they did receive a

compliance report indicating that the system is compliant. A compliance report is not an indication that the system will last any given amount of time, rather it is the condition of the system at that time. He noted it could fail at any point in the future, although it is unlikely that it will. Any type of system that goes in now will be a Type 3 or Type 4 system, which the City will recognize if a Type 1 or a Type 3 system cannot be installed. There is a possibility that someone could try to rebuild the area where the existing system is, however, that would still fall outside of the requirement for the 5,000 square feet. He clarified someone could put together a design rebuilding that existing area and then request a variance to not need that 5,000 square foot area.

- Commissioner Sandell noted the City is not asking for a replacement system nor is there a plan for a replacement system right now. This is simply the secondary contingent site that would receive the variance.
- Inspector Humpal said that is correct.
- Commissioner Sandell said it is good for everyone to know that there is not a new system going in right now, it is just the secondary contingent system.
- Inspector Humpal clarified it may never go in.
- Commissioner Cremons asked if at some point the septic system has to be replaced, what is the process for City input, review, and approval of the new system when that time comes, going into the 5,000 square foot area.
- Inspector Humpal said when an applicant comes in for a system, Staff reviews the design and engineering to make sure it meets codes, they visit the site to make sure it makes setbacks, and they verify that the soil conditions are suitable for the type of system proposed, and that they agree where limiting conditions on the soil are identified.
- Chair Azman said right now the situation is if the property owner wants to build here, code requires a second location. The Applicant has submitted a plan from a very good engineering firm that identifies the second location; it is a little close to property lines and ordinary high water mark line which is why they need a variance. The only complaint received was from NOHOA who had concerns about the proximity – while he respects NOHOA’s position highly, he does not find that to be a significant enough of a neighborhood opposition to justify denial of the variance based on what the Commission is hearing from Inspector Humpal. However, NOHOA also said their concern also includes a lack of suitable soil on this location. As he reads the Wenck report and listens to Inspector Humpal, it appears there is suitable soil if they use a Type 3 or 4. He noted the concern by NOHOA seems to be ameliorated by that issue; a Type 3 or 4 can be managed with that approach.
- Inspector Humpal said yes that would be correct. He added that even if nothing had ever changed with this house and they needed a new system, the City would be looking at essentially the same options that they are today.
- Chair Azman said Ms. Alexander had indicated that it may be possible to fit a new system on the old system site with some sophisticated engineering; however, they still need that 5,000 square foot area. With a type 2 or 3, he understands it can be moved north so it can be placed further away from the borders. Chair Azman does not hear an objection to a condition that at least requires consideration by the property owner of a future site to put it as far away from the south border as possible. This seems to him to be a wishy-washy condition but at least

keeping it in mind in the future may exist. The property owner seems to have satisfied the three conditions for practical difficulties in this scenario.

- Commissioner Sandell said if the house or proposed house was not there and they moved the septic south a bit, is the land suitable at that location. He asked if part of the reason it is being pushed north because of the size and location of the proposed building.
- Inspector Humpal does not believe the placement of the house encroaches any more than the previous house did into that septic area.
- Commissioner Yoshimura-Rank asked if the Commission gives the approval for this second system plan, if and when it happens that the owner needs this second system, does it come back to the Planning Commission again.
- Chair Azman replied and said no, they have the variance and the owner would have to come back to the City and Inspector Humpal or his successor would get involved with review of the septic design before it can be installed. He clarified once the variance is there it follows the land and not the owner; if someone else purchased the property down the line, that variance would still be in place.
- Commissioner Yoshimura-Rank asked if it is limited to what the Commission approves, the 23 feet.
- Chair Azman said that is correct.
- Inspector Humpal said if the Commission put a condition in that they position the future septic system as far south as possible, that would give the City more ability to review it at the time that a replacement system is needed. It would also give Inspector Humpal or his successor ability to ask the designer or engineer to prove that they have positioned it as far south as possible.
- Commissioner Sayre noted Chair Azman has been saying “north” but he thinks the Chair has been meaning to say “south.”
- Chair Azman said that is correct and he was making sure they were all listening.
- Commissioner Sayre is for that as long as the quality of what they put in stays the same. He would not want the quality of the system to be less because they must move it into a less desirable location within this 5,000 square foot space. At the end of the day that is what matters; if it is a little closer to the lake that is not good, but if it is buttoned up tight and is state-of-the-art that is what matters in his mind.
- Commissioner Cremons asked Administrator Kress if they have a final survey for the record that shows the actual setbacks from the property lines and where the proposed drain field would be with dimensions.
- Ms. Alexander clarified it was sent to the City on December 9, 2020.
- Administrator Kress noted that is the one he has been showing this evening. He pulled it up on screen so everyone could see the secondary site, the existing site, and the 30-foot setback.
- Chair Azman believes the packet discusses the retaining wall but the proposed variance document does not.
- Administrator Kress would like to have a discussion with the Applicant regarding the retaining wall, as it looks like it goes beyond the 30-foot mark. He brought up the survey on screen and pointed out the 30-foot mark (red line) and noted two sections of the retaining

wall go well beyond the 30-foot setback of the front yard. The main concerns from NOHOA were the setbacks that go into the road easement area. Some questions are: is it possible to put in some sort of natural barrier rather than the retaining wall.

- Ms. Alexander stated there are 30 feet from the road, and then another 30 feet and asked which Administrator Kress is referring to.
- Administrator Kress said it looks like it goes beyond in both scenarios, 30 feet from the structure and 30 feet from the road.
- Ms. Alexander asked which one are they referring to that it cannot go beyond.
- Administrator Kress said either one.
- Ms. Alexander asked if it cannot go 60 feet from the road.
- Administrator Kress said 60 feet looks like it would be appropriate and would be very close to the garage in that case.
- Commissioner Cremons asked if Administrator Kress can take his cursor and point to the edge of the road easement as that may be the appropriate spot to measure the 30 feet.
- Ms. Alexander noted there are two 30-foot easements marked and Administrator Kress is pointing to 60 feet from the road. She clarified the red line is 60 feet.
- Chair Azman asked regarding the red line – it is 30 feet from what.
- Administrator Kress said the lot line.
- Ms. Alexander said the edge of the road is over near the “A” on screen in the word “ROAD.” There is a 30-foot dimension to a grey line.
- Inspector Humpal said the City’s setbacks are typically 60 feet on the road.
- Ms. Alexander said there is a 30-foot dimension to a grey line.
- Administrator Kress noted on screen he is talking about two little “chunks.”
- Ms. Alexander replied the little chunk can be adjusted; it is really minor.
- Administrator Kress asked about NOHOA’s stance on the retaining walls in general.
- Ms. Alexander asked if the retaining walls have anything to do with this variance for the septic system.
- Administrator Kress answered no; however, the Applicant would need a variance if it goes beyond the 30 feet like the two sections noted on screen.
- Ms. Alexander asked what if she presents an updated survey that adjusts that little bit.
- Administrator Kress said then she would not need it.
- Ms. Alexander said that is correct, they would not need it.
- Administrator Kress asked if that means Ms. Alexander is not requesting a variance for that tonight.
- Ms. Alexander said for **that [retaining wall]**, no; this is the first she has heard of it and they are talking about a few feet.
- Administrator Kress said they will take that off the table if Chair Azman is willing to adjust the distance.
- Ms. Alexander said that was not part of their submission.
- Administrator Kress said they were just trying to get it done if they needed it as part of a variance; they would do it tonight rather than having the Applicant come back.
- Ms. Alexander asked if it is correct that it is just that little piece.

- Administrator Kress said correct, it is just the two small sections that go beyond the 30 foot.
- Commissioner Cremons noted there is the little piece and then there is that longer extended wall further west. Basically, Ms. Alexander would have to present plans that did not show either of those walls going within the 30-foot setback. If that is the case, there will not be an issue, but if either of those walls is still there it will be a problem.
- Chair Azman asked if Ms. Alexander does not want the Commissioners to deal with the retaining wall issue this evening.
- Ms. Alexander asked to pull up the survey and said no, they should be fine.
- Administrator Kress asked if Ms. Alexander could get him an updated set in the next week or two.
- Ms. Alexander replied yes, that is not a problem.
- Administrator Kress said if the retaining walls will be adjusted it does not look like they would require a variance.
- Chair Azman noted they only have the septic to deal with tonight.
- Inspector Humpal asked if there is a motion to approve, he would like the Commissioners to add that the area should be fenced off prior to construction to prevent accidents from construction equipment that would potentially negatively impact that soil.
- Administrator Kress asked if Inspector Humpal can add that to his variance documents.
- Inspector Humpal replied yes, he had added it, but it is not on the documents the Commission has tonight.
- Commissioner Cremons asked what they will do about Inspector Humpal's suggestion concerning the location of the system within the 5,000 foot area and that it be located as far south as is feasible. He would like that language put in the variance if possible.
- Administrator Kress will speak with Attorney Nason about it, as it sounds reasonable but he wants to be sure it is legal from her end.
- John Kraemer, architect, mentioned that they have already put the fence around the septic site proactively.
- Chair Azman said if the Applicant does not object, can they put that restriction in.
- Administrator Kress does not see why not.
- Chair Azman noted Commissioner Cremons and Inspector Humpal mentioned the restriction on locating as far south as possible within the 5,000 foot area subject to appropriate improvement planning for a system as Commissioner Sayre had mentioned.
- Inspector Humpal said normally they would have a deadline but in this particular case the Applicant is not putting the system in so it is not needed.
- Chair Azman asked if Inspector Humpal has any other concerns or needs for further restrictions.
- Inspector Humpal does not believe so.
- Administrator Kress asked if there are any other questions from the Commission to the architect on the project, or comments from Matt Summers from Wenck.
- Commissioner Yoshimura-Rank asked if there is a way to ask that the engineer putting in the system revisit the possibility of putting a system in where the existing system is now.

- Chair Azman does not see why they cannot put a recommendation in to observe and confer with engineers.
- Commissioner Cremons asked in the variance if the reference to the December 6, 2020 design is still correct.
- Inspector Humpal said it would still be correct, he has not seen any revisions in the design. The only revisions received are in the survey.
- Matt Summers had a comment on the potential condition suggesting looking at reusing the existing site. He said five to ten years from now, reusing the existing site is always a consideration for any designer, he does not think they need to state it as that would be a standard protocol. If he went out to design a new system, he would meet Inspector Humpal out there to discuss the best option.
- Chair Azman asked if Inspector Humpal concurs that would be a standard practice.
- Inspector Humpal replied depending on the designer, yes, but most good designers will have that consideration. Perhaps it might be easier that as a condition of this, they would have to meet on site and work on an approved location with himself or his successor in placement of the system.
- Chair Azman thinks with their particular community and the proximity of Pleasant Lake, as well as the lake being part of the St. Paul Water Department, he wonders if there can be a condition that reminds the parties to consider the existing site as a preferred alternative to the site that required a variance.
- Inspector Humpal thinks it may be easier to just spell out that they have at least explored those options in a future design before even using this other 5,000 square foot area. He suggested asking them to consider the option of rebuilding the existing area and after that positioning the system as far south as possible and utilizing whatever technologies may be available in decreasing the footprint of the system.
- Commissioner Sandell is not a lawyer but it is the old handy commercially reasonable efforts to use the old system or the southern most of the new proposed site.
- Inspector Humpal thinks that would be appropriate in addition to noting they need to fence off the area, which they have already done.
- Administrator Kress asked Commissioner Sandell to repeat what he said.
- Commissioner Sandell said the lawyers on the call may be able to help but he suggested commercially reasonable efforts to utilize the existing site or if unavailable, utilize the southern-most area of the new secondary site.
- Chair Azman said instead of commercially reasonable they use “good engineering standard and practice.”
- Commissioner Sayre agreed and said the term commercially reasonable is a defined term under the uniform commercial code and has to do with business transactions, while this is an engineering thing, so he likes the reference to engineering practices.
- Chair Azman does not want to go overboard here for the Applicant either and he understands the engineer’s comments, but he noted they do have a community in North Oaks that is very sensitive to the environment, particularly with Pleasant Lake being an integral part of the

water system. He thinks people will feel more comfortable and it sounds like they will do that anyway; he thinks writing it down as a reminder is not a bad practice either.

- Administrator Kress asked when the Applicant anticipates going before the Architectural Supervisory Committee (ASC) again.
- Mr. Kraemer thinks it was two Mondays ago and they gave their conditional blessing before this meeting. He has not spoken about going before the ASC again but that is a good question and they should get that on the calendar before the City Council meeting.
- Administrator Kress noted City Council meets on January 14, 2021 and if possible, it would be nice to have ASC commentary if available.
- Chair Azman said they have their conditions and he does not hear any further comment. He asked for a motion regarding the application.

**MOTION by Sayre, seconded by Cremons, to recommend approval of variance 20-14 to the City Council.**

- Administrator Kress noted he has conditions listed as fence off the area for construction, move as far south as feasible, and good engineering standard practices to reasonably apply effort to use the existing site.
- Commissioner Sayre agreed and as clarification that is what he moves for approval. Commissioner Cremons seconded again.
- Commissioner Yoshimura-Rank asked the orders of the conditions.
- Administrator Kress noted Inspector Humpal has his listed on variance 20-14 and Administrator Kress added several additional; fence off the area prior to construction, move as far south as feasible, and good engineering standard practices to reasonably apply effort to use the existing site.
- Commissioner Yoshimura-Rank asked if they could put the last one second and move the “further south” third.
- Administrator Kress said he could but they would have to comply with all of them. He said he does not have an issue with flipping them.
- Commissioner Sayre does not have any problem with reordering as the conditions are all there.
- Administrator Kress noted this is only for the septic variance and is not anything to do with the retaining wall as that has been taken off the table.

