

Planning Memorandum

To: Mayor O'Leary and the Sunfish Lake City Council

From: Lori Johnson, City Planner

Date: June 5, 2025, for City Council meeting on June 10, 2025

Re: 2 Acorn Dr. – Major Site and Building Plan Review, Conditional Use Permit & Variance
WSB Project No. 027923-000

GENERAL INFORMATION

Applicant: Chad Maack – Hartman Homes Inc.

Property Owners: Chris Nelson and David Carlson

Project Location: 2 Acorn Dr. – PID 38-76000-00-020

Acreage: 2.43 acres

Existing Land Use / Zoning: Single-Family Residential; Zoned R-1

Surrounding Land Use / Zoning: North: Residential; Zoned Single-Family Residential District R-1
East: Vacant; Zoned Single-Family Residential District R-1
South: Residential; Zoned Single-Family Residential District, R-1
West: Residential; Zoned Single-Family Residential District R-1

Comprehensive Plan: The City of Sunfish Lake (2040) Comprehensive Plan guides this property for Low Density Residential land use.

Deadline for Agency Action:	Application Date:	03.15.2025
	60 Days:	05.23.2025
	Extension Letter Mailed:	05.09.2025
	120 Days:	07.07.2025

Attachments: Location Map
Aerial
Proposed Survey
Grading, Drainage and Erosion Control Plan
Survey with Tree Tags
Tree Inventory
Landscape Plan

House/Sauna Plans
Engineering Memo
Letter to City Council from Applicant
Survey showing 25 ft drive
Tree Inventory Drawing
Tree Inventory Notes

CONSIDERATIONS RELATED TO THE REQUEST

1. Overview.

Hartman Homes Inc, applicant, and owners David Carlson and Chris Nelson, are proposing to build a 2,578 square foot home at 2 Acorn Drive. The lot on which the home is proposed is 2.43 acres in size and is currently wooded and vacant. This development requires the review and approval of a major site and building plan/conditional use permit according to Sections 1208.02C and 1215.02(L) of the Zoning Ordinance. The proposed site plan also includes a separate accessory building labeled as a lounge and sauna. That structure is proposed at 241 square feet.

The proposed driveway requires a variance, as the driveway is proposed with a 10-foot side yard setback where a 25-foot setback is required. .

2. General Zoning Review

Setbacks (Building):

	Required	Proposed
Front	100 feet	232 feet
Side	50 feet	68 and 212 feet
Rear	50 feet	51.5 feet

Accessory structures are required to meet a 100-foot front yard setback, with 25-foot setback requirements in the rear and side yards. The front yard setback of the proposed sauna will be 274 feet. The side yard setback will be 173 feet and 152 feet, with a rear yard setback of 49.9 feet.

Variance: The applicant is requesting a 15-foot variance to the 25-foot side yard driveway setback requirement on the north side of the site. The applicant is proposing this variance because the other options for the placement of the driveway involve the removal of more significant trees. The applicant is also trying to avoid cutting into a hill

on the south side of the driveway, which would also result in the removal of significant trees if this area was disturbed.

Impervious Surface and Building Coverage: The total proposed impervious surface coverage for the lot on which the home is to be located is 8.4%. The total impervious surface coverage allowed is 30% and this plan meets this requirement.

The total building coverage allowed on the lot cannot be greater than 10% per ordinance requirements. The building coverage on the home lot is 3.4% which meets ordinance requirements.

Accesses: The new home will access an existing shared private driveway (with 3 Acorn Drive) which connects to Acorn Drive. The owners of 2 Acorn Drive will be responsible for any damage to the existing private drive that may occur during construction. Because this is a private drive, the city can take no responsibility for damage to the private drive and will not be responsible for any subsequent repairs to the road.

Size: The home that is being constructed is 2,578 square feet. The proposed sauna will measure 241 square feet.

Exterior Elevations and Height: The exterior home elevations include Hardie plank lap siding, vertical Sierra siding panels, stone veneer, metal roof elements and glass. The overall height of the structure is 28 feet from the average ground level prior to construction. The height requirement in the zoning ordinance is 30 feet and this home meets the ordinance requirement.

Section 1217.01 (C) requires that any accessory structure cannot be greater than one story, or exceed 16 feet in height. The building materials of the accessory structure must be compatible with the principal building. The applicant has provided an exterior elevation of the sauna, which will be compatible with the proposed home and will meet ordinance requirements. The proposed height of the sauna building is less than 10 feet.

Tree Preservation: This site is heavily wooded. There will be 22 significant trees removed from the property to construct the proposed improvements. Seven additional dead, injured, or insignificant trees will be removed. There are 30 replacement trees proposed on site. Many of these replacement trees will be located along the proposed driveway running to the home. These trees will provide additional screening from the neighbors located directly north at 3 Acorn Drive. The City Forester has consulted with the applicant and is in agreement with these plans.

Lighting: The applicant must submit a foot candle lighting site plan prior to the approval of a building permit that includes any lights on the exterior of the structures on the property.

Engineering: The City Engineer has reviewed the plans for this site and submitted a memo regarding the plans for the home that was presented to the applicant and Planning Commission. This memo is attached to this report but the applicant has since provided plans that comply with all aspects of this memo.

Site Plan Review Criteria

The Planning Commission, as its basis of recommendation, and the City Council, as its basis for decision on major projects, shall evaluate the effects of the proposed site and building plans according to the criteria below:

- A. Whether the proposed improvements are compatible and in harmony with the existing structures in the surrounding community.
- B. Whether the proposed improvements preserve the character and nature of the surrounding community, including the natural landscape and woodland characteristics of the community.
- C. Whether the proposed improvements are not constructed of unsightly, improper or unsuitable materials.
- D. Whether the proposed improvements will not materially adversely affect any natural resources in the community, except when there is no feasible and prudent alternative to the proposed location of the improvements. For purposes of this clause, "natural resources" shall include, but not be limited to, all mineral, animal, botanical, air, water, land, timber, soil, quietude, recreational, historical, scenic and aesthetic resources.
- E. Whether the proposed site and improvements shall have an appearance that will not have an adverse effect upon adjacent residential properties.
- F. Whether the proposed site improvement complies with drainage requirements, as provided in Section 1216.04 of this Ordinance.
- G. Whether the proposed site and improvements are consistent with the purposes of the Zoning Ordinance.

The information provided in this staff report and on the proposed plans indicate that all the above criteria have been met for major site and building plan approval.

No written public comments were received prior to the Planning Commission meeting.

Conditional Use Permit Criteria for Nonconforming Lot Size

Legal, non-conforming, vacant, or redeveloped substandard sized lots of record may be developed for single family detached uses upon approval of a conditional use permit, provided that:

- a. The lot in question was legally established in accordance with Ordinance requirements existing at the time of its creation and is a separate, distinct tax parcel.
- b. The lot in question is similar in size and characteristics to and not highly divergent from other lots immediately abutting or in the adjacent area.
- c. The lot in question has frontage on a public or private street.
- d. Public health concerns (potable water and sanitary sewer) can be adequately addressed.
- e. The setback and yard requirements as determined by the City Council to be either:
 - (1) those established as part of the applicable Zoning District; or
 - (2) those measurements which are common to immediately abutting properties can be achieved while simultaneously resulting in development which complies with the character and quality of the immediate area and the objectives of the City's Comprehensive Plan and Zoning Ordinance.
- f. The lot in question and related potential development is evaluated based upon criteria outlined in Section 1204, Subd. 2.F. (conditional use permit criteria and is found to be acceptable per these standards.

Variance Review Criteria

In considering all requests for a variance and in taking subsequent action, the Planning Commission and the Council shall make a finding of fact that the proposed action will not:

- A. Impair an adequate supply of light and air to adjacent property.
- B. Unreasonably increase the congestion in the public street.
- C. Have the effect of allowing any district uses prohibited therein, permit a lesser degree of flood protection than the flood protection elevation for the particular area, or permit standards which are lower than those required by State law.
- D. Increase the danger of fire or endanger the public safety.
- E. Unreasonably diminish or impair established property values within the neighborhood, or in any way be contrary to the intent of this Title.
- F. Violate the intent and purpose of the Comprehensive Plan.

In addition, a variance shall not be granted unless it can be demonstrated that:

- A. Practical difficulties will result if the variance is denied due to the existence of special conditions and circumstances which are peculiar to the land, structure, or building involved and which are not applicable to other lands, structures or buildings in the same district.
 - a. Special conditions may include exceptional topographic or water conditions or, in the case of an existing lot or parcel of record, narrowness, shallowness, insufficient area or shape of the property.
 - b. Practical difficulties caused by the special conditions and circumstances may not be solely economic in nature, if a reasonable use of the property exists under the terms of this Title.
 - c. Special conditions and circumstances causing practical difficulties shall not be a result of lot size or building location when the lot qualifies as a buildable parcel.
- B. Compliance with the requirements of the provisions of this Ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this Ordinance or deny the applicant the ability to put the property in question to a reasonable use and the proposed variance permits the owner to use the property in a reasonable manner.
- C. The special conditions and circumstances causing the practical difficulties do not result from the actions of the applicant.
- D. Granting the variance requested will not confer on the applicant any special privilege that is denied by this Ordinance to other lands, structures or buildings in the same district under the same conditions.
- E. The request is not a use variance.
- F. The variance requested is the minimum variance necessary to accomplish the intended purpose of the applicant.
- G. The request does not create an inconvenience to neighboring properties and uses.
- H. The variance requested is in harmony with the purpose and intent of the Ordinance.
- I. The variance requested is consistent with the Comprehensive Plan.
- J. The variance requested will not alter the essential character of the locality.

Staff concludes that a practical difficulty exists with regard to the proposed variance, in that the other options for the placement of the driveway involve the removal of more significant trees. In addition, there is a hill on the south side of the proposed driveway

that should be avoided to ensure no other significant trees are removed. The unique factors of this proposal include the location of the hill adjacent to the proposed driveway and the location of significant trees in the front yard, which makes driveway location challenging. The variance request is reasonable and will not have a detrimental impact on the surrounding neighborhood.

Planning Commission

At the Planning Commission meeting on April 17, 2025, the Planning Commission voted to table the land use applications in order to perform a site visit. Concerns expressed at the public hearing from adjacent property owners included the buildability of the lot, privacy, septic system location, and headlights shining on to 3 Acorn Dr.

At the May 15, 2025 Planning Commission meeting, and after a site visit was held, the Planning Commission voted to recommend denial of the variance because they did not find that a practical difficulty could be proven given that trees will be removed regardless of the final location of the driveway and there are other options for driveway location.

The applicant has submitted additional information to staff after the May 15 Planning Commission meeting that they hope will shed more light on their request for a variance. This information is included in the packet (Letter to Council, Survey Showing 25-ft Drive, Tree Inventory Drawing, Tree Inventory Notes.)

RECOMMENDATION

Based on the foregoing considerations and applicable ordinances, staff recommends approval of the major site and building plan review/conditional use permit for a new home, in addition to the side yard setback variance request. Two motions should be made with regard to these requests.

Staff recommends approval of the major site and building plan/conditional use permit subject to the following findings of fact and conditions of approval:

Conditions of Approval:

1. Construction of the home and all improvements shall occur in substantial conformance with the plans recommended for approval at the June 10, City Council meeting.
2. The applicant must submit a lighting plan with foot candle measurements prior to issuance of a building permit.
3. The applicant must obtain all other permits as may be required.
4. The applicant shall comply with all applicable federal, state, and local laws, rules and ordinances.
5. The applicant must adhere to and remain in compliance with the requirements of this Resolution, applicable performance standards, and such other requirements as may apply.

6. All conditions of the site plan review must be complied with, shall run with the land, and shall not in any way be affected by the subsequent sale, lease or other change from current ownership of the Property.
7. By undertaking the activities approved by the requests, the Applicant agrees to all conditions.
8. The improvements to be staked out in the field by the surveyor and reviewed and approved by city staff prior to the start of any construction.
9. All erosion controls identified on the approved plan must be properly installed and inspected by City staff prior to the start of any construction.
10. If site disturbance exceeds one acre, the applicant agrees to apply for a NPDES permit through the MPCA and supply the city with the approved Storm Water Pollution Prevention Plan (SWPPP) and the approved MPCA NPDES permit.

Staff recommends approval of the 15-foot variance to the 25-foot side yard driveway setback based on the following rationale.

1. The unique factors of this proposal, resulting in practical difficulties for the applicant, include the location of the hill adjacent to the proposed driveway and the location of significant trees in the front yard, which makes driveway location challenging.
2. The variance request is reasonable in that the home needs a driveway, and it is difficult to locate the driveway elsewhere on the property without substantial tree removal.
3. The variance request will not have a detrimental impact on the surrounding neighborhood. Tree replacement is being located on the north side of the driveway to provide additional screening for the neighboring property.

Given that staff's recommendation and the Planning Commission's recommendation are in conflict, it was determined that two resolutions be presented for Council's review. According to statute 15.99, the City must act on this application by July 7. There is no time to table this item and make a recommendation before July 7, and the city cannot extend the application any longer. Typically, staff's recommendation would be the only one presented in the form of a resolution, but given the time frame needed for approval, the Planning Commission's recommendation is also being presented in the form of a resolution. Council will need to determine which resolution they wish to approve.

**CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA**

RESOLUTION NO. XX-XX

**RESOLUTION APPROVING A VARIANCE FOR THE PROPERTY AT 2 ACORN
DRIVE, SUNFISH LAKE, DAKOTA COUNTY, MINNESOTA.**

WHEREAS, Applicant, Chad Maack, and property owners, Chris Nelson and David Carlson submitted an application for the approval of a 15-foot variance to the required 25-foot driveway side yard setback requirement in the R-1 Single Family zoning district for the property at 2 Acorn Drive, Sunfish Lake, Dakota County, Minnesota, legally described as:

Lot 2, THIRTY OAKS ADDITION, Dakota County, Minnesota, according to the recorded plat thereof.

PID: 387600000020

and

WHEREAS, the Sunfish Lake Planning Commission held a public hearing on April 17, 2025 and tabled the review of the variance; and

WHEREAS, the Sunfish Lake Planning Commission met again on May 15, 2025 and recommended denial of the variance; and

WHEREAS, the City Council considered the application on June 10, 2025; and

NOW THEREFORE BE IT RESOLVED THAT the City Council of the City of Sunfish Lake hereby approves the 15-foot variance to the required 25-foot driveway side yard setback requirement for the R-1 District at 2 Acorn Drive with the following **rationale**:

1. The proposed action will not:
 - a. Impair an adequate supply of light and air to adjacent property
 - b. Unreasonably increase congestion in the public street
 - c. Have the effect of allowing any district uses prohibited therein, permit a lesser degree of flood protection than the flood protection elevation for the particular area, or permit standards which are lower than those required by State law.
 - d. Increase the danger of fire or endanger the public safety.
 - e. Unreasonably diminish or impair established property values within the neighborhood, or in any way be contrary to the intend of the Ordinance.
 - f. Violate any of the following conditions below

2. Practical difficulties will result if the variance is denied due to the existence of special conditions and circumstances which are peculiar to the land, structure, or building involved and which are not applicable to other lands, structures or buildings in the same district. Other options for the placement of the driveway involve the removal of more significant trees. In addition, there is a hill on the south side of the proposed driveway that should be avoided to ensure no other significant trees are removed. The unique factors of this proposal include the location of the hill adjacent to the proposed driveway and the location of significant trees in the front yard.
3. Compliance with the requirements of the provisions of the Ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of the Ordinance or deny the applicant the ability to put the property in question to a reasonable use and the proposed variance permits the owner to use the property in a reasonable manner.
4. The special conditions and circumstances causing practical difficulties do not result from the actions of the applicant. The applicants did not create this situation; it existed when the property was purchased by the applicants.
5. Granting the variance requested will not confer on the applicant any special privilege that is denied by this Ordinance to other lands, structures or buildings in the same district under the same conditions.
6. The request is not a use variance.

This resolution is adopted by the City Council of the City of Sunfish Lake this 10th day of June 2025.

Dan O'Leary, Mayor

Attest:

Christy Wilcox, City Clerk

**CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA**

RESOLUTION NO. XX-XX

**RESOLUTION DENYING A VARIANCE FOR THE PROPERTY AT 2 ACORN
DRIVE, SUNFISH LAKE, DAKOTA COUNTY, MINNESOTA.**

WHEREAS, Applicant, Chad Maack, and property owners, Chris Nelson and David Carlson submitted an application for the approval of a 15-foot variance to the required 25-foot driveway side yard setback requirement in the R-1 Single Family zoning district for the property at 2 Acorn Drive, Sunfish Lake, Dakota County, Minnesota, legally described as:

Lot 2, THIRTY OAKS ADDITION, Dakota County, Minnesota, according to the recorded plat thereof.

