THE CITY OF LAKE ELMO

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Lake Elmo, MN 55042

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NOTICE OF MEETING

The City of Lake Elmo
Planning Commission will conduct a meeting on
Monday April 24, 2017 at 7:00 p.m.
AGENDA

1. Pledge of Allegiance
2. Approve Agenda
3. Approve Minutes
    a. April 10, 2017
4. Public Hearings
    a. ZONING MAP AMENDMENT. A request by the City of Lake Elmo for a Zoning Map Amendment to rezone the following properties to VMX – Village Mixed Use: 13.029.21.23.0010; 13.029.21.23.0026; 13.029.21.23.0027; 13.029.21.23.0077; 13.029.21.32.0007; 13.029.21.32.0010; 13.029.21.24.0003; 13.029.21.24.0003;13.029.21.23.0064; 13.029.21.23.0062; 13.029.21.32.0009; 13.029.21.32.0022; 13.029.21.32.0008; 13.029.21.23.0096; 13.029.21.32.0063; 13.029.21.23.0018; 13.029.21.24.0028; 13.029.21.32.0086; 13.029.21.32.0085; 13.029.21.32.0094.
    b. GRADING PERMIT IN EXCESS OF 400 CUBIC YARDS OF MATERIAL: A request from H.C. Golf Course Development, LLC to conduct grading on approximately 73 acres of land, creating a common excavation quantity of approximately 224,000 cubic yards of material, not including subgrade connections and trench borrow. PID's 25.029.21.44.0002; 25.029.21.44.0002; 25.029.21.43.0002; 25.029.21.43.0001; 25.029.21.31.0001; 25.029.21.42.0001; 25.029.21.13.0001; 25.029.21.12.0001.
    c. ZONING TEXT AMENDMENT. A request by the City of Lake Elmo for a Zoning Text Amendment setting forth additional standards for Solar Energy Systems.
5. Business Items
    a. EASTON VILLAGE FINAL PLAT: The Planning Commission is being asked to consider a Final Plat request from Chase Development for the 2nd addition of Easton Village which includes 19 single family lots located on the eastern portion of the subdivision.
    b. ZONING TEXT AMENDMENT – VILLAGE URBAN DISTRICTS: The Planning Commission is being asked to make recommendations on the proposed draft ordinance of the Village Low Density Residential and minor amendments to the Village Mixed Use (VMX) district.
6. Updates
    a. City Council Updates – April 18, 2017
        i. Engineering & Landscape Design & Construction Standards - passed
        ii. Bremer Bank Service Center Easement Vacations - passed
        iii. Noise Ordinance - passed
    b. Staff Updates

i. Upcoming Meetings:
   - April 24, 2017
   - May 6, 2017

ii. MAC CEP Report-none

c. Commission Concerns

7. Adjourn

***Note: Every effort will be made to accommodate person or persons that need special considerations to attend this meeting due to a health condition or disability. Please contact the Lake Elmo City Clerk if you are in need of special accommodations.

City of Lake Elmo
Planning Commission Meeting
Minutes of April 10, 2017

Chairman Kreimer called to order the meeting of the Lake Elmo Planning Commission at 7:00 p.m.

COMMISSIONERS PRESENT: Dorschner, Fields, Kreimer, Dodson, Emerson, Williams, Lundquist and Hartley

COMMISSIONERS ABSENT: Larson

STAFF PRESENT: Planning Director Wensman, City Planner Becker and City Engineer Griffin

Approve Agenda:

M/S/P: Williams/Lundquist, move to approve the agenda as amended, adding a 5c for a condition for buckthorn management for Royal Golf, ***Vote: 7-0, motion carried, unanimously.***

Approve Minutes: March 27, 2017

M/S/P: Williams/Lundquist, move to approve the March 27, 2017 minutes as amended, ***Vote: 4-0, motion carried unanimously.***

Public Hearing – Easement Vacation – Bremer Bank 8555 Eagle Point Blvd

Becker started her presentation regarding the request for a vacation for two public easements. The first request is to vacate an existing D & U for a stormwater facility easement to be relocated to allow for expansion of the existing building. The second easement to be vacated is along the property line (to be replaced), to allow for combination of three parcels. The City Attorney and the County have been consulted and it is ok to combine a platted lot with outlots. There is one condition being recommended that the applicant shall record replacement easements as approved by the City Engineer.

Dorschner asked if this approval secures the other necessary easements. Becker stated that it does through the condition of approval.

Public Hearing opened at 7:10 pm

There were no written comments and no one spoke

Public Hearing closed at 7:10 pm

Dodson is wondering why there are two separate motions being recommended. Becker stated that there would not need to be two separate motions, but two motions clarify what is being vacated.

M/S/P: Dodson/Williams, move to recommend the approval of the vacation of the easement described as south 5.00 feet Lot 1 Block 1, Eagle Point Business Park 3rd Addition and also the easement as shown in Doc. No. 1208614, subject to replacement easements, as approved by the City Engineer being recorded, Vote***: 7-0, motion carried unanimously.***

Public Hearing – Zoning Text Amendment – VMX Zoning District

Becker started her presentation by talking about some of the updates from the last meeting. The Commission wanted to add a definition for Mixed Use. Staff does not recommend adding. It does not fit broadly into code and is specific to the VMX district. Staff added additional density standards using the language from the Comprehensive Plan for senior congregate care facilities up to 16 units per acre with CUP. The garage setback of 25 feet was added to Table 11-2, rather than the text. Standards for V-MDR were not added because the existing LDR zoning district can be used for areas guided as V-MDR. Setbacks for properties abutting County roads were added for consideration by the Commission.

The issue of single family homes in the VMX needs to be resolved. Existing single family homes should be non-conforming, or permitted uses. If permitted, the City would need to allow both existing and new single family homes in this district. The current Comprehensive Plan language does not mention detached single family homes as allowed uses in the VMX district, except for those existing. The minimum lot size for single family homes in VMX is currently 5000 sf, but staff is proposing to change that to 9000 sf to prevent an influx of property splits. The minimum lot width is proposed to change from 50 ft. to 70 ft. to mirror V-LDR standards.

There was a discussion at the last meeting regarding conditional and permitted uses in the VMX district. The Commission should specifically outline which uses are of concern and discuss. New housing type mixture requirement was copied from the MDR standards for multi-family and two family dwelling units. Staff is recommending striking this. There was concern at the last meeting regarding veterinary services, so standards were added to limit services to small domestic pets.

Lundquist asked about the single family housing not being in the Comprehensive Plan. Becker stated that the issue can be addressed with the Comprehensive Plan update

currently being worked on. Williams thinks that single family should be included as a permitted use in the table for VMX. Wensman stated that he believes this is the right way to go as you cannot have permitted existing single family without allowing permitted new single family. Dorschner thinks that it should be conditional because they are talking about downtown. He does not feel that the vision for downtown is single family homes, but is commercial. Williams does not recall discussing finding number 4 in the staff report that states the Planning Commission is interested in exploring increased densities within the Old Village as an amendment to the Comprehensive Plan. There was discussion about if the VMX needs more density to attract commercial development. Williams is wondering if it would make sense to increase the single family attached lot area since the single family detached lot area was increased to 9000 sf. Becker stated that by leaving it the same, it would encourage more density. The LDR, Urban Low Density Residential minimum lot size is 8000 sf. Williams is wondering why a parking facility is only allowed as an accessory use and not as a principle use. Becker stated that it is allowed as a principal use, but is a conditional use.

Williams asked about the City Attorney's recommendation to strike 5b for redevelopment projects. He doesn't see how that is infringing on someone's rights. Wensman stated that it makes sense if someone buys up the whole block, but not if there is partial redevelopment. Hartley thinks that they need to decide if it is ok for one type of housing to be on a single street.

Williams is wondering about on page 9 (5d) if "except on a permitted driveway" should be added. There was some discussion about structured parking on the ground level and what that should look like.

Wensman brought up setbacks from County roads. The VMX code states that the setback is 10 feet from the right of way. Wensman is wondering if the setback should be greater on County roads as there is greater potential for road expansion. The County thinks it is too small.

Williams does not understand why a definition for mixed use would cause a problem in other parts of the code. Wensman stated that they looked extensively through other codes, and they did not find any definitions of it. Becker stated that the VMX already states that it allows 2 principal uses. It also describes the district and its intent in the Purpose and District Description. Williams stated that he still doesn't understand why having a definition will cause issues. Wensman stated that mixed use can be vertical or horizontal. Vertical would be a mixed use on the same lot, while horizontal would be a mixed use development, like Inwood. Staff could not find an applicable definition and did not feel that one was necessary and it may actually create other unforeseen issues.

Public Hearing opened at 8:03 pm

No one spoke and there were no written comments

Public Hearing closed at 8:03 pm

Dodson thinks the minimum lot size for single family detached should be 8000 sf to match the LDR. Becker stated that the 9000 sf came from the 70 ft. width calculation.

M/S/P: Kreimer/Williams, move to change single family detached from a conditional use to permitted use in the VMX zoning district, ***Vote: 7-0, motion carried unanimously.***

Dorschner thinks that there are some areas in VMX that single family should be permitted and some areas where it should be conditional, but he isn't sure how that would be handled, but he is afraid there may be some unintended consequences. Dodson feels that a comprehensive plan amendment needs to be done to get the wording right and to avoid spot zoning.

Dorschner feels that a conditional use permit gives the City a little more control. Williams feels that if there is a conditional use permit, there should be some basis for which to approve or deny. Dorschner feels that there are parts of the VMX that it is appropriate, but in the downtown proper from north of the tracks to old Hwy 5, it probably would not be. Dodson is wondering if possibly the number of businesses that surround the property could be the criteria. Fields agrees that in areas that have potential to develop as commercial, having single family detached as permitted could disrupt the development pattern. He feels having it conditional gives the opportunity to evaluate the development pattern. Hartley is wondering how to develop the standards without it sounding arbitrary.

Wensman stated the problem is that they are talking about allowing single family detached, but don't really want them everywhere. He suggested maybe the way to manage it is to have a sub district. Williams agrees with Dorschner's concern, but feels there needs to be some basis to limit the new single family detached. Williams feels that from the City's point of view, the safest way to handle this is to make the single family detached a legal non-conforming use. Dorschner feels that they need to go with what their vision is and that would be to make the single family detached a legal non-conforming use.

Becker stated that if the existing single family homes wanted to expand, the City would not be able to grant the variance as it is a use variance. Lundquist stated that the residents in this area should not be penalized by what is adopted. Becker stated that at this point, for the short-term, they are not proposing to rezone the properties that currently have single family homes on them to VMX. However, if a property owner wanted to develop their property to VMX, they could ask for a rezoning at that time. Dorschner stated that he doesn't want to penalize the existing residents, but by

rezoning their property to VMX, they have more opportunities for their property and it increases the property value.

Williams is wondering if it should be left in as a conditional use and a finding be made that the standards need further work. Wensman would like this issue to be tabled until further research can be done. Dodson is wondering if there is any case law in regards to this and if the City Attorney can weigh in on this. Wensman stated that staff can consult with the City Attorney.

M/S/P: Williams/Kreimer, move to reconsider the motion to change single family detached from a conditional use to permitted use in the VMX zoning district, and that the motion be rescinded with the intent to discuss further at a future meeting, ***Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Kreimer, move to substitute on page 9 (5b) "proposed development" for "developed block", Williams ***withdrew motion.***

Hartley is wondering how the wording would work for one lot. Dodson is wondering what the intent of this. Williams stated it is to encourage diversity on the block, but not to completely change the character of that area and to preserve the mix. Kriemer stated that he is in favor of removing the paragraph all together and Dodson agrees. Wensman asked the commission how they would feel if someone came in and took out a whole block of commercial and put in all townhouses. Fields stated that could be a real possibility based on demand.

Dorschner stated that he feels the VMX is a good idea, but is hard to implement in this area. He feels that they are kind of missing a business district. Williams thinks that during the Comp plan update, they need to look at what the vision for downtown should be.

M/S/P: Williams/Dodson, move to change the wording on page 11 (8) the first sentence to say that "structured parking is permitted within a mixed-use building, provided that the entrance is located on side or rear facades, not facing the primary abutting street", and striking the last sentence that says "The primary street façade may include an entrance into the parking facility", ***Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Dodson, move to change Page 13 (3) (a) (i) to say "the front façade of a garage shall be offset from that of a principle structure by a minimum of two feet from the public right of way", ***Vote: 7-0, motion carried unanimously.***

Wensman asked about the request from the County to have a larger setback than the current 10 feet to a county road. Dorschner is not in favor as there are already some properties such as Arbor Glen at the 10 feet. Williams doesn't understand why the County wants a larger setback. Wensman stated that typically County roads are at

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higher speeds which creates noise and other issues. Lundquist stated it is also for public safety such as if a car went off the road. Hartley stated that the other reason would be that it gives them another 60 feet so that if the road needs to be widened to four lanes, they have the right of way. There was no interest from the Commission to change the setback from 10 feet from County roads.

Williams would like to change footnote (g) on page 7 to differentiate county 17 south of CSAH 14 vs north of CSAH 14. Williams would like more information from the County on why they want the greater setback.

M/S/P: Williams/Lundquist, move to postpone further consideration of VMX until they get further information on the items talked about, ***Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Dodson, move to move the Engineering and landscape standards item before the solar energy systems as the City Engineer is in attendance for that item, ***Vote: 7-0, motion carried unanimously.***

Business Item – Engineering & Landscape Standards

Wensman started his presentation by stating that staff is looking for a recommendation for the Engineering & Landscaping design details and specifications. The purpose is to set minimum requirements for all public infrastructure projects in the City with the intent of constructing consistent and compatible infrastructure systems throughout the City. Staff is suggesting to have a separate section specific to landscape and irrigation standards vs having them be part of the engineering design and construction standards.

Engineering design standards and specifications will include having electronic plans required, reference to benchmark system removed, lot corner elevations required and the record drawing requirements clarified. There are many areas that are clarified such as the street width, minimum tangent length for intersections, collector street right-of-way width, and sign post standards changed per direction of PW.

Griffin stated that many of these updates, the City is already doing in practice. As development happens, standards evolve as circumstances arise. Staff uses the standards, but they are only formally updated every 2 years.

Dodson asked about the street light standards. It seems like the developers are assuming that since street lighting is in the Engineering standards that they have to be put in. Is there a way to specify that it is not required? Griffin stated that there is a difference between what is in a standard and what is in an ordinance. The ordinance would determine where or when things are done, while the design standards are if it is done, this is how it will be built. Dodson stated that he would like to see less lighting within developments and feels that there should be something in the design standards

to discourage lighting. Griffin stated that when street lighting is put into a development, Xcel actually is the entity that decides where the lights will go. If the City wanted to say where lights are to be located and the spacing, the City should specify that in the standards. Williams is wondering if it would be appropriate to have different districts and have standards for each district. Such as district 1 has no street lights, district 2 has street lights only at intersections and district 3 has street lights throughout the development. That way the City could determine through conditions what type of lighting the development should have. Griffin stated that might be a good way to give high level guidance to a developer. Emerson is wondering if Xcel would baulk at the idea of putting street lights only at intersections. Griffin doesn't think so.

Dodson asked if the irrigation standards are in the Engineering design and construction standards manual. Griffin stated that the detail of the service line is in the engineering standards and then it refers to the landscape plan for the details of the landscape meter and specific details. Hartley asked about the issue that landscaping hadn't been handled properly in the past. Wensman stated that the water meter and service location need to be on the landscape plans. In the past, that wasn't a requirement so they were not necessarily located properly.

Wensman stated that in the landscape standards, there is a recommended and required section. By putting in a recommended section, they are hoping that developers will go beyond what is required. Standard notes were cleaned up and made more usable and it recognizes the bee safe policy. The tree standards were refined and addressed more of the issues. Hartley doesn't see where the root flare is addressed for planting a tree. Wensman believes it is addressed and is one of the most problematic things they have seen in the field. Hartley thinks it might be worthwhile to draw specific attention to it. There are standards for trees and shrubs on slopes. The biggest thing would be the irrigation details and the interface between public and private systems.

Dodson would like staff to research what the best mechanism would be to deal with the issue of street lighting in different developments and possibly having various zones. Wensman stated that staff felt that it was not necessary to have a policy regarding street lighting. Dodson wants to see the City try to minimize the street lighting and would like to see no lighting in residential developments. Williams would like there to be guidelines in regards to street lights so that the Commission does not need to decide each time. Dodson likes the idea of the zones so that in different locations, you could have different lighting. Griffin stated that the lighting requirements would only come into play on higher level streets vs. neighborhood streets.

M/S/P: Dodson/Williams, move to recommend approval of the March 2017 revision to the Engineering Design and Construction Standards Manual, and adding a condition of approval that staff look into proposing a lighting ordinance and/or engineering standard for residential districts with the intent to minimize lighting, ***Vote: 6-1, motion carried, with Hartley voting no. Hartley voting no because he feels the engineering standards***

should stand as they are. He feels the lighting standards should be addressed via ordinance in the zoning code.

Dorschner has the same kinds of concerns regarding Landscaping that Dodson has with lighting. Dorschner would like to see the use of water and irrigation minimized. He is not sure how that should be formulated. Wensman stated that they are re-evaluating what the options there are to mitigate the use of water and irrigation. Staff is looking at no mow turf, and salt tolerant turf. Dorschner wants the landscape standard to spell out that they need to be plants that need no water or minimal watering or even rocks and shrubs that would need no pesticides or fertilizers. Wensman stated there were some things they could do with the landscape ordinance to encourage this or even provide some incentives.

M/S/P: Dodson/Fields, move to recommend that staff look into minimizing the use of water, irrigation, herbicide and pesticides in the landscape ordinance***: Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Dodson, move to recommend approval of the Landscape Design Standard Details and Specifications***: Vote: 7-0, motion carried unanimously.***

Business Item – Zoning Text Amendment – Solar Energy Systems

Becker started her presentation regarding the solar energy systems. Changes from the last meeting include exemptions for size, different standards for rooftop vs ground mount, standards for solar farms, definition for off-grid, language about reflectors clarified, and restrictions on HOA documents forbidding solar energy systems.

Dodson asked how the decommissioning would be enforced. Becker stated that a plan might be required dependent on how large of a system it is. Becker stated it would be enforced like any other nuisance complaint.

Williams wants the word wholesale deleted from the solar farm definition. Kreimer asked if the Commission wanted a size exemption. The Commission felt 6 sf was a reasonable exemption. Kreimer asked why they were saying a homeowners association can't forbid solar energy systems, he feels it should be up to them. Dorschner thinks the rationale is that the City should want to promote clean energy.

Williams thinks they should be talking about ground mount and building mount vs roof mount as a roof would not be the only place that solar could be mounted. Kreimer asked what zoning districts the Commission feels the solar farms should be allowed in. Williams suggested AG and Rural Districts only. Dodson asked if there is a limit on the size of a solar farm. Becker stated that no size has been suggested. It is currently a CUP, but if they wanted minimum acreage and maximum size, they would need to put standards on it. There was discussion around if solar farms should be considered

commercial and only allowed on commercial property or if they should be allowed in other areas. The Commission discussed if there should be a 10 acre minimum. They also discussed if the city would allow a solar farm to be a principle use. Kreimer is wondering if the farm should be restricted to a certain percentage of the property like maybe 25%. Wensman asked if the solar farm was the principal use, what would be the front and side yard setbacks. Williams thinks there should be a greater setback if it is more of a commercial use next to a residential use.

Williams wanted to talk about the condition of buckthorn control for the Royal Golf. There was a condition that in return for relaxing the tree replacement ordinance by 50%, Royal Golf would initiate a program for Buckthorn control.

M/S/P: Williams/Fields, move to add to the existing condition the following sentence "the applicant shall present a buckthorn control plan for approval by the City landscape consultant who shall report at least once a year to the Planning Commission and City Council on the plans progress and effectiveness", **Vote: *7-0, motion carried unanimously.***

Emerson feels it is throwing away a lot of money because he doesn't feel that the residents are going to continue it.

City Council Updates – April 4, 2017 Meeting

i) Inwood 5th Addition Final Plat and PUD Plans – approved
ii) Approve Comp Plan Amendment to City's Wastewater facilities - approved

Staff Updates

1. Upcoming Meetings
   a. April 24, 2017
   b. May 8, 2017
2. MAC CEP Report

Commission Concerns

Williams is still uncomfortable not having a definition of mixed use. He doesn't understand why other Cities do not have it. Wensman stated that each use has its own definition and if it is a mixed use, it combines more than one use. Williams would like to see a definition.

Meeting adjourned at 10:35 pm

Respectfully submitted,

Joan Ziertman

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Planning Program Assistant

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STAFF REPORT

DATE: 4/24/2017
PUBLIC HEARING
ITEM #: 4a

TO: Planning Commission

FROM: Emily Becker, Planner

AGENDA ITEM: Rezoning Old Village GB – General Business District to VMX – Village Mixed Use District

REVIEWED BY: Stephen Wensman, Planning Director

BACKGROUND:

Added Parcels. At its March 27, 2017 meeting, the Planning Commission reviewed a proposed Zoning Map Amendment rezoning properties zoned GB – General Business District to VMX – Village Mixed Use. After advertising the Public Hearing Notice, Staff had learned that there were a number of Zoning Map errors with incorrect zoning classifications resulting in properties that should have been included in the public notification for rezoning. Staff has sent out an additional public hearing notice advertising the proposed rezoning of these aforementioned properties.

ISSUE BEFORE PLANNING COMMISSION:

The Planning Commission should consider a Zoning Map Amendment rezoning additional parcels to VMX - Village Mixed Use.

PROPOSAL DETAILS/ANALYSIS:

Staff Report from Last Meeting. The Staff Report from the last meeting at which the Zoning Map Amendment was discussed is attached to this report to provide further detail, analysis, and reason for the request.

Two properties zoned GB – General Business that are guided for RAD – Rural Area Development in the Comprehensive Plan. There are two properties that are guided for Rural Area Development that are zoned GB – General Business District. These PID#s are 130.292.132.0052 and 130.292.132.0051, and Washington County classifies the use of these parcels as commercial and residential, respectively. Because these properties are not guided for VMX – Village Mixed use currently, they should not be rezoned to VMX. Staff recommends that these properties be considered for rezoning after the 2040 Comprehensive Plan update process that may re-designate or reconfirm the future land use plan for these properties.

GB – General Business References Recommended to Remain in Code. Due to the aforementioned, it is recommended that references to the GB – General Business District remain in the code for the two above-mentioned properties.

Schiltgen Parcel. PID# 130.292.124.0028 was added to the proposed Zoning Map Amendment. This is the 31.78 acre vacant parcel on the east edge of the Village Area. The Commission should consider whether this should be rezoned at this time or zoned at the time of a land use application. The parcel is currently zoned RT – Rural Development Transitional. Typically a property of this size is rezoned at the time of Preliminary Plat. Staff does not recommend including this parcel at this time but has advertised for it in case the Commission wishes to recommend rezoning it. This parcel was not included on the attached recommended ordinance.

FISCAL IMPACT:

See attached report dated March 27, 2017.

OPTIONS:

The Planning Commission may recommend any of the following:

1) Recommend Zoning Map Amendment rezoning *all* parcels listed on attached proposed ordinance.
2) Recommend Zoning Map Amendment rezoning *some* of the parcels listed on attached proposed ordinance.
3) Recommend *not* rezoning *any* parcels listed on attached proposed ordinance to VMX – Village Mixed Use at this time.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend approval of Ord. 08- adopting a Zoning Map Amendment rezoning all parcels listed.

"Move to recommend a Zoning Map Amendment rezoning properties outlined in Ord. 08- to VMX – Village Mixed Use."

ATTACHMENTS:

- Staff Report from March 27, 2017
- Ord. 08-___ rezoning GB parcels to VMX.
- Village Land Use Map showing PID#s Advertised to be Rezoned to VMX
- Land Use Map of Comprehensive Plan

STAFF REPORT

DATE: 03/27/2017
PUBLIC HEARING
ITEM #: 4a

TO:	Planning Commission
FROM:	Emily Becker, Planner
AGENDA ITEM:	Rezoning Old Village GB – General Business District to VMX – Village Mixed Use District
REVIEWED BY:	Stephen Wensman, Planning Director

BACKGROUND:

Creation of VMX District. In November of 2013, creation of the Village Mixed Use District was approved in support of the 2030 Comprehensive Plan update for the Village Planning Area. The Village Mixed Use District was created to replace the existing intermingling of commercial, residential, and public zoning classifications within the central portion of the Village area. While the creation of the District was approved, the majority of the area for which it was meant has not yet been rezoned. Currently, the majority of the parcels that are planned for VMX - Village Mixed Use zoning are still zoned GB – General Business. Only three parcels within the City have been rezoned to VMX thus far.

Former Planning Commission Review of Rezoning GB Parcels to VMX. The Planning Commission discussed rezoning all parcels zoned GB – General Business District within the Old Village to VMX – Village Mixed Use in June of 2016. The meeting minutes of this meeting are attached for reference. Summarily, the Commission was not in favor at that time of this mass rezoning for concern of the following:

- That the densities within this area are guided too high.
- That VMX district standards are less restrictive (higher maximum impervious surface, additional permitted uses, smaller minimum building setbacks, etc.) than the GB district standards.
- That Form Based Code should be created for the Village.

- That updated population and development projections for the areas guided for VMX in the Old Village are needed.

Reconsideration Requested. At its February 27, 2017 meeting, the Commission again discussed rezoning parcels within the Old Village from GB to VMX. This discussion was prompted by a number of requests from residents to further develop or make improvements on their properties located within the GB – General Business zoning district. Staff has found that a number of these requests required rezoning to VMX, as the proposals did not meet the minimum requirements of the GB – General Business District but did meet the requirements of the VMX – Village Mixed Use District. Many infrastructure improvements have been made to the Old Village including availability of city sewer and additional stormwater management. For these reasons, and because updating the Zoning Map to change Village parcels to VMX consistent with the Comprehensive Plan is an item on the 2017 Planning Department Work Plan, Staff would like the Planning Commission to re-review rezoning GB parcels within the Old Village to VMX.

ISSUE BEFORE PLANNING COMMISSION:

The Planning Commission should consider rezoning the parcels currently zoned GB - General Business District to VMX - Village Mixed Use. It should also consider removal of 154.034: GB – General Business from the Zoning Code, along with all other references within the Code to the GB – General Business zoning district, as this district will no longer exist on the Zoning Map.

PROPOSAL DETAILS/ANALYSIS:

Reason for Requesting Zoning Map Amendment Now vs. at Time of Development Application. In order to ensure that the property is being developed according the Comprehensive Plan, rezoning will typically occur at the time of a development application if a parcel is not zoned in accordance with the Comprehensive Plan. However, as previously mentioned, there are many non-conforming parcels within the GB – General Business zoning district which cannot further develop or, in some cases, make simple improvements, as a non-conformity may not be expanded. Rezoning these parcels will allow for owners to further develop and/or make improvements without having to submit application and go through a public hearing and approval process.

Number of Parcels Currently in the GB – General Business District. According to data provided in the City's Zoning Map, there are currently 83 parcels that are zoned GB – General Business District. It should be noted that only those properties currently zoned GB are proposed to be rezoned to VMX. There are some RS - Rural Single Family-zoned parcels that are guided for VMX, however, these are not proposed to be rezoned.

Comparison Tables of Two Ordinances. In general, the proposed rezoning will allow a higher degree of flexibility for site improvements and land development in the Village than is presently permitted under the current ordinance. The following outlines differences in lot dimensions, setback requirements, and permitted uses in the two districts. Staff has also provided a complete draft the GB and VMX District regulations for review.

Permitted and Conditional Use Comparison. The following shows that there are a number of uses that the VMX district either permits or allows with a conditional use permit that the GB district does not. In some cases, the VMX is actually more restrictive, in that it requires a conditional use permit for some uses that the GB district permits. It should be noted that current properties that currently employ any of these land uses would not be required to obtain a conditional use permit for such uses unless an expansion of the use was proposed or if the use was discontinued for more than a year.

The VMX district permits the following uses that the GB district does not allow:

- Single Family Detached
- Single Family Attached
- Two Family
- Live Work Unit
- Wayside Stand
- Temporary Sales as Accessory Use
- Parking Facility as Accessory Use
- Solar Equipment as Accessory Use

The VMX districts allows the following conditional uses that the GB district does not allow:

- Multi Family
- Secondary Dwelling
- Congregate Housing
- Semi-Transient Accommodations
- Schools
- Funeral Home
- Lodging
- Trade Shop
- Farmer's Market
- Gas Station
- Parking Facility
- Outdoor Recreation Facility
- Parks and Open Areas
- Indoor Athletic Facility
- Broadcasting or Communication Facility

The VMX district requires a Conditional Use Permit for the following uses that the GB district permits (does not require a Conditional Use Permit):

- Group Residential Facility/Nursing and Personal Care (the GB district permits a Boarding Care Facility with 15 residents max)
- Public Assembly
- Religious Institutions
- Medical Facility
- Membership Organization
- Repair and Maintenance Shop
- Veterinary Services
- Restaurant with Drive Thru
- Garden Center
- Shopping Center
- Automobile Maintenance Service
- Sales and Storage Lots
- Indoor Recreation (the GB district allows Family Entertainment Centers (no definition provided))
- Bed and Breakfast as Accessory Use
- Group Family Day Care as Accessory Use

Lot Dimension and Setback Requirements Comparison. The table below compares the minimum lot size requirements of the GB General Business District to those of the VMX District and provides analysis on the differences.

Standard	*GB*	*VMX*	*Analysis*
Minimum Lot Area	• 1.5 acres	• Non-Residential Use: None • Single Family Detached Dwelling: 5,000 sf • Two-Family Dwelling (per unit): 3,000 sf • Single-Family Attached (per unit): 2,500 sf • Multi-Family Dwelling (per unit): 1,800 sf • Live-Work Unit: 3,000 sf	The minimum lot size requirement of 1.5 acre most likely assumed that properties within the GB district would not be sewered. The entire Village Area is now within the MUSA, and lots of this size are no longer necessary to provide wastewater treatment. It should also be noted that properties that further subdivide would be required to rezone to VMX and would need to adhere to the standards of the VMX district.

		• Other Structures: 3,500 sf	There are 50 parcels within the GB district that do not meet its minimum lot size requirement.
Maximum Lot Area	• None	• Residential Structures: None • Other Structures: 5 acres	This would also only be applicable when a property further subdivided, which would already necessitate a rezoning from GB to VMX.
Minimum Lot Width	• 150 ft	• Single Family Detached Dwelling: 50 ft • Two-Family Dwelling (per unit): 30 ft. • Single-Family Attached (per unit): 25 ft. • Multi-Family Dwelling (per building): 75 ft. • Live-Work Unit: 25 ft.	The VMX minimum lot width requirements are smaller than those of the GB district, as the minimum lot size requirements of the VMX district are much smaller. There are approximately 20 parcels within the GB district that do not meet the minimum lot width requirement.
Setbacks	• Front: 0 ft. for Old Village • Interior Side: 0 ft. for Old Village • Side (Corner): 50 ft. • Rear: 50 ft.	• Front: 0-20 ft. (25 ft for single family homes) • Interior Side: 10 ft. (for properties abutting residential uses) • Side (Corner): 0 ft. (or maintain front setback of adjacent property adjoining street) • Rear: 10 ft.	This item has been discussed at previous Planning Commission meetings. The VMX ordinance is undergoing revisions, and the Planning Commission has suggested that because of the street design of some areas within the Village, there should be certain defined areas of the VMX that have a build-to setback.
Maximum Building Height	• 35 ft	• 35 ft/3 stories	Standard does not change.
Maximum Impervious Coverage	• Residential Structures: 75% • Other Structures: No Limit	• Up to 4 acres: 40% • >4-8 acres: 35% • >8 acres: 25%	Many lots within the GB district do not meet the maximum impervious surface requirement. The Village has increased stormwater management efforts, and stormwater management plans will be evaluated upon the receipt of land use applications.

			It is difficult to know without having exact impervious surface calculations, but one can see by looking from an aerial that a vast majority of parcels within the GB district do not meet the maximum impervious surface requirement.
Lot Config-uration	• Maximum depth to width ratio no more than 3:1	• None	
Septic Drainage Regulation	• 20,000 sf dedicated for septic	• None	All GB parcels within the Village would be required to be sewered eventually, as they are in the MUSA. This standard is no longer applicable.

Density. The Comprehensive Plan guides the Village Mixed Use area for a density of 5-10 residential equivalency units per acre. Maximum lot size and no minimum lot size requirement for the VMX district help to accomplish this higher density.

Form Based Code. Staff is also cognizant of the fact that the Planning Commission is in support of implementing a Form Based Zoning for the VMX District, as is supported in the Comprehensive Plan. Creation of a draft of a form-based code for the VMX zoning district is currently on the 2017 Planning Department Workplan. The Commission should consider if it is necessary for Form Based Code to be adopted before rezoning Village parcels to VMX. It should be noted that the City can do nothing, short of enacting a moratoria, to prevent further development within the area guided for VMX until a Form Based Code is adopted. The goal of rezoning these parcels is to make non-conforming parcels conforming.

General Business District References No Longer Required in the Zoning Code. Currently, the only parcels zoned GB – General Business are located in the Old Village. Rezoning these parcels to VMX – Village Mixed Use will leave the GB – General Business District non-existent on the Zoning Map. Therefore, Staff is recommending that Section 034, GB – General Business be removed along with all other references to this zoning district.

Public Hearing Notices – Additional Consideration Requested. A public hearing notice was published in the official City newspaper, and public hearing notices were sent out to property owners within 350 feet of all properties zoned GB – General Business District. Staff received a number of inquiries about the rezonings, asking for clarification. One resident was not in support

the rezonings, citing concerns of increased density and the ability for homeowners not being able to keep a single family home. As previously mentioned in this report, GB-zoned parcels are still guided for VMX, which means that a rezoning would need to occur when the property develops, and any development may occur at the density which the Comprehensive Plan dictates. Additionally, existing single family detached homes are a permitted use in the VMX.

Another comment that was received was that there are still a number of parcels that are guided for VMX that were not zoned GB – General Business District (currently either zoned RS – Rural Single Family, RT – Rural Development Transitional, or had no zoning classification on the City's Zoning Map), even though the land use of some of these parcels is not a single family home. Staff has looked further in to this and have found that the following parcels are zoned RS but are guided for VMX, yet are not used as single family homes. Please note that this list does not include land that is guided for VMX yet is still used as single family homes. If the Commission wishes to recommend rezoning all parcels that are guided for VMX to VMX, a motion can be made to do so.

PID#	Address	Description
1302921230010	None	Small strip of land south of and owned by same owner as 3699 Laverne Avenue North (vacant)
1302921230026	None	Small strip of land north of and owned by same owner as 3520 Laverne Avenue North (vacant)
1302921230027	3520 Laverne Ave N	Industrial Use per Washington County Use Description
1302921230077	11127 Stillwater Blvd N	Lake Elmo Oil
1302921320007	None	Small strip of land near 33rd St N (vacant)
1302921320010	None	Paved area for Lake Elmo Inn
1302921240003	11179 Stillwater Blvd N	Lake Elmo Repair Shop Building
1302921230064	None	Small strip of land west of 11799 Stillwater Blvd N
1302921230062	None	Small strip of land east of and owned by same owner as 11179 Stillwater Blvd N
1302921320009	None	Small strip of land north of 33rd St N
1302921320022	3504 Lake Elmo Ave N	Owned by Lake Elmo Inn

1302921320008	None	Small strip of land north of 33rd St N
1302921230020	None	Small strip of land used for parking, owned by Christ Lutheran Church
1302921320096	11123 Upper 33rd St N	Owned by Grain on Main LLC
1302921230063	None	Parking area for 11179 Stillwater Blvd N
1302921230018	None	Parcel south of parking area for 11179 Stillwater Blvd N
1302921240028	None	Schiltgen Property (31.78 acre parcel)
1302921320086	None	Small strip of land north of 33rd St N
1302921320085	None	Small piece of land west of and owned by same owner as 11123 Upper 33rd St N
1302921320094	11320 Upper 33rd St N	Storage building with parking (parking shared with Lake Elmo Inn)

The Commission should consider if the above-mentioned parcels should also be rezoned to VMX. If the Commission recommends this, an additional public hearing notice would need to be published, and it is recommended this item be tabled until the next meeting after which an appropriate public hearing notice has been given for this Zoning Map Amendment to rezone these parcels.

FISCAL IMPACT:

Rezoning the subject area to Village Mixed Use zoning will allow property owners to redevelop or make improvements to their property in accordance with VMX standards, thereby allowing greater flexibility. Not having to go through the process or pay the application fee for a Zoning Map Amendment may further incent a property owner within the current GB district to make improvements that otherwise may not be allowed under the GB district standards.

OPTIONS:

The Planning Commission may recommend any of the following:

1) Rezone all of the parcels located in the GB – General Business District to VMX – Village Mixed Use and omit references to the GB district from the City Code.

2) Rezone some of the parcels located in the GB – General Business District to VMX – Village Mixed Use and not omit references to the GB district from the City Code.
3) Table discussion so that an additional public hearing notice may be published to include the above-mentioned parcels in the Zoning Map Amendment rezoning properties to VMX – Village Mixed Use.
4) Table discussion so that an additional public hearing notice may be published to include all properties guided for VMX – Village Mixed Use in the Zoning Map Amendment rezoning properties to VMX – Village Mixed Use.
5) Not rezone any parcels to VMX – Village Mixed Use at this time and leave references to the GB district from the City Code for the time being.

RECOMMENDATION:

Staff recommends that the Planning Commission table tonight's discussion so that an additional public hearing notice may be published to include the above-mentioned parcels in the Zoning Map Amendment rezoning properties to VMX – Village Mixed Use.

"Move to table this Zoning Map Amendment Discussion to rezone properties to VMX – Village Mixed Use until an appropriate public hearing notice may be published to include the above-mentioned properties in the Zoning Map Amendment."

ATTACHMENTS:

- GB District Regulations
- VMX District Regulations
- Ord. 08-___ rezoning GB parcels to VMX and omitting references to GB district from City Code.
- Current and Proposed Zoning Maps
- PC Meeting Minutes from 6.13.2016.

	the first drainfield is prohibited.
Maximum Width of Primary Dwelling	All dwelling units must be at least 20 feet wide through the main living area of the structure.
Footings	The primary structure must have continuous frost footings. Continuous frost footings are not required for porches, decks, and other appendages so long as proper post type footings per existing Building Codes are constructed.
Maximum Impervious Surface Coverage	
Maximum Width of Driveways	See § 93.26
Signage	See §§ 154.212

(1997 Code, § 300.07 Subd. 4.D) (Am. Ord. 97-192, passed 6-19-2007)

§ 154.034 GB – GENERAL BUSINESS.

A. Permitted uses and structures.

1. The following service/office uses:

General Business – Service/Office	
Accounting	
Advertising	(Sign fabrication not permitted use)
Alterations	
Apparel Cleaning Pick-up Stations	
Apparel Repair and Alterations	
Architectural	
Art Gallery	
Auditing	
Bakeries	(With production of bakery goods limited to retail sales)
Barber Services	
Beauty Shops	
Bookkeeping	
Business and Management Consultant Offices	

Business Associations	
Cafes and Restaurants - Drive-up window	(Menu boards and intercom systems prohibited; Adequate vehicle stacking must be provided)
Cafes and Restaurants	(Limited to full table service operations)
Charitable	
Chiropractic	
Civic, Social and Fraternal Association Offices and Halls	
Collection and Adjustment Services	
General Business – Service/Office	
Credit Reporting (Consumer and Mercantile)	
Dental	
Detective and Protective Agencies	
Duplication	
Educational	
Employment Agencies	
Engineering	
Finance	
Galleries	
Governmental Offices	
Insurance	
Investment	
Labor Unions	
Legal	
Libraries	
Mailing	
Medical	
Medical Services	(The compounding, dispensing or retail sale of drugs, prescription items, patient or proprietary medicine, sick room supplies, prosthetic devices or items relating to any of the foregoing when conducted in the building occupied primarily by medical, dental, osteopathic, chiropractic or

	optometric offices)
Optometric	
Osteopathic	
Photo Gallery	
Professional Membership Organizations	
Real Estate	
Religious	
Scientific Research	(Excluding laboratory facilities)
Shoe Repair	
General Business – Service/Office	
Stenographic Service	
Therapeutic Massage	(See licensing requirements in § 114.01)
Welfare Offices	

(Am. Ord. 97-170, passed 5-2-2006; Am. Ord. 2012-064, passed 12-4-2012)

2. The following retail uses:

General Business - Retail
Antiques and Secondhand Merchandise
Apparel and Related Accessories
Automobile Repair and Services
Automobiles and Automobile Accessories
Bicycles
Books
Building Supplies
Cameras and Photographic Supplies
Cigars and Cigarettes
Drugs and Proprietary Items
Electrical Supplies
Flowers and Floral Accessories
Food and Grocery Products
Furniture

Gifts, Novelties and Souvenirs
Glass
Heating Equipment
Home Furnishings and Related Equipment
Jewelry
Liquors
Marine Craft and Accessories
Newspapers and Magazines
Nursery and Garden Supplies
General Business – Retail
Optical Goods
Paint
Pets
Plumbing Equipment
Sporting Goods
Stationery
Wallpaper

3. The following repair/service uses:

General Business – Repair/Service
Clock Repair
Electrical Repair and Supplies
Equipment–Rental and Leasing
Food Catering
Furniture Repair
Heating
Household Appliances
Jewelry Repair
Landscaping
Plumbing
Radio

Reupholstery
Television
Watch Repair

4. The following office uses (excluding equipment storage):

General Business - Office
Air Conditioning Contractor
Building Construction Contractor
Carpentry Contractor
General Business - Office
Decorating Contractor
Heating Contractor
Masonry Contractor
Painting Contractor
Plastering Contractor
Plumbing Contractor
Roofing Contractor
Sheet Metal Contractor
Stone Work Contractor
Tile Setting Contractor
Wallpaper Contractor
Water Well Drilling Contractor
Wood Flooring Contractor

5. Uses permitted by conditional use permit.

General Business - Conditional Use	
Bed and Breakfast Facility	15 Beds Maximum
Boarding Care Facility	15 Residents Maximum
Day Care Centers	40 Children Maximum
Family Entertainment Centers	
Fitness Studio	Maximum floor area not to exceed 5,000 square feet

Kennels	
Nursing Care Facility	15 Residents Maximum
Open Sales Lots	
Manufacturing	Any industrial manufacturing operation in existence within the city at the effective date of this chapter, including manufacture of wood products and plastic products, may continue the use as a conforming use without a conditional use permit. Nothing in this provision shall otherwise be construed to require the city to authorize any manufacturing use in the General Business Zone after the effective date of this chapter.
General Business - Conditional Use	
Veterinary Clinics	

(Am. Ord. 97-20, passed 10-21-1997; Am. Ord. 97-86, passed 10-2-2001; Am. Ord. 97-88, passed 10-2-2001; Am. Ord. 97-138, passed 9-7-2004; Am. Ord. 2012-064, passed 12-4-2012)

6. General requirements.

   a. All storage, services, repair or processing shall be conducted wholly within an enclosed building or behind opaque fence or wall not less than 6 feet high, except the outdoor display of merchandise;

   b. Incineration of waste matter shall be conducted in approved equipment located within the building wherein the permitted use is conducted;

   c. Where a proposed GB development abuts on RR, R-1, R-2, R-3, R-4, or RE district other than at a public street line, buffer provision shall be established. There shall be provided a protective strip of not less than 35 feet in width. The protective strip shall not be used for parking, off- street loading or storage and shall be landscaped. The protective strip must be approved by the Council as being in harmony with the residential neighborhood and providing sufficient screening of the commercial area;

   d. All lots must have at least 1 acre of land suitable for septic drainfields and area sufficient for 2 separate and distinct drainfield sites. Placement of the second required drainfield between the trenches of the first drainfield is prohibited; and

   e. Must meet all requirements of §§ 51.002 through 51.008.

B. Accessory uses. Uses which are clearly incidental and subordinate to the allowed uses.

(Am. Ord. 97-38, passed 11-17-1998)

C. Minimum district requirements.

1. The Old Village District shall be defined as the Old Village Sign District described in § 151.117(S)(1)(a).

General Business	
Lot Size	1-1/2 acres (except as required by Interstate Corridor Overlay District, §§ 150.230 - 150.238)
Lot Width	150 Feet Minimum
Building Setback from property lines: (Also see § 154.082)	
Front:	10 Feet Minimum No setback required for properties located in the Old Village District and south of Minnesota State Highway 5
Side (Interior):	20 Feet Minimum No setback required for properties located in the Old Village District and south of Minnesota State Highway 5
Side (Corner):	50 Feet Minimum
Rear:	50 Feet Minimum
Building Height (Also see § 154.083)	35 Feet Maximum
Maximum area to be covered by buildings, parking lots, driveways and other hard surfaces:	
Up to 4 acres	40% of lot size
Larger than 4 acres to 8 acres	35% of lot size
Larger than 8 acres	25% of lot size
Lot Configuration	Maximum lot depth to width dimension ratio shall be no more than 3:1
Lot Size	Covered Area
Lot Configuration	
Maximum Width of Driveways	See § 93.26
Signage	See §§ 154.212
Septic Drainage Regulation (Also see §§ 51.002 through 51.008)	All newly subdivided lots shall have a minimum of 20,000 square feet of land dedicated for septic system use and suitable for that use. This land may comprise up to 2 separate areas, each of which

	is contiguous to the 1.25-acre building site or contained within it, and each of which contains at least 10,000 contiguous square feet. Placement of the second required drainfield between the trenches of the first drainfield is prohibited.

(1997 Code, § 300.07 Subd. 4.H) (Am. Ord. 08-030, passed 10-5-2010)

D. Performance standards.

1. Purpose and intent.

   a. It is the purpose and intent of the city, by the adoption of the performance standards of this division, to ensure commercial buildings constructed within the city are of a high quality of exterior appearance, consistent with the terms of Non-Residential Development Policy #5 of the 2000-2020 Lake Elmo Comprehensive Plan. It is the finding of the city that a limited selection of primary exterior surfacing materials meets this standard of quality.

   b. It is the further finding of the city that several specific exterior surfacing materials are appropriate, and of sufficient quality, to be utilized only as accent materials in varying percentages. The variations of percentage of specific accent materials relates to a finding by the city as to the relative quality and rural character of those respective accent materials.

2. Architectural and site plan submittals. New building proposals shall include architectural and site plans prepared by registered architect and shall show the following as a minimum:

   a. Elevations of all sides of the buildings;

   b. Type and color of exterior building materials;

   c. Typical general floor plans;

   d. Dimensions of all structures; and

   e. Location of trash containers, heating, cooling and ventilation equipment and systems.

3. Applicability – structure additions and renovation.

   a. Additions to existing structures resulting in an increase of gross floor area of the structure of less than 100%; and/or installation of replacement exterior surfacing of any portion of an existing structure shall be exempt from the standards of this division where it is found that the new or replacement exterior surfacing proposed is identical to that of the existing structure.

   b. Where additions to an existing structure result in an increase in the gross floor area of the existing structure of 100% or greater, the entire structure (existing structure and structure addition) shall be subject to the standards of this division.

4. Performance standards – primary exterior surfacing.

    a. The primary exterior surfacing of structures shall be limited to natural brick, stone, or glass. Artificial or thin veneer brick or stone less than nominal 4 inches thick shall not qualify as complying with this performance standard.

    b. Primary exterior surface shall be defined as not less than 70% of the sum of the area of all exterior walls of a structure nominally perpendicular to the ground. All parapet or mansard surfaces extending above the ceiling height of the structure shall be considered exterior surface for the purposes of this division. Windows and glass doors shall be considered a primary surface, but the sum area of this glass shall be deducted from the wall area for purposes of the 70% primary/30% accent formulas of this chapter. Doors of any type of material, except glass, shall not be considered a primary exterior surface.

    c. Each wall of the structure shall be calculated separately and, individually comply with the 70/30 formula.

5. Performance standard – exterior surfacing accents. Not more than 30% of the exterior wall surfacing, as defined by division (D)(4) above, may be of the following listed accent materials, but no single accent material, except natural wood, may comprise more than 20% of the total of all accent materials; and, no combustible materials shall be used:

    a. Cedar, redwood, wood siding;

    b. Cement fiber board;

    c. Standing seam metal;

    d. Architectural metal;

    e. Stucco;

    f. Poured in place concrete (excluding "tilt-up" panels);

    g. Architectural metal panels; and

(Am. Ord. 97-175, passed 6-20-2006)

    h. Porcelain or ceramic tile.

6. *Performance Standard – Accessory Structures*. All accessory structures shall comply with the exterior surfacing requirements specified by this division (D).

7. *Performance Standard – HVAC Units and Exterior Appurtenances.* All exterior equipment, HVAC and trash/recycling and dock areas shall be screened from view of the public with the primary exterior materials used on the principal structure.

8. *Performance Standard – Visible Roofing Materials.* Any roofing materials that are visible from ground level shall be standing seam metal, fire-treated cedar shakes, ceramic tile, clay tile, concrete or slate.

9. *Applicability – New Construction.* The standards of this division shall be applicable to all structures and buildings constructed in the city, on and after the

ARTICLE XIII. VILLAGE MIXED USE DISTRICT

§ 154.500 PURPOSE AND DISTRICT DESCRIPTION.

The purpose of the VMX district is to provide an area for compact, mixed use development made mutually compatible through a combination of careful planning and urban design and coordinated public and private investment. This district is intended to continue the traditional mixed use development that has occurred in the Village area by allowing retail, service, office, civic and public uses as well as residential units. The mixture of land uses within the district is essential to establishing the level of the level of vitality and intensity needed to support retail and service uses. The placement of building edges and treatment of building, parking, landscaping, and pedestrian spaces is essential to creating the pedestrian friendly environment envisioned for the VMX district. The standards in this chapter are intended to implement and effectuate the principles and relationships established in the Village Master Plan, which will be carried out through specific standards related to site planning, signage, architecture, building materials, and landscaping. Renovation and infill of traditional storefront-type buildings is encouraged, and parking standards may be waived to recognize the availability of on-street and shared parking facilities.

(Ord. 08-091, passed 11-13-2013)

§ 154.501 PERMITTED AND CONDITIONAL USES.

Table 11-1 lists all permitted and conditional uses allowed in the urban residential districts. “P” indicates a permitted use, “C” a conditional use. Uses not so indicated shall be considered prohibited. Cross-references listed in the table under “Standards” indicate the location within this Ordinance of specific development standards that apply to the listed use.

A. *Combinations of Uses*. The following use types may be combined on a single parcel:

1. Principal and accessory uses may be combined on a single parcel.
2. A principal and secondary dwelling unit may be combined according to the standards of Section 154.454 (A) and 154.505 (D).
3. Single-family attached or multi-family complexes designed for rental or condominium occupancy, since these typically include multiple units and buildings on a single parcel.
4. Other permitted or conditional uses allowed within the district may be combined on a single parcel, provided that a unified and integrated site plan is approved. The entire development must be approved as a conditional use.
5. A mixed-use building that combines permitted or conditionally permitted residential, service, retail and civic uses may be developed meeting the form standards of this Article. Office or studio uses on upper stories are encouraged.

Table 11-1: Permitted and Conditional Uses, VMX Districts

	VMX	Standard
Residential Uses		
Household Living		
Single-family detached dwelling	P*	* See Restrictions in 155.504 (A)
Two-family dwelling	P	* See Restrictions in 155.504 (A)
Single-family attached dwelling	C	154.505 (B)
Multifamily dwelling	C	154.505 (C)
Secondary dwelling	C	154.505 (D), 154.454 (C)
Live-work unit	P	154.505 (J)
Group Living		
Group Home	P	154.012 (B) (1) (b), 154.301 (A)
Group Residential Facility	C	154.012 (B) (1) (b), 154.301 (B)
Congregate Housing	C	154.012 (B) (1) (b), 154.301 (C)
Semi-Transient Accommodations	C	154.012 (B) (1) (b), 154.301 (D)
Public and Civic Uses		
Community Services	P	154.012 (B) (2)
Day Care Center	P	154.012 (B) (2)
Public Assembly	C	154.012 (B) (2)
Religious Institutions	C	154.012 (B) (2), 154.303 (N)
Schools, Public and Private	C	154.012 (B) (2), 154.303 (A)
Services		
Business Services	P	154.012 (B) (3)
Business Center	P	154.012 (B) (3)
Offices	P	154.012 (B) (3)
Communications Services	P	154.012 (B) (3)
Education Services	P	154.012 (B) (3), 154.303 (A)
Financial Institution	P	154.012 (B) (3)
Funeral Home	C	154.012 (B) (3)
Lodging	C	154.012 (B) (3), 154.302 (D)
Medical Facility	C	154.012 (B) (3), 154.303 (B)
Membership Organization	C	154.012 (B) (3)
Nursing and Personal Care	C	154.012 (B) (3), 154.303 (C)
Personal Services	P	154.012 (B) (3)
Repair and Maintenance Shop	C	154.012 (B) (3), 154.505 (E)
Trade Shop	C	154.012 (B) (3), 154.505 (F)
Veterinary Services	C	154.012 (B) (3), 154.505 (G)
	VMX	**Standard**
Food Services		
Standard Restaurant	P	154.012 (B) (4), 154.505 (L)
Restaurant with Drive-through	C	154.012 (B) (4), 154.505 (L), 154.304 (A)
Drinking and Entertainment	P	154.012 (B) (4), 154.505 (L), 154.304 (B)
Sales of Merchandise		

Retail Trade [1]	P	154.012 (B) (5)
Farmer's Market	C	
Garden Center	C	154.012 (B) (5), 154.505 (H)
Neighborhood Convenience Store	P	154.012 (B) (5)
Shopping Center	C	154.012 (B) (5)
Wayside Stand	P	
Automotive/Vehicular Uses		
Automobile Maintenance Service	C	154.505 (I)
Automobile Parts/Supply	P	154.505 (I)
Gasoline Station	C	154.305 (B)
Parking Facility	C	154.505 (K)
Sales and Storage Lots	C	154.305 (C)
Outdoor Recreation		
Outdoor Recreation Facility	C	154.306 (C)
Parks and Open Areas	P	154.012 (B) (7)
Indoor Recreation/Entertainment		
Indoor Athletic Facility	C	154.012 (B) (7), 154.307 (A)
Indoor Recreation	C	154.012 (B) (7), 154.307 (A)
Transportation and Communications		
Broadcasting or Communications Facility	C	154.012 (B) (11), 154.083
Accessory Uses		
Home Occupation	P	154.012 (B) (12)
Bed and Breakfast	C	154.012 (B) (12)
Domestic Pets	P	154.012 (B) (12)
Family Day Care	P	154.012 (B) (12)
Group Family Day Care	C	154.012 (B) (12)
Temporary Sales	P	154.012 (B) (12)
Parking Facility	P	154.505 (K)
Solar Equipment	P	154.012 (B) (12), 154.310 (C)
Swimming Pools, Hot Tubs, Etc.	P	154.012 (B) (12)
Other Structures Typically Incidental and Clearly Subordinate to Permitted Uses	P	

Note: Standards listed in Table 11-1 are listed by Article, Section and Subsection.

1. Retail Trade in the VMX District includes all uses and activities defined as Retail Trade in §154.012 (B) (5) with the exception of building supplies sales and warehouse club sales.

(Ord. 08-091, passed 11-13-2013)

§ 154.502 LOT DIMENSIONS AND BUILDING BULK REQUIREMENTS.

Lot area and setback requirements shall be as specified in Table 11-2, Lot Dimension and Setback Requirements.

Table 11-2: Lot Dimension and Setback Requirements, VMX District

	VMX
Minimum Lot Area (sq. ft.) [a]	
Non-Residential Use	None
Single Family Detached Dwelling	5,000
Two-Family Dwelling (per unit) [b]	3,000
Single-Family Attached (per unit) [c]	2,500
Multi-Family Dwelling (per unit)	1,800
Secondary Dwelling	See 154.454 (C)
Live-Work Unit	3,000
Congregate Housing	See 154.301 (C)
Other Structures	3,500
Maximum Lot Area (acres)	
Residential Structures	N/A
Other Structures	5
Minimum Lot Width (feet)	
Single Family Detached Dwelling	50
Two-Family Dwelling (per unit) [b]	30
Single-Family Attached (per unit)[c]	25
Multi-Family Dwelling (per building)	75
Live-Work Unit	25
Maximum Height (feet/stories)	35/3 [d]
	VMX
Maximum Impervious Coverage	
Residential Structures	75%
Other Structures	No Limit
Minimum Building Setbacks (feet)	
Front Yard [e]	See 154.506
Interior Side Yard [f]	10
Corner Side Yard [g]	0
Rear Yard	10

Notes to VMX District Table

a. No development may exceed the residential density range as specified in the Comprehensive Plan for the Village Mixed Use land use category

b. Two-family units may be side-by-side with a party wall between them ("twin") or located on separate floors in a building on a single lot ("duplex"). The per-unit measurements in this table apply to "twin" units, whether on a single lot or separate lots. The standards for single-family detached dwelling shall apply to a "duplex" containing two vertically-separated units on a single lot.

c. In the case of single-family attached dwellings that are not situated on individual lots, minimum lot size shall be applied to each unit as a measure of density; i.e. 1 unit per 2,500 square feet. This standard is also used for multifamily dwellings.

d. Buildings up to 45 feet in height may be permitted as part of a PUD.

e. The front yard setback for single family homes shall be 25 feet.

f. Side yard setbacks in the VMX District apply only along lot lines abutting residentially zoned parcels or those parcels with residential uses as the sole use.

g. Corner properties: the side yard façade of a corner building adjoining a public street shall maintain the front setback of the adjacent property fronting upon the same public street, or the required front yard setback, whichever is less. If no structure exists on the adjacent property, the setback shall be shown in the table.

(Ord. 08-091, passed 11-13-2013)

§ 154.503 DIMENSIONAL REQUIREMENTS AND PRESERVATION OF OPEN SPACE.

A. *Averaging of Lot Area*. When lots are clustered within a development to provide common open space, the open space may be used to calculate an average density per lot to determine compliance with the individual lot are requirements.

B. *Lot Dimension Reductions*. Other reductions in dimensional standards may be considered as part of a Planned Unit Development if these reductions provide for common open space within a development.

(Ord. 08-091, passed 11-13-2013)

§ 154.504 GENERAL SITE DESIGN CONSIDERATIONS – VMX DISTRICT.

Development of land within the VMX District shall follow established standards for traffic circulation, landscape design, and other considerations as specified in Article 7, 8 and 9. (Ord. 08-152, passed 10-01-2016)

A. *Circulation*. New access points to State Highway 5 may be refused or restricted to right-in right-out movement if alternatives exist. Internal connections shall be provided between parking areas on adjacent properties wherever feasible.

1. The number and width of curb-cuts shall be minimized. To promote pedestrian circulation, existing continuous curb-cuts shall be reduced to widths necessary for vehicular traffic, and unnecessary or abandoned curb cuts shall be removed as parcels are developed.

B. *Fencing and Screening*. Fencing and screening walls visible from the public right-of-way shall be constructed of materials compatible with the principle structure.

C. *Lighting Design*. Lighting shall be integrated into the exterior design of new or renovated structures to create a greater sense of activity, security, and interest to the pedestrian, and shall comply with §150.035-150.038 Lighting, Glare Control, and Exterior Lighting Standards.

D. *Exterior Storage*. Exterior materials storage must be screened from view from adjacent public streets and adjacent residential properties, by a wing of the principal structure or a screen wall constructed of the same materials as the principal structure. Height of the structure or screen wall must be sufficient to completely conceal the stored materials from view at eye level (measured at six feet above ground level) on the adjacent street or property.

E. *Screening of Existing Residential Structures*. When a new development is proposed adjacent to an existing single family residential structure, screening shall be provided in accordance with §154.258.F. The City may require buffering or screening above and beyond this section in cases where the required screening will not provide an adequate separation between incompatible uses.

(Ord. 08-091, passed 11-13-2013)

§ 154.505 DEVELOPMENT STANDARDS FOR SPECIFIC USES.

Development of land within the VMX district shall follow established standards for traffic circulation, landscape design, parking, signs and other considerations as specified in Articles 7, 8 and 9. The following standards apply to specific uses; other standards related to design and building type may be found at §154.506. (Ord. 08-152, passed 10-01-2016)

A. Single-Family and Two-Family Dwellings

1. Single-Family Dwellings are limited to those existing at the time of adoption of this Ordinance. Existing single-family dwellings shall be considered permitted uses, rather than nonconforming uses.

2. Unless otherwise specified in this Article, Single and Two Family Dwellings in the VMX district shall adhere to the MDR district setbacks as specified in §154.452.

B. Single-Family Attached Dwellings

1. A maximum of eight (8) units shall be permitted within a single building.

2. Townhouse dwellings shall be located on lots in such a way that each individual unit has a minimum of twenty-five (25) feet of public street frontage. No parking shall be located in the front yard or between the front façade and the street.

3. The primary entrance to each unit shall be located on the façade fronting a public street; an additional entrance may be provided on the rear or side façade.

4. Common open space for use by all residents or private open space adjacent to each unit shall be provided. Such open space shall compromise a minimum of three hundred (300) square feet per unit.

C. *Multi-Family Dwelling Units*. Dwelling units (both condominium and rental) are restricted to the upper floors or rear or side ground floors of a mixed use building.

1. No parking shall be located in the front yard or between the front façade and the street.

D. *Secondary Dwellings*. Restricted to lots occupied by single-family dwellings, and must meet the standards for secondary dwellings in residential districts, §154.454 (C).

E. *Repair and Maintenance Shop*. No outdoor storage is permitted unless fully screened from public view.

F. *Trade Shop*. Exterior materials storage must be totally screened from view from adjacent public streets and adjacent residential properties by a wall of the principal structure or a screen wall constructed of the same materials as the principal structure.

G. *Veterinary Services*. All activities must be conducted within an enclosed building.

H. Garden Center.

1. The storage or display of any materials or products shall meet all setback requirements of a structure, and shall be maintained in an orderly manner. Screening along the boundaries of adjacent residential properties may be required, meeting the standards of Section 154.258 (F).

2. All loading and parking shall be provided off-street.

3. The storage of any soil, fertilizer or other loose, unpackaged materials shall be contained so as to prevent any effects on adjacent uses.

I. Automobile Maintenance Service and Automobile Parts/Supply.

1. All vehicle repairs shall be conducted in a completely enclosed building

2. The storage or display of inoperable or unlicensed vehicles or other equipment shall meet all setback requirements of a structure, and shall be totally screened from view from adjacent public streets and adjacent residential properties.

J. *Live-Work Unit*. The purpose of a live-work unit is to provide a transitional use type between a home occupation and a larger commercial enterprise, and to provide neighborhood-oriented commercial services, while maintaining a generally residential character in which the work space is subordinate to the residential use.

1. The work space component shall be located on the first floor or basement of the building.

2. The dwelling unit component shall maintain a separate entrance located on the front or side façade and accessible from the primary abutting public street.

3. The work space component of the unit shall not exceed thirty (30) percent of the total gross floor area of the unit.

4. A total of two (2) off-street parking spaces shall be provided for a live-work unit, located to the rear of the unit, or underground/enclosed.
5. The size and nature of the work space shall be limited so that the building type may be governed by residential building codes. An increase in size or intensity beyond the specified limit on floor area would require the building to be classified as a mixed-use building.
6. The business component of the building may include offices, small service establishments, home crafts which are typically considered accessory to a dwelling unit, or limited retailing (by appointment only) associated with fine arts, crafts, or personal services. It may not include a wholesale business, a commercial food service requiring a license, a limousine business or auto service or repair for any vehicles other than those registered to residents of the property.
7. The business of the live-work unit must be conducted by a person who resides on the same lot. The business shall not employ more than two (2) workers on-site at any one time who live outside of the live-work unit.

K. *Parking Facility*. Structured parking is permitted as a ground floor use within a mixed-use building, provided that it is located on side or rear facades, not facing the primary abutting street. The primary street-facing façade shall be designed for retail, office or residential use. The primary street façade may include an entrance into the parking facility.

L. *Outdoor Dining Accessory to Food Services*. Outdoor dining is allowed as an accessory use in the commercial districts, provided that tables do not block the sidewalk. A minimum of five (5) feet of sidewalk must remain open.

(Ord 08-091, passed 11-13-2013)

§ 154.506 VMX DISTRICT DESIGN AND DEMOLITION REVIEW.

A. *Review of Design*. For certain development activity as specified in the Lake Elmo Design Standards Manual, design review is required as part of the approval process for a permit or certificate under this Ordinance. All projects subject to design review shall be reviewed for conformance with the Lake Elmo Design Standards Manual. A separate process for design review is not established.

1. *Review Authority and Process*. Design review shall be the responsibility of the individual or body authorizing the permit or certificate and shall be incorporated in the established review of the applicable permit or certificate. For those applications under this Ordinance that require review by the Planning Commission, the Planning Commission shall consider the standards in the Lake Elmo Design Standards Manual as part of its recommendation to the City Council.
2. *Review by Professional*. The authorizing body may request review by a design professional of the proposed design or demolition. The cost of review by such design professional shall be charged by the applicant, and shall not exceed $1,000 unless otherwise agreed to by the applicant.

3. *Development Activity Defined*. Development Activity consists of new construction and redevelopment activities, including remodeling that expands the footprint of a structure, altering, or repairing a structure in a manner that will change the exterior appearance of said structure. Development activity also includes the construction of a new parking lots and installation of signage.

    a. *Exempt Activities*. The following activities shall be exempt from under review of this Section:

        i. Ordinary repairs and maintenance that will not change the exterior appearance of a structure;

        ii. Removal of existing signage without replacement unless said signs are an integral part of the building;

        iii. Emergency repairs ordered by the Director of Planning in order to protect public health and safety;

        iv. Exterior alteration, addition, or repair of a structure used as a single-family residence, duplex, or two-family residence.

        v. Temporary signage, installed in accordance with §154.212 of this Ordnance, or during which time an application for permanent signage is pending under this Ordinance;

        vi. Maintenance of existing signage advertising an on-site business;

        vii. Alterations only to the interior of a structure.

(Ord 08-091, passed 11-13-2013)

§ 154.507 ACCESSORY USES AND STRUCTURES.

Accessory uses are listed in the VMX District Use Table as permitted or conditional accessory uses. Accessory uses and structures in the VMX District shall comply with the following standards and all other applicable regulations of this ordinance:

A. *Phasing*. No accessory use or structure shall be constructed or established on any lot prior to the time of construction of the principal use to which it is accessory.

B. *Incidental to Principal Use*. The accessory use or structure shall be incidental to and customarily associated with the principal use or structure served.

C. *Subordinate to Principal Use*. The accessory use or structure shall be subordinate in the area, extent, and purpose to the principal use or structure served.

D. *Function*. The accessory use or structure shall contribute to the comfort, convenience, or necessity of the occupants of the principal use or structure served.

E. *Location*. The accessory use or structure shall be located on the same zoning lot as the principal use or structure.

(Ord 08-091, passed 11-13-2013)

§154.508 RESIDENTIAL ACCESSORY STRUCTURES, VILLAGE MIXED-USE DISTRICT.

A. *Attached Structures, Village Mixed-Use District.* An accessory structure shall be considered attached, and an integral part of, the principal structure when it is connected by an enclosed passageway. All attached accessory structures shall be subject to the following requirements:

1. The structure shall meet the required yard setbacks for a principal structure, as established for the zoning district in which it is located.
2. The structure shall not exceed the height of the principal building to which it is attached.

B. *Attached Garages, Mixed-Use District*

1. Attached garages are encouraged to be side or rear loaded. If facing the primary street, garages shall be designed using one of the following techniques, unless specific physical conditions on the lot in question require a different approach:
   a. The front of the garage is recessed at least four (4) feet behind the plane of the primary façade; or
   b. The front of the garage is recessed at least four (4) feet behind a porch if the garage is even with the primary façade.
2. The width of the attached garage shall not exceed 40% of the width of the entire principal building façade (including garage) fronting the primary street.
3. Attached garages shall not exceed one thousand (1,000) square feet in area at the ground floor level except by conditional use permit.
4. Garage doors or openings shall not exceed fourteen (14) feet in height.

C. *Detached Structures, Village Mixed-Use District.* Detached accessory structures that are accessory to permitted residential structures in the VMX District shall adhere to the following requirements:

1. Detached accessory structures shall be located to the side or rear of the principal building, and are not permitted within the required front yard or within a side yard abutting a street.
2. Detached garages shall not exceed one thousand (1,000) square feet at ground floor level and shall not exceed a height of twenty-two (22) feet or the height of the principal structure. The maximum size and height may be increased upon approval of a conditional use permit, provided that lot coverage requirements are satisfied.
3. Pole barns, as defined herein, shall be prohibited.
4. No more than thirty (30) percent of the rear yard area may be covered by accessory structures.
5. Garage doors or openings shall not exceed fourteen (14) feet in height.

D. *Exterior Design and Color, All Accessory Structures. T*he exterior building materials, design and color of all accessory building or structures shall be similar to or compatible with the principal building, with the exception of the following accessory building or structures:

1. Gazebos
2. Swimming pools
3. Tennis and sport courts
4. Other structures in which the required design is integral to the intended use, such as a greenhouse.

(Ord. 08-104, passed 3-18-2014) Penalty, see § 154.999

§ 154.509 ACCESSORY USES.

A. *Exterior Storage on Residential Parcels*. All materials and equipment shall be stored within a building or be fully screened so as not to be visible from adjoining properties, except for the following:

1. Laundry drying
2. Construction and landscaping materials and equipment currently being used on the premises. Materials kept on the premises for a period exceeding six (6) months shall be screened or stored out of view of the primary street on which the house fronts.
3. Agricultural equipment and materials, if these are used or intended for use on the premises.
4. Off-street parking and storage of vehicles and accessory equipment, as regulated in Sections 154.404 and 154.210.
5. Storage of firewood shall be kept at least ten (10) feet from any habitable structure and screened from view of adjacent properties.
6. Outdoor parking

B. *Temporary Sales*. Temporary sales, also known as yard or garage sales, are permitted in all residential districts, limited to two (2) per calendar year per residence, not to exceed four (4) days in length for each event.

(Ord 08-091, passed 11-13-2013)

§ 154.510 ACCESSORY USES AND STRUCTURES NOT LISTED.

Standards for accessory uses and structures that are permitted in all districts, or in all residential buildings in any district, are listed in Article 9, Specific Development Standards. These include uses such as family and group family day care, bed and breakfast facilities, and home occupations, and structures such as swimming pools and solar equipment.

(Ord 08-091, passed 11-13-2013) (Ord. 08-152, passed 10-01-2016)

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF LAKE ELMO AND AMENDING THE ZONING CODE BY OMITTING SECTION 034: GB – GENERAL BUSINESS

SECTION 1. The City Council of the City of Lake Elmo hereby ordains the following properties to be rezoned from GB – General Business to VMX – Village Mixed Use:

PIDs:

1302921230055	1302921320001	1302921320052	1302921210010	1302921120013
1302921230057	1302921230038	1302921320026	1302921320012	1302921120010
1302921230058	1302921230037	1302921230007	1302921240022	1302921120016
1302921320021	1302921320019	1302921320046	1302921220007	1302921120012
1302921230068	1302921210013	1302921230059	1302921220023	1302921120009
1302921320025	1302921210014	1302921310017	1302921220018	1302921120011
1302921230070	1302921210011	1302921210016	1302921220016	1302921120015
1302921320049	1302921210012	1302921310016	1302921220017	1302921120014
1302921320051	1302921210015	1302921230046	1302921220019	1302921220008
1302921320048	1302921320041	1302921230065	1302921220022	1302921220010
1302921320047	1302921320042	1302921230053	1302921220021	1302921240016
1302921240020	1302921320083	1302921240024	1302921220020	1302921220012
1302921310003	1302921230054	1302921240019	1302921240021	1302921230071
1302921230056	1302921210001	1302921240017	1302921210006	1302921210007
1302921320032	1302921320005	1302921230067	1302921220002	1302921220013
1302921320027	1302921230025	1302921240025	1302921220011	1302921220014
		1302921210009	1302921230004	1302921210002

SECTION 2. The City Council of the City of Lake Elmo also hereby ordains that the Zoning Administrator shall make the applicable changes to the official Zoning Map of the City of Lake Elmo.

SECTION 3. The City Council of the City of Lake Elmo hereby strikes Title XV: Land Usage; Chapter 154: Zoning Code; by repealing Section 154.034: GB – General Business in its entirety.

SECTION 4. The City Council of the City of Lake Elmo hereby strikes reference to 154.034: GB – General Business District from the Table of Contents of Chapter 154: Zoning Code of Title XV: Land Usage.

SECTION 5. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Section 030: Classifications by eliminating the following:

§ 154.030 CLASSIFICATIONS.

For the purpose of this chapter, all land in the city is divided into zoning districts. The zoning districts shall be identified by the following classifications, including those districts identified in § 154.350:

(A)	R-2	One- and Two-Family Residential
~~(B)~~	~~GB~~	~~General Business~~
~~(C)~~ B	OP	Open Space Preservation District
~~(D)~~ C	OZD	Overlay Zoning Use District

SECTION 6. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Section 212: Sign Regulations; Table 5-3 to read the following:

Ground Signs				
Zoning Districts		Aa, LDR, OP, RE, RS, RRa, RTa	MDR, HDR	BP, C, CC, ~~GB,~~ LC, VMX
No. of Total Traffic Lanes	Speed Limit (MPH)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)
1-3	0-34	-	6'/32	10'/32
	35-44	-	6'/32	10'/50
	45+	-	6'/32	10'/72
4-5	0-34	-	6'/32	10'/40
	35-44	-	6'/32	10'/64
	45+	-	6'/32	12'/80

SECTION 7. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 150.116: [Wireless Communications] Zoning Requirements to read the following:

§ 150.116 ZONING REQUIREMENTS.

(A) Wireless communications facilities that require a conditional use permit, including the installation of a new tower, shall be permitted in the following districts and subject to the following height restrictions provided they meet all other requirements of this subchapter.

Zoning District	*Maximum Height (in feet)*	*Minimum Parcel Area*
A- Agriculture	125	10
RR - Rural Residential Zoning	125	5
~~R-1, R-2, R-3 and R-4~~ Urban Residential	125	2.5
OP - Open Space	125	2.5
RE - Residential Estates	125	2.5
~~GB ,~~ LB, CB, ~~HB~~ - Business	125	5
BP - Business Park	125	5
PF - Public Facility	125	None

SECTION 8. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 153.14: Park Land Dedication Requirements to read the following:

Zoning Districts	*Minimum Required Land Dedication*
~~GB , LB, HB, BP, CB,~~	~~Fee as set by Council resolution~~
C, CC, LC, VMX, BP	Fee as set by Council resolution
RR and AG with OP Conditional Use Permit	7%
RR and AG with OP-A Conditional Use Permit	10%

SECTION 9. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 10. Adoption Date. This Ordinance 08-___ was adopted on this _____ day of _____, 2016, by a vote of ___ Ayes and ___ Nays.

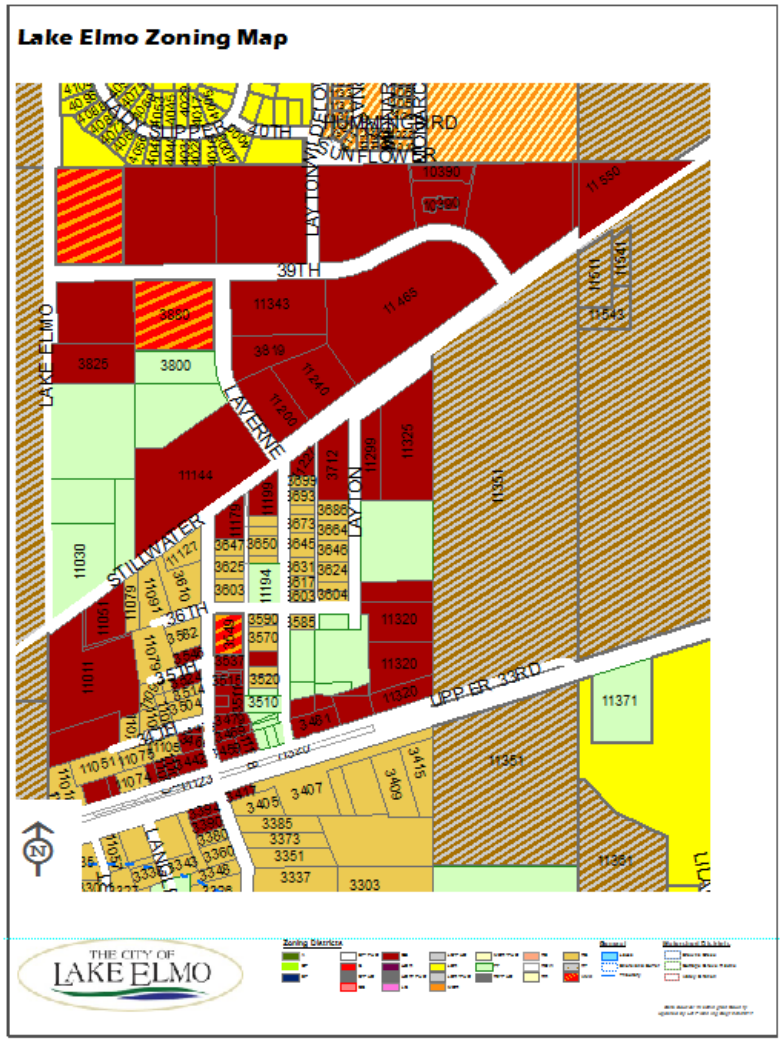
LAKE ELMO CITY COUNCIL

_____
Mike Pearson, Mayor

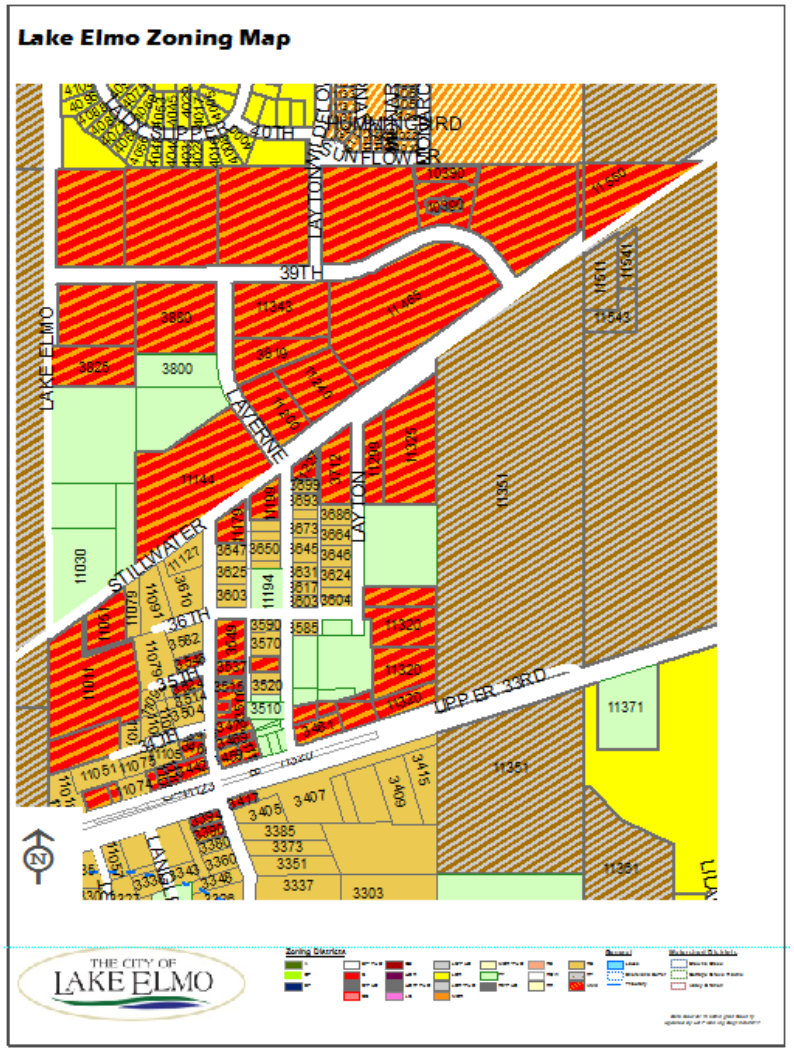
ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 08-____ was published on the ____ day of _____, 2017.

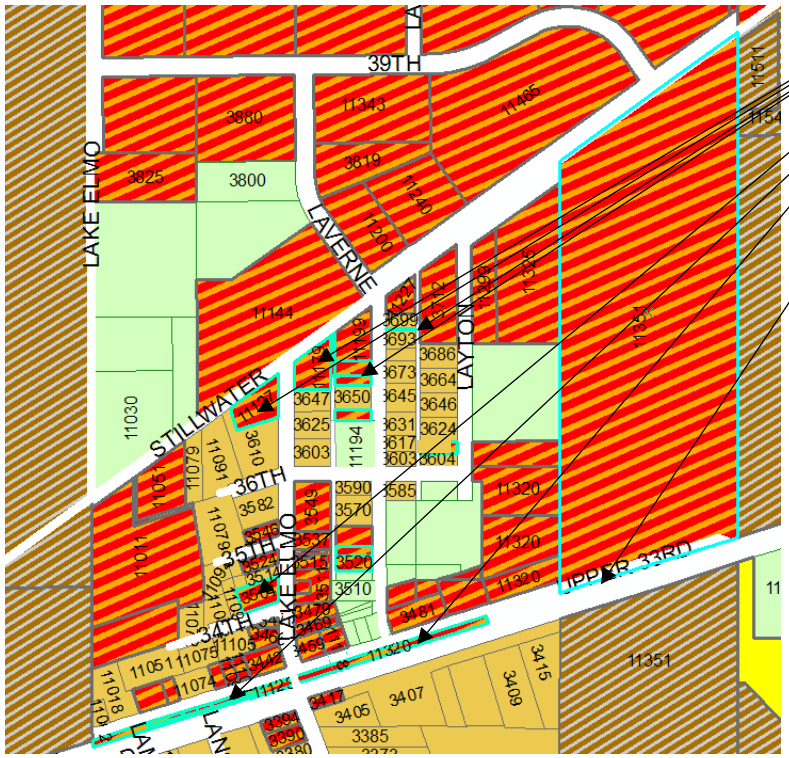


Current Zoning



Proposed Zoning (Only includes parcels included in the Public Hearing Notice – see next page for parcels added in Staff report)

Proposed Zoning (includes parcels that were included in tonight's Staff report but were not advertised in public hearing)



The aqua-outlined VMX-zoned parcels are those that were added in the Staff Report that were not zoned GB

Public hearing opened at 8:34 pm

No one spoke and there was no written comments received.

Public hearing closed at 8:35 pm

Dunn would like to see the option of sewer or private septic. She doesn't think that they should be forced to connect to sewer. Wensman stated that the comprehensive Plan is not in compliance with the projects that we are doing. If we don't do this amendment, the land use designation would need to be changed.

M/S/P: Fields/Dodson, Move to recommend the City Council approve the comprehensive plan text amendment to amend the planned land use category in the Comprehensive Land Use Plan to read as written, ***Vote: 5-1, motion carried. Dunn voted no because she feels it is important that people have an option regarding connection.***

Business Item – Zoning Text Amendment to discuss the VMX Zoning Text .

Wensman began his presentation by showing the areas that are zoned as general business, but guided as VMX in the Comprehensive Plan. To bring the zoning into compliance with the Comprehensive Plan, Wensman would like to see these properties rezoned. Wensman believes by rezoning, it would actually eliminate some non conformities. The area that would change the most, would be in the Northern area by 39th Street. Wensman stated that this was intended to bring the district more in conformance than it is now and should be done as a district vs. one at a time. If there are things about the district that the Commission does not like, then changes should be made to the district.