**Motion carried unanimously by roll call.**

Chair Azman noted the variance has been recommended for approval. He reminded the Applicant that the Planning Commission is an advisory body and the Applicant will have to seek final approval with the City Council at the January 14, 2021 meeting.

Mr. Kraemer thanked the Planning Commission for their time and for considering the application.



Chair Azman said it seems like a great project and a redevelopment site and the Planning Commission is happy to see a wonderful new development out in the community.

Councilmember Kingston asked to say a word just before adjournment; he noted this is the last meeting he will be attending as a City Council liaison to the Planning Commission and apparently the last meeting he will be attending as part of the North Oaks City Council before the new Council is sworn in. He understands that Mayor-elect Kara Ries and Councilmember Jim Hara decided they want to pre-empt the swearing in of the new Council that typically takes place at the first Council meeting in January. He just learned this afternoon that Mayor-elect Ries is calling for a special meeting next Monday which will deprive the outgoing Councilmembers the opportunity to say good-bye and thanks to the residents and others than have worked so hard for the City during their tenure. Normally, Councilmember Kingston would have thanked and recognized all the Planning Commissioners then, but instead he will do so now. He would simply like to say that all of the Commissioners have acted honestly, with honesty, integrity, and transparency and it has been an absolute privilege to work with each of them. He has faith in their ability to continue serving the community and “doing great things for all of us.” He thanked them, said goodbye, and wished them the best of luck in 2021.

Chair Azman thanked Councilmember Kingston, and said he appreciates all the nice comments and working with him as well over the last few years.

Each of the Councilmembers thanked Councilmember Kingston for his service.

**ADJOURNMENT**

Chair Azman noted it is also the Planning Commission’s last meeting of 2020 and his term has expired, although he has reapplied to serve on the Commission; he hopes he will be reappointed but if not, it has certainly been a privilege and an honor to work with everyone.

Commissioner Yoshimura-Rank stated her term is also up and she will also reapply; she said if they do not see her, she will miss them and it has been a very busy year and she thinks the Planning Commission did really, really well. She wished everyone a Happy New Year.

Commissioner Sayre noted he would be rooting for both of them.

**MOTION by Yoshimura-Rank, seconded by Hauge, to adjourn the Planning Commission meeting at 7:15 p.m. Motion carried unanimously by roll call.**

\_\_\_\_\_  
Kevin Administrator Kress, City Administrator

\_\_\_\_\_  
Mark Chair Azman,  
Chair

Date approved \_\_\_\_\_

February 12, 2021  
VARIANCE 20-06 Rev 2.0  
Lawrence and Ruth Eaton  
33 Eagle Ridge Rd  
North Oaks, MN 55127  
RSL Zoning

Date Application Determined Complete: February 12, 2021  
Planning Commission Meeting Date February 25, 2021  
City Council Meeting Date:  
120 Day Review Date:

**Description of Request**

The applicant is requesting a variance to install a sub-surface sewage treatment system (SSTS), which would encroach 20 feet into the required 30 foot south property line setback and 12 feet into the required 30 foot west property line setback.

The applicable regulations are as follows:

§ 151.050 RSL - RESIDENTIAL SINGLE-FAMILY LOW DENSITY DISTRICT.

(F) Setbacks.

(1) No building or structure (except fences, screening, planting strips, and landscaping in compliance with Sections 151.033 and 151.034), individual sewage treatment system, or well shall be located within thirty (30) feet of the lot lines, the nearest edge of any road easement(s), or any wetland(s), except that additions which do not exceed twenty five (25) percent of the existing building footprint area, on buildings or structures lawfully existing upon the effective date of this chapter shall be excluded from wetland setback requirements.

**Staff Review**

The current system has been classified as non-compliant under MPCA Rule 7080.1500 Subp. 4 (E) due to the lack of the required three foot separation between the bottom of the drainfield and the limiting soil conditions.

The area available for installation of a replacement system is limited due to water supply wells, structures, impervious areas, steep slopes, and property lines. A previous design had been presented to the planning commission, which would have encroached into the road easement. After receiving unfavorable feedback from staff and the planning commission, the applicant subsequently withdrew that request.

Based on these facts, it is the staff's opinion that the applicant has met the requirements for a variance as outlined in Section 151.078 of the code. We are in agreement with the designer, Jesse Kloepfner, that the proposed location of the new system appears to be the most viable location for an SSTS. This would be the minimum variance, which would alleviate the practical difficulties. Additionally, the proposed system will result in a significant improvement to the local ground and surface waters.

**Action Requested**

That the Planning Commission make a recommendation to the City Council to approve or deny Variance #20-06 V2.0, based on KSD Septic design Version 3.0, to encroach 20 feet into the required 30 foot south property line setback and 12 feet into the required 30 foot west property line setback.

**Motions**

Motion to Approve

MOTION \_\_\_\_\_ SECOND \_\_\_\_\_

That Variance #20-06 V2.0, for 33 Eagle Ridge Rd:

be APPROVED with the following conditions:

1. Completion date 180 days after approval
2. System to be located per the KSD design Version 3.0 dated September 8, 2020 by Jesse Kloepner.

Motion to Deny

MOTION \_\_\_\_\_ SECOND \_\_\_\_\_

That Variance #20-06 V2.0, based on KSD Design Version 3.0, for 33 Eagle Ridge Rd:

be DENIED with the following findings:

- 1.
- 2.

9/19/2020



# SSTS Design

33 Eagle Ridge Road  
North Oaks, MN 55127

PID # 083022330020

Version 3.0

Kloppner Services & Designs, LLC  
MPCA LICENSE # 4043

763.843.4114  
CONNECT@KSD-MN.COM

On September 14<sup>th</sup>, 2020, a site evaluation was conducted at 33 Eagle Ridge Road, North Oaks, MN 55127 in Ramsey County to create a replacement Subsurface Sewage Treatment System (SSTS) for the existing 4-bedroom home. The PID number is 083022330020. The new SSTS is a Type III system with a new Mound dispersal bed.

This design will require a variance from the setback to the property border. No survey or wetland delineations were completed prior to the design. All measurements should be confirmed by the owner and the installing contractor.

Prior to submitting for permit from City of North Oaks please review and sign all pages which require a signature.

### **Wastewater Sources & Peak Flow Rate**

The expected waste strength is Residential Wastewater with a Peak flow of 600 gallons per day (GPD) for a 4-bedroom house. The Actual Daily Flow should be less than 70% of the Peak Flow (420 GPD).

### **Septic Tanks**

Three (3) new septic tanks will be installed. The tank volumes: 1<sup>st</sup> Tank – 1,500-gal; 2<sup>nd</sup> Tank – 1,000-gal; Pump Tank – 1,000-gal. The existing tanks must be abandoned.

### **Type III - Mound**

The dispersal area will be a Type III Mound. The Mound Soil Absorption Area required is 1,000 sqft (20' x 50'). The berms must not extend beyond the property boundaries.

The reason for the Type III dispersal bed is due to the limited space on the property and the lack of 12" of soil separation to the limiting soil condition in absorption area.

*The minimum required materials for the sewer line, distribution network, pumps, supply line, sand, rock, fill and cover are detailed in the design worksheets included with this design. Actual values may change slightly and will need to be field verified for correctness.*

### **Design Notes**

1. A variance is needed for setbacks from the property lines for the STA in the SW corner of the lot.
  - a. A variance of 20' from the South.
  - b. A variance of 18.7' from the West.
2. Trees will need to be removed.
3. Access around the house will be difficult. The area is often wet and will required extra measures by contractor to protect ground and equipment.
4. The supply line may need to be directionally bored from the Lift Tank to the mound.
5. The current ground elevation of the area for the new tanks is 89.0'.
6. It is advised to address the lack of drainage in the SW corner of the the lot and the hillside on the West to allow for drainage from SW corner of property.

## **Construction Notes**

### Building Permit requirements

No construction shall be allowed by any local unit of government until the permit required for the subsurface sewage treatment system has been issued.

### Site Protection

Prior to and during construction or lot improvements, the proposed initial and replacement soil treatment and dispersal areas shall be protected from disturbance, compaction, or other damage by use of stakes and silt fence or snow fence.

### MR 7080.2100, Subpart 1. F

Electrical installations must comply with applicable laws and ordinances including the most current codes, rules, and regulations of public authorities having jurisdiction and with part 1315.0200, which incorporates the National Electrical Code.

### As-Built Drawing

The Licensed Installer must provide an As-Built of the final location of all components. The attached Site Plan is only for reference and should not be considered as final survey or location of system components.

### Soil Erosion & Protection from Freezing

The dispersal area must have seed and grass established throughout the excavated areas to maintain proper protection from soil erosion and freezing.

# Materials & Specifications

33 Eagle Ridge Road, North Oaks



## Tankage

- 1,500-gallon Tank
- 1,000-gallon Tank
- 1,000-gallon Dose Tank

## Effluent Filter & Alarm

- Polylok 525 w/ Reed Switch for Alarm
- Single-Alarm Box located in or near house (or Installer equivalent)
- Electrical wire & Junction Box
- Dedicated 120V circuit from house for alarm

## Sewer Line

- 10' - 4" Sch 40 dia. Pipe
- Fittings, as necessary

## Pump – Installer Choice

- Pump Specs: 22 GPM - 17 TDH

## Supply Line to Pressure Laterals

- 120' - 2" sch 40 pipe
- Fittings, as necessary

## Pressure Laterals

- 3 –48' long 1-1/2" sch 40 pipe
- 3' spacing (orifices)
- 3/16" diameter orifices (drilled holes)
- Clean-outs at end of each lateral
- 1 ½" Bends, couplings, sweeps and fittings, as necessary

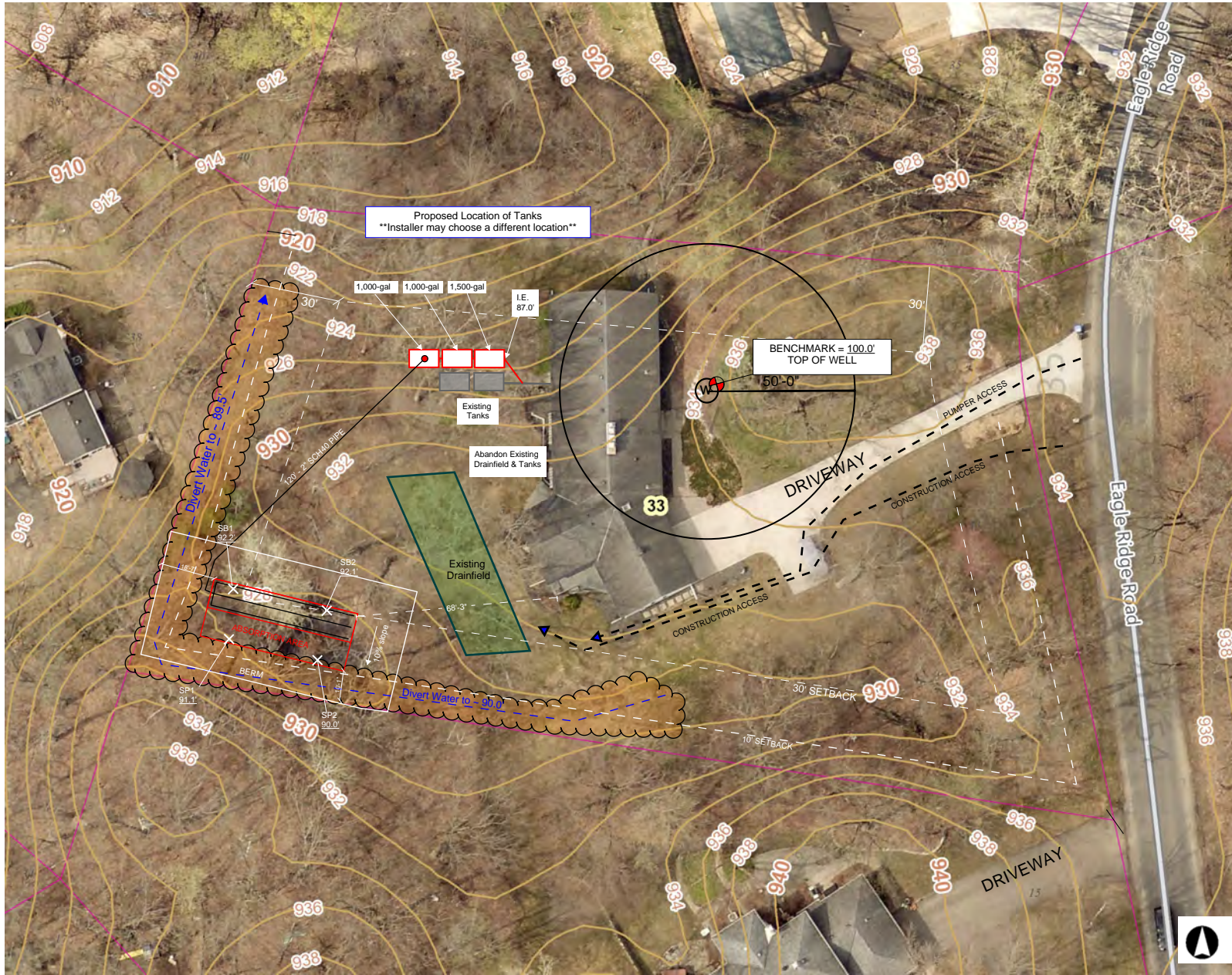
## Dispersal Area

- Absorption Area – 20' x 50'
- Rock depth of 6" + min 3.5" to cover pipe
- Washed-Mound Sand – Min. Height: 36"
- Backfill & Black dirt – See Mound Calculation worksheets

\*Note: All materials quantities for pipe, sand, rock, etc. are only estimates.