PID: 387600000020

and

WHEREAS, the Sunfish Lake Planning Commission held a public hearing on April 17, 2025 and tabled the review of the variance; and

WHEREAS, the Sunfish Lake Planning Commission met again on May 15, 2025 and recommended denial of the variance; and

WHEREAS, the City Council considered the application on June 10, 2025; and

NOW THEREFORE BE IT RESOLVED THAT the City Council of the City of Sunfish Lake hereby denies the 15-foot variance to the required 25-foot driveway side yard setback requirement for the R-1 District at 2 Acorn Drive with the following **rationale**:

1. A practical difficulty does not exist in this circumstance due to the fact that there are other options for the location of the driveway that meet setback requirements and significant trees will be removed regardless of the location of the driveway.

This resolution is adopted by the City Council of the City of Sunfish Lake this 10th day of June 2025.

Dan O’Leary, Mayor

Attest:

Christy Wilcox, City Clerk

**CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA**

RESOLUTION NO. XX-XX

**RESOLUTION APPROVING A MAJOR SITE AND BUILDING PLAN APPLICATION
AND A CONDITIONAL USE PERMIT FOR THE PROPERTY AT 2 ACORN DRIVE,
SUNFISH LAKE, DAKOTA COUNTY, MINNESOTA.**

WHEREAS, Applicant, Chad Maack, and property owners, Chris Nelson and David Carlson submitted an application for the approval of a major site and building plan application and a conditional use permit in the R-1 Single Family zoning district for the property at 2 Acorn Drive, Sunfish Lake, Dakota County, Minnesota, legally described as:

Lot 2, THIRTY OAKS ADDITION, Dakota County, Minnesota, according to the recorded plat thereof.

PID: 387600000020

and

WHEREAS, the Sunfish Lake Planning Commission held a public hearing on April 17, 2025, and tabled the review of the variance; and

WHEREAS, the Sunfish Lake Planning Commission met again on May 15, 2025, and recommended approval of the major site and building plan application and conditional use permit; and

WHEREAS, the City Council considered the application on June 10, 2025; and

NOW THEREFORE BE IT RESOLVED THAT the City Council of the City of Sunfish Lake hereby approves the major site and building plan application and conditional use permit for 2 Acorn Drive, with the following conditions of approval:

1. Construction of the home and all improvements shall occur in substantial conformance with the plans recommended for approval at the June 10, City Council meeting.
2. The applicant must submit a lighting plan with foot candle measurements prior to issuance of a building permit.
3. The applicant must obtain all other permits as may be required.
4. The applicant shall comply with all applicable federal, state, and local laws, rules and ordinances.
5. The applicant must adhere to and remain in compliance with the requirements of this Resolution, applicable performance standards, and such other requirements as may apply.

6. All conditions of the site plan review must be complied with, shall run with the land, and shall not in any way be affected by the subsequent sale, lease or other change from current ownership of the Property.
7. By undertaking the activities approved by the requests, the Applicant agrees to all conditions.
8. The improvements to be staked out in the field by the surveyor and reviewed and approved by city staff prior to the start of any construction.
9. All erosion controls identified on the approved plan must be properly installed and inspected by City staff prior to the start of any construction.
10. If site disturbance exceeds one acre, the applicant agrees to apply for a NPDES permit through the MPCA and supply the city with the approved Storm Water Pollution Prevention Plan (SWPPP) and the approved MPCA NPDES permit.

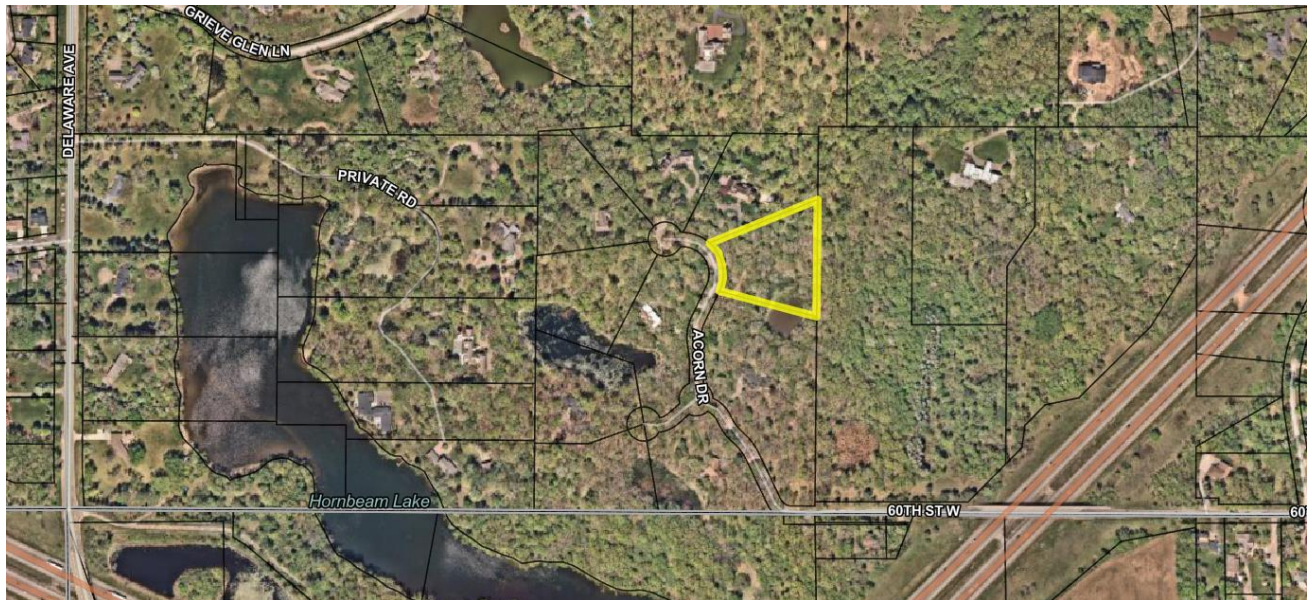
This resolution is adopted by the City Council of the City of Sunfish Lake this 10th day of June 2025.

Dan O'Leary, Mayor

Attest:

Christy Wilcox, City Clerk

Location Map for 2 Acorn Drive



Aerial for 2 Acorn Drive





CARLSON NELSON RESIDENCE

2 ACORN DRIVE
SUNFISH LAKE, MINNESOTA

GRADING, STORMWATER MANAGEMENT AND EROSION CONTROL PLANS

CONTACT INFORMATION

CIVIL ENGINEER

PIERCE PINI & ASSOCIATES, INC.
9298 CENTRAL AVENUE NE, SUITE 312
BLAINE, MN 55434
CONTACT: Kevin Gardner
TEL: 763-537-1311

SURVEYOR

CORNERSTONE LAND SURVEYING
6750 STILLWATER BLVD N, SUITE 1
STILLWATER, MN 55082
CONTACT: Connie Villari
TEL: 651-275-8969

BUILDER

HARTMAN HOMES, INC.
744 RYAN DRIVE, SUITE 102
HUDSON, WI 54016
CONTACT: Chad Maack
TEL: 715-377-1555

DRAWING INDEX

C000 - COVER SHEET
C100 - SITE REMOVALS PLAN
C200 - STORMWATER POLLUTION PREVENTION NOTES
C300 - STORMWATER POLLUTION PREVENTION DETAILS
C400 - GRADING, DRAINAGE AND EROSION CONTROL PLAN
C500 - STORMWATER MANAGEMENT DETAILS

CONSTRUCTION NOTES

- ALL EXISTING INFORMATION AND PROPOSED SITE IMPROVEMENTS TAKEN FROM CERTIFICATE OF SURVEY BY CORNERSTONE LAND SURVEYING, DATED JANUARY 2, 2025.
- GEOTECHNICAL REPORT COMPLETED BY KILO ENGINEERING, PROJECT 25-1864, DATED MARCH 9, 2025.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS OF EXISTING UTILITIES, AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR TO PREVENT DIRT AND/OR DEBRIS FROM BEING TRANSPORTED OFF-SITE IN AN UNCONTROLLED MANNER. SEDIMENT DISCOVERED SHALL BE REMOVED BY CONTRACTOR WITHIN 48 HOURS OF DISCOVERY.
- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH CITY OF SUNFISH LAKE AND STATE OF MINNESOTA REGULATIONS AND STANDARDS.
- EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES WHICH MAY INCLUDE BUT IS NOT LIMITED TO: ELECTRIC, TELEPHONE, GAS, CABLE TV, COMPUTER CABLE, FIBER OPTIC CABLE, SANITARY SEWER, STORM SEWER AND WATER MAIN. CONTRACTOR TO CONTACT THE GOPHER STATE ONE CALL BEFORE EXCAVATING.
- CONTRACTOR TO PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS, LANDSCAPING, STRUCTURES AND UTILITIES THAT ARE TO REMAIN. CONTRACTOR TO STORE AND PROTECT EXISTING SITE FEATURES WHICH NEED TO BE REMOVED AND REPLACED. CONTRACTOR TO PREVENT DAMAGE OR THEFT OF THESE ITEMS AND TO REPAIR AND REPLACE AT OWN EXPENSE.
- ALL EXCAVATIONS MUST COMPLY WITH THE REQUIREMENTS OF OSHA 29 CFR, PART 1926, SUBPART P "EXCAVATIONS AND TRENCHES". THIS DOCUMENT STATES THAT EXCAVATION SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL COORDINATE WITH ARCHITECT'S DRAWINGS TO VERIFY LOCATION, SIZE AND QUANTITY OF ALL ROOF DRAINS AND UTILITY CONNECTIONS.
- PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH MUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS", CURRENT EDITION.
- DRAWINGS DO NOT INDICATE AREAS OF TEMPORARY SUPPORT SYSTEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS AND WILL HAVE TOTAL CONTROL OVER THE TYPES AND DESIGN OF ALL SHORING, SHEETING, BRACING, ANCHORAGES, EXCAVATION SUPPORT WALLS, DIRECTIONAL BORING, AUGER JACKING, SOIL STABILIZATION AND OTHER METHODS OF PROTECTING EXISTING IMPROVEMENTS. SEE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO STARTING CONSTRUCTION.
- ALL MATERIALS FOR PROPOSED CONSTRUCTION OR REPAIR OF EXISTING FACILITIES SHALL BE NEW PRODUCTS DIRECT FROM THE FACTORY AND FREE FROM DEFECTS.
- WHEN WORKING AROUND EXISTING UTILITIES, LIGHT POLES, TRAFFIC SIGNALS, TELEPHONE OR POWER POLES, THE CONTRACTOR SHALL PROVIDE SUFFICIENT SUPPORT OR BRACING TO PREVENT EXCESSIVE STRESS ON THE PIPING. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.
- CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. MONUMENTS DAMAGED OR DISPLACED DUE TO CONTRACTOR NEGLIGENCE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOT BLOCK DRAINAGE FROM OR DIRECT EXCESS DRAINAGE ONTO ADJACENT PROPERTY.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY.
- CONTRACTOR MUST ADHERE TO AXLE LOAD LIMITS WHEN DELIVERING MATERIALS AND EQUIPMENT TO THE SITE. ANY DAMAGE TO THE ROADWAY AND THE CITY RIGHT-OF-WAY SHALL BE REPAIRED TO THE CITY'S SATISFACTION AT THE COST OF THE CONTRACTOR.
- CONTRACTOR SHALL TAKE PHOTOGRAPHS AND DOCUMENT THE CONDITION OF THE EXISTING ROADWAY PRIOR TO CONSTRUCTION.
- ALL RETAINING WALLS EXCEEDING 42" IN HEIGHT, MEASURED FROM THE FOOTING TO TOP OF WALL, NEED ENGINEERED DRAWINGS SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY OF SUNFISH LAKE BUILDING OFFICIAL.

PROPERTY INFORMATION

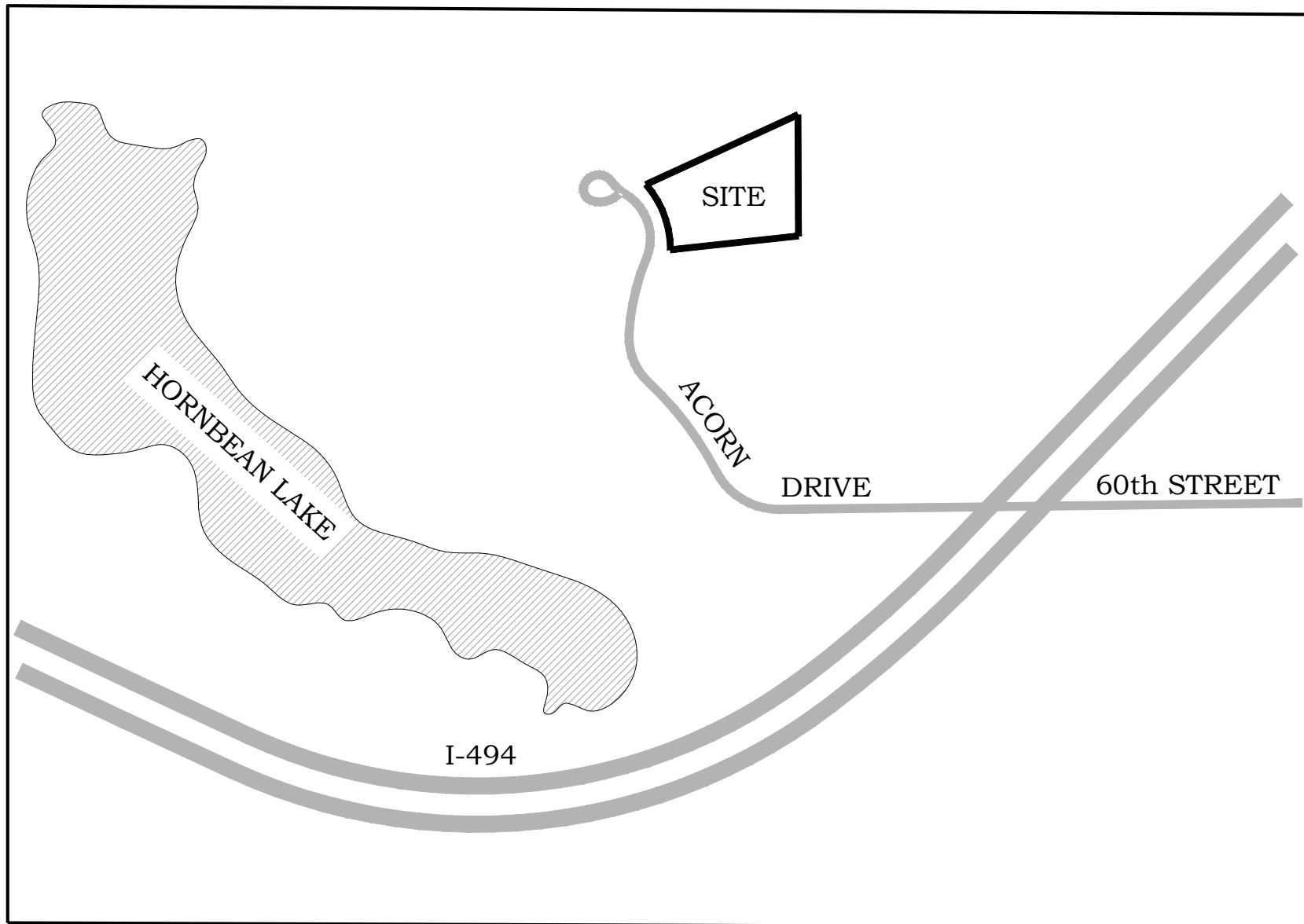
ADDRESS: 2 ACORN DRIVE, SUNFISH LAKE, MN 55077
PARCEL ID: 38-76000-00-020
LOT AREA: 106,046 SQ. FT. (2.43 ACRES)
WATERSHED: LOWER MISSISSIPPI RIVER