Dunn feels that the premise is based on the Village Master Plan. Where is the master plan? Wensman stated that the plan was based on transfer of density and he is not sure what happened to that plan. Dunn did a rough calculation on what could be done if the maximum densities were used. With her calculation, there is potential for upwards of 3000 people. She feels it is quite intense and not appropriate for this target area. She would like to see more work done on the reductions for the comprehensive plan and possibly look at form based code. Dunn would like to see the Comprehensive Plan revisited as soon as possible for population reductions. She thinks we should take our time and do this right.

Dunn pointed out some of the differences between GB and VMX. She feels one of the biggest differences is the impervious surface coverage maximum goes from 40% based on acreage in GB to 75% in VMX.

Fields is confused because if the comprehensive plan is guided the way we want it, the rezoning should happen. If we are considering if the guiding is correct, then it should not be rezoned, but should be discussed what the guiding should be.
Larson thinks that what brings the guiding for VMX into question is that the density of this area is in transition. Larson understands the feeling of discomfort as this zone is less restrictive. There are still a lot of questions that make it uncomfortable for people to buy into this zone.

Williams thinks it would be good to ask the City Council if past projections of population in this area are still valid.

Dodson is wondering how big a project form based code is. Wensman stated that it is something that takes some technical skill to do and it would need to be contracted out.

Williams thinks it would help facilitate the vision, but would not be necessary to do the rezone.

M/:Dunn/, Move to recommend not rezoning the parcels to VMX until the City Council can review the target numbers and there is a form based code, **motion dies for lack of second.**

M/S/P: Williams/Dunn, Move to ask the City Council to give the Planning Commission guidance on updated population and development projections for the areas guided for VMX in the Old Village, ***Vote: 6-0, motion carried unanimously.***

Fields would like to know what the driving force was for the VMX. If it was to bring more people to the downtown to make it more vibrant, or if it was to meet the Met Council mandates for housing population. Williams recollection was that it was for both of those reasons in addition to form based code to make it a more picturesque downtown and to incorporate business and residential in the same building, which general business does not do.

M/S/P: Williams/Dodson, Move to ask the City Council to approve funds for a consultant to work on a form based code for the downtown Old Village, ***Vote: 6-0, motion carried unanimously.***

Fields would like any information that he could get on form based code. Williams believes that the City has a couple of videos on this topic.

Staff Updates

1. Upcoming Meetings
    a. June 27, 2016
    b. July 11, 2016

Commission Concerns

Dunn asked about the AUAR. Wensman stated that the City is overdue for the update and it is in the City Engineers hands right now.

Meeting adjourned at 9:28 pm

Respectfully submitted,

Joan Ziertman
Planning Program Assistant

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF LAKE ELMO AND AMENDING THE ZONING CODE BY OMITTING SECTION 034: GB – GENERAL BUSINESS

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1302921230056	1302921210001	1302921240017	1302921210006	1302921210007
1302921320032	1302921320005	1302921230067	1302921220002	1302921220013
1302921320027	1302921230025	1302921240025	1302921220011	1302921220014
1302921230063	1302921230036	1302921210009	1302921230004	1302921210002
1302921320022	1302921230062	1302921230064	1302921320086	1302921320007
1302921320009	1302921320008	1302921320010	1302921320085	1302921320096
1302921320094	1302921230077	1302921230027	1302921230018	1302921230026
1302921230010				

SECTION 2. The City Council of the City of Lake Elmo also hereby ordains that the Zoning Administrator shall make the applicable changes to the official Zoning Map of the City of Lake Elmo.

SECTION 3. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 4. Adoption Date. This Ordinance 08-___ was adopted on this _____ day of _____, 2017, by a vote of ___ Ayes and ___ Nays.

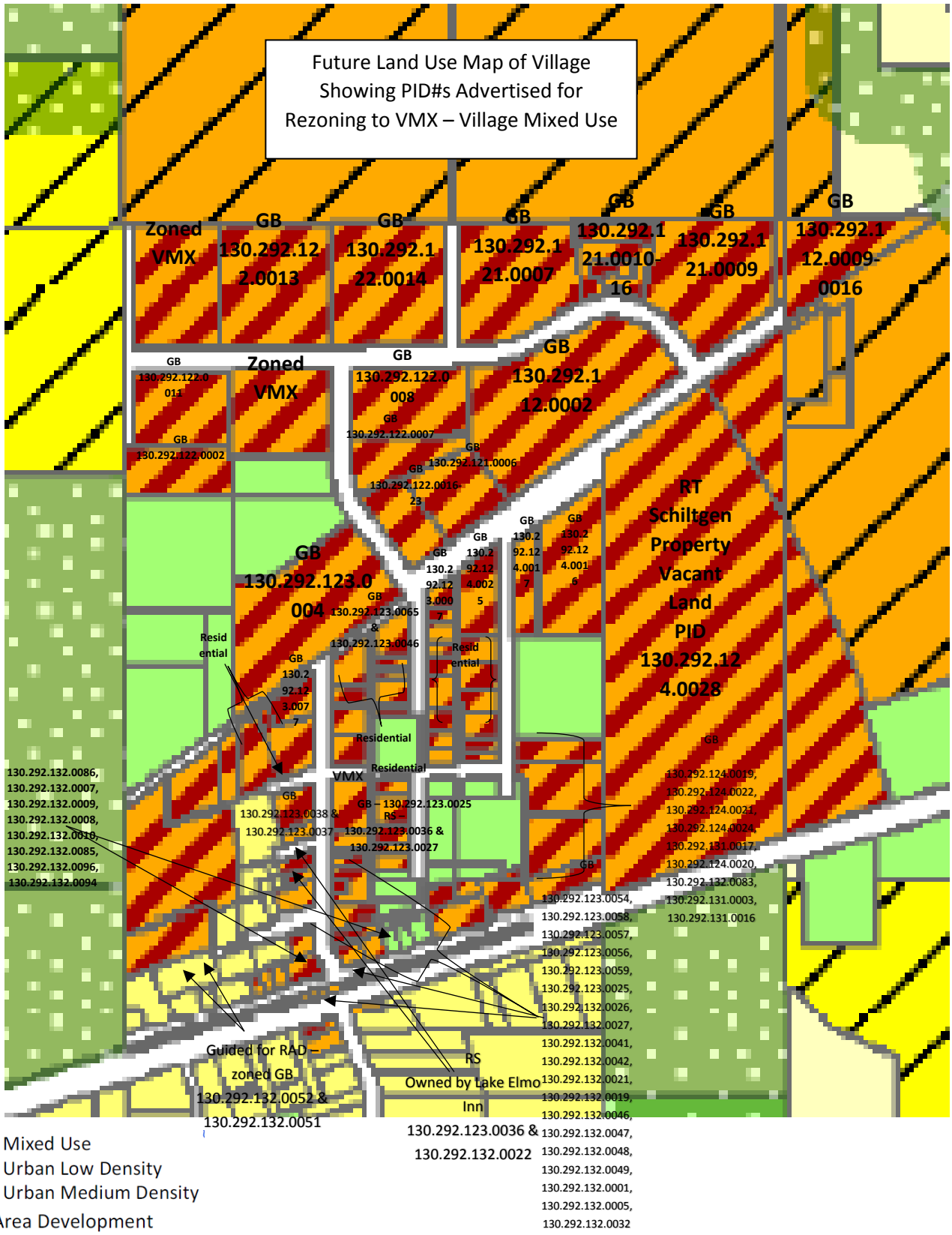
LAKE ELMO CITY COUNCIL

_____
Mike Pearson, Mayor

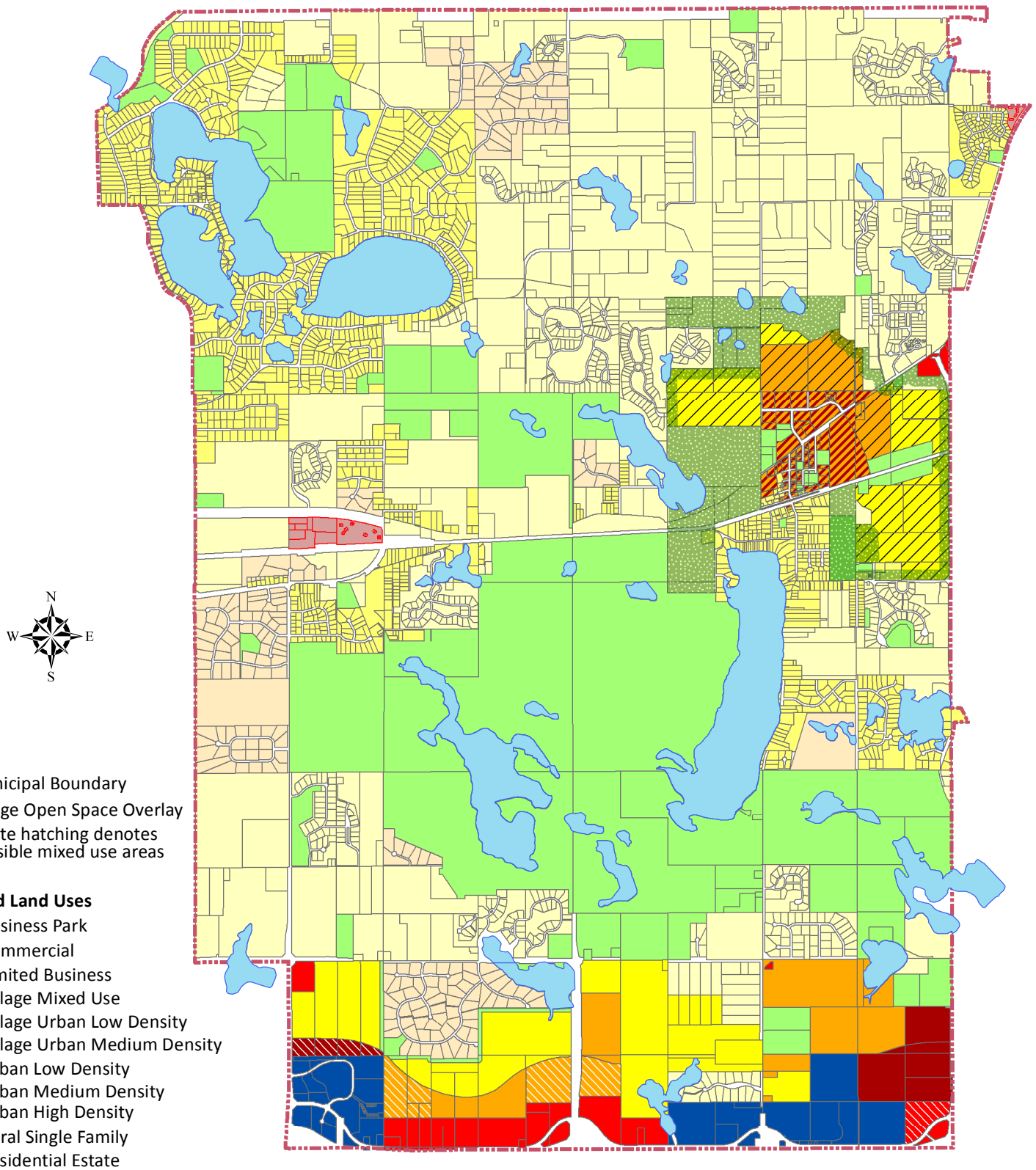
ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 08-____ was published on the ____ day of _____, 2017.


Future Land Use Map of Village
Showing PID#s Advertised for
Rezoning to VMX – Village Mixed Use
Zoned VMX
GB 130.292.122.0013
GB 130.292.122.0014
GB 130.292.121.0007
GB 130.292.121.0010-16
GB 130.292.121.0009
GB 130.292.112.0009-0016
GB 130.292.122.0011
GB 130.292.122.0002
Zoned VMX
GB 130.292.122.0008
GB 130.292.122.0007
GB 130.292.121.0006
GB 130.292.122.0016-23
GB 130.292.112.0012.0002
GB 130.292.123.0004
GB 130.292.123.0065 & 130.292.123.0046
GB 130.292.123.0037
GB 130.292.112.4.0028
RT Schiltgen Property Vacant Land PID 130.292.112.4.0028
Residential
Residential
VMX
Residential
Residential
GB – 130.292.123.0025
RS – 130.292.123.0036 & 130.292.123.0027
GB 130.292.123.0038 & 130.292.123.0037
130.292.132.0086, 130.292.132.0007, 130.292.132.0009, 130.292.132.0008, 130.292.132.0010, 130.292.132.0085, 130.292.132.0096, 130.292.132.0094
GB 130.292.124.0019, 130.292.124.0022, 130.292.124.0021, 130.292.124.0024, 130.292.131.0017, 130.292.124.0020, 130.292.132.0083, 130.292.131.0003, 130.292.131.0016
GB 130.292.123.0054, 130.292.123.0058, 130.292.123.0057, 130.292.123.0056, 130.292.123.0059, 130.292.123.0025, 130.292.132.0026, 130.292.132.0027, 130.292.132.0041, 130.292.132.0042, 130.292.132.0021, 130.292.132.0019, 130.292.132.0046, 130.292.132.0047, 130.292.132.0048, 130.292.132.0049, 130.292.132.0001, 130.292.132.0005, 130.292.132.0032
Guided for RAD – zoned GB 130.292.132.0052 & 130.292.132.0051
RS Owned by Lake Elmo Inn 130.292.123.0036 & 130.292.132.0022
Village Mixed Use
Village Urban Low Density
Village Urban Medium Density
Rural Area Development
Public/Park
Village Open Space Overlay

Map 3-3



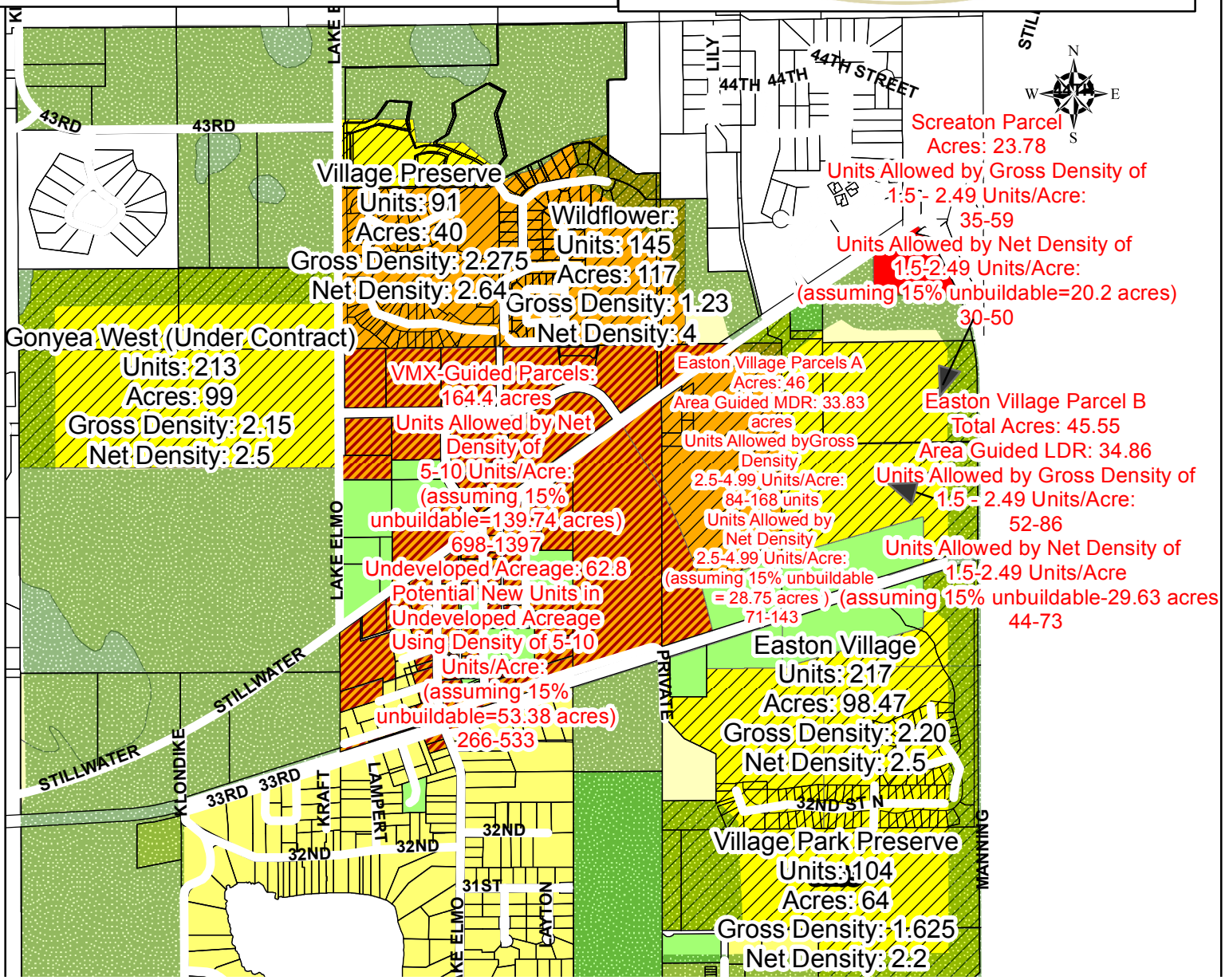
Sources: Washington County & Metro GIS
3-26-2015

Planned Land Use

Lake Elmo Comprehensive Plan 2030

THE CITY OF LAKE ELMO

Parcels Guided in Village District



Land Use	Expected Per Village Master Plan	Development/Parcel Under Contract, Prelim Plat or Final Plat	Planned or Approved Development	Possible Future Development	Possible # of Units (based on gross density) Low	High	Possible # of Units (based on net density) Low	High
V-LDR and V-MDR Zoning Districts	800	Gonyea West	213	Screaton Parcel	35	59	30	50
		Village Preserve	91	Easton Village Parcel A	84	168	71	143
		Wildflower	145	Easton Village Parcel B	52	86	44	73
		Easton Village	217					
		Village Park Preserve	104					
		Total Planned/Approved Development Units:	770	Possible Future Units :	171	313	145	266
VMX Zoning District	200-300	Arbor Glen	48	Vacant Parcels in VMX District			266	533
				Potential Redevelopment in VMX District			398	1397

STAFF REPORT

DATE: 4/24/17
AGENDA ITEM: 4B – PUBLIC HEARING
CASE # 2017-15

TO: Planning Commission

ITEM: Royal Golf Club at Lake Elmo Grading Permit

SUBMITTED BY: Stephen Wensman, Planning Director

REVIEWED BY: Emily Becker, City Planner
Jack Griffin, City Engineer

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to consider a grading permit request from HC Golf Course Development LLC to grade the first phase of the Royal Golf Club at Lake Elmo development. The developer proposes to excavate over 400 cubic yards per acre of site area, triggering the need for a public hearing, Planning Commission review and Council approval. Typically preliminary grading is conducted after preliminary plat approval and in association with approved preliminary grading plans. The developer is requesting a grading permit outside of the preliminary plat process in order to facilitate early grading in the event the preliminary plat approval is delayed. In either case, the grading will be conducted according to grading plans which will substantially conform to the preliminary PUD plans that have been prepared and reviewed to date and are anticipated for approval with some modifications. Grading is also subject to meeting City standards for erosion control, Valley Branch Watershed District (VBWD) approval and an NPDES permit. Grading prior to plat approval does not guarantee approval of the preliminary plat and is conducted at the developer's own risk. In approving this grading activity the developer will be asked to acknowledge as part of the grading agreement that grading rework will likely be required as necessary to conform to the final approved Plat and construction plans.

GENERAL INFORMATION

Applicant: HC Golf Course Development, LLC

Property Owner: HC Golf Course Development, LLC, 11074 Radisson Road NE, Blaine, MN 55449

Location: Former 3M Tartan Park, PIDs: 25-029-21-12-0001, 25-029-21-13-0001, 25-029-21-14-0001, 25-029-21-21-0001, 25-029-21-31-0001, 25-029-21-42-0001, 25-029-21-43-0001, 25-029-21-43-0002, and 25-029-21-44-0002

Request: Grading Permit Approval

Grading Site Area: 73 acres

Deadline for Action:	Application Complete – 3/28/17 60 Day Deadline – Extension Letter Mailed – No 120 Day Deadline –
Applicable Code:	Article V Zoning Administration and Enforcement §150.270 Storm Water, Erosion, and Sediment Control Article III – Environmental Performance Standards

REQUEST DETAILS

HC Golf Course Development is requesting a grading permit prior to preliminary plat approval. Because of the proposed grading exceeds 400 cu. yds. per site area, the request requires a public hearing, Commission review and Council approval.

The developer is requesting a permit to move 224,000 cubic yards of material, not including subgrade corrections and trench borrow, on 73 acres and to remove existing trees to begin grading the planned phase 1 Royal Golf Club at Lake Elmo planned subdivision. The Planning Commission reviewed and recommended approval of the preliminary plat and preliminary PUD Plans on March 28, 2017, and the preliminary plat and PUD plans will likely be reviewed by the City Council at the May 16, 2017 City Council meeting. The comprehensive plan amendment to allow the development to proceed was submitted to the Metropolitan Council on 3/27/17 and is presently under review. The Metropolitan Council has 60 days to review the amendment.

PLANNING AND ZONING ISSUES

Tree Preservation Plans. An approved Tree Preservation Plan is required prior to issuance of a grading permit. The developer prepared a Tree Preservation Plan for the phase 1 grading that also shows tree preservation for all phases of the Royal with the preliminary plat application which has not been approved, however, the planned removal within phase 1 grading area is below the threshold for required tree replacement if considering the entire plat area. However, if the grading is viewed as a stand along project and future phases and future tree replacement do not occur, then the developer is 5.4% over the allowed 30% tree removal. Staff recommends that an escrow be established for the 5.4% of the caliper inches removed to cover tree replacement. The escrow can be released once tree replacement occurs for future phases.

VBWD Permit. A Valley Branch Watershed District permit will be required prior to any grading work being done. The grading permit will be conditioned on VBWD approval. The VBWD has previously identified issues with the planned infiltration basins and other issues that the developer is working through. At this time, the developer does not believe the issues will impact to the proposed preliminary plat. At the time this report was written, the VBWD had not completed their review.

Shoreland. A portion of the grading is within the shorelands of Downs and Horseshoe Lakes. The proposed grading is consistent with the Article 17 – Shoreland Management Overlay District regulations. An EAW was prepared for the Royal Golf Club at Lake Elmo development and the proposed grading is consistent with the environmental review and the City made a negative declaration for an EIS.

Construction Access. Construction access was not identified on the grading plans as required. The developer had indicated that desired construction access would be off of Manning Trail and 10th

Street. The grading plans will be required to be updated to identify construction access for the project prior to the start of construction.

Future Utility Work. As discussed in the applicant's narrative, there will be utility work associated with the development project, but this work will occur subsequent to the site grading. The applicant has proposed to install some utilities under a Site Work Agreement prior to final plat approval. If approved by the City a Site Work Agreement will be required to provide the needed protections, securities and escrows for the public utility improvements.

Engineering Review. The engineering review for the Phase 1 Grading and Erosion Control Plans is ongoing as additional plan changes are being made to address VBWD permit requirements and City engineering design standards. The Phase 1 Grading and Erosion Control Plans will need to be approved for construction by the City Engineer prior to any grading permit being issued.

DRAFT CONDITIONS OF APPROVAL:

Staff is recommending approval of the grading permit for HC Golf Course Development to conduct the Phase 1 grading activities on the properties with the following draft conditions:

1. That no utility work shall occur under the Grading Agreement.
2. That site access to the property be limited to 20th Street and 10th Street South and that the locations be identified on the grading plans.
3. That tree protection fencing be completed prior to grading and that the locations be staked and field inspected prior to installation.
4. That a tree replacement escrow be established in the Grading Agreement to cover 5.4% tree replacement of the 16,643.68 caliper inches being removed.
5. That the Developer enter into a Grading Agreement with the City acceptable to the City Attorney that delineates that the developer is responsible for the design, construction, and payment of the required improvements with financial guarantees therefore.
6. That no grading commence on the site until the Phase 1 grading and erosion control plans are approved by the City Engineer, the Grading Agreement is executed, the financial securities are in place, and a preconstruction meeting has been conducted with City staff.
7. That a Valley Branch Watershed District Permit and MPCA NPDES Permit are obtained and that all conditions of the permits are complied with.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed grading:

1. That the Royal Golf Club at Lake Elmo preliminary plat has not been approved by the City Council.
2. That the proposed Phase 1 grading will be allowed under the terms and conditions of a grading agreement approved by the City Attorney prior to preliminary or final plat approval at the developer's sole risk and does not provide any development entitlement.
3. That a Tree Preservation Plan was submitted with the grading plan that clearly articulates the impacts to the woodlands on the site and addresses tree protection and replacement responsibilities.

4. That grading will be conducted on site with no off site impacts beyond normal development activities.
5. That the Phase 1 grading and erosion control plans have been reviewed and approved for mass grading operations on the site with conditions complying with the City's Storm Water, Erosion, and Sediment Control, and Tree Preservation ordinances and design standards.

RECOMENDATION:

Staff recommends that the Planning Commission recommend approval of the grading permit with the conditions of approval as listed in the Staff report. Suggested motion:

"Move to recommend approval of the grading permit to grade the first phase of the proposed Royal Golf Club at Lake Elmo plat area with 7 conditions based on the findings in the staff report."

ATTACHMENTS:

1. Application Narrative
2. Royal Golf Club at Lake Elmo Grading, Development and Erosion Control Plans dated 4/7/17
3. Tree Preservation Plan

THE ROYAL GOLF CLUB

Grading Permit

March 27, 2017

Background

Tartan Park, 3M's private 27-hole golf course and recreational facility was purchased by H.C. Golf Course Development, LLC in March of 2016. Since that time, the golf course reconstruction and proposed clubhouse renovation have begun with an expected opening Summer of 2017. H.C. Golf applied for a Comprehensive Plan Amendment on September 12, 2016. This application was approved, conditioned on Metropolitan Council approval, January 9, 2017. The EAW for the Royal Golf Club was approved by the City Council on January 17, 2017 and the Zoning Text Amendment for the new Golf Course Community designation was approved on February 7th, 2017. The applicant has prepared a Shoreland PUD/Cluster evaluation that is in the final stages of review by the City of Lake Elmo. On September 8, 2016, H.C. Golf requested that the City undertake a Water Supply study based on the City Engineer's recommendation during the Concept Plan review. The study is complete, the recommended changes to RGC's water looping system have been made. RGC has obtained its required Wetland Alteration Permits and received approval of the Wetland Replacement Plan. The Planning Commission is expected to give approval the preliminary plat March 27, 2017.

Due to the need to finish a first phase of development by the end of 2017, the surrounding cities taking their full 60 days to comment on the CPA, and with the same time of review expected by the Met Council, it is necessary to apply for a grading permit prior to the preliminary plat process finishing in its entirety.

Project Phasing

- **Development Phasing**

  The first phase of ***development*** (installation of streets and utilities directly serving platted lots) will be the northeast side of the site. This comprises 84 lots, both villa and traditional single family) and the streets to serve them. The ***sewer*** to serve these lots comes from the intersection of Lake Elmo Ave. and 10th Street so a 1.5 mile forcemain will need to be installed across the golf course and down 10th to serve this phase. The first phase is served by ***water*** from the intersection of 20th Street and Lake Elmo Ave.

  This arrangement is unusual in that developers generally try to develop nearest the infrastructure source to minimize front end costs. In this case, due to the County requirement that the clubhouse be hooked up to sewer and water with 24 months of sewer being available to the site. This requirement economically makes development of the east side the most efficient.

- **Utility Phasing**

  As mentioned above, extensive utility work is needed to serve the first phase and clubhouse. As such, RGC will be requesting a "Site Development Agreement" to extend certain utilities once preliminary plat approval is obtained but prior to receiving final plat approval. There two segments of the utilities that this agreement will apply to. One segment is the watermain along 20th Street to Phase 1. ***This watermain will not be "hooked up" to anything in Phase 1;*** *it will simply be "brought" to Phase 1.*

  Additionally, to facilitate restoration of the golf course so that grass can grow back in this summer, the Site Development Agreement will allow for the construction of the forcemain, watermain, sanitary sewer, and storm sewer ***within the golf course limits.*** The sewer and water lines will not be energized – they are put in solely to shrink the construction schedule and allow the course to heal over the summer. The storm sewer will connect Pond 10 to Horseshoe Lake. This pipe (and pond) will likely be dry until the subdivision storm sewer system is installed. The forcemain and the watermain will not be hooked up to anything until after final plat and final utility plan approvals. Because these are not as "elevation sensitive" like infrastructure in the subdivision, they can be put in first and any needed adjustments can be made when they are hooked up to the lift stations and subdivision watermains. The sanitary sewer serve line will serve the clubhouse, fitness center and maintenance building; there is sufficient enough grade in the sewer line serving these buildings that we are not concerned with grade. Again, this pipe will not be energized; this is expected in 2019.

The remaining utilities (subdivision utilities to serve lots) will all be put in under the normal process – final plat with Developers Agreement, final approval of construction plans, securities, plat recordation.

- **Grading Phasing**

  The Phase 1 grading encompasses the NE area of the site in addition to the SW corner. Because a second phase of development will likely occur early in 2018 (in the SW corner of the site), it is preferable to grade this portion in late 2017 in advance of utility construction in Spring of 2018. Additionally, there is a certain amount of grading in this area that will be necessary to bring sewer down to the lift station located on 10th street.

Grading Specifics

During the Phase 1 grading, approximately 73 acres will be disturbed, creating a common excavation quantity of 224,000 cubic yards, not including subgrade corrections and trench borrow. A large excavation will be created in the corner of 20th Street and Manning Trail to replace the floodplain that was filled to provide for an entrance to 20th Street. There will also be the necessary stormwater treatment and infiltration basins required by City ordinance and VBWD rules. All disturbed areas will be restored with seeding and fiber blankets per rule and ordinance.

There are several retaining walls shown as part of the grading plans. At this time, it is expected that walls 5' tall or less will be constructed of large limestone blocks and that walls in excess of 5' will be of poured concrete with a limestone-like pattern. As more information regarding costs are obtained, it may be decided that all walls will be made with large limestone blocks. All walls will be maintained by the Homeowners Association.

Tree Preservation

Tree preservation plans for Phase 1 grading are included. A spreadsheet is also included showing all the trees in Phase 1 along with the expected removal. As shown, the tree removal with Phase 1 is 12% therefore not triggering any replacement. Regardless, the landscaping for the Phase 1 plat (84 lots) will contain landscaping that will be counted toward future tree replacement when those phases occur.

Wetland Impacts

Wetland 16 on the attached plans will be excavated with this phase. This alteration has been permitted through the required agencies; the replacement will be by way of purchasing wetland credits.

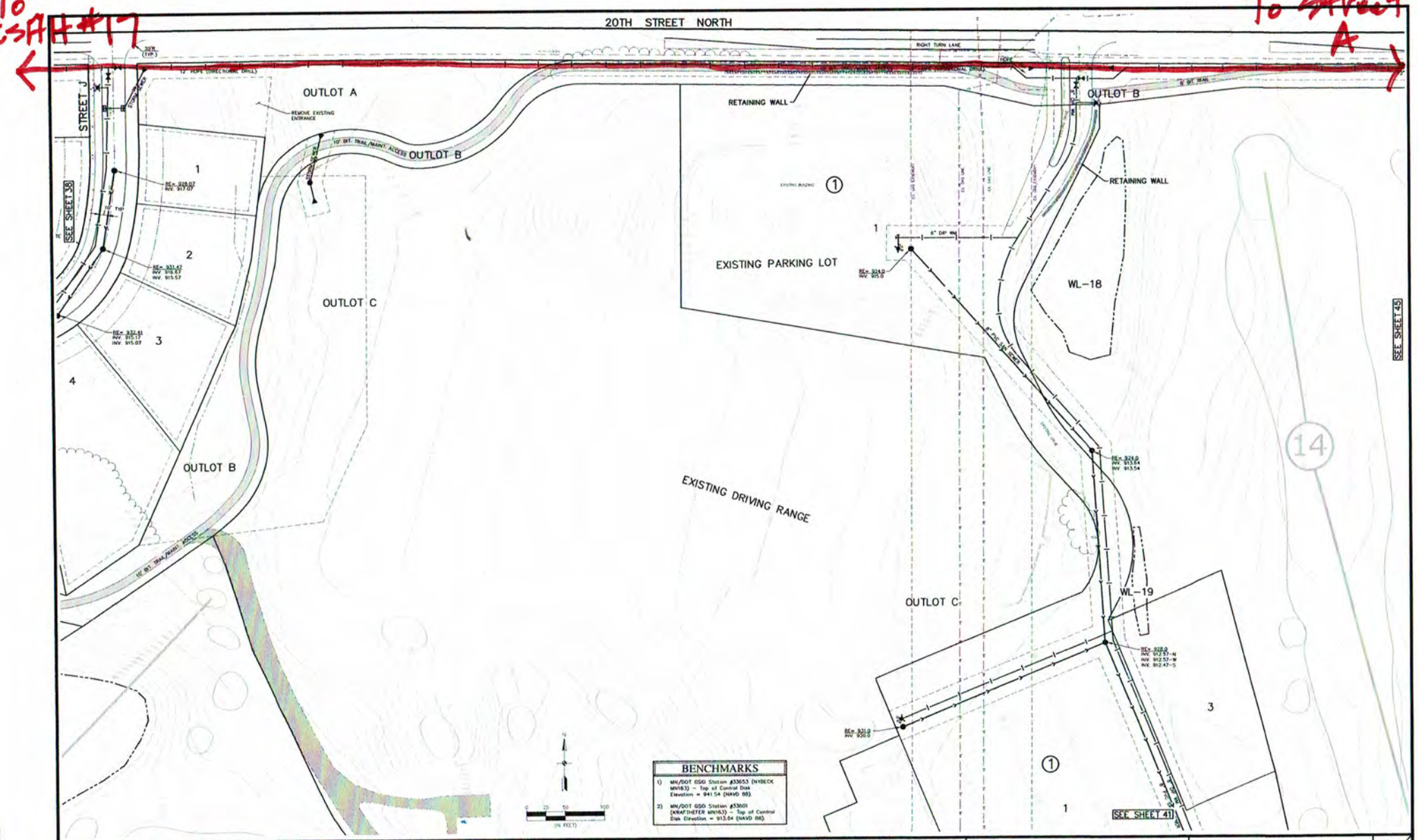
An MnPCA permit has been applied for and acquired.

Sincerely,

Rick Packer
President

Royal Golf Club
H.C. Golf Land, LLC.

SITE WORK PERMIT



Carlson McCain • environmental • engineering • surveying

3890 Pheasant Ridge Drive NE, Suite 100
Blaine, MN 55449
Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 21063

Drawn: JSO
Designed: BJK
Date: 9/21/16

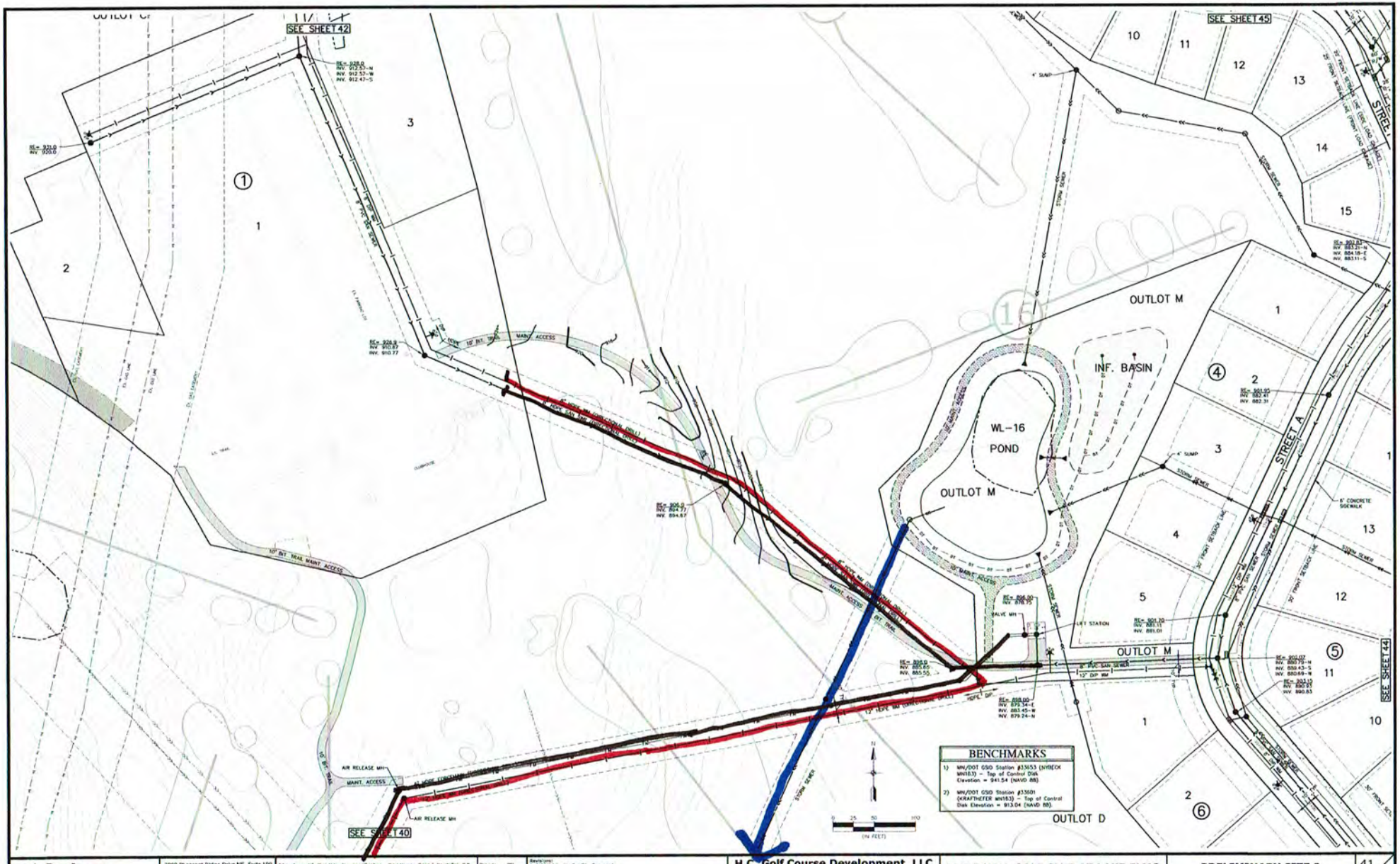
Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/28/17 Revise Per City Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY SITE & UTILITY PLAN

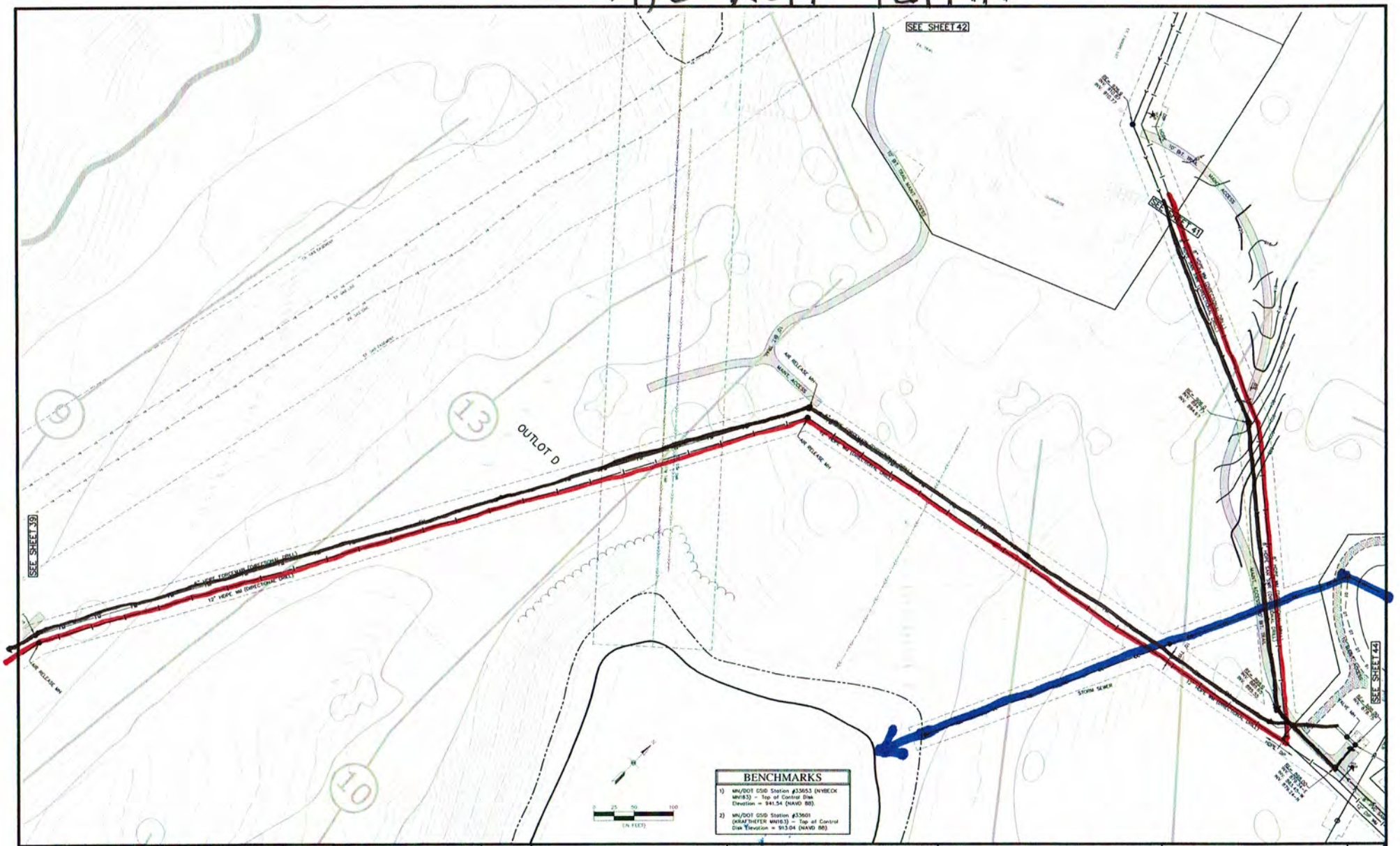
SITE WORK PERMIT



Carlson McCain • environmental • engineering • surveying	3890 Pheasant Ridge Drive NE, Suite 100 Blaine, MN 55449 Phone: (763) 489-7900 Fax: (763) 489-7959 www.carlsonmccain.com	I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota	Print Name: Brian J. Koystofiak, P.E. Signature: Date: 9/21/16 License #: 23061	Drawn: JKJ Designed: BJK Date: 9/21/16	Revisions: 1. 2/10/17 Revise Per City Comments 2. 2/28/17 Revise Per City Comments
H.C. Golf Course Development, LLC 11074 Radisson Rd NE Blaine, MN 55449	**THE ROYAL GOLF CLUB AT LAKE ELMO** Lake Elmo, Minnesota	**PRELIMINARY SITE & UTILITY PLAN**	41 of 65		

To Horseshoe

SITE WORK PERMIT



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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: DD
Designed: BJK
Date: 9/21/16

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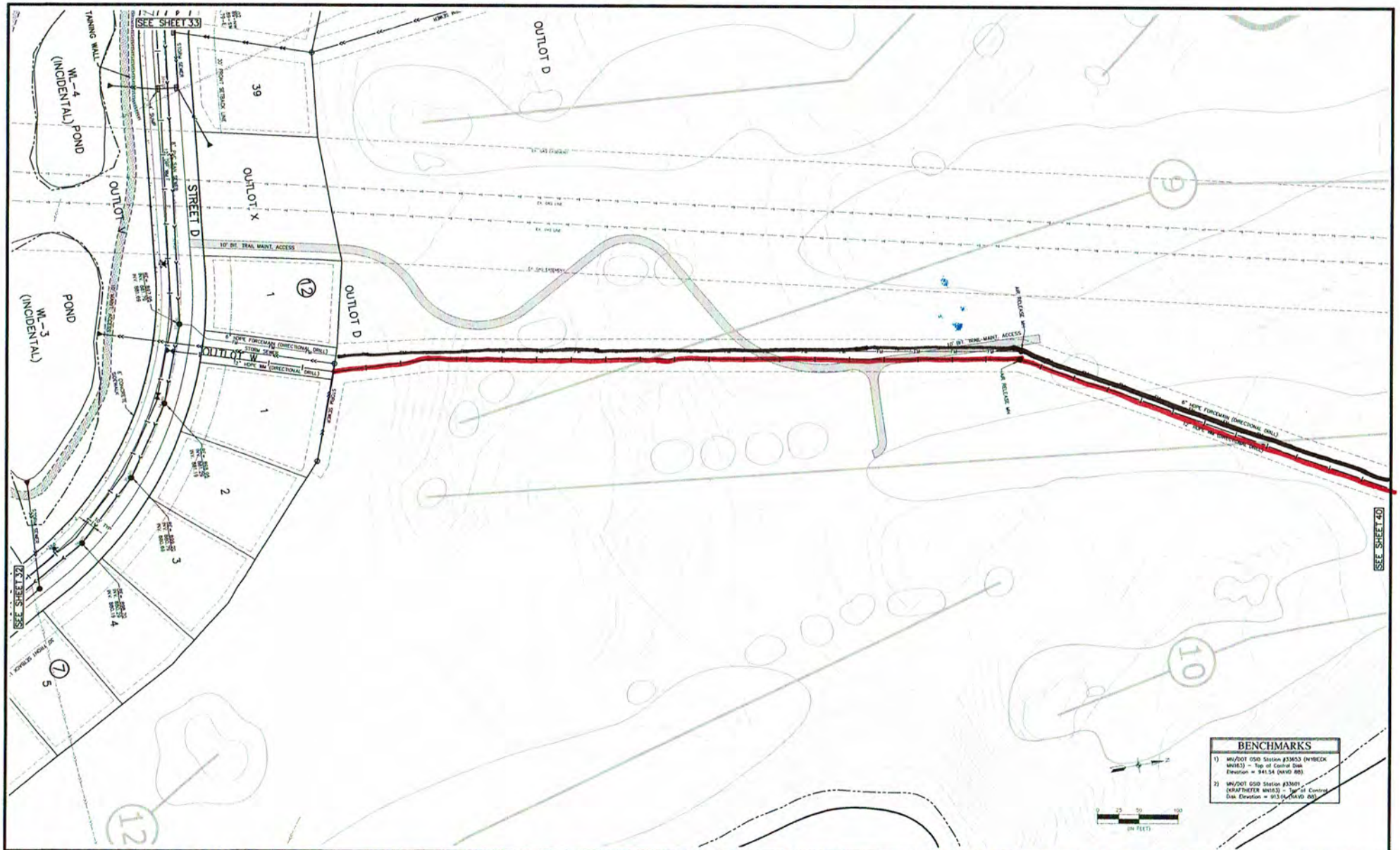
H.C. Golf Course Development, LLC
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY SITE & UTILITY PLAN

40 of 65

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Designed: BJK
Date: 9/21/16

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THE ROYAL GOLF CLUB AT LAKE ELMO
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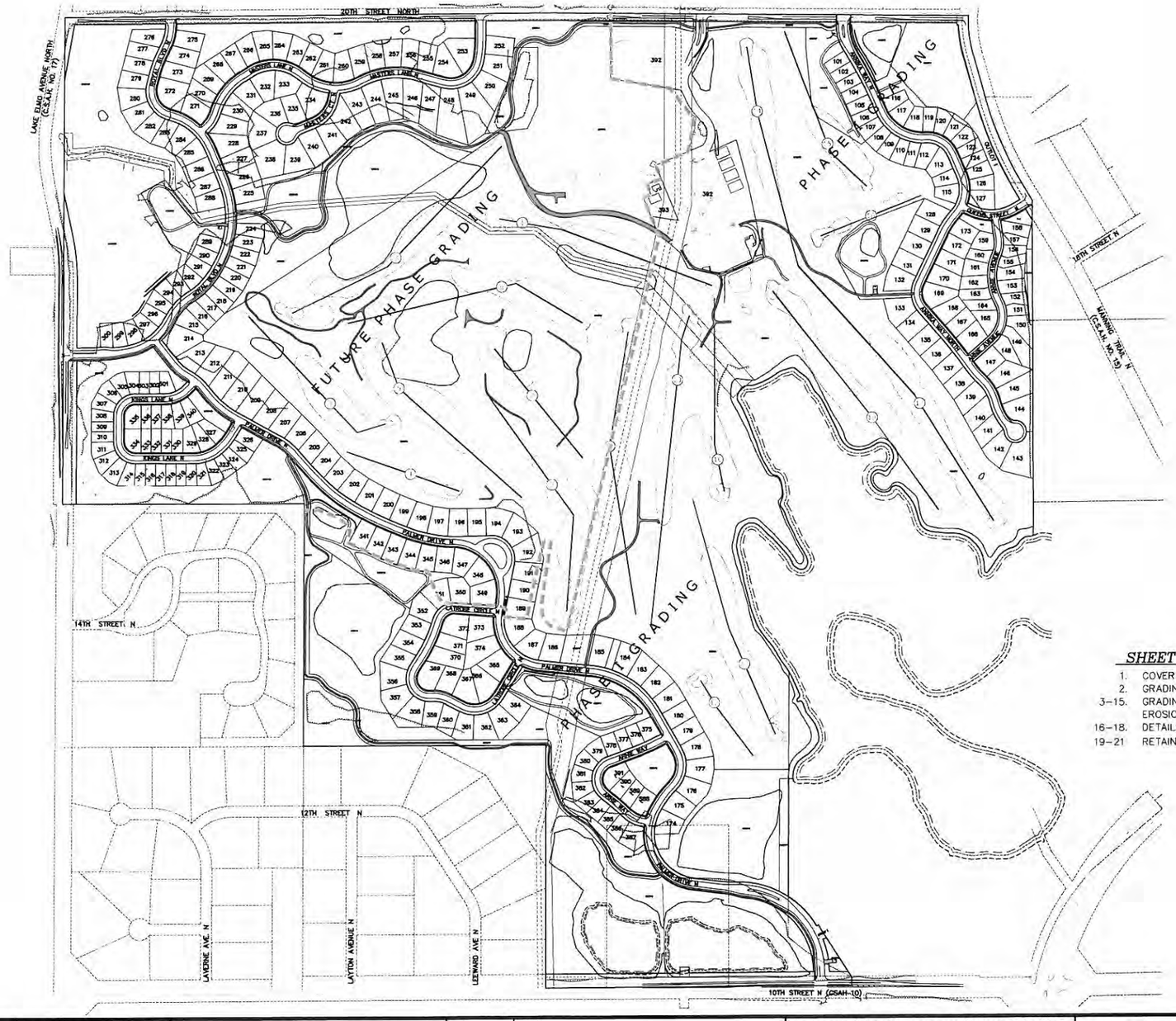
PRELIMINARY SITE & UTILITY PLAN

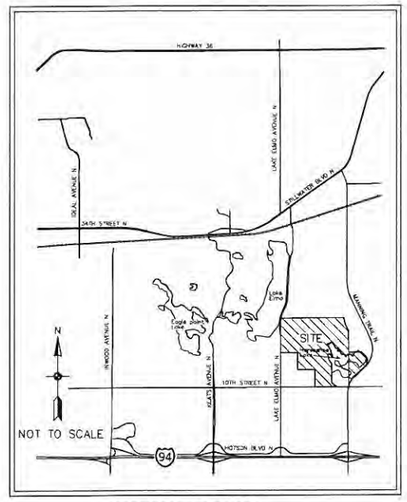
39 of 65

THE ROYAL GOLF CLUB AT LAKE ELMO

GRADING, DEVELOPMENT & EROSION CONTROL PLANS

BLAINE, MINNESOTA





VICINITY MAP

SHEET INDEX

1. COVER
2. GRADING INDEX
3–15. GRADING DRAINAGE & EROSION CONTROL PLANS
16–18. DETAILS
19–21 RETAINING WALL PROFILES

N

0 150 300 600

(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

CALL BEFORE YOU DIG!

811 Know what's below. Call before you dig.

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Print Name: Brian J. Krystofiak, P.E.
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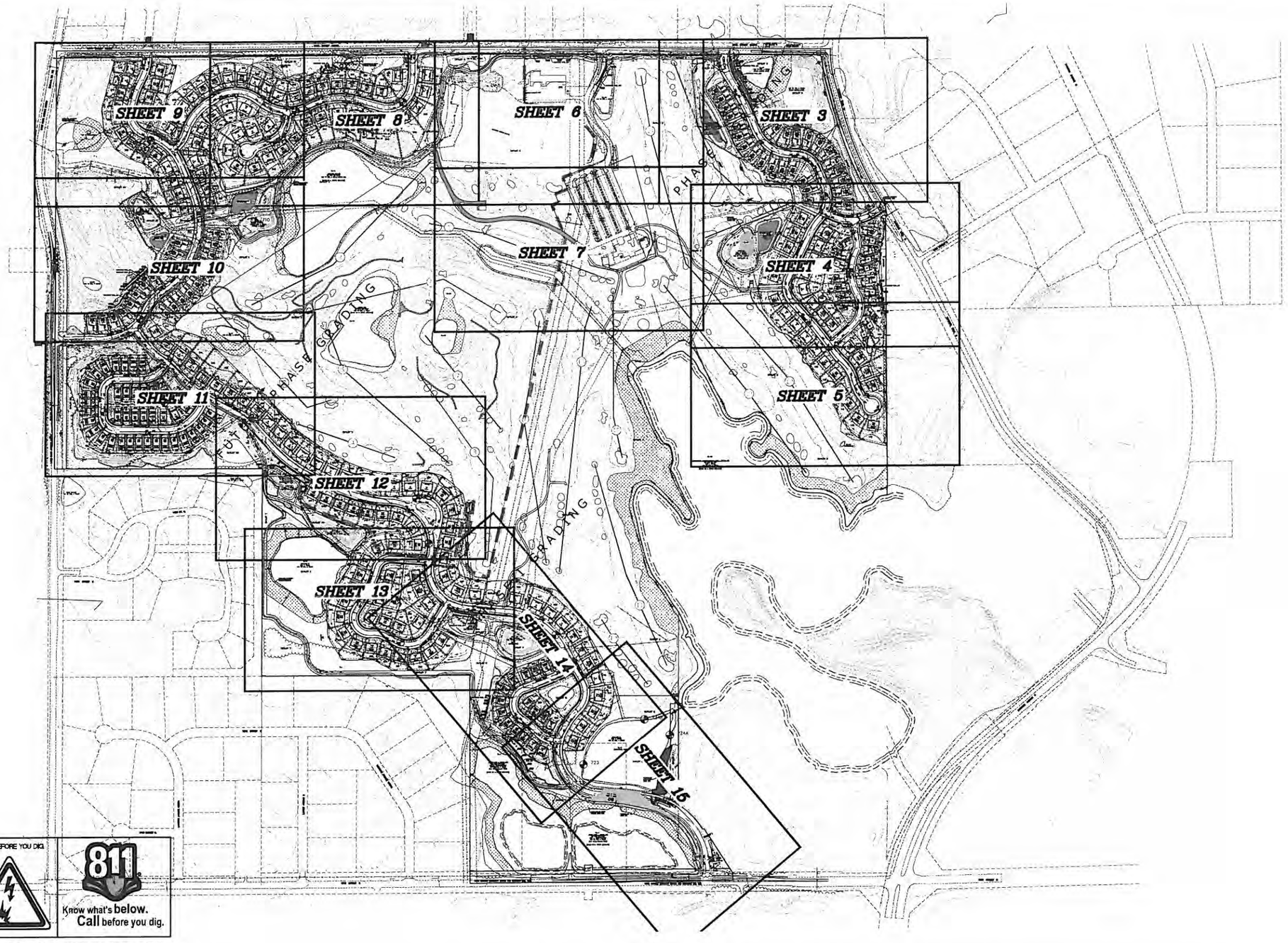
Drawn: AOB
Designed: BJK
Date: 4/7/12

Revisions
1.

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

COVER



LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY		
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE		
10' CONTOUR		
2' CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	000	00.0
EMERGENCY OVERFLOW		E.O.F. 000.0
SILT FENCE		
TREE FENCE		
TREELINE		
SOIL BORING		
GRADING LIMITS		
STORM CATCH BASIN		DENOTES INLET PROTECTION
WETLAND BUFFER SIGN		DENOTES SIGN, DENOTES POST

WETLAND FILL SUMMARY

	AREA
WETLAND FILL:	3097 S.F.
WETLAND EXCAVATION:	12,032 S.F.
TOTAL WETLAND IMPACT:	15,129 S.F.

NOTE: WETLAND REPLACEMENT CREDITS TO BE PURCHASED IN LIEU OF ONSITE REPLACEMENT

NORTHEAST FLOODPLAIN SUMMARY

EXISTING FLOODPLAIN:	81.3 AC/FT
PROPOSED FLOODPLAIN:	81.3 AC/FT

SOUTH FLOODPLAIN SUMMARY

FLOODPLAIN FILL:	2500 CY
FLOODPLAIN MITIGATION:	3200 CY

N

0 150 300 600
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

CALL BEFORE YOU DIG. 811 Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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www.carlsonmccain.com

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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 4/7/17 License # 25063

Drawn: LOC
Designed: BJK
Date: 4/7/17

Revisions
1.

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

INDEX

20TH STREET NORTH

EXISTING OUTLET FOR WETLAND 17 (887.6)

BUFFER AREA: 75' AVERAGE
REQUIRED: 66,982 SQ.FT.
PROVIDED: 67,355 SQ.FT.

OUTLOT B

OUTLOT F

OUTLOT G

RETAINING WALL #12

WL-17
100 YR HWL = 893.8
(FROM DOWNS LAKE)

RETAINING WALL #13

100 YR HWL = 893.8
(FROM DOWNS LAKE)

OUTLOT H

ANNIKA WAY N

MANNING TRAIL N

OUTLOT E

INFILTRATION BASIN
POND 20
100 YR HWL = 886.5 (MODEL)
NWL = 881.8
OUTLET = 882.3
100 YR HWL = 893.8
(FROM DOWNS LAKE)

100 YR HWL= 894.7

100 YR HWL= 893.8

FLOODPLAIN STORAGE

OUTLOT I

MATCH EXISTING CULVERT SIZE

SEE SHEET 6

SEE SHEET 4

NORTHEAST FLOODPLAIN SUMMARY

EXISTING FLOODPLAIN:	81.3 AC/FT
PROPOSED FLOODPLAIN:	81.3 AC/FT

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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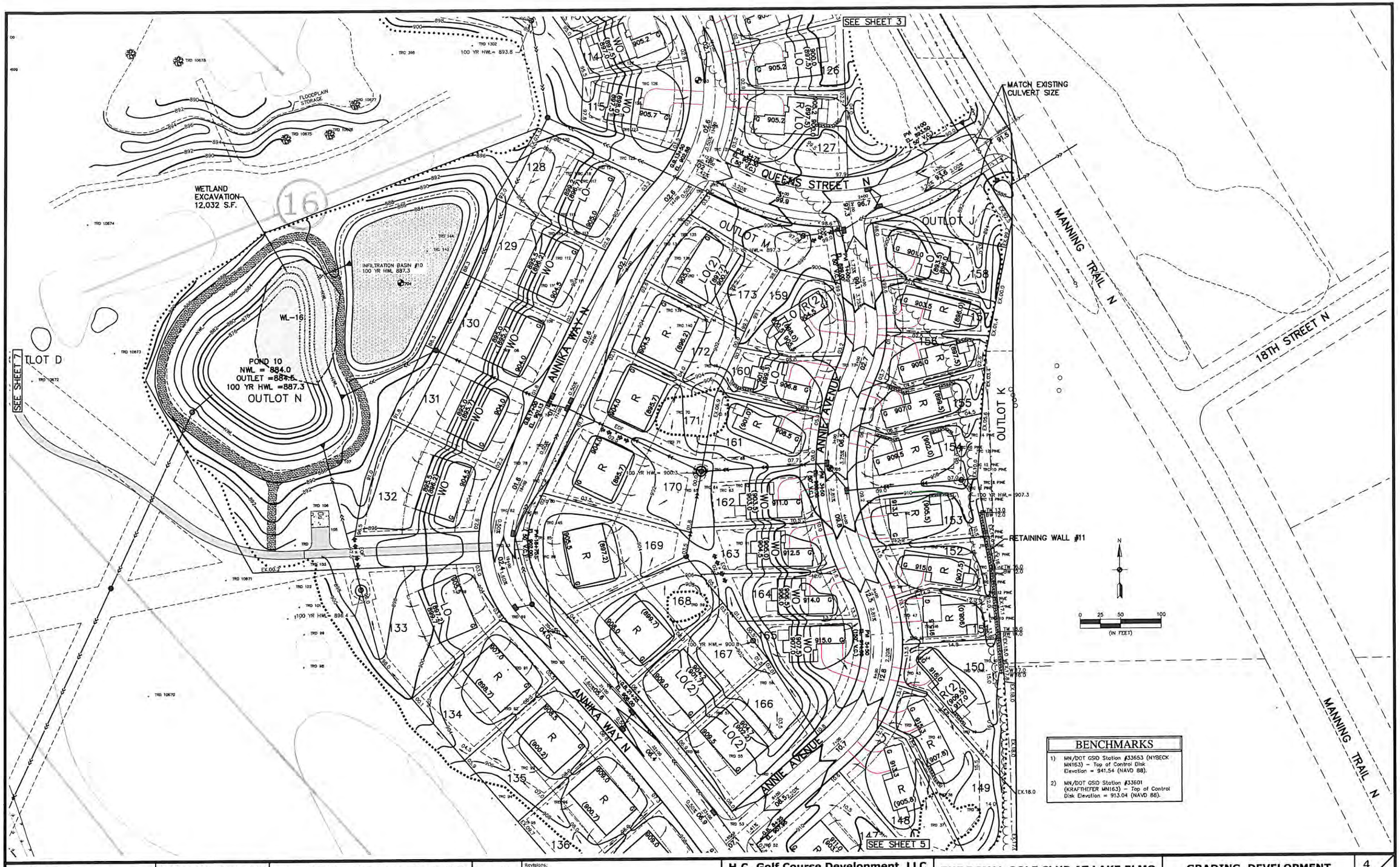
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Lake Elmo, Minnesota

GRADING, DEVELOPMENT & EROSION CONTROL PLAN

[Save Date: 04/07/17] P:\pond\2021 - 2040\2040.06 - Golf\Engineering\Final Residential Plans\Final Grading Plan\FG-01-gr.dwg



BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

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GRADING, DEVELOPMENT & EROSION CONTROL PLAN

Issue Date: 04/07/17 P:\2016\16024 - 604016036 - Certain Park\Civil\Engineering\01 Initial Resident\Final plans\Final grading plan\16-16-grd.dwg

SEE SHEET 4

ANNIKA WAY N

ANNIE AVENUE

MANNING TRAIL N

OUTLOT D

OUTLOT D

17

18

WL-22

HORSESHOE LAKEHORSESHOE LAKE – (NGVD 29)
MN DNR 82-74P
OHW = 876.8
100 YR HWL = 877.4

WL-15
(INCIDENTAL)

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT CSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT CSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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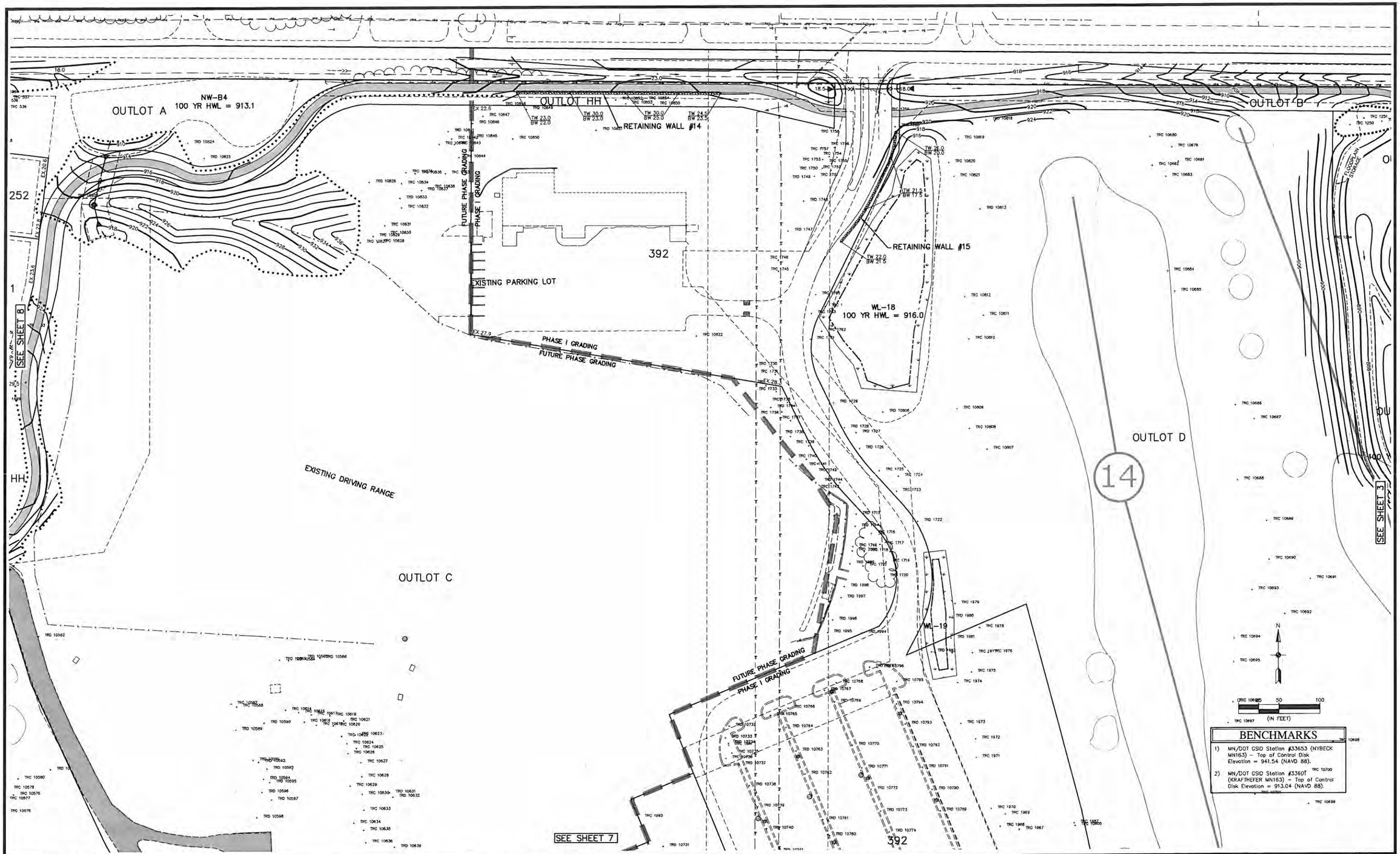
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GRADING, DEVELOPMENT & EROSION CONTROL PLAN



BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #3360T (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Lake Elmo, Minnesota

GRADING, DEVELOPMENT & EROSION CONTROL PLAN

SEE SHEET 6

SEE SHEET 8

SEE SHEET 4

FUTURE PHASE GRADING
PHASE I GRADING

WL-19
WL-14
WL-13

392
393

1

OUTLOT D

N

0 25 50 100
(IN FEET)

BENCHMARKS

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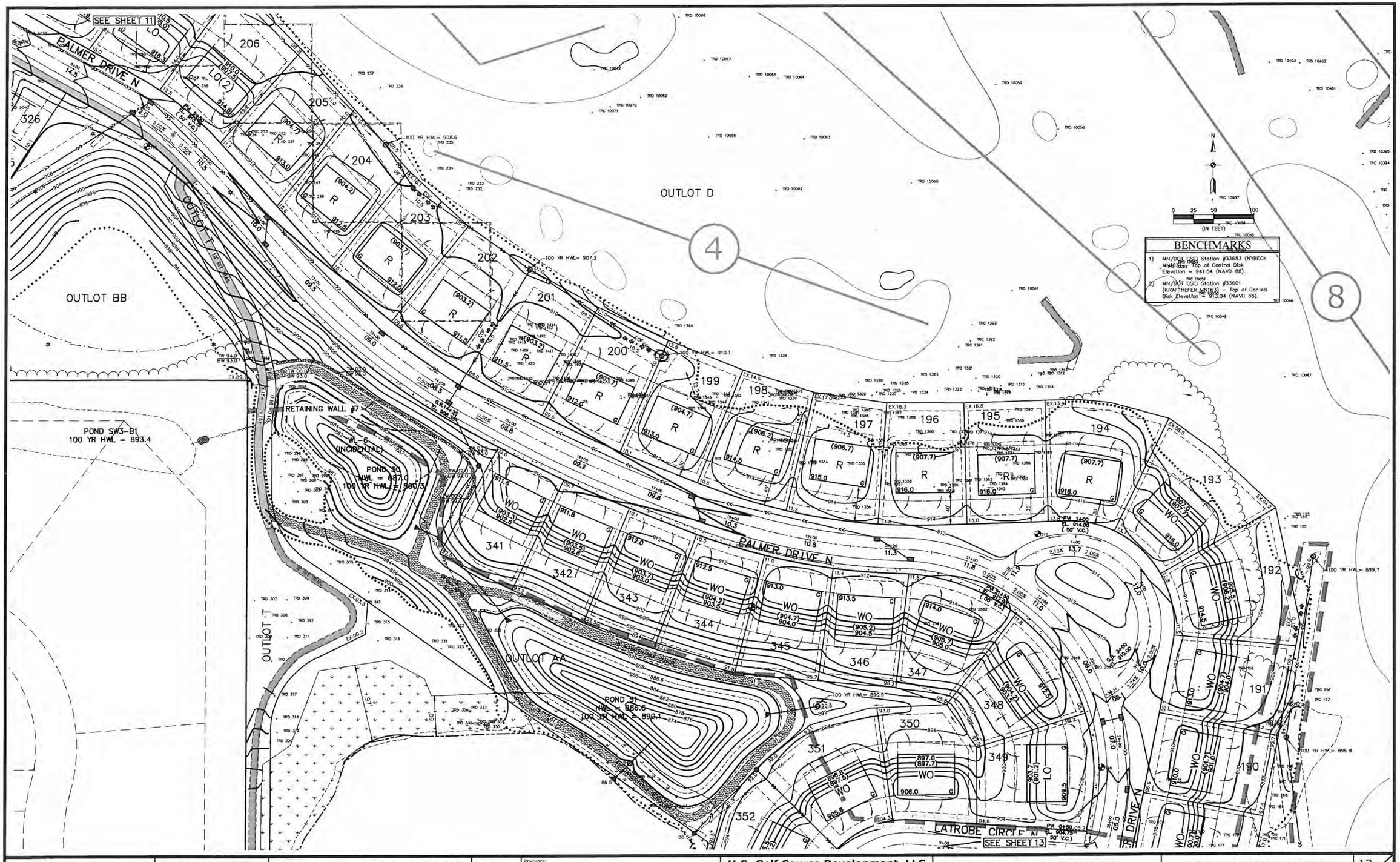
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Lake Elmo, Minnesota

GRADING, DEVELOPMENT & EROSION CONTROL PLAN

POND 51
NWL = 886.6
100 YR HWL = 890.1

WL-5
WETLAND 5
NWL = 886.5
100 YR HWL = 888.5

OUTLOT Z

BUFFER AREA: 50' AVERAGE
REQUIRED: 85,765 SQ.FT.
PROVIDED: 99,620 SQ.FT.

OUTLOT Y

SEE SHEET 12

LATROBE CIRCLE N

PALMER DRIVE N

OUTLOT X

OUTLOT T

OUTLOT U

WL-4
(INCIDENTAL)
POND 60
NWL = 883.0
100 YR HWL = 887.5

RETAINING WALL #8

SEE SHEET 14

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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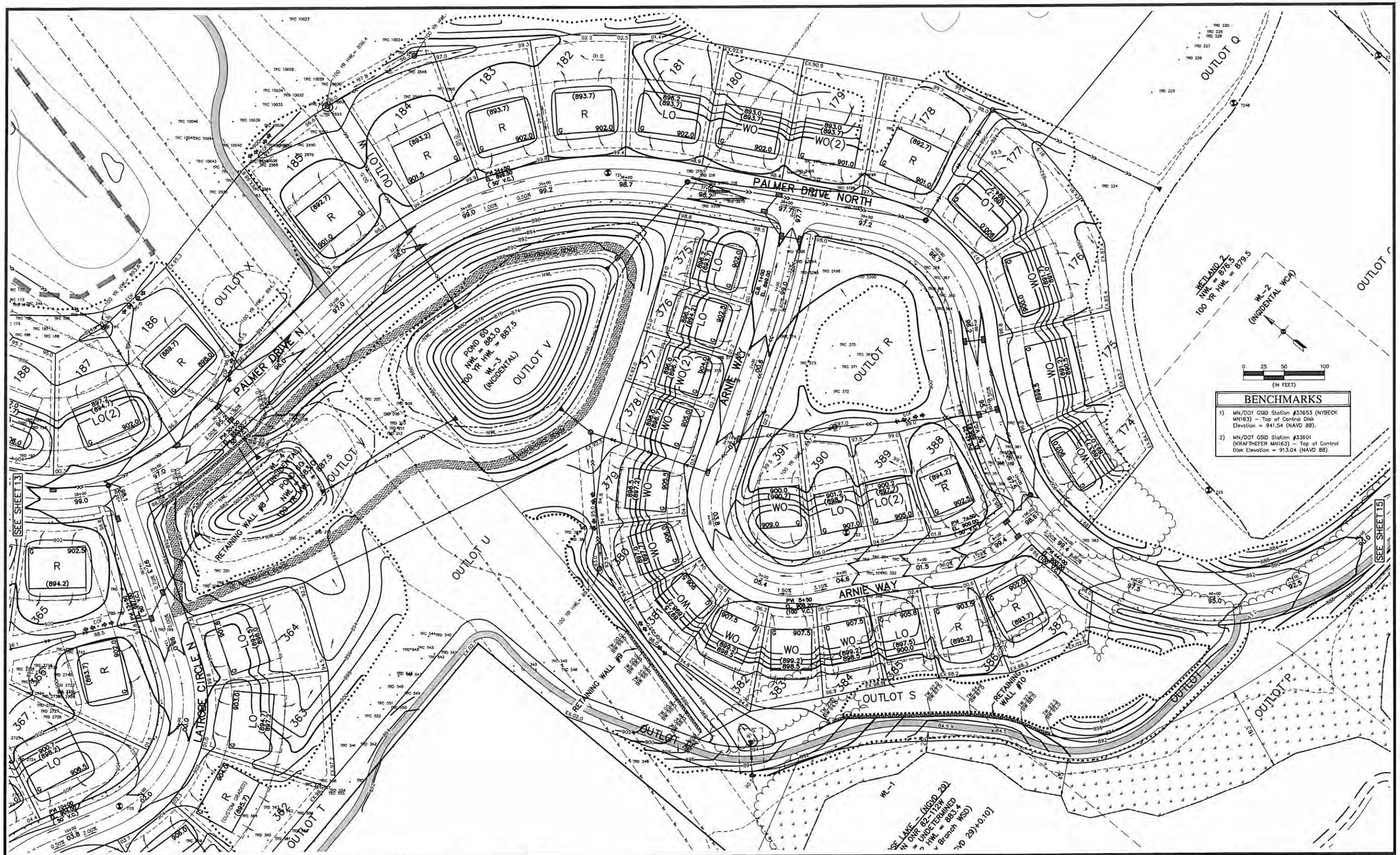
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Lake Elmo, Minnesota

GRADING, DEVELOPMENT & EROSION CONTROL PLAN



BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Central Disk Elevation = 941.54 (NAVD 88).

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GRADING, DEVELOPMENT & EROSION CONTROL PLAN

WL-22
HORSESHOE LAKEHORSESHOE LAKE - (NGVD 29)
MN DNR 82-74P
OHW = 876.8
100 YR HWL = 877.4
[NAVD 88 = (NGVD 29)+0.10]

OUTLOT Q

OUTLOT P

WETLAND 2
NWL = 876.5
100 YR HWL = 879.5

WL-2
(INCIDENTAL WCA)

FLOODPLAIN MITIGATION
3200 C.Y.

PALMER DRIVE N

STREET I

OUTLOT O

FLOODPLAIN FILL
2500 C.Y.

10TH STREET (COUNTY STATE AID HIGHWAY NO. 10)

SEE SHEET 14

OUTLOT R

OUTLOT S

OUTLOT T

RETAINING WALL #10

WAY

BUFFER AREA, 50' AVERAGE
REQUIRED 16,500 SQ.FT.
PROVIDED 19,949 SQ.FT.

WL-1 - (NGVD 29)
ROSE LAKE
MN DNR 82-112W
OHW = UNDETERMINED
100 YR HWL = 885.4
(Per Valley Branch WSD)
[NAVD 88 = (NGVD 29)+0.10]

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) - Top of Control Disk Elevation = 941.54 (NAVD 88).

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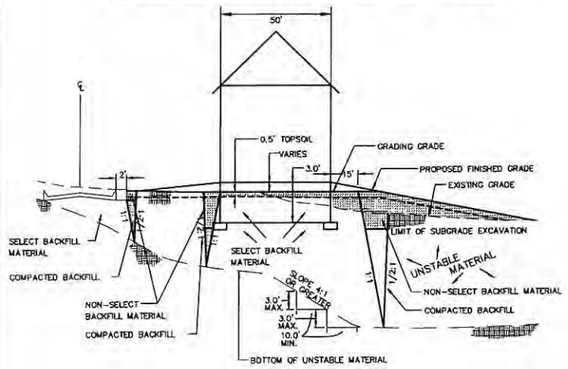
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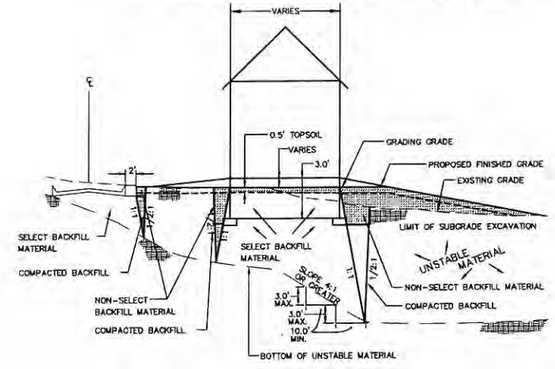
THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

GRADING, DEVELOPMENT & EROSION CONTROL PLAN

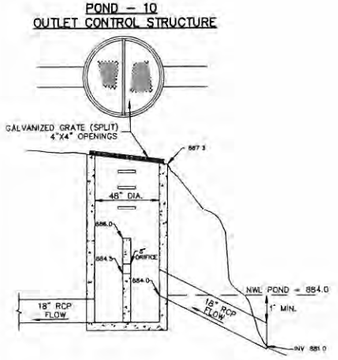
SUBGRADE CORRECTION (80–100' LOTS)



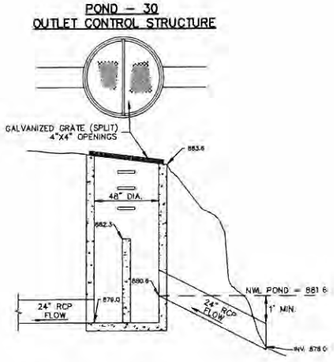
SUBGRADE CORRECTION (55' – 65' LOTS)



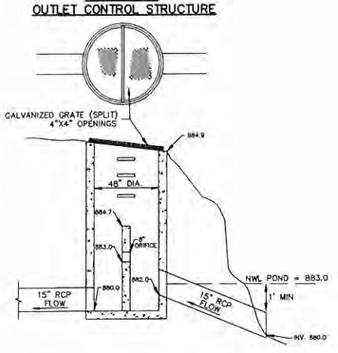
POND – 10 OUTLET CONTROL STRUCTURE



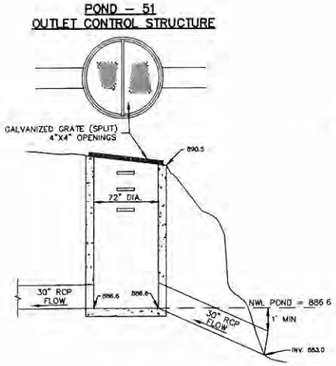
POND – 30 OUTLET CONTROL STRUCTURE



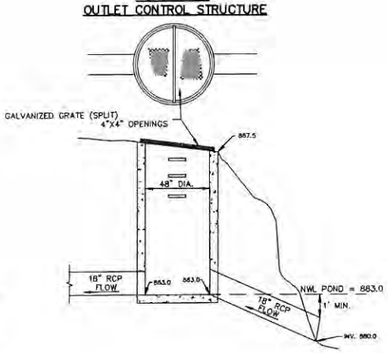
POND – 40 OUTLET CONTROL STRUCTURE



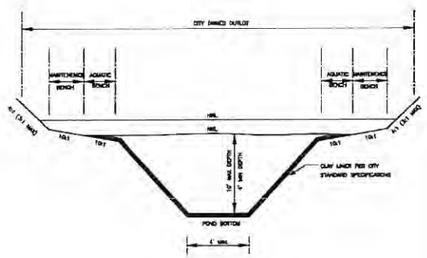
POND – 51 OUTLET CONTROL STRUCTURE



POND – 60 OUTLET CONTROL STRUCTURE



TYPICAL POND SECTION



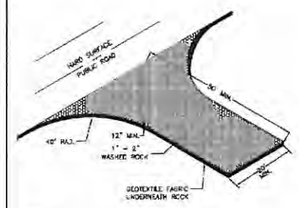
FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 416

LAKE ELMO

ROCK CONSTRUCTION ENTRANCE



NOTES:

① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET

② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.

④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.

⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LOAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

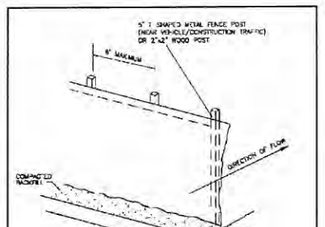
FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 505

LAKE ELMO

SILT FENCE



NOTE - SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT 3737.3. TYPE MS(W) NEAR WETLAND/CONSTRUCTION TRAFFIC TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886

SILT FENCE

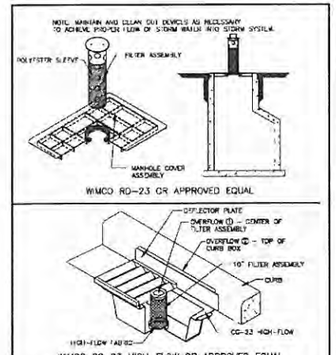
FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 601

LAKE ELMO

SEDIMENT CONTROL AROUND STORM SEWER INLET



FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 604

LAKE ELMO

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE POLLUTION AS A EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL IDENTIFY WORK ALL CONDITIONS AND COMPLETION DATES TIMELINE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL NON-EMERGENCY WORK AND ALL GRADING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
2. SITE ENTRANCE AND HAY STRAW AND OTHER EROSION CONTROL MEASURES SHALL BE INSTALLED AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR GRADING. AND SHALL BE MAINTAINED UNTIL WHOLE TURF OF GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
3. SILT FENCE: THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE SHALL AND MAINTAIN SUMPS SHALL BE PLACED TO PREVENT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. STOCKPILES: ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMEA" PARTYING SYSTEM PLACED AROUND THE ENTIRE PERIMETER.
5. INLET PROTECTION: THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INTES IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OR TAKE ON IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
6. TEMPORARY SEDIMENT BASINS: THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ATION SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
7. ROCK CONSTRUCTION ENTRANCE: A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
8. STREET SWEEPING: ALL STREETS (PAVED ROADS) TO AND FROM THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OF ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED NECESSARY BY DEVELOPER/CONTRACTOR'S EXPENSE.