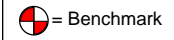
\*\*Tonnage calculations for materials may differ from actual volume used onsite.#





**LEGEND:**

W = Well  
 SB = Soil Boring  
 SP = Soil Pit



**NOTES:**

1. A variance is needed for setbacks from the property lines for the STA in the SW corner of the lot. A variance of 20' from the South and 18.7' from the West must be granted by the City of North Oaks prior to construction.
2. Trees will need to be removed.
3. Access around the house will be difficult. The area is often wet and will require extra measures by contractor to protect ground and equipment.
4. Sewerline will need to be directionally bored to the Lift Tank.
5. The current ground elevation of the area for the new tanks is 89.0'.
6. It is advised to address the lack of drainage in the SW corner of the lot and the hillside on the West to allow for drainage from SW corner of property.

THIS IS ONLY A SITE PLAN

ALL SEPTIC LOCATIONS AND MEASUREMENTS ARE ONLY ESTIMATES

AS-BUILT WILL NEED TO BE PROVIDED BY INSTALLER AFTER CONSTRUCTION

**MOUND DIMENSIONS**

Rockbed - 10' x 50'  
 Absorption Bed - 20' x 50'  
 Total Mound - 46.0' x 84.8'  
 Mound Slope Ratio - 3:1

Upslope Elev. - 92.2'  
 Min: Sand Height - 0" @ 95.2'  
 Rockbed Laterals Elev. - 96.0'  
 Height @ Crown Elev. - 97.5'

**LATERALS**

3 - Laterals @ 48" of 1-1/2" SCH40  
 Spacing - 3'  
 Drilled Holes - 3/16"

100.0 0 50.00 100.0 Feet

NAD\_1983\_HARN\_Adj\_MN\_Ramsey\_Feet  
 © Ramsey County Enterprise GIS Division

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



Kloppner Services & Designs, LLC

Lic # 4043

Approved by: Jesse Kloppner

Date - 9/14/20



# Preliminary Evaluation Worksheet

**1. Contact Information** v 04.01.2020

Property Owner/Client:  Date Completed:

Site Address:  Project ID:

Legal Description:

Parcel ID:  SEC:  TWP:  RNG:

**2. Flow and General System Information**

**A. Client-Provided Information**

Project Type:     New Construction         Replacement         Expansion         Repair

Project Use:     Residential     Other Establishment:

Residential use:    # Bedrooms:  Dwelling Sq.ft.:  Unfinished Sq. Ft.:

                          # Adults:                     # Children:                     # Teenagers:

In-home business (Y/N):  If yes, describe:

Water-using devices:     Garbage Disposal/Grinder     Dishwasher         Hot Tub\*  
                                    Sewage pump in basement     Water Softener\*         Sump Pump\*  
                                    Large Bathtub >40 gallons     Iron Filter\*             Self-Cleaning Humidifier\*  
                                    Clothes Washing Machine     High Eff. Furnace\*     Other:

\* Clear water source - should not go into system

Additional current or future uses:

Anticipated non-domestic waste:

*The above is complete & accurate:*

*Client signature & date*

**B. Designer-determined flow Information**    *Attach additional information as necessary.*

Design Flow:  GPD                    Anticipated Waste Type:

BOD:  mg/L    TSS  mg/L    Oil & Grease  mg/L

**3. Preliminary Site Information**

**A. Water Supply Wells**

#	Description	Mn. ID#	Well Depth (ft.)	Casing Depth (ft.)	Confining Layer	STA Setback	Source
1	33 Eagle Ridge Rd	14258	205	176		50	MN Well Index
2	18 Spring Farm La	13892	195	161		50	MN Well Index
3							
4							

Additional Well Information:

# Preliminary Evaluation Worksheet

Site within 200' of noncommunity transient well (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text"/>
Site within a drinking water supply management area (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text"/>
Site in Well Head Protection inner wellhead management zone (Y/N)	<input type="text" value="No"/>	Yes, source: <input style="width: 80%;" type="text" value="MN Well Index"/>
Buried water supply pipes within 50 ft of proposed system (Y/N)	<input type="text" value="No"/>	
<b>B. Site located in a shoreland district/area?</b>	<input type="text" value="No"/>	Yes, name: <input style="width: 80%;" type="text"/>
Elevation of ordinary high water level:	<input style="width: 50%;" type="text"/> ft	Source: <input style="width: 80%;" type="text"/>
Classification: <input style="width: 150%;" type="text"/>	Tank Setback: <input style="width: 50%;" type="text"/> ft.	STA Setbk: <input style="width: 50%;" type="text"/> ft.
<b>C. Site located in a floodplain?</b>	<input type="text" value="No"/>	Yes, Type(s): <input style="width: 80%;" type="text" value="N/A"/>
Floodplain designation/elevation (10 Year):	<input style="width: 50%;" type="text" value="N/A"/> ft	Source: <input style="width: 80%;" type="text" value="N/A"/>
Floodplain designation/elevation (100 Year):	<input style="width: 50%;" type="text" value="N/A"/> ft	Source: <input style="width: 80%;" type="text" value="N/A"/>
<b>D. Property Line Id / Source:</b>	<input type="checkbox"/> Owner <input type="checkbox"/> Survey <input checked="" type="checkbox"/> County GIS <input type="checkbox"/> Plat Map <input type="checkbox"/> Other <input style="width: 100px;" type="text"/>	
<b>E. ID distance of relevant setbacks on map:</b>	<input checked="" type="checkbox"/> Water <input checked="" type="checkbox"/> Easements <input checked="" type="checkbox"/> Well(s) <input checked="" type="checkbox"/> Building(s) <input checked="" type="checkbox"/> Property Lines <input checked="" type="checkbox"/> OHWL <input type="checkbox"/> Other: <input style="width: 100px;" type="text"/>	

**4. Preliminary Soil Profile Information From Web Soil Survey (attach map & description)**

Map Units:	<input style="width: 90%;" type="text" value="342C, Kingsley sandy loam"/>	Slope Range:	<input style="width: 80%;" type="text" value="6-12"/> %
List landforms:	<input style="width: 95%;" type="text" value="Moraines"/>		
Landform position(s):	<input style="width: 95%;" type="text" value="Shoulder"/>		
Parent materials:	<input style="width: 95%;" type="text" value="Till"/>		
	Depth to Bedrock/Restrictive Feature: <input style="width: 50%;" type="text" value="&gt;80"/> in	Depth to Watertable: <input style="width: 50%;" type="text" value="&gt;80"/> in	
Map Unit Ratings	Septic Tank Absorption Field- At-grade:	<input style="width: 90%;" type="text" value="Extremely limited"/>	
	Septic Tank Absorption Field- Mound:	<input style="width: 90%;" type="text" value="Extremely limited"/>	
	Septic Tank Absorption Field- Trench:	<input style="width: 90%;" type="text" value="Moderately limited"/>	

**5. Local Government Unit Information**

Name of LGU:	<input style="width: 80%;" type="text" value="City of North Oaks"/>
LGU Contact:	<input style="width: 80%;" type="text"/>
LGU-specific setbacks:	<input style="width: 80%;" type="text" value="30' from Wetlands"/>
LGU-specific design requirements:	<input style="width: 80%;" type="text" value="Septic Tanks: 4-bedroom = 1,500-gal &amp; 1,000-gal"/>
LGU-specific installation requirements:	<input style="width: 80%;" type="text"/>
Notes:	<input style="width: 80%; height: 40px;" type="text"/>

# Field Evaluation Worksheet

<b>1. Project Information</b>		v 04.01.2020	
Property Owner/Client:	<input type="text" value="Lawrence Eaton"/>	Project ID: <input type="text"/>	
Site Address:	<input type="text" value="33 Eagle Ridge Rd, North Oaks, MN 55127"/>	Date Completed: <input type="text" value="9/14/2020"/>	
<b>2. Utility and Structure Information</b>			
Utility Locations Identified	<input checked="" type="checkbox"/> Gopher State One Call # <input type="text"/>	<input type="checkbox"/> Any Private Utilities: <input type="text"/>	
Locate and Verify (see <i>Site Evaluation map</i> )			
<input checked="" type="checkbox"/> Existing Buildings <input checked="" type="checkbox"/> Improvements <input checked="" type="checkbox"/> Easements <input checked="" type="checkbox"/> Setbacks			
<b>3. Site Information</b>			
Vegetation type(s):	<input type="text" value="Lawn / Forest"/>	Landscape position: <input type="text" value="Back/ Side Slope"/>	
Percent slope:	<input type="text" value="10"/> %	Slope shape: <input type="text" value="Convex, Linear"/> Slope direction: <input type="text" value="southwest"/>	
Describe the flooding or run-on potential of site:	<input type="text" value="Direct run-off around upslope of mound"/>		
Describe the need for Type III or Type IV system:	<input type="text" value="The small lot does not provide enough space for Type I."/>		
Note:	<input type="text" value="Additionally, the steep slopes and wet soil requires building smallest system possible."/>		
Proposed soil treatment area protected? (Y/N):	<input type="text" value="Yes"/>	If yes, describe: <input type="text" value="Stakes"/>	
<b>4. General Soils Information</b>			
Filled, Compacted, Disturbed areas (Y/N):	<input type="text" value="No"/>		
If yes, describe:	<input type="text"/>		
Soil observations were conducted in the proposed system location (Y/N):	<input type="text" value="Yes"/>		
A soil observation in the most limiting area of the proposed system (Y/N):	<input type="text" value="Yes"/>		
Number of soil observations:	<input type="text" value="4"/>	Soil observation logs attached (Y/N): <input type="text" value="Yes"/>	
Percolation tests performed & attached (Y/N):		<input type="text" value="No"/>	
<b>5. Phase I. Reporting Information</b>			
	Depth	Elevation	
Limiting Condition*:	<input type="text"/> in	<input type="text" value="92.2"/> ft	<i>*Most Restrictive Depth Identified from List Below</i>
Periodically saturated soil:	<input type="text"/> in	<input type="text" value="92.2"/> ft	Soil Texture: <input type="text" value="fine sandy loam"/>
Standing water:	<input type="text"/> in	<input type="text"/> ft	Percolation Rate: <input type="text"/> min/inch
Bedrock:	<input type="text"/> in	<input type="text"/> ft	Soil Hyd Loading Rate: <input type="text" value="0.6"/> gpd/ft <sup>2</sup>
Benchmark Elevation:	<input type="text" value="100.0"/> ft	Elevations and Benchmark on map? (Y/N): <input type="text" value="Yes"/>	
Benchmark Elevation Location:	<input type="text" value="Top of Well"/>		
Differences between soil survey and field evaluation:	<input type="text"/>		
Site evaluation issues / comments:	<input type="text"/>		
Anticipated construction issues:	<input type="text" value="Water run-off, trees and variance for setbacks must be addressed prior to construction of this design."/>		



# Soil Observation Log

Project ID:

v 04.01.2020

Client: Lawrence Eaton				Location / Address: 33 Eagle Ridge Rd, North Oaks, MN 55127								
Soil parent material(s): (Check all that apply)				<input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter								
Landscape Position: (select one)		Back/ Side Slope		Slope %: 10.0		Slope shape		Convex, Linear		Elevation-relative to benchmark: 92.2		
Vegetation: Lawn / Forest			Soil survey map units: 342C, Kingsley sandy loam			Limiting Layer Elevation: 90.9						
Weather Conditions/Time of Day:			Sunny			3:00 PM		Date			09/14/20	
Observation #/Location:		SB1		See Map			Observation Type:			Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I----- Structure-----I					
							Shape	Grade	Consistence			
0-9	Fine Sandy Loam	10%	10YR 3/3				Granular	Weak	Friable			
9-15	Fine Sandy Loam	10%	10YR 4/3				Granular	Weak	Friable			
15-21	Fine Sandy Loam	15%	10YR 4/3	10YR 5/2	Depletions	S1	Granular	Weak	Friable			
				10YR 5/8	Concentrations	S2						
21-36	Coarse Sandy Loam	15%	10YR 5/3	10YR 6/2	Depletions	S1	Granular	Moderate	Friable			
				7.5YR 5/8	Concentrations	S2						

Comments: Limiting Layer = 15"

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Jesse Kloepner _____ (Designer/Inspector)	 _____ (Signature)	L4043 _____ (License #)	9/14/2020 _____ (Date)
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# Soil Observation Log