CONSTRUCTION SEQUENCING AND INSPECTION OF EROSION AND SEDIMENT CONTROL PRACTICES FOR STORMWATER MANAGEMENT SYSTEMS

- OBTAIN PERMITS FOR SITE WORK FROM CITY OF SUNFISH LAKE AND ALL GOVERNING AUTHORITIES WITH JURISDICTION IN THIS CONSTRUCTION AREA.
- INSTALL PERIMETER EROSION CONTROL AND TREE PROTECTION WITHIN AND ADJACENT TO LIMITS OF CONSTRUCTION. INSTALL EROSION CONTROL INSERTS AT ALL CATCH BASINS AND MANHOLES AND CONSTRUCT ROCK CONSTRUCTION ENTRANCE. SEE EROSION CONTROL PLANS FOR FURTHER INSTRUCTION.
- UPON INSTALLATION OF EROSION CONTROLS PER THE APPROVED PLANS, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER FOR AN INSPECTION PRIOR TO ANY EARTHWORK ACTIVITIES COMMENCING.
- PROCEED WITH SITE DEMOLITION, GRADING AND CONSTRUCTION.
- MAINTAIN EROSION CONTROL BMP'S AND CONTROL RUNOFF REQUIREMENTS AS OUTLINED ON DRAWINGS AND SPECIFICATIONS.
- ALL SITE WORK SHOULD BE COMPLETE PRIOR TO WORK ON THE STORMWATER AREAS BEING STARTED TO THE EXTENT POSSIBLE. IF CONSTRUCTION OF THESE AREAS NEEDS TO OCCUR PRIOR TO FINAL SITE STABILIZATION, THEN THE CONSTRUCTED AREA MUST BE PROTECTED AND CONTRIBUTING FLOWS NEED TO BE FILTERED TO PREVENT SEDIMENT ACCUMULATION. THE STORMWATER MANAGEMENT SYSTEMS NEED TO BE PROTECTED FROM EROSION AND SEDIMENT. SILT FENCE WILL BE REQUIRED AROUND ITS PERIMETER TO KEEP THE AREA OF THE STORMWATER SYSTEMS PROTECTED.
- NOTIFY CIVIL ENGINEER AND CITY OF SUNFISH LAKE OF WORK BEING DONE ON STORMWATER SYSTEMS AND THE SCHEDULE OF CONSTRUCTION. ALLOW A MINIMUM OF FIVE WORKING DAYS FOR NOTIFICATION SO ENGINEER CAN CONDUCT SITE MEETING TO DISCUSS THE INTENT OF THE SYSTEM AND CONSTRUCTION OBSERVATION CAN BE SCHEDULED ACCORDINGLY. SITE MEETING TO REVIEW THE INTENT OF THE DESIGN AND THE CONSTRUCTION OF THE STORMWATER SYSTEM NEEDS TO OCCUR PRIOR TO STARTING CONSTRUCTION ON THE SYSTEM.
- MAINTAIN EROSION AND SEDIMENT CONTROL ON CONTRIBUTING AREAS TO AVOID SEDIMENTATION OF SYSTEM.
- CONSTRUCT STORMWATER SYSTEMS PER DRAWINGS AND SPECIFICATIONS.
- COMPLETE CONSTRUCTION OF PARKING AND SIDEWALKS AFTER STORMWATER SYSTEM IS INSTALLED. AFTER PAVEMENT IS INSTALLED, VERIFY THAT STORMWATER SYSTEMS ARE CLEAR AND FULLY FUNCTIONAL. EXCAVATE, DREDGE, OR CLEAN AS NEEDED SO THEY ARE FULLY FUNCTIONAL AT PROJECT CLOSEOUT.
- INSTALL LANDSCAPING AND PLANTING MATERIALS PER LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- REMOVE ALL TEMPORARY EROSION CONTROL BMP'S AFTER PAVING AND STORMWATER AREAS ARE COMPLETE AND AFTER TURF HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL TAKE PHOTOGRAPHS AND MEASUREMENTS OF ALL STORMWATER MANAGEMENT SYSTEMS THROUGHOUT CONSTRUCTION. DOCUMENTATION OF CONSTRUCTION SHALL BE SUBMITTED TO THE CIVIL ENGINEER AT THE CLOSEOUT OF THE PROJECT. CLOSEOUT DOCUMENTATION SHALL INCLUDE PHOTOGRAPHS AND MEASUREMENTS OF SYSTEM DURING CONSTRUCTION, TESTING REPORTS AND OBSERVATIONS AND REDLINE DRAWINGS OF ANY FIELD MODIFICATIONS MADE DURING CONSTRUCTION.

CONSTRUCTION SEQUENCING FOR CERTIFICATE OF OCCUPANCY RELEASE

- AN AS-BUILT SURVEY OF THE PROPOSED IMPROVEMENTS SHALL BE COMPLETED AT THE END OF THE PROJECT TO DEMONSTRATE THAT ALL IMPROVEMENTS HAVE BEEN CONSTRUCTED PER THE APPROVED PLANS.
- THE ENGINEER OF RECORD SHALL REVIEW THE AS-BUILT SURVEY AND CERTIFY THAT THE AS-BUILT SITE IMPROVEMENT ELEVATIONS MATCH THOSE OF THE INTENDED DESIGN.
- UPON COMPLETION OF THE AS-BUILT CERTIFICATION, AN ON-SITE MEETING WITH CITY STAFF, THE BUILDER, THE ENGINEER OF RECORD AND THE OWNER WILL BE REQUIRED TO REVIEW THE STATUS OF THE PROJECT AND ANY OUTSTANDING ITEMS.
- A CERTIFICATE OF OCCUPANCY WILL BE ISSUED ONCE ALL SITE AND BUILDING ITEMS ARE DEEMED FULLY COMPLETE BY CITY STAFF. TEMPORARY CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED.



LOCATION MAP

PIERCE PINI &
ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55434
TEL 763-537-1311

CARLSON NELSON RESIDENCE

2 ACORN DRIVE
SUNFISH LAKE, MINNESOTA 55077

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for Date

Revised Septic 05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

Comm. No. 25-005

Drawn EJ

Checked KG

Date 04/22/2025

City Approval

Drawing Title

COVER SHEET

C000

CARLSON NELSON RESIDENCE
2 ACORN DRIVE
SUNFISH LAKE, MINNESOTA 55077

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for	Date
Revised Septic	05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

Comm. No. 25-005

Drawn EJ

Checked KG

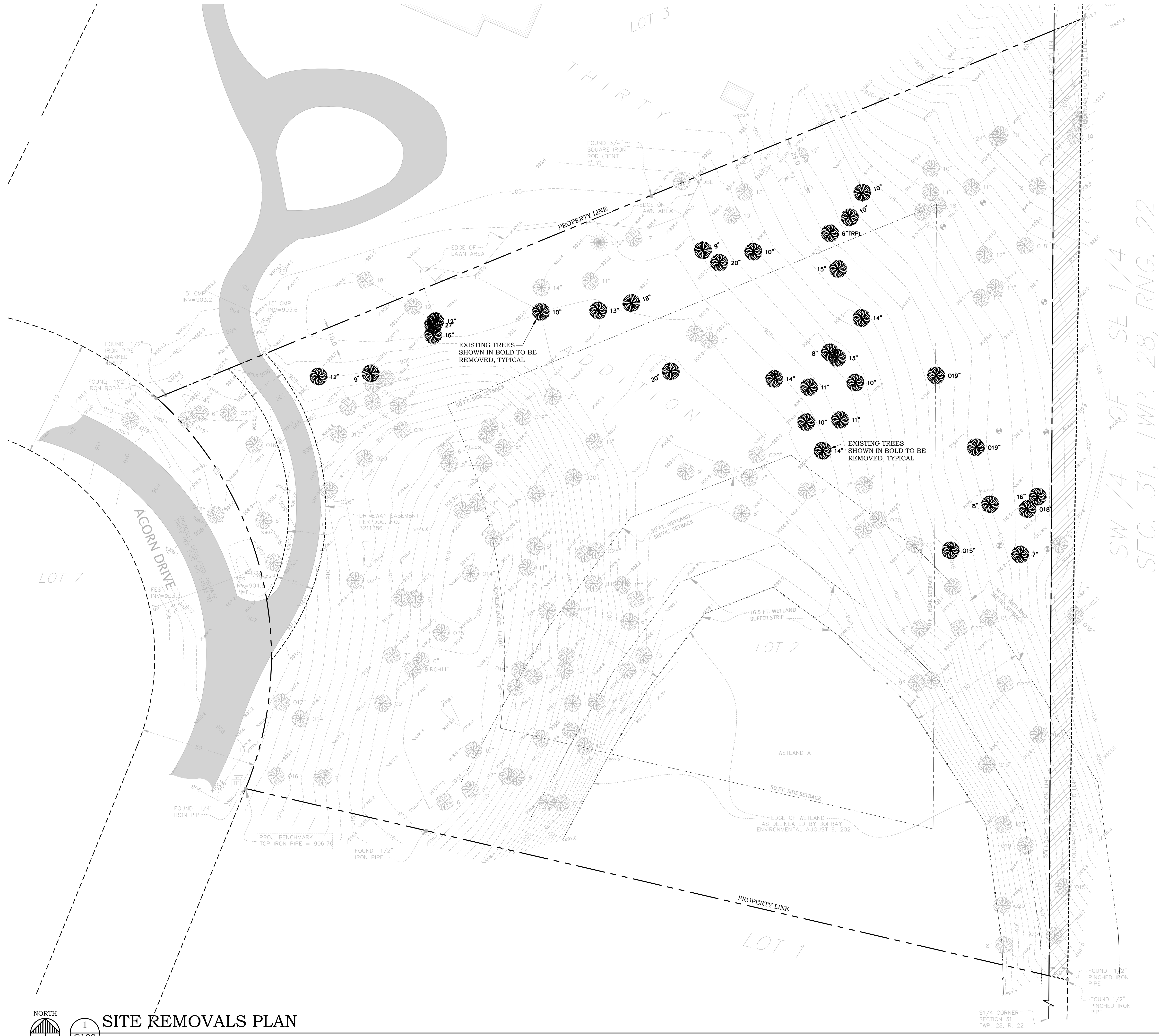
Date 04/22/2025

City Approval

Drawing Title

SITE REMOVALS PLAN

C100



SW 1/4 OF SE 1/4
SEC. 31, TWP. 28, RNG. 22

PROJECT DESCRIPTION:
A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED AS PART OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/STATE DISPOSAL SYSTEM (SDS) CONSTRUCTION STORMWATER PERMIT FOR THE PROJECT SINCE THE DISTURBED AREA IS MORE THAN ONE ACRE. ALL SITE WORK SHALL FOLLOW THE PERMIT GUIDELINES.

THE GOAL OF POLLUTION PREVENTION EFFORTS DURING PROJECT CONSTRUCTION IS TO CONTROL SOIL AND POLLUTANTS ON THE SITE AND PREVENT THEM FROM LEAVING THE PROJECT SITE AND FLOWING TO SURFACE WATERS. THE PURPOSE OF THIS SWPPP IS TO PROVIDE GUIDELINES FOR ACHIEVING THAT GOAL. THE SWPPP MUST BE KEPT ONSITE AND UPDATED AS NECESSARY DURING THE COURSE OF CONSTRUCTION TO KEEP IT CURRENT WITH ANY MODIFICATIONS TO THE POLLUTION CONTROL MEASURES BEING UTILIZED.

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW HOUSE WITH ATTACHED GARAGE, OUTDOOR TERRACE AND DRIVEWAY ON THE EAST SIDE OF ACORN DRIVE IN SUNFISH LAKE.

THE PROPOSED STORMWATER MANAGEMENT DESIGN WILL MEET THE REQUIREMENTS OF THE CITY OF SUNFISH LAKE AND THE LOWER MISSISSIPPI RIVER WATERSHED MANAGEMENT ORGANIZATION. THIS PROJECT IS REQUIRED TO MEET THE MPCA PERMANENT STORMWATER MANAGEMENT REQUIREMENTS BECAUSE THE DISTURBED AREA IS GREATER THAN ONE ACRE.

REGULATORY CONTEXT:
DISCHARGE TO SPECIAL OR IMPAIRED WATERS WITHIN ONE MILE OF SITE:
- THIS PROJECT DISCHARGES TO HORNBEAN LAKE - THIS LAKE IS NOT IDENTIFIED AS AN IMPAIRED WATER ON THE MPCA'S 303(D) IMPAIRED WATERS LIST.

PLACEMENT OF FILL IN WATERS OF THE STATE:
-N/A
DRINKING WATER SUPPLY MANAGEMENT AREA:
-N/A

THE PROJECT STORMWATER DISCHARGE IS NOT ANTICIPATED TO IMPACT ANY OF THE FOLLOWING:
-OUTSTANDING RESOURCE VALUE WATERS, TROUT WATERS, WETLANDS, CALCAREOUS FENS, PROPERTIES LISTED BY THE NATIONAL REGISTER OF HISTORIC PLACES OR ARCHAEOLOGICAL SITES

THE PROJECT STORMWATER DISCHARGE IS NOT SUBJECT TO ADDITIONAL REGULATION DUE TO ANY OF THE FOLLOWING:
-OTHER FORMAL ENVIRONMENTAL REVIEWS, ENDANGERED OR THREATENED SPECIES

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IMPLEMENTATION RESPONSIBILITIES:
1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP, INCLUDING THE ACTIVITIES OF ALL OF THE CONTRACTOR'S SUBCONTRACTORS.
2. CONTRACTOR SHALL PROVIDE A PERSON(S) KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPs TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMPs AND IMPLEMENTATION OF THE SWPPP
3. FOLLOWING FINAL STABILIZATION, THE OWNER IS EXPECTED TO FURNISH LONG TERM OPERATION AND MAINTENANCE (O & M) OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM.

STORMWATER DISCHARGE DESIGN REQUIREMENTS:
THE FOLLOWING SIZING CRITERIA APPLY TO THE DESIGN OF STORMWATER TREATMENT FACILITIES. N/A INDICATES NOT APPLICABLE OR NOT CONSTRUCTED AS PART OF THIS PROJECT.
1. TEMPORARY SEDIMENTATION BASINS: N/A
2. PERMANENT WET SEDIMENTATION BASINS: N/A
3. PERMANENT INFILTRATION/FILTRATION : SEE GRADING PLAN AND STORMWATER MANAGEMENT PLAN
4. PERMANENT REGIONAL PONDS: N/A
5. ALTERNATIVE METHODS: N/A

SEQUENCE OF CONSTRUCTION:
THE FOLLOWING SEQUENCE DESCRIBES, IN GENERAL, THE WORK ON THE SITE:
1. CONTRACTOR SHALL VERIFY THAT ALL PERMITS HAVE BEEN OBTAINED AND/OR OBTAIN THE NECESSARY PERMITS.
2. CONTRACTOR SHALL PERFORM SITE INSPECTIONS, RECORD KEEPING AND RECORD RETENTION IN ACCORDANCE WITH ALL PERMITS.
3. CONTRACTOR SHALL INSTALL ALL PERIMETER AND DOWN-GRADIENT EROSION CONTROL AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), CONSTRUCTION ENTRANCES AND INLET PROTECTION DEVICES PRIOR TO SITE GRADING, EXCAVATION, STOCKPILING OR DISTURBING EXISTING VEGETATIVE COVER.
4. CONTRACTOR SHALL PERFORM SITE GRADING, EXCAVATION, STOCKPILING WORK IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
5. CONTRACTOR SHALL INSTALL, INSPECT, MONITOR AND MAINTAIN TEMPORARY AND PERMANENT EROSION CONTROL BMPs AS SHOWN ON PLANS & IN CONFORMANCE WITH NPDES PERMIT, CONTINUOUSLY DURING THE WORK. CONTRACTOR SHALL STABILIZE ALL EXPOSED SOILS NO LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
6. CONTRACTOR SHALL REPLACE OR REPAIR EROSION CONTROL AND SEDIMENT CONTROL BMPs THAT ARE NOT FUNCTIONING PROPERLY.
7. CONTRACTOR SHALL PERFORM SITE RESTORATION ACTIVITIES FOR PERMANENT VEGETATIVE ESTABLISHMENT.
8. CONTRACTOR SHALL REMOVE SEDIMENT CONTROL DEVICES PRIOR TO FINAL COMPLETION.

1. CONSTRUCTION ACTIVITY FIELD REQUIREMENTS:
ALL FIELD REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
A. THE CONTRACTOR MUST IMPLEMENT THE SWPPP AND PROVIDE BMPs IDENTIFIED IN THE SWPPP IN AN APPROPRIATE AND FUNCTIONAL MANNER.
B. THE CONTRACTOR SHALL RESPOND TO CHANGING SITE CONDITIONS AND IMPLEMENT/SUPPLEMENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES UTILIZED TO PROVIDE ADEQUATE PROTECTION OF DISTURBED SOILS AND ADEQUATE PREVENTION OF SEDIMENT TRANSPORT OFF-SITE. AT A MINIMUM, THE FOLLOWING STORM WATER POLLUTION PREVENTION CONSTRUCTION ACTIVITY FIELD REQUIREMENTS SHALL BE FURNISHED BY THE CONTRACTOR.