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 600A

LAKE ELMO

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

2. DEWATERING: EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CONDITIONING. WHEN GROUNDWATER CONDITIONS EXIST, AND WHERE NECESSARY TO CONSTRUCT THE IMPROVEMENTS, THE CONTRACTOR SHALL INSTALL DEWATERING FACILITIES AS NECESSARY TO LOWER THE GROUNDWATER TABLE AT LEAST 2 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS HE CHOOSES, HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH, IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE IMMEDIATELY REPLACED OR OTHERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL PONDS, PUMPS, MATERIALS AND APPURTENANCES NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PUBLIC OR PRIVATE DRAINAGE OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
10. POSITIVE DRAINAGE AND PROTECTION: THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO INCLUDE PROPER DRAINAGE DURING CONSTRUCTION TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, MUDD FINISH BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND ENTRANCEWAYS. PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MANAGE SILT IN THE RUNOFF.
11. DEWATERING: EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CONDITIONING. WHEN GROUNDWATER CONDITIONS EXIST, AND WHERE NECESSARY TO CONSTRUCT THE IMPROVEMENTS, THE CONTRACTOR SHALL INSTALL DEWATERING FACILITIES AS NECESSARY TO LOWER THE GROUNDWATER TABLE AT LEAST 2 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS HE CHOOSES, HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH, IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE IMMEDIATELY REPLACED OR OTHERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL PONDS, PUMPS, MATERIALS AND APPURTENANCES NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PUBLIC OR PRIVATE DRAINAGE OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
12. "TURF ESTABLISHMENT": ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 600B

LAKE ELMO

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

13. MAINTENANCE AND INSPECTION: EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OF FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEARED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER. AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
14. REMOVAL: THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER'S APPROVAL. ALL DEBRIS, SEDIMENTS AND SILTS ALONG THE PERIMETER OF THE REMOVED TEMPORARY DEVICES SHALL BE REMOVED AND DISPOSED OF. THE CONTRACTOR SHALL PROMPTLY RESTORE ANY DISTURBANCE CAUSED TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD AS REQUIRED TO MATCH THE VARIOUS GRASS MIX OF THE ADJACENT AREA.
15. FINAL STORM SEWER SYSTEM: AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL BASE COURSE IS PLACED, THE CONTRACTOR SHALL STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
16. DITCH CHECKS (BIOROLL BLANKET SYSTEM): BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.
17. FLOCCULATION: SILT CURTAINS, FLOCCULATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS WITHIN THE BANKS OF NORMAL AREAS. THE INSTALLATION OF FLOCCULATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
18. CONCRETE WASHOUT: ONSITE, ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT DOES NOT ALLOW LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE ANY RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR ABOVE LIQUID AND SOLIDS WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE FACILITIES.

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 600C

LAKE ELMO

STANDARD PLAN NOTES

SITE RESTORATION PLANS

1. RESTORE ALL DISTURBED AREAS WITH 5 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. FERTILIZE: ALL STORM TEMPER AREAS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
5. A MINIMUM OF 2 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 600D

LAKE ELMO

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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 4/7/17 License #: 25063

Drawn: ADB
Designed: BJK
Date: 4/7/17

Revisions
1

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

DETAILS

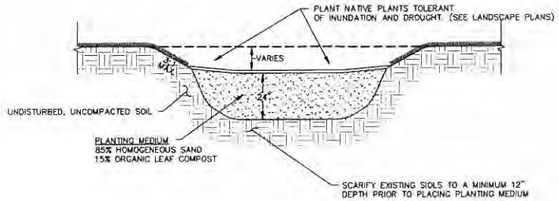
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Dave Cone, 4/7/2017 | Y:\jobs\6031 - 6040\6036 - Golfan Park\civil\engineering\Final residential plans\Grading plan\6036-GD1.dwg

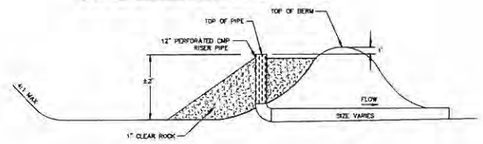
LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY		
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE		
10' CONTOUR		
2' CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	00.0	00.0
EMERGENCY OVERFLOW		E.O.F. 000.0
SILT FENCE		
TREE FENCE		
TREELINE		
SOIL BORING	TH	
GRADING LIMITS		
STORM CATCH BASIN		DENOTES INLET PROTECTION
WETLAND BUFFER SIGN		DENOTES SIGN / DENOTES POST

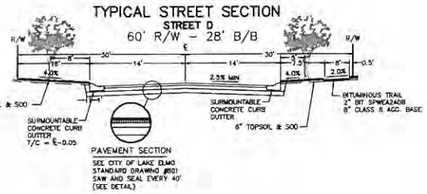
INFILTRATION BASINS



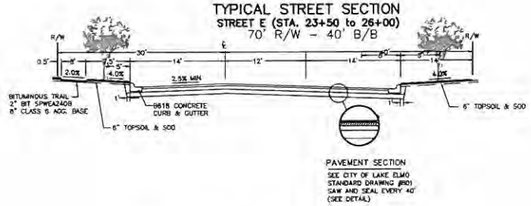
TEMPORARY SEDIMENT BASIN W/PERFORATED RISER PIPE



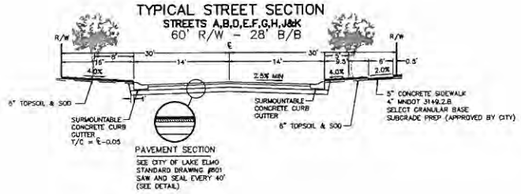
TYPICAL STREET SECTION
STREET D
60' R/W – 28' B/B

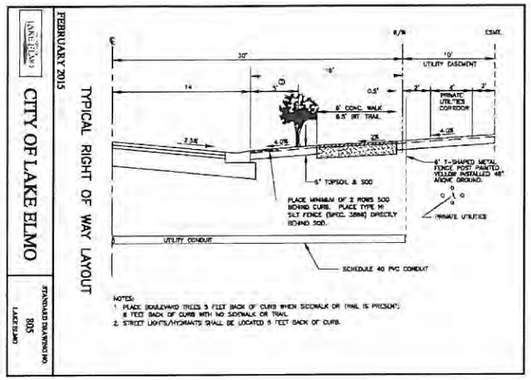


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STREET E (STA. 23+50 to 26+00)
70' R/W – 40' B/B

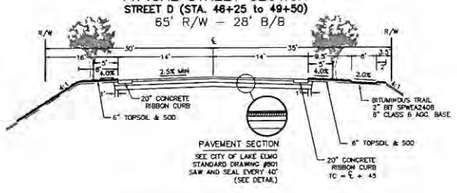


TYPICAL STREET SECTION
STREETS A,B,D,E,F,G,H,J&K
60' R/W – 28' B/B

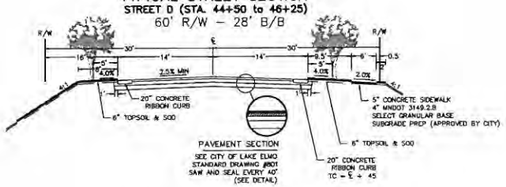




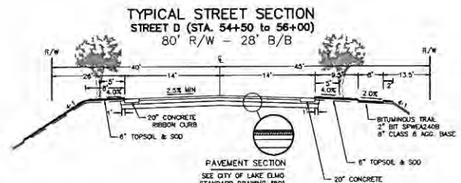
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STREET D (STA. 46+25 to 49+50)
65' R/W – 28' B/B



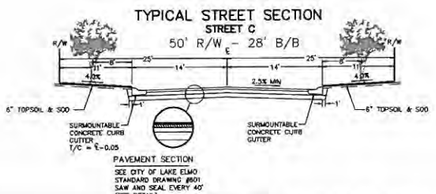
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STREET D (STA. 44+50 to 46+25)
60' R/W – 28' B/B

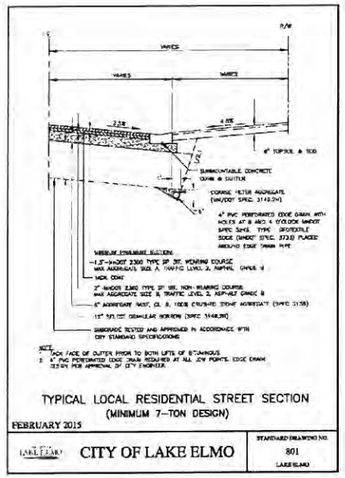


TYPICAL STREET SECTION
STREET D (STA. 54+50 to 56+00)
80' R/W – 28' B/B



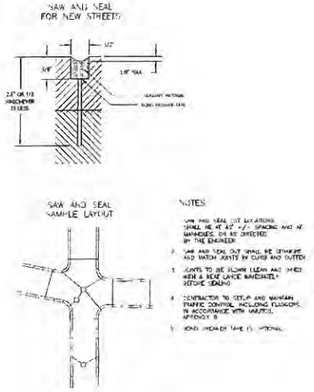
TYPICAL STREET SECTION
STREET C
50' R/W – 28' B/B





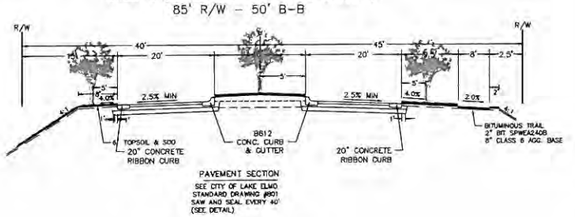
TYPICAL LOCAL RESIDENTIAL STREET SECTION
(MINIMUM 7-TON DESIGN)

FEBRUARY 2015 — CITY OF LAKE ELMO — STANDARD DRAWING NO. 801

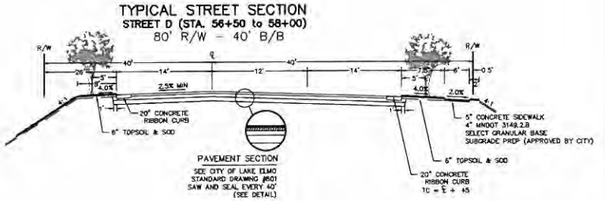


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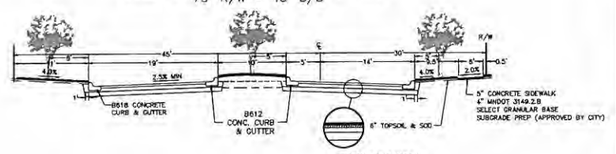
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STREET D (CENTER ISLAND STA. 51+00 to 52+75)
85' R/W – 50' B-B



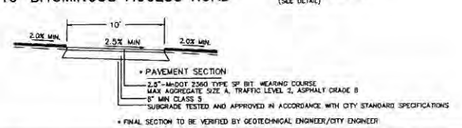
TYPICAL STREET SECTION
STREET D (STA. 56+50 to 58+00)
80' R/W – 40' B/B



TYPICAL STREET SECTION
STREET A (CENTER ISLAND STA. 0+00 to 1+25)
75' R/W – 48' B/B



10' BITUMINOUS ACCESS ROAD



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Print Name Brian J. Krystofiak, P.E.
Signature
Date 4/7/17 License # 25063

Drawn ADB
Designed BJK
Date 4/7/17

Revisions
1

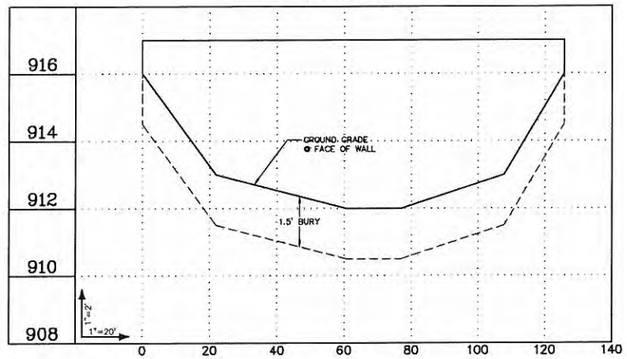
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THE ROYAL GOLF CLUB AT LAKE ELMO
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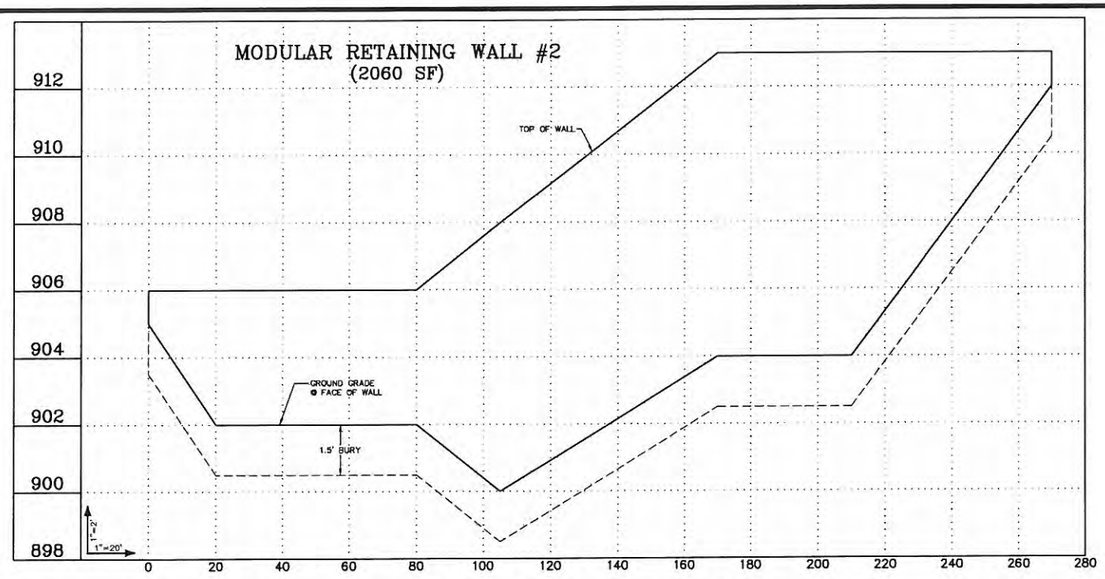
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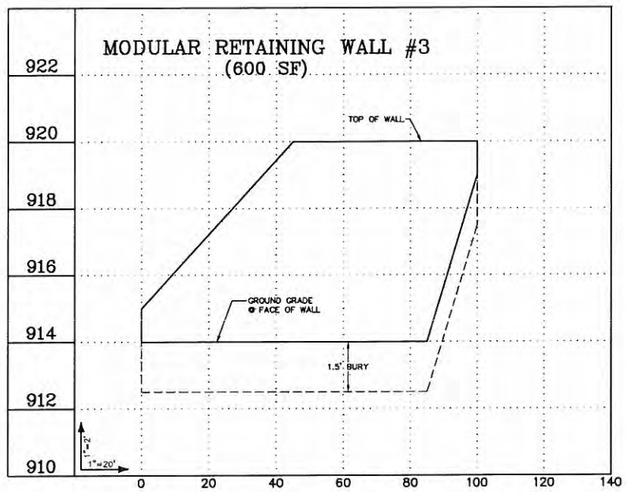
MODULAR RETAINING WALL #1
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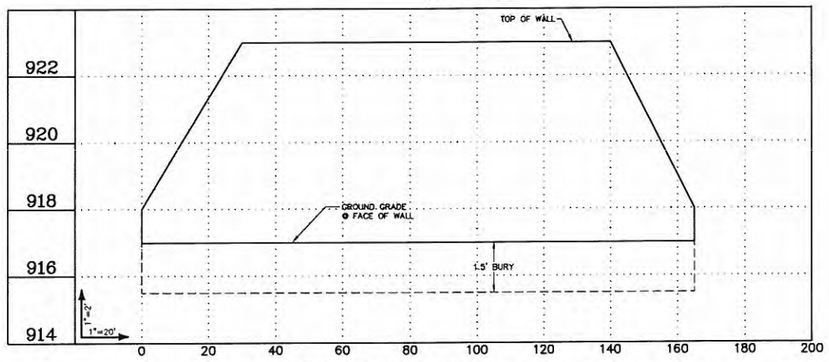
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(2060 SF)



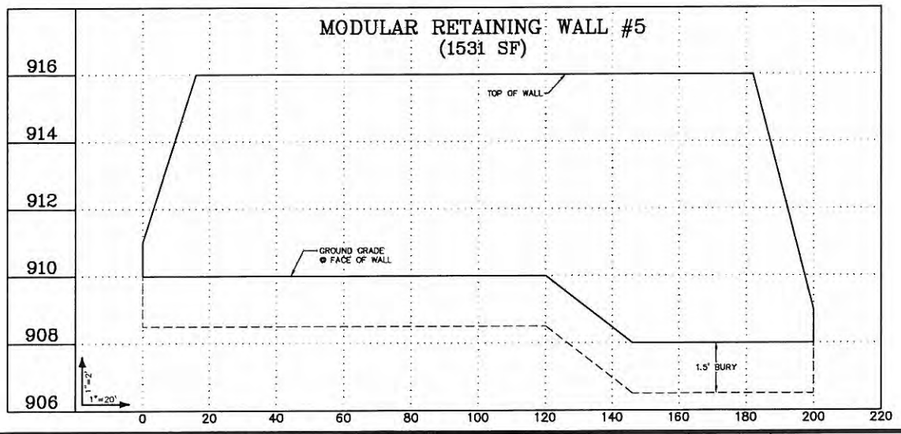
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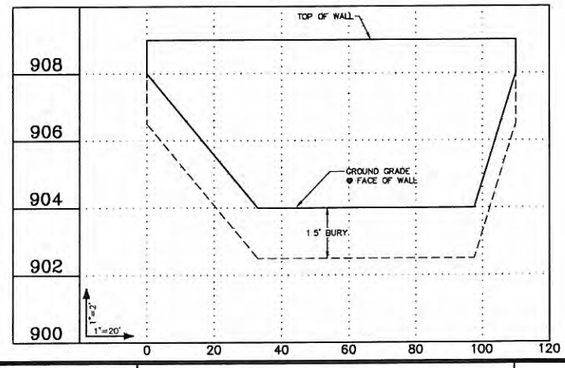
MODULAR RETAINING WALL #4
(1100 SF)



MODULAR RETAINING WALL #5
(1531 SF)



MODULAR RETAINING WALL #6
(625 SF)



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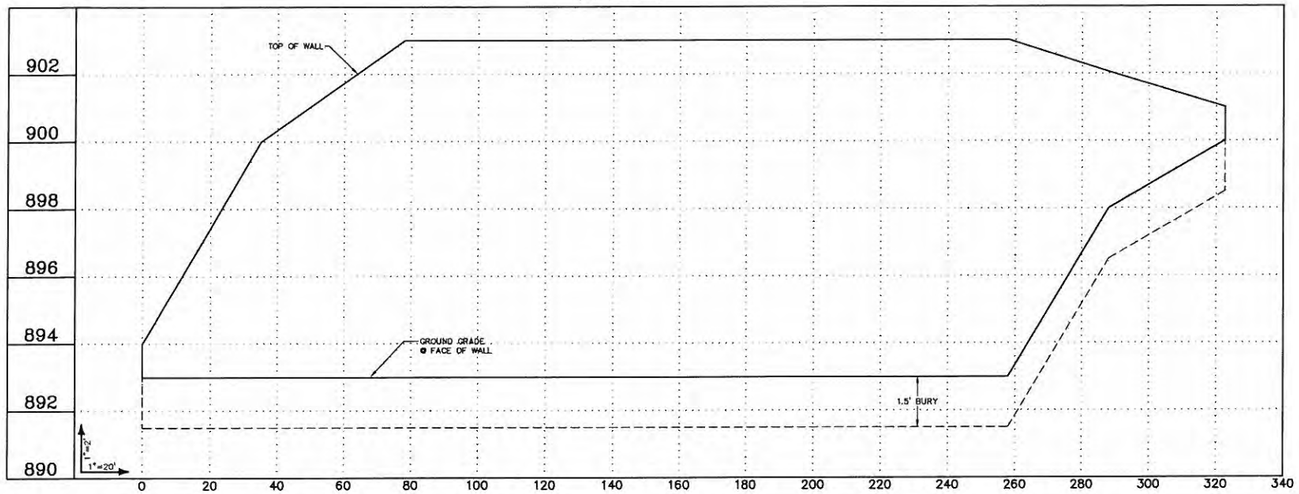
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Lake Elmo, Minnesota

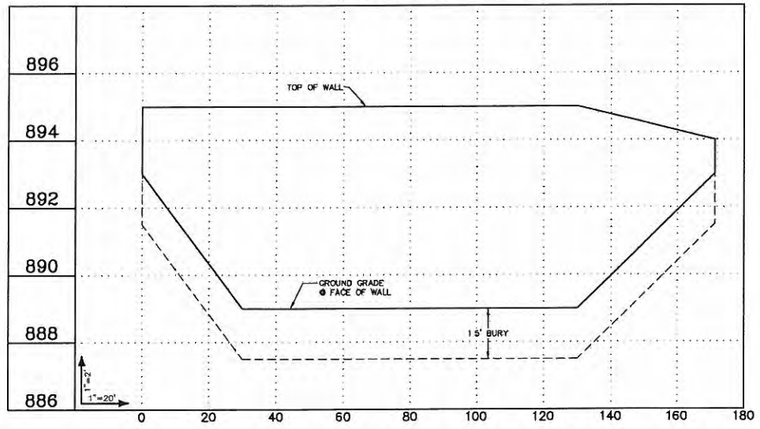
RETAINING WALL PROFILES

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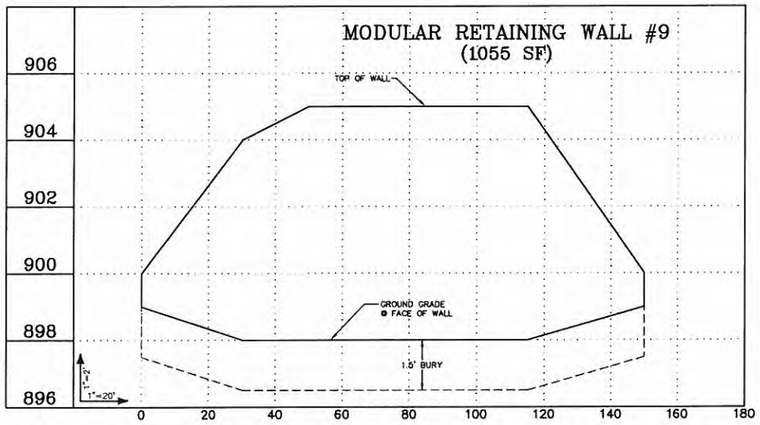
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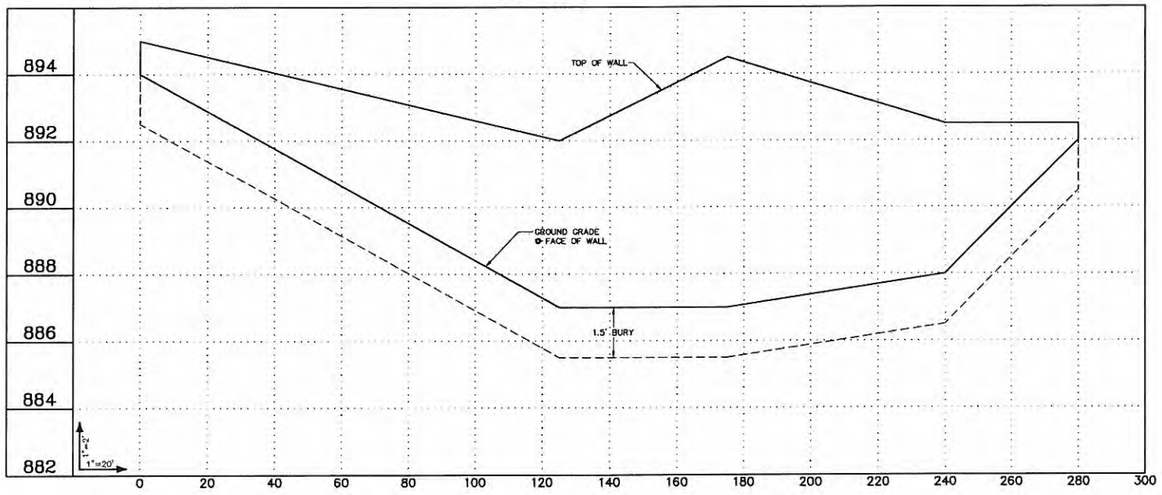
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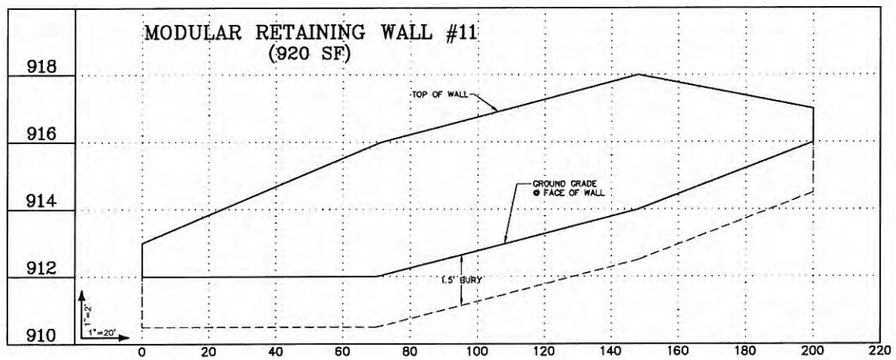
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(1055 SF)



MODULAR RETAINING WALL #10
(1598 SF)



MODULAR RETAINING WALL #11
(920 SF)



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Revisions:
1

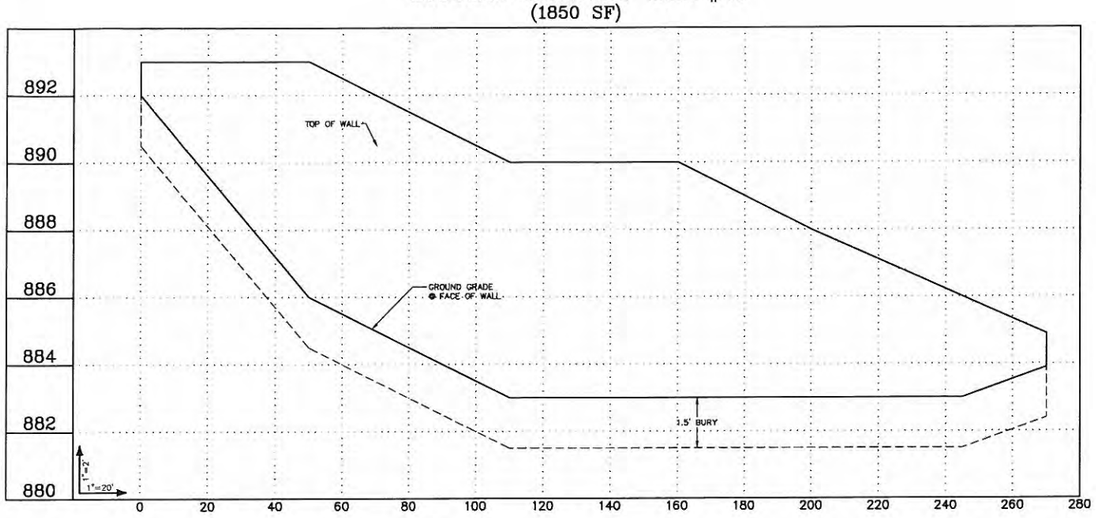
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

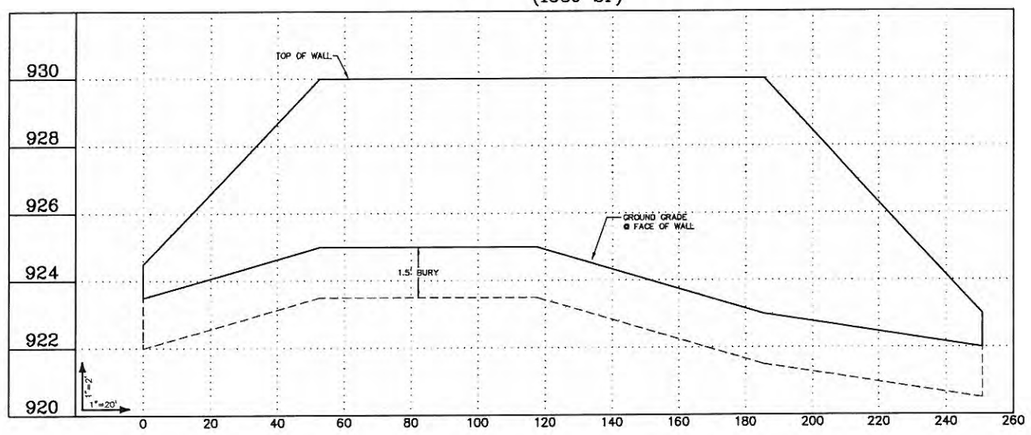
RETAINING WALL PROFILES

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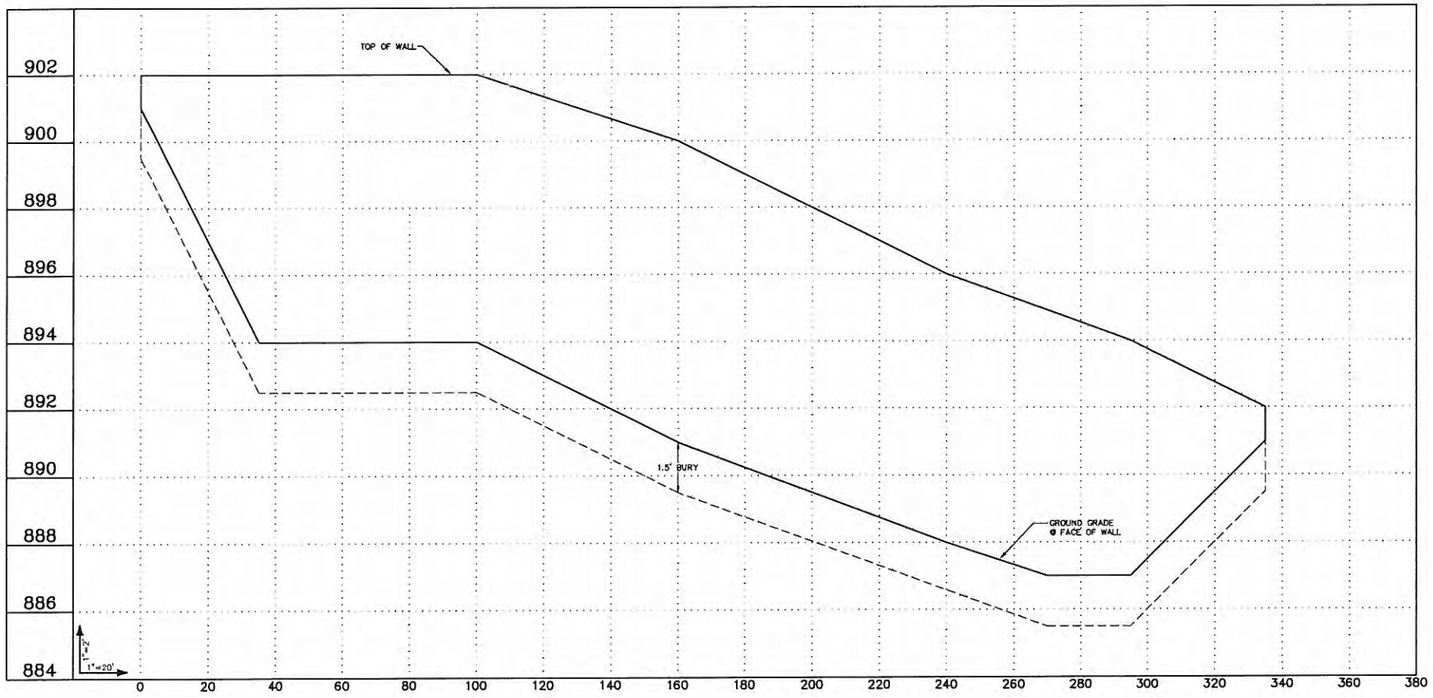
MODULAR RETAINING WALL #12
(1850 SF)



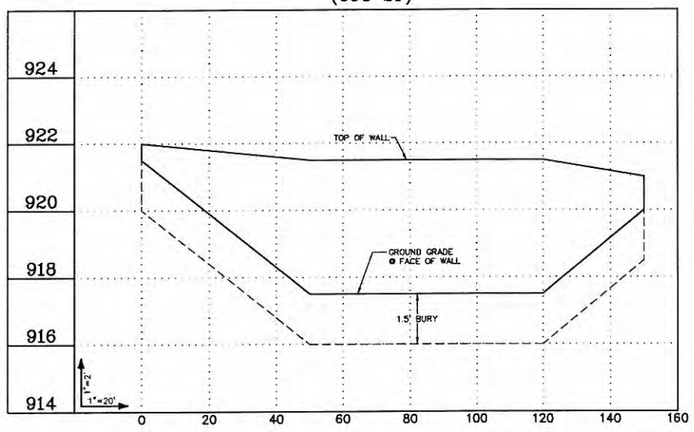
MODULAR RETAINING WALL #14
(1530 SF)



MODULAR RETAINING WALL #13
(2950 SF)



MODULAR RETAINING WALL #15
(693 SF)



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Signature
Date 4/7/17 License # 25063

Drawn ADB
Designed BJK
Date 4/7/17

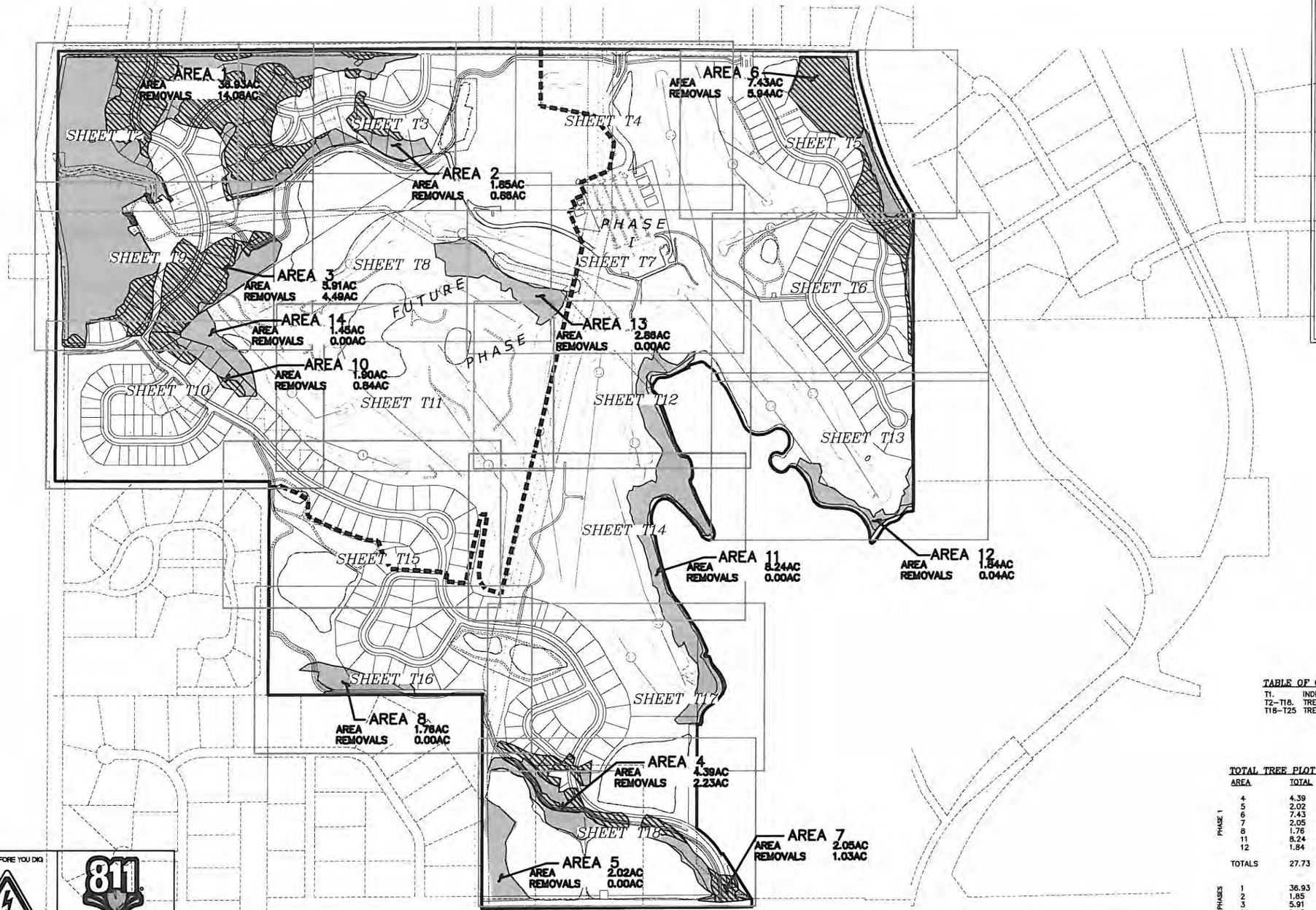
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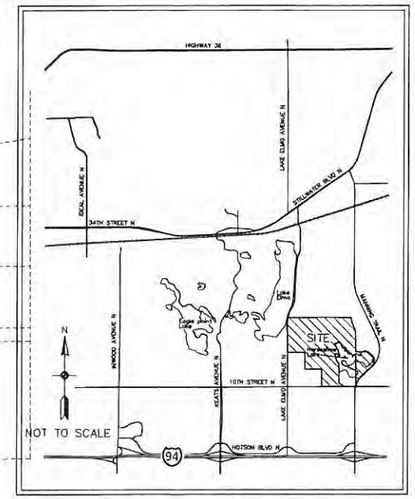
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Lake Elmo, Minnesota

RETAINING WALL PROFILES

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VICINITY MAP

KEY

DENOTES AREA OF TREE PLOT ASSESSMENT

DENOTES REMOVAL AREA OF TREE PLOT ASSESSMENT

DENOTES TREE TO BE SAVED ○ 1507

DENOTES TREE TO BE REMOVED × 1500

NOTE:
REFER TO TREE INVENTORY REPORT FOR TREE IDENTIFICATION AND REMOVAL/REPLACEMENT INFORMATION.

TABLE OF CONTENTS

T1. INDEX
T2–T18. TREE PRESERVATION PLAN
T18–T25 TREE TABLES

N

0 150 300 600
(IN FEET)

TOTAL TREE PLOT ASSESSMENT AREAS

	AREA	TOTAL	REMOVAL
PHASE 1	4	4.39	2.23
	5	2.02	0.00
	6	7.43	5.94
	7	2.05	1.03
	8	1.76	0.00
	11	8.24	0.00
	12	1.84	0.04
	TOTALS	27.73	9.24
FUTURE PHASES	1	36.93	14.08
	2	1.85	0.86
	3	5.91	4.49
	10	1.90	0.84
	13	2.88	0.00
	14	1.45	0.00
	TOTALS	50.90	20.27

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

NOTE:
TREE IDENTIFICATION AND TREE AREA CALCULATIONS WERE PROVIDED BY KJOLHAUG ENVIRONMENTAL SERVICES.

CALL BEFORE YOU DIG!
811
Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

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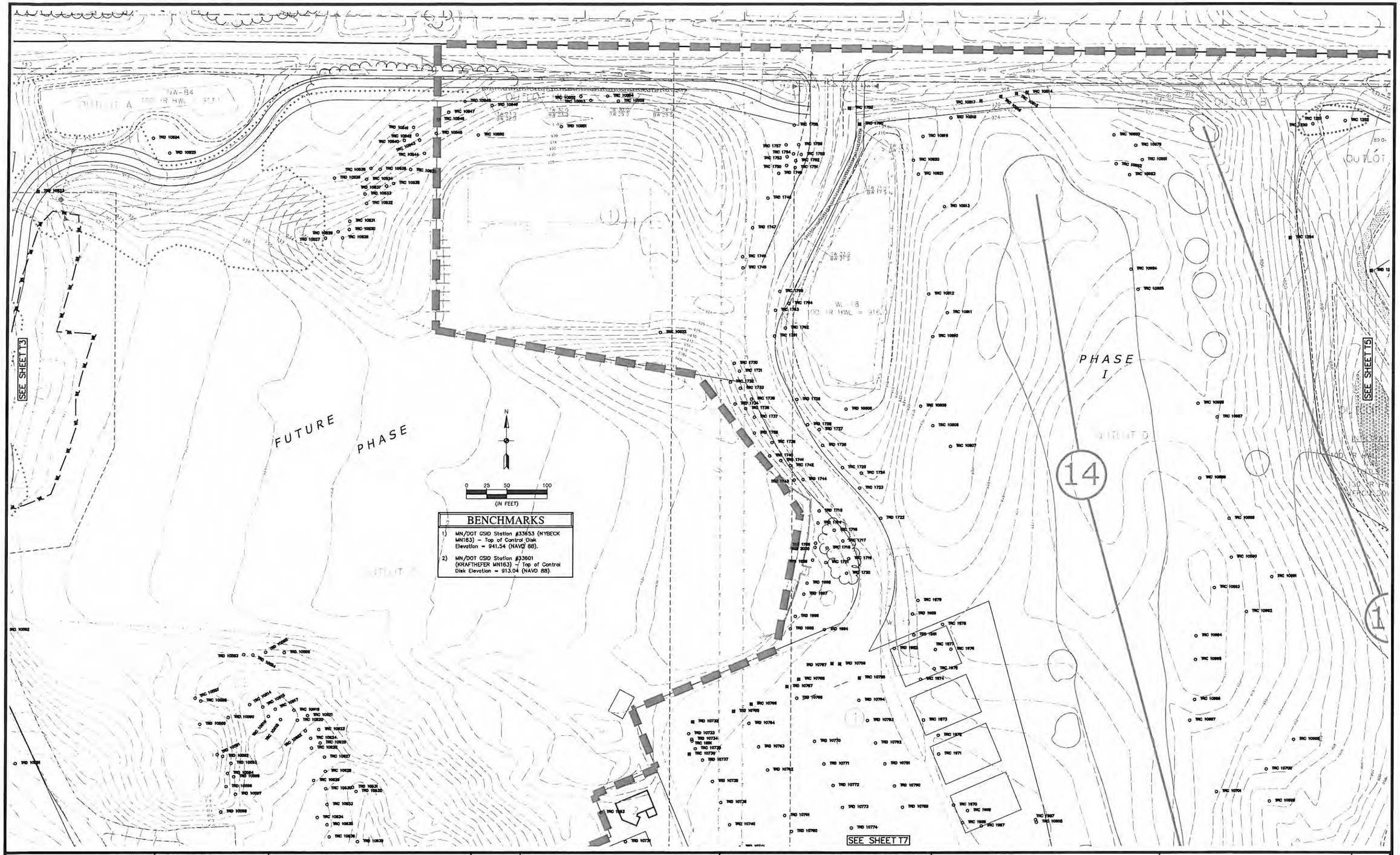
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TREE PRESERVATION PLAN

T1 of 25

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BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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TREE PRESERVATION PLAN

T4 of 25

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ANNIKA WAY N

MANNING TRAIL N

AREA AREA 6 7.43AC
REMOVALS 5.94AC

SEE SHEET T4

SEE SHEET T6

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT CSD Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT CSD Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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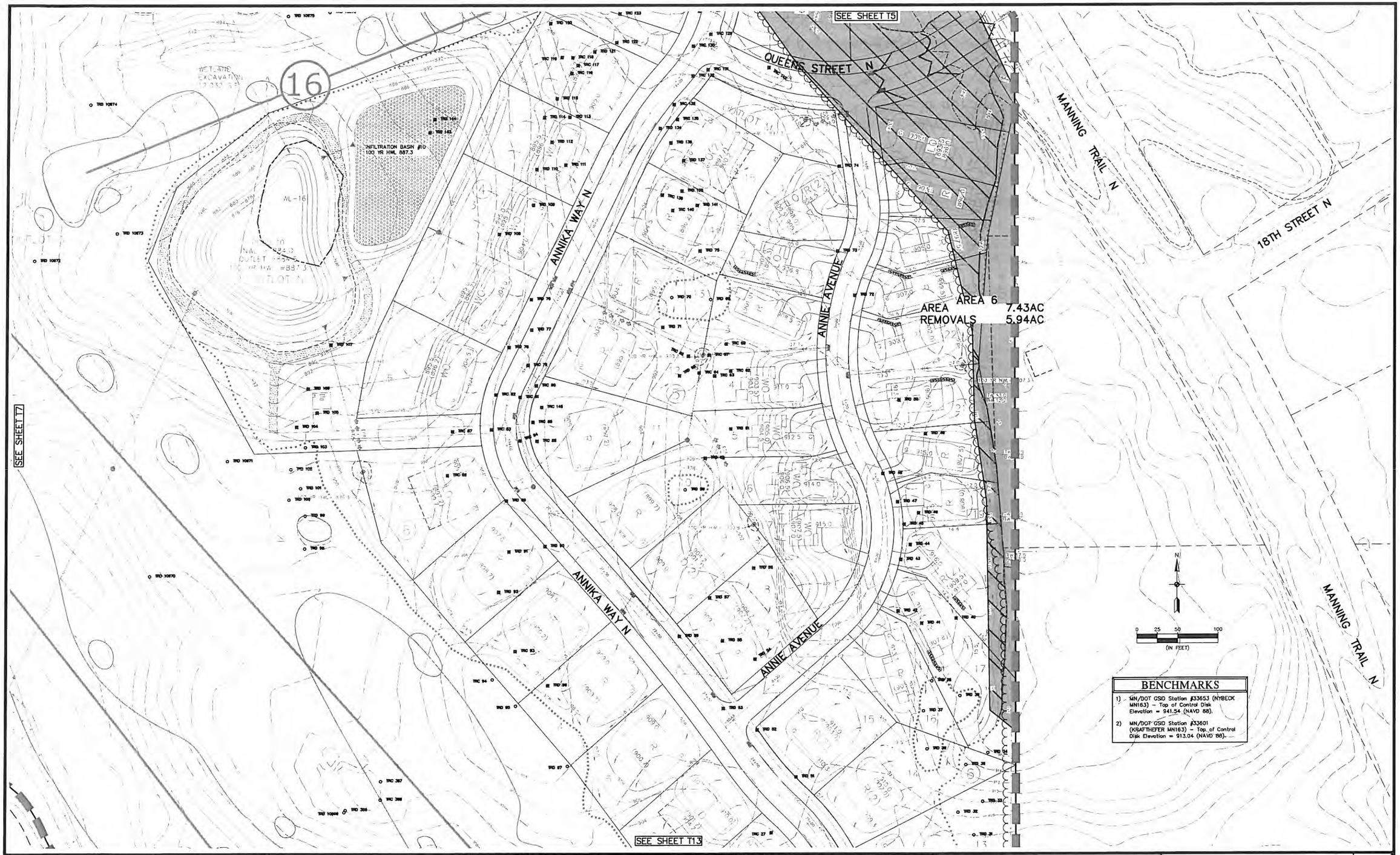
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TREE PRESERVATION PLAN

T5 of 25

Date: 04/26/17 P:\Projects\21 - 3040\3036 - Tartan Park\Civil\engineering\trees\3036_tree.dwg



BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 841.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Lake Elmo, Minnesota

TREE PRESERVATION PLAN

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SEE SHEET T4

SEE SHEET T8

SEE SHEET T6

SEE SHEET T12

FUTURE PHASE

AREA 13
AREA 2.86AC
REMOVALS 0.00AC

PHASE I

OUTLOT B

OUTLOT D

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33853 (NYBECK WN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER WN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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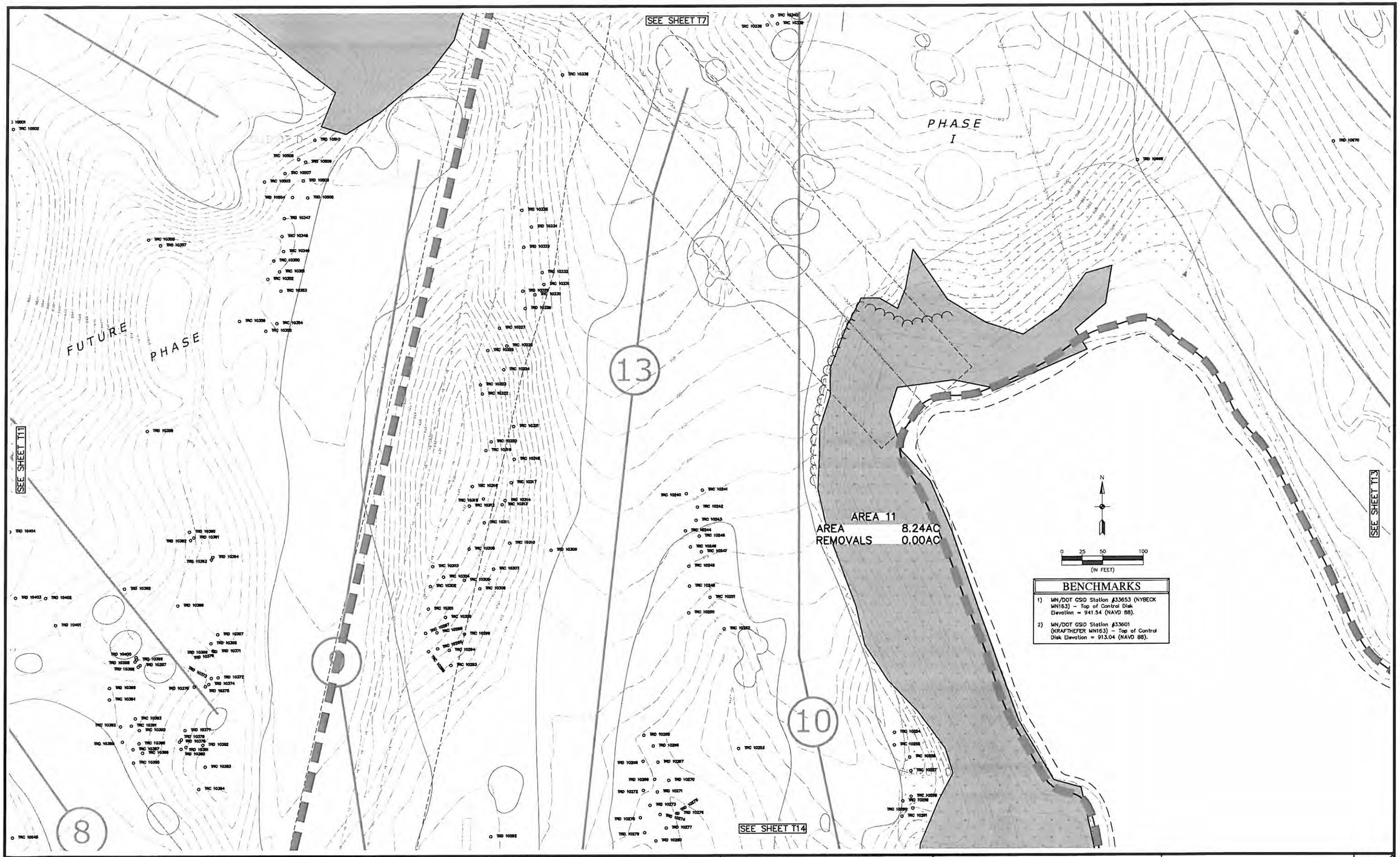
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TREE PRESERVATION PLAN

T7 of 25

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TREE PRESERVATION PLAN

T12 of 25

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SEE SHEET T6

SEE SHEET T12

17

18

AREA 12
AREA 1.84AC
REMOVALS 0.04AC

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT CSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

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TREE PRESERVATION PLAN

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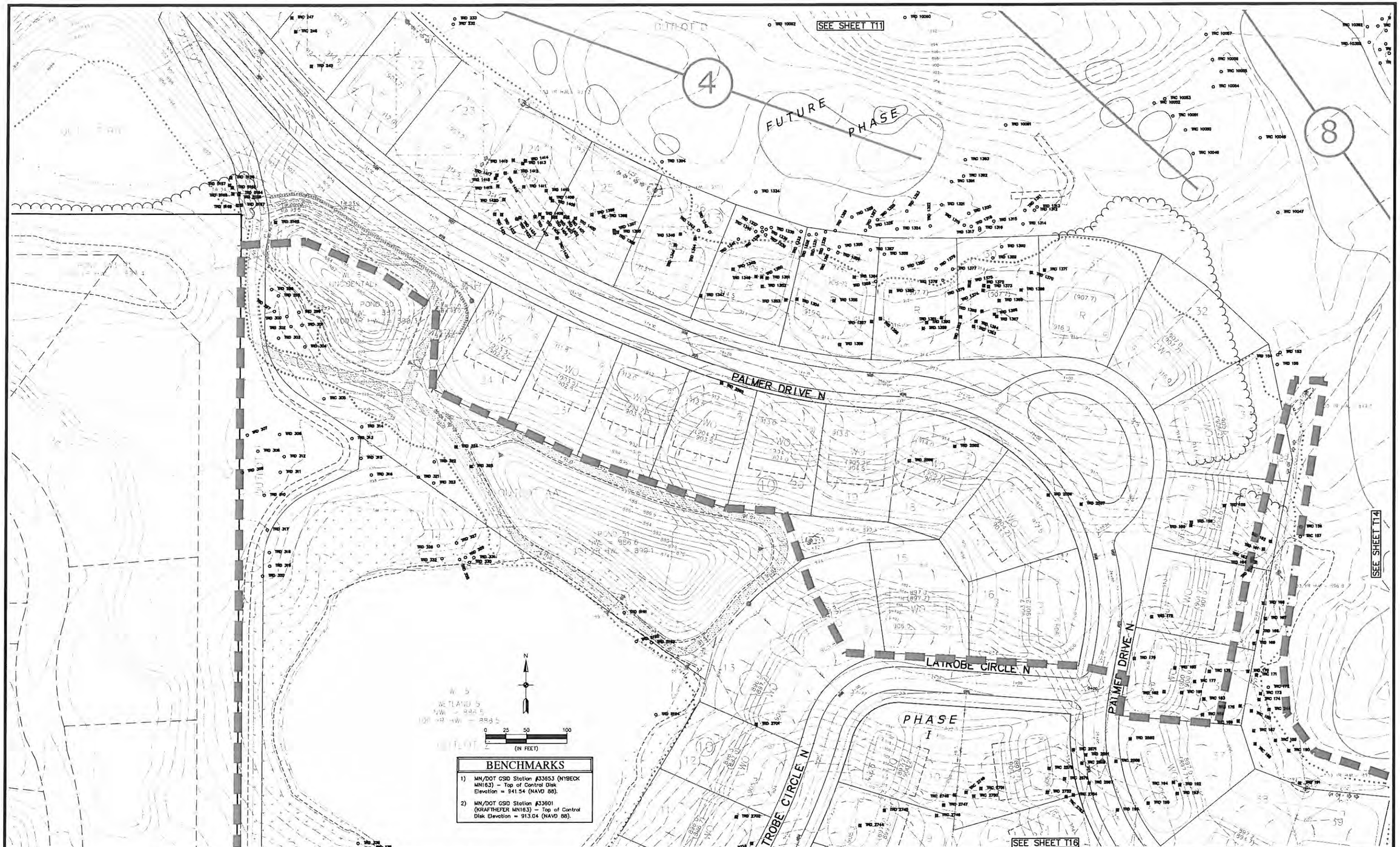
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TREE PRESERVATION PLAN



BENCHMARKS

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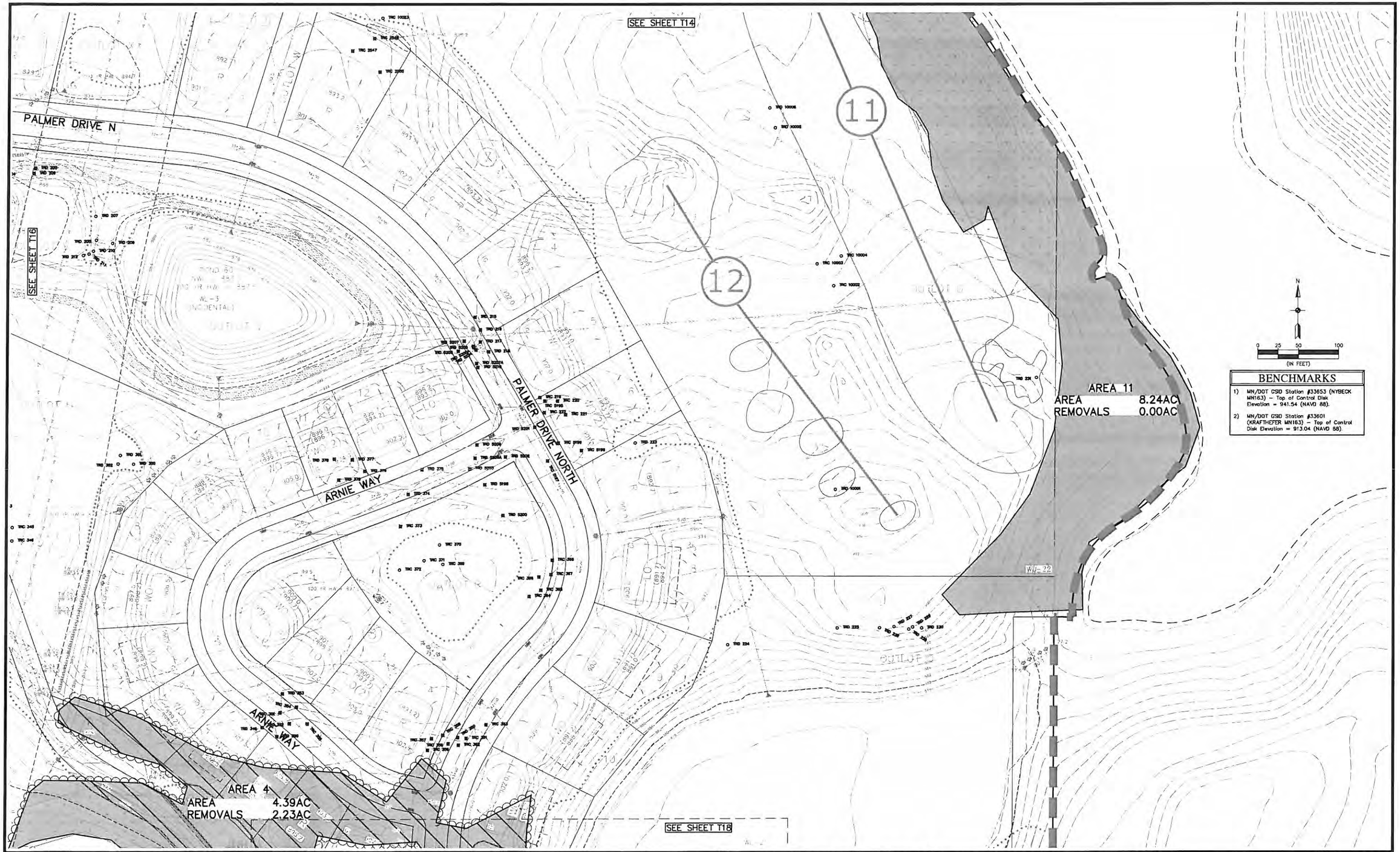
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TREE PRESERVATION PLAN

T15 of 25

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BENCHMARKS

1) MN/DOT GSD Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).
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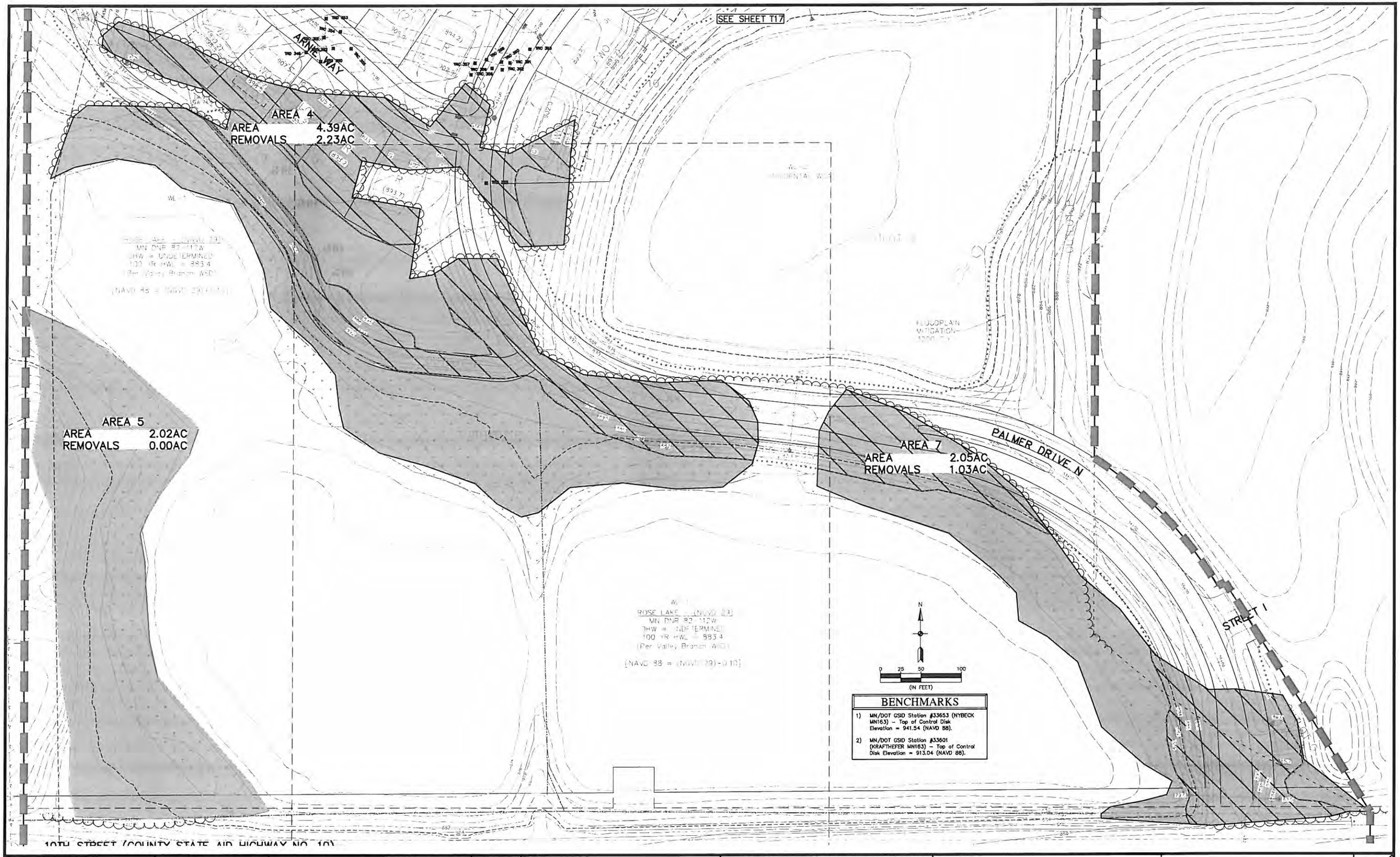
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TREE PRESERVATION PLAN

T17 of 25

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TREE PRESERVATION PLAN

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PHASE I INDIVIDUAL SHOTS

Tree No.	Tree Species	DBH (In.)	Quality	Stems	City Classification	Significant	Saved	Removed
1	Previously Removed	N/A	N/A	N/A	Exempt	-		X
2	Previously Removed	N/A	N/A	N/A	Exempt	-		X
3	Previously Removed	N/A	N/A	N/A	Exempt	-		X
4	Previously Removed	N/A	N/A	N/A	Exempt	-		X
5	Previously Removed	N/A	N/A	N/A	Exempt	-		X
6	Previously Removed	N/A	N/A	N/A	Exempt	-		X
7	Previously Removed	N/A	N/A	N/A	Exempt	-		X
8	Basswood	28	3	1	Exempt	-	X	
9	Ash, Green	8	2	1	Common Tree	No	Not Significant	
10	Previously Removed	N/A	N/A	N/A	Exempt	-		X
11	Previously Removed	N/A	N/A	N/A	Exempt	-		X
12	Previously Removed	N/A	N/A	N/A	Exempt	-		X
13	Spruce, White	20	3	1	Coniferous	Yes		X
14	Previously Removed	N/A	N/A	N/A	Exempt	-		X
15	Previously Removed	N/A	N/A	N/A	Exempt	-		X
16	Ash, Green	27.5	3	1	Common Tree	Yes	X	
17	Kentucky Coffee Tree	18	4	1	Common Tree	Yes	X	
18	Maple, Silver	38	4	1	Common Tree	Yes	X	
19	Basswood	22.5	3	1	Common Tree	Yes	X	
20	Basswood	28	2	1	Common Tree	Yes	X	
21	Previously Removed	N/A	N/A	N/A	Exempt	-		X
22	Previously Removed	N/A	N/A	N/A	Exempt	-		X
23	Previously Removed	N/A	N/A	N/A	Exempt	-		X
24	Previously Removed	N/A	N/A	N/A	Exempt	-		X
25	Previously Removed	N/A	N/A	N/A	Exempt	-		X
26	Previously Removed	N/A	N/A	N/A	Exempt	-		X
27	Previously Removed	N/A	N/A	N/A	Exempt	-		X
28	Basswood	38	3	1	Common Tree	Yes	X	
29	Basswood	22	4	1	Common Tree	Yes		X
30	Ash, Green	22	4	1	Common Tree	Yes	X	
31	Ash, Green	17	3	1	Common Tree	Yes	X	
32	Maple, Silver	20	3	1	Common Tree	Yes	X	
33	Ash, Green	20	4	1	Common Tree	Yes	X	
34	Basswood	15	3	1	Common Tree	Yes	X	
35	Ash, Green	11.5	2	1	Common Tree	No	Not Significant	
36	Basswood	15	2	1	Common Tree	Yes	X	
37	Basswood	27	3	1	Common Tree	Yes	X	
38	Ash, Green	21	2	1	Common Tree	Yes	X	
39	Ash, Green	19	2	1	Common Tree	Yes	X	
40	Ash, Green	18	2	1	Common Tree	Yes		X
41	Basswood	23	3	1	Common Tree	Yes		X
42	Maple, Silver	13	2	1	Common Tree	Yes		X
43	Maple, Silver	13.5	2	1	Common Tree	Yes		X
44	Maple, Silver	16	2	1	Common Tree	Yes		X
45	Maple, Silver	24	3	1	Common Tree	Yes		X
46	Cottonwood	23	3	1	Common Tree	Yes		X
47	Maple, Silver	14	2	1	Common Tree	Yes		X
48	Maple, Silver	40	3	1	Common Tree	Yes		X
49	Basswood	12	2	1	Common Tree	Yes		X
50	Basswood	20	2	1	Common Tree	Yes		X
51	Previously Removed	N/A	N/A	N/A	Exempt	-		X
52	Previously Removed	N/A	N/A	N/A	Exempt	-		X
53	Previously Removed	N/A	N/A	N/A	Exempt	-		X
54	Maple, Silver	13	3	1	Common Tree	Yes		X
55	Boxelder	24	2	1	Common Tree	Yes		X
56	Ash, Green	30	2	1	Common Tree	Yes		X
57	Maple, Silver	18	3	1	Common Tree	Yes		X
58	Ash, Green	19	3	1	Common Tree	Yes		X
59	Maple, Silver	34	4	1	Common Tree	Yes	X	
60	Maple, Sugar	18	3	1	Deciduous Hardwood	Yes		X
61	Maple, Silver	11	3	1	Common Tree	No	Not Significant	
62	Pine, Red	12.5	4	1	Coniferous	Yes		X
63	Pine, Red	14	3	1	Coniferous	Yes		X
64	Pine, Red	13	3	1	Coniferous	Yes		X
65	Pine, Red	14	3	1	Coniferous	Yes		X
66	Pine, Red	16	2	1	Coniferous	Yes		X
67	Pine, Red	15	2	1	Coniferous	Yes		X
68	Pine, Red	15	3	1	Coniferous	Yes		X
69	Maple, Silver	64	3	1	Common Tree	Yes	X	
70	Maple, Silver	52	3	1	Common Tree	Yes	X	
71	Ash, Green	20	3	1	Common Tree	Yes		X
72	Maple, Silver	43	3	1	Common Tree	Yes		X
73	Ash, Green	34	2	1	Common Tree	Yes		X
74	Kentucky Coffee Tree	13	3	1	Common Tree	Yes		X
75	Maple, Silver	15	3	1	Common Tree	Yes		X
76	Ash, Green	28	2	1	Common Tree	Yes		X
77	Ash, Green	26	3	1	Common Tree	Yes		X
78	Maple, Silver	25	2	1	Common Tree	Yes		X
79	Pine, Red	17	3	1	Coniferous	Yes		X
80	Pine, Red	15	3	1	Coniferous	Yes		X
81	Pine, Red	14.5	3	1	Coniferous	Yes		X
82	Maple, Silver	36	3	1	Common Tree	Yes		X
83	Pine, Scotts	17.5	2	1	Coniferous	Yes		X
84	Pine, Red	15.5	3	1	Coniferous	Yes		X
85	Pine, Red	15.5	3	1	Coniferous	Yes		X
86	Pine, Red	15	3	1	Coniferous	Yes		X
87	Spruce, White	24	4	1	Coniferous	Yes		X
88	Spruce, White	32	3	1	Coniferous	Yes		X
89	Maple, Silver	28.5	2	1	Common Tree	Yes		X
90	Maple, Silver	29	2	1	Common Tree	Yes		X
91	Maple, Silver	32	3	1	Common Tree	Yes		X
92	Ash, Green	20	2	1	Common Tree	Yes		X
93	Previously Removed	N/A	N/A	N/A	Exempt	-		X
94	Previously Removed	N/A	N/A	N/A	Exempt	-		X
95	Maple, Silver	30	2	1	Common Tree	Yes	X	

Tree No.	Tree Species	DBH (In.)	Quality	Stems	City Classification	Significant	Saved	Removed
96	Maple, Sugar	17	3	1	Deciduous Hardwood	Yes		X
97	Maple, Silver	39	4	1	Common Tree	Yes	X	
98	Maple, Red	10	N/A	0	Deciduous Hardwood	Yes	X	
99	Basswood	10	N/A	0	Common Tree	No	Not Significant	
100	Basswood	11	N/A	0	Common Tree	No	Not Significant	
101	Basswood	11	N/A	0	Common Tree	No	Not Significant	
102	Basswood	14	2	1	Common Tree	Yes	X	
103	Ash, White	10	N/A	0	Common Tree	No	Not Significant	
104	Ash, White	10	N/A	0	Common Tree	No	Not Significant	
105	Ash, Green	12	4	1	Common Tree	Yes		X
106	Ash, Green	10	N/A	0	Common Tree	No	Not Significant	
107	Basswood	10	N/A	0	Common Tree	No	Not Significant	
108	Maple, Silver	17.5	3	1	Common Tree	Yes		X
109	Ash, Green	23	2	1	Common Tree	Yes		X
110	Basswood	14	3	1	Common Tree	Yes		X
111	Kentucky Coffee Tree	10	3	1	Common Tree	No	Not Significant	
112	Ash, Green	12	2	1	Common Tree	Yes		X
113	Kentucky Coffee Tree	13	3	1	Common Tree	Yes		X
114	Basswood	16	2	1	Common Tree	Yes		X
115	Basswood	13	2	1	Common Tree	Yes		X
116	Pine, Red	15	2	1	Coniferous	Yes		X
117	Spruce, Blue	12	2	1	Coniferous	Yes		X
118	Spruce, Blue	17	2	1	Coniferous	Yes		X
119	Spruce, White	11	2	1	Coniferous	Yes		X
120	Basswood	14	3	1	Common Tree	Yes		X
121	Locust, Honey	14.5	2	2	Common Tree	Yes		X
122	Pine, Scotts	22	3	1	Coniferous	Yes		X
123	Spruce, White	11	4	1	Coniferous	Yes		X
124	Spruce, White	9	3	1	Coniferous	Yes		X
125	Spruce, White	10.5	4	1	Coniferous	Yes		X
126	Spruce, White	20	4	1	Coniferous	Yes		X
127	Spruce, White	26	4	1	Coniferous	Yes		X
128	Spruce, White	17.5	3	1	Coniferous	Yes		X
129	Spruce, White	15	3	1	Coniferous	Yes		X
130	Spruce, White	15	2	1	Coniferous	Yes		X
131	Spruce, White	11.5	3	1	Coniferous	Yes		X
132	Spruce, Blue	10.5	3	1	Coniferous	Yes		X
133	Spruce, Blue	10	3	1	Coniferous	Yes		X
134	Ash, Green	20	2	1	Common Tree	Yes		X
135	Spruce, Blue	10.5	3	1	Coniferous	Yes		X
136	Ash, Green	16	2	1	Common Tree	Yes		X
137	Maple, Silver	44.5	2	1	Common Tree	Yes		X
138	Maple, Silver	18	3	1	Common Tree	Yes		X
139	Cedar, white	11.5	2	2	Common Tree	No	Not Significant	
140	Cedar, white	14	2	5	Common Tree	Yes		X
141	Locust, Honey	21.5	2	1	Common Tree	Yes		X
142	Spruce, White	20	3	1	Coniferous	Yes		X
143	Basswood	28	3	1	Common Tree	Yes		X
144	Basswood	20	4	1	Common Tree	Yes		X
145	Pine, Red	18	2	1	Coniferous	Yes		X
146	Oak, White	22	3	1	Deciduous Hardwood	Yes		X
147	Oak, Burr	20	4	1	Deciduous Hardwood	Yes		X
148	Oak, Burr	17	4	1	Deciduous Hardwood	Yes		X
149	Oak, Burr	14	4	1	Deciduous Hardwood	Yes		X
150	Oak, Burr	12	3	1	Deciduous Hardwood	Yes		X
151	Oak, Burr	14	4	1	Deciduous Hardwood	Yes		X
152	Oak, Burr	15.5	3	1	Deciduous Hardwood	Yes		X
161	Cottonwood	16	2	1	Common Tree	Yes		X
162	Ash, Green	10	2	1	Common Tree	No	Not Significant	
163	Cottonwood	14	2	1	Common Tree	Yes		X
164	Cottonwood	15	2	1	Common Tree	Yes		X
165	Cottonwood	12	2	2	Common Tree	Yes		X
166	Willow, Black	42	3	2	Common Tree	Yes		X
167	Birch, River	13	2	1	Deciduous Hardwood	Yes		X
168	Birch, River	10	2	1	Deciduous Hardwood	Yes		X
169	Birch, River	97	2	2	Deciduous Hardwood	Yes		X
170	Cottonwood	14	3	1	Common Tree	Yes		X
171	Pine, White	13	3	1	Coniferous	Yes		X
172	Pine, White	15	3	1	Coniferous	Yes	X	
173	Pine, White	12	3	1	Coniferous	Yes		X
174	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
175	Pine, White	12.5	3	1	Coniferous	Yes		X
185	Pine, White	12	3	1	Coniferous	Yes		X
186	Spruce, White	8	2	1	Coniferous	Yes		X
187	Pine, White	13	3	1	Coniferous	Yes		X
188	Pine, White	12	3	1	Coniferous	Yes		X
189	Pine, White	14.5	3	1	Coniferous	Yes		X
190	Pine, White	14	3	1	Coniferous	Yes		X
191	Cottonwood	23	3	1	Common Tree	Yes		X
192	Cottonwood	12	3	1	Common Tree	Yes		X
193	Cottonwood	13	3	1	Common Tree	Yes		X
194	Pine, White	14	3	1	Coniferous	Yes		X
195	Elm, Siberian	13	3	1	Common Tree	Yes		X
196	Cottonwood	13	3	1	Common Tree	Yes		X
197	Boxelder	14	2	1	Common Tree	Yes		X
198	Boxelder	19	2	1	Common Tree	Yes		X
199	Elm, American	20	3	1	Common Tree	Yes		X
200	Boxelder	17	2	3	Common Tree	Yes	X	
201	Ash, Green	16	3	1	Common Tree	Yes	X	
202	Ash, Green	15	2	1	Common Tree	Yes	X	
203	Willow, Black	12	2	1	Common Tree	Yes		X
204	Maple, Silver	12	2	2	Common Tree	Yes		X
205	Birch, River	10	2	2	Deciduous Hardwood	Yes		X
206	Willow, Black	23	2	2	Common Tree	Yes		X
207	Willow, Black	13	2	2	Common Tree	Yes	X	

Tree No.	Tree Species	DBH (In.)	Quality	Stems	City Classification	Significant	Saved	Removed
208	Elm, Siberian	10.5	2	1	Common Tree	No	Not Significant	
209	Elm, Siberian	6	2	1	Common Tree	No	Not Significant	
210	Cottonwood	12	4	1	Common Tree	Yes	X	
211	Elm, Siberian	8	1	1	Common Tree	No	Not Significant	
212	Willow, Black	11	2	1	Common Tree	No	Not Significant	
213	Willow, Black	39	2	1	Common Tree	Yes	X	
214	Aspen, Quaking	11	2	1	Common Tree	No	Not Significant	
215	Spruce, Blue	16	3	3	Coniferous	Yes		X
216	Spruce, Blue	8.5	3	2	Coniferous	Yes		X
217	Spruce, Blue	10	3	3	Coniferous	Yes		X
218	Birch, River	9.5	2	2	Deciduous Hardwood	Yes		X
219	Spruce, White	14	4	1	Coniferous	Yes		X
220	Spruce, Blue	10	2	1	Coniferous	Yes		X
221	Spruce, White	14.5	4	1	Coniferous	Yes		X
222	Spruce, Blue	14	3	1	Coniferous	Yes		X
223	Maple, Sugar	11	2	1	Deciduous Hardwood	Yes	X	
224	Locust, Honey	13	4	1	Common Tree	Yes	X	
225	Elm, Siberian	17	3	2	Common Tree	Yes	X	
226	Elm, Siberian	15	3	3	Common Tree	Yes	X	
227	Elm, American	15	4	2	Common Tree	Yes	X	
228	Elm, Siberian	11	N/A	0	Common Tree	No	Not Significant	
229	Elm, Siberian	14	3	2	Common Tree	Yes	X	
230	Elm, Siberian	10	N/A	0	Common Tree	No	Not Significant	
231	Oak, Red	16	3	1	Deciduous Hardwood	Yes	X	
244	Pine, White	13	3	1	Coniferous	Yes		X
296	Birch, River	10	3	1	Deciduous Hardwood	Yes	X	
297	Birch, River	8	2	1	Deciduous Hardwood	Yes	X	
298	Birch, River	10.5	2	1	Deciduous Hardwood	Yes	X	
299	Birch, River	10	2	1	Deciduous Hardwood	Yes	X	
300	Birch, River	8	2	1	Deciduous Hardwood	Yes	X	
301	Birch, River	11	2	1	Deciduous Hardwood	Yes	X	
302	Birch, River	9	2	1	Deciduous Hardwood	Yes	X	
303	Cottonwood	25	4	1	Common Tree	Yes	X	
304	Tamarack	11	3	1	Coniferous	Yes	X	
305	Tamarack	16	2	1	Coniferous	Yes	X	
306	Cottonwood	20	4	1	Common Tree	Yes	X	
307	Ash, Green	12	4	1	Common Tree	Yes	X	
308	Cottonwood	19	4	1	Common Tree	Yes	X	
309	Boxelder	23	3	5	Common Tree	Yes	X	
310	Cottonwood	23	4	1	Common Tree	Yes	X	
311	Cottonwood	16.5	4	1	Common Tree	Yes	X	
312	Cottonwood	16	4	1	Common Tree	Yes	X	
313	Maple, Red	13.5	3	1	Deciduous Hardwood	Yes	X	
314	Maple, Red	10	2	1	Deciduous Hardwood	Yes	X	
315	Ash, Green	13	3	1	Common Tree	Yes	X	
316	Ash, Green	15	3	1	Common Tree	Yes	X	
317	Locust, Honey	20	4	1	Common Tree	Yes	X	
318	Locust, Honey	15	4	1	Common Tree	Yes	X	
319	Maple, Sugar	9	4	1	Deciduous Hardwood	Yes	X	
320	Maple, Sugar	14	4	1	Deciduous Hardwood	Yes	X	
321	Ash, Green	15	3	1	Common Tree	Yes	X	
322	Ash, Green	10.5	3	1	Common Tree	No	Not Significant	
323	Ash, Green	10	3	1	Common Tree	No	Not Significant	
324	Hackberry, Northern	12	4	1	Common Tree	Yes		X
325	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
326	Oak, Pin	20.5	3	1	Deciduous Hardwood	Yes	X	
327	Boxelder	18.5	4	1	Common Tree	Yes	X	
328	Boxelder	8.5	3	1	Common Tree	No	Not Significant	
329	Aspen, Quaking	12	3	1	Common Tree	Yes	X	
330	Oak, White	16	4	1	Deciduous Hardwood	Yes	X	
331	Aspen, Quaking	10.5	3	1	Common Tree	No	Not Significant	
332	Boxelder	20.5	4	1	Common Tree	Yes	X	
333	Birch, River	14	3	2	Deciduous Hardwood	Yes	X	
334	Birch, River	10	3	3	Deciduous Hardwood	Yes	X	
335	Birch, River	11	3	3	Deciduous Hardwood	Yes	X	
336	Birch, River	12	4	3	Deciduous Hardwood	Yes	X	
337	Birch, River	14	4	2	Deciduous Hardwood	Yes	X	
338	Birch, River	13	4	2	Deciduous Hardwood	Yes	X	
339	Cottonwood	18	4	1	Common Tree	Yes	X	
340	Hackberry, Northern	18	2	1	Common Tree	Yes	X	
341	Cottonwood	31	2	1	Common Tree	Yes	X	
342	Cottonwood	25	1	1	Common Tree	Yes	Bad Quality	
343	Ash, Green	8	2	1	Common Tree	No	Not Significant	
344	Ash, Green	10	2	2	Common Tree	No	Not Significant	
345	Pine, Red	13	2	1	Coniferous	Yes	X	
346	Pine, Red	14	3	1	Coniferous	Yes	X	
347	Boxelder	11	2	2	Common Tree	No	Not Significant	
348	Oak, White	12	3	1	Deciduous Hardwood	Yes	X	
349	Maple, Sugar	11	4	1	Deciduous Hardwood	Yes		X
350	Maple, Silver	12	3	1	Common Tree	Yes		X
351	Spruce, Blue	15	3	1	Coniferous	Yes		X
352	Spruce, Blue	17	4	1	Coniferous	Yes		X
353	Oak, Red	11	4	1	Deciduous Hardwood	Yes		X
354	Spruce, Blue	16	4	1	Coniferous	Yes		X
355	Spruce, Blue	14	3	1	Coniferous	Yes		X
356	Pine, White	14.5	3	1	Coniferous	Yes		X
357	Pine, White	21	4	1	Coniferous	Yes		X
358	Pine, White	14	3	1	Coniferous	Yes		X
359	Pine, White	13	3	1	Coniferous	Yes		X
360	Pine, White	15.5	3	1	Coniferous	Yes		X
361	Pine, White	16	3	1	Coniferous	Yes		X
362	Pine, White	9.5	1	1	Coniferous	Yes	Bad Quality	
363	Pine, White	15	2	2	Coniferous	Yes		X
364	Pine, White	9	2	1	Coniferous	Yes		X
365	Pine, White	16	2	1	Coniferous	Yes		X