Project ID:

v 04.01.2020

Client: <b>Lawrence Eaton</b>				Location / Address: <b>33 Eagle Ridge Rd, North Oaks, MN 55127</b>							
Soil parent material(s): (Check all that apply)				<input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter							
Landscape Position: (select one)		Back/ Side Slope		Slope %: 10.0		Slope shape		Convex, Linear		Elevation-relative to benchmark: 91.1	
Vegetation: <b>Lawn / Forest</b>			Soil survey map units: <b>342C, Kingsley sandy loam</b>			Limiting Layer Elevation: 90.6					
Weather Conditions/Time of Day:		Sunny			3:30 PM		Date: 09/14/20				
Observation #/Location:		SP1		See Map			Observation Type: Pit				
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure				
							Shape	Grade	Consistence		
0-6	Loamy Fine Sand	10%	10YR 3/2				Granular	Weak	Friable		
6-11	Loamy Fine Sand	10%	10YR 3/1	10YR 5/1	Depletions	S2	Granular	Weak	Friable		
11-16	Loamy Fine Sand	10%	10YR 4/2	10YR 6/1	Depletions	S2	Granular	Weak	Friable		
			10YR 2/1								
16-24	Loamy Fine Sand	5%	10YR 2/1	10YR 7/1	Depletions	S2	Granular	Moderate	Friable		
			10YR 5/1								
24-30	Loamy Fine Sand	5%	10YR 2/1	10YR 7/1	Depletions	S2	Granular	Moderate	Friable		
			10YR 5/1								

Comments: Limiting Layer = 6"

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Jesse Kloepner

L4043

9/14/2020

(Designer/Inspector)

(Signature)

(License #)

(Date)



# Soil Observation Log

Project ID:

v 04.01.2020

Client:				Location / Address: 33 Eagle Ridge Rd, North Oaks, MN 55127							
Soil parent material(s): (Check all that apply)				<input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter							
Landscape Position: (select one)		Back/ Side Slope		Slope %: 10.0		Slope shape		Convex, Linear		Elevation-relative to benchmark: 90.0	
Vegetation: Lawn / Forest			Soil survey map units:			342C, Kingsley sandy loam			Limiting Layer Elevation: 90		
Weather Conditions/Time of Day:		Sunny			3:50 PM		Date 09/14/20				
Observation #/Location:		SP2		See Map			Observation Type: Pit				
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure				
							Shape	Grade	Consistence		
0-5	Loamy Fine Sand	10%	10YR 3/1	10YR 5/1	Depletions	S2	Granular	Weak	Friable		
5-15	Loamy Fine Sand	10%	10YR 3/1	10YR 5/1	Depletions	S2	Granular	Weak	Friable		
15-20	Loamy Fine Sand	5%	10YR 3/2	10YR 6/1	Depletions	S2	Granular	Moderate	Friable		
			10YR 2/1								
20-30	Loamy Fine Sand	5%	10YR 2/1	10YR 7/1	Depletions	S2	Granular	Moderate	Friable		
			10YR 5/1								

Comments: Limiting Layer = 0"

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

<u>Jesse Kloepfner</u> (Designer/Inspector)	 (Signature)	<u>L4043</u> (License #)	<u>9/14/2020</u> (Date)
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Textures:	
C	Clay
SiC	Silty Clay
SC	Sandy Clay
CL	Clay Loam
SiCL	Silty Clay Loam
SCL	Sandy Clay Loam
Si	Silt
SiL	Silt Loam
L	Loam
SL	Sandy Loam*
LS	Loamy Sand*
S	Sand*

*Sand Modifiers:	
Co	Coarse
M	Medium
F	Fine
VF	Very Fine

Topsoil Indicator(s) of Saturation:	
T1.	Wetland Vegetation
T2.	Depressional Landscape
T3.	Organic texture or organic modifiers
T4.	N 2.5/ 0 color
T5.	Redox features in topsoil
T6.	Hydraulic indicators

Subsoil Indicator(s) of Saturation:	
S1.	Distinct gray or red redox features
S2.	Depleted matrix (value >/=4 and chroma </=2)
S3.	5Y chroma </= 3
S4.	7.5 YR or redder faint redox concentrations or redox depletions

**Shape:**

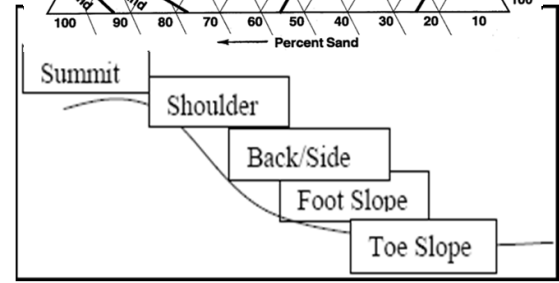
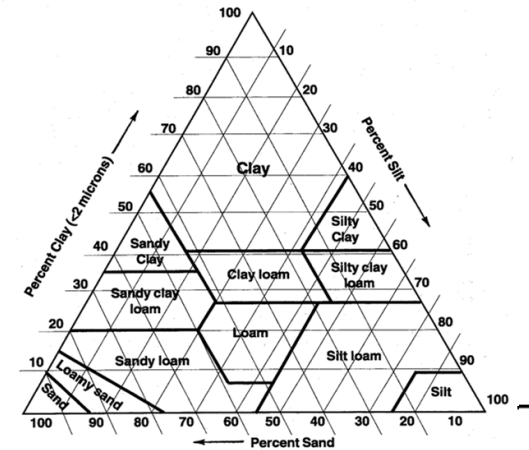
- Granular The peds are approximately spherical or polyhedral and are commonly found in topsoil. These are the small, rounded peds that hang onto roots when soil is turned over.
- Platy The peds are flat and plate like. They are oriented horizontally and are usually overlapping. Platy structure is commonly found in forested areas just below the leaf litter or shallow topsoil.
- Blocky The peds are block-like or polyhedral, and are bounded by flat or slightly rounded surface that are castings of the faces of surrounding peds. Blocky structure is commonly found in the lower topsoil and subsoil.
- Prismatic Flat or slightly rounded vertical faces bound the individual peds. Peds are distinctly longer vertically, and faces are typically casts or molds of adjoining peds. Prismatic structure is commonly found in the lower subsoil.
- Single Grain The structure found in a sandy soil. The individual particles are not held together.

**Grade:**

- Loose No peds, sandy soil
- Weak Poorly formed, indistinct peds, barely observable in place
- Moderate Well formed, distinct peds, moderately durable and evident, but not distinct in undisturbed soil
- Strong Durable peds that are quite evident in un-displaced soil, adhere weakly to one another, withstand displacement, and become separated when soil is disturbed
- Massive No observable aggregates, or no orderly arrangement of natural lines of weakness

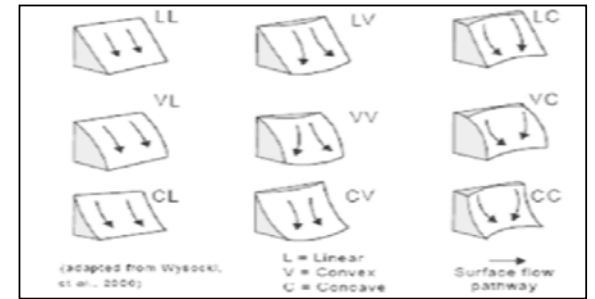
**Consistence:**

- Loose Intact specimen not available
- Friable Slight force between fingers
- Firm Moderate force between fingers
- Extremely Firm Moderate force between hands or slight foot pressure
- Rigid Foot pressure



**Slope Shape:**

Slope shape is described in two directions: up and down slope (perpendicular to the contour), and across slope (along the horizontal contour); e.g. Linear, Convex or LV'.





v 04.01.2020

## 1. PROJECT INFORMATION

Property Owner/Client:  Project ID:

Site Address:  Date:

## 2. DESIGN FLOW & WASTE STRENGTH *Attach data / estimate basis for Other Establishments*

Design Flow:  GPD Anticipated Waste Type:

BOD:  mg/L TSS:  mg/L Oil & Grease:  mg/L

Treatment Level:  *Select Treatment Level C for residential septic tank effluent*

## 3. HOLDING TANK SIZING

Minimum Capacity: Residential =400 gal/bedroom, Other Establishment = Design Flow x 5.0, Minimum size 1000 gallons

*Code Minimum Holding Tank Capacity:*  Gallons in  Tanks or Compartments

*Recommended Holding Tank Capacity:*  Gallons in  Tanks or Compartments

Type of High Level Alarm:  (Set @ 75% tank capacity)

Comments:

## 4. SEPTIC TANK SIZING

### A. Residential dwellings:

Number of Bedrooms (Residential):

*Code Minimum Septic Tank Capacity:*  Gallons in  Tanks or Compartments

*Recommended Septic Tank Capacity:*  Gallons in  Tanks or Compartments

Effluent Screen & Alarm (Y/N):  Model/Type:

### B. Other Establishments:

Waste received by:   GPD x  Days Hyd. Retention Time

*Code Minimum Septic Tank Capacity:*  Gallons in  Tanks or Compartments

*Recommended Septic Tank Capacity:*  Gallons in  Tanks or Compartments

Effluent Screen & Alarm (Y/N):  Model/Type:

## 5. PUMP TANK SIZING

Pump Tank 1 Capacity (Minimum):  Gal Pump Tank 2 Capacity (Minimum):  Gal

Pump Tank 1 Capacity (Recommended):  Gal Pump Tank 2 Capacity (Recommended):  Gal

Pump 1  GPM Total Head  ft Pump 2  GPM Total Head  ft

Supply Pipe Dia.  in Dose Vol:  gal Supply Pipe Dia.  Dose Vol:  Gal

<b>6. SYSTEM AND DISTRIBUTION TYPE</b>		Project ID: _____	
Soil Treatment Type:	<input type="text" value="Mound"/>	Distribution Type:	<input type="text" value="Pressure Distribution-Level"/>
Elevation Benchmark:	<input type="text" value="100"/> ft	Benchmark Location:	<input type="text" value="Top of Well"/>
MPCA System Type:	<input type="text" value="Type III"/>	Distribution Media:	<input type="text" value="Rock"/>
Type III/IV Details:	<input of="" sand."="" type="text" value="Mound requires 36"/>		

**7. SITE EVALUATION SUMMARY:**

Describe Limiting Condition:

Layers with >35% Rock Fragments? (yes/no)  If yes, describe below: % rock and layer thickness, amount of soil credit and any additional information for addressing the rock fragments in this design.

Note:

	Depth		Depth		Elevation of Limiting Condition
Limiting Condition:	<input type="text" value="0"/> inches		<input type="text" value="0.0"/> ft		<input type="text" value="92.20"/> ft
Minimum Req'd Separation:	<input type="text" value="36"/> inches		<input type="text" value="3.0"/> ft		<i>Critical for system compliance</i>
Code Max System Depth:	<input type="text" value="Mound"/> inches		<input type="text" value="-3.0"/> ft		<input type="text" value="95.20"/> ft

This is the maximum depth to the bottom of the distribution media for required separation. Negative Depth (ft) means it must be a mound.

Soil Texture:

Soil Hyd. Loading Rate:  GPD/ft<sup>2</sup>      Percolation Rate:  MPI

Contour Loading Rate:       Note:

Measured Land Slope:  %      Note:

Comments:

**8. SOIL TREATMENT AREA DESIGN SUMMARY**

**Trench:**

Dispersal Area	<input type="text"/>	ft <sup>2</sup>	Sidewall Depth	<input type="text"/>	in	Trench Width	<input type="text"/>	ft
Total Lineal Feet	<input type="text"/>	ft	No. of Trenches	<input type="text"/>		Code Max. Trench Depth	<input type="text"/>	in
Contour Loading Rate	<input type="text"/>	ft	Length	<input type="text"/>	ft	Designed Trench Depth	<input type="text"/>	in

**Bed:**

Dispersal Area	<input type="text"/>	ft <sup>2</sup>	Sidewall Depth	<input type="text"/>	in	Maximum Bed Depth	<input type="text"/>	in
Bed Width	<input type="text"/>	ft	Bed Length	<input type="text"/>	ft	Designed Bed Depth	<input type="text"/>	in

**Mound:**

Dispersal Area	<input type="text" value="500.0"/>	ft <sup>2</sup>	Bed Length	<input type="text" value="50.0"/>	ft	Bed Width	<input type="text" value="10.0"/>	ft
Absorption Width	<input type="text" value="20.0"/>	ft	Clean Sand Lift	<input type="text" value="3.0"/>	ft	Berm Width (0-1%)	<input type="text"/>	ft
Upslope Berm Width	<input type="text" value="11.1"/>	ft	Downslope Berm	<input type="text" value="24.9"/>	ft	Endslope Berm Width	<input type="text" value="17.4"/>	ft
Total System Length	<input type="text" value="84.8"/>	ft	System Width	<input type="text" value="46.0"/>	ft	Contour Loading Rate	<input type="text" value="12.0"/>	gal/ft

Project ID: \_\_\_\_\_

**At-Grade:**

Bed Width	<input type="text"/>	ft	Bed Length	<input type="text"/>	ft	Finished Height	<input type="text"/>	ft
Contour Loading Rate	<input type="text"/>	gal/ft	Upslope Berm	<input type="text"/>	ft	Downslope Berm	<input type="text"/>	ft
Endslope Berm	<input type="text"/>	ft	System Length	<input type="text"/>	ft	System Width	<input type="text"/>	ft