2. EROSION PREVENTION PRACTICES
CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING EROSION PREVENTION PRACTICES:
A. THE CONTRACTOR SHALL ATTEMPT TO PHASE ALL WORK TO MINIMIZE EROSION AND MAINTAIN VEGETATIVE COVER TO THE EXTENT POSSIBLE. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE DELINEATED ON THE SITE BEFORE CONSTRUCTION BEGINS.
B. STABILIZATION ON ALL EXPOSED SOILS MUST BE INITIATED IMMEDIATELY WHENEVER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS, INCLUDING STOCKPILES WITH SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS. STABILIZATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS.
C. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE OR DIVERTS WATER AROUND A SITE MUST BE STABILIZED BY CONTRACTOR WITHIN 200 FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. TEMPORARY OR PERMANENT DITCH SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DO NOT NEED TO BE STABILIZED UNTIL THEY ARE NO LONGER USED AS A SEDIMENT CONTAINMENT SYSTEM, AFTER WHICH THEY MUST BE STABILIZED WITHIN 24 HOURS.
D. TEMPORARY OR PERMANENT ENERGY DISSIPATION AT PIPE OUTLETS MUST BE PROVIDED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER.
E. THE CONTRACTOR MUST DIRECT DISCHARGES FROM BMPs TO VEGETATED AREAS OF THE SITE IN ORDER TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE INFILTRATION UNLESS INFEASIBLE. THE CONTRACTOR MUST UTILIZE VELOCITY DISSIPATION DEVICES IF NECESSARY TO PREVENT EROSION WHEN DIRECTING STORMWATER TO VEGETATED AREAS.

3. SEDIMENT CONTROL PRACTICES
CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING SEDIMENT CONTROL PRACTICES:
A. CONTRACTOR MUST INSTALL ALL DOWN GRADIENT PERIMETER CONTROLS BEFORE ANY UP GRADIENT DISTURBANCE BEGINS. CONTRACTOR SHALL MAINTAIN PERIMETER CONTROLS UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED.
B. CONTRACTOR SHALL PROVIDE GRADING AND BMP INSTALLATION TO LIMIT ALL SLOPES OF 3H:1V OR STEEPER TO AN UNBROKEN LENGTH OF 75 FEET OR LESS.
C. IF DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED, THE CONTRACTOR MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs TO ELIMINATE OVERLOADING. THE SWPPP MUST BE AMENDED TO IDENTIFY THESES ADDITIONAL PRACTICES.
D. TIMING AND INSTALLATION OF SEDIMENT CONTROL DEVICES CAN BE ADJUSTED BY CONTRACTOR TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING AND GRUBBING OR VEHICLE PASSAGE. ANY SHORT-TERM ACTIVITY MUST BE COMPLETED AS QUICKLY AS POSSIBLE AND THE SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IMMEDIATELY AFTER THE ACTIVITY IS COMPLETED AND IN ALL CASES PRIOR TO THE NEXT PRECIPITATION EVENT.
E. ALL PUBLIC AND PRIVATE STORM SEWER INLETS AND OUTLETS SHALL BE PROTECTED BY CONTRACTOR WITH APPROPRIATE BMPs DURING THE WORK. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL THE POTENTIAL SOURCES FOR DISCHARGING SEDIMENT TO INLETS HAVE BEEN STABILIZED BY CONTRACTOR.
F. TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN SURFACE WATERS OR STORMWATER CONVEYANCES. ACCEPTABLE PROTECTION INCLUDES COVER OF MULCH, EROSION CONTROL MATS, OR PLASTIC SHEETING.

- G. ROCK CONSTRUCTION ENTRANCES OR EQUIVALENT SYSTEM MUST BE INSTALLED BY CONTRACTOR TO MINIMIZE TRACKING FROM SITE. CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NECESSARY IF BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET.
- H. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENTATION BASINS AS NEEDED.
- I. CONTRACTOR MUST MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL, UNLESS INFEASIBLE. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.
- J. THE CONTRACTOR MUST PRESERVE A 50 FOOT NATURAL BUFFER OR PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT DISTURBANCE LIMITS AND STORMWATER FLOWS TO THE SURFACE WATER.
- K. IF POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ARE USED ON SITE, THE CONTRACTOR MUST COMPLY WITH THE FOLLOWING REQUIREMENTS.
- a. THE CONTRACTOR MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION TO ENSURE EFFECTIVE TREATMENT. CHEMICALS MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A SEDIMENT CONTROL SYSTEM WHICH ALLOWS FOR THE SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.
- b. CHEMICALS MUST BE SELECTED THAT ARE APPROPRIATELY SUITED TO THE TYPES OF SOILS LIKELY TO BE EXPOSED DURING CONSTRUCTION. CHEMICALS MUST BE USED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, AND WITH DOSING SPECIFICATION AND SEDIMENT REMOVAL DESIGN SPECIFICATION PROVIDED BY THE MANUFACTURER.
- 4. DEWATERING AND BASIN DRAINING**
CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING DEWATERING REQUIREMENTS:
A. CONTRACTOR'S DEWATERING ACTIVITIES THAT HAVE SEDIMENT-LADEN DISCHARGE WATER MUST BE DISCHARGED INTO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN WHENEVER POSSIBLE, OTHERWISE IT MUST BE DISCHARGED THROUGH SOME FORM OF BEST MANAGEMENT PRACTICE (BMP) BY CONTRACTOR TO LIMIT SEDIMENT FROM LEAVING THE SITE. PRIOR TO DISCHARGE, THE CONTRACTOR SHALL PERFORM A VISUAL TEST TO ENSURE ADEQUATE TREATMENT IS OBTAINED IN THE BASIN OR BMP AND APPLY ADDITIONAL TREATMENT AS REQUIRED TO ENSURE ADEQUATE TREATMENT.
B. THE CONTRACTOR SHALL DISCHARGE WATER FROM DEWATERING IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS. THE DISCHARGE WATER SHALL BE DISPERSED OVER AN ACCEPTED ENERGY DISSIPATION MEASURE AND NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM LANDOWNERS OR WETLANDS.
C. IF CONTRACTOR IS USING FILTERS WITH BACKWASH WATER, THE CONTRACTOR SHALL HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION.
- 5. INSPECTIONS AND MAINTENANCE**
CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THE FOLLOWING INSPECTIONS AND MAINTENANCE:
A. WHEN INSPECTIONS FIND EROSION PREVENTION AND SEDIMENT CONTROL BMPs THAT ARE NONFUNCTIONAL, ALL NONFUNCTIONAL BMPs MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPs WITHIN 24 HOURS AFTER DISCOVERY. THE CONTRACTOR SHALL ALSO PLACE ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY WITHIN 24 HOURS OF NOTICE FROM CITY INSPECTORS.
B. THE CONTRACTOR MUST ROUTINELY INSPECT THE SITE ONCE EVERY 7 DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.
C. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED IN WRITING BY CONTRACTOR AND RETAINED WITH THE SWPPP BY CONTRACTOR. MAINTENANCE MUST BE COMPLETED BY CONTRACTOR. CONTRACTOR'S RECORDS MUST INCLUDE:
a. DATE AND TIME OF INSPECTION.
b. NAME OF PERSON CONDUCTING INSPECTION.
c. FINDING OF INSPECTION INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTION.
d. DETAILS OF CORRECTIVE ACTION TAKEN (DATE, TIME, PARTY COMPLETING MAINTENANCE ACTIVITIES).
e. DATE AND AMOUNT OF RAINFALL GREATER THAN 0.5 INCHES IN 24 HOURS.
f. IF ANY DISCHARGE IS OBSERVED TO BE OCCURRING DURING THE INSPECTION, A RECORD OF ALL POINTS OF THE PROPERTY FROM WHICH THERE IS A DISCHARGE MUST BE MADE, AND THE DISCHARGE SHALL BE DESCRIBED (COLOR, ODOR, FLOATING, SETTLED, OR SUSPENDED SOLIDS, FOAM, OIL SHEEN, AND OTHER INDICATORS) AND PHOTOGRAPHED.
g. DOCUMENTATION OF CHANGES MADE TO SWPPP.
D. IN AREAS OF PROJECT WHERE FINAL STABILIZATION IS COMPLETE INSPECTIONS CAN BE REDUCED TO ONCE A MONTH. THESE AREAS SHALL BE INSPECTED BY CONTRACTOR FOR MINIMUM PERIOD OF 12 NON-WINTER MONTHS AND WITHIN 24 HOURS OF FIRST SPRING RUNOFF OR PRIOR TO RESUMING CONSTRUCTION FOLLOWING ANY WINTER STOPPAGE, WHICHEVER COMES FIRST.
E. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF BMPs UNTIL THE PROJECT HAS UNDERGONE FINAL STABILIZATION.
F. ALL EROSION CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED BY CONTRACTOR ACCORDING TO THE DETAILS INCLUDED IN THE CONSTRUCTION DOCUMENTS AND IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S RECOMMENDATIONS.
G. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED OR SUPPLEMENTED BY THE CONTRACTOR WHEN THEY BECOME NON-FUNCTIONAL OR THE SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE DEVICE. CONTRACTOR SHALL REPAIR OR REPLACE DEVICE THAT IS NONFUNCTIONAL BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW.
H. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND SEDIMENT REMOVED BY CONTRACTOR ONCE THE SEDIMENT COLLECTED REACHES ONE HALF THE STORAGE VOLUME WITH 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.
I. ALL SEDIMENT DEPOSITS WITHIN SURFACE WATERS OR STORMWATER CONVEYANCES MUST BE REMOVED AND RESTABILIZED BY CONTRACTOR WITHIN 7 DAYS OF DISCOVERY OR SOONER IF IT PRESENTS A FLOOD RISK, INCLUDING DELTAS AND STORM SEWER SEDIMENT DEPOSITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED, IF NECESSARY, FOR SUCH SEDIMENT REMOVAL.
J. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING EXISTING PAVED SURFACES CLEAN OF SEDIMENT. CONSTRUCTION ENTRANCES SHALL BE CHECKED DAILY BY CONTRACTOR. IF THE ENTRANCE BECOMES INUNDATED WITH SEDIMENT, THE ENTRANCE WILL BE CLEANED OR REPLACED AS APPROPRIATE BY CONTRACTOR. STREETS LEADING TO AND FROM THE CONSTRUCTION ENTRANCE SHALL BE CHECKED DAILY BY CONTRACTOR FOR OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. THESE AREAS WILL BE SWEEPED CLEAN OF ANY TRACKED MATERIALS BY CONTRACTOR AS SOON AS POSSIBLE AND WITHIN 24 HOURS OF DISCOVERY AND AS DIRECTED BY THE CITY. CONTRACTOR SHALL EXTEND SWEEPING TO THE EXTREMITY OF ANY SEDIMENT TRACKING THAT OCCURS OFF-SITE.
K. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY OFF-SITE SEDIMENT ACCUMULATIONS IN A MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS.
L. ALL INFILTRATION/FILTRATION AREAS MUST BE INSPECTED BY CONTRACTOR TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION IS ACCUMULATING OVER THE INFILTRATION/FILTRATION AREA. SEDIMENT ACCUMULATED OVER INFILTRATION/FILTRATION MUST BE REMOVED BY CONTRACTOR.
M. CONTRACTOR SHALL PROTECT INFILTRATION/FILTRATION AREAS FROM SEDIMENTATION AND OVER-COMPACTION. DURING EXCAVATION, SEDIMENT AND EROSION CONTROL DEVICES MUST BE UTILIZED BY CONTRACTOR TO PREVENT SEDIMENTATION AND THE AREA MUST BE STAKED OFF AND MARKED SO THAT HEAVY CONSTRUCTION EQUIPMENT WILL NOT COMPACT THE SOIL.
N. INSPECTIONS CAN BE SUSPENDED DUE TO FROZEN GROUND CONDITIONS UNTIL FIRST RUNOFF OCCURS OR CONSTRUCTION ACTIVITIES RESUME.
- 6. POLLUTION PREVENTION MEASURES**
CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:
A. THE CONTRACTOR SHALL MINIMIZE THE EXPOSURE OF ALL PRODUCTS, MATERIALS, AND WASTES FROM STORMWATER WHICH MAY BE A SOURCE OF CONTAMINATION TO STORMWATER OR ARE NOT DESIGNED TO BE EXPOSED TO STORMWATER.
B. BUILDING PRODUCTS THAT MAY LEACH POLLUTANTS MUST BE UNDER COVER (PLASTIC SHEETING, TEMPORARY ROOFS, ETC.) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
C. PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER (PLASTIC SHEETING, TEMPORARY ROOFS, ETC.) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
D. HAZARDOUS MATERIALS, TOXIC WASTE, INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) MUST BE STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS MATERIALS MUST COMPLY WITH ALL STATE REQUIREMENTS.
E. SOLID WASTE MUST BE STORED, COLLECTED, AND DISPOSED IN COMPLIANCE WITH ALL STATE REQUIREMENTS.
F. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OVER. SANITARY WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ALL STATE REQUIREMENTS.
G. THE CONTRACTOR SHALL TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ALL AREAS WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED. THE CONTRACTOR MUST CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE. THE CONTRACTOR MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. ALL SPILLS MUST BE CLEANED UP AND REPORTED IN ACCORDANCE WITH STATE REQUIREMENTS. DRY CLEAN UP MEASURES SHALL BE USED WHERE POSSIBLE.
H. THE CONTRACTOR MUST LIMIT VEHICLE AND EQUIPMENT WASHING TO A DEFINED AREA WHEN COMPLETED ON THE PROJECT SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND WASTE FROM THE WASHING ACTIVITY MUST BE PROPERLY DISPOSED OF. THE CONTRACTOR MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS. NO ENGINE DEGREASING IS ALLOWED ONSITE.

1. THE CONTRACTOR MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE PROJECT CONSTRUCTION ACTIVITY. NO WASHOUT WASTES MAY CONTACT THE GROUND, AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR ARE LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH ALL MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.
- 7. FINAL STABILIZATION**
THE CONTRACTOR SHALL ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION REQUIRES THE FOLLOWING:
A. ALL SOIL DISTURBING ACTIVITIES ARE COMPLETE AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ACHIEVED, INCLUDING STABILIZATION OF ALL DITCHES AND SWALES.
B. CONTRACTOR SHALL ENSURE THAT ALL PERMANENT STORMWATER TREATMENT SYSTEMS ARE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF CONSTRUCTION DOCUMENTS.
C. CONTRACTOR SHALL REMOVE ALL TEMPORARY SYNTHETIC AND STRUCTURAL BMPs.

RECORD AVAILABILITY AND RETENTION:
-THE CONTRACTOR SHALL MAKE THE SWPPP, INCLUDING ALL CERTIFICATES, REPORTS, RECORDS, OR OTHER INFORMATION, AVAILABLE TO FEDERAL, STATE, OR LOCAL OFFICIALS WITHIN 72 HOURS UPON REQUEST FOR THE DURATION OF THE PROJECT AND FOR THREE YEARS FOLLOWING FINAL STABILIZATION.