Tree No.	Tree Species	DBH (In.)	Quality	Stems	City Classification	Significant	Saved	Removed
366	Pine, White	13.5	3	1	Coniferous	Yes		X
367	Pine, White	14.5	3	1	Coniferous	Yes		X
368	Pine, Whitey	16	4	1	Coniferous	Yes		X
369	Pine, White	12	3	1	Coniferous	Yes	X	
370	Pine, White	12	3	1	Coniferous	Yes	X	
371	Pine, White	11	3	1	Coniferous	Yes	X	
372	Pine, White	11.5	3	1	Coniferous	Yes	X	
373	Pine, White	12	3	1	Coniferous	Yes		X
374	Aspen, Quaking	13	2	1	Common Tree	Yes		X
375	Aspen, Quaking	16	3	1	Common Tree	Yes		X
376	Oak, Red	13	3	1	Deciduous Hardwood	Yes		X
377	Oak, Red	11	3	1	Deciduous Hardwood	Yes		X
378	Oak, Red	15	4	1	Deciduous Hardwood	Yes		X
379	Oak, Red	16	3	1	Deciduous Hardwood	Yes		X
380	Locust, Honey	12.5	3	1	Common Tree	Yes	X	
381	Locust, Honey	15	3	1	Common Tree	Yes	X	
382	Locust, Honey	12.5	2	1	Common Tree	Yes	X	
383	Elm, Siberian	23	3	1	Common Tree	NA	Part of Plot Area 4	
384	Spruce, White	28	4	1	Coniferous	Yes	X	
385	Spruce, White	27	4	1	Coniferous	Yes	X	
386	Maple, Silver	38	4	1	Common Tree	Yes	X	
387	Previously Removed	N/A	N/A	N/A	Exempt	-	X	
388	Previously Removed	N/A	N/A	N/A	Exempt	-	X	
389	Maple, Silver	18	4	1	Common Tree	Yes	X	
390	Locust, Honey	26	4	1	Common Tree	Yes	X	
391	Spruce, White	20	4	1	Coniferous	Yes		X
393	Pine, White	13	4	1	Coniferous	Yes	X	
394	Pine, Red	15	4	1	Coniferous	Yes	X	
395	Spruce, White	26	4	1	Coniferous	Yes	X	
396	Spruce, White	13	4	1	Coniferous	Yes	X	
397	Spruce, White	22	3	1	Coniferous	Yes		X
540	Ash, Green	14	3	1	Common Tree	Yes	X	
541	Ash, Green	11	3	1	Common Tree	No	Not Significant	
542	Spruce, Blue	10.5	3	1	Coniferous	Yes	X	
543	Spruce, Blue	12	2	1	Coniferous	Yes	X	
544	Spruce, Blue	14.5	3	1	Coniferous	Yes	X	
545	Maple, Red	16	3	1	Deciduous Hardwood	Yes	X	
546	Maple, Red	12	3	1	Deciduous Hardwood	Yes	X	
547	Maple, Red	10	2	1	Deciduous Hardwood	Yes	X	
548	Maple, Red	15	3	1	Deciduous Hardwood	Yes	X	
549	Spruce, Blue	19	3	1	Coniferous	Yes	X	
550	Spruce, Blue	17	3	1	Coniferous	Yes	X	
551	Spruce, Blue	16	3	1	Coniferous	Yes	X	
552	Spruce, Blue	16	3	1	Coniferous	Yes	X	
553	Cottonwood	20.5	3	1	Common Tree	Yes	X	
554	Cottonwood	11	3	1	Common Tree	No	Not Significant	
555	Pine, White	7	3	1	Coniferous	No	Not Significant	
556	Pine, White	14	3	1	Coniferous	Yes	X	
557	Pine, White	12	3	1	Coniferous	Yes	X	
558	Pine, White	16	3	1	Coniferous	Yes	X	
559	Elm, Siberian	11	2	2	Common Tree	No	Not Significant	
560	Pine, White	11	4	1	Coniferous	Yes	X	
561	Cottonwood	14	3	2	Common Tree	Yes	X	
562	Hackberry, Northern	10	3	1	Common Tree	No	Not Significant	
563	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
564	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
565	Pine, White	12.5	4	1	Coniferous	Yes	X	
566	Elm, Siberian	11.5	2	1	Common Tree	No	Not Significant	
567	Elm, Siberian	10	3	1	Common Tree	No	Not Significant	
568	Elm, Siberian	12	2	1	Common Tree	Yes		X
569	Spruce, Blue	16.5	3	1	Coniferous	Yes		X
570	Spruce, Blue	15	3	1	Coniferous	Yes		X
571	Spruce, White	18	4	1	Coniferous	Yes		X
572	Elm, Siberian	24	3	1	Common Tree	Yes	X	
573	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
574	Hackberry, Northern	13	3	1	Common Tree	Yes		X
575	Hackberry, Northern	8.5	3	1	Common Tree	No	Not Significant	
576	Hackberry, Northern	8	3	1	Common Tree	No	Not Significant	
577	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
578	Hackberry, Northern	8	3	1	Common Tree	No	Not Significant	
579	Cottonwood	26	3	1	Common Tree	Yes		X
580	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
581	Cottonwood	35	3	1	Common Tree	Yes	X	
582	Cottonwood	26	4	1	Common Tree	Yes	X	
583	Cottonwood	28	4	1	Common Tree	Yes	X	
584	Cottonwood	22	4	1	Common Tree	Yes	X	
585	Aspen, Quaking	12	3	1	Common Tree	Yes	X	
586	Maple, Sugar	9	3	1	Deciduous Hardwood	Yes	X	
587	Maple, Sugar	13	4	1	Deciduous Hardwood	Yes	X	
588	Maple, Sugar	13	4	1	Deciduous Hardwood	Yes	X	
589	Pine, White	23	4	1	Coniferous	Yes	X	
590	Pine, White	24	4	1	Coniferous	Yes	X	
1250	Pine, Red	17	4	1	Coniferous	Yes	X	
1251	Pine, Red	17	3	1	Coniferous	Yes	X	
1252	Pine, Red	20	3	1	Coniferous	Yes	X	
1253	Maple, Silver	23	3	2	Common Tree	Yes		X
1254	Previously Removed	N/A	N/A	N/A	Exempt	-		X
1255	Maple, Silver	37	2	1	Common Tree	Yes		X
1256	Pine, Red	20	2	1	Coniferous	Yes		X
1257	Pine, Red	16	3	1	Coniferous	Yes		X
1258	Pine, Red	17	3	1	Coniferous	Yes		X
1259	Pine, Red	13.5	3	1	Coniferous	Yes		X
1260	Pine, Red	16	3	1	Coniferous	Yes		X
1261	Pine, Red	15.5	2	1	Coniferous	Yes		X
1262	Maple, Silver	42	2	1	Common Tree	Yes		X

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name Brian J. Krystofiak, P.E.
Signature
Date 9/21/16 License # 25063

Drawn ADB
Designed BJK
Date 9/21/16

Revisions
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

Plotted Date: 04/10/17 | X:\pw\ec21 - 1040\d\03\8 - tarlson pa\civil\engineering\trees\tp2of8 tree tables.dwg

PHASE I INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1263	Ash, Green	18	3	1	Common Tree	Yes		X
1264	Maple, Silver	18	2	2	Common Tree	Yes		X
1265	Locust, Honey	30	2	1	Common Tree	Yes		X
1266	Pine, Red	13	3	1	Coniferous	Yes		X
1267	Pine, Red	12	3	1	Coniferous	Yes		X
1268	Pine, Red	12.5	3	1	Coniferous	Yes		X
1269	Maple, Silver	25	3	1	Common Tree	Yes		X
1270	Maple, Silver	25.5	3	1	Common Tree	Yes		X
1271	Maple, Silver	38	3	1	Common Tree	Yes		X
1272	Maple, Silver	41	2	1	Common Tree	Yes		X
1273	Ash, Green	21.5	3	1	Common Tree	Yes		X
1274	Locust, Honey	12	2	3	Common Tree	Yes		X
1275	Ash, Green	16	2	1	Common Tree	Yes		X
1276	Pine, Red	15.5	3	1	Coniferous	Yes		X
1277	Pine, Red	15	3	1	Coniferous	Yes		X
1278	Pine, Red	17	3	1	Coniferous	Yes		X
1279	Pine, Red	15	3	1	Coniferous	Yes		X
1280	Pine, Red	16	2	1	Coniferous	Yes		X
1281	Pine, Red	17	3	1	Coniferous	Yes		X
1282	Pine, Red	15	3	1	Coniferous	Yes		X
1283	Pine, Red	17	3	1	Coniferous	Yes		X
1284	Pine, Red	20	3	1	Coniferous	Yes		X
1285	Pine, Red	16	3	1	Coniferous	Yes		X
1286	Birch, River	9	2	3	Deciduous Hardwood	Yes		X
1287	Birch, River	11	2	3	Deciduous Hardwood	Yes		X
1288	Birch, River	10	2	3	Deciduous Hardwood	Yes		X
1289	Spruce, White	13	2	2	Coniferous	Yes		X
1290	Spruce, White	19	3	1	Coniferous	Yes		X
1291	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
1292	Pine, Red	17	4	1	Coniferous	Yes		X
1293	Spruce, White	17	3	1	Coniferous	Yes		X
1294	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
1295	Pine, Red	14	4	1	Coniferous	Yes		X
1296	Pine, Red	14	3	1	Coniferous	Yes		X
1297	Oak, Burr	13	2	2	Deciduous Hardwood	Yes		X
1298	Oak, White	14.5	3	1	Deciduous Hardwood	Yes		X
1299	Oak, Burr	13	2	1	Deciduous Hardwood	Yes		X
1300	Oak, Burr	16	0	1	Deciduous Hardwood	Yes	Dead	
1301	Oak, Burr	15	3	1	Deciduous Hardwood	Yes		X
1302	Maple, Red	8	N/A	0	Deciduous Hardwood	Yes	X	
1303	Locust, Honey	28	4	1	Common Tree	Yes	X	
1304	Maple, Silver	40	3	1	Common Tree	Yes	X	
1305	Ash, Green	30	4	1	Common Tree	Yes		X
1306	Spruce, White	28	4	1	Coniferous	Yes		X
1307	Maple, Silver	23	2	1	Common Tree	Yes		X
1308	Maple, Silver	54	1	5	Common Tree	Yes	Bad Quality	
1309	Spruce, White	40	4	1	Coniferous	Yes		X
1310	Spruce, White	28	4	1	Coniferous	Yes		X
1714	Crabapple	6	4	4	Common Tree	No	Not Significant	
1715	Crabapple	7	4	4	Common Tree	No	Not Significant	
1716	Spruce	10	4	1	Coniferous	Yes	X	
1717	Spruce	8	4	1	Coniferous	Yes	X	
1718	Spruce	10	4	1	Coniferous	Yes	X	
1719	Spruce	8	4	2	Coniferous	Yes	X	
1720	Spruce	10	4	1	Coniferous	Yes	X	
1721	Spruce	11	4	1	Coniferous	Yes	X	
1722	Maple	10	4	1	Common Tree	No	Not Significant	
1723	Spruce	10	3	3	Coniferous	Yes	X	
1724	Spruce	12	4	1	Coniferous	Yes	X	
1725	Spruce	18	4	1	Coniferous	Yes	X	
1726	Crabapple	9	4	4	Common Tree	No	Not Significant	
1727	Crabapple	7	4	3	Common Tree	No	Not Significant	
1728	Crabapple	8	4	6	Common Tree	No	Not Significant	
1729	Maple	13	4	1	Common Tree	Yes	X	
1730	Spruce	10	4	1	Coniferous	Yes	X	
1731	Spruce	10	4	1	Coniferous	Yes	X	
1732	Spruce	10	4	1	Coniferous	Yes	X	
1733	Spruce	8	4	1	Coniferous	Yes	X	
1734	Birch, river	10	4	3	Deciduous Hardwood	Yes	X	
1735	Spruce	8	4	1	Coniferous	Yes	X	
1736	Spruce	10	4	1	Coniferous	Yes	X	
1737	Spruce	12	4	1	Coniferous	Yes	X	
1738	Maple	11	4	1	Common Tree	No	Not Significant	
1739	Spruce	9	4	1	Coniferous	Yes	X	
1740	Spruce	10	4	1	Coniferous	Yes	X	
1741	Spruce	12	4	1	Coniferous	Yes	X	
1742	Spruce	6	4	1	Coniferous	No	Not Significant	
1743	Spruce	15	4	1	Coniferous	Yes	X	
1744	Birch, river	10	4	1	Deciduous Hardwood	Yes	X	
1745	Pine	18	4	1	Coniferous	Yes	X	
1746	Spruce	17	4	11	Coniferous	Yes	X	
1747	Ash	18	4	1	Common Tree	Yes	X	
1748	Ash	18	4	1	Common Tree	Yes	X	
1749	Linden, Littleleaf	14	4	2	Common Tree	Yes	X	
1750	Pine	11	4	1	Coniferous	Yes	X	
1751	Pine	18	4	1	Coniferous	Yes	X	
1752	Pine	14	4	1	Coniferous	Yes	X	
1753	Pine	14	4	1	Coniferous	Yes	X	
1754	Pine	11	4	1	Coniferous	Yes	X	
1755	Pine	13	4	1	Coniferous	Yes	X	
1756	Pine	14	4	1	Coniferous	Yes	X	
1757	Spruce	13	4	1	Coniferous	Yes	X	
1758	Spruce	18	4	1	Coniferous	Yes	X	
1759	Spruce	15	4	1	Coniferous	Yes		X
1760	Spruce	18	4	1	Coniferous	Yes		X

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1761	Spruce	15	4	1	Coniferous	Yes	X	
1762	Spruce	11	4	1	Coniferous	Yes	X	
1763	Spruce	14	4	1	Coniferous	Yes	X	
1764	Spruce	11	3	1	Coniferous	Yes	X	
1765	Spruce	13	4	1	Coniferous	Yes	X	
1766	Spruce	9	4	1	Coniferous	Yes	X	
1963	Maple	8	4	1	Common Tree	No	Not Significant	
1964	Maple	10	4	1	Common Tree	No	Not Significant	
1965	Pine	14	4	1	Coniferous	Yes	X	
1966	Pine	12	4	1	Coniferous	Yes	X	
1967	Pine	11	4	1	Coniferous	Yes	X	
1968	Spruce	10	4	1	Coniferous	Yes	X	
1969	Spruce	10	3	1	Coniferous	Yes	X	
1970	Spruce	11	4	1	Coniferous	Yes	X	
1971	Maple	8	4	1	Common Tree	No	Not Significant	
1972	Maple	10	4	1	Common Tree	No	Not Significant	
1973	Maple	10	4	1	Common Tree	No	Not Significant	
1974	Maple	10	4	1	Common Tree	No	Not Significant	
1975	Maple	19	4	1	Common Tree	Yes	X	
1976	Spruce	24	4	1	Coniferous	Yes	X	
1977	Spruce	18	4	1	Coniferous	Yes	X	
1978	Spruce	18	4	1	Coniferous	Yes	X	
1979	Spruce	9	4	2	Coniferous	Yes	X	
1980	Crabapple	8	4	4	Common Tree	No	Not Significant	
1981	Crabapple	9	4	4	Common Tree	No	Not Significant	
1982	Maple, Amur	12	4	4	Deciduous Hardwood	Yes	X	
1983	Spruce	13	4	1	Coniferous	Yes	X	
1984	Pine	12	4	1	Coniferous	Yes	X	
1985	Spruce	13	4	1	Coniferous	Yes	X	
1986	Pine	12	4	1	Coniferous	Yes	X	
1987	Spruce, white	23.0	4	1	Coniferous	Yes	X	
1988	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
1989	Spruce	16	4	1	Coniferous	Yes	X	
1990	Spruce	14	4	1	Coniferous	Yes	X	
1991	Spruce	17	4	1	Coniferous	Yes	X	
1992	Spruce	13	4	1	Coniferous	Yes	X	
1993	Spruce	15	4	1	Coniferous	Yes	X	
1994	Maple	13	4	1	Common Tree	Yes	X	
1995	Crabapple	8	4	4	Common Tree	No	Not Significant	
1996	Crabapple	6	4	4	Common Tree	No	Not Significant	
1997	Crabapple	6	4	4	Common Tree	No	Not Significant	
1998	Crabapple	8	4	4	Common Tree	No	Not Significant	
1999	Crabapple	9	4	4	Common Tree	No	Not Significant	
2000	Crabapple	8	4	4	Common Tree	No	Not Significant	
2535	Pine, white	10.0	4	1	Coniferous	Yes	X	
2547	Spruce, white	12.0	4	1	Coniferous	Yes		X
2548	Pine, white	18.0	4	1	Coniferous	Yes		X
2549	Pine, white	14.0	4	1	Coniferous	Yes	X	
2550	Spruce, white	14.0	4	1	Coniferous	Yes		X
2551	Spruce, blue	14.0	4	1	Coniferous	Yes		X
2552	Spruce, white	10.0	4	1	Coniferous	Yes		X
2553	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2554	Spruce, white	14.0	4	1	Coniferous	Yes		X
2555	Spruce, white	12.0	4	1	Coniferous	Yes		X
2558	Spruce, blue	9.0	4	1	Coniferous	Yes		X
2559	Pine, white	10.0	4	1	Coniferous	Yes		X
2560	Aspen, Quaking	12.0	4	1	Common Tree	Yes		X
2561	Cottonwood	26.0	4	1	Common Tree	Yes		X
2563	Pine, white	10.0	4	1	Coniferous	Yes	X	
2564	Pine, white	16.0	4	1	Coniferous	Yes	X	
2567	Pine, white	20.0	4	2	Coniferous	Yes		X
2568	Pine, white	17.0	4	1	Coniferous	Yes		X
2570	Pine, white	28.0	4	2	Coniferous	Yes		X
2571	Spruce, white	16.0	4	1	Coniferous	Yes		X
2578	Spruce, white	12.0	4	1	Coniferous	Yes		X
2579	Spruce, white	12.0	4	1	Coniferous	Yes		X
2701	Cherry, black	19.0	4	1	Deciduous Hardwood	Yes		X
2702	Cottonwood	26.0	4	1	Common Tree	Yes		X
2703	Cottonwood	16.0	4	1	Common Tree	Yes		X
2704	Elm, Siberian	14.0	4	1	Common Tree	Yes		X
2705	Elm, Siberian	14.0	3	1	Common Tree	Yes		X
2706	Elm, Siberian	22.0	4	1	Common Tree	Yes		X
2707	Elm, Siberian	13.0	4	1	Common Tree	Yes		X
2708	Cottonwood	12.5	4	1	Common Tree	Yes		X
2709	Elm, Siberian	12.5	3	1	Common Tree	Yes		X
2710	Elm, Siberian	17.0	3	1	Common Tree	Yes		X
2711	Elm, Siberian	17.0	3	1	Common Tree	Yes		X
2712	Cottonwood	14.5	4	1	Common Tree	Yes		X
2713	Cottonwood	29.0	4	1	Common Tree	Yes		X
2714	Cottonwood	14.5	4	1	Common Tree	Yes		X
2715	Elm, Siberian	22.0	3	1	Coniferous	Yes		X
2716	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2717	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2718	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2719	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2720	Pine, Austrian	14.0	3	1	Coniferous	Yes		X
2721	Pine, Austrian	13.5	4	1	Coniferous	Yes		X
2722	Pine, Austrian	19.0	3	1	Coniferous	Yes		X
2723	Pine, Austrian	17.0	3	1	Coniferous	Yes		X
2724	Elm, Siberian	21.0	3	1	Common Tree	Yes		X
2725	Cottonwood	16.0	4	1	Common Tree	Yes		X
2726	Cottonwood	19.0	4	1	Common Tree	Yes		X
2727	Cottonwood	15.5	4	1	Common Tree	Yes		X
2728	Cottonwood	15.5	4	1	Common Tree	Yes		X
2729	Cottonwood	15.5	4	1	Common Tree	Yes		X

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
2730	Cottonwood	14.5	4	1	Common Tree	Yes		X
2731	Cottonwood	18.5	4	1	Common Tree	Yes		X
2732	Cottonwood	16.0	4	1	Common Tree	Yes		X
2733	Cottonwood	13.0	4	1	Common Tree	Yes		X
2734	Elm, American	13.0	4	1	Common Tree	Yes		X
2735	Pine, Austrian	15.0	3	1	Coniferous	Yes		X
2736	Pine, Austrian	18.0	3	1	Coniferous	Yes		X
2737	Pine, Austrian	14.5	3	1	Coniferous	Yes		X
2738	Pine, Austrian	13.0	4	1	Coniferous	Yes		X
2739	Pine, Austrian	14.0	4	1	Coniferous	Yes		X
2740	Boxelder	36.5	3	6	Common Tree	Yes		X
2741	Pine, Austrian	22.0	3	1	Coniferous	Yes		X
2742	Pine, Austrian	16.0	3	1	Coniferous	Yes		X
2743	Basswood	12.0	4	1	Common Tree	Yes		X
2744	Ash, green	15.5	4	1	Common Tree	Yes		X
2745	Ash, green	12.5	4	1	Common Tree	Yes		X
2746	Spruce, blue	16.0	4	1	Coniferous	Yes		X
2747	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2748	Spruce, blue	17.0	4	1	Coniferous	Yes		X
2749	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2750	Spruce, blue	14.5	4	1	Coniferous	Yes		X
2751	Spruce, blue	12.0	3	1	Coniferous	Yes		X
2752	Cottonwood	27.5	4	1	Common Tree	Yes		X
2753	Pine, white	8.5	4	1	Coniferous	Yes		X
2754	Pine, white	10.0	4	1	Coniferous	Yes		X
5169	Cottonwood	30.0	3	1	Common Tree	Yes	X	
5170	Cottonwood	20.0	4	1	Common Tree	Yes	X	
5171	Cottonwood	30.0	4	1	Common Tree	Yes	X	
5172	Cottonwood	18.0	4	1	Common Tree	Yes	X	
5173	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5174	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5175	Cottonwood	13.0	4	1	Common Tree	Yes	X	
5176	Cottonwood	12.0	4	1	Common Tree	Yes	X	
5177	Cottonwood	13.0	4	1	Common Tree	Yes	X	
5178	Cottonwood	16.0	4	1	Common Tree	Yes	X	
5179	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5180	Cottonwood	16.0	4	1	Common Tree	Yes	X	
5181	Cottonwood	12.0	3	1	Common Tree	Yes	X	
5182	Cottonwood	12.0	4	1	Common Tree	Yes	X	
5184	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5184	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5185	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5186	Cottonwood	22.0	4	1	Common Tree	Yes	X	
5187	Boxelder	16.0	3	1	Common Tree	Yes	X	
5188	Boxelder	16.0	3	1	Common Tree	Yes	X	
5189	Ash, green	18.0	3	1	Common Tree	Yes	X	
5190	Cottonwood	30.0	4	1	Common Tree	Yes	X	
5191	Willow, black	38.0	3	1	Common Tree	Yes	X	
5192	Willow, black	38.0	3	1	Common Tree	Yes	X	
5193	Willow, black	32.0	3	1	Common Tree	Yes	X	
5194	Birch, river	8.0	3	1	Deciduous Hardwood	Yes	X	
5195	Spruce, white	16.0	4	1	Coniferous	Yes		X
5196	Pine, Scots	8.0	4	1	Coniferous	Yes		X
5197	Cottonwood	13.0	4	1	Common Tree	Yes		X
5198	Cottonwood	16.0	4	1	Common Tree	Yes		X
5199	Pine, Scots	8.0	4	1	Coniferous	Yes		X
5200	Elm, Siberian	14.0	3	1	Common Tree	Yes		X
5201	Cottonwood	14.0	3	2	Common Tree	Yes		X
5202	Cottonwood	13.0	4	1	Common Tree	Yes		X
5203	Cottonwood	16.0	4	1	Common Tree	Yes		X
5204	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
5205	Birch, river	8.0	3	3	Deciduous Hardwood	Yes		X
5206	Cottonwood	14.0	4	1	Common Tree	Yes		X
5207	Birch, river	9.0	3	3	Deciduous Hardwood	Yes		X
5208	Birch, river	8.0	3	3	Deciduous Hardwood	Yes		X
5210	Birch, river	11.0	3	3	Deciduous Hardwood	Yes		X
5205A	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
5206A	Cottonwood	15.0	4	1	Common Tree	Yes		X
5207A	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
10001	Maple, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10002	Spruce, white	9.5	4	1	Coniferous	Yes	X	
10003	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10004	Spruce, white	9.0	3	1	Coniferous	Yes	X	
10005	Cottonwood	31.0	4	1	Common Tree	Yes	X	
10006	Cottonwood	29.0	4	1	Common Tree	Yes	X	
10007	Pine, Austrian	15.5	4	1	Coniferous	Yes	X	
10008	Pine, Austrian	12.5	4	1	Coniferous	Yes	X	
10009	Pine, Austrian	13.0	3	1	Coniferous	Yes	X	
10010	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10011	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10012	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10013	Pine, Austrian	15.5	3	1	Coniferous	Yes	X	
10014	Pine, Austrian	16.0	3	1	Coniferous	Yes	X	
10015	Pine, Austrian	13.5	4	1	Coniferous	Yes	X	
10016	Pine, white	14.0	4	1	Coniferous	Yes	X	
10017	Pine, white	11.0	4	1	Coniferous	Yes	X	
10018	Cottonwood	13.5	4	1	Common Tree	Yes	X	
10019	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10020	Cottonwood	15.5	4	1	Common Tree	Yes	X	
10021	Cottonwood	15.5	4	1	Common Tree	Yes	X	
10022	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10023	Spruce, blue	9.0	3	1	Coniferous	Yes	X	
10024	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10025	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10026	Spruce, blue	10.0	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10027	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10028	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10029	Spruce, blue	8.0	3	1	Coniferous	Yes	X	
10030	Spruce, blue	8.5	3	1	Coniferous	Yes	X	
10031	Spruce, blue	9.0	4	1	Coniferous	Yes		X
10032	Spruce, blue	9.5	4	1	Coniferous	Yes	X	
10033	Spruce, blue	9.0	3	1	Coniferous	Yes	X	
10034	Pine, white	16.0	3	1	Coniferous	Yes	X	
10035	Spruce, blue	12.0	4	1	Coniferous	Yes	X	
10036	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10037	Spruce, blue	10.0	4	1	Coniferous	Yes		X
10038	Spruce, white	9.0	4	1	Coniferous	Yes		X
10039	Pine, white	13.0	4	1	Coniferous	Yes	X	
10040	Pine, white	15.0	4	1	Coniferous	Yes	X	
10041	Pine, white	12.5	4	1	Coniferous	Yes	X	
10042	Pine, white	15.0	4	1	Coniferous	Yes	X	
10043	Pine, white	15.5	4	1	Coniferous	Yes	X	
10044	Pine, white	10.5	3	1	Coniferous	Yes	X	
10045	Pine, white	14.5	4	1	Coniferous	Yes	X	
10046	Pine, white	8.5	4	1	Coniferous	Yes	X	
10240	Pine, Scots	18.0	3	1	Coniferous	Yes	X	
10241	Pine, Scots	18.0	4	1	Coniferous	Yes	X	
10242	Pine, Scots	18.5	4	1	Coniferous	Yes	X	
10243	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10244	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10245	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10246	Pine, Scots	16.5	4	1	Coniferous	Yes	X	
10247	Pine, Scots	14.5	4	1	Coniferous	Yes	X	
10248	Pine, Scots	18.5	4	1	Coniferous	Yes	X	
10249	Pine, Scots	21.0	4	1	Coniferous	Yes	X	
10250	Pine, Scots	25.0	4	1	Coniferous	Yes	X	
10251	Pine, Scots	14.5	4	1	Coniferous	Yes	X	
10252	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10253	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10254	Spruce, blue	11.0	3	1	Coniferous	Yes	X	
10255	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10256	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10257	Spruce, blue	15.0	3	1	Coniferous	Yes	X	
10258	Pine, white	12.0	4	1	Coniferous	Yes	X	
10259	Pine, white	16.0	4	1	Coniferous	Yes	X	
10260	Pine, white	18.0	4	1	Coniferous	Yes	X	
10261	Pine, white	14.0	4	1	Coniferous	Yes	X	
10262	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10263	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10264	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10265	Birch, river	20.0	4	2	Deciduous Hardwood	Yes	X	
10266	Birch, river	23.5	4	3	Deciduous Hardwood	Yes	X	
10267	Birch, river	7.5	4	1	Deciduous Hardwood	Yes	X	
10268	Birch, river	26.0	4	3	Deciduous Hardwood	Yes	X	
10269	Birch, river	19.0	4	3	Deciduous Hardwood	Yes	X	
10270	Birch, river	24.0	4	3	Deciduous Hardwood	Yes	X	
10271	Birch, river	9.0	4	2	Deciduous Hardwood	Yes	X	
10272	Birch, river	13.0	4	3	Deciduous Hardwood	Yes	X	
10273	Birch, river	15.5	4	3	Deciduous Hardwood	Yes	X	
10274	Birch, river	19.0	4	3	Deciduous Hardwood	Yes	X	
10275	Birch, river	8.0	4	1	Deciduous Hardwood	Yes	X	
10276	Birch, river	8.0	4	1	Deciduous Hardwood	Yes	X	
10277	Birch, river	21.0	4	3	Deciduous Hardwood	Yes	X	
10278	Birch, river	25.0	4	3	Deciduous Hardwood	Yes	X	
10279	Birch, river	28.0	4	3	Deciduous Hardwood	Yes	X	
10280	Birch, river	25.5	4	3	Deciduous Hardwood	Yes	X	
10281	Pine, Scots	14.0	4	1	Coniferous	Yes	X	
10282	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10283	Tamarack	10.5	4	1	Coniferous	Yes	X	
10284	Tamarack	10.5	4	1	Coniferous	Yes	X	
10285	Tamarack	9.5	4	1	Coniferous	Yes	X	
10286	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10287	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10288	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10289	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10290	Oak, pin	9.0	4	1	Deciduous Hardwood	Yes	X	
10291	Oak, pin	11.5	4	1	Deciduous Hardwood	Yes	X	
10292	Oak, pin	9.0	4	1	Deciduous Hardwood	Yes	X	
10293	Pine, white	10.0	4	1	Coniferous	Yes	X	
10294	Pine, white	12.0	4	1	Coniferous	Yes	X	
10295	Pine, white	8.5	4	1	Coniferous	Yes	X	
10296	Pine, white	23.0	3	2	Coniferous	Yes	X	
10297	Pine, white	14.0	4	1	Coniferous	Yes	X	
10298	Pine, white	13.5	4	1	Coniferous	Yes	X	
10299	Pine, white	16.0	4	1	Coniferous	Yes	X	
10300	Pine, white	17.0	4	1	Coniferous	Yes	X	
10301	Pine, white	17.0	4	1	Coniferous	Yes	X	
10302	Pine, white	15.5	4	1	Coniferous	Yes	X	
10303	Pine, white	14.0	4	1	Coniferous	Yes	X	
10304	Pine, white	12.5	4	1	Coniferous	Yes	X	
10305	Pine, white	12.0	4	1	Coniferous	Yes	X	
10306	Pine, white	15.0	3	1	Coniferous	Yes	X	
10307	Pine, white	13.5	4	1	Coniferous	Yes	X	
10308	Pine, white	13.0	3	1	Coniferous	Yes	X	
10309	Oak, red	19.0	4	1	Deciduous Hardwood	Yes	X	
10310	Pine, white	14.0	4	1	Coniferous	Yes	X	
10311	Pine, white	15.0	3	1	Coniferous	Yes	X	
10312	Pine, white	17.0	4	1	Coniferous	Yes	X	
10313	Pine, Scots	8.5	4	1	Coniferous	Yes	X	
10314	Pine, white	13.0	4	1	Coniferous	Yes	X	

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Kryzstofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed:

PHASE I INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10315	Pine, Scots	9.5	4	1	Coniferous	Yes	X	
10316	Pine, white	18.0	4	1	Coniferous	Yes	X	
10317	Pine, white	19.0	4	2	Coniferous	Yes	X	
10318	Pine, white	12.0	4	1	Coniferous	Yes	X	
10319	Pine, Scots	13.0	3	1	Coniferous	Yes	X	
10320	Pine, white	13.0	4	1	Coniferous	Yes	X	
10321	Pine, white	19.0	3	1	Coniferous	Yes	X	
10322	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10323	Pine, white	17.0	4	1	Coniferous	Yes	X	
10324	Pine, white	13.0	4	1	Coniferous	Yes	X	
10325	Pine, white	17.0	4	1	Coniferous	Yes	X	
10326	Pine, white	15.0	4	1	Coniferous	Yes	X	
10327	Pine, white	21.0	3	2	Coniferous	Yes	X	
10328	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10329	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10330	Pine, Scots	15.0	4	1	Coniferous	Yes	X	
10331	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10332	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10333	Oak, pin	16.0	4	1	Deciduous Hardwood	Yes	X	
10334	Oak, pin	15.5	4	1	Deciduous Hardwood	Yes	X	
10335	Oak, pin	17.5	4	1	Deciduous Hardwood	Yes	X	
10336	Tamarack	9.0	4	1	Coniferous	Yes	X	
10337	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10338	Spruce, blue	9.5	4	1	Coniferous	Yes	X	
10339	Spruce, blue	13.0	4	1	Coniferous	Yes	X	
10340	Spruce, blue	12.5	4	1	Coniferous	Yes	X	
10341	Spruce, blue	22.5	4	1	Coniferous	Yes	X	
10342	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10343	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10344	Honeylocust	12.0	4	1	Common Tree	Yes	X	
10345	Maple, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10346	Maple, red	21.0	4	1	Deciduous Hardwood	Yes	X	
10668	Maple, silver	45.5	4	1	Common Tree	Yes	X	
10669	Maple, silver	20.0	4	1	Common Tree	Yes	X	
10670	Maple, silver	26.5	4	1	Common Tree	Yes	X	
10671	Maple, silver	35.0	4	1	Common Tree	Yes	X	
10672	Maple, silver	39.5	4	1	Common Tree	Yes	X	
10673	Maple, silver	38.0	4	1	Common Tree	Yes	X	
10674	Maple, silver	44.0	4	1	Common Tree	Yes	X	
10675	Basswood	28.0	4	1	Common Tree	Yes	X	
10676	Basswood	27.0	4	1	Common Tree	Yes	X	
10677	Basswood	33.0	4	1	Common Tree	Yes	X	
10678	Maple, sugar	26.0	4	1	Deciduous Hardwood	Yes	X	
10679	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10680	Spruce, white	22.0	4	1	Coniferous	Yes	X	
10681	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10682	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10683	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10684	Spruce, blue	24.0	3	1	Coniferous	Yes	X	
10685	Spruce, blue	21.0	4	1	Coniferous	Yes	X	
10686	Douglasfir	24.0	4	1	Coniferous	Yes	X	
10687	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10688	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10689	Spruce, blue	20.0	3	1	Coniferous	Yes	X	
10690	Spruce, blue	26.0	3	1	Coniferous	Yes	X	
10691	Spruce, white	25.0	4	1	Coniferous	Yes	X	
10692	Spruce, white	19.0	4	1	Coniferous	Yes	X	
10693	Pine, red	14.5	4	1	Coniferous	Yes	X	
10694	Pine, Scots	29.0	4	1	Coniferous	Yes	X	
10695	Pine, red	15.0	4	1	Coniferous	Yes	X	
10696	Pine, red	15.5	4	1	Coniferous	Yes	X	
10697	Pine, red	18.0	4	1	Coniferous	Yes	X	
10698	Pine, Scots	21.0	3	1	Coniferous	Yes	X	
10699	Pine, Scots	26.0	3	1	Coniferous	Yes	X	
10700	Pine, Scots	21.0	3	1	Coniferous	Yes	X	
10701	Pine, Scots	27.0	3	1	Coniferous	Yes	X	
10702	Pine, Austrian	75.0	3	1	Coniferous	Yes	X	
10703	Pine, red	16.5	4	1	Coniferous	Yes	X	
10704	Pine, red	16.0	4	1	Coniferous	Yes	X	
10705	Pine, red	18.0	4	1	Coniferous	Yes	X	
10706	Crabapple	12.0	4	1	Common Tree	Yes	X	
10707	Crabapple	9.5	4	1	Common Tree	No	Not Significant	
10708	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10709	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10710	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10711	Spruce, white	12.0	3	1	Coniferous	Yes	X	
10712	Spruce, white	12.5	4	1	Coniferous	Yes	X	
10713	Spruce, white	14.0	4	1	Coniferous	Yes	X	
10714	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10715	Spruce, white	17.0	4	1	Coniferous	Yes	X	
10716	Spruce, white	13.5	4	1	Coniferous	Yes	X	
10717	Birch, river	28.0	4	3	Deciduous Hardwood	Yes	X	
10718	Birch, river	27.0	4	3	Deciduous Hardwood	Yes	X	
10719	Birch, river	27.0	4	4	Deciduous Hardwood	Yes	X	
10720	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10721	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10722	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10723	Crabapple	8.0	3	1	Common Tree	No	Not Significant	
10724	Crabapple	8.5	4	1	Common Tree	No	Not Significant	
10725	Crabapple	5.0	3	1	Common Tree	No	Not Significant	
10726	Crabapple	5.5	4	1	Common Tree	No	Not Significant	
10727	Crabapple	8.5	4	1	Common Tree	No	Not Significant	
10728	Duplicate see Tree No. 1988							
10729	Birch, river	10.0	4	4	Deciduous Hardwood	Yes	X	
10730	Birch, river	10.0	4	4	Deciduous Hardwood	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10731	Birch, river	12.0	4	4	Deciduous Hardwood	Yes	X	
10732	Crabapple	8.0	4	1	Common Tree	No	Not Significant	
10733	Crabapple	7.0	4	1	Common Tree	No	Not Significant	
10734	Crabapple	12.5	4	1	Common Tree	Yes	X	
10735	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10736	Spruce, blue	11.0	3	1	Coniferous	Yes		X
10737	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10738	Honeylocust	13.0	4	1	Common Tree	Yes	X	
10739	Honeylocust	14.5	4	1	Common Tree	Yes	X	
10740	Honeylocust	9.0	4	1	Common Tree	No	Not Significant	
10741	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10742	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10743	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10744	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10745	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10746	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10747	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10748	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10749	Honeylocust	12.0	4	1	Common Tree	Yes		X
10750	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10751	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10752	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10753	Honeylocust	9.5	4	1	Common Tree	No	Not Significant	
10754	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10755	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10756	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10757	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10758	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10759	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10760	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10761	Honeylocust	15.0	4	1	Common Tree	Yes	X	
10762	Honeylocust	15.5	4	1	Common Tree	Yes	X	
10763	Honeylocust	10.0	4	1	Common Tree	No	Not Significant	
10764	Honeylocust	11.0	4	1	Common Tree	No	Not Significant	
10765	Crabapple	11.0	4	1	Common Tree	No	Not Significant	
10766	Spruce, white	13.5	4	1	Coniferous	Yes		X
10767	Crabapple	6.0	4	1	Common Tree	No	Not Significant	
10768	Spruce, blue	16.0	4	1	Coniferous	Yes		X
10769	Honeylocust	9.0	4	1	Common Tree	No	Not Significant	
10770	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10771	Honeylocust	9.5	4	1	Common Tree	No	Not Significant	
10772	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10773	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10774	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10775	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10776	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10777	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10778	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10779	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10780	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10781	Pine, Scots	12.5	4	1	Coniferous	Yes	X	
10782	Pine, Scots	21.0	4	1	Coniferous	Yes	X	
10783	Honeylocust	12.5	4	1	Common Tree	Yes		X
10784	Honeylocust	10.0	4	1	Common Tree	No	Not Significant	
10785	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10786	Honeylocust	11.0	4	1	Common Tree	No	Not Significant	
10787	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10788	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10789	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10790	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10791	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10792	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10793	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10794	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10795	Spruce, blue	15.0	3	1	Coniferous	Yes		X
10796	Crabapple	7.5	4	1	Common Tree	No	Not Significant	
10797	Crabapple	7.5	4	1	Common Tree	No	Not Significant	
10798	Birch, paper	16.5	4	1	Deciduous Hardwood	Yes	X	
10799	Birch, paper	13.5	4	1	Deciduous Hardwood	Yes	X	
10800	Birch, paper	10.5	4	1	Deciduous Hardwood	Yes	X	
10801	Honeylocust	17.0	4	1	Common Tree	Yes	X	
10802	Honeylocust	20.5	4	1	Common Tree	Yes	X	
10803	Honeylocust	12.3	3	1	Common Tree	Yes		X
10804	Maple, sugar	10.5	4	1	Deciduous Hardwood	Yes	X	
10805	Duplicate see Tree No. 1987							
10806	Willow	46.0	4	4	Common Tree	Yes	X	
10807	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10808	Spruce, blue	16.5	4	1	Coniferous	Yes	X	
10809	Spruce, blue	15.5	4	1	Coniferous	Yes	X	
10810	Spruce, blue	14.5	4	1	Coniferous	Yes	X	
10811	Spruce, blue	16.0	4	1	Coniferous	Yes	X	
10812	Spruce, blue	19.0	4	1	Coniferous	Yes	X	
10813	Maple, silver	34.5	4	1	Common Tree	Yes	X	
10814	Spruce, Norway	13.0	4	1	Coniferous	Yes		X
10815	Spruce, Norway	12.0	4	1	Coniferous	Yes		X
10816	Spruce, Norway	13.0	3	1	Coniferous	Yes		X
10817	Douglasfir	18.0	4	1	Coniferous	Yes		X
10818	Maple, silver	39.5	4	1	Common Tree	Yes	X	
10819	Spruce, blue	14.5	4	1	Coniferous	Yes	X	
10820	Spruce, blue	15.0	4	1	Coniferous	Yes	X	
10821	Spruce, blue	13.0	4	1	Coniferous	Yes	X	
10822	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10845	Ash, green	19.0	4	1	Common Tree	Yes	X	
10846	Pine, Scots	24.0	3	1	Coniferous	Yes	X	
10847	Pine, Scots	14.5	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10848	Pine, Austrian	17.0	4	1	Coniferous	Yes	X	
10849	Cottonwood	30.0	4	1	Common Tree	Yes	X	
10850	Pine, Scots	8.0	4	1	Coniferous	Yes	X	
10851	Cottonwood	15.5	3	2	Common Tree	Yes	X	
10852	Pine, Austrian	17.0	4	1	Coniferous	Yes	X	
10853	Pine, Austrian	26.0	3	1	Coniferous	Yes	X	
10854	Spruce, blue	15.0	4	1	Coniferous	Yes	X	
10855	Pine, Austrian	14.0	4	1	Coniferous	Yes	X	

Note: Tree Tags 1-2000 by Carlson Mccain, Tree Tags 2536-5207A by KES and Tree Tags 10001-10855 by TreeBiz

TOTAL INDIVIDUAL TREE SHOT ASSESMENT (PHASE 1)

Total caliper inches from individual shots (Phase 1)	13,466.50
Common Tree RemovalCaliper Inches	2507.5
Coniferous Tree Removal Caliper Inches	2421.0
Deciduous Hardwood Removal Caliper Inches	586.5

Quality Rating	
4	Good
3	Fair
2	Poor
1	Bad
0	Dead

TOTAL TREE PLOT ASSESMENT AREAS (PHASE 1)

	Total Area (Acres)	Removal Area (Acres)	Caliper Inches per Acre	Total Caliper Inches	Total Caliper Inches Removed	Common Inches Removed	Conifer Inches Removed	Hardwood Inches removed
Area 4	4.39	2.23	1010.00	4433.90	2252.30	1013.54	337.85	900.92
Area 5	2.02	0.00	290.00	585.80	0.00	0.00	0.00	0.00
Area 6	7.43	5.94	1325.63	9849.39	7874.21	874.91	0.00	6999.30
Area 7	2.05	1.03	906.67	1858.67	933.87	700.40	0.00	233.47
Area 8	1.76	0.00	815.00	1434.40	0.00	0.00	0.00	0.00
Area 9	See individual tree shot information							
Area 11	8.24	0.00	1485.00	12236.40	0.00	0.00	0.00	0.00
Area 12	1.84	0.04	1707.50	3141.80	68.30	18.99	0.00	49.31
Totals:	27.73	9.24		33540.36	11128.68	2607.83	337.85	8183.00

Total caliper inches from all areas (Phase 1)	33,540.36
Common Tree RemovalCaliper Inches	2607.83
Coniferous Tree Removal Caliper Inches	337.85
Deciduous Hardwood Removal Caliper Inches	8183.00

SUMMARY (PHASE I)

Total caliper inches on the site	138,991.36
Allowable significant removal for the site (Allowable removal = 30% Total Significant DBH)	41,697.41
Common Tree RemovalCaliper Inches	5115.3
Coniferous Tree Removal Caliper Inches	2758.8
Deciduous Hardwood Removal Caliper Inches	8769.5
Total Removal Caliper Inches	16643.7
Total Replacement Caliper Inches for Phase 1	0.00

Removal for Phase 1	16643.68
Total on the site	÷ 138991.36
Percent Removed	11.97%

No replacement is required for Phase 1

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name Brian J. Krystofiak, P.E.
Signature
Date 9/21/16 License # 25063

Drawn ADB
Designed BJK
Date 9/21/16

Revisions
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

Save Date: 04/13/17 | F:\Jobs\0611 - 0640\0636 - Jordan Jacobs\Engineering\Trees\0636 trees 1st review.dwg

FUTURE PHASES INDIVIDUAL SHOTS

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
153	Cottonwood	14	3	1	Common Tree	Yes	X	
154	Cottonwood	10.5	3	1	Common Tree	No	Not Significant	
155	Cottonwood	15	2	3	Common Tree	Yes	X	
156	Tamarack	7.5	2	1	Coniferous	No	Not Significant	
157	Tamarack	12.5	3	1	Coniferous	Yes		X
158	Cottonwood	16.5	2	2	Common Tree	Yes		X
159	Cottonwood	17	3	1	Common Tree	Yes		X
160	Cottonwood	8.5	2	1	Common Tree	No	Not Significant	
176	Pine, White	13	3	1	Coniferous	Yes		X
177	Pine, White	11.5	3	1	Coniferous	Yes		X
178	Willow, Black	24	2	3	Common Tree	Yes		X
179	Willow, Black	30	2	2	Common Tree	Yes		X
180	Elm, Siberian	8	2	2	Common Tree	No	Not Significant	
181	Pine, White	12	3	1	Coniferous	Yes		X
182	Aspen, Quaking	11	2	1	Common Tree	No	Not Significant	
183	Oak, White	15	4	1	Deciduous Hardwood	Yes		X
184	Pine, White	13	3	1	Coniferous	Yes		X
232	Ash, Green	28	3	1	Common Tree	Yes	X	
233	Maple, Silver	51	3	1	Common Tree	Yes	X	
234	Maple, Silver	22.5	2	1	Common Tree	Yes	X	
235	Maple, Silver	25	2	1	Common Tree	Yes	X	
236	Maple, Sugar	56	3	1	Deciduous Hardwood	Yes	X	
237	Maple, Sugar	23	3	1	Deciduous Hardwood	Yes	X	
238	Maple, Silver	42	4	1	Common Tree	Yes	X	
239	Maple, Silver	38	4	1	Common Tree	Yes	X	
240	Maple, Silver	40.5	4	1	Common Tree	Yes	X	
241	Maple, Silver	28.5	4	1	Common Tree	Yes	X	
242	Maple, Silver	32	4	1	Common Tree	Yes	X	
243	Maple, Silver	37.5	4	1	Common Tree	Yes	X	
245	Maple, Amyr	6.5	1	4	Deciduous Hardwood	Yes	Bad Quality	
246	Spruce, Blue	15	3	1	Coniferous	Yes		X
247	Spruce, Blue	12.5	2	2	Coniferous	Yes		X
248	Spruce, Blue	12	3	1	Coniferous	Yes		X
249	Spruce, Blue	11	2	1	Coniferous	Yes		X
250	Spruce, Blue	14.5	3	1	Coniferous	Yes		X
251	Maple, Amyr	4	1	8	Deciduous Hardwood	No	Not Significant	
252	Maple, Amyr	4	1	8	Deciduous Hardwood	No	Not Significant	
253	Spruce, Blue	11	2	1	Coniferous	Yes		X
254	Spruce, Blue	8	2	1	Coniferous	Yes		X
255	Spruce, Blue	11	2	1	Coniferous	Yes		X
256	Spruce, Blue	9	2	1	Coniferous	Yes		X
257	Spruce, Blue	9	2	1	Coniferous	Yes		X
258	Spruce, Blue	11.5	2	1	Coniferous	Yes		X
259	Spruce, Blue	10	3	1	Coniferous	Yes		X
260	Spruce, Blue	9.5	3	1	Coniferous	Yes		X
261	Birch, Paper	15	3	1	Deciduous Hardwood	Yes		X
262	Ash, Green	14	2	1	Common Tree	Yes	X	
263	Ash, Green	20	2	1	Common Tree	Yes	X	
264	Ash, Green	12	2	1	Common Tree	Yes	X	
265	Ash, Green	13	2	1	Common Tree	Yes	X	
266	Ash, Green	17.5	2	1	Common Tree	Yes	X	
267	Ash, Green	17.5	2	1	Common Tree	Yes	X	
268	Ash, Green	18.5	2	1	Common Tree	Yes	X	
269	Ash, Green	21	2	1	Common Tree	Yes	X	
270	Ash, Green	12.5	2	1	Common Tree	Yes	X	
271	Ash, Green	22	2	1	Common Tree	Yes	X	
272	Ash, Green	16.5	2	1	Common Tree	Yes	X	
273	Ash, Green	18	2	1	Common Tree	Yes	X	
274	Ash, Green	21	2	1	Common Tree	Yes	X	
275	Ash, Green	18	2	1	Common Tree	Yes	X	
276	Ash, Green	22	2	1	Common Tree	Yes	X	
277	Ash, Green	19	2	2	Common Tree	Yes	X	
278	Ash, Green	14	2	2	Common Tree	Yes	X	
279	Ash, Green	20.5	2	1	Common Tree	Yes	X	
280	Ash, Green	24.5	2	1	Common Tree	Yes	X	
281	Ash, Green	24.5	2	1	Common Tree	Yes	X	
282	Elm, American	11	3	1	Common Tree	No	Not Significant	
283	Pine, Red	14.5	2	1	Coniferous	Yes	X	
284	Elm, Siberian	20	3	1	Common Tree	Yes	X	
285	Pine, Red	15	3	1	Coniferous	Yes	X	
286	Pine, Red	13.5	2	1	Coniferous	Yes	X	
287	Elm, Siberian	17	2	1	Common Tree	Yes	X	
288	Pine, Red	16.5	3	1	Coniferous	Yes	X	
289	Pine, Red	15.5	3	1	Coniferous	Yes	X	
290	Pine, Red	16.5	3	1	Coniferous	Yes	X	
291	Pine, Red	13.5	3	1	Coniferous	Yes	X	
292	Pine, Red	15	2	1	Coniferous	Yes	X	
293	Pine, Red	15.5	2	1	Coniferous	Yes	X	
294	Elm, Siberian	22	2	1	Common Tree	Yes	X	
295	Boxelder	14.5	2	1	Common Tree	Yes	X	
392	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
398	Oak, White	20	3	1	Deciduous Hardwood	Yes	X	
399	Oak, Red	32.5	3	1	Deciduous Hardwood	Yes	X	
400	Oak, White	21	3	2	Deciduous Hardwood	Yes		X
401	Maple, Silver	34	3	1	Common Tree	Yes		X
402	Maple, Silver	45.5	3	1	Common Tree	Yes		X
403	Basswood	14.5	0	1	Common Tree	Yes	Dead	
404	Oak, White	26	3	1	Deciduous Hardwood	Yes	X	
405	Oak, White	21.5	4	1	Deciduous Hardwood	Yes	X	
406	Oak, White	16	3	1	Deciduous Hardwood	Yes	X	
407	Oak, White	14	2	2	Deciduous Hardwood	Yes	X	
408	Oak, White	17	2	2	Deciduous Hardwood	Yes	X	
409	Oak, White	17.5	3	1	Deciduous Hardwood	Yes	X	
410	Oak, White	10	3	1	Deciduous Hardwood	Yes	X	
411	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
412	Oak, White	20	4	1	Deciduous Hardwood	Yes	X	
413	Oak, White	20.5	2	1	Deciduous Hardwood	Yes	X	
414	Oak, White	9	3	1	Deciduous Hardwood	Yes	X	
415	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
416	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
417	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
418	Oak, White	15	2	2	Deciduous Hardwood	Yes	X	
419	Oak, White	17	2	1	Deciduous Hardwood	Yes	X	
420	Oak, White	23	3	1	Deciduous Hardwood	Yes	X	
421	Oak, White	15	3	1	Deciduous Hardwood	Yes	X	
422	Oak, Burr	10.5	4	1	Deciduous Hardwood	Yes		X
423	Oak, White	28.5	4	1	Deciduous Hardwood	Yes	X	
424	Oak, White	12.5	3	1	Deciduous Hardwood	Yes		X
425	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
426	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
427	Oak, White	16.5	4	1	Deciduous Hardwood	Yes		X
428	Oak, White	23	2	2	Deciduous Hardwood	Yes		X
429	Oak, White	14	3	1	Deciduous Hardwood	Yes		X
430	Birch, Paper	16	2	1	Deciduous Hardwood	Yes	X	
431	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
432	Oak, Burr	19	3	1	Deciduous Hardwood	Yes		X
433	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
434	Oak, White	21.5	2	1	Deciduous Hardwood	Yes		X
435	Oak, White	14.5	3	1	Deciduous Hardwood	Yes	X	
436	Oak, White	17	2	2	Deciduous Hardwood	Yes		X
437	Oak, White	22	2	1	Deciduous Hardwood	Yes		X
438	Oak, White	18	2	1	Deciduous Hardwood	Yes		X
439	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
440	Oak, White	17.5	3	0	Deciduous Hardwood	Yes		X
441	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
442	Oak, White	18	3	1	Deciduous Hardwood	Yes		X
443	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
444	Oak, White	19.5	3	1	Deciduous Hardwood	Yes		X
445	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
446	Birch, Paper	12	2	1	Deciduous Hardwood	Yes		X
447	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
448	Oak, White	19	4	1	Deciduous Hardwood	Yes		X
449	Oak, White	15.5	3	1	Deciduous Hardwood	Yes		X
450	Oak, White	17	2	1	Deciduous Hardwood	Yes		X
451	Basswood	13	2	2	Common Tree	Yes		X
452	Basswood	15.5	3	1	Common Tree	Yes		X
453	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
454	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
455	Oak, White	14.5	2	1	Deciduous Hardwood	Yes	X	
456	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
457	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
458	Oak, White	13	2	1	Deciduous Hardwood	Yes		X
459	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
460	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
461	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
462	Oak, Burr	25	3	1	Deciduous Hardwood	Yes	X	
463	Oak, White	15.5	2	1	Deciduous Hardwood	Yes	X	
464	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
465	Oak, White	12	2	1	Deciduous Hardwood	Yes	X	
466	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
467	Oak, White	11.5	2	1	Deciduous Hardwood	Yes	X	
468	Oak, White	16	3	1	Deciduous Hardwood	Yes	X	
469	Oak, White	17	3	1	Deciduous Hardwood	Yes	X	
470	Oak, White	15	2	1	Deciduous Hardwood	Yes	X	
471	Oak, White	19	2	1	Deciduous Hardwood	Yes	X	
472	Oak, Burr	18.5	3	1	Deciduous Hardwood	Yes	X	
473	Oak, White	11.5	3	1	Deciduous Hardwood	Yes	X	
474	Oak, White	14.5	2	1	Deciduous Hardwood	Yes	X	
475	Oak, White	15	3	1	Deciduous Hardwood	Yes	X	
476	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
477	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
478	Oak, White	14	2	1	Deciduous Hardwood	Yes	X	
479	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
480	Oak, Burr	20	2	1	Deciduous Hardwood	Yes		X
481	Oak, White	21	3	1	Deciduous Hardwood	Yes		X
482	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
483	Oak, White	13.5	3	1	Deciduous Hardwood	Yes		X
484	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
485	Maple, Red	22	3	1	Deciduous Hardwood	Yes		X
486	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
487	Oak, White	23	1	1	Deciduous Hardwood	Yes	Bad Quality	
488	Oak, White	18	2	1	Deciduous Hardwood	Yes		X
489	Oak, Burr	27.5	2	1	Deciduous Hardwood	Yes		X
490	Oak, White	16.5	3	1	Deciduous Hardwood	Yes	X	
491	Oak, White	16.5	3	1	Deciduous Hardwood	Yes	X	
492	Oak, White	18.5	3	1	Deciduous Hardwood	Yes	X	
493	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
494	Oak, White	13	2	2	Deciduous Hardwood	Yes		X
495	Oak, White	16.5	3	1	Deciduous Hardwood	Yes		X
496	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
497	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
498	Oak, White	15	2	1	Deciduous Hardwood	Yes	X	
499	Oak, White	17	2	2	Deciduous Hardwood	Yes	X	
500	Oak, White	24.5	3	1	Deciduous Hardwood	Yes		X
501	Oak, White	25.5	4	1	Deciduous Hardwood	Yes	X	
502	Oak, White	22.5	4	1	Deciduous Hardwood	Yes	X	
503	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	
504	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
505	Oak, White	24.5	4	1	Deciduous Hardwood	Yes	X	
506	Oak, White	21	4	1	Deciduous Hardwood	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
507	Oak, White	20.5	4	1	Deciduous Hardwood	Yes	X	
508	Oak, White	29	4	1	Deciduous Hardwood	Yes		X
509	Oak, White	26.5	4	1	Deciduous Hardwood	Yes		X
510	Oak, White	21.5	4	1	Deciduous Hardwood	Yes		X
511	Oak, White	29.5	4	1	Deciduous Hardwood	Yes	X	
512	Oak, White	28.5	4	1	Deciduous Hardwood	Yes	X	
513	Oak, White	22.5	4	1	Deciduous Hardwood	Yes		X
514	Oak, White	29	4	1	Deciduous Hardwood	Yes		X
515	Oak, White	20	4	1	Deciduous Hardwood	Yes		X
516	Oak, White	26	4	1	Deciduous Hardwood	Yes		X
517	Oak, White	23.5	4	1	Deciduous Hardwood	Yes	X	
518	Oak, White	29.5	4	1	Deciduous Hardwood	Yes	X	
519	Oak, White	23	4	1	Deciduous Hardwood	Yes		X
520	Oak, White	26.5	4	1	Deciduous Hardwood	Yes		X
521	Oak, White	22.5	4	1	Deciduous Hardwood	Yes		X
522	Oak, White	24	4	1	Deciduous Hardwood	Yes		X
523	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
524	Oak, White	28	4	1	Deciduous Hardwood	Yes	X	
525	Oak, White	26.5	4	1	Deciduous Hardwood	Yes	X	
526	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	
527	Oak, White	19.5	4	1	Deciduous Hardwood	Yes	X	
528	Maple, Sugar	11	3	1	Deciduous Hardwood	Yes	X	
529	Oak, White	27	4	1	Deciduous Hardwood	Yes	X	
530	Ash, Green	10.5	3	1	Common Tree	No	Not Significant	
531	Oak, White	28	4	1	Deciduous Hardwood	Yes		X
532	Oak, White	20.5	4	1	Deciduous Hardwood	Yes		X
533	Maple, Amur	13.5	2	1	Deciduous Hardwood	Yes	X	
534	Maple, Amur	11	2	1	Deciduous Hardwood	Yes	X	
535	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
536	Spruce, White	18.5	3	1	Coniferous	Yes	X	
537	Spruce, White	13.5	2	1	Coniferous	Yes	X	
538	Pine, Red	27	3	1	Coniferous	Yes	X	
539	Spruce, White	19.5	4	1	Coniferous	Yes	X	
591	Elm, Siberian	13	2	1	Common Tree	Yes		X
592	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
593	Oak, White	13	3	1	Deciduous Hardwood	Yes		X
594	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
595	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
596	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
597	Oak, Burr	12.5	2	2	Deciduous Hardwood	Yes		X
598	Oak, Red	19	3	1	Deciduous Hardwood	Yes		X
599	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
600	Oak, White	10.5	3	1	Deciduous Hardwood	Yes		X
601	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
602	Oak, White	25	4	1	Deciduous Hardwood	Yes		X
603	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
604	Oak, White	16.5	4	1	Deciduous Hardwood	Yes		X
605	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
606	Oak, White	21.5	4	1	Deciduous Hardwood	Yes		X
607	Oak, White	25.5	3	1	Deciduous Hardwood	Yes		X
608	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
609	Oak, White	12.5	3	1	Deciduous Hardwood	Yes		X
610	Oak, White	13	0	1	Deciduous Hardwood	Yes	Dead	
611	Oak, White	26.5	3	1	Deciduous Hardwood	Yes		X
612	Oak, Red	7.5	2	1	Deciduous Hardwood	Yes		X
613	Oak, Red	9	3	1	Deciduous Hardwood	Yes		X
614	Oak, White	24	3	1	Deciduous Hardwood	Yes		X
615	Oak, White	29.5	4	1	Deciduous Hardwood	Yes		X
616	Birch, Paper	11	1	1	Deciduous Hardwood	Yes	Bad Quality	
617	Birch, Paper	8.5	2	1	Deciduous Hardwood	Yes		X
618	Oak, White	11	2	1	Deciduous Hardwood	Yes		X
619	Oak, White	25	4	1	Deciduous Hardwood	Yes		X
620	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
621	Oak, White	13	4	2	Deciduous Hardwood	Yes		X
622	Oak, White	17	2	1	Deciduous Hardwood	Yes		X
623	Basswood	16.5	3	1	Common Tree	Yes		X
624	Oak, Red	17	4	1	Deciduous Hardwood	Yes		X
625	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
626	Oak, White	23.5	4	1	Deciduous Hardwood	Yes		X
627	Oak, White	26	3	1	Deciduous Hardwood	Yes		X
628	Oak, White	28	3	1	Deciduous Hardwood	Yes		X
629	Oak, White	17	3	2	Deciduous Hardwood	Yes		X
630	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
631	Oak, White	14	3	1	Deciduous Hardwood	Yes		X
632	Oak, White	13.5	3	1	Deciduous Hardwood	Yes		X
633	Cherry, Black	9	3	1	Deciduous Hardwood	Yes		X
634	Cherry, Black	9.5	3	1	Deciduous Hardwood	Yes		X
635	Birch, Paper	7.5	2	2	Deciduous Hardwood	Yes		X
636	Birch, Paper	6.5	2	2	Deciduous Hardwood	Yes		X
637	Oak, White	31	3	1	Deciduous Hardwood	Yes	X	
638	Oak, Red	21	2	2	Deciduous Hardwood	Yes	X	
639	Oak, Red	15.5	3	1	Deciduous Hardwood	Yes	X	
640	Elm, Siberian	11	3	1	Common Tree	No	Not Significant	
641	Oak, Red	8	3	1	Deciduous Hardwood	Yes	X	
642	Oak, Red	7	2	1	Deciduous Hardwood	Yes	X	
643	Elm, Siberian	14	3	1	Common Tree	Yes	X	
644	Oak, Red	13.5	2	1	Deciduous Hardwood	Yes	X	
645	Oak, Red	12.5	3	1	Deciduous Hardwood	Yes		X
646	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
647	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
648	Oak, White	15.5	1	1	Deciduous Hardwood	Yes	Bad Quality	
649	Aspen, Quaking	11	3	1	Common Tree	No	Not Significant	
650	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
651	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
652	Oak, White	16	2	1	Deciduous Hardwood	Yes		X

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1311	Ash, Green	12	2	1	Common Tree	Yes	X	
1312	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1313	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1314	Ash, Green	9.5	2	2	Common Tree	No	Not Significant	
1315	Ash, Green	9.5	2	1	Common Tree	No	Not Significant	
1316	Elm, Siberian	8	2	1	Common Tree	No	Not Significant	
1317	Elm, Siberian	8.5	2	1	Common Tree	No	Not Significant	
1318	Elm, Siberian	9	2	1	Common Tree	No	Not Significant	
1319	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1320	Ash, Green	8	3	1	Common Tree	No	Not Significant	
1321	Ash, Green	23	3	1	Common Tree	Yes	X	
1322	Ash, Green	13	2	2	Common Tree	Yes	X	
1323	Ash, Green	16	2	1	Common Tree	Yes	X	
1324	Elm, Siberian	11.5	2	1	Common Tree	No	Not Significant	
1325	Oak, Burr	9	3	1	Deciduous Hardwood	Yes	X	
1326	Oak, Burr	7	2	1	Deciduous Hardwood	Yes	X	
1327	Oak, Burr	5.5	2	1	Deciduous Hardwood	No	Not Significant	
1328	Oak, Burr	19	3	1	Deciduous Hardwood	Yes	X	
1329	Ash, Green	8	3	1	Common Tree	No	Not Significant	
1330	Ash, Green	8.5	2	3	Common Tree	No	Not Significant	
1331	Maple, Silver	6	2	1	Common Tree	No	Not Significant	
1332	Ash, Green	6	2	1	Common Tree	No	Not Significant	
1333	Boxelder	8.5	2	2	Common Tree	No	Not Significant	
1334	Maple, Silver	37	3	1	Common Tree	Yes	X	
1335	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1336	Ash, Green	7	2	1	Common Tree	No	Not Significant	
1337	Ash, Green	7	2	1	Common Tree	No	Not Significant	
1338	Ash, Green	10	2	1	Common Tree	No	Not Significant	
1339	Elm, American	8	2	1	Common Tree	No	Not Significant	
1340	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1341	Ash, Green	8.5	2	1	Common Tree	No	Not Significant	
1342	Ash, Green	15	2	1	Common Tree	Yes	X	
1343	Elm, American	7	2	1	Common Tree	No	Not Significant	
1344	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1345	Ash, Green	9	2	1	Common Tree	No	Not Significant	
1346	Ash, Green	10	3	1	Common Tree	No	Not Significant	
1347	Ash, Green	9	2	2	Common Tree	No	Not Significant	
1348	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1349	Cottonwood	14	3	1	Common Tree	Yes		X
1350	Cottonwood	14	3	1	Common Tree	Yes		X
1351	Cottonwood	12	3	1	Common Tree	Yes		X
1352	Ash, Green	9	2	2	Common Tree	No	Not Significant	
1353	Ash, Green	8	2	2	Common Tree	No	Not Significant	
1354	Ash, Green	9.5	2	1	Common Tree	No	Not Significant	
1355	Ash, Green	11	2	2	Common Tree	No	Not Significant	
1356	Ash, Green	11	2	2	Common Tree	No	Not Significant	
1357	Maple, Silver	7	3	1	Common Tree	No	Not Significant	
1358	Elm, American	8	2	1	Common Tree	No	Not Significant	
1359	Elm, American	7	1	1	Common Tree	No	Not Significant	
1360	Ash, Green	8.5	2	1	Common Tree	No	Not Significant	
1361	Cottonwood	13	2	1	Common Tree	Yes		X
1362	Ash, Green	8	2	0	Common Tree	No	Not Significant	
1363	Elm, Siberian	10	2	1	Common Tree	No	Not Significant	
1364	Elm, American	7.5	2	2	Common Tree	No	Not Significant	
1365	Elm, American	9.5	3	1	Common Tree	No	Not Significant	
1366	Elm, American	8	2	1	Common Tree	No	Not Significant	
1367	Cottonwood	6	2	1	Common Tree	No	Not Significant	
1368	Elm, American	14	2	2	Common Tree	Yes		X
1369	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1370	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1371	Ash, Green	6	2	1	Common Tree	No	Not Significant	
1372	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1373	Elm, American	11	2	1	Common Tree	No	Not Significant	
1374	Ash, Green	5.5	2	2	Common Tree	No	Not Significant	
1375	Cottonwood	13	3	1	Common Tree	Yes		X
1376	Boxelder	11	2	2	Common Tree	No	Not Significant	
1377	Cottonwood	11.5	2	1	Common Tree	No	Not Significant	
1378	Elm, American	11	2	1	Common Tree	No	Not Significant	
1379	Cottonwood	14	2	2	Common Tree	Yes	X	
1380	Cottonwood	16	2	2	Common Tree	Yes	X	
1381	Cottonwood	17	2	2	Common Tree	Yes	X	
1382	Maple, Silver	7	2	2	Common Tree	No	Not Significant	
1383	Cottonwood	12	3	1	Common Tree	Yes	X	
1384	Cottonwood	12.5	2	1	Common Tree	Yes		X
1385	Cottonwood	9	2	1	Common Tree	No	Not Significant	
1386	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1387	Elm, American	9.5	2	1	Common Tree	No	Not Significant	
1388	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1389	Elm, Siberian	17	2	1	Common Tree	Yes	X	
1390	Ash, Green	8	2	3	Common Tree	No	Not Significant	
1391	Pine, White	16	3	1	Coniferous	Yes	X	
1392	Pine, White	16	3	1	Coniferous	Yes	X	
1393	Pine, White	8	2	2	Coniferous	Yes	X	
1394	Ash, Green	15.5	3	1	Common Tree	Yes	X	
1395	Oak, Red	8	3	1	Deciduous Hardwood	Yes		X
1396	Oak, Red	10.5	3	1	Deciduous Hardwood	Yes		X
1397	Oak, Red	16	2	1	Deciduous Hardwood	Yes		X
1398	Oak, Burr	14	2	1	Deciduous Hardwood	Yes		X
1399	Oak, Burr	31	3	1	Deciduous Hardwood	Yes		X
1400	Oak, Burr	13	3

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1406	Oak, White	16	2	3	Deciduous Hardwood	Yes		X
1407	Oak, Burr	10	2	1	Deciduous Hardwood	Yes		X
1408	Oak, Red	10	2	2	Deciduous Hardwood	Yes		X
1409	Oak, Red	10	3	1	Deciduous Hardwood	Yes		X
1410	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1411	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1412	Ash, Green	14.5	2	1	Common Tree	Yes		X
1413	Boxelder	13	2	1	Common Tree	Yes		X
1414	Boxelder	17.5	2	1	Common Tree	Yes		X
1415	Boxelder	20	2	1	Common Tree	Yes		X
1416	Ash, Green	10	2	2	Common Tree	No	Not Significant	
1417	Ash, Green	10	2	1	Common Tree	No	Not Significant	
1418	Ash, Green	18	2	1	Common Tree	Yes		X
1419	Ash, Green	13	2	1	Common Tree	Yes		X
1420	Cherry, Black	11.5	2	1	Deciduous Hardwood	Yes		X
1421	Oak, Burr	23	2	1	Deciduous Hardwood	Yes		X
1422	Oak, White	33	1	1	Deciduous Hardwood	Yes	Bad Quality	
1423	Oak, Burr	11	3	1	Deciduous Hardwood	Yes		X
1424	Oak, Burr	7	2	1	Deciduous Hardwood	Yes		X
1425	Oak, Red	10	2	1	Deciduous Hardwood	Yes		X
1426	Oak, White	31.5	3	1	Deciduous Hardwood	Yes	X	
1427	Oak, Burr	23	4	1	Deciduous Hardwood	Yes	X	
1428	Oak, Burr	31	4	1	Deciduous Hardwood	Yes	X	
1429	Oak, White	35	1	1	Deciduous Hardwood	Yes	Bad Quality	
1430	Oak, White	19.5	3	1	Deciduous Hardwood	Yes	X	
1431	Basswood	14	2	1	Common Tree	Yes	X	
1432	Oak, White	27	4	1	Deciduous Hardwood	Yes	X	
1433	Ash, Green	19	2	1	Common Tree	Yes	X	
1434	Oak, White	24.5	4	1	Deciduous Hardwood	Yes	X	
1435	Maple, Sugar	28.5	3	1	Deciduous Hardwood	Yes	X	
1436	Ginkgo	13	2	1	Common Tree	Yes	X	
1437	Spruce, White	22.5	3	1	Coniferous	Yes	X	
1438	Spruce, White	19	3	1	Coniferous	Yes	X	
1439	Oak, Burr	22	4	1	Deciduous Hardwood	Yes	X	
1440	Oak, Burr	21.5	4	1	Deciduous Hardwood	Yes	X	
1441	Oak, Burr	28.5	4	1	Deciduous Hardwood	Yes		X
1442	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1443	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1444	Oak, Burr	29.5	3	1	Deciduous Hardwood	Yes		X
1445	Spruce, White	21.5	3	1	Coniferous	Yes		X
1446	Oak, Burr	28.5	4	1	Deciduous Hardwood	Yes		X
1447	Pine, Red	16.5	3	1	Coniferous	Yes		X
1448	Pine, Red	23.5	2	1	Coniferous	Yes		X
1449	Pine, Red	30	3	1	Coniferous	Yes		X
1450	Pine, Red	21.5	2	1	Coniferous	Yes		X
1451	Oak, White	28	3	1	Deciduous Hardwood	Yes		X
1452	Pine, Red	20	2	1	Coniferous	Yes		X
1453	Pine, Red	20	0	1	Coniferous	Yes	Dead	
1454	Oak, White	25.5	4	1	Deciduous Hardwood	Yes		X
1455	Oak, White	20	2	2	Deciduous Hardwood	Yes		X
1456	Oak, White	19.5	2	2	Deciduous Hardwood	Yes		X
1457	Oak, White	31.5	2	1	Deciduous Hardwood	Yes		X
1458	Oak, White	28.5	4	1	Deciduous Hardwood	Yes		X
1459	Oak, White	24.5	4	1	Deciduous Hardwood	Yes		X
1460	Ash, Green	12	2	1	Common Tree	Yes		X
1461	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
1462	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
1463	Oak, White	11	3	1	Deciduous Hardwood	Yes		X
1464	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
1465	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
1466	Oak, White	23	4	1	Deciduous Hardwood	Yes		X
1467	Oak, White	18	3	1	Deciduous Hardwood	Yes		X
1468	Oak, White	30.5	4	1	Deciduous Hardwood	Yes	X	
1469	Oak, White	20	4	1	Deciduous Hardwood	Yes	X	
1470	Oak, White	21.5	4	1	Deciduous Hardwood	Yes	X	
1471	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
1472	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
1473	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
1474	Oak, White	26	3	1	Deciduous Hardwood	Yes		X
1475	Oak, White	26.5	2	1	Deciduous Hardwood	Yes		X
1476	Oak, White	34.5	4	1	Deciduous Hardwood	Yes		X
1477	Oak, White	30.5	4	1	Deciduous Hardwood	Yes		X
1478	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
1479	Oak, White	32.5	4	1	Deciduous Hardwood	Yes		X
1480	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1481	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1482	Oak, White	25	3	1	Deciduous Hardwood	Yes	X	
1483	Oak, White	22.5	4	1	Deciduous Hardwood	Yes	X	
1484	Oak, White	20.5	4	1	Deciduous Hardwood	Yes	X	
1485	Oak, White	22	4	1	Deciduous Hardwood	Yes	X	
1486	Oak, White	25	3	1	Deciduous Hardwood	Yes	X	
1487	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1488	Maple, Sugar	16	2	1	Deciduous Hardwood	Yes	X	
1489	Oak, White	28	4	1	Deciduous Hardwood	Yes		X
1490	Oak, White	25	4	1	Deciduous Hardwood	Yes	X	
1491	Oak, White	31.5	4	1	Deciduous Hardwood	Yes		X
1492	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
1493	Ash, Green	13.5	2	1	Common Tree	Yes		X
1494	Basswood	17.5	2	1	Common Tree	Yes	X	
1495	Basswood	16	4	1	Common Tree	Yes	X	
1497	Maple, Silver	20	3	2	Common Tree	Yes		X
1498	Maple, Silver	34	2	2	Common Tree	Yes	X	
1499	Basswood	13	1	1	Common Tree	Yes	Bad Quality	
1500	Oak, White	24	3	1	Deciduous Hardwood	Yes	X	
2556	Willow, black	62.0	3	8	Common Tree	Yes		X