**Level & Equal Pressure Distribution**

No. of Laterals	<input type="text" value="3"/>	Perforation Spacing	<input type="text" value="3"/>	ft	Perforation Diameter	<input type="text" value="3/16"/>	in	
Lateral Diameter	<input type="text" value="1.50"/>	in	Min Dose Volume	<input type="text" value="63"/>	gal	Max Dose Volume	<input type="text" value="150"/>	gal

**9. Additional Info for At-Risk, HSW or Type IV Design**

A. Starting BOD Concentration = Design Flow X Starting BOD (mg/L) X 8.35 ÷ 1,000,000

gpd X  mg/L X 8.35 ÷ 1,000,00 =  lbs. BOD/day

B. Target BOD Concentration = Design Flow X Target BOD (mg/L) X 8.35 ÷ 1,000,000

gpd X  mg/L X 8.35 ÷ 1,000,00 =  lbs. BOD/day

Lbs. BOD To Be Removed:

PreTreatment Technology:  \*Must Meet or Exceed Target

Disinfection Technology:  \*Required for Levels A & B

C. Organic Loading to Soil Treatment Area:

mg/L X  gpd x 8.35 ÷ 1,000,000 ÷  ft<sup>2</sup> =  lbs./day/ft<sup>2</sup>

**10. Comments/Special Design Considerations:**

1. A variance is needed for setbacks from the property lines for the STA in the SW corner of the lot. A variance of 20' from the South and 18.7' from the West must be granted by the City of North Oaks prior to construction.
2. Trees will need to be removed.
3. Access around the house will be difficult. The area is often wet and will required extra measures by contractor to protect ground and equipment.
4. The supply line may need to be directionally bored from the Lift Tank to the mound.
5. The current ground elevation of the area for the new tanks is 89.0'.
6. It is advised to address the lack of drainage in the SW corner of the the lot and the hillside on the West to allow for drainage from SW corner of property.

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

<input type="text" value="Jesse Kloepfner"/>	<input type="text" value="L. Kloepfner"/>	<input type="text" value="L4043"/>	<input type="text" value="09/19/20"/>
(Designer)	(Signature)	(License #)	(Date)

**1. SYSTEM SIZING:** Project ID: \_\_\_\_\_ v 04.01.2020

- A. Design Flow:  GPD
- B. Soil Loading Rate:  GPD/ft<sup>2</sup>
- C. Depth to Limiting Condition:  ft
- D. Percent Land Slope:  %
- E. Design Media Loading Rate:  GPD/ft<sup>2</sup>
- F. Mound Absorption Ratio:

<b>TABLE IXa</b>				
LOADING RATES FOR DETERMINING BOTTOM ABSORPTION AREA AND ABSORPTION RATIOS USING PERCOLATION TESTS				
Percolation Rate (MPI)	Treatment Level C		Treatment Level A, A-2, B,	
	Absorption Area Loading Rate (gpd/ft <sup>2</sup> )	Mound Absorption Ratio	Absorption Area Loading Rate (gpd/ft <sup>2</sup> )	Mound Absorption Ratio
<0.1	-	1	-	1
0.1 to 5	1.2	1	1.6	1
0.1 to 5 (fine sand and loamy fine sand)	0.6	2	1	1.6
6 to 15	0.78	1.5	1	1.6
16 to 30	0.6	2	0.78	2
31 to 45	0.5	2.4	0.78	2
46 to 60	0.45	2.6	0.6	2.6
61 to 120	-	5	0.3	5.3
>120	-	-	-	-

Table 1 MOUND CONTOUR LOADING RATES:				
Measured Perc Rate	← OR →	Texture - derived mound absorption ratio		Contour Loading Rate:
≤ 60mpi		1.0, 1.3, 2.0, 2.4, 2.6	→	≤12
61-120 mpi	← OR →	5.0	→	≤12
≥ 120 mpi*		>5.0*	→	≤6*

\*Systems with these values are not Type I systems. Contour Loading Rate (linear loading rate) is a recommended value.

**2. DISPERSAL MEDIA SIZING**

A. Calculate Dispersal Bed Area: Design Flow ÷ Design Media Loading Rate

$$\frac{600 \text{ GPD}}{1.2 \text{ GPD/ft}^2} = 500 \text{ ft}^2$$

If a larger dispersal media area is desired, enter size:  ft<sup>2</sup>

B. Enter Dispersal Bed Width:  ft *Can not exceed 10 feet*

C. Calculate Contour Loading Rate: Bed Width X Design Media Loading Rate

$$10 \text{ ft} \times 1.2 \text{ GPD/ft}^2 = 12.0 \text{ gal/ft} \quad \textit{Can not exceed Table 1}$$

D. Calculate Minimum Dispersal Bed Length: Dispersal Bed Area ÷ Bed Width

$$\frac{500 \text{ ft}^2}{10.0 \text{ ft}} = 50.0 \text{ ft}$$

**3. ABSORPTION AREA SIZING**

A. Calculate Absorption Width: Bed Width X Mound Absorption Ratio

$$10.0 \text{ ft} \times 2.0 = 20.0 \text{ ft}$$

B. For slopes >1%, the Absorption Width is measured downhill from the upslope edge of the Bed.

Calculate Downslope Absorption Width: Absorption Width - Bed Width

$$20.0 \text{ ft} - 10.0 \text{ ft} = 10.0 \text{ ft}$$

**4. DISTRIBUTION MEDIA: ROCK**

Project ID: \_\_\_\_\_

A. Rock Depth Below Distribution Pipe

$$\frac{6 \text{ in}}{0.50 \text{ ft}}$$

**5. DISTRIBUTION MEDIA: REGISTERED TREATMENT PRODUCTS: CHAMBERS AND EZFLOW**

- A. Enter Dispersal Media:
- B. Enter the Component: Length:  ft      Width:  ft      Depth:  ft
- C. Number of Components per Row = Bed Length divided by Component Length (Round up)  
 ft ÷  ft =  components/row      *Check registered product information for specific application details and design*
- D. Actual Bed Length = Number of Components/row X Component Length:  
 components X  ft =
- E. Number of Rows = Bed Width divided by Component Width (Round up)  
 ft ÷  ft =  rows      *Adjust width so this is a whole number.*
- F. Total Number of Components = Number of Components per Row X Number of Rows  
 X  =  components

**6. MOUND SIZING**

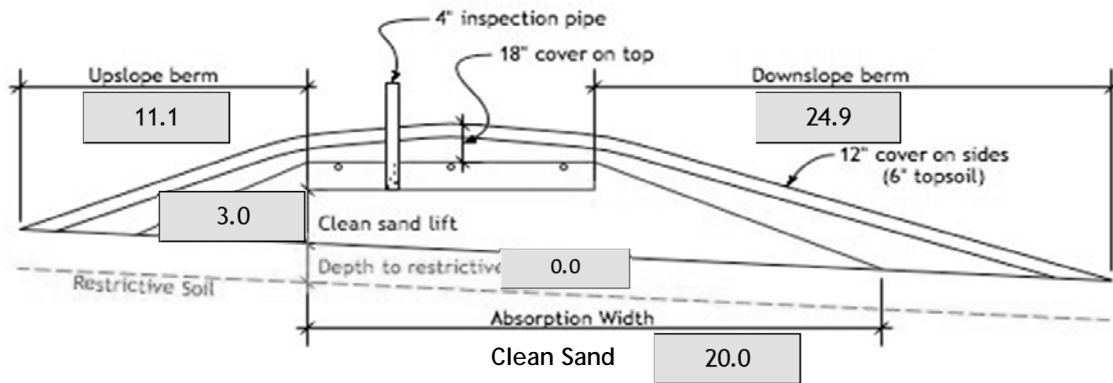
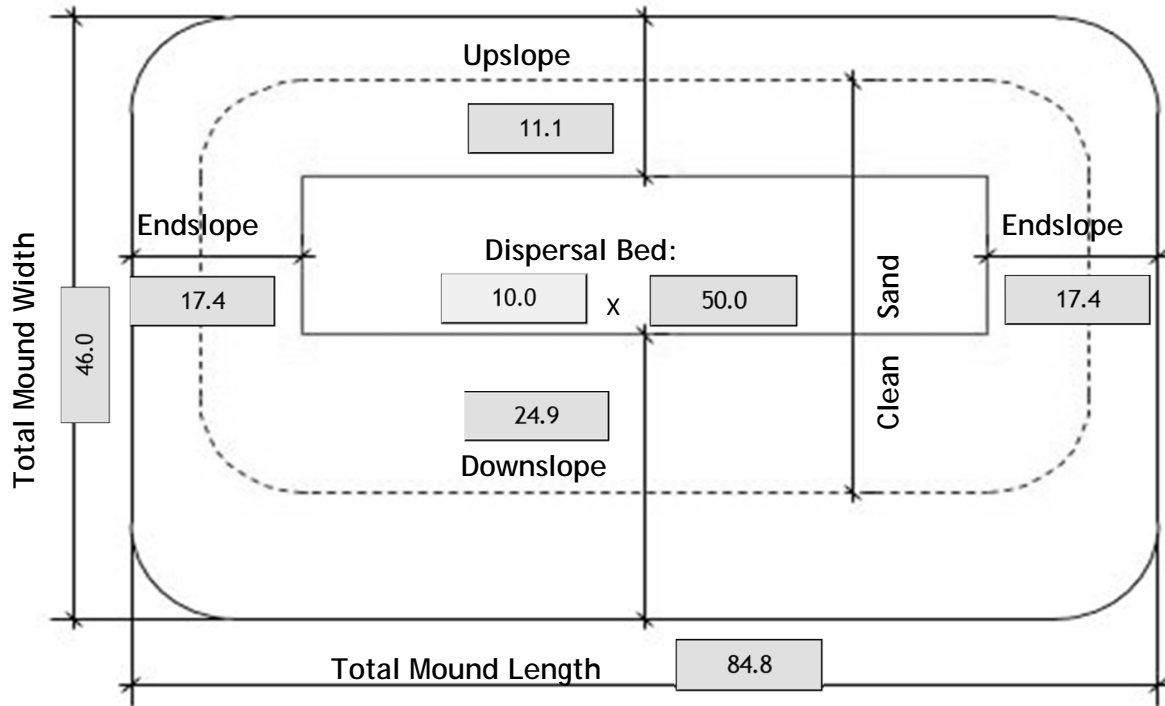
- A. Calculate Minimum Clean Sand Lift: 3 feet minus Depth to Limiting Condition = Clean Sand Lift  
 3.0 ft -  ft =  3.0 ft      Design Sand Lift (optional):  ft
- B. Upslope Height: Clean Sand Lift + Depth of Media + Depth to Cover Pipe + Depth of Cover (1 ft)  
 3.0 ft +  0.5 ft +  0.3 ft +  1.0 ft =  4.8 ft

Land Slope %	0	1	2	3	4	5	6	7	8	9	10	11	12	
Upslope Berm Ratio	3:1	3.00	2.91	2.83	2.75	2.68	2.61	2.54	2.48	2.42	2.36	2.31	2.26	2.21
	4:1	4.00	3.85	3.70	3.57	3.45	3.33	3.23	3.12	3.03	2.94	2.86	2.78	2.70

- C. Select Upslope Berm Multiplier (based on land slope):  2.31
- D. Calculate Upslope Berm Width: Multiplier X Upslope Mound Height  
 2.31 ft X  4.8 ft =  11.1 ft
- E. Calculate Drop in Elevation Under Bed: Bed Width X Land Slope ÷ 100 = Drop (ft)  
 10.0 ft X  10.0 % ÷ 100 =  1.00 ft
- F. Calculate Downslope Mound Height: Upslope Height + Drop in Elevation  
 4.8 ft +  1.00 ft =  5.8 ft

Land Slope %	0	1	2	3	4	5	6	7	8	9	10	11	12	
Downslope Berm Ratio	3:1	3.00	3.09	3.19	3.30	3.41	3.53	3.66	3.80	3.95	4.11	4.29	4.48	4.69
	4:1	4.00	4.17	4.35	4.54	4.76	5.00	5.26	5.56	5.88	6.25	6.67	7.14	7.69

- G. Select Downslope Berm Multiplier (based on land slope):  4.29
- H. Calculate Downslope Berm Width: Downslope Multiplier X Downslope Height  
 4.29 x  5.8 ft =  24.9 ft
- I. Calculate Minimum Berm to Cover Absorption Area: Downslope Absorption Width + 4 feet  
 10.0 ft +  4 ft =  14.0 ft
- J. Design Downslope Berm = greater of 4H and 4I:  24.9 ft
- K. Select Endslope Berm Multiplier:  3.00      *(usually 3.0 or 4.0)*
- L. Calculate Endslope Berm X Downslope Mound Height = Endslope Berm Width  
 3.00 ft X  5.8 ft =  17.4 ft
- M. Calculate Mound Width: Upslope Berm Width + Bed Width + Downslope Berm Width  
 11.1 ft +  10.0 ft +  24.9 ft =  46.0 ft
- N. Calculate Mound Length: Endslope Berm Width + Bed Length + Endslope Berm Width  
 17.4 ft +  50.0 ft +  17.4 ft =  84.8 ft