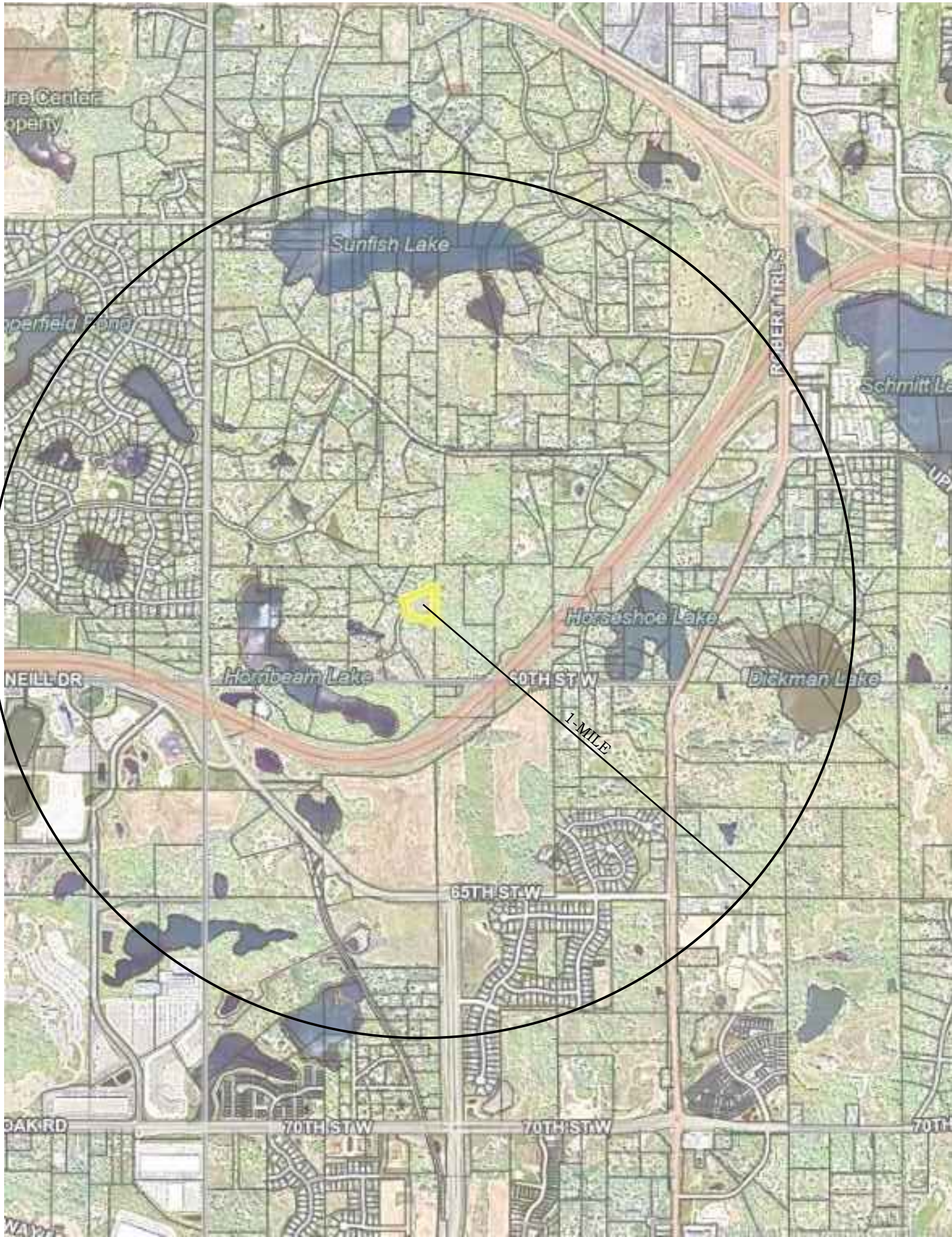
INSPECTION AND ENTRY:
-THE CONTRACTOR MUST ALLOW ACCESS FOR REPRESENTATIVES OF THE CITY OR ANY MEMBER THEREOF WHEN AUTHORIZED BY IT, TO ENTER UPON THE PROJECT SITE FOR THE PURPOSE OF OBTAINING INFORMATION, EXAMINATION OF RECORDS, OR CONDUCTING SURVEYS OR INVESTIGATIONS.

- 8. CHANGES TO SWPPP**
-THE CONTRACTOR MUST AMEND THE SWPPP AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, SUCH AS ADDITIONAL OR MODIFIED BMPs, DESIGNED TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER:
1. THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAVE SIGNIFICANT EFFECT ON DISCHARGE. INSPECTION IS REQUIRED WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN ONE-HALF INCH.
2. INSPECTION OR INVESTIGATION BY SITE OPERATORS, LOCAL, STATE OR FEDERAL OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE.
3. THE SWPPP IS NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS.

9. SWPPP CERTIFICATION:
-THIS STORMWATER POLLUTION PREVENTION PLAN WAS PREPARED BY INDIVIDUAL(S) TRAINED IN ACCORDANCE WITH TRAINING REQUIREMENTS FOR PREPARATION OF SWPPPS. INDIVIDUAL(S) PREPARING THIS SWPPP:

PREPARED BY:
KEVIN GARDNER, P.E.
PIERCE PINI AND ASSOCIATES
KEVIN@PIERCEPINI.COM
763-537-1311

TRAINING/CERTIFICATION:
DATE OF TRAINING/CERTIFICATION: 2023
CERTIFICATION PROGRAM: UNIVERSITY OF MINNESOTA - DESIGN OF CONSTRUCTION SWPPP
ARDEN HILLS, MN
INSTRUCTOR(S): JOHN CHAPMAN
CERTIFICATION EXPIRATION: 2026



IMPAIRED WATERS MAP

**PIERCE PINI &
ASSOCIATES, INC.**
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55434
TEL 763-537-1311

CARLSON NELSON RESIDENCE

2 ACORN DRIVE
SUNFISH LAKE, MINNESOTA 55077

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for	Date
Revised Septic	05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

Comm. No.	25-005
Drawn	EJ
Checked	KG
Date	04/22/2025

City Approval

Drawing Title

**STORMWATER
POLLUTION
PREVENTION NOTES**

C200

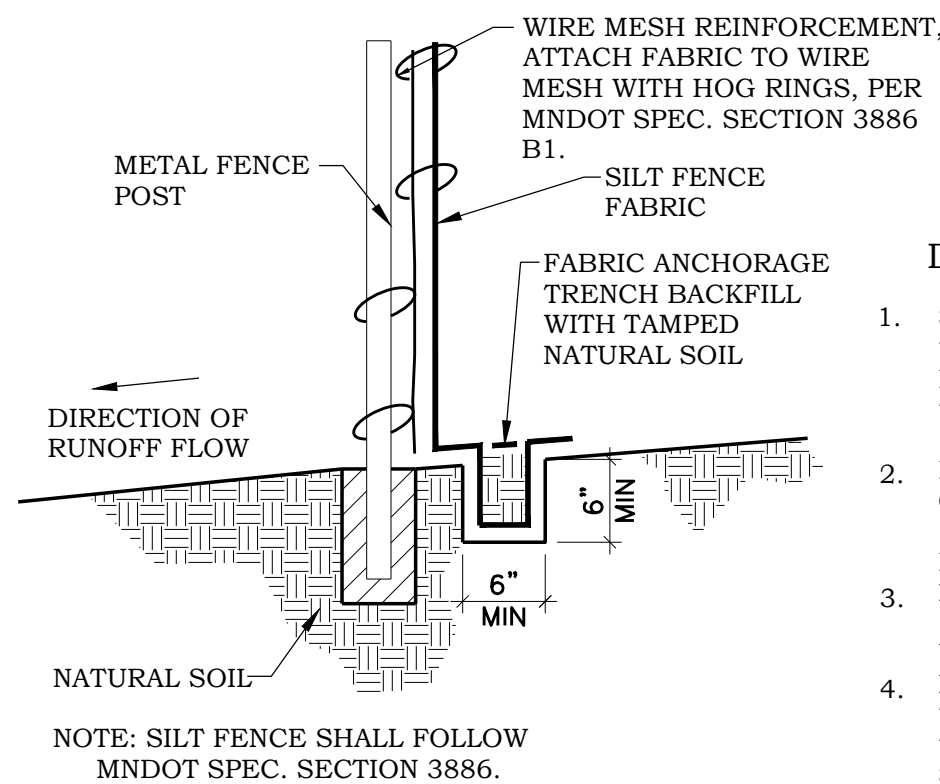


FIGURE 1 TYPICAL INSTALLATION FOR SILT FENCE

TABLE 1 MAXIMUM SLOPE LENGTH AND SLOPE FOR WHICH SILT FENCE IS APPLICABLE

		BY CALCULATION	BY CALCULATION	BY ACCEPTED DESIGN PRACTICES
SLOPE H:V	PERCENT	SILT FENCE STORAGE EQUALES 2 FT FOR A 100-YEAR EVENT	SILT FENCE STORAGE EQUALS 2 FT FOR A 2-YEAR EVENT OR 3 FT FOR A 100-YEAR EVENT	MAXIMUM SLOPE LENGTH
100:1	1%	400 FT	900 FT	100 FT
50:1	2%	200 FT	450 FT	75 FT
25:1	4%	100 FT	225 FT	75 FT
20:1	5%	80 FT	180 FT	75-50 FT
17:1	6%	67 FT	150 FT	50 FT
12.5:1	8%	50 FT	112 FT	50 FT
10:1	10%	40 FT	90 FT	50-25 FT
5:1	20%	20 FT	45 FT	25-15 FT
4:1	25%	16 FT	36 FT	15 FT
3:1	33%	12 FT	27 FT	15 FT
2:1	50%	8 FT	18 FT	15 FT

1

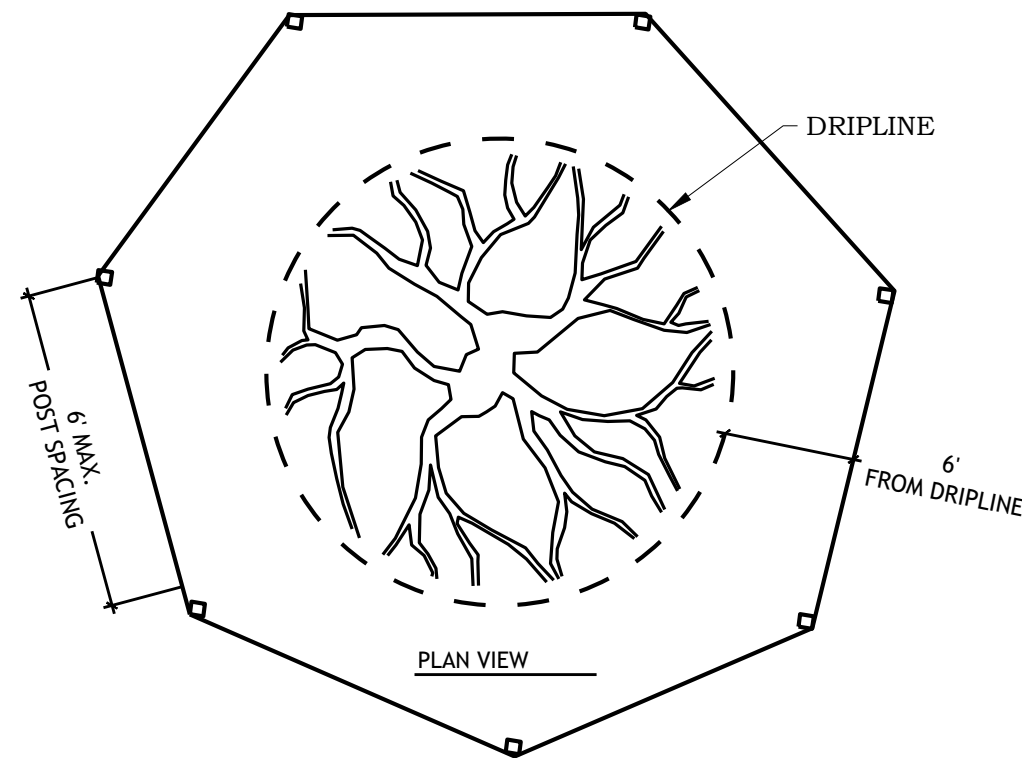
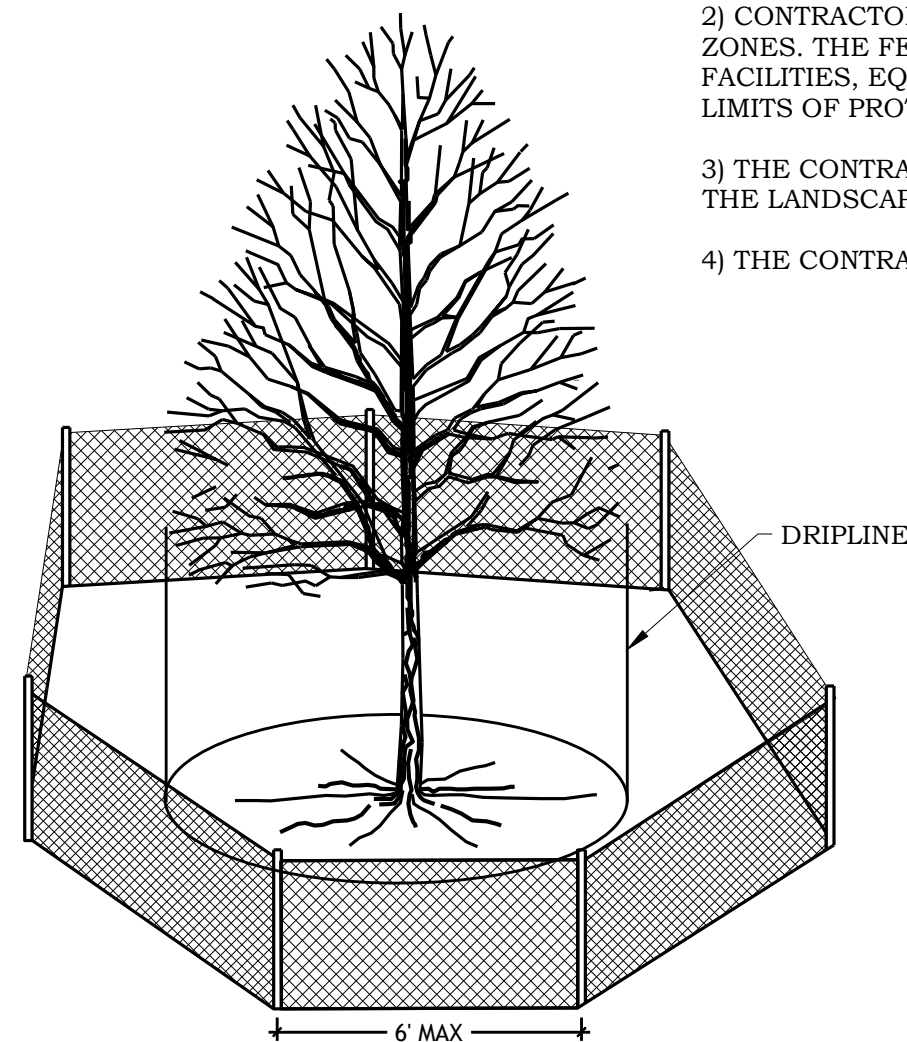
HEAVY DUTY SILT FENCE

NO SCALE

C300

NOTES:

- 1) ALL TREE PROTECTION FENCING AND EROSION CONTROL FENCING SHALL BE INSTALLED ACCORDING TO THE PLANS PRIOR TO ANY DEMOLITION. AFTER DEMOLITION OR AS NECESSARY, TREE PROTECTION FENCING MAY BE RELOCATED WITH APPROVAL FROM THE LANDSCAPE ARCHITECT. ALL TREE PROTECTION FENCING AND EROSION CONTROL DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
- 2) CONTRACTOR SHALL NOT STORE ANY MATERIALS OR PARK ANY VEHICLES IN TREE PROTECTION ZONES. THE FENCE SHALL PREVENT TRAFFIC MOVEMENT AND THE PLACEMENT OF TEMPORARY FACILITIES, EQUIPMENT, STOCKPILES AND SUPPLIES FROM HARMING VEGETATION WITHIN THE LIMITS OF PROTECTION.
- 3) THE CONTRACTOR SHALL CLEANLY CUT ALL ROOTS EXPOSED BY GRADING AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- 4) THE CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES AND STAGING AREAS.



5

TREE PROTECTION FENCING

NO SCALE

C300

DESIGN RECOMMENDATIONS

1. SILT FENCES SHOULD BE INSTALLED ON THE CONTOUR (AS OPPOSED TO UP AND DOWN A HILL) AND CONSTRUCTED SO THAT FLOW CANNOT BYPASS THE ENDS.
2. ENSURE THAT THE DRAINAGE AREA IS NO GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
3. MAKE THE FENCE STABLE FOR THE 10-YEAR PEAK STORM RUNOFF.
4. WHERE ALL RUNOFF IS TO BE STORED BEHIND THE SILT FENCE, ENSURE THAT THE MAXIMUM SLOPE LENGTH BEHIND THE FENCE DOES NOT EXCEED THE SPECIFICATIONS SHOWN IN TABLE 1.