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
2557	Willow, black	58.0	3	1	Common Tree	Yes		X
2562	Cottonwood	26.0	4	1	Common Tree	Yes		X
2565	Willow, black	16.0	2	3	Common Tree	Yes		X
2566	Cottonwood	16.0	4	1	Common Tree	Yes		X
5000	Maple, silver	27.0	4	1	Common Tree	Yes		X
5001	Maple, silver	25.0	4	1	Common Tree	Yes		X
5002	Maple, silver	24.0	3	1	Common Tree	Yes		X
5003	Maple, silver	34.0	4	1	Common Tree	Yes		X
5004	Ash, green	14.0	4	1	Common Tree	Yes		X
5005	Ash, green	20.0	4	1	Common Tree	Yes		X
5006	Ash, green	20.0	3	1	Common Tree	Yes		X
5007	Ash, green	12.0	3	1	Common Tree	Yes		X
5008	Ash, green	18.0	4	1	Common Tree	Yes		X
5009	Ash, green	23.0	4	1	Common Tree	Yes		X
5010	Ash, green	20.0	4	1	Common Tree	Yes		X
5011	Ash, green	22.0	4	1	Common Tree	Yes		X
5012	Ash, green	28.0	3	1	Common Tree	Yes		X
5013	Ash, green	22.0	4	1	Common Tree	Yes		X
5014	Ash, green	19.0	4	1	Common Tree	Yes		X
5015	Ash, green	22.0	4	1	Common Tree	Yes		X
5016	Ash, green	32.0	3	1	Common Tree	Yes		X
5017	Ash, green	20.0	4	1	Common Tree	Yes		X
5018	Ash, green	32.0	3	1	Common Tree	Yes		X
5019	Ash, green	26.0	4	1	Common Tree	Yes		X
5020	Birch, paper	14.0	3	1	Deciduous Hardwood	Yes		X
5021	Birch, paper	10.0	3	2	Deciduous Hardwood	Yes		X
5022	Birch, paper	11.0	3	2	Deciduous Hardwood	Yes		X
5023	Basswood	14.0	1	2	Common Tree	No	Bad Quality	
5024	Maple, silver	40.0	3	3	Common Tree	Yes		X
5025	Maple, silver	13.0	3	1	Common Tree	Yes		X
5026	Maple, silver	22.0	3	1	Common Tree	Yes		X
5027	Ash, green	20.0	4	1	Common Tree	Yes		X
5027	Maple, silver	12.0	3	1	Common Tree	Yes		X
5028	Maple, silver	14.0	3	1	Common Tree	Yes		X
5029	Maple, silver	14.0	3	1	Common Tree	Yes		X
5030	Maple, silver	18.0	2	2	Common Tree	Yes		X
5031	Maple, silver	24.0	3	1	Common Tree	Yes		X
5032	Maple, silver	58.0	3	8	Common Tree	Yes		X
5033	Ash, green	26.0	4	1	Common Tree	Yes		X
5034	Ash, green	32.0	4	1	Common Tree	Yes		X
5035	Ash, green	20.0	4	1	Common Tree	Yes		X
5036	Oak, red	18.0	4	1	Deciduous Hardwood	Yes		X
5037	Oak, red	11.0	4	1	Deciduous Hardwood	Yes		X
5038	Pine, Scots	13.0	3	1	Coniferous	Yes		X
5039	Oak, bur	28.0	4	1	Deciduous Hardwood	Yes		X
5040	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5041	Oak, pin	18.0	4	1	Deciduous Hardwood	Yes		X
5042	Oak, pin	25.0	4	1	Deciduous Hardwood	Yes		X
5043	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5044	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5045	Boxelder	14.0	3	1	Common Tree	Yes		X
5046	Oak, pin	27.0	3	1	Deciduous Hardwood	Yes		X
5047	Oak, red	17.0	4	1	Deciduous Hardwood	Yes		X
5048	Oak, red	27.0	4	1	Deciduous Hardwood	Yes		X
5049	Boxelder	15.0	3	1	Common Tree	Yes		X
5050	Boxelder	20.0	3	1	Common Tree	Yes		X
5051	Maple, sugar	14.0	4	1	Deciduous Hardwood	Yes		X
5052	Pine, Scots	14.0	3	1	Coniferous	Yes		X
5053	Pine, Scots	28.0	3	2	Coniferous	Yes		X
5054	Maple, red	13.0	4	1	Deciduous Hardwood	Yes		X
5055	Maple, red	15.0	4	1	Deciduous Hardwood	Yes		X
5056	Maple, red	13.0	4	1	Deciduous Hardwood	Yes		X
5058	Spruce, blue	8.0	4	1	Coniferous	Yes		X
5058	Basswood	28.0	4	1	Common Tree	Yes		X
5059	Spruce, blue	8.0	4	1	Coniferous	Yes		X
5060	Ash, green	15.0	2	1	Common Tree	Yes		X
5061	Basswood	20.0	4	1	Common Tree	Yes		X
5062	Basswood	22.0	4	1	Common Tree	Yes		X
5063	Maple, red	13.0	2	1	Deciduous Hardwood	Yes		X
5064	Basswood	17.0	3	1	Common Tree	Yes	X	
5065	Pine, red	18.0	4	1	Coniferous	Yes	X	
5066	Pine, red	14.0	4	1	Coniferous	Yes	X	
5067	Pine, red	14.0	4	1	Coniferous	Yes	X	
5068	Pine, red	14.0	4	1	Coniferous	Yes	X	
5069	Pine, red	14.0	4	1	Coniferous	Yes		X
5070	Pine, red	14.0	4	1	Coniferous	Yes		X
5071	Pine, red	10.0	4	1	Coniferous	Yes		X
5072	Pine, red	16.0	4	1	Coniferous	Yes		X
5073	Pine, red	10.0	4	1	Coniferous	Yes		X
5074	Pine, red	11.0	4	1	Coniferous	Yes		X
5075	Pine, red	10.0	4	1	Coniferous	Yes		X
5076	Pine, red	14.0	4	1	Coniferous	Yes		X
5077	Pine, red	13.0	4	1	Coniferous	Yes		X
5078	Pine, red	11.0	4	1	Coniferous	Yes		X
5079	Pine, red	10.0	3	1	Coniferous	Yes	X	
5080	Pine, red	12.0	4	1	Coniferous	Yes	X	
5081	Pine, red	14.0	4	1	Coniferous	Yes	X	
5082	Pine, red	11.0	4	1	Coniferous	Yes	X	
5084	Pine, red	16.0	3	1	Coniferous	Yes	X	
5084	Pine, red	13.0	4	1	Coniferous	Yes	X	
5085	Pine, red	13.0	4	1	Coniferous	Yes	X	
5087	Pine, red	13.0	4	1	Coniferous	Yes	X	
5087	Pine, red	8.0	3	1	Coniferous	Yes	X	
5088	Pine, red	14.0	4	1	Coniferous	Yes	X	
5089	Pine, red	13.0	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
5090	Pine, red	12.0	4	1	Coniferous	Yes	X	
5091	Pine, red	14.0	4	1	Coniferous	Yes	X	
5093	Pine, red	14.0	4	1	Coniferous	Yes	X	
5094	Pine, red	10.0	3	1	Coniferous	Yes	X	
5095	Pine, red	16.0	4	1	Coniferous	Yes	X	
5096	Pine, red	8.0	4	1	Coniferous	Yes	X	
5097	Pine, red	10.0	3	1	Coniferous	Yes	X	
5098	Pine, red	13.0	4	1	Coniferous	Yes	X	
5099	Pine, red	12.0	4	1	Coniferous	Yes	X	
5100	Pine, red	10.0	4	1	Coniferous	Yes	X	
5101	Pine, red	11.0	4	1	Coniferous	Yes	X	
5102	Pine, red	16.0	4	1	Coniferous	Yes	X	
5104	Pine, red	14.0	4	1	Coniferous	Yes	X	
5104	Pine, red	16.0	4	1	Coniferous	Yes	X	
5105	Pine, red	12.0	4	1	Coniferous	Yes	X	
5107	Pine, red	11.0	4	1	Coniferous	Yes	X	
5107	Pine, red	13.0	4	1	Coniferous	Yes	X	
5108	Pine, red	14.0	4	1	Coniferous	Yes	X	
5109	Pine, red	12.0	4	1	Coniferous	Yes	X	
5110	Pine, red	12.0	4	1	Coniferous	Yes	X	
5111	Pine, red	12.0	4	1	Coniferous	Yes	X	
5112	Pine, red	12.0	4	1	Coniferous	Yes	X	
5113	Pine, red	12.0	4	1	Coniferous	Yes	X	
5114	Pine, red	8.0	3	1	Coniferous	Yes	X	
5115	Pine, red	13.0	3	1	Coniferous	Yes	X	
5116	Pine, red	11.0	4	1	Coniferous	Yes	X	
5117	Pine, red	13.0	4	1	Coniferous	Yes	X	
5118	Pine, red	12.0	4	1	Coniferous	Yes	X	
5119	Pine, red	14.0	4	1	Coniferous	Yes	X	
5120	Pine, red	13.0	4	1	Coniferous	Yes	X	
5121	Pine, red	12.0	3	1	Coniferous	Yes	X	
5122	Pine, red	8.0	3	1	Coniferous	Yes	X	
5123	Pine, red	14.0	4	1	Coniferous	Yes	X	
5124	Pine, red	16.0	4	1	Coniferous	Yes	X	
5125	Boxelder	13.0	3	1	Common Tree	Yes	X	
5126	Pine, red	13.0	4	1	Coniferous	Yes	X	
5127	Pine, red	8.0	3	1	Coniferous	Yes	X	
5128	Pine, red	10.0	3	1	Coniferous	Yes	X	
5129	Pine, red	14.0	4	1	Coniferous	Yes	X	
5130	Maple, silver	47.0	1	5	Common Tree	Yes	Bad Quality	
5131	Boxelder	16.0	3	1	Common Tree	Yes	X	
5132	Boxelder	20.0	2	1	Common Tree	Yes	X	
5132	Boxelder	18.0	3	1	Common Tree	Yes	X	
5133	Boxelder	24.0	3	1	Common Tree	Yes	X	
5134	Maple, silver	12.0	3	1	Common Tree	Yes	X	
5135	Maple, silver	16.0	3	2	Common Tree	Yes	X	
5136	Boxelder	13.0	3	2	Common Tree	Yes	X	
5137	Maple, silver	28.0	4	1	Common Tree	Yes	X	
5138	Maple, silver	13.0	3	2	Common Tree	Yes	X	
5139	Boxelder	15.0	4	1	Common Tree	Yes	X	
5140	Pine, white	8.0	4	1	Coniferous	Yes		X
5141	Birch, paper	10.0	3	1	Deciduous Hardwood	Yes		X
5142	Birch, paper	8.0	3	2	Deciduous Hardwood	Yes		X
5143	Pine, white	10.0	4	1	Coniferous	Yes		X
5144	Birch, paper	10.0	3	1	Deciduous Hardwood	Yes		X
5145	Birch, paper	12.0	3	1	Deciduous Hardwood	Yes		X
5146	Oak, bur	6.0	3	1	Deciduous Hardwood	Yes		X
5147	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5148	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5149	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5150	Boxelder	14.0	3	1	Common Tree	Yes	X	
5151	Willow, black	22.0	1	2	Common Tree	Yes	Bad Quality	
5152	Willow, black	24.0	1	2	Common Tree	Yes	Bad Quality	
5153	Willow, black	22.0	1	1	Common Tree	Yes	Bad Quality	
5154	Boxelder	13.0	3	1	Common Tree	Yes	X	
5155	Oak, bur	6.0	4	1	Deciduous Hardwood	Yes		X
5156	Boxelder	12.0	3	1	Common Tree	Yes		X
5157	Boxelder	14.0	3	1	Common Tree	Yes		X
5158	Willow, black	15.0	2	1	Common Tree	Yes	X	
5159	Boxelder	13.0	3	1	Common Tree	Yes		X
5160	Boxelder	14.0	4	1	Common Tree	Yes	X	
5161	Boxelder	14.0	3	1	Common Tree	Yes	X	
5162	Boxelder	16.0	3	1	Common Tree	Yes		X
5163	Boxelder	14.0	3	2	Common Tree	Yes	X	
5164	Boxelder	15.0	3	1	Common Tree	Yes		X
5165	Boxelder	12.0	4	1	Common Tree	Yes		X
5166	Cottonwood	26.0	3	2	Common Tree	Yes		X
5167	Cottonwood	22.0	4	1	Common Tree	Yes		X
5168	Elm, Siberian	12.0	4	1	Common Tree	Yes		X
10047	Pine, Austrian	17.5	3	1	Coniferous	Yes	X	
10048	Pine, Austrian	14.5	3	1	Coniferous	Yes	X	
10049	Spruce, blue	21.0	3	1	Coniferous	Yes	X	
10050	Spruce, blue	21.5	3	1	Coniferous	Yes	X	
10051	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10052	Spruce, blue	20.0	3	1	Coniferous	Yes	X	
10053	Spruce, blue	16.5	3	1	Coniferous	Yes	X	
10054	Tamarack	8.0	4	1	Coniferous	Yes	X	
10055	Tamarack	8.0	4	1	Coniferous	Yes	X	
10056	Tamarack	8.0	4	1	Coniferous	Yes	X	
10057	Tamarack	19.0	4	1	Coniferous	Yes	X	
10058	Maple, silver	31.0	4	1	Common Tree	Yes	X	
10059	Oak, red	33.0	3	1	Deciduous Hardwood	Yes	X	
10060	Cottonwood	81.0	4	1	Common Tree	Yes	X	
10061	Maple, silver	43.0	3	1	Common Tree	Yes	X	
10062	Maple, silver	55.0	3	1	Common Tree	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10063	Maple, silver	42.0	3	1	Common Tree	Yes	X	
10064	Maple, silver	26.5	4	1	Common Tree	Yes	X	
10065	Ash, green	21.0	4	1	Common Tree	Yes	X	
10066	Maple, silver	42.0	4	1	Common Tree	Yes	X	
10067	Maple, silver	34.0	4	1	Common Tree	Yes	X	
10068	Maple, sugar	18.5	4	1	Deciduous Hardwood	Yes	X	
10069	Maple, sugar	20.0	4	1	Deciduous Hardwood	Yes	X	
10070	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10071	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10072	Maple, sugar	27.0	4	1	Deciduous Hardwood	Yes	X	
10073	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10074	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10075	Oak, bur	10.0	4	1	Deciduous Hardwood	Yes	X	
10076	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10077	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10078	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10079	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10080	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10081	Oak, bur	10.5	4	1	Deciduous Hardwood	Yes	X	
10082	Oak, bur	6.5	3	1	Deciduous Hardwood	Yes	X	
10083	Oak, bur	34.0	4	1	Deciduous Hardwood	Yes	X	
10084	Oak, bur	15.5	4	1	Deciduous Hardwood	Yes	X	
10085	Oak, bur	29.0	4	1	Deciduous Hardwood	Yes	X	
10086	Oak, bur	17.5	4	1	Deciduous Hardwood	Yes	X	
10087	Oak, bur	22.0	4	1	Deciduous Hardwood	Yes	X	
10088	Maple, silver	36.0	3	1	Common Tree	Yes	X	
10089	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10090	Oak, red	46.0	2	1	Deciduous Hardwood	Yes	X	
10091	Cherry, black	28.0	4	1	Deciduous Hardwood	Yes	X	
10092	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10093	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10094	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10095	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10096	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10097	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10098	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10099	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10100	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10101	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10102	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10103	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10104	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10105	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10106	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10107	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10108	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10109	Oak, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10110	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10111	Oak, red	6.0	3	1	Deciduous Hardwood	Yes	X	
10112	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10113	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10114	Oak, red	15.0	4	1	Deciduous Hardwood	Yes	X	
10115	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10116	Oak, red	8.0	4	1	Deciduous Hardwood	Yes	X	
10117	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10118	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10119	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10120	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10121	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10122	Boxelder	13.5	3	1	Common Tree	Yes	X	
10123	Boxelder	13.0	4	1	Common Tree	Yes	X	
10124	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10125	Oak, red	26.5	4	2	Deciduous Hardwood	Yes	X	
10126	Oak, red	16.0	3	2	Deciduous Hardwood	Yes	X	
10127	Oak, red	23.0	4	2	Deciduous Hardwood	Yes	X	
10128	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10129	Birch, paper	7.5	4	1	Deciduous Hardwood	Yes	X	
10130	Elm, American	13.5	4	1	Common Tree	Yes	X	
10131	Boxelder	40.0	3	3	Common Tree	Yes	X	
10132	Ash, green	8.5	3	1	Common Tree	No	Not Significant	
10133	Elm, American	13.0	3	1	Common Tree	Yes	X	
10134	Elm, American	15.0	3	1	Common Tree	Yes	X	
10135	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10136	Oak, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10137	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10138	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10139	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10140	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10141	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10142	Elm, American	15.0	4	1	Common Tree	Yes	X	
10143	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10144	Oak, red	28.0	4	1	Deciduous Hardwood	Yes	X	
10145	Boxelder	12.5	4	1	Common Tree	Yes	X	
10146	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10147	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10148	Oak, red	13

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10158	Oak, red	19.0	3	2	Deciduous Hardwood	Yes	X	
10159	Elm, American	12.5	4	1	Common Tree	Yes	X	
10160	Elm, American	14.0	4	1	Common Tree	Yes	X	
10161	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10162	Oak, red	22.0	3	2	Deciduous Hardwood	Yes	X	
10163	Elm, American	14.0	3	1	Common Tree	Yes	X	
10164	Cherry, black	12.0	4	1	Deciduous Hardwood	Yes	X	
10165	Oak, white	30.0	4	1	Deciduous Hardwood	Yes	X	
10166	Aspen	12.5	4	1	Common Tree	Yes	X	
10167	Ash, green	8.0	4	1	Common Tree	No	Not Significant	
10168	Boxelder	12.5	4	1	Common Tree	Yes	X	
10169	Oak, white	20.5	4	1	Deciduous Hardwood	Yes	X	
10170	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10171	Oak, red	9.0	3	1	Deciduous Hardwood	Yes	X	
10172	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10173	Oak, white	22.0	3	1	Deciduous Hardwood	Yes	X	
10174	Oak, white	19.5	4	1	Deciduous Hardwood	Yes	X	
10175	Oak, bur	24.0	4	1	Deciduous Hardwood	NA	Part of Plot 3	
10176	Maple, silver	45.0	3	1	Common Tree	Yes	X	
10177	Oak, white	20.5	4	1	Deciduous Hardwood	Yes	X	
10178	Oak, red	54.0	4	2	Deciduous Hardwood	Yes	X	
10179	Oak, red	30.0	4	1	Deciduous Hardwood	Yes	X	
10180	Oak, red	31.5	4	2	Deciduous Hardwood	Yes	X	
10181	Oak, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10182	Oak, white	16.0	4	1	Deciduous Hardwood	Yes	X	
10183	Oak, white	16.5	4	1	Deciduous Hardwood	Yes	X	
10184	Oak, bur	27.0	4	1	Deciduous Hardwood	Yes	X	
10185	Oak, white	23.0	4	1	Deciduous Hardwood	Yes	X	
10186	Oak, white	21.5	4	1	Deciduous Hardwood	Yes	X	
10187	Oak, bur	16.0	4	1	Deciduous Hardwood	Yes	X	
10188	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes		X
10189	Birch, paper	17.0	4	3	Deciduous Hardwood	Yes	X	
10190	Oak, bur	14.0	4	1	Deciduous Hardwood	Yes	X	
10191	Oak, bur	15.0	3	1	Deciduous Hardwood	Yes	X	
10192	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10193	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10194	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10195	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10196	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10197	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10198	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10199	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10200	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10201	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10202	Oak, bur	15.5	4	1	Deciduous Hardwood	Yes	X	
10203	Oak, bur	17.5	3	1	Deciduous Hardwood	Yes	X	
10204	Oak, bur	16.5	4	1	Deciduous Hardwood	Yes	X	
10205	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10206	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10207	Oak, red	16.0	4	2	Deciduous Hardwood	Yes	X	
10208	Oak, bur	6.5	4	1	Deciduous Hardwood	Yes	X	
10209	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10210	Oak, red	29.0	4	1	Deciduous Hardwood	Yes	X	
10211	Oak, bur	17.5	4	1	Deciduous Hardwood	Yes	X	
10212	Oak, bur	22.0	4	1	Deciduous Hardwood	Yes	X	
10213	Cherry, black	9.0	3	2	Deciduous Hardwood	Yes	X	
10214	Elm, American	15.0	4	1	Common Tree	Yes	X	
10215	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10216	Oak, bur	26.0	3	1	Deciduous Hardwood	Yes	X	
10217	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10218	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10219	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10220	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10221	Oak, bur	6.0	4	1	Deciduous Hardwood	Yes	X	
10222	Oak, bur	28.0	3	1	Deciduous Hardwood	Yes	X	
10223	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10224	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10225	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10226	Oak, red	15.0	4	1	Deciduous Hardwood	Yes	X	
10227	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10228	Oak, bur	28.0	4	1	Deciduous Hardwood	Yes	X	
10229	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10230	Oak, bur	29.0	4	1	Deciduous Hardwood	Yes	X	
10231	Oak, bur	28.5	4	1	Deciduous Hardwood	Yes	X	
10232	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10233	Spruce, blue	12.0	4	1	Coniferous	Yes	X	
10234	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10235	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10236	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10237	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10238	Oak, red	40.0	4	1	Deciduous Hardwood	Yes	X	
10239	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10347	Oak, pin	10.0	4	1	Deciduous Hardwood	Yes	X	
10348	Pine, Austrian	10.5	4	1	Coniferous	Yes	X	
10349	Pine, red	10.0	4	1	Coniferous	Yes	X	
10350	Pine, red	11.0	3	1	Coniferous	Yes	X	
10351	Pine, red	12.5	4	1	Coniferous	Yes	X	
10352	Pine, red	13.0	4	1	Coniferous	Yes	X	
10353	Pine, red	11.5	4	1	Coniferous	Yes	X	
10354	Pine, red	11.0	4	1	Coniferous	Yes	X	
10355	Pine, red	10.5	4	1	Coniferous	Yes	X	
10356	Pine, red	9.5	4	1	Coniferous	Yes	X	
10357	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10358	Spruce, blue	16.0	3	1	Coniferous	Yes	X	
10359	Cottonwood	15.5	4	1	Common Tree	Yes	X	
10360	Cottonwood	18.5	4	1	Common Tree	Yes	X	
10361	Cottonwood	14.0	3	1	Common Tree	Yes	X	
10362	Cottonwood	19.0	4	1	Common Tree	Yes	X	
10363	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10364	Cottonwood	16.0	4	1	Common Tree	Yes	X	
10365	Maple, silver	34.0	4	1	Common Tree	Yes	X	
10366	Maple, sugar	19.0	4	1	Deciduous Hardwood	Yes	X	
10367	Cottonwood	15.0	4	1	Common Tree	Yes	X	
10368	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10369	Cottonwood	19.5	4	1	Common Tree	Yes	X	
10370	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10371	Cottonwood	11.0	4	1	Common Tree	No	Not Significant	
10372	Ash, green	12.0	3	1	Common Tree	Yes	X	
10373	Cottonwood	15.0	4	1	Common Tree	Yes	X	
10374	Cottonwood	21.0	4	1	Common Tree	Yes	X	
10375	Ash, green	6.0	4	1	Common Tree	No	Not Significant	
10376	Elm, American	16.0	4	1	Common Tree	Yes	X	
10377	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10378	Ash, green	7.0	4	1	Common Tree	No	Not Significant	
10379	Ash, green	6.5	3	1	Common Tree	No	Not Significant	
10380	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10381	Cottonwood	20.0	4	1	Common Tree	Yes	X	
10382	Ash, green	16.0	4	2	Common Tree	Yes	X	
10383	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10384	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10385	Pine, Scots	16.0	4	1	Coniferous	Yes	X	
10386	Pine, Scots	15.0	3	1	Coniferous	Yes	X	
10387	Pine, Scots	15.5	4	1	Coniferous	Yes	X	
10388	Pine, Scots	17.0	3	1	Coniferous	Yes	X	
10389	Maple, sugar	14.0	4	1	Deciduous Hardwood	Yes	X	
10390	Pine, Scots	20.0	3	1	Coniferous	Yes	X	
10391	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10392	Pine, Scots	15.0	4	1	Coniferous	Yes	X	
10393	Pine, Scots	14.0	4	1	Coniferous	Yes	X	
10394	Pine, Scots	15.5	4	1	Coniferous	Yes	X	
10395	Maple, silver	12.0	3	1	Common Tree	Yes	X	
10396	Maple, silver	12.0	3	1	Common Tree	Yes	X	
10397	Maple, silver	42.0	3	5	Common Tree	Yes	X	
10398	Maple, silver	13.5	4	1	Common Tree	Yes	X	
10399	Maple, silver	20.0	3	1	Common Tree	Yes	X	
10400	Maple, silver	36.0	3	5	Common Tree	Yes	X	
10401	Elm, American	21.0	4	1	Common Tree	Yes	X	
10402	Elm, Siberian	18.0	3	1	Common Tree	Yes	X	
10403	Elm, American	14.0	4	1	Common Tree	Yes	X	
10404	Maple, silver	38.0	3	1	Common Tree	Yes	X	
10405	Birch, paper	6.0	4	1	Deciduous Hardwood	Yes	X	
10406	Birch, paper	6.0	4	1	Deciduous Hardwood	Yes	X	
10407	Birch, paper	16.0	4	4	Deciduous Hardwood	Yes	X	
10408	Spruce, blue	18.0	3	1	Coniferous	Yes	X	
10409	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10410	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10411	Birch, paper	10.0	4	2	Deciduous Hardwood	Yes	X	
10412	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10413	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10414	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10415	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10416	Ash, green	8.5	4	1	Common Tree	No	Not Significant	
10417	Elm, American	13.5	3	1	Common Tree	Yes	X	
10418	Elm, American	14.5	3	1	Common Tree	Yes	X	
10419	Elm, American	14.5	3	1	Common Tree	Yes	X	
10420	Birch, paper	30.0	3	3	Deciduous Hardwood	Yes	X	
10421	Birch, paper	13.5	3	1	Deciduous Hardwood	Yes	X	
10422	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10423	Birch, paper	10.5	4	1	Deciduous Hardwood	Yes	X	
10424	Birch, paper	8.0	4	1	Deciduous Hardwood	Yes	X	
10425	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10426	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10427	Basswood	12.0	3	2	Common Tree	Yes	X	
10428	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10429	Elm, Siberian	25.0	3	1	Common Tree	Yes	X	
10430	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10431	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10432	Basswood	21.0	4	2	Common Tree	Yes	X	
10433	Maple, silver	14.5	4	1	Common Tree	Yes	X	
10434	Basswood	15.0	3	2	Common Tree	Yes	X	
10435	Basswood	15.5	4	2	Common Tree	Yes	X	
10436	Birch, paper	8.5	4	1	Deciduous Hardwood	Yes	X	
10437	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10438	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10439	Cottonwood	19.0	4	1	Common Tree	Yes	X	
10440	Cottonwood	13.5	4	1	Common Tree	Yes	X	
10441	Elm, American	12.5	4	1	Common Tree	Yes	X	
10442	Cottonwood	18.5	4	1	Common Tree	Yes	X	
10443	Cottonwood	34.5	4	2	Common Tree	Yes	X	
10444	Cottonwood	12.5	4	1	Common Tree	Yes	X	
10445	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10446	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10447	Elm, American	13.5	4	1	Common Tree	Yes	X	
10448	Cottonwood	44.0	4	1	Common Tree	Yes	X	
10449	Cottonwood	40.0	3	1	Common Tree	Yes	X	
10450	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10451	Cottonwood	23.0	3	2	Common Tree	Yes	X	
10452	Pine, white	9.5	4	1	Coniferous	Yes	X	
10453	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10454	Pine, white	12.0	4	1	Coniferous	Yes	X	
10455	Pine, white	9.0	4	1	Coniferous	Yes	X	
10456	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10457	Willow	61.0	4	4	Common Tree	Yes	X	
10458	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10459	Willow	52.0	3	1	Common Tree	Yes	X	
10460	Spruce, white	8.5	4	1	Coniferous	Yes	X	
10461	Spruce, white	13.0	4	1	Coniferous	Yes	X	
10462	Cottonwood	16.0	4	1	Common Tree	Yes	X	
10463	Willow	55.0	4	1	Common Tree	Yes	X	
10464	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10465	Cottonwood	35.0	4	1	Common Tree	Yes	X	
10466	Willow	65.0	3	1	Common Tree	Yes	X	
10467	Pine, white	16.0	4	1	Coniferous	Yes	X	
10468	Pine, white	12.5	4	1	Coniferous	Yes	X	
10469	Pine, white	13.5	4	1	Coniferous	Yes	X	
10470	Pine, white	12.0	4	1	Coniferous	Yes	X	
10471	Pine, white	14.5	4	1	Coniferous	Yes	X	
10472	Pine, white	15.5	4	1	Coniferous	Yes	X	
10473	Pine, white	13.5	4	1	Coniferous	Yes	X	
10474	Pine, white	19.5	4	1	Coniferous	Yes	X	
10475	Pine, white	13.5	4	1	Coniferous	Yes	X	
10476	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10477	Willow	33.0	4	1	Common Tree	Yes	X	
10478	Willow	13.0	4	1	Common Tree	Yes	X	
10479	Willow	65.0	4	1	Common Tree	Yes	X	
10480	Willow	35.0	4	4	Common Tree	Yes	X	
10481	Willow	35.0	4	1	Common Tree	Yes	X	
10482	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10483	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10484	Willow	23.0	4	3	Common Tree	Yes	X	
10485	Willow	13.0	4	2	Common Tree	Yes	X	
10486	Willow	47.0	4	6	Common Tree	Yes	X	
10487	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10488	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10489	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10490	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10491	Pine, red	10.5	3	1	Coniferous	Yes	X	
10492	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10493	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10494	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10495	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10496	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10497	Pine, white	13.5	4	1	Coniferous	Yes	X	
10498	Pine, white	10.0	4	1	Coniferous	Yes	X	
10499	Pine, white	14.0	4	1	Coniferous	Yes	X	
10500	Pine, white	13.0	4	1	Coniferous	Yes	X	
10501	Spruce, blue	19.5	4	1	Coniferous	Yes	X	
10502	Spruce, blue	22.0	3	1	Coniferous	Yes	X	
10503	Spruce, blue	21.0	3	1	Coniferous	Yes	X	
10504	Oak, pin	19.0	4	1	Deciduous Hardwood	Yes	X	
10505	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10506	Oak, pin	14.0	4	1	Deciduous Hardwood	Yes	X	
10507	Spruce, blue	17.0	3	1	Coniferous	Yes	X	
10508	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10509	Elm, Siberian	12.0	3	1	Common Tree	Yes	X	
10510	Elm, Siberian	25.0	4	1	Common Tree	Yes	X	
10511	Oak, bur	32.0	4	1	Deciduous Hardwood	Yes	X	
10512	Pine, white	9.5	4	1	Coniferous	Yes	X	
10513	Pine, white	9.0	4	1	Coniferous	Yes	X	
10514	Pine, white	9.0	4	1	Coniferous	Yes	X	
10515	Pine, white	13.0	4	1	Coniferous	Yes	X	
10516	Pine, white	9.0	4	1	Coniferous	Yes	X	
10517	Pine, white	14.0	3	1	Coniferous	Yes	X	
10518	Pine, white	14.0	4	1	Coniferous	Yes	X	
10519	Pine, white	11.5	4	1	Coniferous	Yes	X	
10520	Pine, white	8.0	4	1	Coniferous	Yes	X	
10521	Pine, white	12.5	3	1	Coniferous	Yes	X	
10522	Pine, white	10.5	4	1	Coniferous	Yes	X	
10523	Pine, white	11.0	4	1	Coniferous	Yes	X	
10524	Pine, white	16.0	3	2	Coniferous	Yes	X	
10525	Pine, white	9.0	4	1	Coniferous	Yes	X	
10526	Pine, white	9.5	4	1	Coniferous	Yes	X	
10527	Pine, white	15.0	4	1	Coniferous	Yes	X	
10528	Pine, white	10.5	4	1	Coniferous	Yes	X	
10529	Pine, white	9.0	4	1	Coniferous	Yes	X	
10530	Pine, white	14.0	4	1	Coniferous	Yes	X	
10531	Pine, white	11.5	4	1	Coniferous	Yes	X	
10532	Pine, white	11.0	4	1	Coniferous	Yes	X	
10533	Pine, white	12.0	4	1	Coniferous	Yes	X	
10534	Pine, white	14.0	3	1	Coniferous	Yes	X	
10535	Pine, white	25.0	3	1	Coniferous	Yes	X	
10536	Pine, white	9.5	4	1	Coniferous	Yes	X	
10537	Pine, white	9.0	4	1	Coniferous	Yes	X	
10538	Pine, white	11.0	3	1	Coniferous	Yes	X	
10539	Pine, white	9.0	4	1	Coniferous	Yes	X	
10540	Pine, white	13.5	4	1	Coniferous	Yes	X	
10541	Pine, white	21.0	3	2	Coniferous	Yes	X	
10542	Pine, Austrian	19.0	3	1	Coniferous	Yes	X	
10543	Pine, white	17.0	3	1	Coniferous	Yes	X	
10544	Pine, white	10.5	4	1	Coniferous	Yes	X	
10545	Pine, white	11.0	4	1	Coniferous	Yes	X	
10546	Pine, white	14.0	4	1	Coniferous	Yes	X	
10547	Pine, white	13.5	4	1	Coniferous	Yes	X	
10548	Pine, white	10.5	4	1	Coniferous	Yes	X	
10549	Pine, white	11.0	4	1	Coniferous	Yes	X	
10550	Pine, white	12.0	3	1	Coniferous	Yes	X	
10551	Pine, white	8.0	4	1	Coniferous	Yes	X	
10552	Pine, white	9.0	4	1	Coniferous	Yes	X	
10553	Pine, white	11.0	4	1	Coniferous	Yes	X	
10554	Pine, white	11.0	4	1	Coniferous	Yes	X	
10555	Pine, white	11.0	4	1	Coniferous	Yes	X	
10556	Pine, white	9.5	4	1	Coniferous	Yes	X	
10557	Pine, white	10.0	4	1	Coniferous	Yes	X	
10558	Pine, white	10.0	4	1	Coniferous	Yes	X	
10559	Pine, white	8.5	4	1	Coniferous	Yes	X	
10560	Pine, white	10.0	4	1	Coniferous	Yes	X	
10561	Pine, white	9.5	4	1	Coniferous	Yes	X	
10562	Pine, white	8.0	4	1	Coniferous	Yes	X	
10563	Pine, white	9.0	4	1	Coniferous	Yes	X	
10564	Pine, white	8.0	4	1	Coniferous	Yes	X	
10565	Pine, white	8.0	4	1	Coniferous	Yes	X	
10566	Pine, white	8.0	4	1	Coniferous	Yes	X	
10567	Pine, white	8.0	4	1	Coniferous	Yes	X	
10568	Pine, white	9.0	4	1	Coniferous	Yes	X	
10569	Pine, white	9.0	4	1	Coniferous	Yes	X	
10570	Pine, white	10.0	4	1	Coniferous	Yes	X	
10571	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10572	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10573	Spruce, Norway	10.0	4	1	Coniferous	Yes	X	
10574	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10575	Spruce, white	9.5	4	1	Coniferous	Yes	X	
10576	Pine, Scots	12.0	3	1	Coniferous	Yes	X	
10577	Pine, Scots	11.0	4	1	Coniferous	Yes	X	
10578	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10579	Pine, Scots	10.0	4	1	Coniferous	Yes	X	
10580	Pine, Scots	12.5	4	1	Coniferous	Yes	X	
10581	Maple, silver	73.0	3	1	Common Tree	Yes	X	
10582	Maple, sugar	12.5	4	1	Deciduous Hardwood	Yes	X	
10583	Maple, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10584	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10585	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10586	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10587	Pine, white	16.0	4	1	Coniferous	Yes	X	
10588	Pine, white	13.0	4	1	Coniferous	Yes	X	
10589	Maple, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10590	Maple, silver	30.0	4	1	Common Tree	Yes	X	
10591	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10592	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10593	Oak, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10594	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10595	Oak, bur	11.5	4	1	Deciduous Hardwood	Yes	X	
10596	Oak, bur	13.0	4	1	Deciduous Hardwood	Yes	X	
10597	Oak, bur	17.0	4	1	Deciduous Hardwood	Yes	X	
10598	Oak, bur	32.0	4	1	Deciduous Hardwood	Yes	X	
10599	Maple, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10600	Spruce, blue	18.5	4	1	Coniferous	Yes	X	
10601	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
10602	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
10603	Ginkgo	16.0	4	1	Common Tree	Yes	X	
10604	Spruce, white	9.0	3	1	Coniferous	Yes	X	
10605	Spruce, white	10.0	3	1	Coniferous	Yes	X	
10606	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10607	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10608	Maple, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10609	Maple, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10610	Maple, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10611	Oak, bur	24.0	4	1	Deciduous Hardwood	Yes	X	
10612	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10613	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10614	Pine, white	14.0	4	1	Coniferous	Yes	X	
10615	Pine, white	14.5	4	1	Coniferous	Yes	X	
10616	Pine, white	14.0	4	1	Coniferous	Yes	X	
10617	Pine, white	13.5	4	1	Coniferous	Yes	X	
10618	Pine, red	16.0	3	1	Coniferous	Yes	X	
10619	Pine, red	15.5	4	1	Coniferous	Yes	X	
10620	Pine, red	14.5	4	1	Coniferous	Yes	X	
10621	Pine, red	17.5	4	1	Coniferous	Yes	X	
10622	Pine, red	14.5	4	1	Coniferous	Yes	X	
10623	Pine, red	14.0	4	1	Coniferous	Yes	X	
10624	Pine, red	13.5	4	1	Coniferous	Yes	X	
10625	Pine, red	15.5	4	1	Coniferous	Yes	X	
10626	Pine, red	12.0	4	1	Coniferous	Yes	X	
10627	Pine, red	14.5	4	1	Coniferous	Yes	X	
10628	Pine, red	13.5	3	1	Coniferous	Yes	X	
10629	Pine, red	14.5	4	1	Coniferous	Yes	X	
10630	Pine, red	11.0	4	1	Coniferous	Yes	X	
10631	Oak, bur	14.0	4	1	Deciduous Hardwood	Yes	X	
10632	Oak, bur	31.0	4	1	Deciduous Hardwood	Yes	X	
10633	Pine, red	13.0	4	1	Coniferous	Yes	X	
10634	Pine, red	12.0	4	1	Coniferous	Yes	X	
10635	Pine, red	14.0	4	1	Coniferous	Yes	X	
10636	Pine, red	14.5	4	1	Coniferous	Yes	X	
10637	Pine, red	15.0	4	1	Coniferous	Yes	X	
10638	Maple, silver	30.0	4	1	Common Tree	Yes	X	
10639	Oak, bur	20.0	4	1	Deciduous Hardwood	Yes	X	
10640	Oak, bur	28.0	4	1	Deciduous Hardwood	Yes	X	
10641	Oak, bur	14.5	4	1	Deciduous Hardwood	Yes	X	
10642

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10645	Spruce, white	11.5	3	1	Coniferous	Yes	X	
10646	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10647	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10648	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10649	Oak, pin	13.5	4	1	Deciduous Hardwood	Yes	X	
10650	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10651	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10652	Oak, pin	16.5	4	1	Deciduous Hardwood	Yes	X	
10653	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10654	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10655	Oak, bur	7.0	4	1	Deciduous Hardwood	Yes	X	
10656	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10657	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10658	Oak, bur	26.0	3	1	Deciduous Hardwood	Yes	X	
10659	Elm, Siberian	15.5	4	1	Common Tree	Yes	X	
10660	Oak, bur	15.0	4	2	Deciduous Hardwood	Yes	X	
10661	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10662	Oak, red	34.0	4	1	Deciduous Hardwood	Yes	X	
10663	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10664	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10665	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10666	Oak, bur	8.5	3	1	Deciduous Hardwood	Yes	X	
10667	Oak, red	27.0	3	1	Deciduous Hardwood	Yes	X	
10823	Maple, red	14.0	4	1	Deciduous Hardwood	Yes		X
10824	Oak, bur	29.5	4	1	Deciduous Hardwood	Yes	X	
10825	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10826	Elm, Siberian	26.0	3	1	Common Tree	Yes	X	
10827	Pine, Scots	19.0	4	1	Coniferous	Yes	X	
10828	Spruce, blue	16.0	4	1	Coniferous	Yes	X	
10829	Pine, Scots	16.0	4	1	Coniferous	Yes	X	
10830	Pine, red	15.0	4	1	Coniferous	Yes	X	
10831	Pine, red	13.5	4	1	Coniferous	Yes	X	
10832	Pine, Scots	20.0	4	1	Coniferous	Yes	X	
10833	Ash, green	15.0	4	1	Common Tree	Yes	X	
10834	Pine, Austrian	9.0	3	1	Coniferous	Yes	X	
10835	Pine, Austrian	13.0	3	1	Coniferous	Yes	X	
10836	Pine, Austrian	16.0	3	1	Coniferous	Yes	X	
10837	Maple, silver	31.0	3	1	Common Tree	Yes	X	
10838	Pine, Austrian	14.0	3	1	Coniferous	Yes	X	
10839	Pine, Austrian	15.0	4	1	Coniferous	Yes	X	
10840	Pine, Austrian	12.5	4	1	Coniferous	Yes	X	
10841	Ash, green	12.0	4	1	Common Tree	Yes	X	
10842	Pine, Austrian	13.5	3	1	Coniferous	Yes	X	
10843	Pine, Austrian	12.0	4	1	Coniferous	Yes	X	
10844	Pine, Austrian	16.0	4	1	Coniferous	Yes	X	

Note: Tree Tags 1-2000 by Carlson Mccain, Tree Tags 2536-5207A by KES and Tree Tags 10001-10855 by TreeBiz

TOTAL INDIVIDUAL TREE SHOT ASSESMENT (ENTIRE SITE)

Total caliper inches from individual shots (Phase 1)	13,466.50
Common Tree RemovalCaliper Inches	2507.5
Coniferous Tree Removal Caliper Inches	2421.0
Deciduous Hardwood Removal Caliper Inches	586.5

Total caliper inches from individual shots (Future Phases)	19,057.00
Common Tree RemovalCaliper Inches	1701.0
Coniferous Tree Removal Caliper Inches	551.0
Deciduous Hardwood Removal Caliper Inches	3569.0

Quality Rating	
4	Good
3	Fair
2	Poor
1	Bad
0	Dead

TOTAL TREE PLOT ASSESMENT AREAS (ENTIRE SITE)

	Total Area (Acres)	Removal Area (Acres)	Caliper Inches per Acre	Total Caliper Inches	Total Caliper Inches Removed	Common Inches Removed	Conifer Inches Removed	Hardwood Inches removed
Area 1	35.93	14.08	1750.00	64627.50	24640.00	12320.00	12320.00	6849.92
Area 2	1.85	0.86	0.00	0.00	0.00	0.00	0.00	0.00
Area 3	5.91	4.49	1010.00	5969.10	4534.90	453.49	0.00	4081.41
Area 4	4.39	2.23	1010.00	4433.90	2252.30	1013.54	337.85	900.92
Area 5	2.02	0.00	290.00	585.80	0.00	0.00	0.00	0.00
Area 6	7.43	5.94	1325.63	9849.39	7874.21	874.91	0.00	6999.30
Area 7	2.05	1.03	906.67	1858.67	933.87	700.40	0.00	233.47
Area 8	1.76	0.00	815.00	1434.40	0.00	0.00	0.00	0.00
Area 9	See individual tree shot information							
Area 10	1.90	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Area 11	8.24	0.00	1485.00	12236.40	0.00	0.00	0.00	0.00
Area 12	1.84	0.04	1707.50	3141.80	68.30	18.99	0.00	49.31
Area 13	2.86	0.00	815.00	2330.90	0.00	0.00	0.00	0.00
Area 14	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals:	78.63	29.51		106467.86	40303.58	15381.32	12657.85	19114.33

Total caliper inches from all areas	106,467.86
Common Tree RemovalCaliper Inches	15381.3
Coniferous Tree Removal Caliper Inches	12657.8
Deciduous Hardwood Removal Caliper Inches	19114.3

SUMMARY (ENTIRE SITE)

Total caliper inches on the site	138,991.36
Allowable significant removal for the site	
(Allowable removal = 30% Total Significant DBH)	41,697.41
Common Tree RemovalCaliper Inches	19589.8
Coniferous Tree Removal Caliper Inches	15629.8
Deciduous Hardwood Removal Caliper Inches	23269.8
Total Removal Caliper Inches	58489.5
Total Replacement Caliper Inches for Site	**8396.05**

Removal Threshold (30%)	41697.4
Common Tree Removal	19589.8
	22107.6
Coniferous Tree Removal	15629.8
	6477.7
Deciduous Hardwood Removal	23269.8
	6477.7
Removal Over Threhold	16792.1
	x 0.5
Hardwood Replacement Requirement	8396.05

Removal over threshold shall be counted against Hardwood Trees at a rate of replacement of 1/2" mitigated per 1" removed
Mitigation requirement: 8396.05"

NOTE:

TREE IDENTIFICATION AND TREE AREA CALCULATIONS WERE PROVIDED BY KJOLHAUG ENVIRONMENTAL SERVICES.

STAFF REPORT

DATE: 4/24/2017
PUBLIC HEARING
ITEM #: 4c
MOTION

TO: Planning Commission

FROM: Emily Becker, City Planner

AGENDA ITEM: Solar Energy Ordinance

REVIEWED BY: Stephen Wensman, Planning Director

BACKGROUND:

The creation of a solar garden/solar power ordinance is an item on the 2017 Planning Commission Work Plan. The Planning Commission reviewed drafts of an ordinance at its March 27 and April 10 meetings. Staff has amended the proposed ordinance for the Planning Commission's review and public hearing.

ISSUE BEFORE COMMISSION:

The Planning Commission is being asked to hold a public hearing and make recommendation on the proposed Solar Energy Ordinance.

PROPOSAL DETAILS/ANALYSIS:

Changes since Last Meeting. Staff has made the following changes to the proposed solar energy systems ordinance due to feedback from the Commission:

- *"Rooftop Systems."* This was changed to Building-Integrated Solar Energy Systems.

Solar Farms. The Commission had suggested that Solar Farms should be allowed in the Rural Residential and Agricultural zoning districts. A Zoning Map has been attached to this report for the Commission to review to consider where solar farms would be allowed if located within the aforementioned rural districts. At this meeting, the Commission is only being asked to make recommendation on the standards set forth for Solar Farms, as the public hearing notice only advertised a Zoning Text Amendment setting forth additional standards for a Solar Energy Ordinance. An additional public hearing notice for a Zoning Text Amendment to the specific zoning district in which Solar Farms are proposed to be allowed needs to be published (i.e. an amendment to Article XI: Rural Districts). The specific development standards for Solar Farms within rural districts would be added to Article XI. This has been prepared as a separate ordinance for Commission review.

- *Solar Farm Standards.* The Commission suggested a number of standards for Solar Farms at its last meeting. Additionally, Commissioner Hartley prepared an email suggesting a number of

standards; this email is attached for reference. Based on this feedback, Staff has drafted the following changes to the Solar Farms ordinance:

- *Definition.* Based on Commissioner Hartley's feedback, Staff has changed the definition of Solar Farms. Commissioner Hartley indicated in the attached email to Staff that the definition of Solar Farms should not be based solely on the selling of power, as solar energy systems trade power back and forth with the power grid. He suggested instead that the distinction be based on the area of the installed solar array. Specifically, he suggested that solar energy systems 2000 square feet in size or larger be categorized as solar farms, based on the size of common solar farms rooftop installations.
- *Minimum Lot Size.* Property must have a minimum of 10 acres.
- *Screening.* Staff is suggesting that screening be required for properties with solar farms, as long as the screening does not inhibit capturing of solar energy.
- *Maximum percentage of coverage.*
    - The Zoning Code does not set forth maximum impervious surface requirements for the Rural Residential, Rural Development Transitional and Agricultural zoning districts, so it would not be applicable to apply the maximum impervious surface requirements of this zoning district to solar farms. Staff has proposed that solar farms not exceed 25% of the lot area. The Commission should consider if this is an appropriate coverage percentage. This would be in addition to the maximum size and number of accessory structures allowed in these districts, which varies based on lot size.
- *Setbacks.* The following table indicates setbacks required by Code. The proposed ordinance requires that solar farms be subject to accessory structure setback requirements of the zoning district in which the solar farm is located. The Commission should consider if there should be additional setback requirements for solar farms, or if these requirements are sufficient.

	RT	**A**	**RR**
Maximum Impervious Coverage	-	-	-
Minimum Accessory Building Setbacks (feet)			
Front Yard	30	200	30
Interior Side Yard	10	200	10
Corner Side Yard [g]	25	200	25
Rear Yard	40	200	40

FISCAL IMPACT:

None.

OPTIONS:

The Commission may wish to:

- Recommend adoption of Ord. 08-173 setting forth additional standards for solar energy systems.

- Not recommend adoption of Ord. 08-173 setting forth additional standards for solar energy systems.
- Table item.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend adoption of Ord. 08-173 and provide feedback on proposed amendment to the Rural Districts Article of the Zoning Code.

"Move to recommend adoption of Ord. 08-173 setting forth additional standards for solar energy systems."

ATTACHMENTS:

- Draft Ordinances
- Zoning Map
- Email from Commissioner Hartley

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-173

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY ADDING ADDITIONAL STANDARDS FOR SOLAR ENERGY SYSTEMS.

SECTION 1. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article II; Section 154.012; Subd. (B) (12) by amending the definition of Solar Equipment and adding one definition relating to solar energy systems:

Solar Farm. A commercial facility that converts sunlight into electricity, whether by photovoltaic (PV), concentrating solar thermal devices (CST), or other conversion technology, for the principal purpose of generating electricity to off-site customers. Any solar energy system over 2000 square feet in size shall be considered a solar farm.

Solar ~~Equipment~~ Energy System. ~~Any solar collector, skylight, or other solar energy device whose~~ A device or structural design feature, a primary purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating, cooling, water heating, providing daylight for interior lighting, or for power generation.

SECTION 2. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article II; Section 154.310 (C) to read as follows.

Solar Energy Systems. Solar energy systems ~~and solar~~ ~~structures~~ are permitted accessory uses in all districts, provided the system or equipment is in compliance with ~~minimum~~ ~~lot requirements and setback~~ standards set forth below.

1. *Building-Integrated Solar Energy Systems.*
    a. These systems are permitted accessory uses in all districts in which buildings are permitted.
    b. *Visibility, Commercial Installations.* Commercial rooftop systems shall be placed on the roof to limit visibility from the public right-of-way or to blend into the roof design, provided that minimizing visibility still allows the property owner to reasonably capture solar energy.
2. *Ground-Mount Solar Energy Systems.*
    a. Ground-mount energy systems are permitted accessory uses in all districts where buildings are permitted.
    b. ~~A solar structure~~ Ground-mount energy systems must comply with all accessory structure setback, height, size and number and lot coverage restrictions unless otherwise stated herein or a variance is granted and shall not encroach on any City easement unless an easement encroachment agreement approved by the Planning Director or his/her designee after review and approval from the City Engineer or his/her designee has been executed. A certificate of zoning compliance is required

for all solar energy systems unless a conditional use permit is required as stated herein.

i. The collector surface of a ground-mount system and any foundation, compacted soil, or other component of the solar installation that rests on the ground is considered impervious surface. Vegetated ground under the collector surface can be used to mitigate stormwater runoff.

c. *Exemptions.* Solar energy systems of a size of six square feet or less may be exempt from zoning district setback requirements.

3. *Interconnection Agreement.* All electric solar energy systems that are connected to the electric distribution or transmission system through the existing service of the primary use on the site shall obtain an interconnection agreement with the electric utility in whose service territory the system is located. Solar energy systems connected directly to the distribution or transmission system must obtain an interconnection agreement with the interconnecting electric utility. Systems that are not directly connected to the grid or not connected to the electric system of a building that is connected to the gird are exempt from this requirement.

4. *Glare.* Glare produced from any solar energy system shall be minimized from affecting adjacent or nearby properties. Measures to minimize glare include selective placement of the system, screening of the solar array, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit glare.

a. *Mirror Reflecting Designed Solar Energy Systems.* Mirror reflecting designed solar energy systems are permitted only on properties with five (5) acres or larger. A conditional use permit is required and more restrictive setback standards may be required upon review of the conditional use permit.

5. *Code Requirements.* Electric solar system componements that are connected to a building electric system must have an Underwriters Laboratory (UL) listing. All solar installations must comply with the Minnesota and National Electric Code. All rooftop or building integrated solar energy systems require a building permit and shall comply with the Minnesota Building Code. Solar thermal hot water systems shall comply with applicable Minnesota State Plumbing Code requirements.

6. *Decommissioning.* A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not in use for 12 consecutive months. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site. The City may require the posting of a bond, letter of credit or the establishement of an escrow to ensure proper decommissioning.

7. *Easements Allowed.* Solar easements may be filed, consistent with Minnesota Stat. Chapter 500 Section 30. Any building owner can purchase an easement across neighboring properties to protect access to sunlight. The easement is purchased or granted by owners of neighborhing properties and can apply to buildings, trees, or other structures that would diminish solar access.

8. *Restrictions on Solar Energy Systems Limited.* No homeowners' agreement, covenant, common interest community, or other contract between multiple property owners within a subdivision shall forbid installation of solar energy systems or create design standards that effectively preclude solar energy installations.

SECTION 3. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 4. Adoption Date. This Ordinance 08-___ was adopted on this _____ day of ___ 2017, by a vote of ___ Ayes and ___ Nays.

LAKE ELMO CITY COUNCIL

_____
Mike Pearson, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 08-____ was published on the ____ day of _____, 2017.

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-___

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY ADDING SOLAR FARMS AS A CONDITIONAL USE WITHIN THE RURAL RESIDENTIAL AND AGRICULTURAL ZONING DISTRICTS; ADDING SOLAR FARMS AS AN INTERIM USE IN THE RURAL DEVELOPMENT TRANSITIONAL ZONING DISTRICT; AND SETTING FORTH SPECIFIC DEVELOPMENT STANDARDS FOR SOLAR FARMS IN RURAL DISTRICTS.

SECTION 1. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article XI: Rural Districts; Section 154.401: Permitted, Conditional, and Interim Uses to read as follows.

Table 9-1: Permitted, Conditional, and Interim Uses, Rural Districts

	RT	A	RR	RS	RE	Standard
Residential Uses						
Household Living						
Single-Family Detached Dwelling	P	P	P	P	P	154.404 (A)
Secondary Dwelling	-	P	-	-	-	154.404 (D)
Services						
Self Service Storage Facility	I[a]	I[a]	-	-	-	154.404 (G)
Outdoor Recreation						
Outdoor Recreation Facility	-	C	-	-	-	154.306 (C)
Parks and Open Areas	P	P	P	P	P	154.012 (B) (7)
Restricted Recreation	-	C	-	-	-	154.306 (B)
Agricultural and Related Uses						
Agricultural Entertainment Business	I	I	I	-	-	154.914
Agricultural Production	P	P	P	-	-	154.012 (B) (9)
Agricultural Sales Business	I	I	I	-	-	154.913
Agricultural Services	C	C	-	-	-	154.404 (J)
Forestry Operations	-	P	-	-	-	154.012 (B) (9)
Greenhouses, Non Retail	C	C	C	-	-	154.012 (B) (9)
Wayside Stand	P	P	P	-	-	154.012 (B) (9)
Solar Farms	-	C	C	-	-	154.404 (K), 154.310 (C)
Industrial and Extractive Uses						
Motor Freight and Warehousing	I[a]	-	-	-	-	154.404 (G)
Accessory Uses						
Bed and Breakfast	C	C	C	-	-	154.012 (B) (12)
Domestic Pets	P	P	P	P	P	154.012 (B) (12)
Family Day Care	P	P	P	P	P	154.012 (B) (12)
Home Occupation	P	P	P	P	P	154.012 (B) (12)

Kennel, Private	C	C	C	-	-	154.012 (B) (12)
Solar Equipment	P	P	P	P	P	154.310 (C)
Solar Farms	-	C	C	-	-	154.404 (K), 154.310 (C)
Stable, Private	C	C	C	-	-	154.012 (B) (12)
Swimming Pools, Hot Tubs, Etc.	P	P	P	P	P	154.012 (B) (12)
Temporary Sales	P	P	P	P	P	154.012 (B) (12)

	RT	A	RR	RS	RE	Standard
Water-Oriented Accessory Structures	**P**	**P**	**P**	**P**	**P**	**154.800**
Other Structures Typically Incidental and Clearly Subordinate to Permitted Uses	**P**	**P**	**P**	**P**	**P**	
Commercial Wedding Ceremony Venue	**I**	**I**	**I**			**154.310 (D)**
Open Space Preservation Development						
OP Development	-	~~C~~ **P***	~~C~~ **P***	-	-	***Permitted through the Planned Unit Development Process Article 16**

SECTION 2. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article XI: Rural Districts; Section 154.404: Site and Development Standards by adding the following.

K. Solar Farm.

1. *Minimum Lot Size*. Solar farms shall be allowed as a conditional use on properties of 10 acres in size or larger.
2. *Maximum Coverage*. Ground-mount solar farm arrays shall not cover more than 25% of the property.
3. *Setback Requirements.* Ground-mount solar farms shall be subject to accessory structure setback requirements of the zoning district in which the solar farm is located.
4. *Stormwater and NPDES.* Ground-mount solar farms are subject to the City's and watershed district's stormwater management and erosion and sediment control provisions and NPDES permit requirements.
5. *Screening.* Screening along the boundaries of adjacent properties may be required through landscaping, fencing, berm, or other means, provided that screening does not inhibit the capture of solar energy.
6. *Foundations.* A qualified engineer shall certify that the foundation and design of the solar panels, racking and support is within accepted professional standards, given local soil and climate conditions.
7. *Power and communication lines.* Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the City in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding feasible, at the discretion of the Planning Director.

SECTION 3. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 4. Adoption Date. This Ordinance 08-___ was adopted on this _____ day of ___ 2017, by a vote of ___ Ayes and ___ Nays.

LAKE ELMO CITY COUNCIL

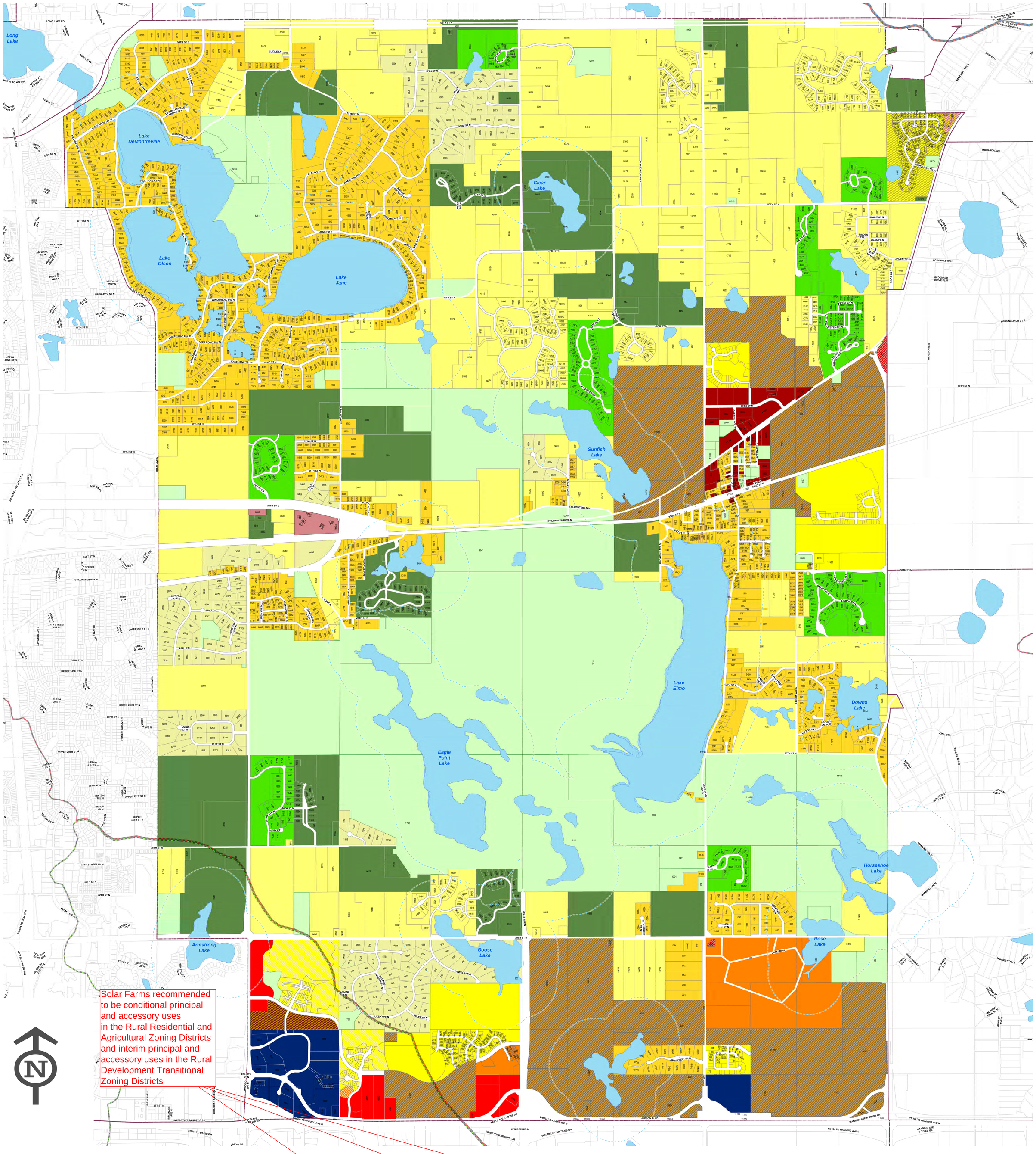
_____
Mike Pearson, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 08-____ was published on the ____ day of _____, 2017.

Lake Elmo Zoning Map



THE CITY OF LAKE ELMO

Map upated by Sambatek on 2-23-16

Sambatek

From: Hartley Jesse W.
To: Emily Becker; Stephen Wensman
Subject: Proposed Solar Energy Ordinance
Date: Thursday, April 13, 2017 3:55:55 PM

One of the points that came up in the discussion of the proposed solar energy ordinance was how to distinguish/define a "commercial" solar system or a solar farm.

Because of the way solar energy systems trade power back and forth with the power grid, a definition that relies on whether or not power is sold is going to be problematic.

I would propose that we not define a "farm" based on the selling of power. I would, instead, make the distinction based on the area of the installed solar array.

A review of some residential installations shows that most are in the range of 4-7 KW peak power with larger installation in the 10-15 KW size. These are most commonly rooftop installations. The area of a 10KW array would be between 800 to 3,000 sq.ft. depending on the efficiency of the array.
See: Installing and Maintaining a Home Solar Electric System | Department of Energy
Because the system efficiency is changing as technology advances, the peak power available is also going to increase. But the most visible characteristic of these systems is the area of the collector array.

My proposal is that any system with a array of greater than 2000 sq.ft. be considered a "Solar Farm" for the purposes of the ordinance. This would invoke the requirement for a conditional use permit and the additional review items. This would apply to all systems whether roof or ground mounted.

Further, I would limit the stormwater management and foundation and wiring reviews to only ground mounted arrays.

My expectation is that most residential installations would be less than this limit and not require a conditional use permit or additional review beyond a building permit. If it is a larger system (rooftop or ground mount) for a commercial building, then it could trigger the requirement for a conditional use permit. Clearly a larger system whose purpose is to sell power to the grid or supply multiple houses would be considered a "Solar Farm" .

The reason for basing the commercial distinction on area is:
1) it is the physical size of the system, the most visible characteristic.
2) It would be easy for the Building permit process to determine the size of the system.
3) As the technology evolve, the size limit can probably stay the same, even though the system power will grow.
4) Other characteristics, such as power produced, will be changing as the technology changes.

There are some technology changes that are happening, such as the photovoltaic shingles. These can be accommodated in the conditional use permit process until the technology becomes available.

The conditional use permit would be granted based on the following characteristics:

1. Visibility from the property boundaries.
2. Size of the Array
3. Type of array. Reflective concentrators vs photovoltaic cells.
4. Ground mount vs Roof mount. Roof Mount would be less intrusive.
5. Glare Control.
6. Grid-connected vs Off-grid. A grid-connected system has a more direct public benefit as compared to an off-grid system.
7. What is the zoning district involved.

-Jess

Jess Hartley
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Lake Elmo, MN 55042
email: hartleyjw@goldengate.net

STAFF REPORT

DATE: 4/24/2017
BUSINESS ITEM
ITEM #: 5A CASE # 2017-01
MOTION

TO: Easton Village 2nd Addition Final Plat

FROM: Emily Becker, City Planner

REVIEWED BY: Stephen Wensman, Planning Director
Jack Griffin, City Engineer

BACKGROUND:

The Planning Commission is being asked to consider a Final Plat request from Chase Development for the 2nd Addition of Easton Village, a planned 217 unit residential development. The 2nd Addition includes 19 single family lots that are located within 5.2 acres on the eastern portion of the subdivision and extended above the northern boundary of the 1st Addition. Staff is recommending approval of the request subject to conditions listed in this report.

ISSUE BEFORE COMMISSION:

The Commission is being asked to recommend approval or denial of the Final Plat request for the 2nd Addition of Easton Village based on its consistency with the approved Preliminary Plat.

PROPOSAL DETAILS/ANALYSIS:

General Information.

Applicant:	Chase Development, 2140 West County Road 42, Burnsville, MN
Property Owners:	Easton Village, LLC (Tom Wolter) 2140 West County Road 42, Burnsville, MN
Location:	Section 12 & 13, Township 29 North, Range 21 West in Lake Elmo, north of 30th Street, west of Manning Avenue, and south of the Union Pacific railroad right-of-way. Part of Outlot F, Easton Village, Washington County, Minnesota. PID Number 13.029.21.42.0025.
Request:	Application for final plat approval of a 19 unit residential subdivision to be named Easton Village.
Zoning:	LDR – Limited Density Residential
Surrounding:	North – vacant/agricultural land (RT – Rural Transitional); West – single family home, City park, natural vegetation (PF – Public and Quasi Public Open Space; South – vacant land (LDR – Limited Density Residential); East – Lake Elmo Airport (Baytown Township).
Comp. Plan:	Village Urban Low Density Residential (1.5 - 2.49 units per acre)

History: Property was included in Village Planning Area boundary and municipal sewer service area as defined in the 2013 Village Land Use Plan. Site has historically been used for faming activities, including the growing of agricultural crops. Sketch Plan review by Planning Commission on 1/27/14 with Preliminary Plat approval on July 15, 2014. An AUAR for the Village Planning area was approved by the City in May of 2009.

Action Deadline: Application Complete – 3/22/2017
60 Day Deadline – 5/21/2017
Extension Letter Mailed – N/A
120 Day Deadline – N/A

Regulations: Chapter 153 – Subdivision Regulations
Article XII – Urban Residential Districts (LDR)
§150.270 Storm Water, Erosion, and Sediment Control

Consistency with Preliminary Plat.

Previously Revised Preliminary Plat. Prior to the 1st Addition Final Plat approval, the approved Preliminary Plat was revised in December of 2014 to address the following:

- The need to reconfigure the temporary access into the subdivision.
- Revisions to the grading plan.
- Adjustments to the property boundaries adjacent to the gas line that bisects the site.
- The provision of a slightly larger buffer from the railroad tracks.
- Revisions to the storm water management plan.

The 2nd Addition Final Plat application was compared against these revised Preliminary Plans (December, 2014).

Increased Number of Lots. The revised Preliminary Plat did not significantly change the lot configuration or density of the 2nd Addition. However, the number of lots as proposed in the 2nd Addition Final Plat was increased by 1.

- # of lots in area proposed as 2nd Addition in approved and revised Preliminary Plat: 18
- # of lots in proposed 2nd Addition Final Plat: 19

Preliminary Plat Revision #2. Staff has requested that the applicant submit another revised preliminary plat that will show how future phases will offset the density increase proposed for the 2nd and 3rd Additions. Application for Easton Village 3rd Addition was submitted with the 2nd Addition final plat, but was deemed incomplete. The 3rd Addition proposes two additional lots than proposed in the December 2014 preliminary plat. The revised preliminary plat is attached.

Decreased Lot Sizes.

The table below shows the lot sizes in the area proposed as 2nd Addition in the December 2014 Preliminary Plat as compared to the proposed 2nd Addition Final Plat:

Lot	Block	Revised Preliminary Plat	Final Plat
1	1	10,043	9,817
2	1	8,450	9,091
3	1	8,450	9,750

4	1	10,187	9,267
5	1	11,923	8,673
6	1	----	10,736
7	1	10,905	8,310
8	1	9,458	10,292
9	1	11,638	9,592
10	1	8,925	8,145
11	1	8,354	8,917
12	11	8,450	9,116
13	1	8,450	8,455
14	1	10,468	11,089
1	2	9,750	8,890
2	2	8,266	8,658
3	2	8,688	8,020
4	2	8,687	9,942
5	2	8,907	10,463

Area of Wetlands and Buffers: None proposed.

Final Area of Dedicated of (Non-Arterial) Right-of-Way: 1.136

Outlots. There are no outlots as part of this plat.

Engineering Comments. Attached is the City Engineer review letter dated April 12, 2017. Summarily, the construction plans will need to be updated according to these comments, and construction may not begin until the Applicant has obtained approval for the Final Construction Plans.

Easements. 2nd Addition plats a portion of Outlot F of Easton Village 1st Addition. This Outlot has three easements recorded against it, a permanent easement for drainage and utility purposes, and a temporary access easement which terminates upon replatting of Outlot F and a temporary construction easement which terminates after a one year warranty period after completion of installing the public and utility and drainageway.

Temporary Cul-de-Sac. The Applicant is proposing a temporary cul-de-sac off of Linden Avenue North. It is a recommended condition of approval that the Applicant provide a temporary road easement over this cul-de-sac.

Parkland.

Missing Trail. The Preliminary Plat was approved on the condition that a trail be constructed between Lots 13 and 14 of Block 3 as shown on the December 2014 Preliminary Plat as presented to the Planning Commission on January 16, 2015. This was a Staff recommended condition based on Sketch Plan review at the City Council. The Sketch Plan included this trail connection. Council had

expressed concerned about the walkability of the neighborhood as a result of the many cul-de-sacs within the neighborhood. According to meeting minutes, the Parks Commission did not make recommendation to add this specific condition but rather was concerned about the walkability of the neighborhood.

In the 2nd Addition application narrative and during meetings with Staff, the applicant has stated that the trail connection shown on the Preliminary Plat has been eliminated because they have found that customers who purchase cul-de-sac lots generally do so because of the added security and privacy they provide for families. Additionally, the Applicant has stated that the elimination of the cul-de-sac would help facilitate the design of wider lots and a mixture of lots to create more variety and options for builders.

The Parks Commission reviewed the 2nd Addition Final Plat at its April 17, 2017 meeting, and they did not see it necessary for this connection to be kept, as it does not provide overall connectivity from the development to the Village or other areas of the City.

The Commission should consider whether or not the trail and outlot can be removed as proposed.

Parkland Dedication. No parks or open space are proposed with the 2nd Addition, however, 3.99 acres of parkland was dedicated with the 1st Addition.

As mentioned above, the revised Preliminary Plat showed a 0.07 acre trail outlot for which the developer would have received dedication credit for in this phase of the development. The approved Developer Agreement of the 1st Addition states that the developer shall be required to dedicate 9.84 acres of land for public park purposes for the entire subdivision, and the 1st Addition provided 3.99 acres of land. The future project phases were to either dedicate the remaining 5.85 acres of park land or cash payment in lieu of dedication. If the removed trail connection is approved, no parkland dedication credit will be given towards this phase, and the developer should be required to pay a parkland dedication fee for the value of 0.52 acres of land for this phase (10% of the acreage of the Final Plat area of 5.2 acres). An assessment has not been done on the value of this land, and this will need to done prior to approval of the Developer Agreement. The Developer Agreement will outline the determined amount the developer is to pay.

Updated Preliminary Plans. The Applicant has updated Preliminary Plans in order to show how changes made to both 2nd and 3rd Additions since the previously approved Preliminary Plans submitted December of 2014 will work. These Preliminary Plans have been reviewed and approved by the City Engineer.

Village Parkway Extended. The Applicant has shown Village Parkway extended all the way adjacent to 2nd Addition. While access to 2nd Addition will not be provided by Village Parkway, it is city policy that all public improvements that are adjacent to any proposed lots be included in the Plat and constructed as part of the Plat improvements. The main reasoning behind this is so that potential buyers of homes on these lots are aware that a road will be constructed adjacent to their lots.

Landscape Plans. The applicant is proposing 19 trees within the 2nd Addition, which is not consistent with updated Preliminary Landscape Plans.

- The Applicant submitted updated Preliminary Landscape Plans along with application for 1st Addition Final Plat, dated 12/17/2014 in response to comments provided by the City's Landscape Architect in a review letter dated 12/3/2014.
- The Applicant has not shown in the Landscape Plans landscaping along the extension of Village Parkway. The Landscape Plans will need to be updated to include these plantings.

- The Applicant is proposing Scarlet Jewel Maples and Redmond Linden where some Autumn Blaze Maples were proposed on the Preliminary Plan, and tree placement is a bit different than provided in the Preliminary Plan, as shown below for comparison.
- The Landscape Plan does not include utility locations. The Plans will need to be updated to include this.
- The Preliminary Landscape Plan Review letter dated December 2, 2014 required that landscape irrigation plans be provided for all commonly held HOA & City Outlots/ROW areas. While there are no commonly held HOA or City Oulots within the 2nd Addition, the irrigation plans will need to be provided for the ROW area along Village Parkway when this is included in the updated Landscape Plans.
- A Landscape Maintenance Agreement will need to be provided for all City ROW areas.

Street Naming. The proposed street names are consistent with Lake Elmo's Street Naming Policy. While there is a Linden Avenue North in the Sanctuary Development, Easton Village 1st Addition Final Plat was approved with the name of Linden Avenue North, and the Linden Avenue in 2nd Addition is a direct extension of the Linden Avenue of 1st Addition.

Village Parkway. Staff is considering/exploring some changes to the Village Parkway design to allow tree planting between the trail/sidewalk and the street, to eliminate the irrigation requirement, changing the turfgrass sod to salt tolerant sod or no-mow, and potentially modifying the soil requirements to support plant establishment without irrigation.

Final Plat Approval Process. The City's subdivision ordinance establishes the procedure for obtaining final subdivision approval, in which case a final plat may only be reviewed after the City takes action on a preliminary plat. As long as the final plat is consistent with the preliminary approval, it must be approved by the City. Please note that the City's approval of the Easton Village Preliminary Plat did include a series of conditions that must be met by the applicant, which are addressed in the "Review and Analysis" section below. There are no public hearing requirements for a final plat.

In order to provide the Planning Commission with an update concerning the conditions associated with the preliminary plat for Easton Village, Staff has prepared the following:

Preliminary Plat Conditions – With Staff Update Comments (updated information in bold italics):

1) Within six months of preliminary plat approval, the applicant shall complete the following: a) the applicant shall provide adequate title evidence satisfactory to the City Attorney; and b) the applicant shall pay all fees associated with the preliminary plat. The above conditions shall be met prior to the City accepting an application for final plat and prior to the commencement of any grading activity on the site. ***Comments: a) all title work will need to be submitted and reviewed by the City Attorney before City officials sign the final plat; b) the applicant has submitted an escrow payment with Final Plat application that is being used to cover Staff and consultant expenses related to the City's review.***

2) The grading plan shall be updated to include the protective tree fencing necessary to preserve all vegetative areas identified for protection around the 5.15 acre residential parcel to the west of the subdivision. ***Comments: The grading plan has been updated accordingly. All disturbed areas***

are shown on the plan, and the applicant will need to replace disturbed tress in accordance with the City's tree replacement schedule.

3) The applicant shall work with the City and Washington County to identify and reserve sufficient space for a future trail corridor along the western right-of-way line of Manning Avenue. ***Comments: The proposed Manning Avenue right-of-way is consistent with County requirements, as the planned roadway segment includes room for trails on one or both sides of the right-of-way. The County's future plans for Manning Avenue include a trail along the western side of this road.***

4) The applicant shall submit a landscape plan prepared by landscape architect for review and approval by the City. The landscape plan submittal will include a tree protection and replacement plan consistent with City ordinances. ***Comments: The applicant submitted updated Preliminary Landscape Plans dated 12/17/2014 with the application for 1st Addition Final Plat. The 2nd Addition landscape plans are incomplete and will need to be revised for City review and approval.***

5) The final plat will incorporate all review comments from the City's landscape architect, including the selection and mix of plantings within storm water basins and infiltration areas. ***Comments: Please see above condition.***

6) The landscape plan shall include additional plantings around the Northern Natural Gas utility site. ***Comments: This condition is not relevant to the 2nd Addition Final Plat as there is no gas easement in this portion of the development.***

7) The proposed access to Manning Avenue will be permitted as a temporary access until such time that the Village Parkway is connected to 30th Street. The construction plans will be updated to reflect the temporary nature of this street. ***Comments: The applicant asked during the 1st Addition Final Plat that this provision be updated to state that the temporary access will be allowed for a minimum of five years. Staff was supportive of this revision and has updated the proposed conditions the 1st Addition Final Plat approval to reflect the change. This condition is not relevant to the 2nd Addition Final Plat.***

8) The applicant shall be responsible for the construction of all improvements within the Manning Avenue (CSAH 15) right-of-way as required by Washington County and further described in the review letter received from the County dated June 24, 2014. ***The final construction plans for the 1st Addition were updated to incorporate the required improvements to Manning Avenue. This condition is not relevant to the 2nd Addition final plat.***

9) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the appropriate watershed districts for the storm water management system prior to the commencement of any grading or development activity on the site. ***Comments: Because the Valley Branch Watershed District has not yet completed its review of the revised storm water plans, this condition will need to be addressed before the City will grant final approval of the construction plans. This has been added as a condition of approval of Final Plat.***

10) The applicant shall enter into a maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public

park and open space on the final plat. ***Comment: A Landscape License Agreement was executed for the 1st Addition and another one will be executed after the approval of 2nd Addition.***

11) The developer shall provide an updated accounting of the land to be dedicated for park purposes prior to submission of a final plat. If required, the developer shall be required to pay a fee in lieu of park land dedication equivalent to the fair market value for the amount of land that is required to be dedicated for such purposes in the City's Subdivision Ordinance less the amount of land that is accepted for park purposes by the City. Any cash payment in lieu of land dedication shall be paid by the applicant prior to the release of the final plat for recording. ***Comments: The park dedication requirements for the entire Easton Village development is 9.84 acres of land, representing 10% of the development area. During the 1st Addition Final Plat, the applicant provided an accounting of the land to be dedicated for park purposes, stating that the entire development will provide 7.29 acres of public park land. Staff had reviewed these numbers with the 1st Addition Final Plat application and found them to be accurate. However, this number will be amended if Council approves the elimination of the trail/outlot within the 2nd Addition Final Plat. The final agreement with the City concerning either a cash payment for the park land shortfall or future land dedication should be addressed in the developer's agreement for Easton Village 2nd Addition.***

12) Any land under which public trails are located will be accepted as park land provided the developer constructs said trails as part of the public improvements for the subdivision. ***Comments: The Applicant has not proposed any trails in this Addition. If it is determined that the trail connection between what is now being proposed as Lot 7 and 8 of Block 1 (referred to in the Preliminary Plat conditions as Lot 13 and 14 of Block 3), this condition will apply.***

13) All required modifications to the plans as requested by the City Engineer in a review letter dated June 26, 2014 shall be incorporated into the plans prior to consideration of a final plat. ***Comments. The preliminary plat and plans have been updated to address the City Engineer's review comments. The Engineer has submitted an updated report specific to the final plat, and this review is attached for consideration by the Planning Commission. Most of the comments pertain to final information or revisions necessary to approve the construction plans for the proposed improvements.***

14) The City and developer will determine the appropriate distribution of future costs associated with the Village Parkway railroad crossing improvements as part of a developer's agreement for any portion of Easton Village. ***Comments: Staff will be drafting a developer's agreement for consideration by the Council that will incorporate a section dealing with this provision.***

15) The developer shall address any comments from Metropolitan Airport Commission as part of a final plat submission for any portion of Easton Village. MAC will be asked to comment on the landscape plan, and the plan shall be revised to address any specific comments concerning the appropriate vegetation to be planted within storm water facilities. ***Comments: MAC has provided a review of the updated plans and provided comments to the developer in a letter dated December 8, 2015. This letter contains recommended mitigation strategies to reduce the attractiveness of the storm water retention and infiltration areas for waterfowl. Other recommendations from MAC have been incorporated into the applicant's landscape plans. Mac's comments are not relevant to the 2nd Addition Final Plat.***

16) The landscape plan shall be revised to eliminate all trees planted within the Lake Elmo Airport Regulatory Protection Zone. ***Comments. The Preliminary and 1st Addition landscape plans have been updated accordingly. MAC's comments are not relevant to the 2nd Addition Final Plat.***

17) The final plat shall include a paved trail connection between Lots 13 and 14 of Block 3. ***Comments: The Applicant is proposing eliminating this trail connections, for reasons cited herein.***

18) The applicant shall submit written acknowledgement from the property owner of the parcel immediately to the south of Easton Village concerning the storm water being outlet running into their property. ***Comments: Since the approval of the preliminary plat, the applicant has met with the watershed district, county, and Gonyea Homes to discuss the proposed storm water management system along Manning Avenue. This condition is not relevant to the 2nd Addition Final Plat.***

19) The applicant is encouraged to incorporate elements from the Lake Elmo Theming Study into the open space areas within the subdivision. ***Comments: This was Staff recommendation at the time of Preliminary Plat to encourage the applicant to utilize a white "horse fence" with landscaping in order to address the comments from MAC to provide a barrier around the storm water ponds. This fence was not erected, but instead additional landscaping was installed to provide screening. The applicant's landscape plan for the 1st Addition incorporated elements from the theming study, including the proposed entrance monument sign.***

20) The developer shall obtain all required permits from Northern Natural Gas to perform construction work over the gas line that runs from north to south across this site. ***Comments. Northern Natural Gas provided review comments to the developer in August of 2014, and these comments have been incorporated into the updated plans. The developer will need to submit the final construction plans to the gas company for review, and will need to abide by any conditions imposed by Northern Natural Gas. This has been added as a condition of approval. There are no impacts to this easement in the 2nd Addition.***

21) The developer shall be required to extend sewer to the northernmost boundary of the site. ***Comments. The Easton Village Trunk Sewer Line project has been completed and has extended sanitary sewer service to the northern boundary of the plat, connecting to the sewer line recently installed by the City of Lake Elmo under the railroad tracks that continues further north (and connects to the 39th Street line also recently installed by the City).***

Staff is recommending certain conditions that been specifically identified as part of the final plat review, and that have not otherwise been addressed by the applicant, be addressed as part of the Planning Commission's recommendation to the City Council. The City Engineer's review letter does identify several issues that need to be addressed by the developer in order for the City to deem the final plans complete. Staff is recommending that City Officials not sign the final plat mylars until the City's construction plan review is finalized and all necessary easements are documented on the final plat.

Based on the above Staff report and analysis, Staff is recommending approval of the final plat with several conditions intended to address the outstanding issues noted above and to further clarify the City's expectations in order for the developer to proceed with the recording of the final plat.

The recommended conditions are as follows:

Recommended Conditions of Approval:

1) Final grading, drainage, and erosion control plans, sanitary and storm water management plans, landscape plans, and street and utility construction plans shall be reviewed and approved by the City Engineer and applicable Staff prior to the recording of the Final Plat. All changes and modifications to the plans requested by the City Engineer in the memorandums addressing Easton Village 2nd Addition Final Plat and Easton Village 2nd Addition Construction Plan Review dated April 12, 2017 in the memo shall be incorporated into these documents before they are approved.

2) Prior to the execution of the Final Plat by City officials, the Developer shall enter into a Developer's Agreement acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements for the Easton Village 2nd Addition Final Plat with financial guarantees therefore.

3) All easements as requested by the City Engineer and Public Works Department shall be documented on the Final Plat prior to its execution by City Officials.

4) The Applicant shall submit an updated Landscape Plan that is consistent with Preliminary Landscape Plans; shows utility locations; shows irrigation plans; and includes the right-of-way area along Village Parkway. The updated plans will need to be approved by the City's Landscape Architect. A Landscape Maintenance Agreement will need to be provided for all City right-of-way areas.

5) Temporary easements for the temporary cul-de-sacs shall be executed and recorded on the City standard easement agreement form.

6) The applicant shall provide a disclosure statement to all first homeowners in the development advising of the airport and associated over-flights.

7) All builders shall be encouraged to incorporate interior noise reduction measures into single family residential structures within the subdivision based on the Metropolitan Council's Builder Guide.

8) The proposed access to Manning Avenue will be permitted as a temporary access until such time that the Village Parkway is connected to 30th Street or 5 years has passed from the date of final plat approval of the 1st Addition (March 23, 2020), whichever is longer. The developer's agreement for Easton Village shall include appropriate financial securities concerning the future cost for removal of the temporary access.

9) Approval by the Valley Branch Watershed District is needed for revised stormwater plans.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Easton Village 2nd Addition Final Plat:

1) That all the requirements of City Code Section 153.07 related to the Final Plan and Final Plat have been met by the Applicant.

2) That the proposed Final Plat for Easton Village consists of the creation of 19 single-family detached residential structures.

3) That the Easton Village 2nd Addition Final Plat is generally consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on July 15, 2014 and as amended to comply with conditions of preliminary plat approval with the exceptions of issues identified in the April 24, 2017 Staff report to the Planning Commission.

4) That the Easton Village 2nd Addition Final Plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

5) That the Easton Village 2nd Addition Final Plat complies with the City's Urban Low Density Residential zoning district regulations.

6) That the Easton Village 2nd Addition Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances with the exception of issues identified in the April 24, 2017 Staff report to the Planning Commission.

7) That the Easton Village 2nd Addition Final Plat complies with the City's subdivision ordinance.

8) That the Easton Village 2nd Addition Final Plat is generally consistent with the City's engineering standards with the exception of necessary plan revisions outlined by the City Engineer in his review comments to the City dated April 12, 2017.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the 2nd Addition Final Plat for Easton Village with the 9 conditions of approval as listed in the Staff report. Suggested motion:

"Move to recommend approval of the Easton Village 2nd Addition Final Plat with the 9 conditions of approval as drafted by Staff"

ATTACHMENTS:

1. Application Form
2. City Engineer Review Letters
3. Updated Preliminary Plans dated 12/17/2014
4. Easton Village 2nd Addition Final Plat and Plans
5. Revised Preliminary Plans

SUGGESTED ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Open the Public Hearing.....Chair
- Close the Public Hearing.....Chair
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
LU File #: _____

THE CITY OF LAKE ELMO

651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

FINAL PLAT APPLICATION

Applicant: Chase Development
Address: 2140 West County Road 42
Phone #: 952-292-0046
Email Address: Timbercrest@ymail.com

Fee Owner: Easton Village
Address: 2140 West County Road 42
Phone #: 952-292-0046
Email Address: Timbercrest@ymail.com

Property Location (Address): _____
Complete (long) Legal Description: Outlot F Easton Village

PID#: 13 029 21 42 0025

General information of proposed subdivision: _____

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning Ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant: Tom Chase Date: 12-27-2016

Fee Owner Signature Tom Chase Date: 12-27-2016

EASTON VILLAGE 2ND ADDITION

FINAL PLAT WRITTEN STATEMENTS

January 14, 2017

A) PROJECT CONTACTS:

OWNER:
Tom Wolter
Easton Village, LLC
2140 County Road 42 West
Burnsville, MN 55337
Phone: 952-292-0046
timbercrest@ymail.com

DEVELOPER:
Tom Wolter
Chase Development
2140 County Road 42 West
Burnsville, MN 55337
Phone: 952-292-0046
timbercrest@ymail.com

AUTHORIZED AGENT:
Project Contact/Engineer:
Todd A. Erickson, PE
EricksonCivil
333 North Main Street, Suite 201
Stillwater, MN 55082
Phone: 612-309-3804
todd@tericksonllc.com

Surveyor:
Paul A. Johnson, LS, EricksonCivil

Landscape Architect:
David Chmielewski, LA, EricksonCivil

B) SITE DATA:

Address: No current address. 32xx Linden Lane North.

Current Zoning: LDR

Parcel Size: 5.20 Acres, 226,528 Sq. Ft.

PID No.: 13.029.21.42.0025

Current Legal: Part of Outlot F, Easton Village, Washington County, Minnesota. See also Final Plat Dedication Page 1 of 2.

C) FINAL SUBDIVISION AND LOT INFORMATION:

Name of Final Plat: Easton Village 2nd Addition

Table of Proposed Lots:

Lot	Block	Area (Sq. Ft.)	Area (Acre)	Lot Width (1)	Lot Depth (2)
1	1	9,817	0.225	79	130
2	1	9,091	0.209	70	130
3	1	9,750	0.224	75	130
4	1	9,267	0.213	75	120
5	1	8,673	0.199	75	110
6	1	10,736	0.246	65	120
7	1	8,310	0.191	65	115
8	1	10,292	0.236	65	115
9	1	10,254	0.235	65	115
10	1	7,483	0.172	70	115
11	1	8,917	0.205	70	125
12	1	9,116	0.209	70	130
13	1	8,455	0.194	65	130
14	1	11,089	0.255	70	130
1	2	8,701	0.200	65	120
2	2	8,658	0.199	70	120
3	2	7,772	0.178	65	120
4	2	10,190	0.234	70	120
5	2	10,463	0.240	60	120
ROAD RIGHT OF WAY		49,494	1.136		
TOTAL AREA DEVELOPED		226,528	5.200		

(1) Lot width at setback shown on plan

(2) Average approximate lot length, some lots are irregular in shape (see plan for exact dimensions)

Area of Parks and Trails:	None proposed.
Area of Wetlands and Buffers:	None on this proposed addition.
Final Area of Dedicated Right of Way:	1.136 Acres
Legal Description of All Lots:	See Final Plat Graphics, Sheet 2 of 2.
Easements to be Vacated:	Temporary Roadway Easement (Easton Village)

D. EXPLANATION OF ISSUES SINCE PRELIMINARY PLAT:

The lot layout has been revised to adjust to market conditions, allowing for wider lots and a mixture of lots to create more variety and options for builders. This adjustment of lots will not alter the overall density and is not a request to increase or decrease the overall density of the preliminary plat, only a request to adjust lot lines to accommodate some more variety for the overall subdivision.