Comments:

Mound slope ratio is 3:1

Project ID: \_\_\_\_\_ v 04.01.2020

**A. Rock Volume:** (Rock Below Pipe + Rock to cover pipe (*pipe outside dia + ~2 inch*)) X Bed Length X Bed Width = Volume

$$(\boxed{6} \text{ in} + \boxed{3.0} \text{ in}) \div 12 \times \boxed{50.0} \text{ ft} \times \boxed{10.0} \text{ ft} = \boxed{375.0} \text{ ft}^3$$

Divide ft<sup>3</sup> by 27 ft<sup>3</sup>/yd<sup>3</sup> to calculate cubic yards:  $\boxed{375.0} \text{ ft}^3 \div 27 = \boxed{13.9} \text{ yd}^3$

Add 30% for constructability:  $\boxed{13.9} \text{ yd}^3 \times 1.3 = \boxed{18.1} \text{ yd}^3$

**B. Calculate Clean Sand Volume:**

*Volume Under Rock bed: Average Sand Depth x Media Width x Media Length = cubic feet*

$$\boxed{3.3} \text{ ft} \times \boxed{10.0} \text{ ft} \times \boxed{50.0} \text{ ft} = \boxed{1650.0} \text{ ft}^3$$

**For a Mound on a slope from 0-1%**

*Volume from Length = ((Upslope Mound Height - 1) X Absorption Width Beyond Bed X Media Bed Length)*

$$\boxed{\phantom{000}} \text{ ft} - 1) \times \boxed{\phantom{000}} \times \boxed{\phantom{000}} \text{ ft} = \boxed{\phantom{000}}$$

*Volume from Width = ((Upslope Mound Height - 1) X Absorption Width Beyond Bed X Media Bed Width)*

$$\boxed{\phantom{000}} \text{ ft} - 1) \times \boxed{\phantom{000}} \times \boxed{\phantom{000}} \text{ ft} = \boxed{\phantom{000}}$$

*Total Clean Sand Volume: Volume from Length + Volume from Width + Volume Under Media*

$$\boxed{\phantom{000}} \text{ ft}^3 + \boxed{\phantom{000}} \text{ ft}^3 + \boxed{\phantom{000}} \text{ ft}^3 = \boxed{\phantom{000}} \text{ ft}^3$$

**For a Mound on a slope greater than 1%**

*Upslope Volume: ((Upslope Mound Height - 1) x 3 x Bed Length) ÷ 2 = cubic feet*

$$((\boxed{4.8} \text{ ft} - 1) \times 3.0 \text{ ft} \times \boxed{50.0}) \div 2 = \boxed{285.0} \text{ ft}^3$$

*Downslope Volume: ((Downslope Height - 1) x Downslope Absorption Width x Media Length) ÷ 2 = cubic feet*

$$((\boxed{5.8} \text{ ft} - 1) \times \boxed{10.0} \text{ ft} \times \boxed{50.0}) \div 2 = \boxed{1200.0} \text{ ft}^3$$

*Endslope Volume: (Downslope Mound Height - 1) x 3 x Media Width = cubic feet*

$$(\boxed{5.8} \text{ ft} - 1) \times 3.0 \text{ ft} \times \boxed{10.0} \text{ ft} = \boxed{144.0} \text{ ft}^3$$

*Total Clean Sand Volume: Upslope Volume + Downslope Volume + Endslope Volume + Volume Under Media*

$$\boxed{285.0} \text{ ft}^3 + \boxed{1200.0} \text{ ft}^3 + \boxed{144.0} \text{ ft}^3 + \boxed{1650.0} \text{ ft}^3 = \boxed{3279.0} \text{ ft}^3$$

Divide ft<sup>3</sup> by 27 ft<sup>3</sup>/yd<sup>3</sup> to calculate cubic yards:  $\boxed{3279.0} \text{ ft}^3 \div 27 = \boxed{121.4} \text{ yd}^3$

Add 30% for constructability:  $\boxed{121.4} \text{ yd}^3 \times 1.3 = \boxed{157.9} \text{ yd}^3$

**C. Calculate Sandy Berm Volume:**

*Total Berm Volume (approx): ((Avg. Mound Height - 0.5 ft topsoil) x Mound Width x Mound Length) ÷ 2*

$$(\boxed{5.3} - 0.5) \text{ ft} \times \boxed{46.0} \text{ ft} \times \boxed{84.8} \div 2 = \boxed{9355.8} \text{ ft}^3$$

*Total Mound Volume - Clean Sand volume - Rock Volume = cubic feet*

$$\boxed{9355.8} \text{ ft}^3 - \boxed{3279.0} \text{ ft}^3 - \boxed{375.0} \text{ ft}^3 = \boxed{5701.8} \text{ ft}^3$$

Divide ft<sup>3</sup> by 27 ft<sup>3</sup>/yd<sup>3</sup> to calculate cubic yards:  $\boxed{5701.8} \text{ ft}^3 \div 27 = \boxed{211.2} \text{ yd}^3$

Add 30% for constructability:  $\boxed{211.2} \text{ yd}^3 \times 1.3 = \boxed{274.5} \text{ yd}^3$

**D. Calculate Topsoil Material Volume: Total Mound Width X Total Mound Length X .5 ft**

$$\boxed{46.0} \text{ ft} \times \boxed{84.8} \text{ ft} \times 0.5 \text{ ft} = \boxed{1949.1} \text{ ft}^3$$

Divide ft<sup>3</sup> by 27 ft<sup>3</sup>/yd<sup>3</sup> to calculate cubic yards:  $\boxed{1949.1} \text{ ft}^3 \div 27 = \boxed{72.2} \text{ yd}^3$

Add 30% for constructability:  $\boxed{72.2} \text{ yd}^3 \times 1.3 = \boxed{93.8} \text{ yd}^3$

# Pressure Distribution Design Worksheet

Project ID:

v 04.01.2020

1. Media Bed Width:  ft
2. Minimum Number of Laterals in system/zone = Rounded up number of  $[(\text{Media Bed Width} - 4) \div 3] + 1$ .

$[(\text{ } \boxed{10} \text{ } - 4) \div 3] + 1 = \boxed{3}$  laterals

*Does not apply to at-grades*

3. Designer Selected *Number of Laterals*:  laterals

*Cannot be less than line 2 (Except in at-grades)*

4. Select *Perforation Spacing*:  ft

5. Select *Perforation Diameter Size*:  in

6. *Length of Laterals* = Media Bed Length - 2 Feet.

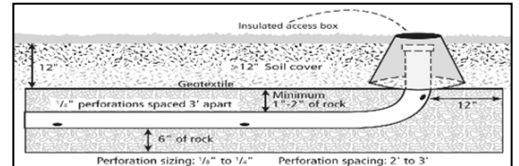
- 2ft =  ft *Perforation can not be closer than 1 foot from edge.*

7. Determine the *Number of Perforation Spaces*. Divide the *Length of Laterals* by the *Perforation Spacing* and round down to the nearest whole number.

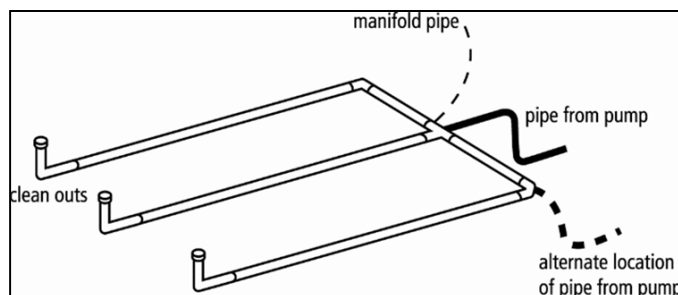
*Number of Perforation Spaces* =  ft  $\div$   ft =  Spaces

8. *Number of Perforations per Lateral* is equal to 1.0 plus the *Number of Perforation Spaces*. Check table below to verify the number of perforations per lateral guarantees less than a 10% discharge variation. The value is double with a center manifold.

*Perforations Per Lateral* =  Spaces + 1 =  Perfs. Per Lateral



Maximum Number of Perforations Per Lateral to Guarantee <10% Discharge Variation											
1/4 Inch Perforations						7/32 Inch Perforations					
Perforation Spacing (Feet)	Pipe Diameter (Inches)					Perforation Spacing (Feet)	Pipe Diameter (Inches)				
	1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3
2	10	13	18	30	60	2	11	16	21	34	68
2 1/2	8	12	16	28	54	2 1/2	10	14	20	32	64
3	8	12	16	25	52	3	9	14	19	30	60
3/16 Inch Perforations						1/8 Inch Perforations					
Perforation Spacing (Feet)	Pipe Diameter (Inches)					Perforation Spacing (Feet)	Pipe Diameter (Inches)				
	1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3
2	12	18	26	46	87	2	21	33	44	74	149
2 1/2	12	17	24	40	80	2 1/2	20	30	41	69	135
3	12	16	22	37	75	3	20	29	38	64	128





## Pressure Distribution Design Worksheet

9. *Total Number of Perforations* equals the *Number of Perforations per Lateral* multiplied by the *Number of Perforated Laterals*.

Perf. Per Lat. X  Number of Perf. Lat. =  Total Number of Perf.

10. Spacing of laterals; Must be greater than 1 foot and no more than 3 feet:  ft

11. Select *Type of Manifold Connection* (End or Center):

12. Select *Lateral Diameter* (See Table):  in

13. Calculate the *Square Feet per Perforation*.

*Recommended value is 4-11 ft<sup>2</sup> per perforation, Does not apply to At-Grades*

Perforation Discharge (GPM)				
Head (ft)	Perforation Diameter			
	1/8	3/16	7/32	1/4
1.0 <sup>a</sup>	0.18	0.41	0.56	0.74
1.5	0.22	0.51	0.69	0.9
2.0 <sup>b</sup>	0.26	0.59	0.80	1.04
2.5	0.29	0.65	0.89	1.17
3.0	0.32	0.72	0.98	1.28
4.0	0.37	0.83	1.13	1.47
5.0 <sup>c</sup>	0.41	0.93	1.26	1.65
1 foot	Dwellings with 3/16 inch to 1/4 inch perforations			
2 feet	Dwellings with 1/8 inch perforations Other establishments and MSTs with 3/16 inch to 1/4 inch perforations			
5 feet	Other establishments and MSTs with 1/8 inch perforations			

a. *Bed Area* = Bed Width (ft) X Bed Length (ft)

ft X  ft =  ft<sup>2</sup>

b. *Square Foot per Perforation* = *Bed Area* ÷ by the *Total Number of Perfs*

ft<sup>2</sup> ÷  perf =  ft<sup>2</sup>/perf

14. Select *Minimum Average Head*:  ft

15. Select *Perforation Discharge* based on Table:  GPM per Perf

16. *Flow Rate* = *Total Number of Perfs* X *Perforation Discharge*.

Perfs X  GPM per Perforation =  GPM

17. *Volume of Liquid Per Foot of Distribution Piping* (Table II):  Gallons/ft

18. *Volume of Distribution Piping* =

= [*Number of Perforated Laterals* X *Length of Laterals* X (Volume of Liquid Per Foot of Distribution Piping)]

X  ft X  gal/ft =  Gallons

Pipe Diameter (inches)	Liquid Per Foot (Gallons)
1	0.045
1.25	0.078
1.5	0.110
2	0.170
3	0.380
4	0.661

19. *Minimum Delivered Volume* = *Volume of Distribution Piping* X 4

gals X 4 =  Gallons

Comments/Special Design Considerations:

1. PUMP CAPACITY Project ID: \_\_\_\_\_ v 04.01.2020

Pumping to Gravity or Pressure Distribution:

A. If pumping to gravity enter the gallon per minute of the pump:  GPM (10 - 45 gpm)

B. If pumping to a pressurized distribution system:  GPM

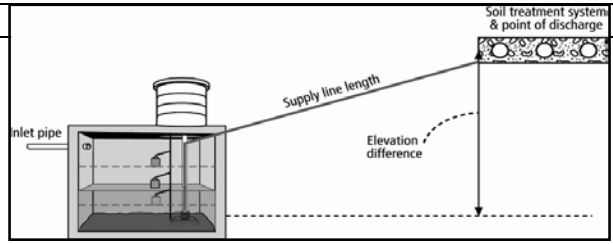
C. Enter pump description:

2. HEAD REQUIREMENTS

A. Elevation Difference  ft  
between pump and point of discharge:

B. Distribution Head Loss:  ft

C. Additional Head Loss:  ft (due to special equipment, etc.)



Distribution Head Loss	
Gravity Distribution = 0ft	
Pressure Distribution based on Minimum Average Head Value on Pressure Distribution Worksheet:	
Minimum Average Head	Distribution Head Loss
1ft	5ft
2ft	6ft
5ft	10ft

Table I. Friction Loss in Plastic Pipe per 100ft

Flow Rate (GPM)	Pipe Diameter (inches)			
	1	1.25	1.5	2
10	9.1	3.1	1.3	0.3
12	12.8	4.3	1.8	0.4
14	17.0	5.7	2.4	0.6
16	21.8	7.3	3.0	0.7
18		9.1	3.8	0.9
20		11.1	4.6	1.1
25		16.8	6.9	1.7
30		23.5	9.7	2.4
35			12.9	3.2
40			16.5	4.1
45			20.5	5.0
50				6.1
55				7.3
60				8.6
65				10.0
70				11.4
75				13.0
85				16.4
95				20.1

D. 1. Supply Pipe Diameter:  in

2. Supply Pipe Length:  ft

E. Friction Loss in Plastic Pipe per 100ft from Table I:

Friction Loss =  ft per 100ft of pipe

F. Determine *Equivalent Pipe Length* from pump discharge to soil dispersal area discharge point. Estimate by adding 25% to supply pipe length for fitting loss.  
*Supply Pipe Length X 1.25 = Equivalent Pipe Length*

ft X 1.25 =  ft

G. Calculate *Supply Friction Loss* by multiplying *Friction Loss Per 100ft* by the *Equivalent Pipe Length* and divide by 100.