EXTEND MATERIAL ABOUT 40" ON TOP OF THE GROUND AND RANDOMLY INSERT STAPLES THROUGH THE MATERIAL ABOUT 20" APART

STAPLES AT 3' O.C. STAPLES MUST BE INSERTED THROUGH OVERLAP MATERIAL

TRANSVERSE SEAMS: BLANKET MATERIAL MUST OVERLAP AT LEAST 6" AND STAPLES INSERTED THROUGH BOTH FABRICS AT A MAXIMUM SPACING OF 20" APART

LONGITUDINAL SEAMS: BLANKET MATERIAL MUST OVERLAP AT LEAST 6" AND STAPLES INSERTED THROUGH BOTH FABRICS AT A MAXIMUM SPACING OF 40" APART

NOTES:

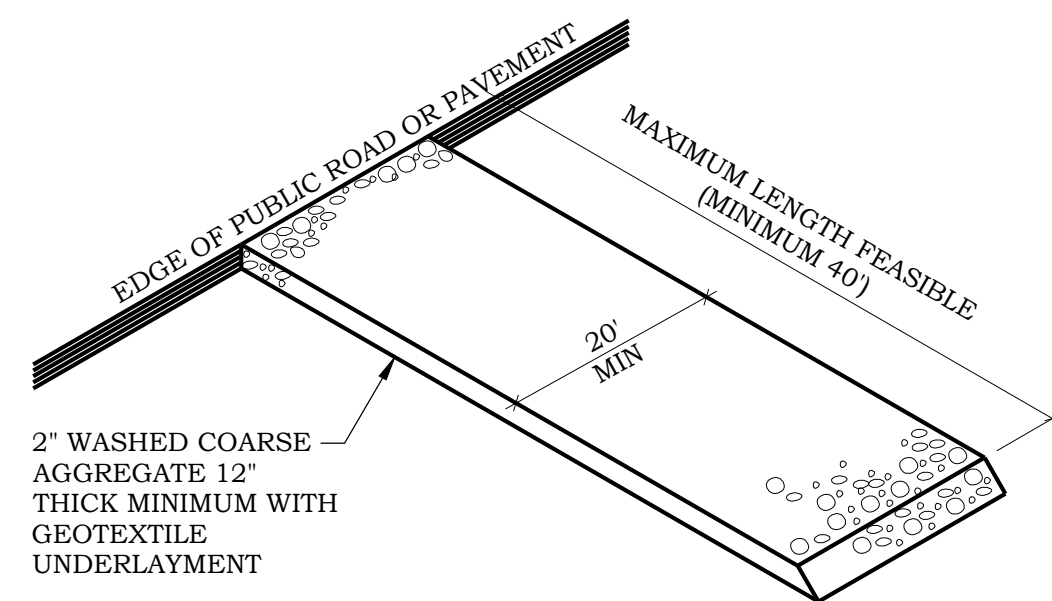
1. EROSION CONTROL BLANKET TO BE CATEGORY 4-COCONUT 2S FOR SLOPES GREATER THAN 5:1 AND SIDES AND BOTTOM OF ALL DRAINAGE SWALES AND PONDING AREAS AND CATEGORY 2-STRAW 2S FOR ALL SLOPES LESS THAN 5:1 PER MNDOT SPEC. SECTION 3885.
2. INSTALL PER MNDOT SPEC. SECTION 2575

2

EROSION CONTROL BLANKET

NO SCALE

C300



3

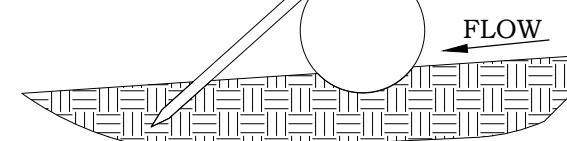
GRAVEL CONSTRUCTION ENTRANCE

NO SCALE

C300

1"X2"X24" WOOD STAKES AT 3' MAX SPACING. STAKES SHALL BE DRIVEN OVER LOG AT A 45° ANGLE WITH TOP OF STAKE POINTING UPSTREAM. PROVIDE 8"-10" OF STAKE EMBEDMENT.

8"-12" DIA LOG WITH ENDS LAPPED 6". FOR INSTALLATION ON BARE SOIL PLACE LOG IN A SMOOTH, ROUNDED TRENCH WITH A DEPTH EQUAL TO ¼ THE LOG DIA.



FIELD INSTALLATION USING MULCH OR COMPOST

1"X2"X24" WOOD STAKES AT 3' MAX SPACING. STAKES SHALL BE DRIVEN TROUGH BACK HALF OF LOG AT A 45° ANGLE WITH TOP OF STAKE POINTING UPSTREAM. PROVIDE 8"-10" OF STAKE EMBEDMENT.

8"-12" DIA LOG WITH ENDS LAPPED 6". FOR INSTALLATION ON BARE SOIL PLACE LOG IN A SMOOTH, ROUNDED TRENCH WITH A DEPTH EQUAL TO ¼ THE LOG DIA.



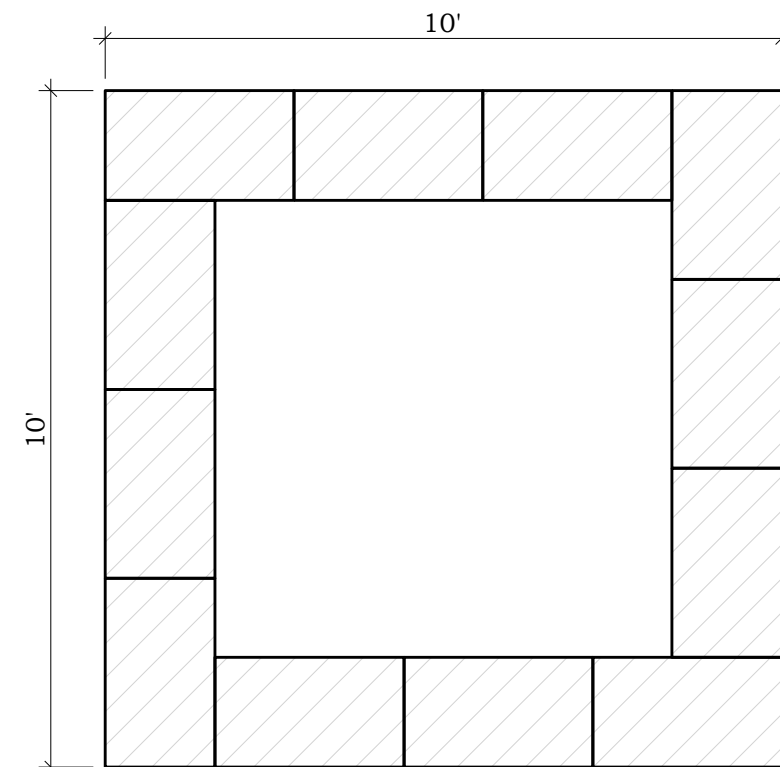
FIELD INSTALLATION USING STRAW OR WOOD FIBER

4

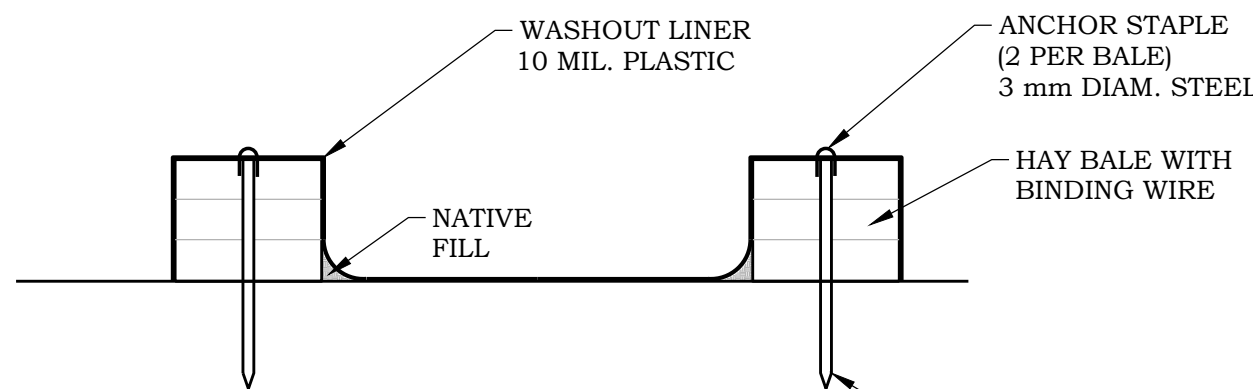
EROSION FILTER LOG

NO SCALE

C300



PLAN VIEW



SECTION VIEW

6

CONCRETE WASHOUT AREA

NO SCALE

C300

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for	Date
Revised Septic	05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

Comm. No. 25-005

Drawn EJ

Checked KG

Date 04/22/2025

City Approval

Drawing Title

STORMWATER
POLLUTION
PREVENTION DETAILS

LEGEND

- EXISTING PROPERTY LINE
--- vl --- EXISTING DELINEATED WETLAND
--- EXISTING WETLAND BUFFER (16.5')
--- EXISTING SEPTIC BUFFER (50')
--- PROPOSED STORM SEWER / DRAIN TILE
--- PROPOSED HEAVY DUTY SILT FENCE
--- PROPOSED TREE FENCING
--- PROPOSED CONSTRUCTION ENTRANCE

ACREAGE SUMMARY	
TOTAL LOT AREA	106,046 SQ. FT. (2.43 ACRES)
EXISTING IMPERVIOUS AREA	1,307 SQ. FT. (0.03 ACRES)
PROPOSED IMPERVIOUS AREA	8,799 SQ. FT. (0.20 ACRES)
DISTURBED AREA	27,060 SQ. FT. (0.62 ACRES)

ESTIMATED BMP QUANTITIES	
SILT FENCE	700 LF
ROCK CONSTRUCTION ENTRANCE	1 EACH
CONCRETE WASHOUT AREA	1 EACH
TREE PROTECTION/SEPTIC FENCING	850 LF
EROSION CONTROL BLANKET	1,800 SY
RIPRAP	5 CY

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL NOT RELY ON THESE QUANTITIES FOR THEIR BID AND CIVIL ENGINEER IS NOT RESPONSIBLE FOR COST ESTIMATES OR ACTUAL CONSTRUCTION COSTS.

EROSION CONTROL NOTES

- BEFORE BEGINNING CONSTRUCTION, INSTALL A TEMPORARY ROCK CONSTRUCTION ENTRANCE AT EACH POINT WHERE VEHICLES EXIT THE CONSTRUCTION SITE. USE 2 INCH OR GREATER DIAMETER ROCK IN A LAYER AT LEAST 12 INCHES THICK ACROSS THE ENTIRE WIDTH OF THE ENTRANCE. EXTEND THE ROCK ENTRANCE AT LEAST 50 FEET INTO THE CONSTRUCTION ZONE USING A GEOTEXTILE FABRIC BENEATH THE AGGREGATE TO PREVENT MIGRATION OF SOIL INTO THE ROCK FROM BELOW.
- REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO PUBLIC AND PRIVATE PAVEMENT AREAS. REMOVAL SHALL BE ON A DAILY BASIS WHEN TRACKING OCCURS AND MAY BE ORDERED BY CITY INSPECTORS AT ANY TIME IF CONDITIONS WARRANT. SWEEPING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION AND DONE IN A MANNER TO PREVENT DUST BEING BLOWN TO ADJACENT PROPERTIES.
- CATCH BASIN INSERTS OR OTHER APPROVED PRODUCTS ARE REQUIRED IN UNDISTURBED AREAS THAT MAY RECEIVE RUNOFF FROM THE PROJECT AREA. HAY BALES OR FILTER FABRIC WRAPPED GRATES ARE NOT ALLOWED FOR INLET PROTECTION.
- LOCATE SOIL OR DIRT STOCKPILES NO LESS THAN 25 FEET FROM ANY PUBLIC OR PRIVATE ROADWAY OR DRAINAGE CHANNEL. TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES MUST BE NO LESS THAN TWO FEET FROM THE DRAINAGE/GUTTER LINE AND SHALL BE COVERED IF LEFT MORE THAN 24 HOURS.
- MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. INSPECT TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ON A DAILY BASIS AND REPLACE DETERIORATED, DAMAGED, OR ROTTED EROSION CONTROL DEVICES IMMEDIATELY.
- DISTURBED SOIL STABILIZATION SHALL USE SEED AND MULCH, EROSION CONTROL MATTING, AND/OR SODDING AND STAKING IN GREEN SPACE AREAS. SEED WITH ANNUAL RYE SEED AT 60 LBS PER ACRE AND WOOD MULCH FIBER AT 45 LBS PER 1,000 SF. AN EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED IS RECOMMENDED TO MINIMIZE EROSION POTENTIAL.
- READY MIXED CONCRETE AND CONCRETE BATCH PLANTS ARE PROHIBITED WITHIN THE PUBLIC RIGHT OF WAY. ALL CONCRETE RELATED PRODUCTION, CLEANING AND MIXING ACTIVITIES SHALL BE DONE IN THE DESIGNATED CONCRETE MIXING/WASHOUT LOCATIONS.
- CHANGES TO EROSION CONTROL PLAN MUST BE APPROVED BY THE EROSION CONTROL INSPECTOR PRIOR TO IMPLEMENTATION. CONTRACTOR TO PROVIDE INSTALLATION AND DETAILS FOR ALL PROPOSED ALTERNATE TYPE DEVICES.
- ALL EROSION CONTROL ELEMENTS ARE TEMPORARY. CONTRACTOR TO INSTALL EROSION CONTROL ELEMENTS PRIOR TO START OF LAND DISTURBING ACTIVITIES, MAINTAIN IN GOOD CONDITION DURING CONSTRUCTION AND REMOVE FROM THE SITE UPON COMPLETION OF FINAL PAVING AND TURF ESTABLISHMENT.

INFILTRATION BASIN TESTING AND OPERATION

- COMMENCE GRADING AND CONSTRUCTION OF FILTRATION BASIN AS NOTED ON THE GRADING PLAN AND DETAILS 1/C500 AND 2/C500.
- AFTER CONSTRUCTION OF FILTRATION BASIN IS COMPLETED, PERFORM (2) DOUBLE-RING INFILTROMETER TESTS TO VERIFY MEDIA HAS BEEN PROPERLY PLACED AND THAT THE AS-CONSTRUCTED FILTRATION RATE IS AT LEAST 0.45 INCHES PER HOUR.

- EXISTING DRIVEWAY 1,307 SQ. FT.
PROPOSED DRIVEWAY 3,985 SQ. FT.
PROPOSED HOUSE 2,578 SQ. FT.
PROPOSED FRONT WALK 78 SQ. FT.
PROPOSED REAR PATIO 502 SQ. FT.
PROPOSED SAUNA 200 SQ. FT.
PROPOSED WALLS 149 SQ. FT.