E. FINAL DENSITY:

Same as presented for Preliminary Plat Documents. Below is a summary of the density calculation of the preliminary plat of Easton Village:

AREA CALCULATION SUMMARY	
PARK AREA	7.96
OPEN SPACE	18.90
LOT AREA	52.25
RIGHT OF WAY	19.37
RUNWAY PROTECTION ZONE	4.77
STEEP SLOPE AREAS	2.65
TOTAL PROPERTY AREA	98.47
TOTAL PROPOSED LOTS	217
PERCENT OF OPEN SPACE/PARK	27.3%
GROSS DENSITY	2.20
NET DENSITY*	2.38

F. INFRASTRUCTURE IMPROVMENTS:

The proposed storm sewer will be connected to the existing pond constructed with Easton Village. The water main and sanitary sewer will be extended from the constructed water and

sewer of Easton Village. All utilities will be constructed per city standards. The storm water ponding for this addition has been planned for and will be accommodated by the existing constructed pond of Easton Village. Stubs for water and sewer will be installed for future phases of the overall project.

G. CONCERNS OF NEIGHBORING PROPERTIES:
No known issues.

H. CONFLICTS WITH NEARBY LAND USES:
No known issues.

I. JUSTIFICATION RELATING TO BURDEN ON EXISTING INFRASTRUCTURE:
This project is a part of an overall larger project, which density has been planned for with the installation of a trunk sewer and watermain and highway right turn and bypass lane for access, therefore this project will not create any undue burden on the existing infrastructure of the City or surrounding area. In addition to the water and sewer charges the City will get from this project, it will add approximately $14,000 a year in tax payments to the City of Lake Elmo, with additional tax payments going to the County, School District and Met Council to offset any burden created by this project.

J. PROPOSED LAKESHORE ACCESS:
None Proposed.

K. PROPOSED PARKS AND OPEN SPACE:
None Proposed. Easton Village currently contains a park and open space, dedicated with the first addition of the project. The trail connection originally shown on the preliminary plat has been eliminated on this final plan. For this neighborhood to connect to the trail system, the access is by sidewalk one block south at the Easton Village Park. We have found that customers purchase cul de sacs lots because of the added security and privacy they provide for families, with the feature of one entrance for both pedestrian and vehicular traffic.

L. CONSTRUCTION SCHEDULE:
Construction would be expected to begin as soon as possible in the spring of 2017. Substantial completion of the project would occur in the fall of 2017.

MEMORANDUM

FOCUS ENGINEERING, inc.

Cara Geheren, P.E.	**651.300.4261**
Jack Griffin, P.E.	**651.300.4264**
Ryan Stempski, P.E.	**651.300.4267**
Chad Isakson, P.E.	**651.300.4283**

Date: April 12, 2017

To: Todd Erickson, P.E., Erickson Civil Site
Cc: Tom Wolter, Chase Development
Jack Griffin, P.E., City Engineer
Stephen Wensman, City Planner
From: Chad Isakson, P.E., Municipal Engineer

Re: Easton Village 2nd Addition
Construction Plan Review

An engineering review has been completed for the Easton Village 2nd Addition Construction Plans consisting of the following documentation prepared by Erickson Civil Site:

- Easton Village Preliminary Plat Revisions dated March 17, 2017.
- Easton Village Preliminary Plat Stormwater Management Revisions dated March 17, 2017.
- Easton Village 2nd Addition Final Plat, not dated.
- Easton Village 2nd Final Plat Narrative dated February 14, 2017.
- Easton Village 2nd Addition Construction Plans dated March 17, 2017.

STATUS/FINDINGS: The following comments have been provided in addition to the Final Plat comment memo to direct plan corrections necessary for final construction plan approval. When submitting revised plans, please provide a point by point response letter that details all changes made to the plans.

FINAL PLAT, GENERAL PLANS & SPECIFICATION REQUIREMENTS:

- Final Construction Plans and Specifications must be prepared in accordance with the City Engineering Design Standards Manual using City details, plan notes and specifications and meeting City Engineering Design Guidelines.
- Specifications for the Easton Village 2nd Addition must be prepared and submitted for the improvements.

GRADING PLAN AND EROSION CONTROL PLANS & STORM WATER MANAGEMENT:

- C2: Label exiting utility type, pipe size and pipe material.
- C2: Label existing street and ROW widths.
- C2: Provide existing inverts of all structures. Some inverts have been provided on the plans, many others have not.
- C3: The first Erosion Control Plan Sheet must have the City Standard Plan Notes for Grading and Erosion Control. Move these plan notes from Sheet C5.
- C3: Keyed notes are incomplete and in some instances are not correct. Please review and revise as needed.
- C3: Add protection around existing storm sewer FES in Outlot E.
- C3/C4: Revise grading note #18 to reference the correct plan sheets.
- C4: Remove proposed 3rd Addition Improvements from the 2nd Addition plans.
- C6: Drainage path from rear yard of Lot 6 to Outlot E contains a critical EOF point between Lots 7-8. The entire drainage path must be emphasized in its design to establish a permanent flow path (established

swale) that cannot be graded in the future. The EOF must be located in the center of the 15 foot easement with gentle grades within the easement area. The grade within Village Parkway must maintain the 4% maximum slope. How does the grade from the right-of-way connect back to the EOF grade?

- C6: A redesign of the grading/storm sewer layout along rear yards of Lots 3-6, Block 1 is required. The storm sewer pipe is too shallow, does not meet the City minimum pipe cover, and the HWL should not be allowed to pond over the pipe as proposed. A beehive structure must be used when located in the open rear yard area.
- C6: The grading plans must be revised to include frequent spot elevations along Lots 2-13, Block 1 as a quality control measure to guide the grading contractor to contain the HWL contours within the easement areas. These spot elevations must be shot and provided as part of the as-built grading plans prior to the release of building permits. Provide minimum of 2 spot elevations per lot.
- C6: Revise the low floor elevation for Lots 9-14 and Lots 1-6, Block 1 to 918.6. The downstream as-built EOF at the south end of Outlot E is 917.53.
- C6: Label the storm water Pond and provide the HWL contours.
- C6: The grading plans must include the driveway locations and grades and building setbacks.
- C6: The grading plans are incomplete along Village Parkway and the west side of Village Parkway. All areas must be graded to provide positive drainage throughout the site, including the temporary grading conditions.
- C6: Add a temporary cul-de-sac per City standard detail at the north end of Village Parkway.
- C6/C7: Revise grading note #7 to reference the correct plan sheets.
- C7: Remove proposed 3rd Addition Improvements from the 2nd Addition plans.
- C8: Add lot setbacks, street names and temporary cul-de-sac at north end of Village Parkway.
- C9-C11: Utility conduit crossing locations must be shown on all plans.
- C9: Revise cul-de-sac geometrics to meet City minimum standards; pavement radius of 45 feet and R/W radius of 60 feet.
- C11: Revise typical section plan note as follows: “See City standard plate 801 for placement of pavement section including drain tile”.
- C11: Add plan notes for completion of Village Parkway storm sewer. Show existing storm sewer as existing on the plans. Ad plan notes to adjust catch basins, placement of castings, etc.
- C11: Label low points and high points on plan view.
- C11: Remove proposed 3rd Addition Improvements from the 2nd Addition plans.
- C11: remove Keyed Notes #1, #3, and #5. They are not applicable to the 2nd Addition plans.
- C12: Change sewer pipe minimum grade to 0.5% whenever possible.
- C12: Revise water/sewer service stubs to Lots 1 and 14, Block 1 to connect from Linden Court.
- C14: Revise CB-8 to meet minimum 3 feet of pipe cover.
- C14: Redesign storm sewer from FES-5 to east of CB-4 to provide minimum 3 feet of pipe cover.
- C14: Add plan note to protect/restore existing DT and clean outs with utility rework at Lots 4 and 5 Block 2.
- C14: Extend DT a minimum of 100 feet in both directions with clean out at all ends from CB-7, CB-8, CB-2 and CB-3.
- C16-C21: Update details as follows: Replace details 201, 208, and 505 with March 2017 version. Add 313, 315, 507B-E, 514, 807B, 900A, 901, 902 and 903.
- L1: Revise Note to require field locating all trees, not just trees on City property/right-of-way.
- L1: Show utilities on landscape plans to help maintain tree/utility offset.
- Add landscape plan for Village Parkway.
- PLAT: Consider expansion for the easement at rear yard of Lots 7-8, Block 1 to better protect critical EOF.
- Storm sewer design calculations must be submitted. The design calculations must demonstrate that all pipe velocities remain at or below 15 fps and all outfall pipe velocities remain at or below 5 fps.

MEMORANDUM

FOCUS ENGINEERING, inc.

Cara Geheren, P.E.	**651.300.4261**
Jack Griffin, P.E.	**651.300.4264**
Ryan Stempski, P.E.	**651.300.4267**
Chad Isakson, P.E.	**651.300.4283**

Date: April 12, 2017

To: Stephen Wensman, City Planner
Cc: Chad Isakson, P.E., Municipal Engineer
From: Jack Griffin, P.E., City Engineer

Re: Easton Village 2nd Addition – Final Plat Engineering Review Comments

An engineering review has been completed for Easton Village 2nd Addition. Final Plat/Final Construction Plans were received on March 22, 2017. The submittal consisted of the following documentation prepared by Erickson Civil, or as noted:

- Easton Village Preliminary Plat Revisions dated March 17, 2017.
- Easton Village Preliminary Plat Stormwater Management Revisions dated March 17, 2017.
- Easton Village 2nd Addition Final Plat, not dated.
- Easton Village 2nd Final Plat Narrative dated February 14, 2017.
- Easton Village 2nd Addition Construction Plans dated March 17, 2017.

STATUS/FINDINGS: Engineering review comments have been provided in two separate memos; one for Final Plat approval, and one to assist with the completion of the final Construction Plans. Please see the following review comments relating to the Final Plat application.

FINAL PLAT: EASTON VILLAGE 2ND ADDITION

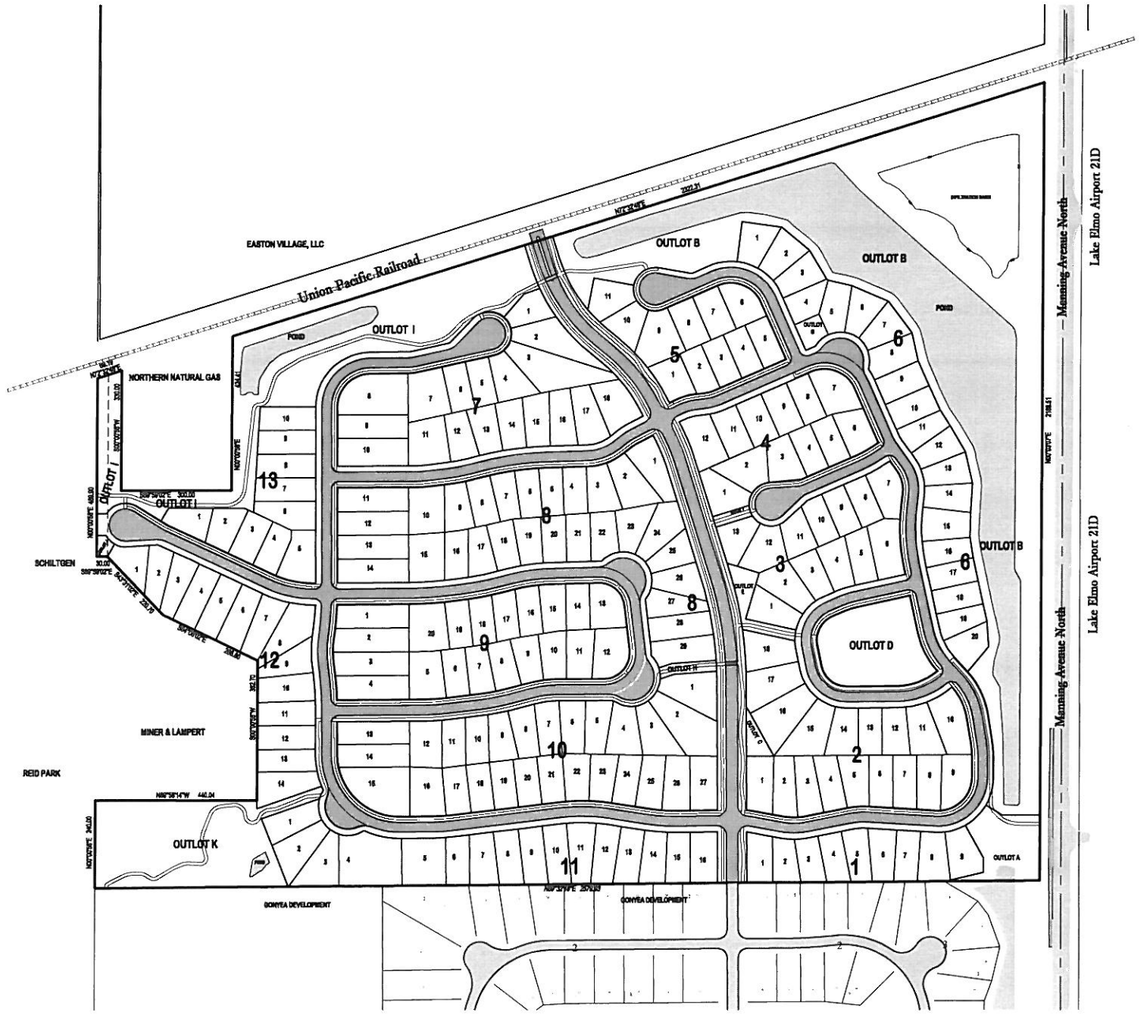
- No construction for Easton Village 2nd Addition may begin until the applicant has received City Engineer approval for the Final Construction Plans; the applicant has obtained and submitted to the City all applicable permits, easements and permissions needed for the project; and a preconstruction meeting has been held by the City's engineering department.
- The Final Plat shall not be recorded until final construction plan approval is granted.
- Final Construction Plans and Specifications must be revised in accordance with the Construction Plan engineering review memorandum dated April 12, 2017 and approved by the City Engineer. In particular, the grading, storm water management including critical emergency overflow locations, and storm sewer must be revised to meet the City engineering design standards.
- Final Construction Plans and Specifications must be prepared in accordance with the City Engineering Design Standards Manual using City details, plan notes and specifications and meeting City Engineering Design Guidelines.
- All easements as requested by the City Engineer and Public Works department shall be documented on the Final Plat prior to the release of the Final Plat for recording.
- There are no Outlots as part of this Plat to be dedicated to the City.
- Final Plat should be contingent upon the City receiving copies of fully executed temporary easements for the temporary cul-de-sacs using the City standard easement agreement form.

EASTON VILLAGE

LAKE ELMO, MINNESOTA

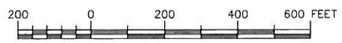
PRELIMINARY PLAT

DECEMBER 17, 2014



217 UNIT SINGLE FAMILY RESIDENTIAL SUBDIVISION

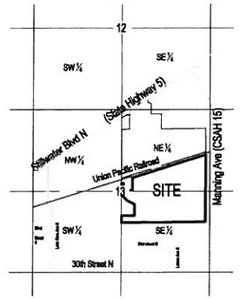
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GRAPHIC SCALE

Site Location Map

Section 12 & 13, T30N - R21W
Washington County, Minnesota



PLAN SHEET INDEX:

SHEET NO.	SHEET ID	DESCRIPTION
1	C1	TITLE SHEET
2	C2	EXISTING CONDITIONS
3	C3	EXISTING CONDITIONS
4	C4	EXISTING CONDITIONS
5	C5	OVERALL SITE & AREA CALCULATIONS
6	C6	PRELIMINARY LAYOUT PLAN
7	C7	PRELIMINARY LAYOUT PLAN
8	C8	PRELIMINARY LAYOUT PLAN
9	C9	STREET PLAN
10	C10	STREET PLAN
11	C11	STREET PROFILES
12	C12	STREET PROFILES
13	C13	STREET PROFILES
14	C14	EROSION CONTROL PLAN
15	C15	EROSION CONTROL PLAN
16	C16	EROSION CONTROL PLAN
17	C17	GRADING PLAN
18	C18	GRADING PLAN
19	C19	GRADING PLAN
20	C20	GRADING PLAN
21	C21	GRADING PLAN
22	C22	GRADING PLAN
23	C23	GRADING PLAN
24	C24	UTILITY PLAN
25	C25	UTILITY PLAN
26	C26	UTILITY PLAN
27	C27	UTILITY PLAN
28	C28	UTILITY PLAN
29	C29	UTILITY PLAN
30	C30	DETAILS
31	C31	DETAILS
32	C32	DETAILS
33	C33	DETAILS

1	TS	TREE SURVEY/REPLACEMENT CALCULATION

1	L1	LANDSCAPE TITLE SHEET
2	L2	EAST LANDSCAPE PLAN
3	L3	WEST LANDSCAPE PLAN
4	L4	INFILTRATION BASIN DETAIL
5	L5	ENTRANCE DETAIL
6	L6	LANDSCAPE DETAILS

NOTE: ALL CONSTRUCTION SHALL COMFORM TO THE STANDARDS OF THE CITY OF LAKE ELMO

ERICKSON CIVIL
333 North Main Street, Suite 201
Stillwater, Minnesota 55082
Phone (612) 309-3804
www.ericksoncivilsite.com

DRAWING PHASE:

	OWNER REVIEW
✓	AGENCY REVIEW
	BID DOCUMENT
	FOR CONSTRUCTION
	AS-BUILT DOCUMENT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TODD A. ERICKSON, PE
40418
LICENSE NO
12/17/2014
DATE

OWNER/DEVELOPER
EASTON VILLAGE, LLC
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 13-114
DRAWN BY: TAE, JSR
CHECKED BY: TAE

SHEET TITLE
TITLE SHEET

SHEET NO.
C1
SHEET 1 of 33

EASTON VILLAGE

LAKE ELMO, MINNESOTA

2ND ADDITION - FINAL PLAN

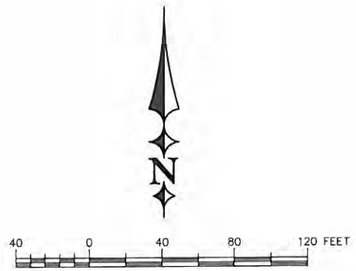
GRADING, EROSION CONTROL, STREET, STORM SEWER, UTILITY, LANDSCAPE AND PLAT

MARCH 17, 2017



2ND ADDITION - 19 UNIT SINGLE FAMILY RESIDENTIAL SUBDIVISION

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GRAPHIC SCALE

Site Location Map

Section 12 & 13, T29N - R21W
Washington County, Minnesota



PLAN SHEET INDEX:

SHEET NO.	SHEET ID	DESCRIPTION
1 OF 21	C1	TITLE SHEET
2 OF 21	C2	EXISTING CONDITIONS
3 OF 21	C3	EROSION CONTROL & SITE RESTORATION PLAN
4 OF 21	C4	EROSION CONTROL & SITE RESTORATION PLAN
5 OF 21	C5	GRADING STANDARD PLAN NOTES
6 OF 21	C6	GRADING PLAN
7 OF 21	C7	GRADING PLAN
8 OF 21	C8	SITE LAYOUT/ LIGHTING AND SIGNAGE PLAN
9 OF 21	C9	STREET PLAN & PROFILE
10 OF 21	C10	STREET PLAN & PROFILE
11 OF 21	C11	STREET PLAN & PROFILE
12 OF 21	C12	SANITARY SEWER & WATERMAIN PLAN & PROFILE
13 OF 21	C13	SANITARY SEWER & WATERMAIN PLAN & PROFILE
14 OF 21	C14	STORM SEWER PLAN & PROFILE
15 OF 21	C15	DETAILS
16 OF 21	C16	DETAILS
17 OF 21	C17	DETAILS
18 OF 21	C18	DETAILS
19 OF 21	C19	DETAILS
20 OF 21	C20	DETAILS
21 OF 21	C21	DETAILS
1 OF 1	L1	LANDSCAPE PLAN AND DETAILS
1 OF 3		FINAL PLAT DEDICATION
2 OF 3		FINAL PLAT DEDICATION
3 OF 3		FINAL PLAT GRAPHICS

NOTE: ALL CONSTRUCTION SHALL COMFORM TO THE STANDARDS OF THE CITY OF LAKE ELMO

ERICKSON CIVIL
333 North Main Street, Suite 201
Stillwater, Minnesota 55082
Phone (612) 309-3804
www.ericksoncivilsite.com

DRAWING PHASE

	OWNER REVIEW
✓	AGENCY REVIEW
	BID DOCUMENT
	FOR CONSTRUCTION
	AS-BUILT DOCUMENT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TODD A. ERICKSON, PE
40418
LICENSE NO
03/17/2017
DATE

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

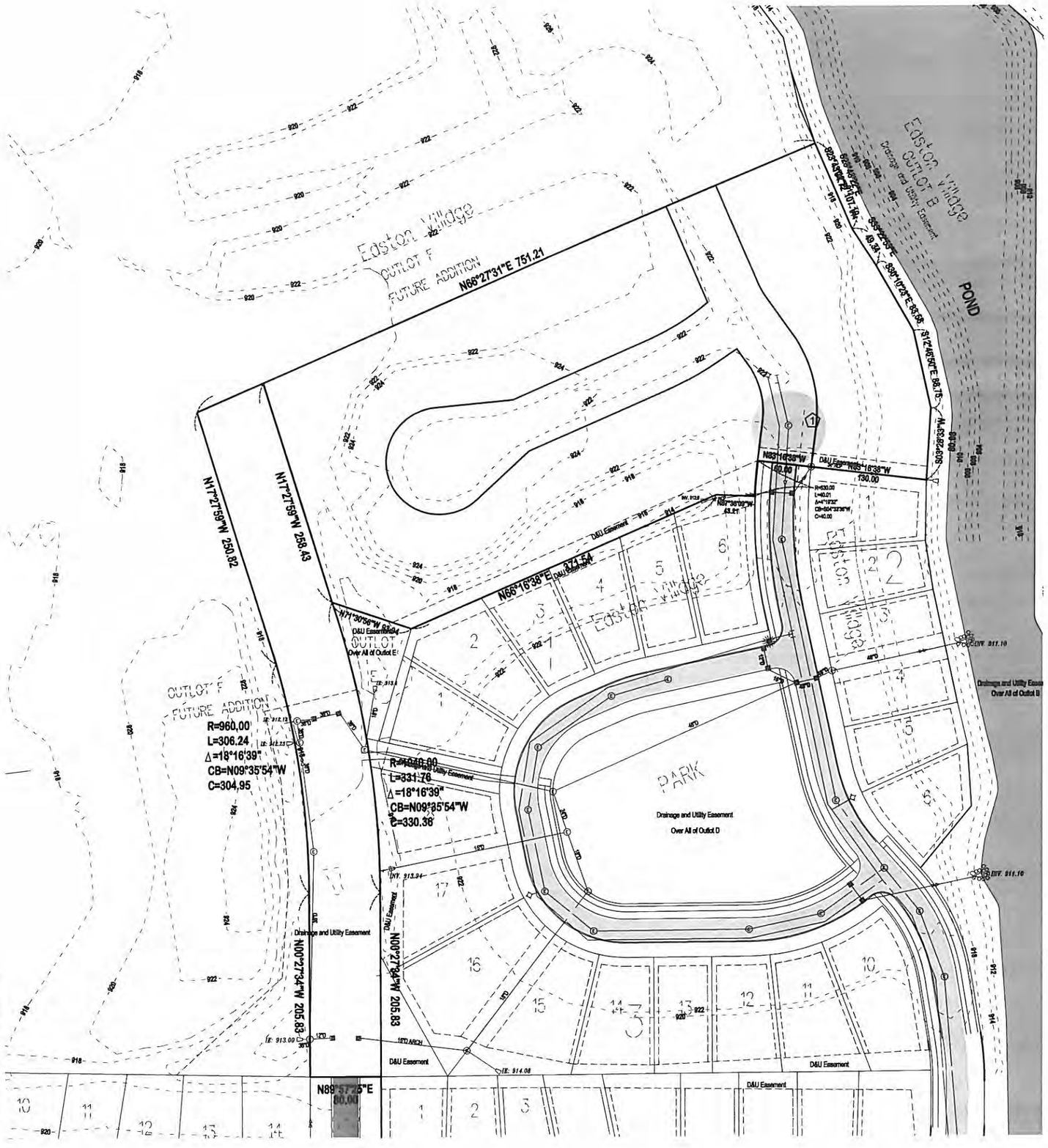
PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
TITLE SHEET

SHEET NO.
C1
SHEET 1 OF 21



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60 0 60 120 180 FEET

GRAPHIC SCALE

Legend

- 2ND ADDITION BOUNDARY
- 922 EXISTING 2-FT CONTOUR
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING BITUMINOUS PAVEMENT

Keyed Notes

1. EXISTING CUL DE SAC SHALL BE REMOVE IN IT'S ENTIRETY.

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SHEET TITLE
EXISTING CONDITIONS

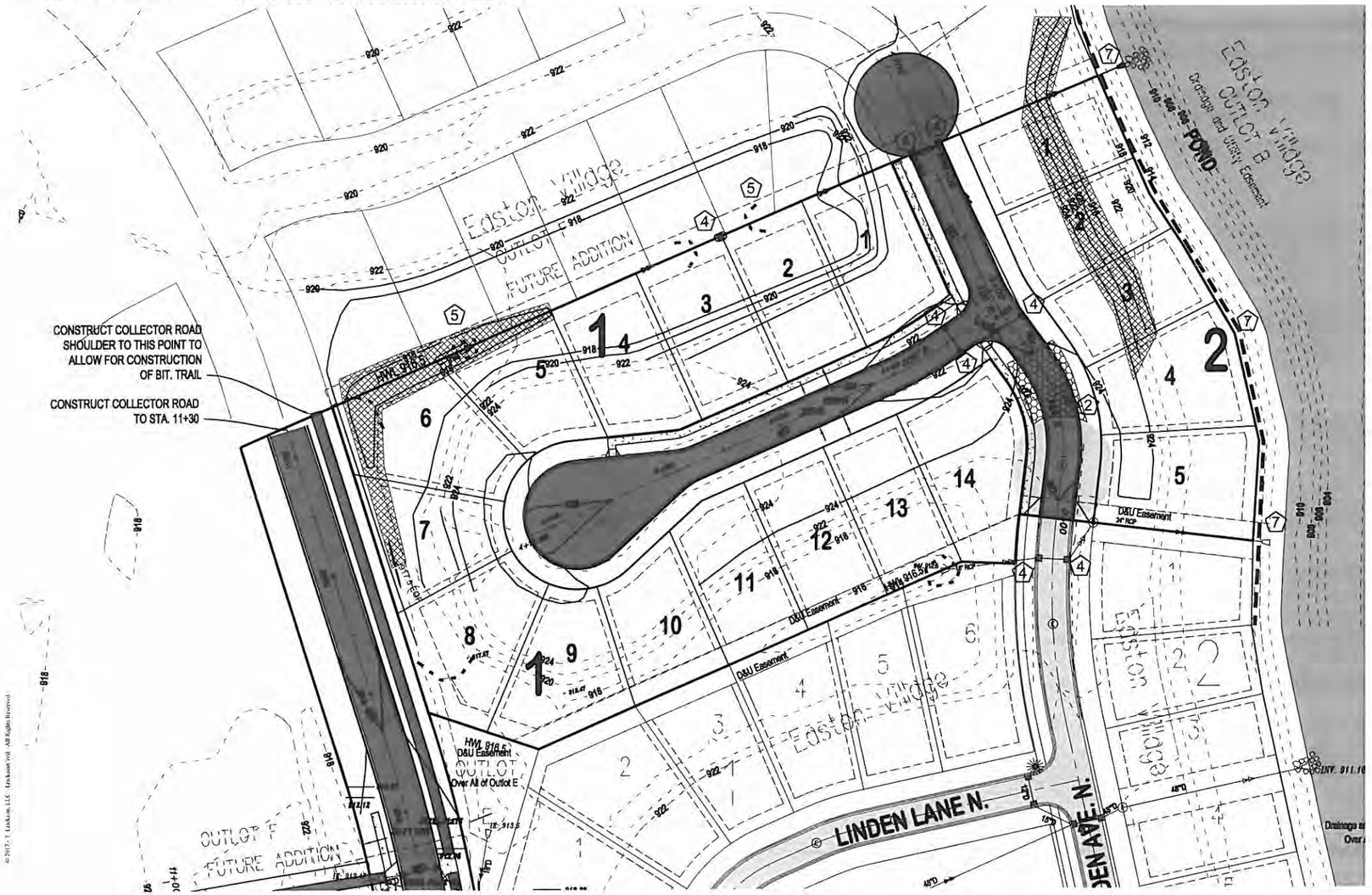
SHEET NO.
C2
SHEET 2 OF 21

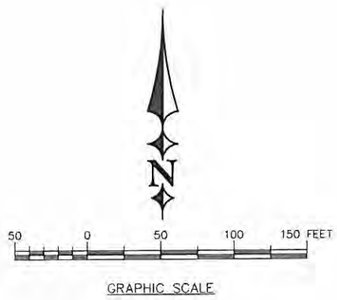
GRADING AND EROSION CONTROL NOTES:

1) SPOT ELEVATIONS ARE ALL GUTTER LINE OR FINISHED ELEVATION UNLESS NOTED OTHERWISE.
2) ELEVATIONS/CONTOURS SHOWN AS FINISHED GRADE ELEVATIONS.
3) REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
4) DO NOT SPREAD TOPSOIL WHILE IT IS FROZEN OR MUDDY OR WHEN THE SUBGRADE IS WET OR FROZEN. CORRECT ANY IRREGULARITIES IN THE SURFACE THAT RESULT FROM TOPSOIL SPREADING OR OTHER OPERATIONS TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. BERMING OR DOUBLE LAYERING OR BIO LOG MAY BE REQUIRED TO CONTAIN RUNOFF IF SILT FENCING CANNOT BE INSTALLED PROPERLY DURING FROZEN CONDITIONS.
5) CONTRACTOR SHALL SCHEDULE SOILS TESTING FOR EACH STRUCTURAL FILL AREA, PAD AND STREET AREA.
6) PRIOR TO ROUGH GRADING, INSTALL FIBER ROLLS AND SILT FENCE IN LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER OR CITY STAFF.
7) AS EACH AREA OUTSIDE OF THE STREET IS GRADED, PROVIDE 6" OF NATIVE TOPSOIL, SEED AND MULCH ANCHORED WITH A STRAIGHT DISC WITHIN 48 HOURS OF FINE GRADING.
8) SLOPES 3:1 AND GREATER SHALL BE STABILIZED WITH FIBER BLANKET.
9) MAINTAIN AND REPAIR FIBER ROLL AND SILT FENCE (INCLUDING REMOVAL OF ACCUMULATED SILT WITHIN 24 HOURS UPON DETECTION OR NOTIFICATION) UNTIL VEGETATION IS 70% ESTABLISHED.
10) CONTRACTOR TO INSPECT AND DOCUMENT EROSION CONTROL A MINIMUM OF ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF ANY RAIN EVENT GREATER THAN 1/2 INCH IN 24 HOURS AND WITHIN SEVEN DAYS AFTER THAT EVENT.
11) BIO LOG AND SILT FENCE FOUND DAMAGED MUST BE REPAIRED OR REPLACED WITH 24 HOURS UPON DISCOVERY. REMOVAL OF FIBER ROLL AND SILT FENCE REQUIRED AFTER SITE IS STABILIZED (AT DIRECTION OF ENGINEER).
12) ALL PUBLIC STREETS SHALL BE KEPT FREE OF SEDIMENT AND DEBRIS. ANY SEDIMENT OR DEBRIS DETECTED MUST BE REMOVED WITHIN 24 HOURS OR AS DIRECTED BY CITY.
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14) ALL PROPOSED AND EXISTING CATCH BASINS WITHIN PROJECT AREA SHALL BE PROVIDED INLET PROTECTION. REGULAR CLEANING OF PROTECTION SHALL OCCUR AND SHALL BE INCLUDED IN THE UNIT PRICE OF INLET PROTECTION.
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16) ON- SITE BURY OF TREES SHALL BE SCRICTLY PROHIBITED. TREES MAY BE BURNED WITH PROPER PERMITTING AND APPROVAL FROM CITY.
17) ALL PIPE OUTFALLS SHALL BE PROTECTED WITH RIPRAP PER CITY DETAIL.
18) ALL CITY STANDARD NOTES AS FOUND ON SHEETS C2 & C3 SHALL BE FOLLOWED.

KEYED NOTES

1. INSTALL SILT FENCE
2. INSTALL ROCK CONSTRUCTION ENTRANCE
3. INSTALL MNDOT SPEC. 9" BIO LOG
4. INSTALL INLET PROTECTION
5. INSTALL EROSION CONTROL BLANKET TYPE CAT. 2 WOOD FIBER
6. AREA SHALL BE UNCOMPACTED WITH HARROW OR OTHER MEANS TO LOOSEN SOIL AND ALLOW FOR INFILTRATION. POND BENCH ABOVE NORMAL AND AS SHOWN.
7. SILT FENCING TO REMAIN AND BE MAINTAINED DURING PROJECT.





LEGEND

- 2ND ADDITION BOUNDARY
- 920 EXISTING 2-FT CONTOUR INTERVAL
- 920 PROPOSED 2-FT CONTOUR INTERVAL
- PROPOSED STORM SEWER (SIZE INDICATED ON PLANS)
- SILT FENCE
- INSTALL DITCH CHECK (MNDOT SPEC. 9" BIO LOG)
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET (CAT. 2, WOOD FIBER) (CAT. 4 IN BOTTOM OF SWALES)

SEEDING 1) LOTS AND OPEN SPACE, LOW GROW FESCUE @ 220 LBS /ACRE
TOPSOIL 6" MINIMUM DEPTH, MEETING MNDOT SPEC. FOR TOPSOIL BORROW

NOTE: ALL SEED SHALL BE DRILLED AND NOT SPREAD.

ALL SEEDING SHALL BE COVERED WITH WEED FREE MNDOT TYPE 3 MULCH APPLIED @ 2 TONS PER ACRE.

SWPPP SEQUENCING

1) OBTAIN MPCA PERMIT MINIMUM 7 DAYS PRIOR TO STARTING TREE CLEARING ACTIVITIES.
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5) MAINTAIN SWPPP MAILBOX WITH A COPY OF THE PLANS, SWPPP AND EROSION CONTROL LOGS.
6) NOTIFY CITY FOR INSPECTION OF PERIMETER EROSION CONTROL MEASURES PRIOR TO STARTING CONSTRUCTION (3 BUSINESS DAY NOTIFICATION REQUIRED).
7) STOCKPILE TOPSOIL AND INSTALL PERIMETER BIO LOG SURROUNDING STOCKPILES REQUIRED
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CITY STANDARD PLAN NOTES

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
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EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
EROSION CONTROL AND SITE RESTORATION PLAN

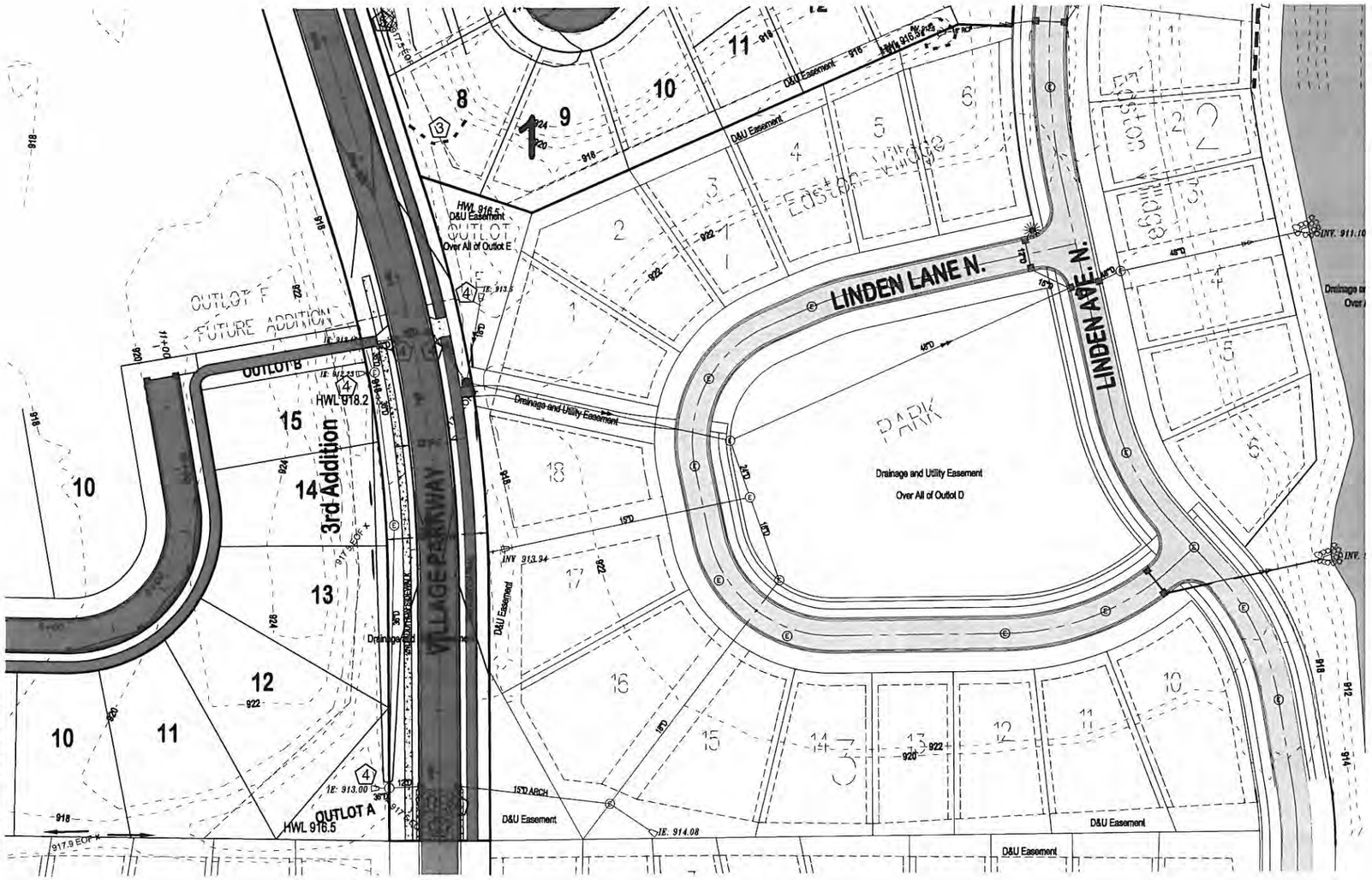
SHEET NO.
C3
SHEET 3 OF 21

GRADING AND EROSION CONTROL NOTES:

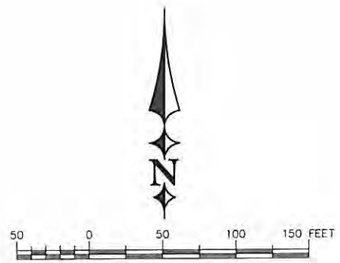
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3. INSTALL MNDOT SPEC. 9" BIO LOG
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5. INSTALL EROSION CONTROL BLANKET TYPE CAT. 2 WOOD FIBER



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GRAPHIC SCALE

LEGEND

- 2ND ADDITION BOUNDARY
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FINAL PLAN
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NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
EROSION CONTROL AND SITE RESTORATION PLAN

SHEET NO.
C4
SHEET 4 OF 21

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.

2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.

5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO: 600A

LAKE ELMO

9. DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.

10. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

11. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO: 600B

LAKE ELMO

13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.

14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.

15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.

16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.

18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO: 600C

LAKE ELMO

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- ✓ AGENCY REVIEW
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- FOR CONSTRUCTION
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TODD A. ERICKSON, PE

40418

LICENSE NO.

01/05/2017

DATE

OWNER/DEVELOPER:
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE:
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

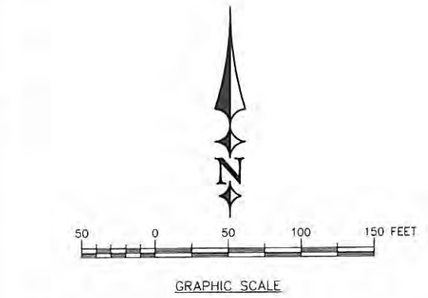
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE:
GRADING
STANDARD PLAN
NOTES

SHEET NO.
C5
SHEET 5 OF 21



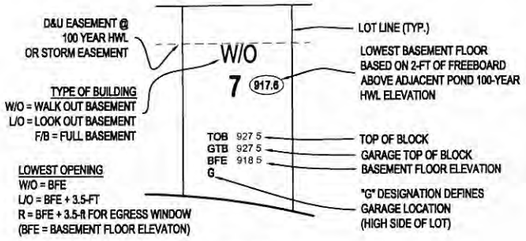


LEGEND

- 2ND ADDITION BOUNDARY
- 1050 — EXISTING 2-FT CONTOUR INTERVAL
- 922.85 LP / HP EOF — HIGH OR LOW POINT OF STREET PROFILE LOCATION AND ELEVATION HP = HIGH POINT, LP = LOW POINT, EOF = EMERGENCY OVERFLOW
- 1050 — PROPOSED 2-FT CONTOUR INTERVAL
- PROPOSED DRAINAGE ARROW
- 0.74% — PROPOSED STREET GRADE PERCENT AND DIRECTION
- PROPOSED STORM SEWER AND STRUCTURES
- ENGINEERED FILL LIMIT
- 100-YEAR HWL

GRADING NOTES:

1) SPOT ELEVATIONS ARE ALL GUTTER LINE OR FINISHED ELEVATION UNLESS NOTED OTHERWISE.
2) ELEVATIONS/CONTOURS SHOWN AS FINISHED GRADE ELEVATIONS.
3) REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
4) DO NOT SPREAD TOPSOIL WHILE IT IS FROZEN OR MUDDY OR WHEN THE SUBGRADE IS WET OR FROZEN. CORRECT ANY IRREGULARITIES IN THE SURFACE THAT RESULT FROM TOPSOIL SPREADING OR OTHER OPERATIONS TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. BERMING OR DOUBLE LAYERING OR FIBER ROLL MAY BE REQUIRED TO CONTAIN RUNOFF IF SILT FENCING CANNOT BE INSTALLED PROPERLY DURING FROZEN CONDITIONS.
5) CONTRACTOR SHALL SCHEDULE SOILS TESTING FOR EACH STRUCTURAL FILL AREA, PAD AND STREET AREA.
6) SEE DETAIL(S) FOR PAD CONSTRUCTION, SHEET C13
7) ALL CITY STANDARD NOTES AS FOUND ON SHEETS C2 & C3 SHALL BE FOLLOWED.



LOT GRADING DETAIL

PAVEMENT HOLD DOWN TABLE

SECTION AREA	HOLD DOWN FOR GRADING
LOCAL STREET	21 INCHES
SIDEWALK	9 INCHES
TRAIL	10.5 INCHES

ENGINEERED/STRUCTURAL FILL REQUIREMENTS

1) CONTRACTOR SHALL REMOVE TOPSOIL AND ANY ORGANIC MATERIAL AS DIRECTED BY ENGINEER IN ALL AREAS OF ENGINEERED/STRUCTURAL FILL.
2) ANY ENGINEERED/STRUCTURAL FILL MATERIAL SHALL BE COMPACTED IN 8-INCH LIFTS TO A DENSITY OF 98% STANDARD PROCTOR DENSITY.
3) GRANULAR BACKFILL SHALL BE COMPLETELY FREE OF ORGANIC MATERIAL & MAY NOT CONTAIN ANY ROCKS LARGER THAN 3" IN DIAMETER.
4) GRADES SHALL NOT VARY MORE THAT 0.2' FROM GRADING ELEVATIONS SHOWN ON PLANS.
5) TESTING OF PAD AREA SHALL BE COORDINATED BY CONTRACTOR AND TESTING RESULTS SHALL BE DELIVERED TO ENGINEER AND OWNER. COST OF TESTING IS BY OWNER.
6) TESTING OF ENGINEERED/STRUCTURAL FILL IN ROAD AREAS SHALL BE COORDINATED BY CONTRACTOR AND TESTING RESULTS SHALL BE DELIVERED TO OWNER, ENGINEER AND CITY.
7) ANY FAILED COMPACTION SHALL BE REMOVED AND RECOMPACTED AT NO ADDITIONAL EXPENSE TO THE OWNER, EXCEPT FOR TESTING.

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TODD A. ERICKSON, PE
LICENSE NO. 40418
DATE 03/17/2017

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

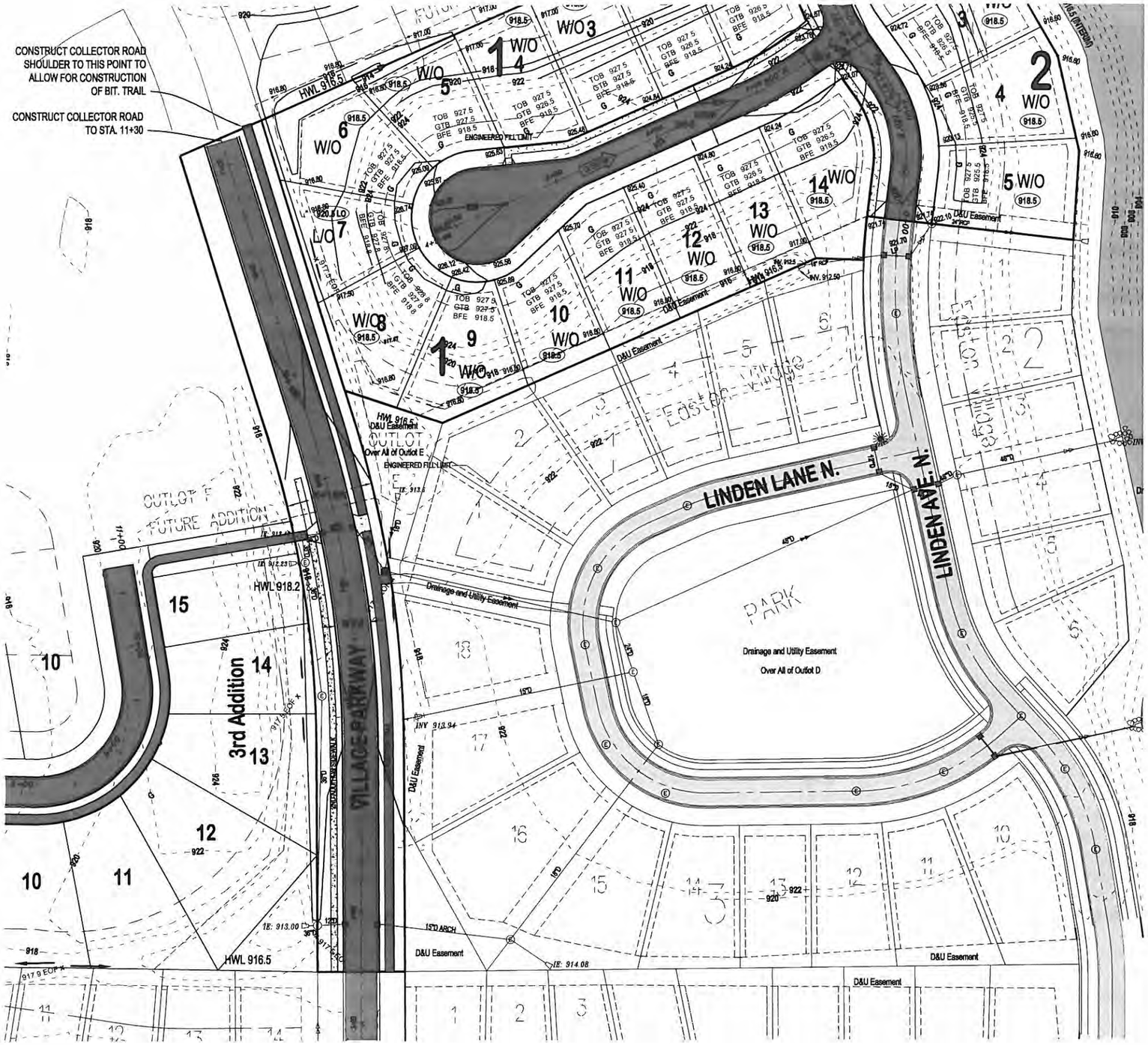
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

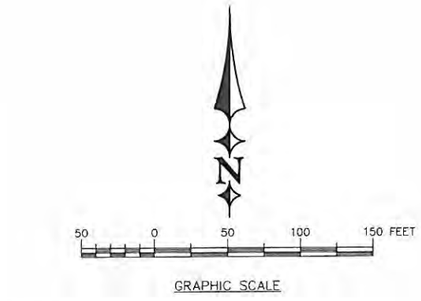
SHEET TITLE
GRADING PLAN

SHEET NO.
C6
SHEET 6 OF 21

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LEGEND

- 2ND ADDITION BOUNDARY
- 1050 — EXISTING 2-FT CONTOUR INTERVAL
- × 922.85 LP / HP EOF — HIGH OR LOW POINT OF STREET PROFILE LOCATION AND ELEVATION HP = HIGH POINT, LP = LOW POINT, EOF = EMERGENCY OVERFLOW
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- ENGINEERED FILL LIMIT
- 100-YEAR HWL

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PAVEMENT HOLD DOWN TABLE

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LOCAL STREET	21 INCHES
SIDEWALK	9 INCHES
TRAIL	10.5 INCHES

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TODD A. ERICKSON, PE
40418
LICENSE NO
03/17/2017
DATE

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

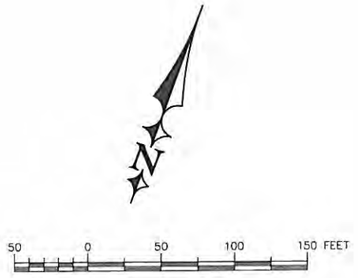
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
GRADING PLAN

SHEET NO.
C7
SHEET 7 OF 21





Legend

- 2ND ADDITION BOUNDARY
- 15-FT POLE WITH ORNAMENTAL LIGHT, XCEL ENERGY "ACRON" LAMP.
- UTILITY EASEMENT
- HOUSE SETBACK
- PROPOSED STREET SIGN
- EXISTING BITUMINOUS PAVEMENT
- PROPOSED BITUMINOUS PAVEMENT

Development Standards

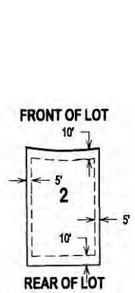
FRONT SETBACK	25'
GARAGE SIDE SETBACK	7.5'
SIDE SETBACK (CORNER LOTS)	15'
HOUSE SIDE SETBACK	7.5'
REAR SETBACK	20'
TYPICAL LOT WIDTH:	65'
TYPICAL LOT DEPTH:	130'
SIDE YARD EASEMENT:	5' *
FRONT AND REAR EASEMENT:	10' *
MIN. BASEMENT ELEVATION ABOVE 100 YEAR HWL:	2'

* UNLESS SHOWN ON PRELIMINARY LAYOUT

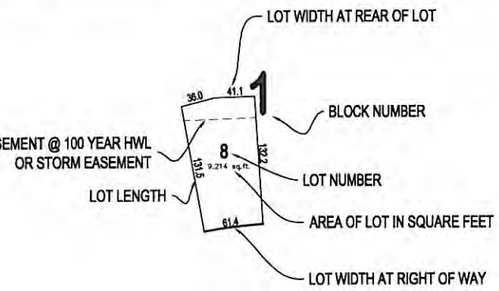
NOTE: DRAINAGE AND UTILITY EASEMENTS SHOWN FOR 100-YEAR HWL OF PONDING AREAS

CITY STANDARD PLAN NOTES

1. STREET LIGHTING SHALL BE INSTALLED PER CITY STANDARDS 5 FEET BACK OF CURB IN LOCATIONS SHOWN ON PLAN.
2. ALL SIGNS MUST MEET MMUTCD.
3. ALL SIGN SHEATHING TO BE TYPE IX DIAMOND GRADE (DG3).
4. SIGN POSTS TO BE GREEN POWDERED PAINTED GALVANIZED METAL, 3.0 LBS/FT.
5. STREET SIGN POSTS TO BE 12' TUBULAR POST WITH 0.080" WALL THICKNESS.
6. DEVELOPER TO FURNISH AND INSTALL STREET SIGNS PER CITY STANDARDS.
7. POLY PREFORMED PAVEMENT MATERIAL SHALL BE USED FOR ALL PAVEMENT SYMBOLS.
8. EPOXY RESIN AND DROP-ON GLASS BEADS FOR PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF MnDOT "SPECIFICATIONS FOR CONSTRUCTION, 2014 EDITIONS".



TYPICAL EASEMENT DETAIL



TYPICAL LOT DETAIL

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PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

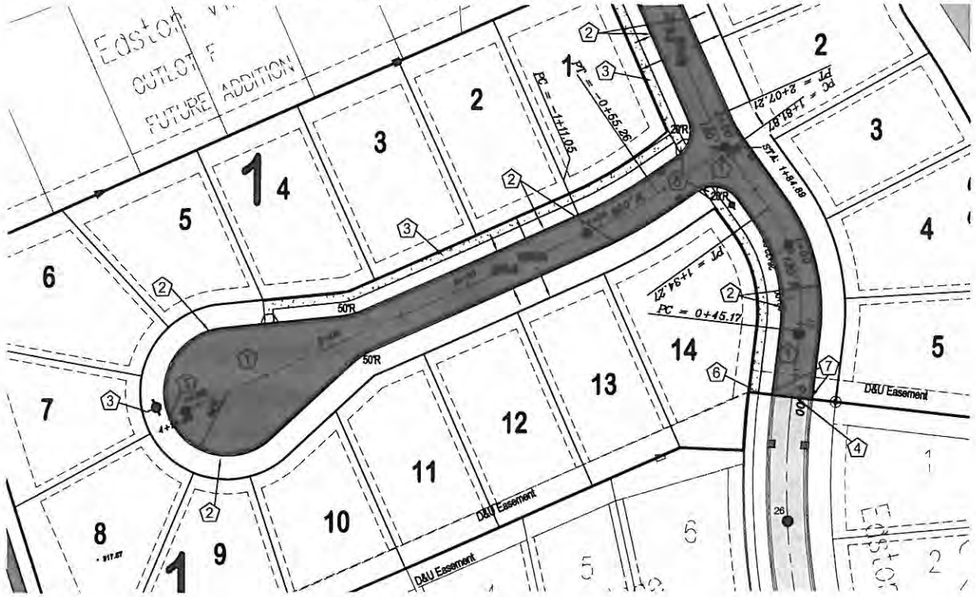
JOB NO. 16-175

SHEET TITLE
SITE LAYOUT, LIGHTING AND SIGNING PLAN

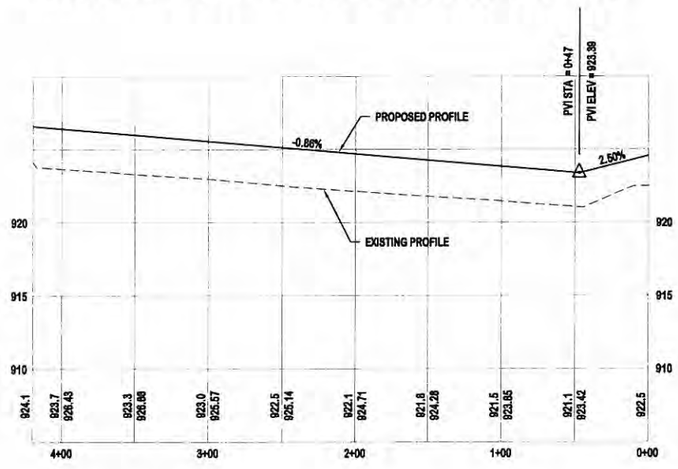
SHEET NO.
C8
SHEET 8 OF 21

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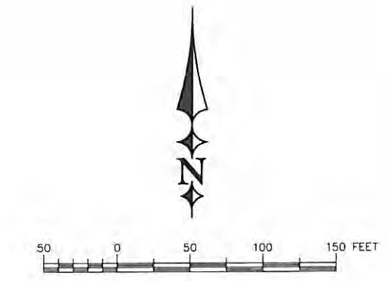
PLAN VIEW - LINDEN COURT NORTH



PROFILE VIEW - LINDEN COURT NORTH



5 FEET
0
VERTICAL
GRAPHIC SCALE



GRAPHIC SCALE

Legend

EXISTING BITUMINOUS PAVEMENT

PROPOSED BITUMINOUS PAVEMENT

Layout Notes

1) ALL RADII TO BACK OF CURB
2) ALL DIMENSIONS TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

Keyed Notes

1. INSTALL BITUMINOUS PAVEMENT PER CITY STANDARD PLATE NO. 801.
2. INSTALL SURMOUNTABLE CONCRETE CURB AND GUTTER PER CITY STANDARD PLATE NO. 501.
3. INSTALL CONCRETE SIDEWALK PER CITY STANDARD PLATE NO. 510.
4. CONNECT TO EXISTING ROADWAY
5. INSTALL ACCESSIBLE CONCRETE RAMP PER CITY STANDARD PLATE NO'S. 507A & 508.
6. CONNECT TO EXISTING CONCRETE SIDEWALK, INSTALL (3) 12" #4 EPOXY REBAR, 1-FT O.C., 4" DEPTH INTO EXISTING SIDEWALK
7. CONNECT TO EXISTING CONCRETE CURB, INSTALL (2) 12" #4 EPOXY REBAR, 6" O.C., 4" DEPTH INTO EXISTING CURB.

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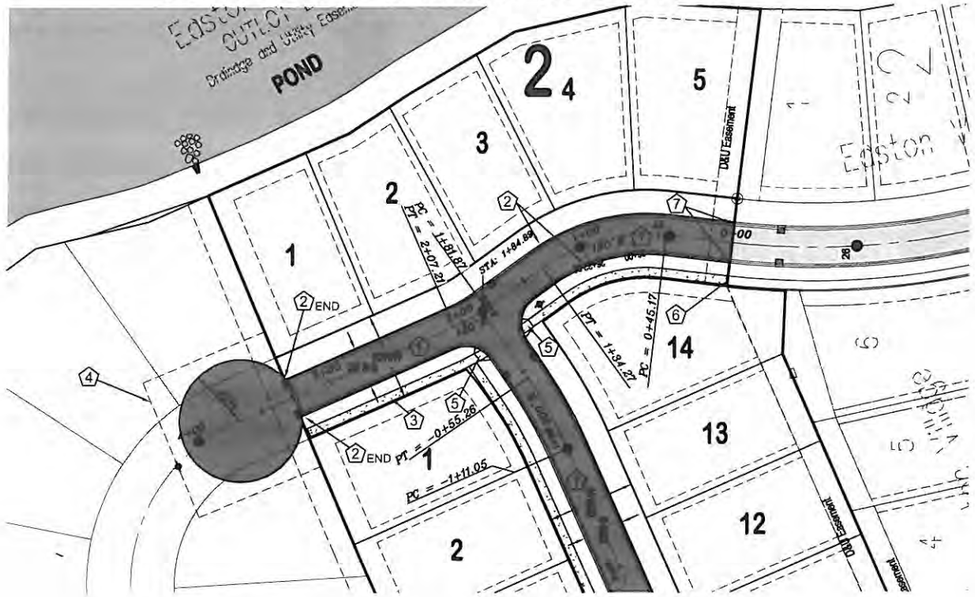
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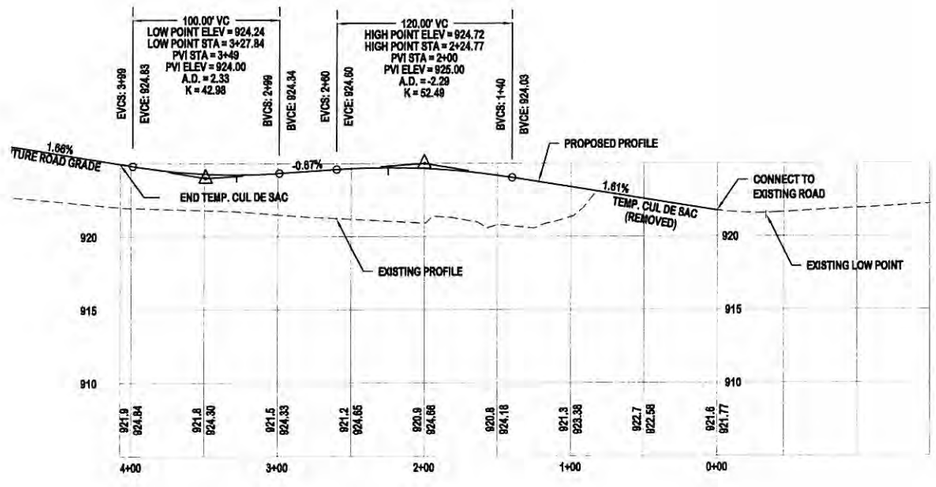
SHEET TITLE
STREET PLAN & PROFILE

SHEET NO.
C9
SHEET 9 OF 21

PLAN VIEW - LINDEN AVENUE NORTH



PROFILE VIEW - LINDEN AVENUE NORTH



5 FEET
0
VERTICAL GRAPHIC SCALE

50 0 50 100 150 FEET
GRAPHIC SCALE

Legend

- EXISTING BITUMINOUS PAVEMENT
- PROPOSED BITUMINOUS PAVEMENT

Layout Notes

1) ALL RADII TO BACK OF CURB
2) ALL DIMENSIONS TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

Keyed Notes

1. INSTALL BITUMINOUS PAVEMENT PER CITY STANDARD PLATE NO. 801.
2. INSTALL SURMOUNTABLE CONCRETE CURB AND GUTTER PER CITY STANDARD PLATE NO. 501.
3. INSTALL 4" CONCRETE SIDEWALK PER CITY STANDARD PLATE NO. 510.
4. TEMPORARY ROAD EASEMENT
5. INSTALL ACCESSIBLE CONCRETE RAMP PER CITY STANDARD PLATE NO'S. 507A & 508.
6. CONNECT TO EXISTING CONCRETE SIDEWALK, INSTALL (3) 12" #4 EPOXY REBAR, 1-FT O.C., 4" DEPTH INTO EXISTING SIDEWALK
7. REMOVE TAPER SECTION OF CURB AND CONNECT TO EXISTING CONCRETE CURB, INSTALL (2) 12" #4 EPOXY REBAR, 6" O.C., 4" DEPTH INTO EXISTING CURB.

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TODD A. ERICKSON, PE
40418
LICENSE NO.
03/17/2017
DATE

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

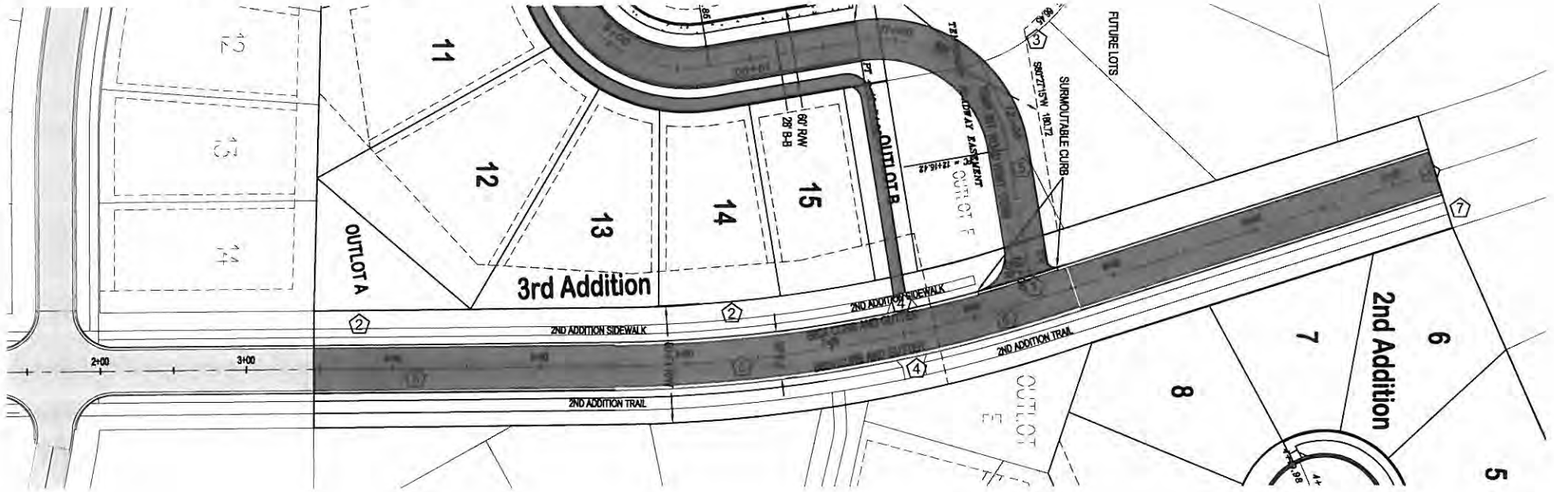
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

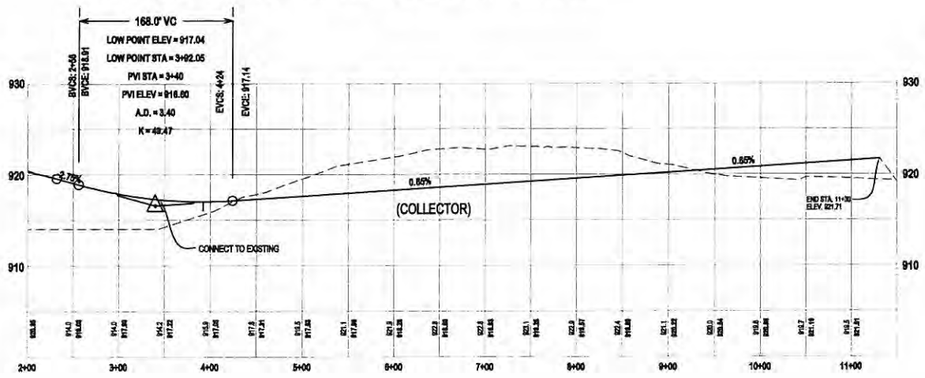
SHEET TITLE
STREET PLAN & PROFILE

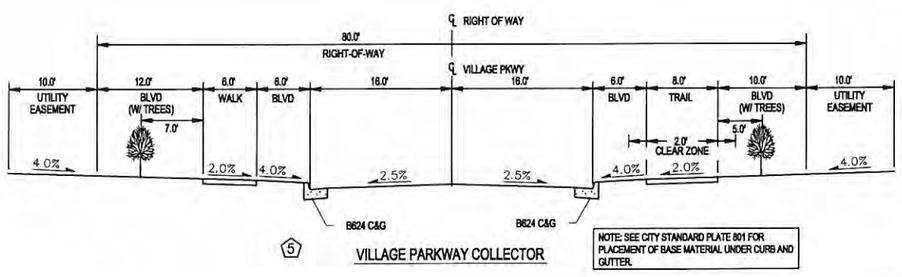
SHEET NO.
C10
SHEET 10 OF 21

PLAN VIEW - VILLAGE PARKWAY



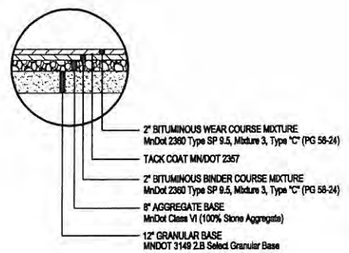
PROFILE VIEW - VILLAGE PARKWAY



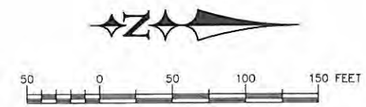


⑤ VILLAGE PARKWAY COLLECTOR

NOTE: SEE CITY STANDARD PLATE 801 FOR PLACEMENT OF BASE MATERIAL UNDER CURB AND GUTTER.



COLLECTOR ROAD SECTION



GRAPHIC SCALE

Legend

- EXISTING BITUMINOUS PAVEMENT
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE SIDEWALK/RAMP

Layout Notes

1) ALL RADII TO BACK OF CURB
2) ALL DIMENSIONS TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

Keyed Notes

1. INSTALL SURMOUNTABLE CONCRETE CURB AND GUTTER PER CITY STANDARD PLATE NO. 501.
2. INSTALL 4" CONCRETE SIDEWALK PER CITY STANDARD PLATE NO. 510.
3. TEMPORARY ROAD EASEMENT
4. INSTALL ACCESSIBLE CONCRETE RAMP PER CITY STANDARD PLATE NO'S. 507A & 508.
5. INSTALL TEMP. ROADWAY SECTION (2" BIT. BASE OVER 9" CL. 5 AGGREGATE)
6. INSTALL COLLECTOR ROAD PER DETAIL(S) BELOW
7. INSTALL BIT. PATH TO STA. 11+30
8. CONSTRUCT SUBGRADE OF ROADWAY TO STA. 11+30

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PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

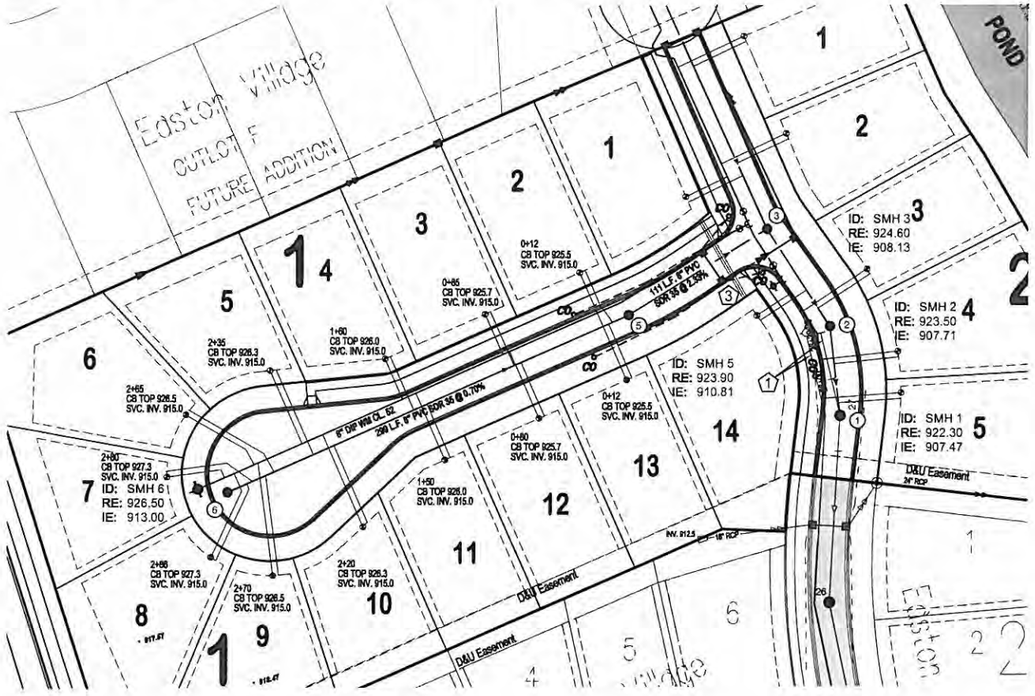
JOB NO. 16-175

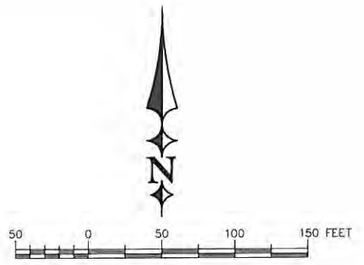
SHEET TITLE
STREET PLAN & PROFILE

SHEET NO.
C11
SHEET 11 OF 21

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PLAN VIEW - SANITARY SEWER (LINDEN COURT)





Keyed Notes

1. SALVAGE AND RE-ALIGN EXISTING SANITARY SEWER AND WATER MAIN STUBS.
2. SALVAGE AND RE-INSTALL EXISTING HYDRANT AND GATE VALVE ASSEMBLY.
3. INSTALL SMALL UTILITY CROSSING (3) 4" CONDUITS (SUPPLIED BY OTHERS)

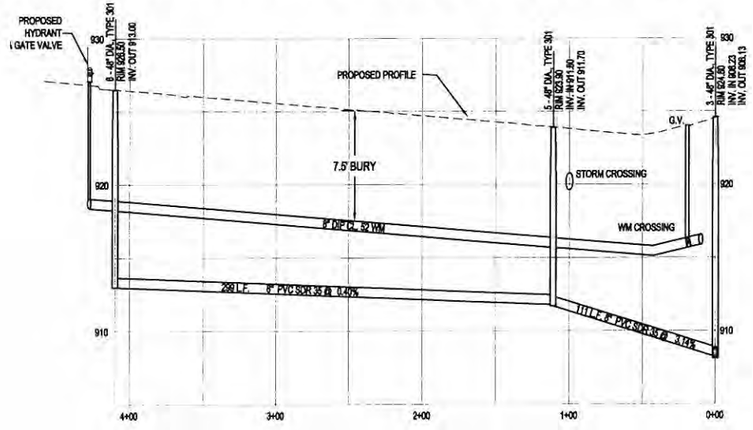
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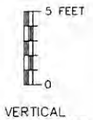
1) SEE DETAIL SHEETS FOR SPECIFIC REQUIREMENTS FOR UTILITY INSTALLATION.
2) ALL UTILITIES SHALL BE INSTALLED PER CITY OF LAKE ELMO DETAILS AND SPECIFICATIONS.
3) TRACER WIRE IS REQUIRED ON ALL SANITARY SEWER MAIN LINE AND SERVICES.

Legend

- 2ND ADDITION BOUNDARY
- PROPOSED 8" PVC (SDR 35 OR 26) SANITARY SEWER
- PROPOSED RCP STORM SEWER
- PROPOSED 8" DIP WM CL. 52 WATER MAIN, HYDRANT AND GATE VALVE
- PROPOSED SANITARY SEWER AND WATER SERVICE (SANITARY SERVICE - 4" PVC (SCH. 40) AND WATER SERVICE - 1" TYPE "K" COPPER WITH CURB STOP)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK (REQUIRED 100-FT EACH SIDE OF LOW POINT CATCH BASINS OR AS SHOWN), PROVIDE CLEAN OUT AT END OF PIPE.
- UGG — EXISTING UNDERGROUND GAS LINE
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER

PROFILE VIEW - SANITARY SEWER (LINDEN COURT)





VERTICAL GRAPHIC SCALE

City Standard Plan Notes

WATERMAIN

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
3. WATERMAIN SHALL BE DUCTILE IRON PIPE, CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A.1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS & BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2, C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.

SANITARY SEWER

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 105 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MNDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
9. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
10. ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

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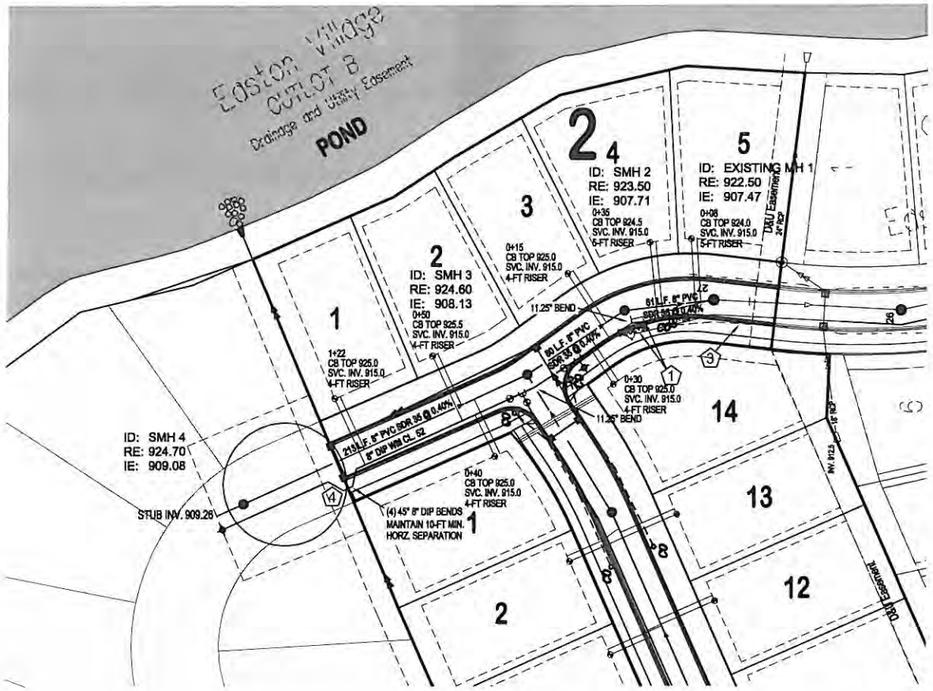
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

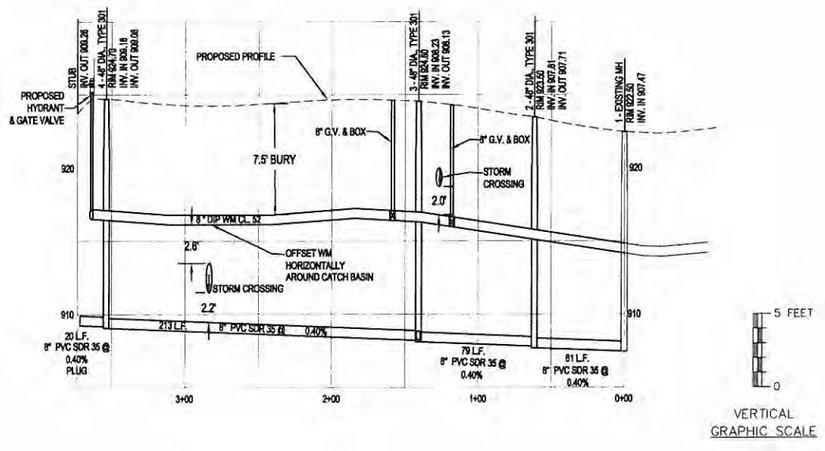
SHEET TITLE
SANITARY SEWER & WATERMAIN PLAN & PROFILE

SHEET NO.
C12
SHEET 12 OF 21

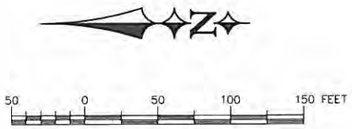
PLAN VIEW - SANITARY SEWER (LINDEN AVENUE)



PROFILE VIEW - SANITARY SEWER (LINDEN AVENUE)



5 FEET
0
VERTICAL GRAPHIC SCALE



GRAPHIC SCALE

Keyed Notes

1. SALVAGE AND RE-ALIGN EXISTING SANITARY SEWER AND WATER MAIN STUBS.
2. SALVAGE AND RE-INSTALL EXISTING HYDRANT AND GATE VALVE ASSEMBLY.
3. RE-ALIGN DRAIN TILE
4. PROVIDE HORIZONTAL OFFSET TO CATCH BASIN IN CURB LINE

Notes

1) SEE DETAIL SHEETS FOR SPECIFIC REQUIREMENTS FOR UTILITY INSTALLATION.
2) ALL UTILITIES SHALL BE INSTALLED PER CITY OF LAKE ELMO DETAILS AND SPECIFICATIONS.
3) TRACER WIRE IS REQUIRED ON ALL SANITARY SEWER MAIN LINE AND SERVICES.

Legend

- 2ND ADDITION BOUNDARY
- PROPOSED 8" PVC (SDR 35 OR 26) SANITARY SEWER
- PROPOSED RCP STORM SEWER
- PROPOSED 8" DIP WM CL. 52 WATER MAIN, HYDRANT AND GATE VALVE
- PROPOSED SANITARY SEWER AND WATER SERVICE (SANITARY SERVICE - 4" PVC (SCH. 40) AND WATER SERVICE - 1" TYPE "K" COPPER WITH CURB STOP)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK (REQUIRED 100-FT EACH SIDE OF LOW POINT CATCH BASINS OR AS SHOWN). PROVIDE CLEAN OUT AT END OF PIPE.
- UGG — EXISTING UNDERGROUND GAS LINE
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER

City Standard Plan Notes

WATERMAIN

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
3. WATERMAIN SHALL BE DUCTILE IRON PIPE, CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A.1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS & BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2, C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.

SANITARY SEWER

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 105 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3054 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
9. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
10. ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

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2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

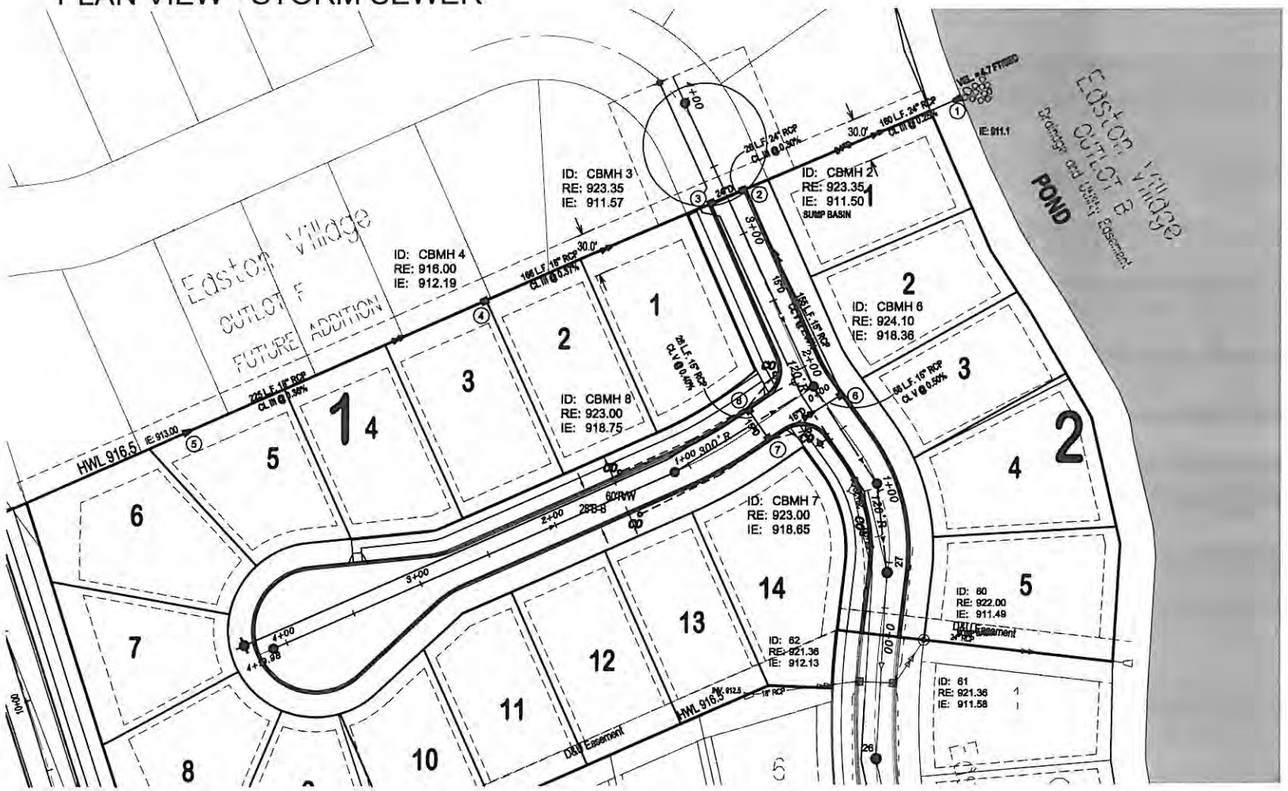
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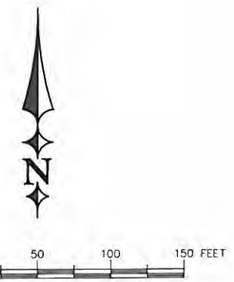
JOB NO. 16-175

SHEET TITLE
SANITARY SEWER & WATERMAIN PLAN & PROFILE

SHEET NO.
C13
SHEET 13 OF 21

PLAN VIEW - STORM SEWER





Legend

- PROPERTY BOUNDARY
- PROPOSED 8" PVC (SDR 35 OR 26) SANITARY SEWER
- PROPOSED RCP STORM SEWER
- PROPOSED 8" DIP WM CL. 52 WATER MAIN, HYDRANT AND GATE VALVE
- PROPOSED SANITARY SEWER AND WATER SERVICE (SANITARY SERVICE - 4" PVC (SCH. 40) AND WATER SERVICE - 1" TYPE "K" COPPER WITH CURB STOP)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK (REQUIRED 100-FT EACH SIDE OF LOW POINT CATCH BASINS OR AS SHOWN). PROVIDE CLEAN OUT AT END OF PIPE.
- EXISTING UNDERGROUND GAS LINE
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER

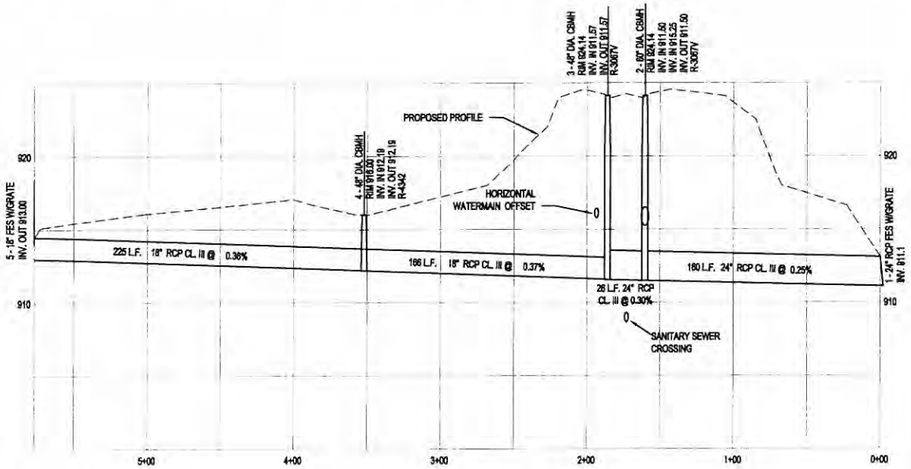
Notes

1) SEE DETAIL SHEETS FOR SPECIFIC REQUIREMENTS FOR UTILITY INSTALLATION.
2) ALL UTILITIES SHALL BE INSTALLED PER CITY OF LAKE ELMO DETAILS AND SPECIFICATIONS.