Supply Friction Loss =  ft per 100ft X  ft ÷ 100 =  ft

H. *Total Head* requirement is the sum of the *Elevation Difference* + *Distribution Head Loss*, + *Additional Head Loss* + *Supply Friction Loss*

ft +  ft +  ft +  ft =  ft

3. PUMP SELECTION

A pump must be selected to deliver at least **22.0** GPM with at least **17.0** feet of total head.

Comments:

<b>DETERMINE TANK CAPACITY AND DIMENSIONS</b>		Project ID:	v 04.01.2020
1. A. Design Flow (Design Sum. 1A):	600	GPD	C. Tank Use: <span style="border: 1px solid black; padding: 2px;">Dosing</span>
B. Min. required pump tank capacity:	600	Gal	D. Recommended pump tank capacity: <span style="border: 1px solid black; padding: 2px;">1000</span> Gal
2. A. Tank Manufacturer:	<span style="border: 1px solid black; padding: 2px;">Minnesota Precast</span>		B. Tank Model: <span style="border: 1px solid black; padding: 2px;">1000 Gallon Pump Tank</span>
C. Capacity from manufacturer:	1000	Gallons	<i>Note: Design calculations are based on this specific tank. Substituting a different tank model will change the pump float or timer settings. Contact designer if changes are necessary.</i>
D. Gallons per inch from manufacturer:	25.0	Gallons per inch	
E. Liquid depth of tank from manufacturer:	40.0	inches	
<b>DETERMINE DOSING VOLUME</b>			
3 Calculate <i>Volume to Cover Pump</i> (The inlet of the pump must be at least 4-inches from the bottom of the pump tank & 2 inches of water covering the pump is recommended)			
(Pump and block height + 2 inches) X Gallons Per Inch ( <span style="border: 1px solid black; padding: 2px;">10</span> in + 2 inches ) X <span style="border: 1px solid black; padding: 2px;">25.0</span> Gallons Per Inch = <span style="border: 1px solid black; padding: 2px;">300</span> Gallons			
4 <i>Minimum Delivered Volume</i> = 4 X Volume of Distribution Piping: -Item 18 of the Pressure Distribution or Item 11 of Non-level			
		<span style="border: 1px solid black; padding: 2px;">63</span> Gallons (Minimum dose)	<span style="border: 1px solid black; padding: 2px;">2.5</span> inches/dose
5 Calculate <i>Maximum Pumpout Volume</i> (25% of Design Flow)			
Design Flow:	<span style="border: 1px solid black; padding: 2px;">600</span> GPD	X 0.25 =	<span style="border: 1px solid black; padding: 2px;">150</span> Gallons (Maximum dose) <span style="border: 1px solid black; padding: 2px;">6.0</span> inches/dose
6 Select a pumpout volume that meets both Minimum and Maximum:			
		<span style="border: 1px solid black; padding: 2px;">80</span> Gallons	
7 Calculate <i>Doses Per Day</i> = Design Flow ÷ Delivered Volume			
		<span style="border: 1px solid black; padding: 2px;">600</span> gpd ÷ <span style="border: 1px solid black; padding: 2px;">80</span> gal =	<span style="border: 1px solid black; padding: 2px;">7.50</span> Doses
8 Calculate Drainback:			
A. Diameter of Supply Pipe =	<span style="border: 1px solid black; padding: 2px;">2</span> inches		
B. Length of Supply Pipe =	<span style="border: 1px solid black; padding: 2px;">120</span> feet		
C. Volume of Liquid Per Lineal Foot of Pipe =	<span style="border: 1px solid black; padding: 2px;">0.170</span> Gallons/ft		
D. Drainback = Length of Supply Pipe X Volume of Liquid Per Lineal Foot of Pipe	<span style="border: 1px solid black; padding: 2px;">120</span> ft X <span style="border: 1px solid black; padding: 2px;">0.170</span> gal/ft = <span style="border: 1px solid black; padding: 2px;">20.4</span> Gallons		
9. <i>Total Dosing Volume</i> = Delivered Volume plus Drainback			
		<span style="border: 1px solid black; padding: 2px;">80</span> gal + <span style="border: 1px solid black; padding: 2px;">20.4</span> gal =	<span style="border: 1px solid black; padding: 2px;">100</span> Gallons
10. Minimum Alarm Volume = Depth of alarm (2 or 3 inches) X gallons per inch of tank			
		<span style="border: 1px solid black; padding: 2px;">3</span> in X <span style="border: 1px solid black; padding: 2px;">25.0</span> gal/in =	<span style="border: 1px solid black; padding: 2px;">75.0</span> Gallons
<b>DEMAND DOSE FLOAT SETTINGS</b>			
11. Calculate <i>Float Separation Distance</i> using <i>Dosing Volume</i> .			
<i>Total Dosing Volume /Gallons Per Inch</i> <span style="border: 1px solid black; padding: 2px;">100</span> gal ÷ <span style="border: 1px solid black; padding: 2px;">25.0</span> gal/in = <span style="border: 1px solid black; padding: 2px;">4.0</span> Inches			
12. Measuring from bottom of tank:			
A. Distance to set Pump Off Float = Pump + block height + 2 inches	<span style="border: 1px solid black; padding: 2px;">10</span> in + 2 in = <span style="border: 1px solid black; padding: 2px;">12</span> Inches		
B. Distance to set Pump On Float=Distance to Set Pump-Off Float + Float Separation Distance	<span style="border: 1px solid black; padding: 2px;">12</span> in + <span style="border: 1px solid black; padding: 2px;">4.0</span> in = <span style="border: 1px solid black; padding: 2px;">16</span> Inches		
C. Distance to set Alarm Float = Distance to set Pump-On Float + Alarm Depth (2-3 inches)	<span style="border: 1px solid black; padding: 2px;">16</span> in + <span style="border: 1px solid black; padding: 2px;">3.0</span> in = <span style="border: 1px solid black; padding: 2px;">19</span> Inches		
		Inches for Dose: <span style="border: 1px solid black; padding: 2px;">4.0</span> in	
		Alarm Depth: <span style="border: 1px solid black; padding: 2px;">19.0</span> in	
		Pump On: <span style="border: 1px solid black; padding: 2px;">16.0</span> in	
		Pump Off: <span style="border: 1px solid black; padding: 2px;">12.0</span> in	



## Septic System Management Plan for Above Grade Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your septic system is designed to kill harmful organisms and remove pollutants before the water is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer or service provider. However, it is **YOUR** responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

***Proper septic system design, installation, operation and maintenance means safe and clean water!***

Property Owner	Email
Property Address	Property ID
System Designer	Contact Info
System Installer	Contact Info
Service Provider/Maintainer	Contact Info
Permitting Authority	Contact Info
Permit #	Date Inspected

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

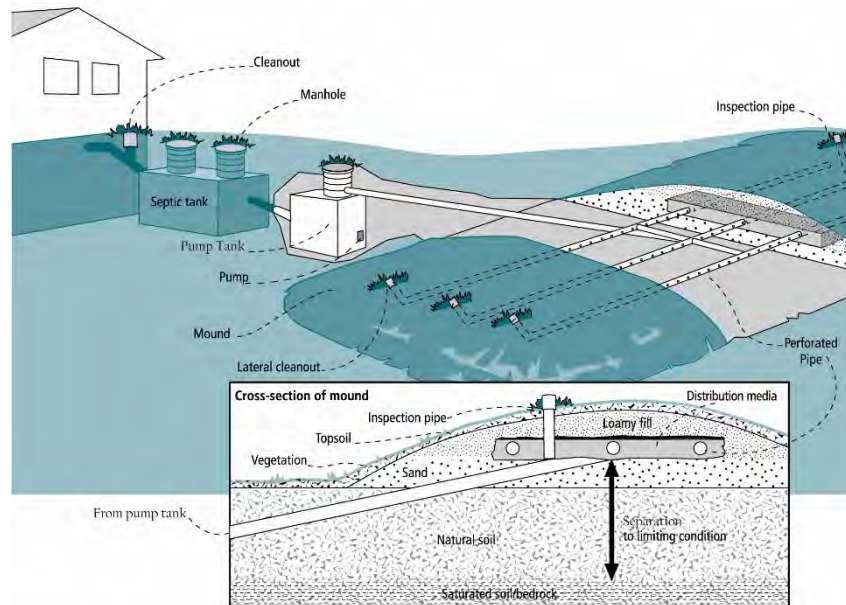
- Attach permit information, designer drawings and as-built of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, visit [www.bookstores.umn.edu](http://www.bookstores.umn.edu) and search for the word "septic" or call 800-322-8642.

**For more information see <http://septic.umn.edu>**



Your Septic System



Septic System Specifics	
System Type:    I    II    III    IV*    V* (Based on MN Rules Chapter 7080.2200 – 2400) *Additional Management Plan required	<input type="checkbox"/> System is subject to operating permit* <input type="checkbox"/> System uses UV disinfection unit* Type of advanced treatment unit _____

Dwelling Type	Well Construction
Number of bedrooms: _____ System capacity/ design flow (gpd): _____ Anticipated average daily flow (gpd): _____ Comments _____ Business? :    Y    N    What type? _____	Well depth (ft): _____ <input type="checkbox"/> Cased well    Casing depth: _____ <input type="checkbox"/> Other (specify): _____ Distance from septic (ft): _____ Is the well on the design drawing?    Y    N

Septic Tank	
<input type="checkbox"/> First tank    Tank volume: _____ gallons <input type="checkbox"/> Does tank have two compartments?    Y    N <input type="checkbox"/> Second tank    Tank volume: _____ gallons <input type="checkbox"/> Tank is constructed of _____ <input type="checkbox"/> Effluent screen:    Y    N    Alarm    Y    N	<input type="checkbox"/> Pump Tank    _____ gallons <input type="checkbox"/> Effluent Pump    make/model: _____ Pump capacity _____ GPM TDH _____ Feet of head <input type="checkbox"/> Alarm location _____

Soil Treatment Area (STA)	
Mound/At-Grade area (width x length): _____ ft x _____ ft Rock bed size (width x length): _____ ft x _____ ft Location of additional STA: _____ Type of distribution media: _____	<input type="checkbox"/> Inspection ports <input type="checkbox"/> Cleanouts <input type="checkbox"/> Surface water diversions <input type="checkbox"/> Additional STA not available



## Homeowner Management Tasks

These operation and maintenance activities are your responsibility. Chart on page 6 can help track your activities.

**Your toilet is not a garbage can. Do not flush anything besides human waste and toilet paper. No wet wipes, cigarette butts, disposal diapers, used medicine, feminine products or other trash!**

The system and septic tanks needs to be checked every \_\_\_\_\_ months

Your service provider or pumper/maintainer should evaluate if your tank needs to be pumped more or less often.

### Seasonally or several times per year

- *Leaks.* Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.
- *Soil treatment area.* Regularly check for wet or spongy soil around your soil treatment area. If surfaced sewage or strong odors are not corrected by pumping the tank or fixing broken caps and leaks, call your service professional. *Untreated sewage may make humans and animals sick.* Keep bikes, snowmobiles and other traffic off and control borrowing animals.
- *Alarms.* Alarms signal when there is a problem; contact your service professional any time the alarm signals.
- *Lint filter.* If you have a lint filter, check for lint buildup and clean when necessary. If you do not have one, consider adding one after washing machine.
- *Effluent screen.* If you do not have one, consider having one installed the next time the tank is cleaned along with an alarm.

### Annually

- *Water usage rate.* A water meter or another device can be used to monitor your average daily water use. Compare your water usage rate to the design flow of your system (listed on the next page). Contact your septic professional if your average daily flow over the course of a month exceeds 70% of the design flow for your system.
- *Caps.* Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- *Water conditioning devices.* See Page 5 for a list of devices. When possible, program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently may negatively impact your septic system. Consider updating to demand operation if your system currently uses time,
- *Review your water usage rate.* Review the Water Use Appliance chart on Page 5. Discuss any major changes with your service provider or pumper/maintainer.

### During each visit by a service provider or pumper/maintainer

- Make sure that your service professional services the tank through the manhole. (NOT through a 4" or 6" diameter inspection port.)
- Ask how full your tank was with sludge and scum to determine if your service interval is appropriate.
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



## Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. At each visit a written report/record must be provided to homeowner.

### Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the septic system.
- Review water usage rates (if available) with homeowner.