KEY NOTES

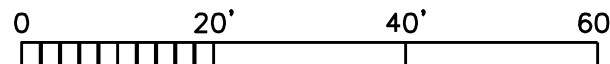
- IF CONSTRUCTION OF THE NEW GARAGE INCLUDES ANY FLOOR DRAINS, THEY MUST BE ROUTED TO A DEDICATED OIL/WATER SEPARATOR PRIOR TO DISCHARGE.
- ROUTE WATER SOFTENER DISCHARGE FROM LOFT MECHANICAL ROOM TO NEW 4" PVC BRINE DISCHARGE PIPING
- WATER SOFTENER BRINE DISCHARGE DRY WELL 15' LONG X 4' WIDE X 3.5' DEEP SEE DETAIL 4/C500

NORTH

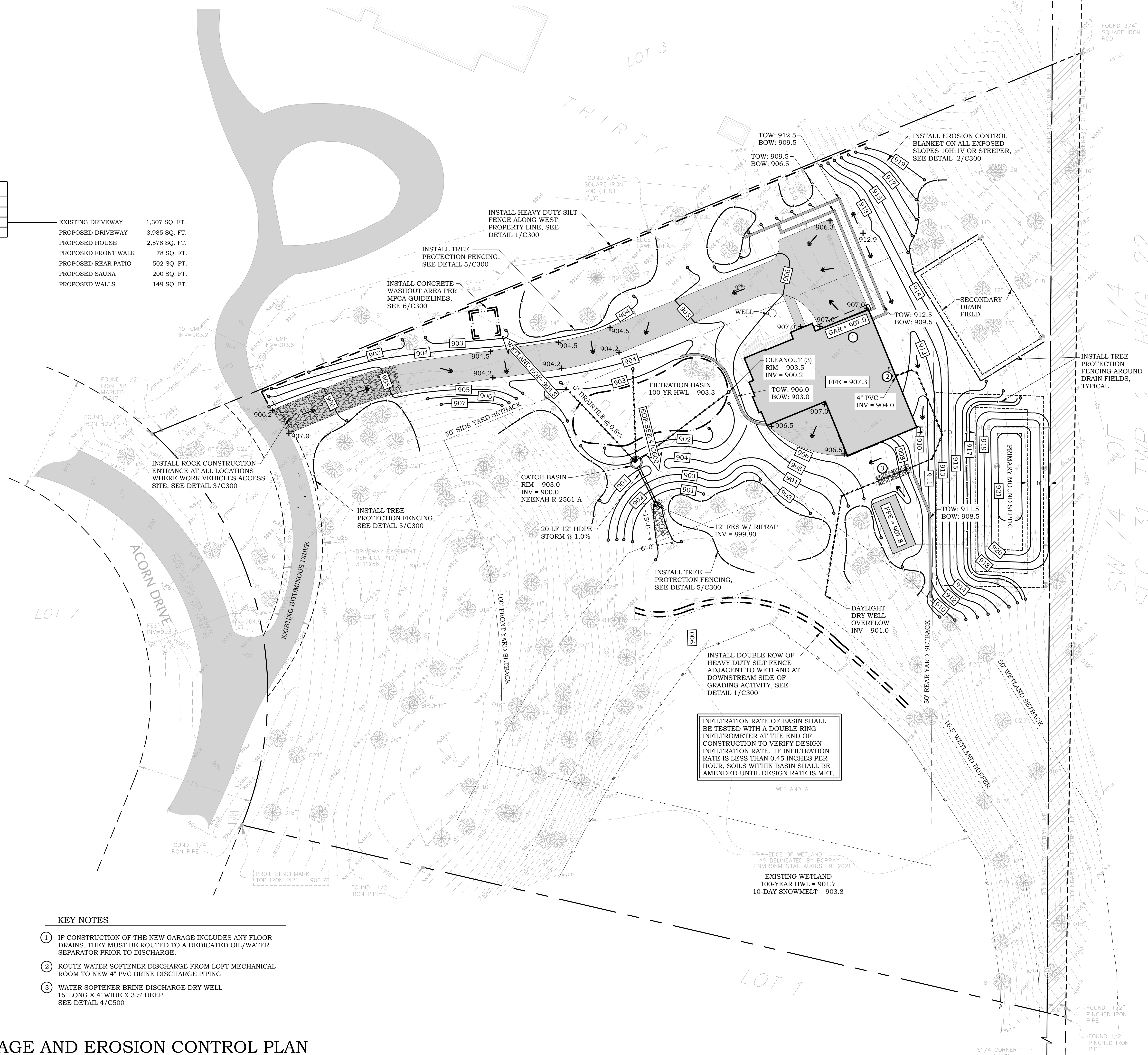


1
C400

GRADING, DRAINAGE AND EROSION CONTROL PLAN



1" = 20' (24" x 36")
1" = 40' (12" x 18")



PIERCE PINI &
ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55434
TEL 763-537-1311

CARLSON NELSON RESIDENCE
2 ACORN DRIVE
SUNFISH LAKE, MINNESOTA 55077

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: Kevin Gardner
Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for	Date
Revised Septic	05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

Comm. No. 25-005

Drawn EJ

Checked KG

Date 04/22/2025

City Approval

Drawing Title

GRADING, DRAINAGE
AND EROSION
CONTROL PLAN

C400

I hereby certify that this plan or drawing 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.

Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 04/22/2025 Reg. No: 45815

Issued for	Date
Revised Septic	05/12/2025

Copyright 2025 Pierce Pini & Associates, Inc.

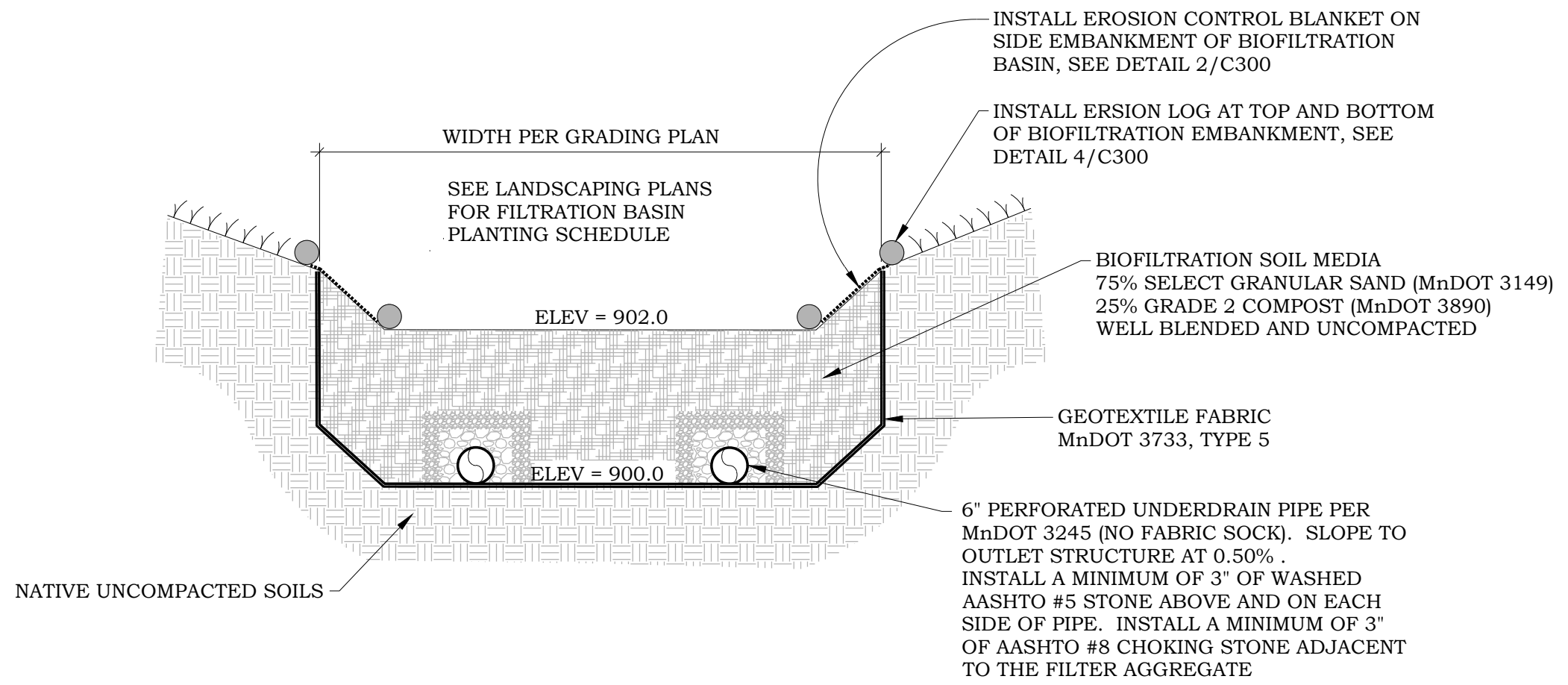
Comm. No.	25-005
Drawn	EJ
Checked	KG
Date	04/22/2025

City Approval

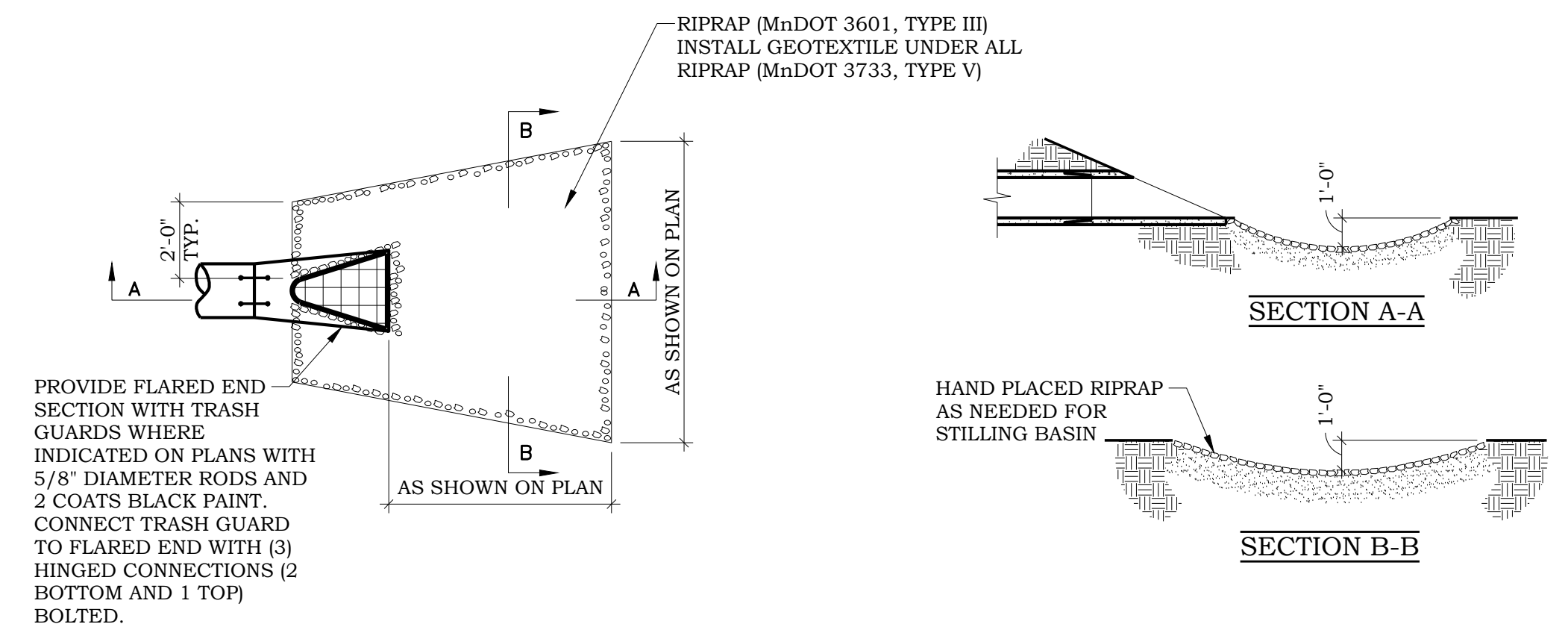
Drawing Title

STORMWATER
MANAGEMENT
DETAILS

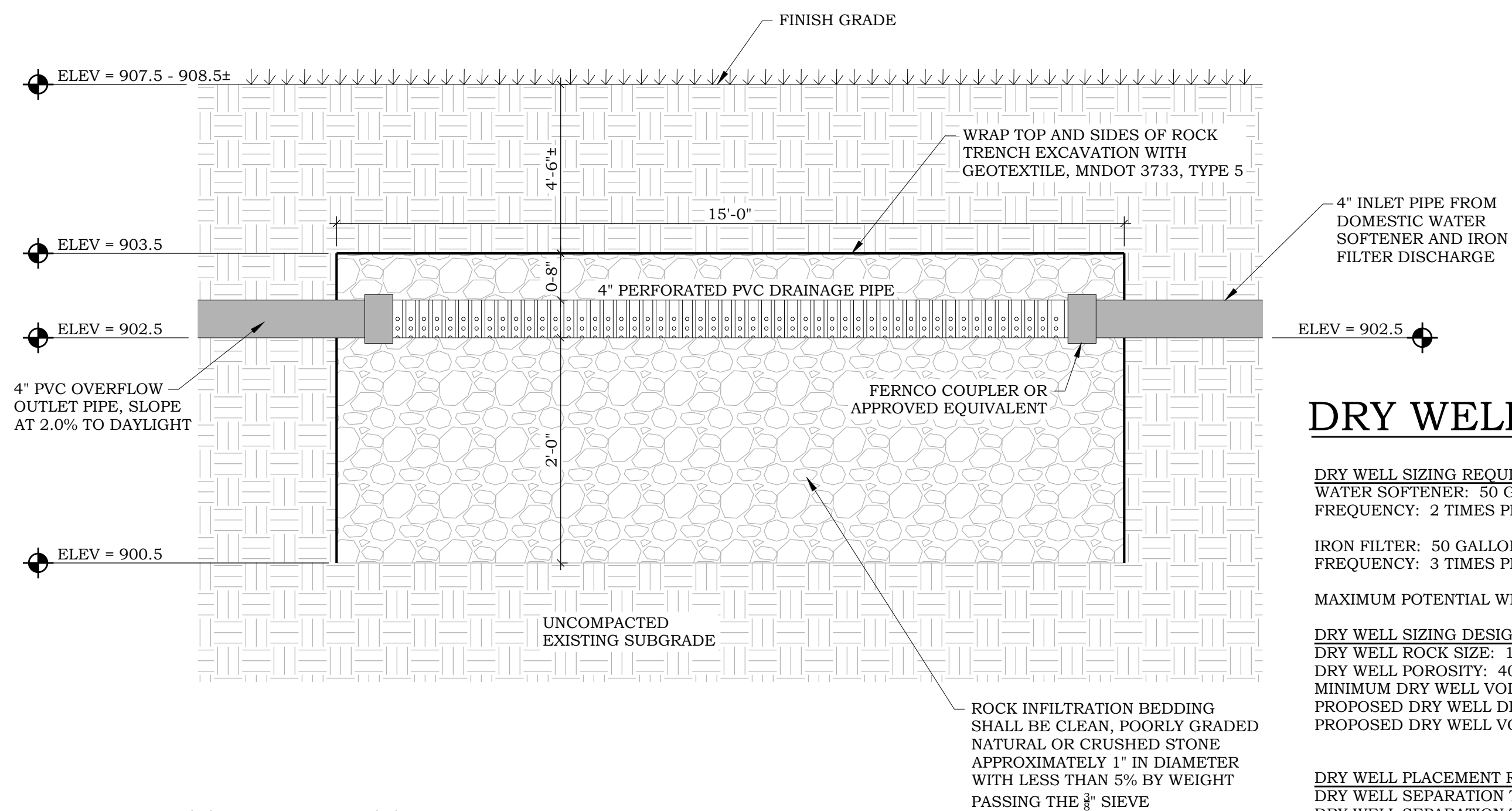
C500



1 FILTRATION BASIN SECTION
C500 NO SCALE



3 FLARED END SECTION WITH RIPRAP
C500 NO SCALE



4 WATER SOFTENER DRY WELL
C500 NO SCALE

DRY WELL DESIGN

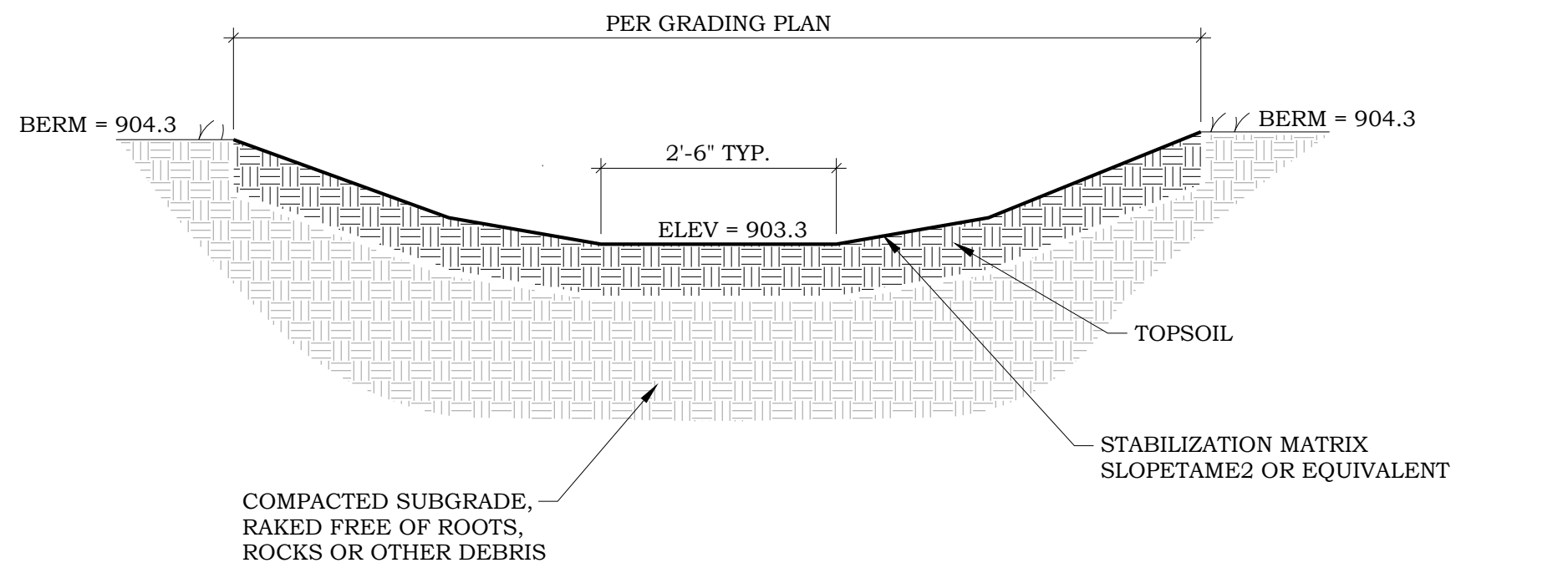
DRY WELL SIZING REQUIREMENTS
WATER SOFTENER: 50 GALLONS PER BACKWASH
FREQUENCY: 2 TIMES PER WEEK

IRON FILTER: 50 GALLONS PER BACKWASH
FREQUENCY: 3 TIMES PER WEEK

MAXIMUM POTENTIAL WEEKLY DISCHARGE: 250 GALLONS (33.4 CU. FT.)