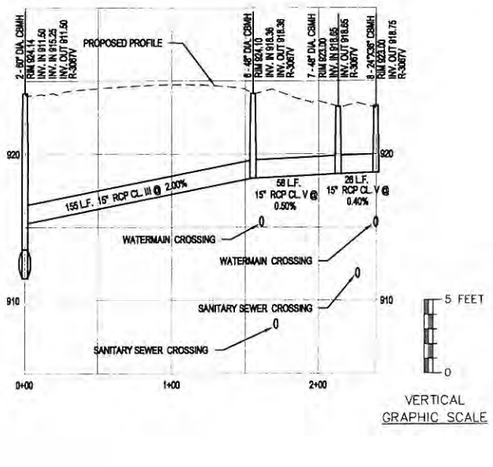
City Standard Plan Notes

1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
3. PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-477.
4. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
5. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES.
6. RIP-RAP SHALL BE HAND-PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO MnDOT SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP-RAP SHALL EXTEND 3 FT UNDER THE APRON.
8. FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
9. ALL SILT SHALL BE CLEANED OUT FROM THE RIP-RAP AT THE END OF THE PROJECT.

PROFILE VIEW - STORM SEWER (1 - 5)



PROFILE VIEW - STORM SEWER (2 - 8)



STORM SEWER DESIGN TABLE

Up-Stream Struct.	Down-Stream Struct.	Len. Ft.	Plan Area Sq.ft.	Areas (ac.) Site Indv.	Areas (ac.) Site Sum	C Indv	C Avg.	Total Tc Min.	Tp Min.	Tc+Tp Min.	Tt Min.	Indv I In/Hr	Avg. I In/Hr	CB Q CFS	Pipe Q CFS	Pipe Dia. In.	Pipe Grade %	Vel. Ft/S	Pipe Cap. CFS	Q Excess CFS
8	7	26	29,980	0.69	0.69	0.80	0.80	5.0	0.1	5.1	5.1	7.20	7.20	4.0	4.0	15	0.40	4.3	5.3	1.3
7	6	58	33,330	0.77	1.45	0.80	0.80	5.1	0.2	5.3	5.3	7.20	7.20	4.4	4.0	15	0.50	4.8	5.9	2.0
6	2	155	2,805	0.06	1.52	0.80	0.80	5.3	0.3	5.6	5.6	7.10	7.10	0.4	8.6	15	2.00	9.7	11.9	3.3

NOTE: Pipe run 1-5 based on hydrocad storm sewer analysis.

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TODD A. ERICKSON, PE
40418
LICENSE NO.
03/17/2017
DATE

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

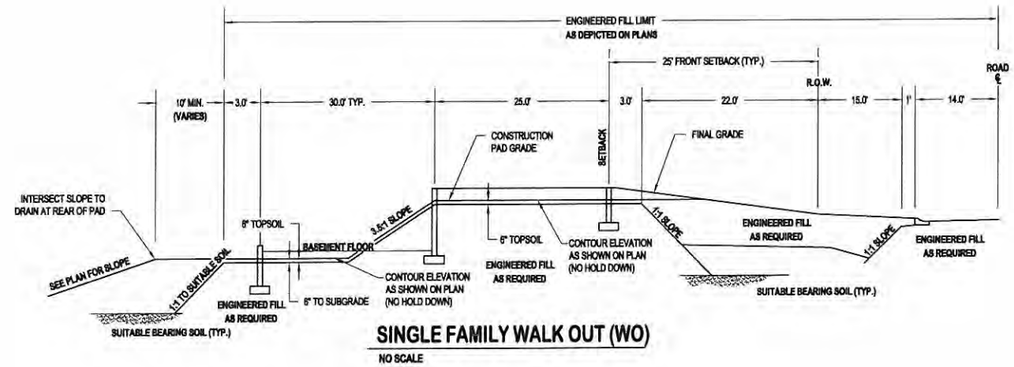
NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
STORM SEWER PLAN & PROFILE

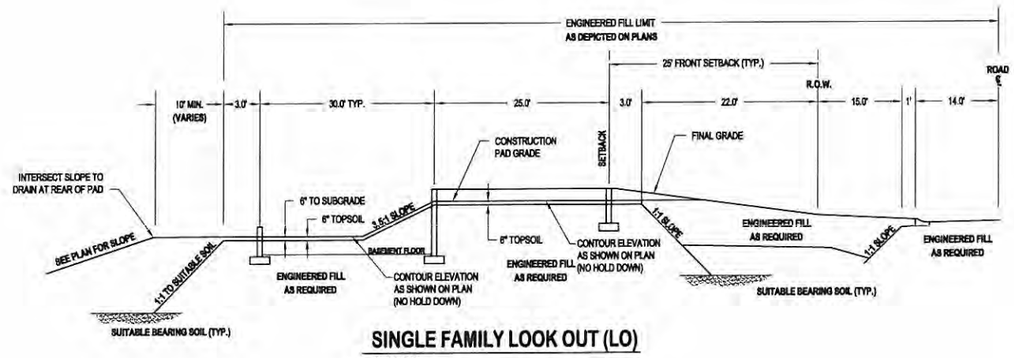
SHEET NO.
C14
SHEET 14 OF 21

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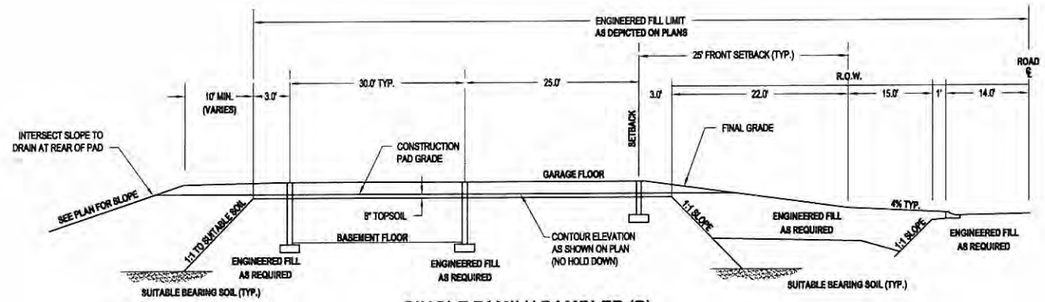
SINGLE FAMILY WALK OUT (WO)

NO SCALE



SINGLE FAMILY LOOK OUT (LO)

NO SCALE



SINGLE FAMILY RAMBLER (R)

NO SCALE

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LICENSE NO. 40418
DATE 03/17/2017

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CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
DETAILS

SHEET NO.
C15
SHEET 15 OF 21

CITY OF LAKE ELMO
STANDARD DETAIL INDEX

100 SERIES – PIPE INSTALLATION

101 PIPE FOUNDATION DETAILS
103 GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE)
105 SPECIAL FOUNDATION FOR STABILIZING OF TRENCH

200 SERIES – WATERMAIN

200A STANDARD PLAN NOTES (WATERMAIN PLANS)
201 TYPICAL HYDRANT LAYOUT (VALVE IN BOULEVARD)
203 GATE VALVE INSTALLATION
204 GATE VALVE ADAPTER
206 CONCRETE REACTION BACKING (FOR BENDS)
207A WATER SERVICE ON DIP MAIN
207B WATER SERVICE ON PVC OR HDPE MAIN
208 IRRIGATION SERVICE
210 WATERMAIN OFFSET
211 WATERMAIN OFFROAD STRUCTURE MARKER

300 SERIES – SANITARY SEWER

300A STANDARD PLAN NOTES (SANITARY SEWER PLANS)
301 SANITARY SEWER MANHOLE, TYPE 301
302 SANITARY SEWER MANHOLE, TYPE 302
303 SANITARY SEWER MANHOLE, TYPE 303
305 SANITARY SEWER MANHOLE, TYPE 305
306 SANITARY SEWER OUTSIDE DROP
311 SANITARY SEWER OFFROAD STRUCTURE MARKER
313 SANITARY SEWER SERVICE
314 AIR RELEASE MANHOLE

400 SERIES – STORM SEWER

400A STANDARD PLAN NOTES (STORM SEWER PLANS)
402 CATCH BASIN, TYPE 402
404 CATCH BASIN, TYPE 404
405 CATCH BASIN/MANHOLE WITH SUMP, TYPE 405
406 CATCH BASIN/MANHOLE, TYPE 406
407 STORM SEWER MANHOLE, TYPE 407 (PIPES 27" OR LESS)
408 STORM SEWER MANHOLE, TYPE 408 (PIPES 30" & LARGER)
409 STORM SEWER MANHOLE, TYPE 409
410 "T" SECTION STORM SEWER MANHOLE, TYPE 410
411 RIPRAP AT RCP OUTLETS
412 OFFROAD DRAINTILE
416 TYPICAL POND SECTION
417 OUTLET CONTROL STRUCTURE DETAIL
419 DRAINTILE CLEANOUT
420 DRAIN TILE CONNECTIONS
421 EDGE DRAIN SERVICE

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. index-le1 LAKE ELMO

CITY OF LAKE ELMO
STANDARD DETAIL INDEX

500 SERIES – PAVEMENTS, CURBS, WALKS

500A STANDARD PLAN NOTES (SIDEWALK AND TRAIL PLANS)
501 CONCRETE CURB & GUTTER
502 COMMERCIAL CONCRETE DRIVEWAY
504 RESIDENTIAL DRIVEWAY
505 CONCRETE VALLEY GUTTER
506 CATCH BASIN PLACEMENT AND CURB & GUTTER TRANSITION AT INTERSECTIONS
507A PEDESTRIAN CURB RAMP
507B PEDESTRIAN CURB RAMP
507C PEDESTRIAN CURB RAMP
507D PEDESTRIAN CURB RAMP
507E PEDESTRIAN CURB RAMP
508 DETECTABLE WARNING SURFACE – TRUNCATED DOMES
509 BICYCLE – PEDESTRIAN PATH
510 CONCRETE SIDEWALK
511 MANHOLE CASTING ADJUSTMENT
512 MILLED LAP JOINT
513 CONCRETE CURB MARKING

600 SERIES – EROSION CONTROL

600A STANDARD PLAN NOTES (GRADING AND EROSION CONTROL PLANS)
600B STANDARD PLAN NOTES (GRADING AND EROSION CONTROL PLANS)
600C STANDARD PLAN NOTES (GRADING AND EROSION CONTROL PLANS)
600D STANDARD PLAN NOTES (SITE RESTORATION PLANS)
601 SILT FENCE
603 DITCH CHECK (FIBER ROLL)
604 SEDIMENT CONTROL AROUND STORM SEWER INLET
605 ROCK CONSTRUCTION ENTRANCE

700 SERIES – MISCELLANEOUS

700A STANDARD PLAN NOTES (SIGNING/PAVEMENT MARKINGS/LIGHTING PLANS)
706 STREET SIGNS
712 SANITARY, WATER & DRAIN TILE SERVICE INSTALLATION
713 TYPICAL SERVICE PROTECTION

800 SERIES – TYPICAL SECTIONS AND RIGHT-OF-WAY

801 TYPICAL LOCAL RESIDENTIAL STREET SECTION
804 TYPICAL LOCAL RESIDENTIAL RURAL STREET SECTION
805 TYPICAL RIGHT OF WAY LAYOUT
806 URBAN STREET UTILITY LOCATION

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CITY OF LAKE ELMO | STANDARD DRAWING NO. index-le2 LAKE ELMO

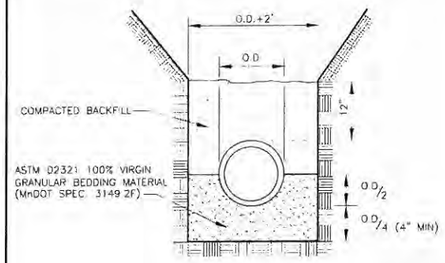
CITY OF LAKE ELMO
STANDARD DETAIL INDEX

900 SERIES – LANDSCAPING

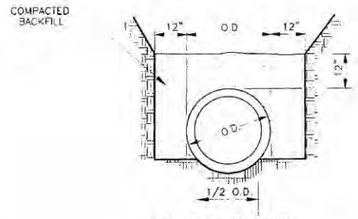
900 STANDARD PLAN NOTES (LANDSCAPE PLAN)
901A CONIFEROUS TREE – MODIFIED/UNMODIFIED SOIL & POORLY DRAINED SOIL
901B CONIFEROUS TREE ON SLOPE 5% TO 50% MODIFIED AND UNMODIFIED SOIL
902A DECIDUOUS TREE – MODIFIED/UNMODIFIED SOIL & POORLY DRAINED SOIL
902B DECIDUOUS TREE ON SLOPE 5% TO 50% MODIFIED AND UNMODIFIED SOIL
903A SHRUB – MODIFIED AND UNMODIFIED SOIL
903B SHRUB ON SLOPE 5% TO 50% MODIFIED AND UNMODIFIED SOIL
904 TREE PROTECTION – MAINTENANCE ROAD % BORING UNDER CROWN/DRIPLINE

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. index-le3 LAKE ELMO



GRANULAR MATERIAL BEDDING
(TO BE USED WHERE, IN THE OPINION OF THE ENGINEER, UNSTABLE MATERIAL PREVENTS USE OF THE "EARTH FOUNDATION" DETAIL)

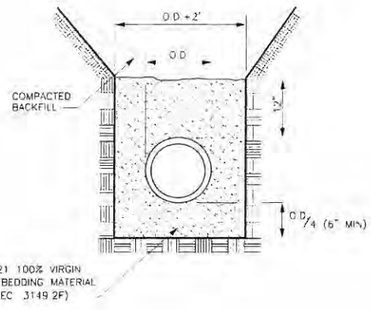


EARTH FOUNDATION
(EXCEPT SANITARY SEWER)

PIPE FOUNDATION DETAILS

FEBRUARY 2015

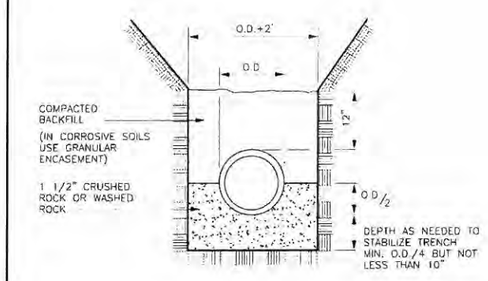
CITY OF LAKE ELMO | STANDARD DRAWING NO. 101 LAKE ELMO



GRANULAR MATERIAL BEDDING METHOD
(FOR PVC SANITARY SEWER PIPE)

FEBRUARY 2015

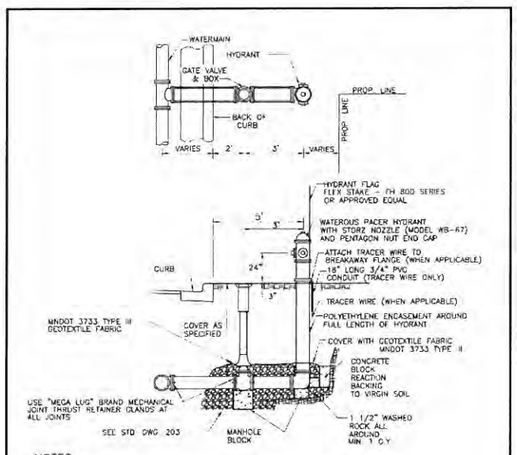
CITY OF LAKE ELMO | STANDARD DRAWING NO. 103 LAKE ELMO



SPECIAL FOUNDATION FOR
STABILIZING OF TRENCH
(AS DIRECTED BY ENGINEER)

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 105 LAKE ELMO

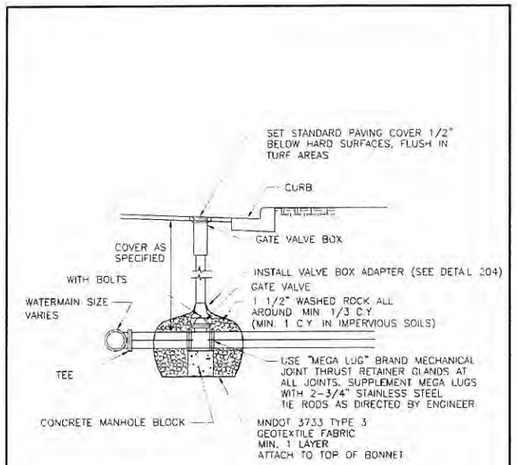


NOTES:
1. USE MEGA LUGS ON ALL JOINTS. PROVIDE CONCRETE BLOCKING BEHIND HYDRANT AND TEE
2. USE COR-BLUE T BOLTS ON ALL FITTINGS
3. PLUG WEEP HOLES IF GROUNDWATER IS PRESENT
4. IF WEEP HOLES ARE PLUGGED, PUMPER NOZZLE CAP MUST BE PAINTED GREEN AND A TAG SHALL BE ATTACHED TO THE HYDRANT STATING "DRAIN HOLES PLUGGED"
5. SUPPLY 1 EXTRA FLEX STAKE FOR EVERY 10 HYDRANTS INSTALLED, MINIMUM ONE PER PROJECT
6. SUPPLY 1 HYDRANT STORZ WRENCH OR HYDRANT REPAIR KIT PER PROJECT.
7. SUPPLY 1 6" HYDRANT EXTENSION AS DIRECTED BY THE ENGINEER.
8. ALL HYDRANTS NOT IN SERVICE SHALL BE COVERED WITH BLACK POLY PLASTIC.
**EXTRA STAKES AND REPAIR KITS ARE TO BE DELIVERED TO THE CITY GARAGE.

TYPICAL HYDRANT LAYOUT
(VALVE IN BOULEVARD)

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 201 LAKE ELMO



NOTES:
SUPPLY ONE 12' GATE VALVE KEY PER PROJECT, AS DIRECTED BY THE ENGINEER. EXTRA KEYS SHALL BE DELIVERED TO THE CITY GARAGE.

GATE VALVE INSTALLATION

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 203 LAKE ELMO

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TODD A. ERICKSON PE
LICENSE NO. 40418
DATE: 01/05/2017

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2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

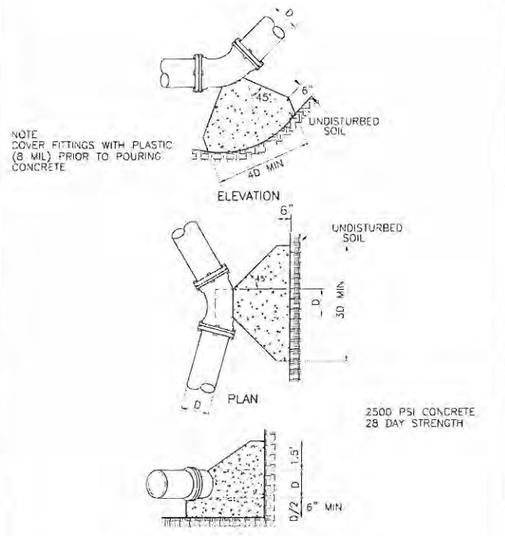
PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
CITY STANDARD DETAIL PLATES

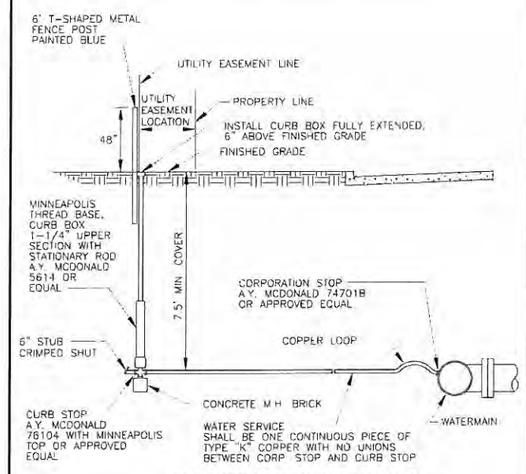
SHEET NO.
C16
SHEET 16 OF 21



CONCRETE REACTION BACKING
(FOR BENDS)

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 206 — LAKE ELMO

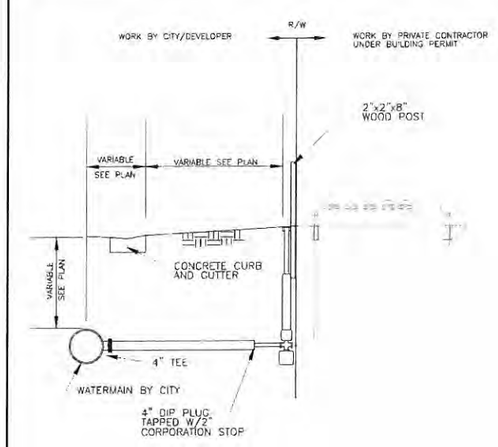


NOTES:
1. SERVICE TAP TO BE MADE SLIGHTLY ABOVE SPRING LINE SO THAT COPPER COPPER LOOP SHALL NOT EXTEND ABOVE MAIN. MAINTAIN 7.5' MINIMUM COVER EXTEND ABOVE MAIN. MAINTAIN 7.5' MINIMUM SERVICE LINES.
2. IF TAPPING SADDLE IS REQUIRED, IT SHALL BE STAINLESS STEEL DOUBLE-STUD WRAP AROUND TAPPING SADDLE SMITH-BLAIR 372 OR APPROVED EQUAL.

WATER SERVICE ON DIP MAIN

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 207A — LAKE ELMO

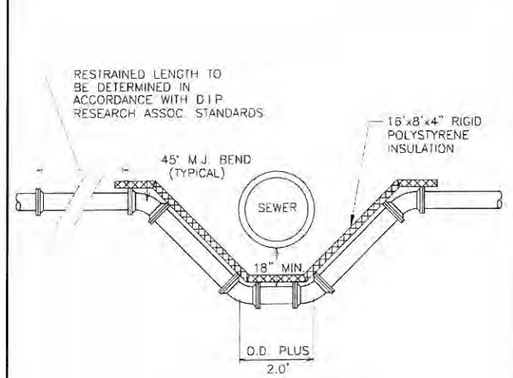


NOTE:
INSTALL 2" CURB STOP WITH COMPRESSION FITTING AT THE END.

IRRIGATION SERVICE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 208 — LAKE ELMO

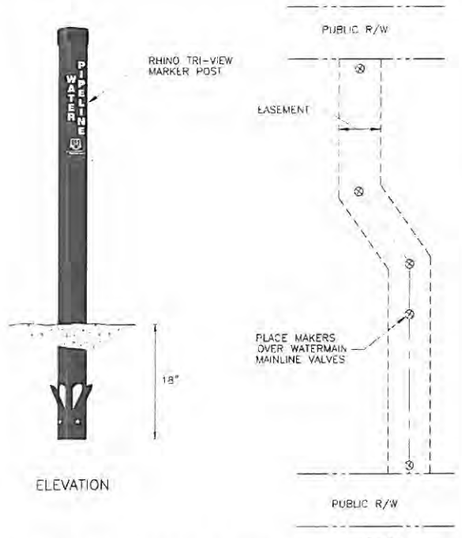


NOTE: FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS.

WATERMAIN OFFSET

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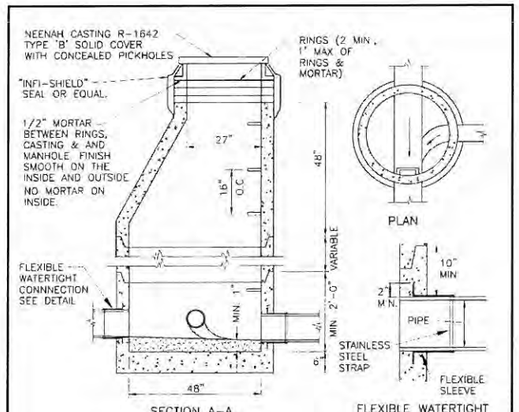
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WATERMAIN OFFROAD STRUCTURE MARKER
(AS DIRECTED BY ENGINEER)

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 211 — LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING. CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC, PER ASTM C478. STEP LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS

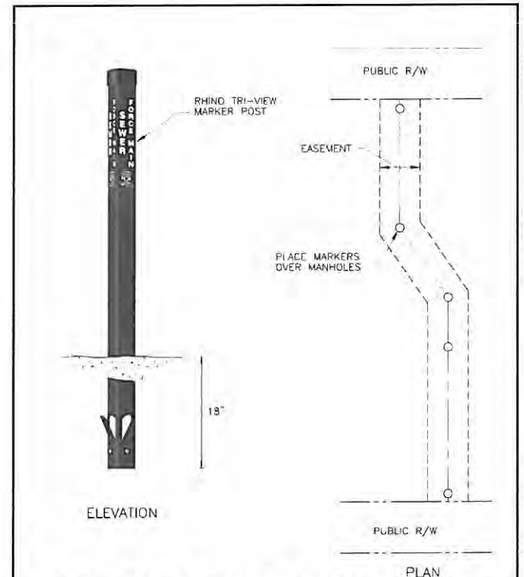
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS AND LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

PIPE CONNECTIONS TO MANHOLE SHALL BE MADE WATER TIGHT BY CAST INPLACE RUBBER BOOT AND CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH

SANITARY SEWER MANHOLE, TYPE 301
(PIPES 27" OR LESS)

FEBRUARY 2015

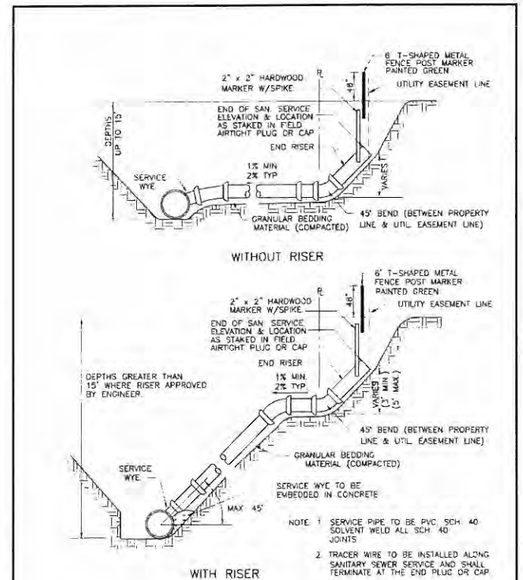
CITY OF LAKE ELMO — STANDARD DRAWING NO. 301 — LAKE ELMO



SANITARY SEWER OFFROAD STRUCTURE MARKER
(AS DIRECTED BY ENGINEER)

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 311 — LAKE ELMO



NOTE: 1. SERVICE PIPE TO BE PVC, SCH. 40 SOLVENT WELD ALL SCH. 40 JOINTS
2. TRACER WIRE TO BE INSTALLED ALONG SANITARY SEWER SERVICE AND SHALL TERMINATE AT THE END PLUG OR CAP.

SANITARY SEWER SERVICE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 313 — LAKE ELMO

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TODD A. ERICKSON, PE
LICENSE NO. 40418
DATE: 01/05/2017

OWNER / DEVELOPER: CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE: EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE: CITY STANDARD DETAIL PLATES

SHEET NO. C17

SHEET 17 OF 21

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 402 LAKE ELMO

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 404 LAKE ELMO

FEBRUARY 2015

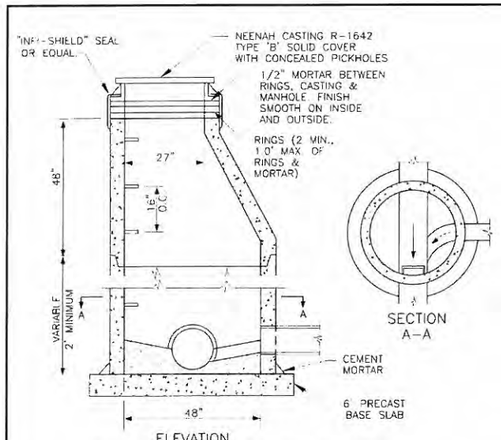
CITY OF LAKE ELMO

STANDARD DRAWING NO. 405 LAKE ELMO

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 406 LAKE ELMO



ELEVATION

NO WOOD SHALL BE USED FOR ADJUSTING CASTING, CEMENT MORTAR ONLY

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478

FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.
A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE

FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR INSIDE SURFACE SHALL BE FINISHED SMOOTH

STORM SEWER MANHOLE, TYPE 407
(PIPES 27" OR LESS)

FEBRUARY 2015

CITY OF LAKE ELMO

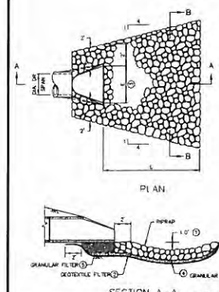
STANDARD DRAWING NO. 407 LAKE ELMO

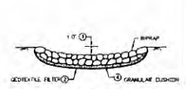
TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS

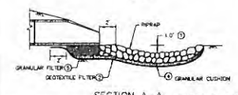
DIA OF PIPE (INCHES)	L	CLASS I 3:0 x 5' GRANULAR FILTER GEOTEXTILE (SQ YD)	CLASS I 3:0 x 5' GRANULAR FILTER GRANULAR APRON (CU YD)	2" DEPTH RIPRAP (SQ YD)	CLASS II 10:0 x 9' RANDOM FILTER GEOTEXTILE (SQ YD)	CLASS II 10:0 x 9' RANDOM FILTER GRANULAR APRON (CU YD)	18" DEPTH RIPRAP (SQ YD)	CLASS IV 3:0 x 10' GRANULAR FILTER GEOTEXTILE (SQ YD)	CLASS IV 3:0 x 10' GRANULAR FILTER GRANULAR APRON (CU YD)	21" DEPTH RIPRAP (CU YD)
12	8	6.9	3.2	3.0	19.5	8.3	4.8	22.6	9.5	5.6
15	8	6.1	3.2	3.2	17.8	8.3	4.9	23.9	9.4	5.4
18	12	12.4	5.3	4.3	25.9	14.5	6.4	32.0	9.5	6.5
21	12	11.6	5.4	4.7	27.4	13.8	7.1	35.6	9.7	9.6
24	12	29.7	5.8	5.7	33.4	13.8	8.2	37.3	11.2	12.3
27	12	31.4	7.6	6.9	35.2	17.4	9.3	38.2	11.4	13.2
30	16	37.4	9.4	8.5	41.6	21.1	12.5	48.3	13.5	18.5
36	16	43.8	11.1	10.6	50.5	21.1	15.8	57.4	15.1	24.1
42	16	52.5	13.2	13.5	57.8	21.1	19.7	62.5	17.3	24.9
48	20		15.1	14.8	69.9	26.4	22.2	74.9	21.4	29.6

TABLE OF QUANTITIES
RIPRAP AT RCP A OUTLETS

SKEW OF PIPE ARCH	L	3:0 x 5' CLASS II GRANULAR FILTER GEOTEXTILE (SQ YD)	CLASS II 3:0 x 5' GRANULAR FILTER GRANULAR APRON (CU YD)	2" DEPTH RIPRAP (SQ FT)	18" DEPTH RIPRAP (CU YD)	CLASS III 10:0 x 9' GRANULAR FILTER GEOTEXTILE (SQ YD)	CLASS III 10:0 x 9' GRANULAR FILTER GRANULAR APRON (CU YD)	18" DEPTH RIPRAP (CU YD)	CLASS IV 3:0 x 10' GRANULAR FILTER GEOTEXTILE (SQ YD)	CLASS IV 3:0 x 10' GRANULAR FILTER GRANULAR APRON (CU YD)	21" DEPTH RIPRAP (CU YD)
18	10	12.4	5.1	4.1	25.8	13.4	6.7	33.0	13.4	9.1	
24	12	29.5	5.5	5.7	33.7	17.1	8.5	37.1	9.5	9.9	
30	14	37.3	7.8	7.3	41.5	21.1	11.2	45.8	11.3	13.9	
43	18	55.8	11.1	9.9	60.5	30.8	14.3	66.5	15.1	19.0	
51	18	62.2	12.2	11.3	67.5	34.4	16.2	74.2	17.3	22.5	
58	20	69.8	13.5	13.0	74.3	37.9	18.1	82.1	19.5	26.4	







NOTES

REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS WILL BE DETERMINED BY THE PLANS.

PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.

(1) FOR PIPES GREATER THAN OR EQUAL TO 30", USE 1.5'.

(2) GEOTEXTILE FILTER, SPEC. 3733, SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIPRAP, GRANULAR FILTER MATERIALS.

(3) DIMENSION C IS GIVEN ON STANDARD PLATES 3006 AND 3106.

(4) GRANULAR FILTER, SPEC. 3149, MAY BE USED AS A CUSHION LAYER. PLACE FILTER PER SPEC. 2531. THE CUSHION LAYER IS INCIDENTAL.

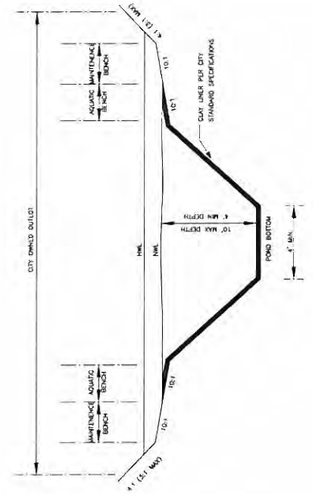
(5) GRANULAR FILTER OR RIPRAP, SPEC. 3149, TO EXTEND UNDER ENTIRE OPEN PORTION OF PIPE APRON. DEPTH OF MATERIAL UNDER APRON SHALL MATCH RIPRAP DEPTH. WHEN USING RIPRAP INCREASE RIPRAP QUANTITY ACCORDINGLY AND PLACE A 3" LAYER OF 1.5" CRUSHED ROCK UNDER THE APRON TO AID IN GRADING FOR APRON PLACEMENT. CRUSHED ROCK IS INCIDENTAL.

RIPRAP AT RCP OUTLETS

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 411 LAKE ELMO



TYPICAL POND SECTION

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 416 LAKE ELMO

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 417 LAKE ELMO

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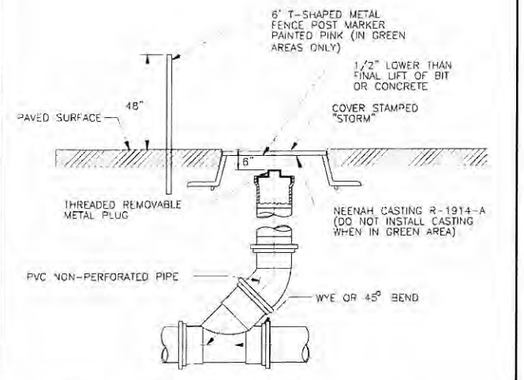
PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
CITY STANDARD DETAIL PLATES

SHEET NO.
C18
SHEET 18 OF 21

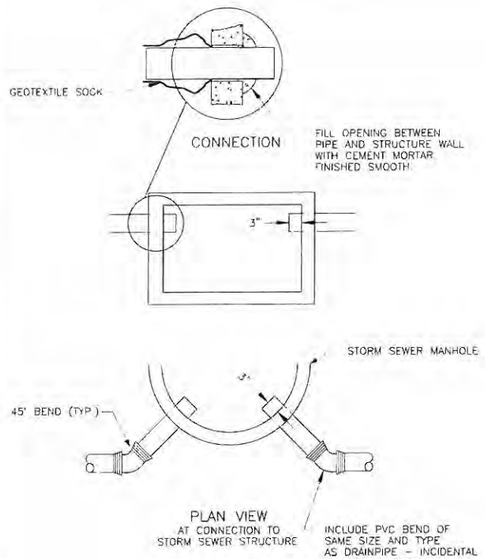


NOTE
INSTALL CLEANOUTS AT A PROPERTY LINE WHENEVER POSSIBLE

DRAINTILE CLEANOUT
(CASTING USED FOR CURB STOPS IN HARD SURFACES)

FEBRUARY 2015

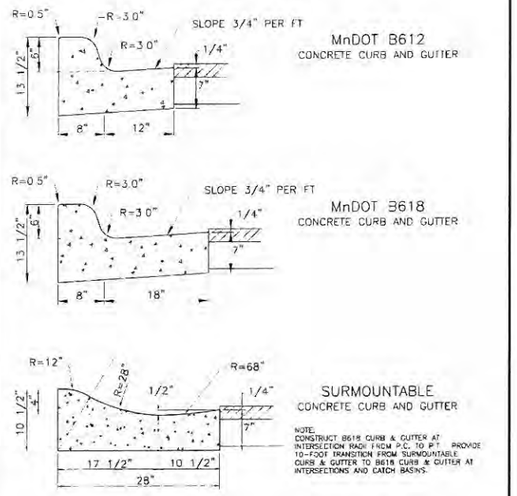
CITY OF LAKE ELMO | STANDARD DRAWING NO. 419 LAKE ELMO



DRAIN TILE CONNECTIONS

FEBRUARY 2015

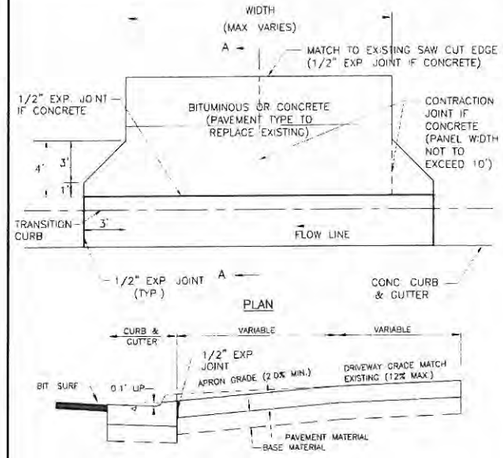
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CONCRETE CURB & GUTTER

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 501 LAKE ELMO



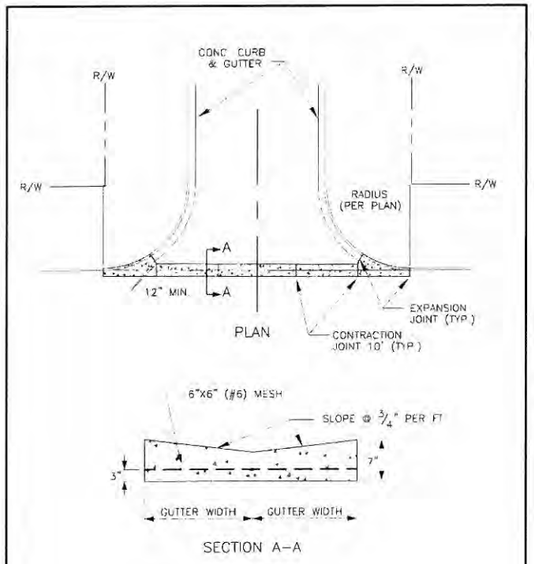
DRIVEWAY TYPE	SURFACE THICKNESS	BASE THICKNESS
BITUMINOUS	3 INCHES	6 INCHES
CONCRETE	6 INCHES	4 INCHES

NOTES
1. BITUMINOUS MATERIAL SHALL BE PER STREET TYPICAL SECTION
2. AGGREGATE BASE MATERIAL SHALL BE PER STREET TYPICAL SECTION

RESIDENTIAL DRIVEWAY

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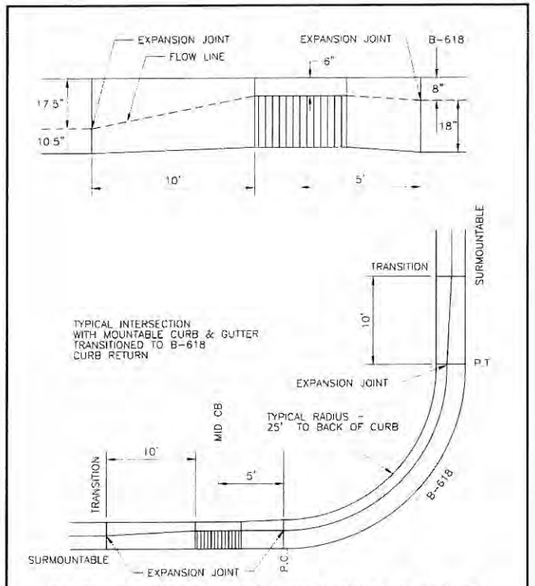
CITY OF LAKE ELMO | STANDARD DRAWING NO. 504 LAKE ELMO



CONCRETE VALLEY GUTTER

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CITY OF LAKE ELMO | STANDARD DRAWING NO. 505 LAKE ELMO



CATCH BASIN PLACEMENT AND CURB & GUTTER TRANSITION AT INTERSECTIONS

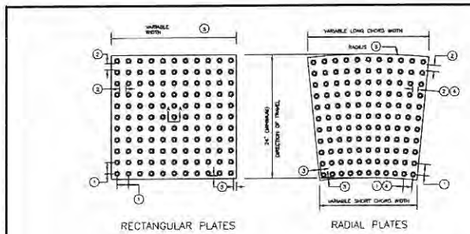
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CITY OF LAKE ELMO | STANDARD DRAWING NO. 506 LAKE ELMO

MnDOT STANDARD PLAN 5-297.250 SHEET 1 OF 5

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 507A LAKE ELMO



RADIUS (FEET)	LONG CHORD WIDTH (INCHES)	SQ. FT. PER PLATE	PLATES REQUIRED FOR 90 DEGREE TURN
10	33-1/2	3.53	8
15	18-13/16	2.83	15
19	23-1/2	3.67	12
20	18-13/16	3.05	20
20	18-7/8	2.86	20
25	20-1/2	3.28	23
25	23-5/16	3.77	20
30	22-5/8	3.45	25
35	22	3.34	30

NOTES
DETECTABLE WARNING SURFACES SHALL FOLLOW THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).
DETECTABLE WARNINGS CONSIST OF TRUNCATED DOMES ALIGNED IN A SQUARE OR RADIAL GRID PATTERN.
DETECTABLE WARNINGS ARE REQUIRED:
- WHERE RAMPS, LANDINGS, OR BLENDED TRANSITIONS PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE ROADWAY.
- WHERE PEDESTRIAN ACCESS ROUTES CROSS COMMERCIAL DRIVEWAYS THAT ARE PROVIDED WITH TRAFFIC CONTROL DEVICES OR OTHERWISE PERMITTED TO OPERATE LIKE A PUBLIC ROADWAY.
- AT PEDESTRIAN RAILWAY CROSSINGS.
- ON RAIL PLATFORMS WHERE BOARDING EDGES ARE NOT PROTECTED.
DETECTABLE WARNINGS SHALL EXTEND:
- A MINIMUM OF 24" IN THE DIRECTION OF TRAVEL.
- THE FULL WIDTH OF THE RAMP, LANDING OR BLENDED TRANSITION, WITHIN 2" OF FULL WIDTH ON EITHER END.
- THE FULL LENGTH OF THE PUBLIC USE AREA OF A RAIL PLATFORM.
DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, ROADWAY OR WALKWAY EITHER A LIGHT-ON-DARK OR DARK-ON-LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.
TRUNCATED DOME PANELS SHALL BE FROM MnDOT'S APPROVED/QUALIFIED PRODUCTS LISTS. PANELS SHALL BE CAST IRON.
DETECTABLE WARNING SURFACE SHALL BE PAID FOR AS TRUNCATED DOMES BY THE SQUARE FOOT.
ALL TRUNCATED DOME SYSTEMS SHALL BE PLACED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.
A. CENTER TO CENTER DOME SPACING: 1.6" MINIMUM, 2.4" MAXIMUM.
B. BASE TO BASE DOME SPACING: 0.65" MINIMUM.
C. DOME BASE TO PLATE EDGE SPACING: 0.35" MINIMUM (1.75" MAXIMUM).
D. SPACING VARIES ON RADIAL PLATES.
E. TYPICAL WIDTHS AVAILABLE: 12", 18", 24", 30", 36". CHECK WITH MANUFACTURERS FOR AVAILABLE WIDTHS.
F. ON RADIAL PLATE, RADIUS DEFINED AT BACK OF CURB.
G. TYPICAL RADII CHECK WITH MANUFACTURERS FOR AVAILABLE RADII.

DETECTABLE WARNING SURFACE - TRUNCATED DOMES

FEBRUARY 2016

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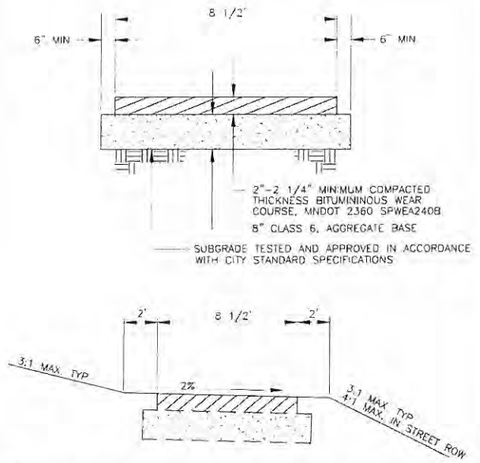
PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
CITY STANDARD DETAIL PLATES

SHEET NO.
C19
SHEET 19 OF 21

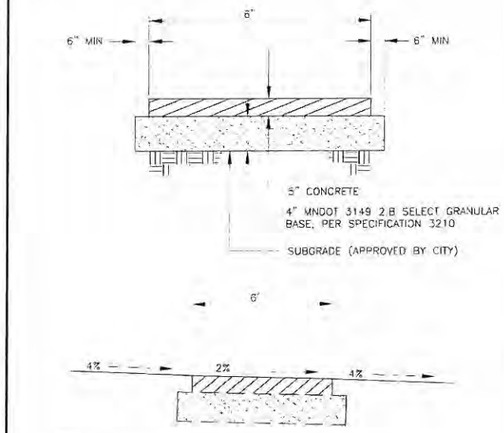


NOTE
1. BITUMINOUS TRAILS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM TRAIL SURFACE THROUGHOUT LENGTH OF TRAIL

BICYCLE-PEDESTRIAN PATH

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 509 LAKE ELMO

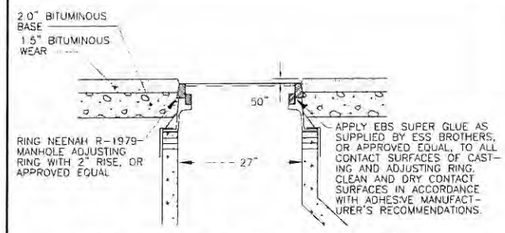


NOTE
1. SIDEWALKS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM SIDEWALK THROUGHOUT LENGTH OF WALK

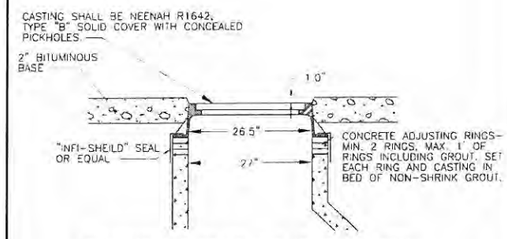
CONCRETE SIDEWALK

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 510 LAKE ELMO



BITUMINOUS WEAR COURSE ADJACENT DETAIL
NOT TO SCALE

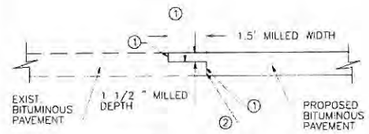


BITUMINOUS BASE COURSE ADJACENT DETAIL
NOT TO SCALE

MANHOLE CASTING ADJUSTMENT

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 511 LAKE ELMO



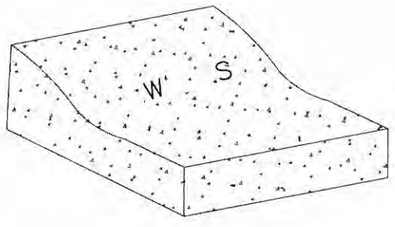
MILLED LAP JOINT SHALL BE CONSTRUCTED WHERE MATCHING INTO EXISTING BITUMINOUS PAVEMENT. MILL IMMEDIATELY PRIOR TO CONSTRUCTING BITUMINOUS WEARING COURSE.

NOTES:
1. APPLY BITUMINOUS TACK COAT, MNDOT SPEC. 2357
2. SAW BITUMINOUS PAVEMENT FULL DEPTH TO ESTABLISH A NEAT LINE FROM WHICH TO EXTEND THE NEW WORK.

MILLED LAP JOINT

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 512 LAKE ELMO



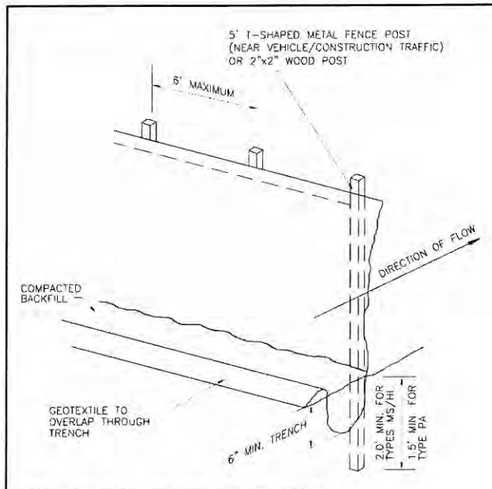
W-RELATIVE CURB STOP LOCATION
S-RELATIVE SANITARY SEWER SERVICE LOCATION

NOTES
1. CURB MARKERS ARE AVAILABLE FROM CITY HALL
2. CURB MARKINGS SHALL BE POSITIONED IN THE FACE OF THE CURB, WHILE THE CONCRETE IS IN A PLASTIC STATE, PERPENDICULAR TO THE LOCATION OF CURB STOPS
3. WHERE B6XX CURB IS USED, PLACE CURB MARKING ON FACE OF CURB

CONCRETE CURB MARKING
(FOR CURB STOPS)

FEBRUARY 2015

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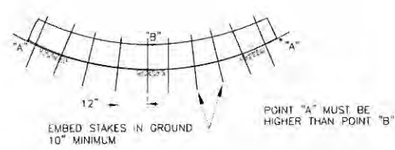


NOTE - -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE MS/HI NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886

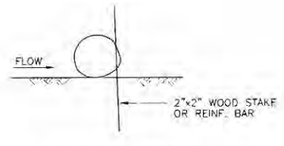
SILT FENCE

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 601 LAKE ELMO



DITCH SECTION



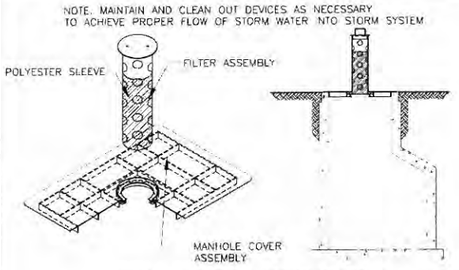
FIBER ROLL SECTION

NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT

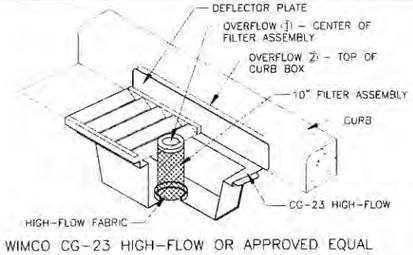
DITCH CHECK (FIBER ROLL)

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO. 603 LAKE ELMO



WIMCO RD-23 OR APPROVED EQUAL



WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2015

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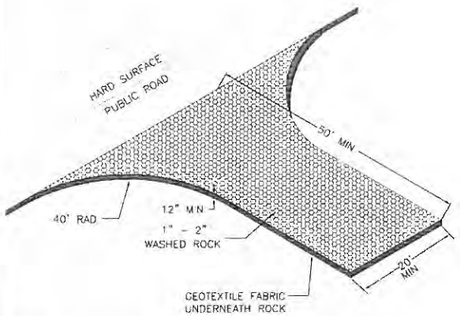
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SHEET TITLE
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SHEET NO
C20
SHEET 20 OF 21



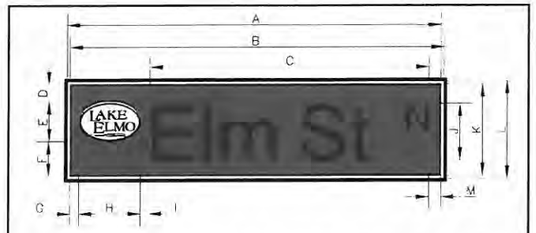
NOTES:

1. MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
2. A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
3. CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
4. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.
5. REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 605 | LAKE ELMO



DIMENSION	30" PANEL	36" PANEL	42" PANEL	48" PANEL
A	30"	36"	42"	48"
B	29.5"	35.5"	41.5"	47.5"
C	20"	26"	N/A	38"
D	1"	1"	1"	1"
E	4.06"	4.07"	4.06"	4.06"
F	3.15	3.15"	3.15"	3.15"
G	1"	1"	1"	1"
H	6.38	6.38"	6.38"	6.38"
I	1"	1"	1"	1"
J	6"	6"	6"	6"
K	8.25"	8.25"	8.25"	8.25"
L	8.75"	8.75"	8.75"	8.75"
M	1.0"	1"	1"	1"

NOTE:

- 9" HIGH STREET SIGN PLATES EXTRUDED
- LONGER NAME SIGN ON BOTTOM
- HIGHER VOLUME STREET SIGN TO BE PLACED ON BOTTOM
- STREET SIGNS TO BE PLACED TO EITHER THE SOUTHEAST OR NORTHWEST CORNER OF CORNER OF THE INTERSECTION
- 812 ROUND CAP AND 812 CROSS PIECE
- REFLECTIVITY IS TO BE TYPE IX DIAMOND GRADE (DG3)
- SUFFIXES SHALL BE LOWERCASE FOR ALL NUMBERED STREET NAMES (30th St N)

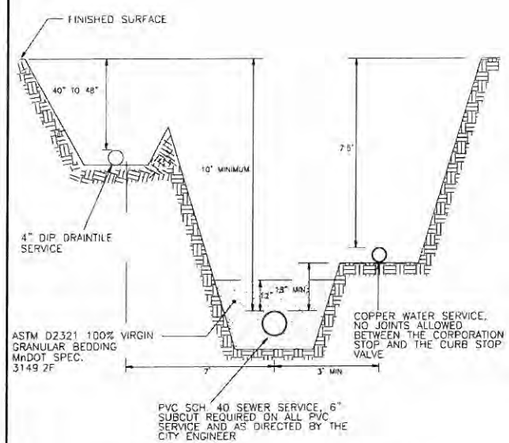
POSTS

- STOP SIGNS TO BE PLACED ON STREET SIGN POSTS PER MMUTCD WHEN APPLICABLE
- 12' TUBULAR POST WITH 0.080" WALL THICKNESS
- BR952 – BR4 BRACKET, NEW STYLE

STREET SIGNS

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 706 | LAKE ELMO

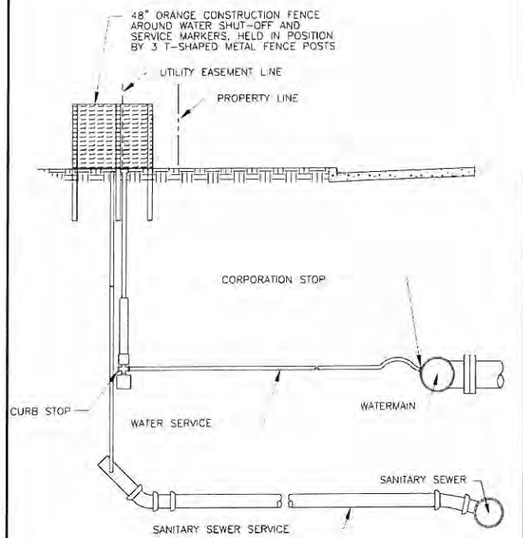


NOTE IF 18" OF VERTICAL SEPARATION BETWEEN THE SANITARY SERVICE AND WATER SERVICE CAN NOT BE MAINTAINED 10' OF HORIZONTAL SEPARATION IS REQUIRED.

SANITARY, WATER & DRAIN TILE SERVICE INSTALLATION

FEBRUARY 2015

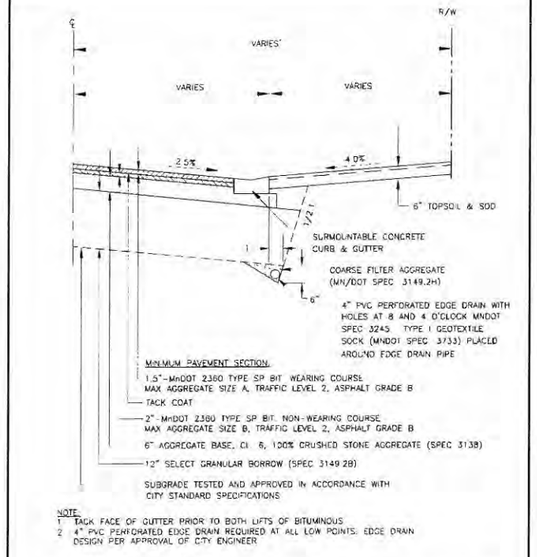
CITY OF LAKE ELMO | STANDARD DRAWING NO 712 | LAKE ELMO



TYPICAL SERVICE PROTECTION

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 713 | LAKE ELMO

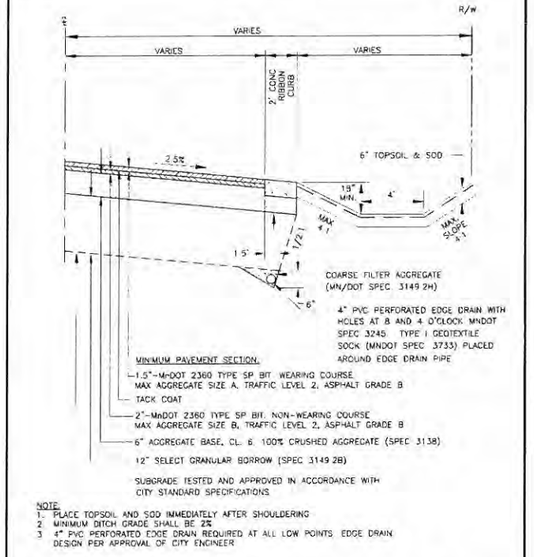


NOTE:
1 TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER

TYPICAL LOCAL RESIDENTIAL STREET SECTION (MINIMUM 7-TON DESIGN)

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 801 | LAKE ELMO

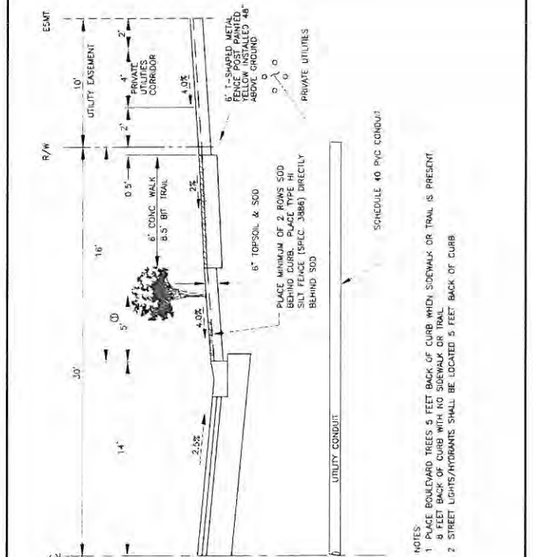


NOTE:
1. PLACE TOPSOIL AND SOD IMMEDIATELY AFTER SHOULDERING
2 MINIMUM DITCH GRADE SHALL BE 2%
3 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER

TYPICAL LOCAL RESIDENTIAL RURAL STREET SECTION (MINIMUM 7-TON DESIGN)

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 804 | LAKE ELMO

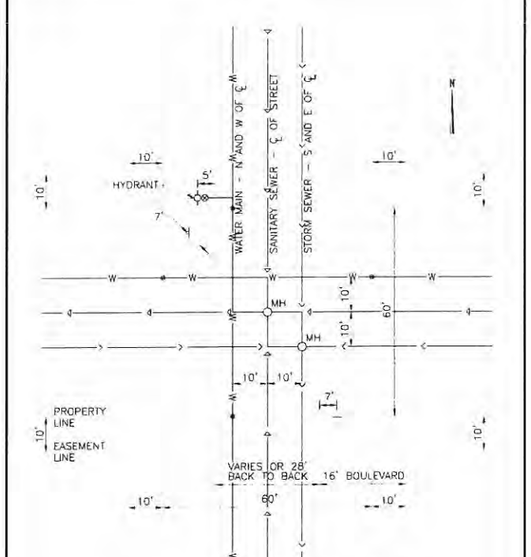


NOTES:
1 PLACE BOULEVARD TREES 5 FEET BACK OF CURB WHEN SIDEWALK OR TRAIL IS PRESENT. 9 FEET BACK OF CURB WITH NO SIDEWALK OR TRAIL.
2 STREET LIGHTS/HYDRANTS SHALL BE LOCATED 5 FEET BACK OF CURB

TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 805 | LAKE ELMO



URBAN STREET UTILITY LOCATION

FEBRUARY 2015

CITY OF LAKE ELMO | STANDARD DRAWING NO 806 | LAKE ELMO

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DRAWING PHASE

	OWNER REVIEW
✓	AGENCY REVIEW
	BID DOCUMENT
	FOR CONSTRUCTION
	AS-BUILT DOCUMENT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TODD A. ERICKSON, PE
LICENSE NO. 40418
DATE: 01/05/2017

OWNER / DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

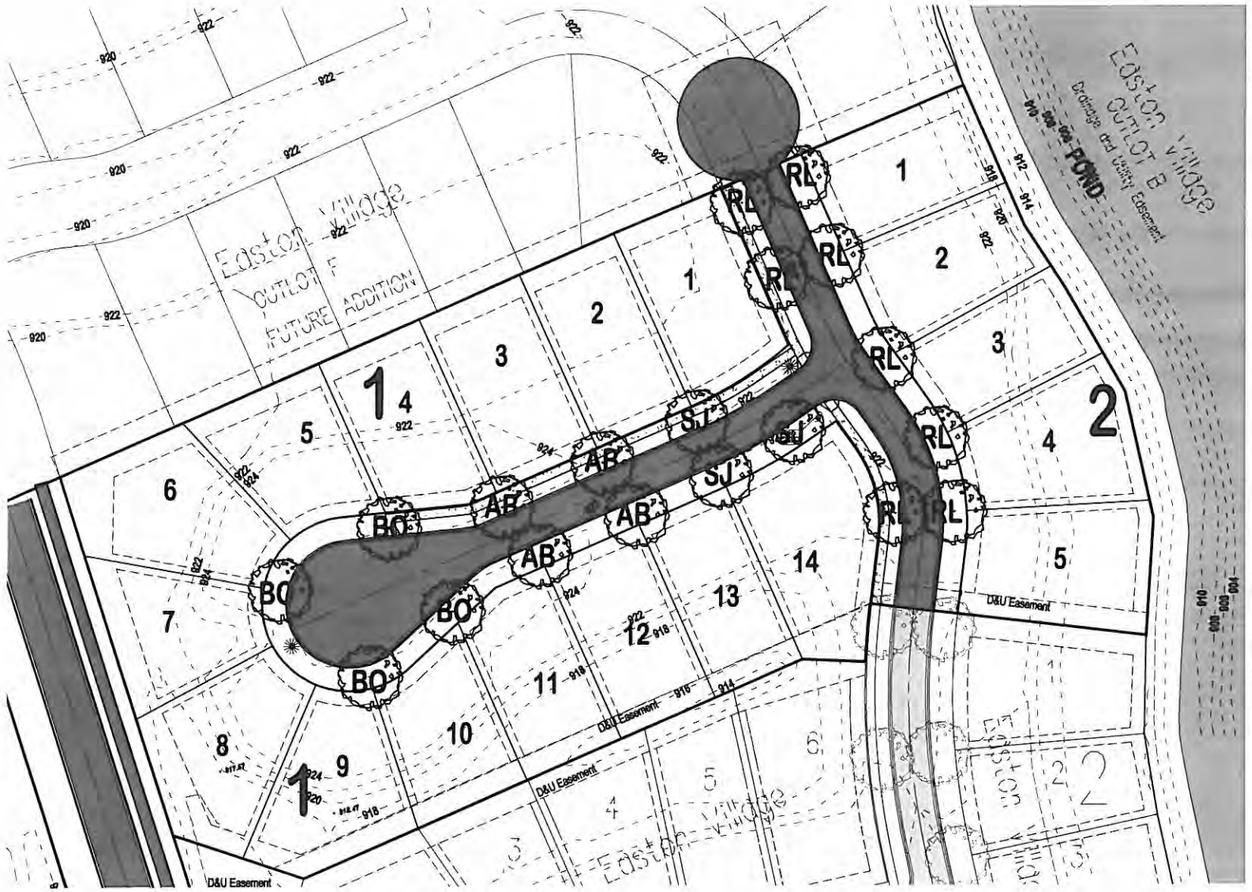
PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
CITY STANDARD DETAIL PLATES

SHEET NO.
C21
SHEET 21 OF 21



PLANTING SCHEDULE

	OVERSTORY TREES	Latin Name	Quantity	Size	Type	Notes
SJ	Scarlet Jewel Maple	Acer rubrum 'Scarlet Jewel'	3	2-1/2" Dia.	B+B	
AB	Autumn Blaze Maple	Acer x freemanii 'Jeffersred'	4	2-1/2" Dia.	B+B	
BO	Swamp White Oak	Quercus bicolor	4	2-1/2" Dia.	B+B	
RL	Redmond Linden	Tilia americana 'Redmond'	8	2-1/2" Dia.	B+B	

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N

50 0 50 100 150 FEET

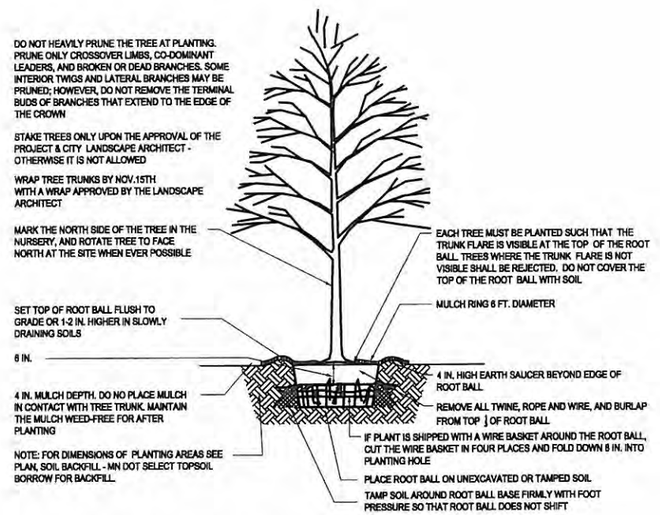
GRAPHIC SCALE

Legend

- EASTON VILLAGE 2ND ADDITION BOUNDARY
- 15-FT POLE WITH ORNAMENTAL LIGHT, XCEL ENERGY "ACRON" LAMP.
- UTILITY EASEMENT
- PROPOSED DECIDUOUS TREE

NOTE:

1) Tree Planting Contractor to Field Stake all Trees located on City Outlots and All Right of Way Areas for Approval by City Landscape Architect Prior to Planting. Notify City Landscape Architect via writing once tree in locations are staked and allow for up to two weeks for Landscape Architect to schedule and complete on-site review with Tree Planting Contractor.



DECIDUOUS TREE PLANTING DETAIL - SECTION

NOT TO SCALE

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✓	AGENCY REVIEW
	BID DOCUMENT
	FOR CONSTRUCTION
	AS-BUILT DOCUMENT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

DAVID CHMIELEWSKI

LICENSE NO 40639

DATE 03/17/2017

OWNER/DEVELOPER
CHASE DEVELOPMENT
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
2ND ADDITION
FINAL PLAN
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 16-175

SHEET TITLE
LANDSCAPE
PLAN & DETAILS

SHEET NO.
L1

SHEET 1 OF 1

EASTON VILLAGE 2ND ADDITION

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KNOW ALL PERSONS BY THESE PRESENTS: That Easton Village, LLC, a Minnesota Limited Liability Company, owner of the following described property:

That part of Outlot F, EASTON VILLAGE, WASHINGTON COUNTY, MINNESOTA, according to the recorded plat thereof, described as follows:

Beginning at the northeast corner of Lot 1, Block 2, EASTON VILLAGE, WASHINGTON COUNTY, MINNESOTA; thence North 83 degrees 16 minutes 38 seconds West, 190.00 feet, along the north line of said Lot 1, Block 2, EASTON VILLAGE; thence along a tangential curve concave to the south having a radius of 530.00 feet, a central angle of 04 degrees 19 minutes 32 seconds, chord bearing South 04 degrees 33 minutes 36 seconds West and chord of 40.00 feet, to a point on the northeast corner of Lot 6, Block 1, EASTON VILLAGE; thence North 87 degrees 36 minutes 09 seconds West, 43.21 feet, along the north line of Block 1, EASTON VILLAGE; thence South 66 degrees 16 minutes 38 seconds West, 371.54 feet, along the north line of said Block 1, EASTON VILLAGE; thence North 71 degrees 30 minutes 56 seconds West, 93.94 feet, along the north line of Outlot E, EASTON VILLAGE, WASHINGTON COUNTY, MINNESOTA; thence south easterly along a non-tangental curve concave west, radius 1040.00 feet, central angle 18 degrees 16 minutes 39 seconds, chord bearing North 09 degrees 35 minutes 54 seconds, chord 330.36 feet; thence North 00 degrees 27 minutes 34 seconds West, 205.83 feet; thence North 80 degrees 57 minutes 25 seconds East, 80.00 feet; thence North 00 degrees 27 minutes 37 seconds West, 205.83 feet; thence northwesterly along a tangental curve, concave west, radius 960.00 feet, central angle 18 degrees 16 minutes 39 seconds, chord bearing North 09 degrees 35 minutes 54 seconds West, chord 304.95 feet; thence North 17 degrees 27 minutes 59 seconds West, 250.82 feet; thence North 66 degrees 27 minutes 31 seconds East, 751.17 feet, to a point on the west line of Outlot B, EASTON VILLAGE, WASHINGTON COUNTY, MINNESOTA; thence South 23 degrees 43 minutes 22 seconds East, 107.10 feet, along the west line of said Outlot B, EASTON VILLAGE; thence South 33 feet 22 minutes 53 seconds East, 49.34 feet, along the along the west line of said Outlot B, EASTON VILLAGE; thence South 30 degrees 10 minutes 23 seconds East, 83.58 feet, along the west line of said Outlot B, EASTON VILLAGE; thence South 12 degrees 46 minutes 50 seconds East, 88.75 feet, along the west line of said Outlot B, EASTON VILLAGE; thence South 03 degrees 28 minutes 33 seconds West, 80.98 feet along the west line of said Outlot B, EASTON VILLAGE, to the point of beginning.

Has caused the same to be surveyed and platted as EASTON VILLAGE 2ND ADDITION, and does hereby dedicate to the public for public use the public ways as shown on the plat, and the easements created by this plat for drainage and utility purposes only.

In witness whereof said Easton Village, LLC, a Minnesota Limited Liability Company, has caused these presents to be signed by its proper officer this_____ day of _____, 2017.

Signed: Easton Village, LLC

By:_____

Thomas Wolter, Vice President

STATE OF _____

COUNTY OF _____

This instrument was acknowledged before me on this _____ day of _____, 2017 by_____, President and _____, Vice President, of Easton Village, LLC, a Minnesota Limited Liability Company, on behalf of the company.

_____

(Print Name)_____
Notary Public_____
My commission expires_____

I, Paul A. Johnson, do hereby certify that this plat was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor in the State of Minnesota, that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been correctly set; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.
Signed and dated this _____ day of _____, 2017.

_____
Paul A. Johnson, Licensed Land Surveyor
Minnesota License Number 10538

STATE OF MINNESOTA
COUNTY OF WASHINGTON
This instrument was acknowledged before me on this _____ day of _____ 2017 by Paul A. Johnson, Licensed Land Surveyor.

_____
Todd A. Erickson, Notary Public, Minnesota
My commission expires January 31, 2019

This plat was approved by the City Council of Lake Elmo , Minnesota, this ___ day of _____, 2017, and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subd. 2.

Signed _____ Signed _____
Mayor Clerk

Approved by the Planning Commission of the City of Lake Elmo, Minnesota, this ___ day of _____, 2017.

Signed: _____ Signed _____
Chair, Planning Commission Secretary, Planning Commission

County Surveyor

Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 2017.

By:_____ By:_____
Washington County Surveyor

County Auditor/Treasurer

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, and Section 272.12, taxes payable in the year 2017, on real estate hereinbefore described, have been paid; and there are no delinquent taxes, and transfer has been entered, on this _____ day of _____, 2017.

By:_____ By:_____
Washington County Auditor/Treasurer Deputy

County Recorder

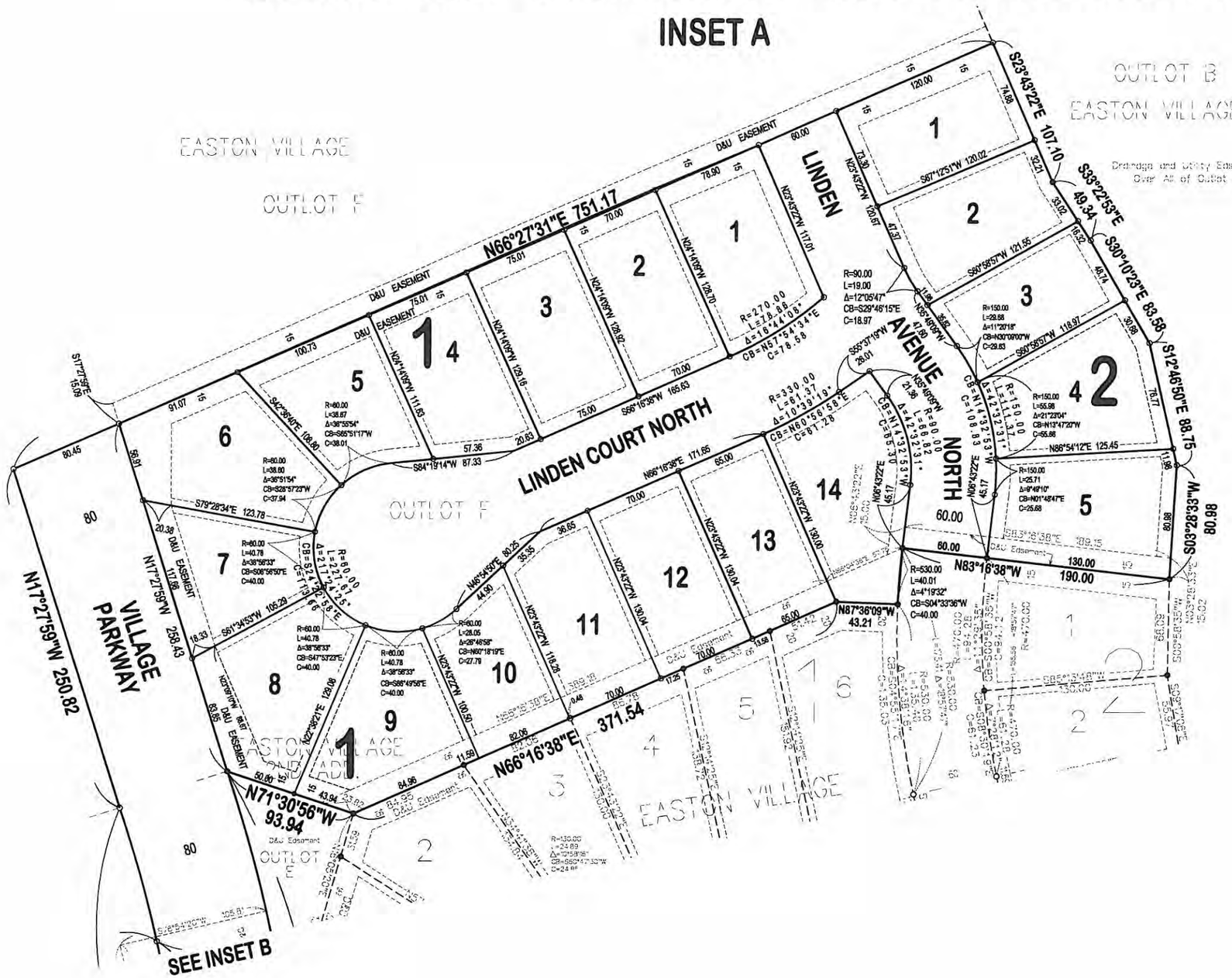
Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 2017 at _____o'clock ____.M. and was duly recorded in Washington County Records.

By:_____ By:_____
Washington County Recorder Deputy

EASTON VILLAGE 2ND ADDITION

INSET A



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Stillwater, Minnesota 55082
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N

40 0 40 80 120

1 INCH = 40 FEET

GRAPHIC SCALE IN FEET

LEGEND

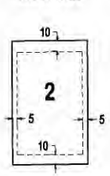
- ○ DENOTES SET ½ INCH BY 18 INCH IRON PIPE MONUMENT INSCRIBED "JOHNSON LS #10936", UNLESS SHOWN OTHERWISE
- ● DENOTES FOUND MONUMENT, SIZE AND MARKINGS AS INDICATED

NOTES

1) ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WASHINGTON COUNTY COORDINATE SYSTEM (NAD 83).

EASEMENT DETAIL

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)

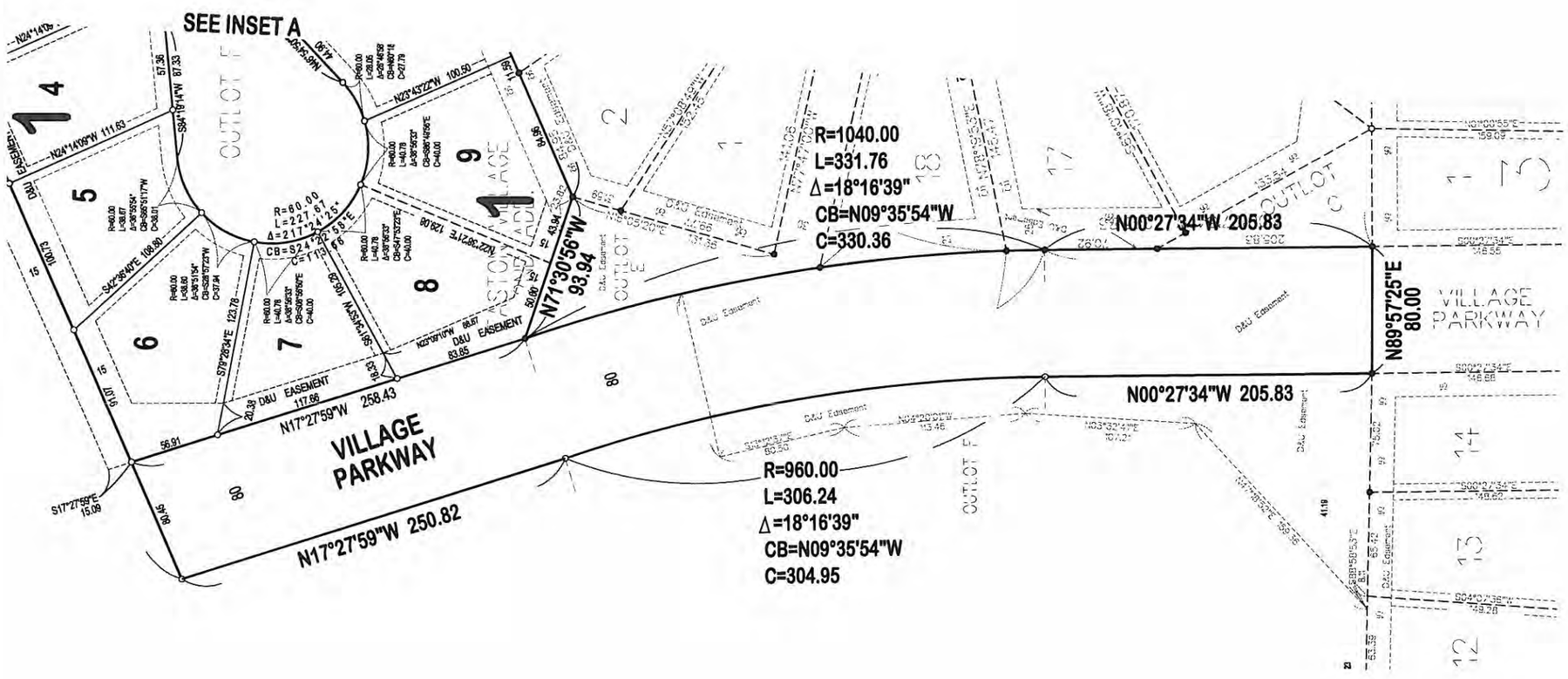


BEING 5 FEET IN WIDTH AND ADJOINING LOT LINES AND 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAYS AND BLOCK LINES, AS SHOWN ON THE PLAT, UNLESS OTHERWISE INDICATED

EASTON VILLAGE 2ND ADDITION

INSET B

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40 0 40 80 120

1 INCH = 40 FEET

GRAPHIC SCALE IN FEET

LEGEND

- DENOTES SET ½ INCH BY 16 INCH IRON PIPE MONUMENT INSCRIBED "JOHNSON LS #10938", UNLESS SHOWN OTHERWISE
- DENOTES FOUND MONUMENT, SIZE AND MARKINGS AS INDICATED

NOTES

1) ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WASHINGTON COUNTY COORDINATE SYSTEM (NAD 83).