### Septic Tank/Pump Tanks

- *Manhole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- *Liquid level.* Check to make sure the tank is not leaking. The liquid level should be level with the bottom of the outlet pipe. (If the water level is below the bottom of the outlet pipe, the tank may not be watertight. If the water level is higher than the bottom of the outlet pipe of the tank, the effluent screen may need cleaning, or there may be ponding in the soil treatment area.)
- *Inspection pipes.* Replace damaged or missing pipes and caps.
- *Baffles.* Check to make sure they are in place and attached, and that inlet/outlet baffles are clear of buildup or obstructions.
- *Effluent screen.* Check to make sure it is in place; clean per manufacturer recommendation. Recommend retrofitted installation if one is not present.
- *Alarm.* Verify that the alarm works.
- *Scum and sludge.* Measure scum and sludge in each compartment of each septic and pump tank, pump if needed.

### Pump

- *Pump and controls.* Check to make sure the pump and controls are operating correctly.
- *Pump vault.* Check to make sure it is in place; clean per manufacturer recommendations.
- *Alarm.* Verify that the alarm works.
- *Drainback.* Check to make sure it is draining properly.
- *Event counter or elapsed time meter.* Check to see if there is an event counter or elapsed time meter for the pump. If there is one or both, calculate the water usage rate and compare to the anticipated use listed on Design and Page 2. Dose Volume: \_\_\_\_\_ gallons: Pump run time: \_\_\_\_\_ Minutes

### Soil Treatment Area

- *Inspection pipes.* Check to make sure they are properly capped. Replace caps and pipes that are damaged.
- *Surfacing of effluent.* Check for surfacing effluent or other signs of problems.
- *Lateral flushing.* Check lateral distribution; if cleanouts exist, flush and clean at recommended frequency.
- *Vegetation* - Check to see that a good growth of vegetation is covering the system.

**All other components – evaluate as listed here:**





### Water-Use Appliances and Equipment in the Home

Appliance	Impacts on System	Management Tips
Garbage disposal	<ul style="list-style-type: none"> <li>• Uses additional water.</li> <li>• Adds solids to the tank.</li> <li>• Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of a garbage disposal is not recommended.</li> <li>• Minimize garbage disposal use. Compost instead.</li> <li>• To prevent solids from exiting the tank, have your tank pumped more frequently.</li> <li>• Add an effluent screen to your tank.</li> </ul>
Washing machine	<ul style="list-style-type: none"> <li>• Washing several loads on one day uses a lot of water and may overload your system.</li> <li>• Overloading your system may prevent solids from settling out in the tank. Unsettled solids can exit the tank and enter the soil treatment area.</li> </ul>	<ul style="list-style-type: none"> <li>• Choose a front-loader or water-saving top-loader, these units use less water than older models.</li> <li>• Limit the addition of extra solids to your tank by using liquid or easily biodegradable detergents. Limit use of bleach-based detergents and fabric softeners.</li> <li>• Install a lint filter after the washer and an effluent screen to your tank</li> <li>• Wash only full loads and think even – spread your laundry loads throughout the week.</li> </ul>
Dishwasher	<ul style="list-style-type: none"> <li>• Powdered and/or high-phosphorus detergents can negatively impact the performance of your tank and soil treatment area.</li> <li>• New models promote “no scraping”. They have a garbage disposal inside.</li> </ul>	<ul style="list-style-type: none"> <li>• Use gel detergents. Powdered detergents may add solids to the tank.</li> <li>• Use detergents that are low or no-phosphorus.</li> <li>• Wash only full loads.</li> <li>• Scrape your dishes anyways to keep undigested solids out of your septic system.</li> </ul>
Grinder pump (in home)	<ul style="list-style-type: none"> <li>• Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area.</li> </ul>	<ul style="list-style-type: none"> <li>• Expand septic tank capacity by a factor of 1.5.</li> <li>• Include pump monitoring in your maintenance schedule to ensure that it is working properly.</li> <li>• Add an effluent screen.</li> </ul>
Large bathtub (whirlpool)	<ul style="list-style-type: none"> <li>• Large volume of water may overload your system.</li> <li>• Heavy use of bath oils and soaps can impact biological activity in your tank and soil treatment area.</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid using other water-use appliances at the same time. For example, don’t wash clothes and take a bath at the same time.</li> <li>• Use oils, soaps, and cleaners in the bath or shower sparingly.</li> </ul>
<b>Clean Water Uses</b>	<b>Impacts on System</b>	<b>Management Tips</b>
High-efficiency furnace	<ul style="list-style-type: none"> <li>• Drip may result in frozen pipes during cold weather.</li> </ul>	<ul style="list-style-type: none"> <li>• Re-route water directly out of the house. Do not route furnace discharge to your septic system.</li> </ul>
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> <li>• Salt in recharge water may affect system performance.</li> <li>• Recharge water may hydraulically overload the system.</li> </ul>	<ul style="list-style-type: none"> <li>• These sources produce water that is not sewage and should not go into your septic system.</li> <li>• Reroute water from these sources to another outlet, such as a dry well, draitile or old drainfield.</li> </ul>
Surface drainage Footing drains	<ul style="list-style-type: none"> <li>• Water from these sources will overload the system and is prohibited from entering septic system.</li> </ul>	<ul style="list-style-type: none"> <li>• When replacing, consider using a demand-based recharge vs. a time-based recharge.</li> <li>• Check valves to ensure proper operation; have unit serviced per manufacturer directions</li> </ul>





**Homeowner Maintenance Log**

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished									
<b>Check frequently:</b>										
Leaks: check for plumbing leaks*										
Soil treatment area check for surfacing**										
Lint filter: check, clean if needed*										
Effluent screen (if owner-maintained)***										
Alarm**										
<b>Check annually:</b>										
Water usage rate (maximum gpd _____)										
Caps: inspect, replace if needed										
Water use appliances – review use										
Other:										

- \*Monthly
- \*\*Quarterly
- \*\*\*Bi-Annually

Notes:

*"As the owner of this SSTS, I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in this Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."*

Property Owner Signature: \_\_\_\_\_

Date \_\_\_\_\_

SIGN HERE

Management Plan Prepared By: \_\_\_\_\_

Certification # \_\_\_\_\_

Permitting Authority: \_\_\_\_\_

# SITE RESEARCH

Parcel Boundaries (1)

Parcel ID: 083022330020

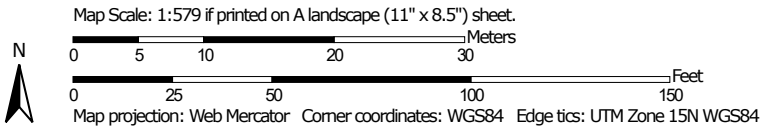
☆ **Parcel ID: 083022330020**  
 PID: 083022330020  
 Primary Owner 1: LAWRENCE E EATON  
 Primary Owner 2: RUTH M EATON  
 Site Address: 33 EAGLE RIDGE RD  
 NORTH OAKS MN 55127-2109  
 Area: 1.02 Acres. Use: Res 1 unit

<	Description	Hyperlinks	Details	ParcelPointLinkSiteAddress	ParcelPointLinkOwner	ParcelPoi	>
---	-------------	------------	---------	----------------------------	----------------------	-----------	---

ParcelID 083022330020	EMVYear 2019
BuildingNumber 33	CurrentLandValue 183200
SiteAddress 33 EAGLE RIDGE RD	CurrentBuildingValue 353900
SiteCityNameUSPS NORTH OAKS	CurrentTotalValue 537100
SiteCityName NORTH OAKS	TotalTax N/A
SiteCityStateZIP NORTH OAKS MN 55127-2109	SpecialAssessmentDue N/A
PrimaryTaxName1 LAWRENCE E EATON	TaxCapacity N/A
PrimaryTaxName2 RUTH M EATON	TaxYear1 2019
PrimaryTaxAddress 33 EAGLE RIDGE RD	EMVYear1 2018
PrimaryTaxCityStateZIP ST PAUL MN 55127-2109	LandValueYear1 183200
AlternateTaxName1 N/A	BuildingValueYear1 327200
AlternateTaxName2 N/A	TotalValueYear1 510400
AlternateTaxAddress N/A	TotalTaxYear1 6098
AlternateTaxCityStateZIP N/A	SpecialAssessmentYear1 171.8
UnmappedName1	LandUseCodeDescription

Displaying 1 - 1 (Total: 1)

Custom Soil Resource Report  
Soil Map (33 Eagle Ridge Rd, North Oaks)



## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
(0.14 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 25 percent

*Available water storage in profile:* Moderate (about 8.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Forage suitability group:* Sloping Upland, Acid (G090XN006MN)

*Hydric soil rating:* No

### Minor Components

#### Zimmerman

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### Blomford

*Percent of map unit:* 3 percent

*Landform:* Drainageways on moraines

*Hydric soil rating:* Yes

#### Kratka

*Percent of map unit:* 2 percent

*Landform:* Depressions on moraines, drainageways on moraines

*Hydric soil rating:* Yes

#### Cathro

*Percent of map unit:* 2 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

## 342C—Kingsley sandy loam, 6 to 12 percent slopes

### Map Unit Setting

*National map unit symbol:* 1t99g

*Elevation:* 1,000 to 1,300 feet

*Mean annual precipitation:* 27 to 33 inches

*Mean annual air temperature:* 39 to 46 degrees F

*Frost-free period:* 135 to 180 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Kingsley and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Kingsley

### Setting

*Landform:* Moraines  
*Landform position (two-dimensional):* Shoulder  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Till

### Typical profile

*Ap - 0 to 6 inches:* sandy loam  
*Bt - 6 to 32 inches:* sandy loam  
*C - 32 to 60 inches:* sandy loam

### Properties and qualities

*Slope:* 6 to 12 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.14 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Forage suitability group:* Sloping Upland, Acid (G090XN006MN)  
*Hydric soil rating:* No

## Minor Components

### Freeon

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

### Ronneby

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

### Rosholt

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

Custom Soil Resource Report

Septic Tank Absorption Fields (MN)–Ramsey County, Minnesota							
Map symbol and soil name	Pct. of map unit	Septic Tank Absorption Fields - At-Grade		Septic Tank Absorption Fields - Mound		Septic Tank Absorption Fields - Trench	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
132C—Hayden fine sandy loam, 6 to 12 percent slopes							
Hayden	90	Slightly limited		Very limited		Slightly limited	
		Slope	0.05	Slope	0.85	Slope	0.05
169C—Braham loamy fine sand, 6 to 15 percent slopes							
Braham	90	Slightly limited		Very limited		Moderately limited	
		Slope	0.05	Slope	0.85	Fine Sands	0.21
						Excessive percolation	0.11
						Slope	0.05
342C—Kingsley sandy loam, 6 to 12 percent slopes							
Kingsley	90	Extremely limited		Extremely limited		Moderately limited	
		Restricted percolation	1.00	Restricted percolation	1.00	Restricted percolation	0.30
		Slope	0.05	Slope	0.85	Slope	0.05





# Minnesota Well Index

33 Eagle Ridge Rd, Saint Paul, MN, 55127, X



Search by Zoom to Tools Base Maps Other Links Help



**Wells**

**Selected Wells**

**Public Wells**

**Domestic Wells**

**Irrigation Wells**

**Monitor Wells**

**Other Wells**

**Sealed Wells**

**Unverified Wells**

**Township**

**Range Section**

**DWSMA**

**SWBCA**

Zoom to see wells, TRS, DWSMA and SWBCA

DWSMA: The area managed by a public water supplier to protect their source water

SWBCA: Special Well and Boring Construction Area layer







# Minnesota Well Index

33 Eagle Ridge Rd, Saint Paul, MN, 55127, X



Search by Zoom to Tools Base Maps Other Links Help



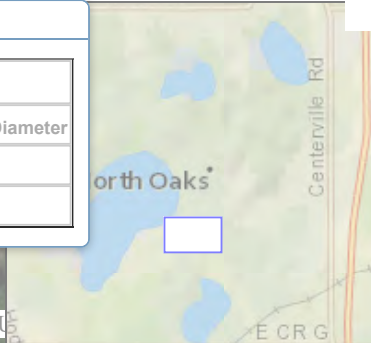
- Wells
- Selected Wells
- Public Wells
- Domestic Wells
- Irrigation Wells
- Monitor Wells
- Other Wells
- Sealed Wells
- Unverified Wells
- Township Range Section
- DWSMA
- SWBCA

Zoom to see wells, TRS, DWSMA and SWBCA  
 DWSMA: The area managed by a public water supplier to protect their source water  
 SWBCA: Special Well and Boring Construction Area layer

Well List selected

Highlighted are Field Verified Wells. Click Unique Well ID to see detailed well information

Unique Number	Well Name	Address	City	County	Township	Range	Section	Depth(ft)	Elevation(ft)	Casing Depth(ft)	Casing Diameter
<a href="#">14258</a>	RAY ANDERSON	EAGLE RIDGE RD	null	Ramsey	30	22	8	205	940	176	4
<a href="#">13892</a>	ARTHUR HEDSTROM	18 SPRING FARM LA	NORTH OAKS	Ramsey	30	22	17	195	930	161	4



UTM: 493615 (x), 4993485 (y) Latitude/Longitude: 45.09480 / -93.08114  
 Click map to get township, range and section

MN Department of Health | Minnesota Geological Survey, U