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N

100 0 100 200 300 FEET

GRAPHIC SCALE

LEGEND

PROPERTY BOUNDARY

REVISED ROAD ALIGNMENT, UTILITY, GRADING AND LOT LINE ADJUSTMENT AREA

DEVELOPMENT STANDARDS

FRONT SETBACK	25'
GARAGE SIDE SETBACK	7.5'
SIDE SETBACK (CORNER LOTS)	15'
HOUSE SIDE SETBACK	7.5'
REAR SETBACK	20'
TYPICAL LOT WIDTH:	65'
TYPICAL LOT DEPTH:	130'
SIDE YARD EASEMENT:	5' *
FRONT AND REAR EASEMENT:	10' *
MINIMUM LOT SIZE:	8,100 SQ. FT.
AVERAGE LOT SIZE:	10,486 SQ. FT
MIN. BASEMENT ELEVATION ABOVE 100 YEAR HWL	2'

* UNLESS SHOWN ON PRELIMINARY LAYOUT

NOTE: DRAINAGE AND UTILITY EASEMENTS SHOWN FOR 100-YEAR HWL OF PONDING AREAS

NOTES

1) LAYOUT CHANGES REFLECT ALIGNMENT, LOT LINE, GRADING AND INTERNAL OUTLOT CHANGES ONLY. NO CHANGES TO LOT COUNT OR PARK AREA PROPOSED WITH REVISION TO ORIGINAL APPROVED PRELIMINARY PLAT.

2) GRADING CHANGES HAVE BEEN MADE TO STREET GRADES TO ALLOW FOR LESS STEPS FROM GARAGE TO FIRST FLOOR OF HOMES AND REDUCTION IN DRIVEWAY GRADES.

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DRAWING PHASE:

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TODD A. ERICKSON, PE
40418
LICENSE NO
03/17/2017
DATE

OWNER/DEVELOPER
EASTON VILLAGE, LLC
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT REV.
LAKE ELMO, MINNESOTA

NO	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT
SITE PLAN REVISION

SHEET NO.
PR1
SHEET 1 OF 11



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100 0 100 200 300 FEET

GRAPHIC SCALE

LEGEND

PROPERTY BOUNDARY

REVISED ROAD ALIGNMENT, UTILITY, GRADING AND LOT LINE ADJUSTMENT AREA

DEVELOPMENT STANDARDS

FRONT SETBACK	25'
GARAGE SIDE SETBACK	7.5'
SIDE SETBACK (CORNER LOTS)	15'
HOUSE SIDE SETBACK	7.5'
REAR SETBACK	20'
TYPICAL LOT WIDTH:	65'
TYPICAL LOT DEPTH:	130'
SIDE YARD EASEMENT:	5' *
FRONT AND REAR EASEMENT	10' *
MINIMUM LOT SIZE:	8,100 SQ. FT.
AVERAGE LOT SIZE:	10,486 SQ. FT.
MIN. BASEMENT ELEVATION ABOVE 100 YEAR HWL:	2'

* UNLESS SHOWN ON PRELIMINARY LAYOUT

NOTE: DRAINAGE AND UTILITY EASEMENTS SHOWN FOR 100-YEAR HWL OF PONDING AREAS

NOTES

1) LAYOUT CHANGES REFLECT ALIGNMENT, LOT LINE, GRADING AND INTERNAL OUTLOT CHANGES ONLY. NO CHANGES TO LOT COUNT OR PARK AREA PROPOSED WITH REVISION TO ORIGINAL APPROVED PRELIMINARY PLAT.

2) GRADING CHANGES HAVE BEEN MADE TO STREET GRADES TO ALLOW FOR LESS STEPS FROM GARAGE TO FIRST FLOOR OF HOMES AND REDUCTION IN DRIVEWAY GRADES.

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TODD A. ERICKSON, PE
40418
LICENSE NO
03/17/2017
DATE

OWNER/DEVELOPER
EASTON VILLAGE, LLC
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

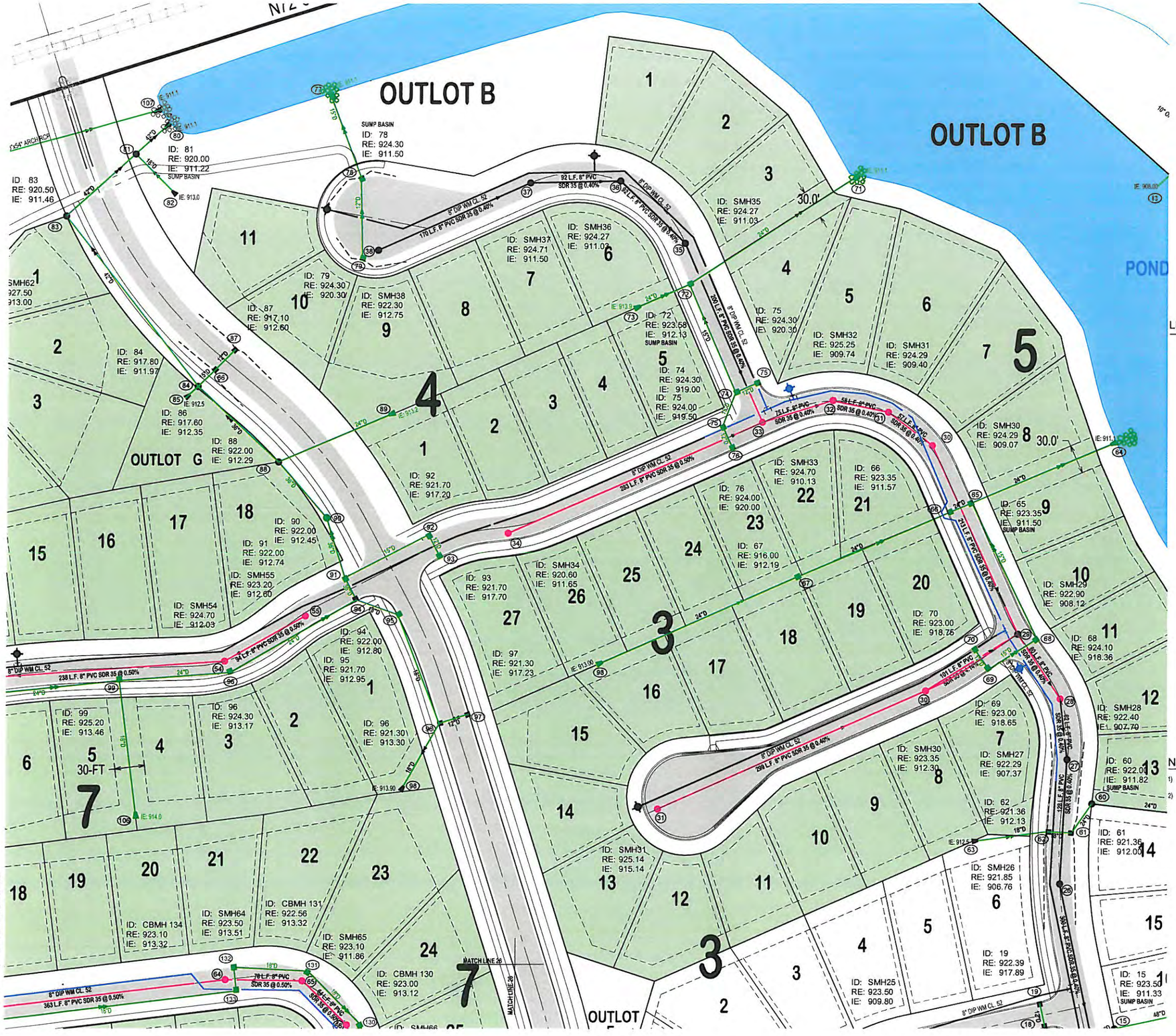
PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT REV.
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT
SITE PLAN REVISION

SHEET NO.
PR2
SHEET 2 OF 10



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50 0 50 100 150 FEET

GRAPHIC SCALE

LEGEND

- PROPERTY BOUNDARY
- 87 L.F. 8" PVC SDR 35 @ 0.40% — PROPOSED SANITARY SEWER (LENGTH, TYPE, SLOPE AND ID NOTED)
- 21"D — PROPOSED STORM SEWER (SIZE AND ID NOTED, 12" - 15" CL. V, ALL OTHERS CL. III)
- PROPOSED WATER MAIN (DIP CL. 52, 8" UNLESS NOTED, 7.5' BURY DEPTH TO TOP OF PIPE)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK REQUIRED AT ALL LOW POINT CATCH BASINS (50-FT EITHER SIDE OF BASIN).
- OHE — EXISTING OVERHEAD ELECTRICAL LINE AND POLE
- UGE — EXISTING UNDERGROUND ELECTRICAL LINE
- UGG — EXISTING UNDERGROUND GAS LINE
- REVISED SANITARY SEWER ALIGNMENT
- REVISED STORM SEWER ALIGNMENT
- REVISED WATER MAIN ALIGNMENT
- REVISED ROAD ALIGNMENT, UTILITY, GRADING AND LOT LINE ADJUSTMENT AREA

NOTES

1) SEE DETAIL SHEETS FOR SPECIFIC REQUIREMENTS FOR UTILITY INSTALLATION
2) ALL UTILITIES SHALL BE INSTALLED PER CITY OF LAKE ELMO DETAILS AND SPECIFICATIONS. MINNESOTA CITY ENGINEER ASSOCIATION STANDARD SPECIFICATIONS SHALL ALSO GOVERN.

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40418
LICENSE NO
03/16/2015
DATE

OWNER/DEVELOPER
EASTON VILLAGE, LLC
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

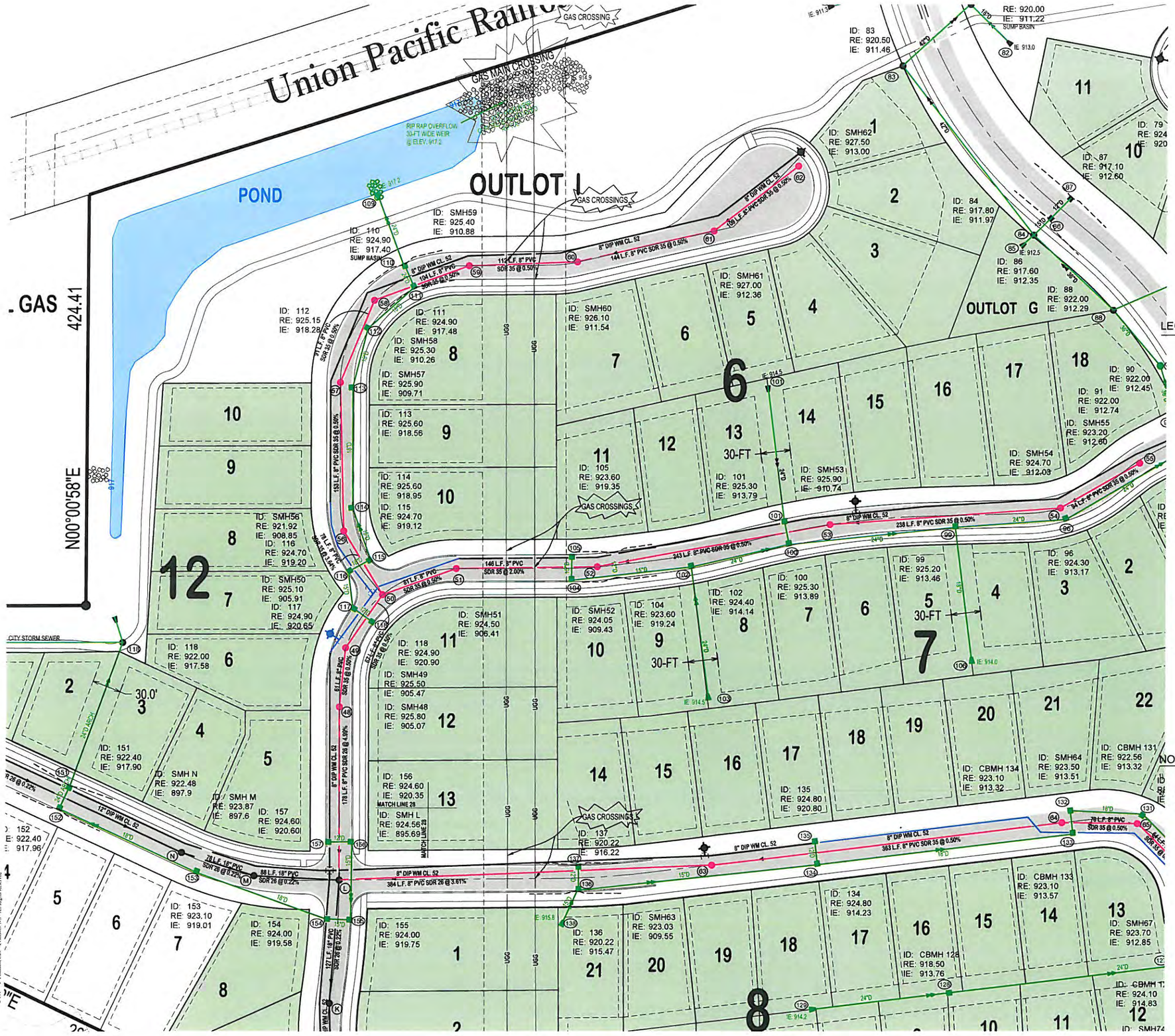
PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT REV.
LAKE ELMO, MINNESOTA

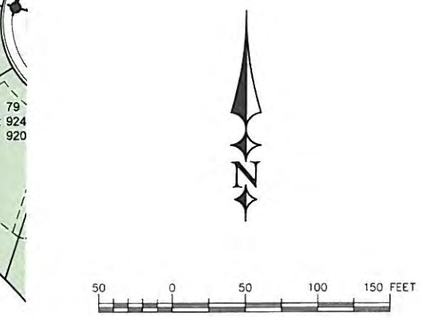
NO.	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT UTILITY REVISION

SHEET NO.
PR3
SHEET 3 OF 11





LEGEND

- PROPERTY BOUNDARY
- PROPOSED SANITARY SEWER (LENGTH, TYPE, SLOPE AND ID NOTED)
- PROPOSED STORM SEWER (SIZE AND ID NOTED, 12" - 15" CL. V, ALL OTHERS CL. III)
- PROPOSED WATER MAIN (DIP CL. 52, 8" UNLESS NOTED, 7.5' BURY DEPTH TO TOP OF PIPE)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK REQUIRED AT ALL LOW POINT CATCH BASINS (50-FT EITHER SIDE OF BASIN).
- OHE — EXISTING OVERHEAD ELECTRICAL LINE AND POLE
- UGE — EXISTING UNDERGROUND ELECTRICAL LINE
- UGG — EXISTING UNDERGROUND GAS LINE
- REVISED SANITARY SEWER ALIGNMENT
- REVISED STORM SEWER ALIGNMENT
- REVISED WATER MAIN ALIGNMENT
- REVISED ROAD ALIGNMENT, UTILITY, GRADING AND LOT LINE ADJUSTMENT AREA

NOTES

SEE DETAIL SHEETS FOR SPECIFIC REQUIREMENTS FOR UTILITY INSTALLATION

ALL UTILITIES SHALL BE INSTALLED PER CITY OF LAKE ELMO DETAILS AND SPECIFICATIONS. MINNESOTA CITY ENGINEER ASSOCIATION STANDARD SPECIFICATIONS SHALL ALSO GOVERN.

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TODD A. ERICKSON, PE
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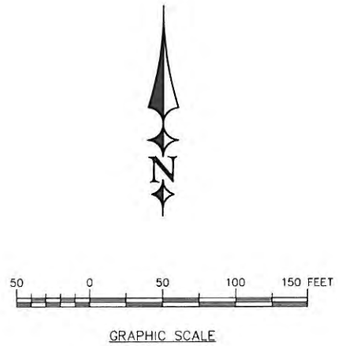
NO.	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT UTILITY REVISION

SHEET NO.
PR4
SHEET 4 OF 11





LEGEND

- PROPERTY BOUNDARY
- 87 L.F. 8" PVC SDR 35 @ 0.40% — PROPOSED SANITARY SEWER (LENGTH, TYPE, SLOPE AND ID NOTED)
- 21"D — PROPOSED STORM SEWER (SIZE AND ID NOTED, 12" - 15" CL. V, ALL OTHERS CL. III)
- PROPOSED WATER MAIN (DIP CL. 52. 8" UNLESS NOTED, 7.5' BURY DEPTH TO TOP OF PIPE)
- PROPOSED RIGID PERFORATED 4" PVC DRAIN TILE WITH SOCK REQUIRED AT ALL LOW POINT CATCH BASINS (50-FT EITHER SIDE OF BASIN).
- OHE — EXISTING OVERHEAD ELECTRICAL LINE AND POLE
- UGE — EXISTING UNDERGROUND ELECTRICAL LINE
- UGG — EXISTING UNDERGROUND GAS LINE
- REVISED SANITARY SEWER ALIGNMENT
- REVISED STORM SEWER ALIGNMENT
- REVISED WATER MAIN ALIGNMENT
- REVISED ROAD ALIGNMENT, UTILITY, GRADING AND LOT LINE ADJUSTMENT AREA.

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PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT REV.
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT UTILITY REVISION

SHEET NO.
PR5
SHEET 5 OF 11

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NOTE:
OUTLET STRUCTURE SHALL BE INSTALLED WITH 10" ORIFICE AT 912.82.

INFILTRATION AREA @ 911.3

SEDIMENT BASIN

10" ORIFICE OUTLET

HWL 916.5
NWL 911.1

OUTLOT B

POND

MAINTENANCE ACCESS

Manning Avenue North

UGE

N00°03'07"E 2188.51

MATCH LINE

HWL 916.5

OUTLOT B

50 0 50 100 150 FEET

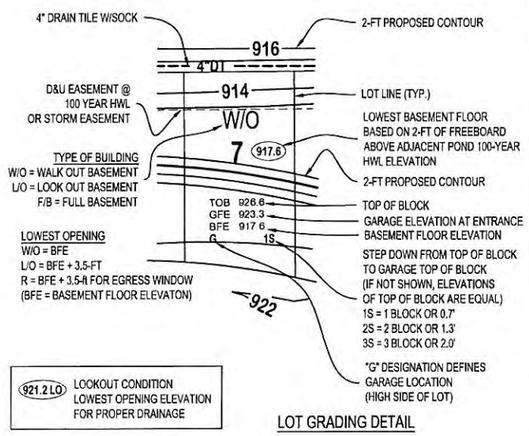
GRAPHIC SCALE

LEGEND

- PROPERTY BOUNDARY
- 1030 — EXISTING 2-FT CONTOUR INTERVAL
- 922.85 LP / HP — HIGH OR LOW POINT OF STREET PROFILE LOCATION AND ELEVATION HP = HIGH POINT, LP = LOW POINT
- 1030 — PROPOSED 2-FT CONTOUR INTERVAL
- PROPOSED DRAINAGE ARROW
- 0.74% — PROPOSED STREET GRADE PERCENT AND DIRECTION
- 21"D — PROPOSED STORM SEWER (SIZE INDICATED ON PLANS)
- 100-YEAR HIGH WATER CONTOUR
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GRADING NOTES:

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6) CONTRACTOR SHALL SCHEDULE SOILS TESTING FOR EACH STRUCTURAL FILL AREA, PAD AND STREET AREA.



921.2 LO — LOOKOUT CONDITION
LOWEST OPENING ELEVATION FOR PROPER DRAINAGE

LOT GRADING DETAIL

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PROJECT TITLE
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PRELIMINARY PLAT
LAKE ELMO, MINNESOTA

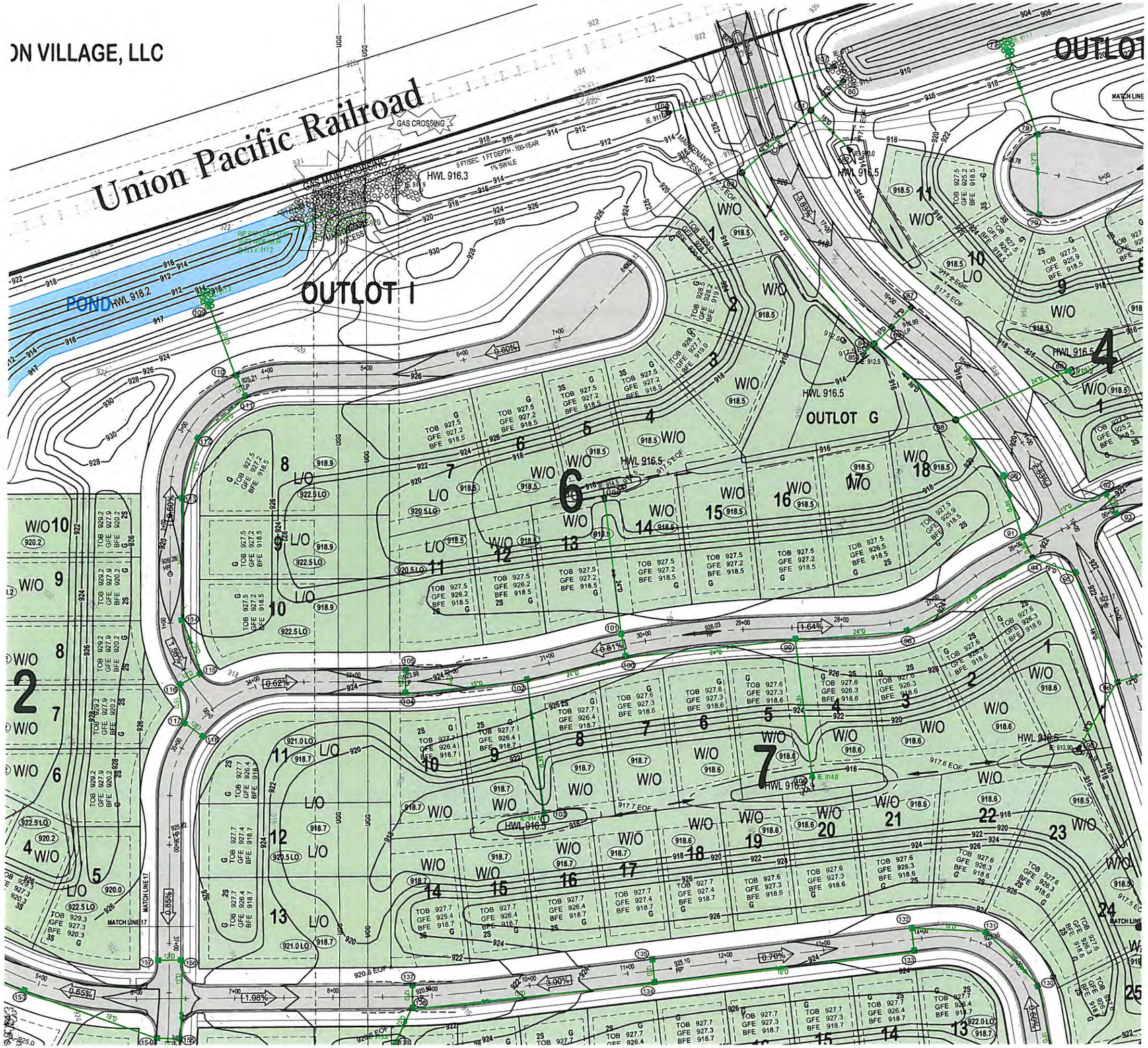
NO	REVISION DESCRIPTION	DATE

JOB NO. 13-114

SHEET TITLE
PRELIMINARY PLAT GRADING REVISION

SHEET NO.
PR6
SHEET 6 OF 11

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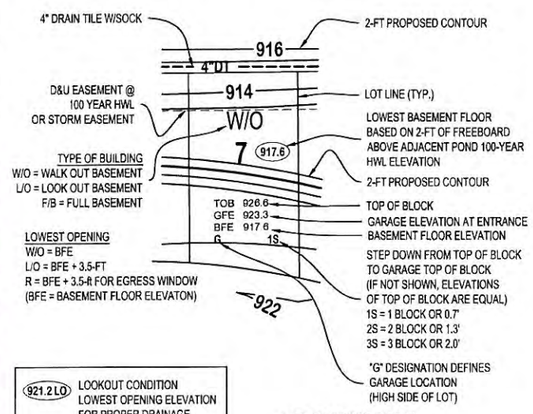


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921.2 LO — LOOKOUT CONDITION LOWEST OPENING ELEVATION FOR PROPER DRAINAGE

LOT GRADING DETAIL

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PROJECT TITLE
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LAKE ELMO, MINNESOTA

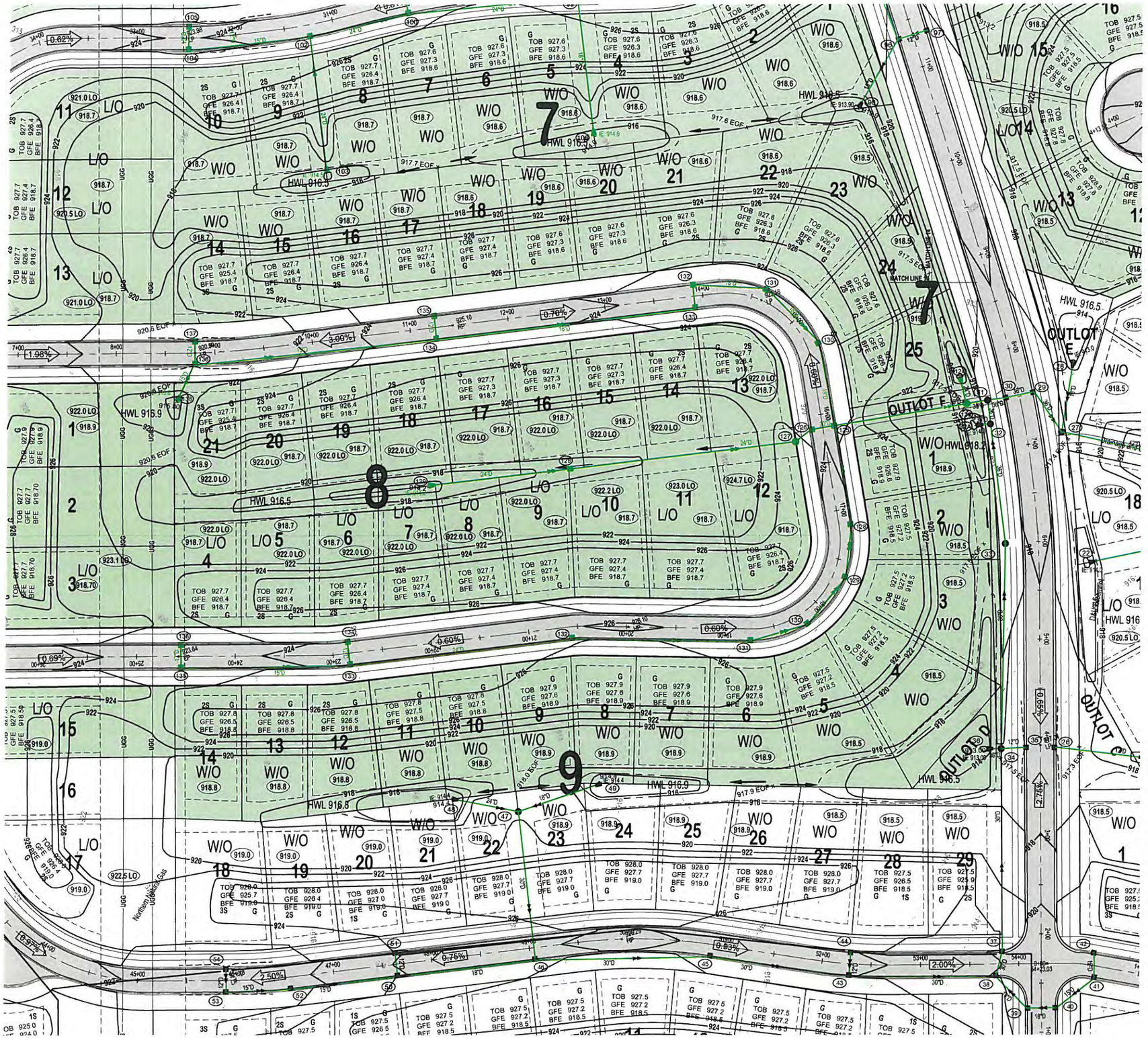
NO.	REVISION DESCRIPTION	DATE

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SHEET TITLE
PRELIMINARY PLAT GRADING REVISION

SHEET NO.
PR7
SHEET 7 OF 11

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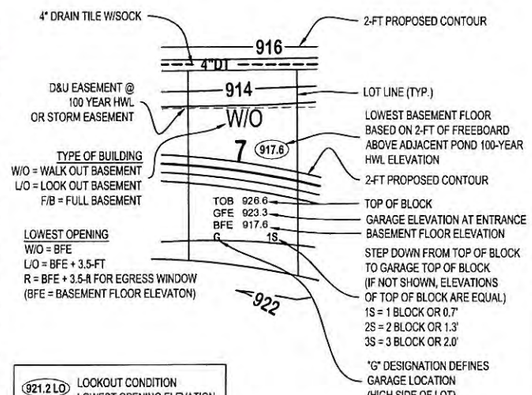


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921.2 LO — LOOKOUT CONDITION LOWEST OPENING ELEVATION FOR PROPER DRAINAGE

LOT GRADING DETAIL

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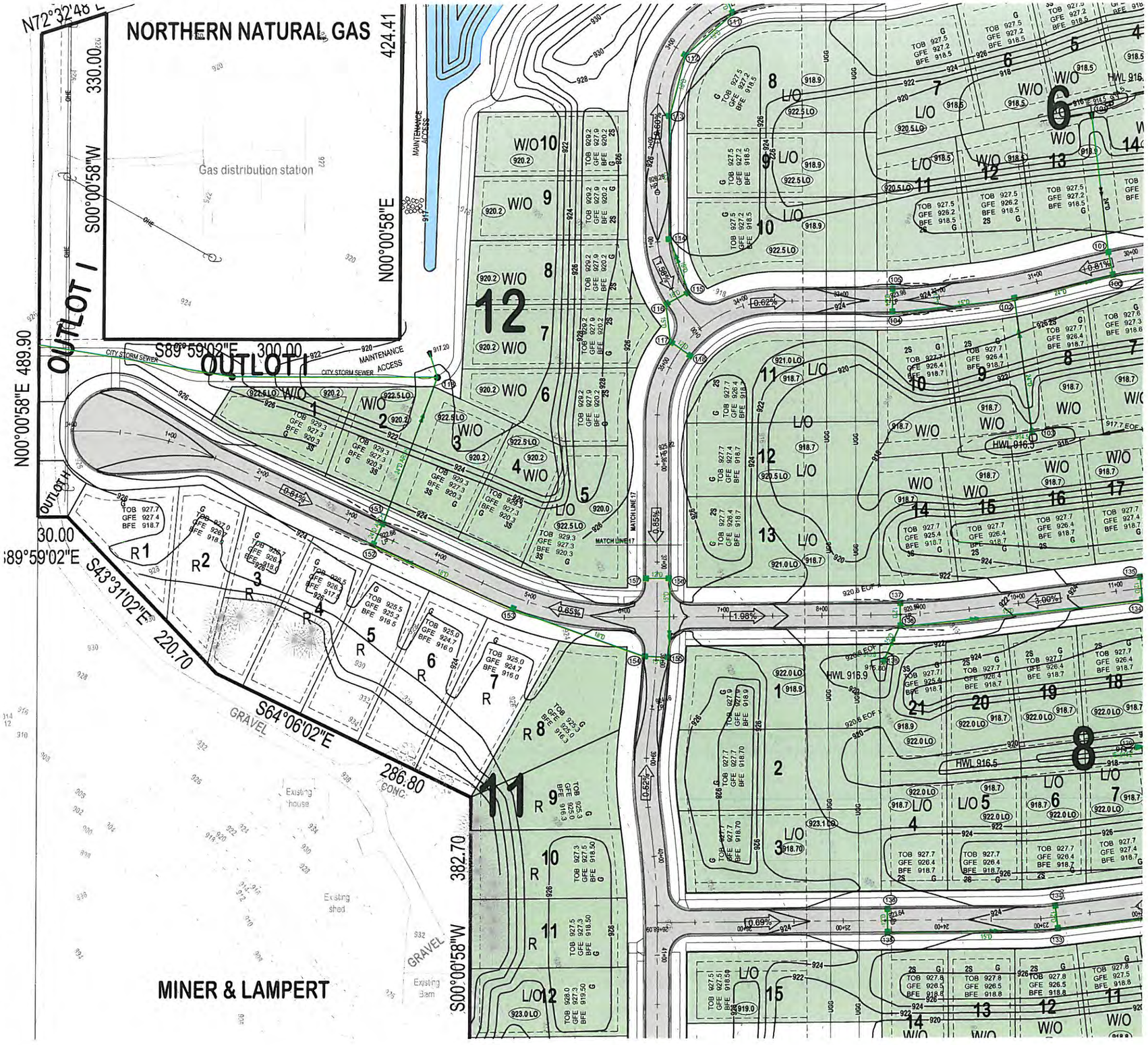
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SHEET TITLE
PRELIMINARY PLAT GRADING REVISION

SHEET NO.
PR8
SHEET 8 OF 11

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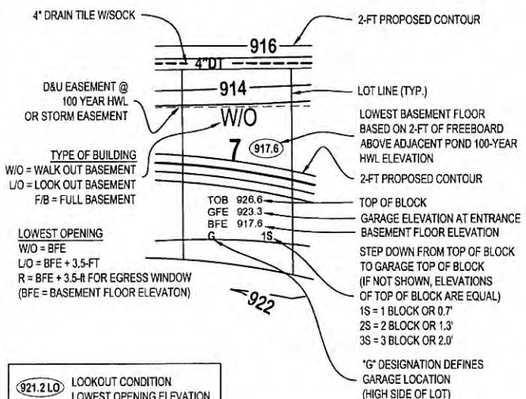
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OWNER/DEVELOPER: EASTON VILLAGE, LLC
2140 COUNTY ROAD 42 WEST
BURNSVILLE, MN 55337

PROJECT TITLE: EASTON VILLAGE
PRELIMINARY PLAT
LAKE ELMO, MINNESOTA

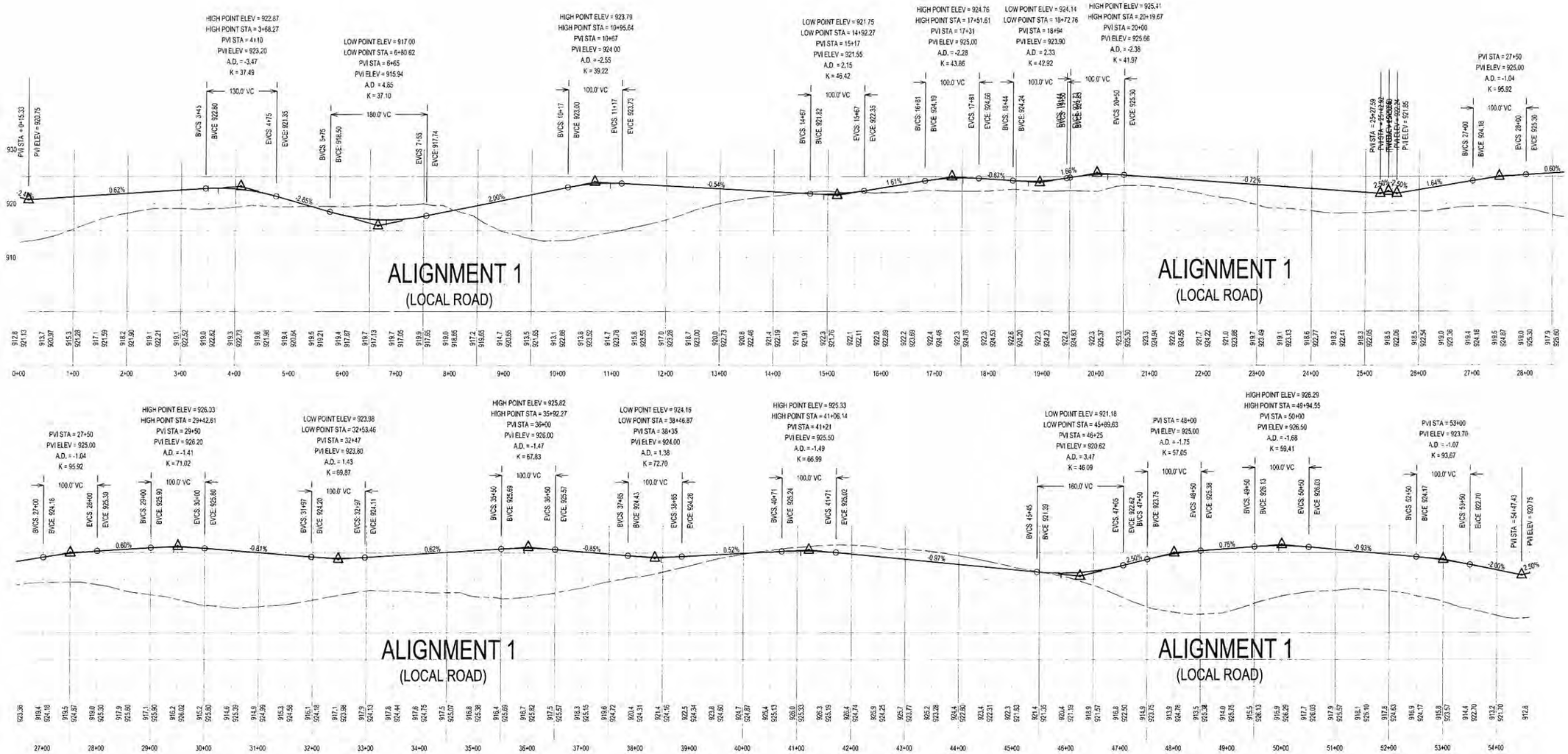
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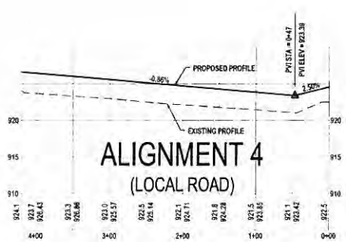
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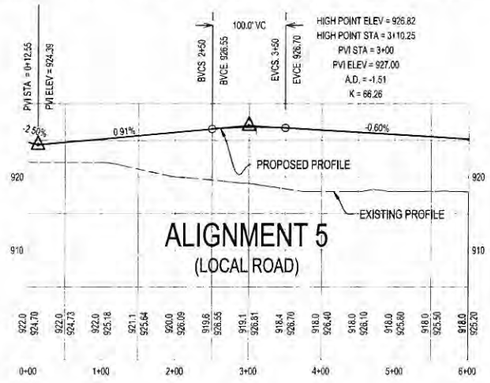
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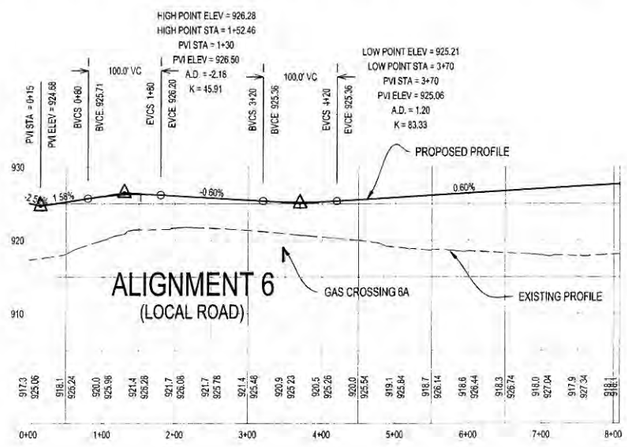
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SHEET 9 OF 11









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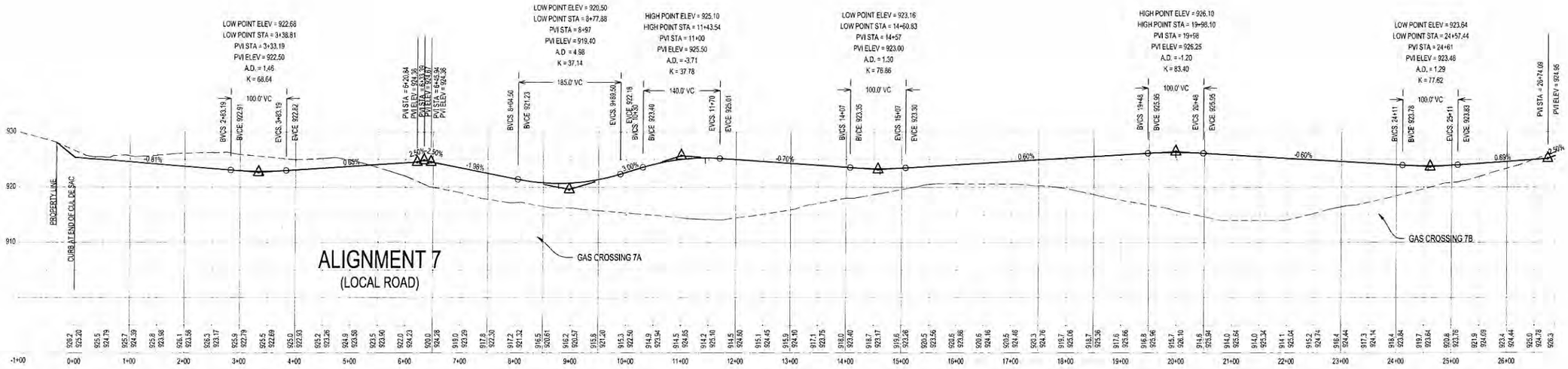
PROJECT TITLE
EASTON VILLAGE
PRELIMINARY PLAT
LAKE ELMO, MINNESOTA

NO.	REVISION DESCRIPTION	DATE

JOB NO: 13-114

SHEET TITLE
PRELIMINARY PLAT
ROAD PROFILE REVISION

SHEET NO.
PR10
SHEET 10 OF 11



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SHEET TITLE
PRELIMINARY PLAT
ROAD PROFILE REVISION

SHEET NO.
PR11
SHEET 11 OF 11

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STAFF REPORT
DATE: APRIL 24, 2017
AGENDA ITEM: 5B – BUSINESS ITEM
CASE #2016-59

TO: Planning Commission
FROM: Emily Becker, Planner
SUBMITTED BY: Zoning Text Amendment – Village Urban Districts
REVIEWED BY: Stephen Wensman, Planning Director

BACKGROUND:

The Planning Commission has reviewed a proposed draft Village Urban Low Density (V-LDR) zoning district as well as minor amendments to the Village Mixed Use (VMX) District at its January 23, 2017, February 13, February 27, 2017, and March 27, 2017 meetings. A public hearing was held at the April 10, 2017 meeting.

ISSUE BEFORE THE COMMISSION:

Staff respectfully requests that the Planning Commission make recommendation on the proposed draft ordinance of the Village Low Density Residential and minor amendments to the Village Mixed Use (VMX) District.

PLANNING/ZONING ANALYSIS:

Summary of Discussed Changes since the last Planning Commission meeting to Proposed Ordinance. Staff has made minor amendments to the draft ordinance that the Planning Commission recommended. Major issues discussed are summarized below:

- **Single Family Homes in VMX.** Currently, standards for the VMX district indicate that an existing single family home shall be considered a permitted, rather than non-conforming use, in the VMX zoning district. This language was derived from the Comprehensive Plan. While the Comprehensive Plan does not specifically outline *new* single-family homes as an allowed use in the VMX zoning district, it does state that existing single family residential homes shall be permitted. As previously discussed, an existing use that is no longer allowed in a zoning district cannot be considered "permitted" upon rezoning; it is then considered legal non-conforming (and consequentially cannot expand).
    - **Again Proposed as a Conditional Use.** Staff has again proposed that single-family detached dwellings be designated as conditional uses. Conditional use means a land use or development as defined by ordinance that would not be appropriate generally but may be allowed with appropriate restrictions as provided by official controls only upon required findings. These required findings include (among others):
        - That the use or development is compatible with the existing neighborhood; and
        - That the use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of the area.
        - The City Attorney has been consulted regarding this provision and believes that designating single-family detached homes as a conditional use may be appropriate within the VMX district in order to limit the number and expansion

of such homes in this district. She stated that the City would have to place appropriate standards and conditions on such uses in order to properly regulate them.

- **Mixed Use Definition**. The City Attorney was asked about a mixed use definition and did not have a definitions because it's a mix of two principal uses already defined in the Zoning Code.
- **Village Open Space Overlay District.** Staff had previously proposed that lots may not encroach on the Village Open Space Overlay/Greenbelt portions as designated by the Comprehensive Plan.
    - *Reasoning.* The reasoning for this was to maintain the open space buffer as designated by the Comprehensive Plan without having to reference different setbacks for lots encroaching on the open space buffer, which could complicate the building permit review process.
    - *Reconsideration.* Staff further considered this provision after discussion with a developer. This may not be practical, as a buffer may be sufficiently provided through landscaping, berms, or other option. Additionally, a small strip of open space may be difficult for an association to maintain. The developer suggested additional way to conserve this buffer may be to record a landscape easement over the buffer portions of residential lots that would prevent structures from being erected and allow the Homeowners' Association to maintain if necessary.
    - *Amended Language.* In response to this, Staff has drafted language that allows berming or screening as an alternative to lots not encroaching on the buffer with Council approval.
- **Limiting Housing Types**. Staff removed the following language from the ordinance: "For redevelopment projects, new housing types should be introduced in limited quantities to increase diversity and housing choice, not to replace whole blocks of existing housing. Therefore, no more than 1/4 of the lineal frontage of a developed block (measured around the entire block perimeter) may be converted to townhouse units, and no further townhouse, two-family or higher-density development is permitted once this threshold is reached."
    - The City Attorney believes that this language causes equal protection issues.
- **Setbacks from County Roads in the V-LDR District.** The County had requested the City to increase setbacks along certain portions of county roads to 30 feet. This includes residential areas on Lake Elmo Avenue (CSAH 17) north of Stillwater Blvd and Stillwater Blvd (CSAH 14). They requested this for the following reasons:
    - Portions of these roads are considered minor highways and right-of-way widening may be necessary in the future.
    - There's a higher volume of traffic.
    - Lake Elmo Avenue provides direct access to Highway 36.
    - Trails may be desired on both sides of four lanes, and additional setbacks could accommodate construction of eventual trails.
    - Additional setbacks leave room for berming and landscaping.

  This provision was added to the draft ordinance and only applicable to the V-LDR zoning district.

Findings.

The Planning Commission drafted the following findings at its February 13, 2017 meeting:

1. That certain areas of the Old Village are guided for Urban Low Density Residential in the Land Use Plan of the Comprehensive Plan, which designates a density of 1.5-2.49 units per acre.
2. That there currently does not exist a Village Low Density Residential zoning district which has a density of 1.5-2.49 units per acre within the Zoning Code.

3. That the Village Low Density Residential zoning district is being proposed due to the imminence of the Gonyea West Development, which is expected to be proposed to be located within the Old Village in an area guided for Village Low Density Residential.
4. That the Planning Commission would be interested in exploring increased densities within the Old Village as an amendment to the Comprehensive Plan.

RECOMMENDATION:

Staff recommends that the Planning Commission hold a public hearing and provide feedback on or recommend approval of amendments to Article XIII: Village Mixed Use Districts, which add standards for the V-LDR Village Low Density Residential District and proposes minor changes to the VMX – Village Mixed Use District. If the Commission wishes to make recommendation at this time, the Commission may do so with the following motion:

"Move to recommend adoption of Ord 08- , creating a Village Low Density Residential District and making minor amendments standards of the Village Mixed Use District."

ATTACHMENTS:

1. Draft Ordinance
2. Required Findings for Conditional Use Permits.

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-__

AN ORDINANCE AMENDING ARTICLE XIII: VILLAGE MIXED USE DISTRICT AND CREATING STANDARDS FOR A VILLAGE LOW DENSITY RESIDENTIAL ZONING DISTRICT

SECTION 1. The City Council of the City of Lake Elmo hereby amends the Lake Elmo City Code Title XV: Land Usage; Chapter154: Zoning Code; Article XIII: Village Mixed Use District; to read the following:

ARTICLE XIII: VILLAGE ~~MIXED USE~~ DISTRICTS

§ 154.500 PURPOSE AND DISTRICT DESCRIPTION

(A) *V-LDR Village Low Density Residential.* The purpose of the V-LDR zoning district is to provide opportunity for lower density residential development within the Old Village and create a transition and connectivity between the heart of the Old Village and surrounding rural areas. Residential development within areas zoned V-LDR will occur at a density of 1.5-2.49 units per acre.

(B) *VMX – Village Mixed Use District.* The purpose of the VMX district is to provide an area for compact, mixed use development made mutually compatible through a combination of careful planning and urban design and coordinated public and private investment. This district is intended to continue the traditional mixed use development that has occurred in the Village area by allowing retail, service, office, civic and public uses as well as residential units. The mixture of land uses within the district is essential to establishing the level of vitality and intensity needed to support retail and service uses. Development within areas zoned VMX will occur at a density of 6-10 units per acre. Senior congregate care facilities may exceed this density maximum with a range not to exceed a total of 16 units per acre, provided the facility can satisfy all zoning and applicable conditional use permit review criteria. The placement of building edges and treatment of building, parking, landscaping, and pedestrian spaces is essential to creating the pedestrian friendly environment envisioned for the VMX district. The standards in this chapter are intended to implement and effectuate the principles and relationships established in the Village Master Plan, which will be carried out through specific standards related to site planning, signage, architecture, building materials, and landscaping. Renovation and infill of traditional storefront-type buildings is encouraged, and parking standards may be waived to recognize the availability of on-street and shared parking facilities.

§ 154.501 PERMITTED AND CONDITIONAL USES

Table 11-1 lists all permitted and conditional uses allowed in the urban residential districts. "P" indicates a permitted use, "C" a conditional use. Uses not so indicated shall be considered prohibited. Cross-references listed in the table under "Standards" indicate the location within this Ordinance of specific development standards that apply to the listed use.

A. *Combinations of uses, Village Districts.* The following use types may be combined on a single parcel:

1. Principal and accessory uses may be combined on a single parcel.

2. A principal and secondary dwelling unit may be combined according to the standards of Section ~~155.137~~ 154.454 (C).

B. *Combination of uses, VMX District.*

1. Single-family attached or multi-family complexes designed for rental or condominium occupancy, since these typically include multiple units and buildings on a single parcel.

2. Other permitted or conditional uses allowed within the district may be combined on a single parcel, provided that a unified and integrated site plan is approved. The entire development must be approved as a conditional use.

3. A mixed-use building that combines permitted or conditionally permitted residential, service, retail and civic uses may be developed meeting the form standards of this Article. Office or studio uses on upper stories are encouraged.

Table 11-1: Permitted and Conditional Uses, ~~VMX~~ Village Districts

	V-LDR	VMX	Standard
Residential Uses			
Household Living			
Single-family detached dwelling	P	~~P*~~ C*	~~155.504.A~~ 154.505 (A) (1), (2), *(4)
Two-family dwelling	-	P*	~~155.504.A~~ 154.505 (A) (1), (4)
Single-family attached dwelling	-	C	154.505 (A) (1), (5)
Multifamily dwelling	-	C	154.505 (A) (1), (6)
Secondary dwelling	C	C	~~154.505.D~~ 154.454 (C) & 154.505 (A) (1), (3)
Live-work unit	-	P	~~155.505.J~~ 154.505 (B) (6)
Group Living			
Group Home	P	P	~~155.102.C~~ 154.301 (A)
Group Residential Facility	-	C	~~155.102.D~~ 154.301 (B)
Congregate Housing	-	C	~~155.102.E~~ 154.301 (C)
Semi-Transient Accommodations	-	C	~~155.102.F~~ 154.301 (C)
Public and Civic Uses			
Community Services	-	P	~~155.103.C~~
Day Care Center	-	P	~~155.103.D~~
Public Assembly	-	C	~~155.505.M~~
Religious Institutions	-	C	~~155.505.N~~ 154.303 (N)
Schools, Public and Private	-	C	~~155.505.O~~ 154.303 (A)
Services			
Business Services	-	P	
Business Center	-	P	
Offices	-	P	
Communications Services	-	P	
Education Services	-	P	154.303 (A)
Financial Institution	-	P	~~155.505.P~~
Funeral Home	-	C	
Lodging	-	C	~~155.505.Q~~ 154.302 (D)
Medical Facility	-	C	~~155.505.R~~ 154.303 (B)
Membership Organization	-	C	~~155.505.N~~
Nursing and Personal Care	-	C	~~155.104.C~~ 154.303 (C)
Personal Services	-	P	
Repair and Maintenance Shop	-	C	~~155.505.E~~ 154.505 (B) (1)
Trade Shop	-	C	~~155.505.F~~ 154.505 (B) (2)
Veterinary Services	-	C	~~154.505.G~~ 154.505 (B) (3)

Food Services			
Standard Restaurant	-	P	
Restaurant with Drive-through	-	C	154.304 (A)
Drinking and Entertainment	-	P	~~155.505.S~~ 154.304 (B)
Sales of Merchandise			
Retail Trade [1]	-	P	~~155.505.T~~
Farmer's Market	-	C	~~155.505.AA~~
Garden Center	-	C	~~155.505.U~~ 154.505 (B)
Neighborhood Convenience Store	-	P	~~155.505.V~~
Shopping Center	-	C	~~155.505.W~~
Wayside Stand	P	P	154.454 (D)
Automotive/Vehicular Uses			
Automobile Maintenance Service	-	C	~~155.505.X~~ 154.505 (B)
Automobile Parts/Supply	-	P	~~155.505.X~~154.505 (B)
Gasoline Station	-	C	~~155.505.X~~ 154.305 (B)
Parking Facility	-	C	~~155.505.X~~ 154.505 (B)
Sales and Storage Lots	-	C	~~155.505.X~~ 154.305 (C)
Outdoor Recreation			
Outdoor Recreation Facility	-	C	~~155.505.Y~~ 154.306 (C)
Parks and Open Areas	P	P	
Indoor Recreation/Entertainment			
Indoor Athletic Facility	-	C	~~155.505.Z~~ 154.307
Indoor Recreation	-	C	~~155.505.Z~~ 154.307
Transportation and Communications			
Broadcasting or Communications Facility	-	C	~~155.110.B~~
Mixed Uses			
Combination of Principal Uses on a single parcel	-	C/P	154.501 (B)
Combination of Principal and Accessory Uses on a single parcel	P	P	154.501 (A)
Accessory Uses			
Home Occupation	P	P	~~155.111.A,B~~ 154.012 (12) (e)
Bed and Breakfast	-	C	~~155.111.C~~ 154.310 (A)
Family Day Care	P	P	~~155.111.G~~ 154.012 (12)
Group Family Day Care	-	C	~~155.111.G~~
Temporary Sales	P	P	~~155.107.B~~ 154.509 (G)
Parking Facility	-	P	154.505 (H) (7)
Solar Equipment	P	P	~~155.111.I~~154.310 (C)
Swimming Pools, Hot Tubs, Etc.	P	P	~~155.111.J~~
Other Structures Typically Incidental and Clearly Subordinate to Permitted Uses	P	P	

Note: Standards listed in Table 11-1 are listed by Article, Section and Subsection.

[1]Retail Trade in the VMX District includes all uses and activities defined as Retail Trade in ~~§155.507.B.5~~ 154.012 (5) (c) with the exception of building supplies sales and warehouse club sales.

§ 154.502 L O T DIMENSIONS AND BUILDING BULK REQUIREMENTS

Lot area and setback requirements shall be as specified in Table 11-2, Lot Dimension and Setback Requirements.

Table 11-2: Lot Dimension and Setback Requirements, ~~VMX~~ Villages Districts

	V-LDR	VMX
Minimum Lot Area (sq. ft.) [a]		
Non-Residential Use	-	None
Single Family Detached Dwelling	9,000	~~5,000~~ 9000
Two-Family Dwelling (per unit) [b]	-	3,000
Single-Family Attached (per unit) [c]	-	2,500
Multi-Family Dwelling (per unit)	-	1,800
Secondary Dwelling	-	See 154.454 (C)
Live-Work Unit	-	3,000
Congregate Housing	-	~~155.102.E~~ 154.301 (C)
Other Structures	-	3,500
Maximum Lot Area (acres)		
Residential Structures	N/A	N/A
Other Structures	N/A	5
Minimum Lot Width (feet)		
Single Family Detached Dwelling	70	~~50~~ 70
Two-Family Dwelling (per unit) [b]	-	30
Single-Family Attached (per unit)[c]	-	25
Multi-Family Dwelling (per building)	-	75
Live-Work Unit	-	25
Maximum Height (feet/stories)	35	35/3 [d]
Maximum Impervious Coverage		
Residential Structures	35%	75%
Other Structures	-	No Limit
Minimum Building Setbacks (feet)~~[e]~~		

Front Yard	25	Single-Family Detached, Two-Family, and Single-Family Attached: See LDR standards of 154.452 Multi-Family Dwellings: 154.505 (A) (6) (b) All Other Residential Uses: 154.505 (A) (7) Non-Residential Uses: 154.505 (B) (1)
Interior Side Yard	10	10 [e]
Corner Side Yard	15	0 [f]
Rear Yard	20	10 [g]
Garages	25	25

Notes to ~~VMX~~ Village Districts Table

a. No development may exceed the residential density range as specified in the Comprehensive Plan for the ~~Village Mixed Use~~ corresponding land use category.

b. Two-family units may be side-by-side with a party wall between them ("twin") or located on separate floors in a building on a single lot ("duplex"). The per-unit measurements in this table apply to "twin" units, whether on a single lot or separate lots. The standards for single-family detached dwelling shall apply to a "duplex" containing two vertically-separated units on a single lot.

c. In the case of single-family attached dwellings that are not situated on individual lots, minimum lot size shall be applied to each unit as a measure of density; i.e. 1 unit per 2,500 square feet. This standard is also used for multifamily dwellings.

d. Buildings up to 45 feet in height may be permitted as part of a PUD in the VMX District.

~~e. The front yard setback for single family homes shall be 25 feet.~~

Commented [EB1]: This is already indicated in 154.505 (A) (3) (b)

e. Side yard setbacks in the VMX District apply only along lot lines abutting residentially zoned parcels or those parcels with residential uses as the sole use.

f. Corner properties: the side yard façade of a corner building adjoining a public street shall maintain the front setback of the adjacent property fronting upon the same public street, or the required front

yard setback, whichever is less. If no structure exists on the adjacent property, and provided required setbacks are not otherwise stated herein, the setback shall be shown in the table.

~~f.~~g. Properties zoned V-LDR abutting Stillwater Boulevard (CSAH 14) and Lake Elmo Avenue 17) north of Stillwater Blvd (CSAH 14) shall have a minimum structure setback of 30 feet.

~~Properties abutting CSAH 17 and CSAH 14 shall have a minimum setback standard of 30 feet.~~

Commented [EB2]: Need to verify with the County why this is needed.

§ 154.503 DIMENSIONAL REQUIREMENTS AND PRESERVATION OF OPEN SPACE

A. *Averaging of Lot Area*. When lots are clustered within a development to provide common open space, the open space may be used to calculate an average density per lot to determine compliance with the individual lot area requirements.

B. *Lot Dimension Reductions*. Other reductions in dimensional standards may be considered as part of a Planned Unit Development if these reductions provide for common open space within a development.

C. *Village Open Space Overlay District.* Development of areas within the Village Open Space Overlay District, as designated by the Comprehensive Plan, is not allowed. Residential lots shall not encroach on the areas designated as open space per this overlay district, unless buffering or screening is provided as an alternative approved by Council.

§ 154.504 GENERAL SITE DESIGN CONSIDERATIONS – ~~LMX~~ VILLAGE DISTRICTS

Development of land within the ~~VMX~~ Village Districts shall follow established standards for traffic circulation, landscape design, and other considerations as specified in Article 5, 6 and 7.

A. *Circulation.* New access points to ~~State Highway 5~~ County State Aid Highway 14 may be refused or restricted to right-in right-out movement if alternatives exist. Internal connections shall be provided between parking areas on adjacent properties wherever feasible.

1. The number and width of curb-cuts shall be minimized. To promote pedestrian circulation, existing continuous curb-cuts shall be reduced to widths necessary for vehicular traffic, and unnecessary or abandoned curb cuts shall be removed as parcels are developed.

B. *Fencing and Screening.* Fencing and screening walls visible from the public right-of-way shall be constructed of materials compatible with the principle structure.

C. *Lighting design.* Lighting shall be integrated into the exterior design of new or renovated structures to create a greater sense of activity, security, and interest to the pedestrian, and shall comply with §150.035-150.038 *Lighting, Glare Control, and Exterior Lighting Standards.*

D. *Exterior Storage.* Exterior materials storage must be screened from view from adjacent public streets and adjacent residential properties, by a wing of the principal structure or a screen wall constructed of the same materials as the principal structure. Height of the structure or screen wall must be sufficient to completely conceal the stored materials from view at eye level (measured at six feet above ground level) on the adjacent street or property.

E. *Screening of Existing Residential Structures.* When a new development is proposed adjacent to an existing single family residential structure, screening shall be provided in accordance with §154.258.F. The City may require buffering or screening above and beyond this section in cases where the required screening will not provide an adequate separation between incompatible uses.

F. *Sidewalks and/or Trails.* Where cul-de-sacs are permitted by the City, sidewalks or trails are required to connect the bulb of the cul-de-sac with the nearest through-road or trail.

G. *Lake Elmo Theming Study.* Elements of the Lake Elmo Theming Study not herein described must be incorporated in to development within Village Districts where applicable.

§ 154.505 DEVELOPMENT STANDARDS FOR SPECIFIC USES

Development of land within the ~~VMX~~ Village ~~d~~ Districts shall follow established standards for traffic circulation, landscape design, parking, signs and other considerations as specified in Articles 5, 6 and 7. The following standards apply to specific uses; other standards related to design and building type may be found at §154.506.

A. *Residential Units, Village Districts.*

1. *All Residential Units, Village Districts.*

a. Residential housing units shall be designed to reflect the general scale and character of the Village, including front yard depth, height and roof pitch, primary materials, facade detailing and size and placement of window and door openings.

2. *Single-Family Detached Dwellings, Village Districts.*

a. No parking shall be located in the front yard or between the front façade and the street except on a permitted driveway.

b. Primary entrances are required to be along the front façade.

c. Dwelling units shall be at least twenty-four (24) feet in width, at least nine hundred sixty (960) square feet in area, and be placed on a permanent foundation.

3. *Secondary Dwellings, Village District.* Restricted to lots occupied by single-family dwellings, and must meet the standards for secondary dwellings in residential districts, §154.13454 (C) and be located within the primary structure.

4. *Single-Family Detached and Two-Family Dwellings, VMX District.*

a. ~~Single-Family Detached Dwellings are limited to those existing at the time of adoption of this Ordinance. Expansion of existing and new single-family detached dwellings shall be allowed through the conditional use process. considered permitted uses, rather than nonconforming uses.~~

b. Unless otherwise specified in this Article, Single and Two-Family Dwellings in the VMX district shall adhere to the ~~MDR~~ LDR district setbacks as specified in §154.452.

5. *Single-Family Attached, VMX District.*

~~a. A maximum of eight (8) units shall be permitted within a single building.~~

a. The primary entrance to each unit shall be located on the façade fronting a public street; an additional entrance may be provided on the rear or side façade.

~~b. For redevelopment projects, new housing types should be introduced in limited quantities to increase diversity and housing choice, not to replace whole blocks of existing housing. Therefore, no more than 1/4 of the lineal frontage of a developed block (measured around the entire block perimeter) may be converted to townhouse units, and no further townhouse, two-family or higher-density development is permitted once this threshold is reached.~~

~~d.~~b. Common open space for use by all residents or private open space adjacent to each unit shall be provided. Such open space shall compromise a minimum of three hundred (300) square feet per unit.

~~e.~~c. No parking shall be located in the front yard or between the front façade and the street except on a permitted driveway.

~~f.~~d. Unless otherwise specified in this Article, Single-Family Attached dwellings in the VMX district shall adhere to the MDR district setbacks as specified in §154.452.

6. *Multi-Family Dwelling Units, VMX District.*

a. Dwelling units (both condominium and rental) within a mixed use development are restricted to the upper floors or rear or side ground floors of a mixed use building.

b. Setback standards for multi-family dwellings not within a mixed use development shall be determined through the conditional use process.

7. *All Other Residential Uses, VMX District.* Setbacks for all other residential uses within the Village districts not specifically outlined in this Section shall be determined by either 154.506 or through the conditional use process.

B. Non-Residential Uses, VMX District.

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1. *Setbacks, Generally.* The front yard setback of a new non-residential building within the VMX district shall maintain the prevailing front yard setback of that block, or a maximum setback of 20 feet, whichever is less.

2. *Repair and Maintenance Shop.* No outdoor storage is permitted unless fully screened from public view.

3. *Trade Shop.* Exterior materials storage must be totally screened from view from adjacent public streets and adjacent residential properties by a wall of the principal structure or a screen wall constructed of the same materials as the principal structure.

4. *Veterinary Services.*

   a. All activities must be conducted within an enclosed building.

   b. Specific veterinary practices shall be limited to veterinary medicine, surgery, dentistry, and related service for small domestic household pets.

5. *Garden Center.*

   a. The storage or display of any materials or products shall meet all setback requirements of a structure, and shall be maintained in an orderly manner. Screening along the boundaries of adjacent residential properties may be required, meeting the standards of Article 6, Section 155.89.F.

   b. All loading and parking shall be provided off-street.

   c. The storage of any soil, fertilizer or other loose, unpackaged materials shall be contained so as to prevent any effects on adjacent uses.

6. *Automobile Maintenance Service and Automobile Parts/Supply*

   a. All vehicle repairs shall be conducted in a completely enclosed building

   b. The storage or display of inoperable or unlicensed vehicles or other equipment shall meet all setback requirements of a structure, and shall be totally screened from view from adjacent public streets and adjacent residential properties.

7. *Live-Work Unit.* The purpose of a live-work unit is to provide a transitional use type between a home occupation and a larger commercial enterprise, and to provide neighborhood-oriented commercial services, while maintaining a generally residential character in which the work space is subordinate to the residential use.

   a. The work space component shall be located on the first floor or basement of the building.

b. The dwelling unit component shall maintain a separate entrance located on the front or side façade and accessible from the primary abutting public street.

c. The work space component of the unit shall not exceed thirty (30) percent of the total gross floor area of the unit.

d. A total of two (2) off-street parking spaces shall be provided for a live-work unit, located to the rear of the unit, or underground/enclosed.

e. The size and nature of the work space shall be limited so that the building type may be governed by residential building codes. An increase in size or intensity beyond the specified limit on floor area would require the building to be classified as a mixed-use building.

f. The business component of the building may include offices, small service establishments, home crafts which are typically considered accessory to a dwelling unit, or limited retailing (by appointment only) associated with fine arts, crafts, or personal services. It may not include a wholesale business, a commercial food service requiring a license, a limousine business or auto service or repair for any vehicles other than those registered to residents of the property.

g. The business of the live-work unit must be conducted by a person who resides on the same lot. The business shall not employ more than two (2) workers on-site at any one time who live outside of the live-work unit.

8. *Parking Facility*. Structured parking is permitted as a ground floor use within a mixed-use building, provided that ~~it~~ the entrance is located on side or rear facades, not facing the primary abutting street. The primary street-facing façade shall be designed for retail, office or residential use. ~~The primary street façade may include an entrance into the parking facility.~~

9. *Outdoor Dining Accessory to Food Services.* Outdoor dining is allowed as an accessory use in the commercial districts, provided that tables do not block the sidewalk. A minimum of five (5) feet of sidewalk must remain open.

§ 154.506 VMX DISTRICT DESIGN AND DEMOLITION REVIEW

A. *Review of Design.* For certain development activity as specified in the *Lake Elmo Design Standards Manual*, design review is required as part of the approval process for a building permit, conditional use permit, or certificate of zoning compliance under this Ordinance. All projects subject to design review shall be reviewed for conformance with the *Lake Elmo Design Standards Manual*. A separate process for design review is not established.

1. *Review Authority and Process.* Design review shall be the responsibility of the individual or body authorizing the permit or certificate and shall be incorporated in the established review of the applicable building permit, conditional use permit, or certificate of zoning compliance. For those applications under this Ordinance that require review by the Planning Commission (i.e. conditional use permits), the Planning Commission shall consider the standards in the *Lake Elmo Design Standards Manual* as part of its recommendation to the City Council.

2. *Review by Professional.* The authorizing body may request review by a design professional of the proposed design or demolition. The cost of review by such design professional shall be charged by the applicant, and shall not exceed $1,000 unless otherwise agreed to by the applicant.

3. *Development Activity Defined.* Development Activity consists of new construction and redevelopment activities, including remodeling that expands the footprint of a structure, altering, or repairing a structure in a manner that will change the exterior appearance of said structure. Development activity also includes the construction of a new parking lots and installation of signage.

   a. *Exempt Activities.* The following activities shall be exempt from under review of this Section:

      i. Ordinary repairs and maintenance that will not change the exterior appearance of a structure;

      ii. Removal of existing signage without replacement unless said signs are an integral part of the building;

      iii. Emergency repairs ordered by the Director of Planning in order to protect public health and safety;

      iv. Exterior alteration, addition, or repair of a structure used as a single-family residence, duplex, or two-family residence.

      v. Temporary signage, installed in accordance with §154.212 of this Ordnance, or during which time an application for permanent signage is pending under this Ordinance;

      vi. Maintenance of existing signage advertising an on-site business;

      vii. Alterations only to the interior of a structure.

§ 154.507 ACCESSORY USES AND STRUCTURES

Accessory uses are listed in ~~the VMX District Use~~ Table 11-1 as permitted or conditional accessory uses. Accessory uses and structures in the ~~VMX~~ Village Districts shall comply with the following standards and all other applicable regulations of this ordinance:

A. *Phasing*. No accessory use or structure shall be constructed or established on any lot prior to the time of construction of the principal use to which it is accessory.

B. *Incidental to Principal Use*. The accessory use or structure shall be incidental to and customarily associated with the principal use or structure served.

C. *Subordinate to Principal Use*. The accessory use or structure shall be subordinate in the area, extent, and purpose to the principal use or structure served.

D. *Function*. The accessory use or structure shall contribute to the comfort, convenience, or necessity of the occupants of the principal use or structure served.

E. *Location.* The accessory use or structure shall be located on the same zoning lot as the principal use or structure.

F. *Residential Accessory Structures*

~~§ 154.5087~~ RESIDENTIAL ACCESSORY STRUCTURES

~~A.~~ 1. *Design Compatibility.* On parcels used for residential structures within the ~~VMX~~ Village Districts, the design and construction of any garage, carport, or storage building shall be similar to or compatible with the design and construction of the main building. The exterior building materials, roof style, and colors shall be similar to or compatible with the main building or shall be commonly associated with residential construction.

~~B.~~ 2. *Attached structures.* An accessory structure shall be considered attached, and an integral part of, the principal structure when it is connected by an enclosed passageway. All attached accessory structures shall be subject to the following requirements:

a. The structure shall meet the required yard setbacks for a principal structure, as established for the zoning district in which it is located.

b. The structure shall not exceed the height of the principal building to which it is attached.

~~B.~~ 3. *Attached Garages.*

~~3.~~ a. Attached garages are encouraged to be side or rear loaded. If facing the primary street, garages shall be designed using one of the following techniques, unless specific physical conditions on the lot in question require a different approach:

~~i. The front of the garage is recessed at least four (4) feet behind the plane of the primary façade; or~~

~~ii. The front of the garage is recessed at least four (4) feet behind a porch if the garage is even with the primary façade; or~~

i. The front façade of the garage shall be offset by the principal structure by a minimum of two (2) feet from the plane of the public right-of-way.

ii. The width of the attached garage shall not exceed 40% of the width of the entire principal building façade (including garage) fronting the primary street.

~~4.~~ b. Attached garages shall not exceed one thousand (1,000) square feet in area at the ground floor level except by conditional use permit.

~~5.~~ c. Garage doors or openings shall not exceed fourteen (14) feet in height.

~~C.~~ 4. *Detached structures.* Detached accessory structures for permitted residential structures in the ~~VMX~~ Village Districts must be in accordance with the following requirements:

a. Detached accessory structures shall be located to the side or rear of the principal building, and are not permitted within the required front yard or within a side yard abutting a street.

b. Detached garages shall not exceed one thousand (1,000) square feet at ground floor level and shall not exceed a height of twenty-two (22) feet or the height of the principal structure, whichever is higher. The maximum size and height may be increased upon approval of a conditional use permit, provided that lot coverage requirements are satisfied.

c. Pole barns, as defined herein, shall be prohibited.

d. No more than thirty (30) percent of the rear yard area may be covered by accessory structures.

e. Garage doors or openings shall not exceed fourteen (14) feet in height.

~~§ 154.509 ACCESSORY USES~~

~~A.~~ G. *Exterior Storage on Residential Parcels.* All materials and equipment shall be stored within a building or be fully screened so as not to be visible from adjoining properties, except for the following:

a. Laundry drying,
b. Construction and landscaping materials and equipment currently being used on the premises. Materials kept on the premises for a period exceeding six (6) months shall be screened or stored out of view of the primary street on which the house fronts.
c. Agricultural equipment and materials, if these are used or intended for use on the premises.
d. Off-street parking and storage of vehicles and accessory equipment, as regulated in Article 5, Section ~~155.67~~ 154.210.
e. Storage of firewood shall be kept at least ten (10) feet from any habitable structure and screened from view of adjacent properties.
f. Outdoor parking.

~~B.~~ H. *Temporary Sales*. Temporary sales, also known as yard or garage sales, are permitted in all residential districts, limited to two (2) per calendar year per residence, not to exceed four (4) days in length for each event.

~~C.~~ I. Accessory Uses and Structures Not Listed

~~§ 154.510 ACCESSORY USES AND STRUCTURES NOT LISTED~~

Standards for accessory uses and structures that are permitted in all districts, or in all residential buildings in any district, are listed in Article 7, Specific Development Standards. These include uses such as family and group family day care, bed and breakfast facilities, and home occupations, and structures such as swimming pools and solar equipment.

SECTION 2. The City Council of the City of Lake Elmo hereby amends the Lake Elmo City Code Title XV: Land Usage; Chapter154: Zoning Code; Article X: Division Into Districts; Section 154.350 to read the following:

Zoning District		*Reference*
R-2	One and Two Family Residential	154.033
GB	General Business	154.034
A	Agriculture	Article XI
RR	Rural Residential	Article XI
RT	Rural Development Transitional	Article XI
RS	Rural Single Family	Article XI
RE	Residential Estate	Article XI
LDR	Urban Low Density Residential	Article XII
MDR	Urban Medium Density Residential	Article XII
HDR	Urban High Density Residential	Article XII
V-LDR	Village Low Density Residential	Article XIII
VMX	Village Center - Mixed Use	Article XIII
C	Commercial	Article XIV
CC	Convenience Commercial	Article XIV
LC	Neighborhood Office/Limited Commercial	Article XIV
BP	Business Park/Light Manufacturing	Article XIV
PF	Public Facilities	Article XV

SECTION 3. The City Council of the City of Lake Elmo hereby amends the Lake Elmo City Code Title XV: Land Usage; Chapter154: Zoning Code; Article VII: General Regulations; Section 154.212: Sign Regulations; Table 5-3 to read the following:

Table 5-3 Ground Signs				
Zoning District		A[a], LDR, OP, RE, RS, RR[a], RT[a]	MDR, HDR, V-LDR	BP, C, CC, GB, LC, VMX
No. of Total Traffic Lanes	Speed Limit (MPH)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)

1-3	0-34	-	6'/32	10'/32
	35-44	-	6'/32	10'/50
	45+	-	6'/32	10'/72
4-5	0-34	-	6'/32	10'/40
	35-44	-	6'/32	10'/64
	45+	-	6'/32	12'/80

SECTION 4. The City Council of the City of Lake Elmo hereby amends the Lake Elmo City Code Title XV: Land Usage; Chapter 153: Subdivision Regulations; Section 153.14: Park Land Dedication Requirements; Subd. A to read the following:

Zoning Districts	***Minimum Required Land Dedication***
R1, R2, R3, andR4	10%
RS, V-LDR, LDR, MDR, HDR	10%
RE	7%
RR and AG	4%

SECTION 5. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 6. Adoption Date. This Ordinance 08-___ was adopted on this _____ day of _____, 2017, by a vote of ___ Ayes and ___ Nays.

LAKE ELMO CITY COUNCIL

_____
Mike Pearson, Mayor

ATTEST:

Julie Johnson, City Clerk

This Ordinance 08-__ was published on the ____ day of _____, 2017.

3. Approximate location of all curb cuts, driveways, access roads, parking areas, off-street loading areas, and sidewalks.
4. Conceptual landscape plan indicating general planting areas for trees, shrubs, and lawns.
5. Conceptual grading, erosion control, and storm water management plan.
6. Conceptual sewer and water utility plan for the development.
7. Narrative indicating the types of uses or businesses that are contemplated for the development, number of employees, parking and traffic impacts, and other pertinent information about the proposed development.
8. The Director of Planning may require the applicant to supply proof of ownership of the property for which the amendment is requested that illustrates legal or equitable interest in the property.

E. *Hearing Requirements*. The Planning Commission shall hold a public hearing on each complete application for a Zoning Amendment as provided in §154.102 of this Article. After the close of such hearing, the Planning Commission shall consider findings and shall submit the same together with its recommendation to the City Council.

F. *Effect of Denial of Application*. No application of a property owner for an amendment to the text of this chapter or the zoning map shall be considered by the Planning Commission within the one year period following a denial of such request, except the Planning Commission may permit a new application, if in the opinion of the Planning Commission, new evidence or a change of circumstances warrant it.

G. *Relationship to Comprehensive Plan*. Any rezoning shall be consistent with the current City of Lake Elmo Comprehensive Land Use Plan. If the rezoning is not consistent with the current Comprehensive Plan, an amendment to the Comprehensive Plan must be requested and approved prior to or concurrent with the rezoning request.

H. *Coordination with Adjoining Communities*. Any zoning district change on land adjacent to or across a public right-of-way from an adjoining community shall be referred to the Planning Commission and the adjacent community or county for review and comment prior to action by the City Council granting or denying the zoning district classification change. A period of at least ten (10) days shall be provided for receipt of comments. Such comments shall be considered as advisory only.

(Ord. 08-085, passed 7-2-2013)

§ 154.106 CONDITIONAL USE PERMITS.

A. *Required Findings*. Conditional use means a land use or development as defined by ordinance that would not be appropriate generally but may be allowed with appropriate restrictions as provided by official controls only upon a finding that all of the following provisions are met:

1. The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city.

2. The use or development conforms to the City of Lake Elmo Comprehensive Plan.
3. The use or development is compatible with the existing neighborhood.
4. The proposed use meets all specific development standards for such use listed in Article 9 of this Chapter. (Ord. 08-152)
5. If the proposed use is in a flood plain management or shoreland area, the proposed use meets all the specific standards for such use listed in Chapter 150, §150.250 through 150.257 (Shoreland Regulations) and Chapter 152 (Flood Plain Management).
6. The proposed use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of that area.
7. The proposed use will not be hazardous or create a nuisance as defined under this Chapter to existing or future neighboring structures.
8. The proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use.
9. The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.
10. The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors.
11. Vehicular approaches to the property, where present, will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.
12. The proposed use will not result in the destruction, loss or damage of a natural or scenic feature of major importance.

B. *Application Requirements*. Conditional Use Permit applications shall be submitted to the Director of Planning on such form and accompanied by such information as required by §154.101.A of this Article and with the submission materials listed in §154.101.B of this Article.

C. *Public Hearing Required*. The Planning Commission shall hold a public hearing on each complete application for a conditional use permit as provided in §154.102 of this Article. After the close of the hearing on a proposed conditional use permit, the City Planning Commission shall consider findings and shall submit the same together with its recommendation to the City Council.

D. *Final Decision by City Council*. The City Council shall make the final decision on a conditional use permit after a public hearing by the Planning Commission. The City Council may approve, approve with conditions, or deny the application.

E. *Conditions*. In reviewing applications for conditional use permits, the Planning Commission and Council may attach whatever reasonable conditions they deem necessary to mitigate anticipated adverse impacts associated with these uses, to protect the value of property within the district and to achieve the goals and objectives of the Comprehensive Plan. In determining such conditions, special consideration shall be given to protecting immediately adjacent properties from objectionable views, noise, traffic and other negative characteristics associated with such uses.

1. The conditions shall include all specific development standards for such use listed in Article 9 of this Chapter. (Ord. 08-152)
2. If the proposed use is in a flood plain management or shoreland area, the conditions shall include specific standards for such use listed in Chapter 151 (Floodplain Management) and Chapter 152 (Shoreland Management).
3. In addition, conditions may include, but are not limited to, the following:
    a. Controlling the number, area, bulk, height and location of such uses;
    b. Regulating ingress and egress to the property and the proposed structures thereon with particular references to vehicle and pedestrian safety and convenience, traffic flow, and control and access in case of fire or other catastrophe;
    c. Regulating off-street parking and loading areas where required;
    d. Controlling the location, availability and compatibility of utilities;
    e. Requiring berming, fencing, screening, landscaping or other means to protect nearby property; and
    f. Requiring other conditions to create compatibility of appearance with surrounding uses.

F. *Findings for Denial*. If the Planning Commission recommends denial of a conditional use permit or the Council orders such denial, it shall include in its recommendation or determination findings as to the specific ways in which the proposed use does not comply with one or more specific findings required by this chapter.

G. *Permittee*. A conditional use permit shall be issued for a particular use and not for a particular person, except in the case of a permit granted for the uses of land reclamation, mining or soil or mineral processing. In such cases, a permit shall be issued to the particular person making application for such permit and such permit shall not be transferred or assigned for use by another without the written consent of the City. However, such consent by the City shall not be unreasonably withheld.

H. *Periodic Review*. A periodic review of the use may be attached as a condition of approval of a conditional use permit.

I. *Term of Permit*. Unless otherwise stipulated, the term shall be the life of the use.

J. *Revocation*. Failure to comply with any condition set forth in a conditional use permit, or any other violation of this chapter, shall be a misdemeanor and shall also constitute

sufficient cause for the termination of the conditional use permit by the City Council following a public hearing conducted in accordance with §155.102 of this Article.

K. *Expiration*. If substantial construction has not taken place within 12 months of the date on which the conditional use permit was granted, the permit is void except that, on application, the Council, after receiving recommendation from the Planning Commission, may extend the permit for such additional period as it deems appropriate. If the conditional use is discontinued for six months, the conditional use permit shall become void. This provision shall apply to conditional use permits issued prior to the effective date of this chapter, but the six-month period shall not be deemed to commence until the effective date of this chapter.

(Ord. 08-085, passed 7-2-2013)

§ 154.107 INTERIM USE PERMITS.

A. *Purpose and Intent*. The purpose and intent of allowing interim uses are:

1. To allow a use for a limited period of time that reasonably utilizes the property where such use is not consistent with the future land map in the Comprehensive Plan; and
2. To allow a use that is presently acceptable, but that with anticipated development or redevelopment or other significant change, will not be acceptable in the future or will be replaced by a permitted or conditional use allowed within the respective district.

B. *Required Findings*. An interim use permit may be granted only if the City Council finds as follows:

1. The use is allowed as an interim use in the respective zoning district and conforms to standard zoning regulations.
2. The use will not adversely impact nearby properties through nuisance, noise, traffic, dust, or unsightliness and will not otherwise adversely impact the health, safety, and welfare of the community.
3. The use will not adversely impact implementation of the Comprehensive Plan.
4. The user agrees to all conditions that the City Council deems appropriate to establish the interim use. This may include the requirement of appropriate financial surety such as a letter of credit or other security acceptable to the City to cover the cost of removing the interim use and any interim structures not currently existing on the site, upon the expiration of the interim use permit.
5. There are no delinquent property taxes, special assessments, interest, or city utility fees due upon the subject parcel.
6. The date or event terminating the interim use shall be set by the City Council at the time of approval.

C. *Application Requirements*. Interim Use Permit applications shall be submitted to the Director of Planning on such form and accompanied by such information as required by