DRY WELL SIZING DESIGN
DRY WELL ROCK SIZE: 1" (APPROXIMATE) - WASHED
DRY WELL POROSITY: 40%
MINIMUM DRY WELL VOLUME: 33.4 CU. FT.
PROPOSED DRY WELL DIMENSIONS: 15' LONG X 4' WIDE X 3.5' DEEP
PROPOSED DRY WELL VOLUME: 48.0 CU. FT. (BELOW OVERFLOW)

DRY WELL PLACEMENT RECOMMENDATIONS
DRY WELL SEPARATION TO WELLS: 100'
DRY WELL SEPARATION TO SEPTIC: 100'
DRY WELL PLACEMENT TO WELL: DOWN GRADIENT



2 FILTRATION BASIN OVERFLOW
C500 NO SCALE

CARLSON/NELSON PROPERTY

SUNFISH LAKE, MINNESOTA

CONTACT:
CHRIS NELSON
5609 ALDRICH AVENUE S.
MINNEAPOLIS, MN 55419
PHONE: 612-254-5122
EMAIL: cjmnp1@yahoo.com

COUNTY/CITY:
DAKOTA COUNTY
CITY OF SUNFISH LAKE

CERTIFICATION:

PROJECT LOCATION:

ACORN DR.
PID#38-76000-00-020

FILE NAME: SURVSP102
PROJECT NO: 51121007

PROPOSED IMPROVEMENTS



Sunfish Lake Tree Survey

Tag #	DBH (inches)	Species	Removal
1	22	White Oak	
2	22	White Oak	
3	6	Elm	
4	28	White Oak	
5	8	Elm	
6	7	Ironwood	
7	12	Cherry	
8	10	Ironwood	
9	12	Ironwood	
10	9	Ironwood	
11	12	Ironwood	
12	10	Ironwood	
13	7	Ironwood	
14	12	Ironwood	
15	9	Ironwood	
16	40	White Oak	
17	14	Ironwood	
18	18	White Oak	
19	22	White Oak	
20	7	Ironwood	
21	7	Boxelder	
22	6	Ironwood	
23	14	Ironwood	
24	8	Ironwood	
25	11	White Oak	
26	6	Apple	
27	20	White Oak	
28	6	Elm	
29	10	Ironwood	
30	7	Boxelder	

31	11	Poplar	
32	34	White Oak	
33	28	White Oak	
34	8	Boxelder	
35	9	Boxelder	
36	6	Boxelder	
37	30	White Oak	
38	10	Ironwood	
39	11	Ironwood	
40	14	Cherry	
41	13	White Oak	
42	15	Cherry	
43	9	White Oak	
44	9	Ironwood	
45	16	Ironwood	
46	14	Cherry	
47	22	White Oak	
48	12	White Oak	
49	7	Cherry	
50	10	Elm	
51	10	Ironwood	
52	14	Cherry	
53	31	White Oak	
54	20	White Oak	
55	25	Elm	
56	28	White Oak	
57	12	Ironwood	
58	26	White Oak	
59	5	Spruce	
60	34	Red Oak	
61	20	White Oak	
62	7	White Oak	
63	9	Boxelder	

64	8	Elm	X
65	13	Red Oak	X
66	17	White Oak	
67	11	Boxelder	
68	12	Cherry	
69	18	Ironwood	
70	36	White Oak	
71	21	White Oak	
72	32	White Oak	
73	20	Cherry	X
74	24	White Oak	
75	20	White Oak	
76	11	Birch	
77	20	Elm	X
78	14	Elm	
79	14	Boxelder	
80	14	White Oak	
81	21	Apple	
82	9	Basswood	
83	24	Cherry	
84	14	Basswood	X
85	28	Ironwood	
86	6	Apple	
87	12	Apple	
88	11	Basswood	X
89	18	Apple	
90	7	Red Oak	
91	26	Hackberry	
92	14	Apple	X
93	11	Apple	X
94	18	Apple	
95	8	Apple	
96	9	Cherry	X

97	11	Linden	
98	18	Boxelder	
99	15	Basswood	
100	16	White Oak	
101	19	Basswood	X
102	24	Boxelder	
103	10	Boxelder	
104	7	White Oak	X
105	12	Ash	
106	12	Elm	X
107	20	Apple	
108	20	White Oak	
109	16	White Oak	
110	23	Boxelder	
111	18	Hackberry	
112	30	Cherry	
113	30	White Oak	
114	26	White Oak	
115	14	Red Oak	
116	18	Boxelder	X
117	14	Butternut	
118	11	Boxelder	
119	28	Cherry	
120	24	White Oak	
121	18	White Oak	
122	28	White Oak	
123	24	White Oak	
124	18	White Oak	
125	18	White Oak	
126	18	Cherry	
127	20	White Oak	
128	20	White Oak	X
129	30	White Oak	X

130	10	Butternut	
133	8	Ironwood	
134	20	White Oak	X
135	30	Boxelder	
138	8	White Oak	
139	18	White Oak	
140	10	White Oak	
141	25	Cherry	X
143	10	White Oak	
144	25	White Oak	
147	20	Maple	
149	10	Boxelder	
153	22	White Oak	
154	22	White Oak	X
155	18	White Oak	X
158	98	Basswood clump	X
160	12	Apple	X
167	22	White Oak	X

CARLSON-NELSON RESIDENCE

FOR BIDDING PURPOSES ONLY
NOT FOR CONSTRUCTION

THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS

HARTMAN
HOMES

715.377.1555

744 Ryan Drive, Suite 102, Hudson, WI 54016

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. The design and all information included is issued for construction by Hartman Homes only.

MATERIAL SYMBOLS:

	EARTH/COMPACT FILL		BRASS		STEEL		ALUMINUM
	POROUS FILL GRAVEL LARGE SCALE		BLOCKING		ROUGH FRAMING		FOAM INSULATION
	CONCRETE, STUCCO		FINISH WOOD		PLYWOOD, LVL		OSB, PARTICLE BD
	FACE BRICK		BATT/LOOSE FILL INSUL		GLASS		PLYWOOD-SMALL SCALE
	CONCRETE BLOCK		CERAMIC TILE		RIGID INSULATION		GLASS BLOCK
	SAND/MORTAR/ PLASTER/CUT STONE		WOOD STUD-SMALL SCALE		GYPSUM WALL BOARD LARGE SCALE		WOOD STUD LARGE SCALE

TAG SYMBOLS:

	A1 INTERIOR AND EXTERIOR ELEVATIONS		DOOR TAG		KEY NOTES
	SIM BUILDING AND WALL SECTIONS		WINDOW TAG		REVISION TAG
			ROOM TAG		WALL TAG

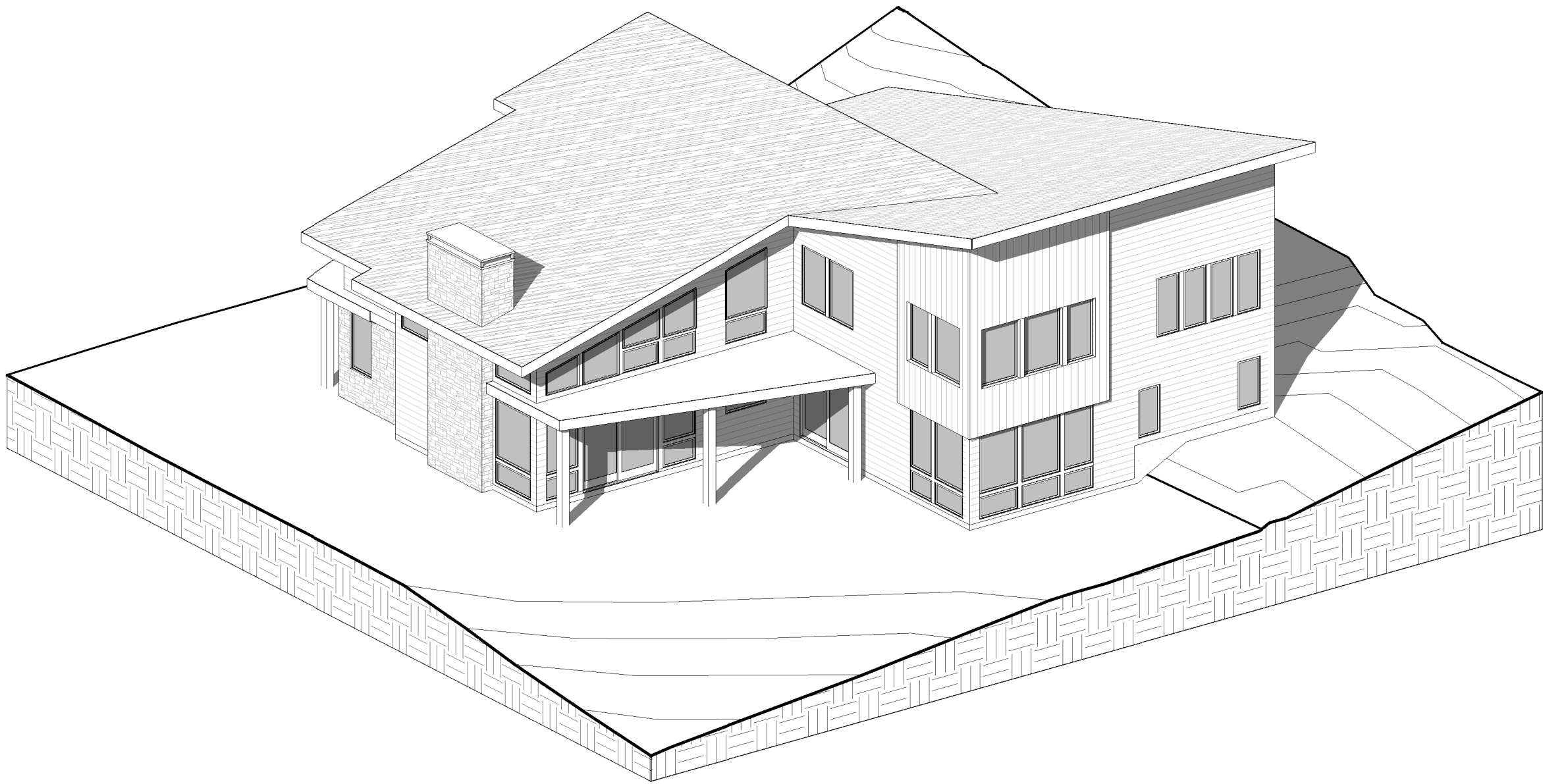
PROJECT SCOPE:

SLAB-ON-GRADE (PARTIAL BASEMENT) W/UPPER LEVEL

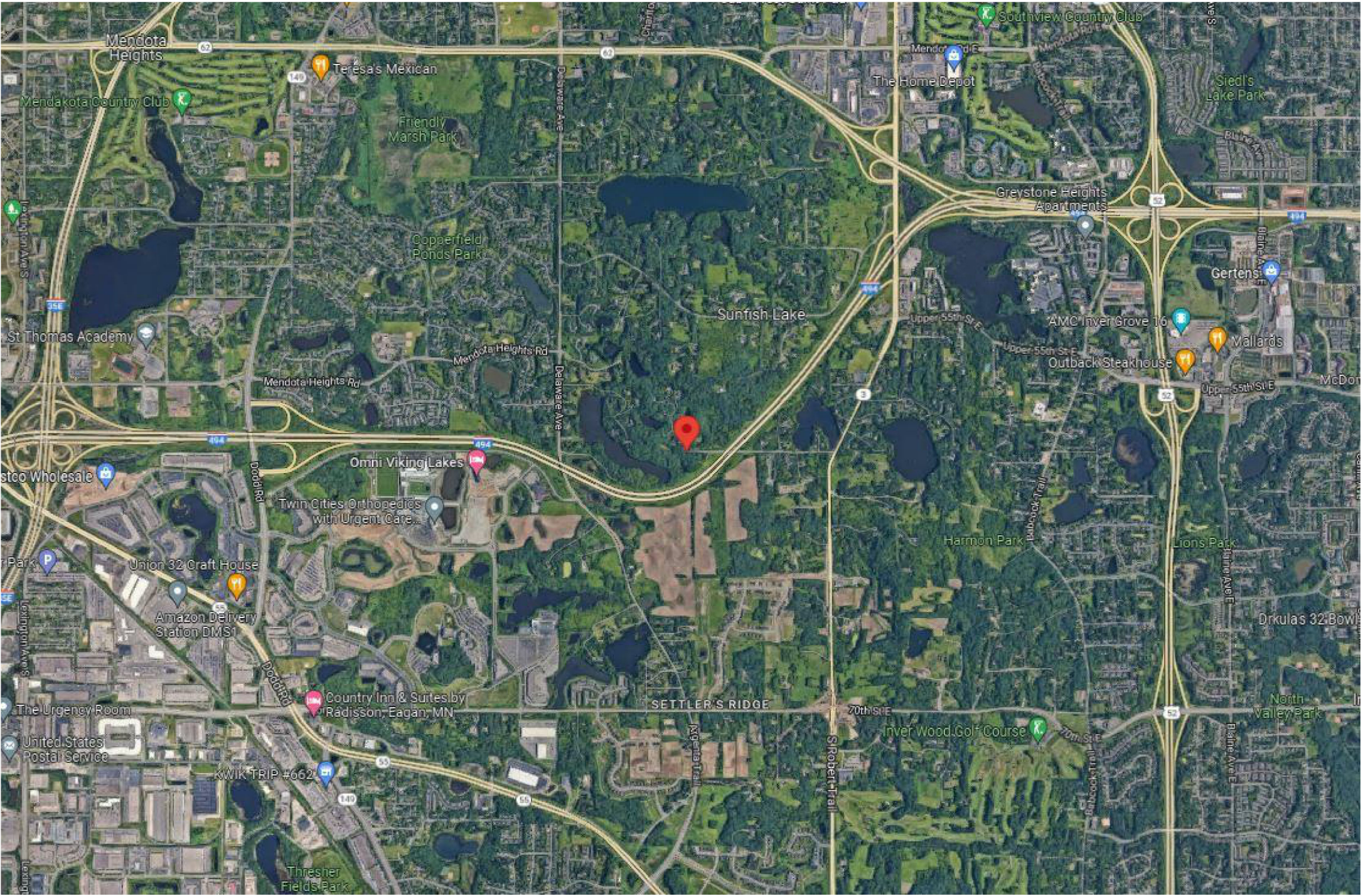
MAIN LEVEL LIVING
OVERSIZED 2 CAR GARAGE
ATTIC STORAGE/MECH ABOVE GARAGE

1 BEDROOM ON MAIN LEVEL
3 BEDROOMS ON UPPER LEVEL
3 BATHROOMS TOTAL

3D VIEW:



PROJECT LOCATION: 2 ACORN DR, SUNFISH LAKE, MN 55077



DRAWING INDEX:

SHEET #	SHEET NAME
01 - GENERAL T	TITLE
02 - ARCHITECTURE	
A1.1	MAIN LEVEL PLAN
A1.2	UPPER LEVEL PLAN
A1.3	ROOF PLAN
A2.1	EXTERIOR ELEVATIONS
A2.2	EXTERIOR ELEVATIONS
A3.1	BUILDING SECTION
A4.1	SCHEDULES
A4.2	SCHEDULES
A5.1	INTERIOR ELEVATIONS
A5.2	INTERIOR ELEVATIONS

GENERAL NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS.
- CONTRACTOR TO VERIFY ALL FINISHES, MATERIALS, CABINETRY, AND EQUIPMENT WITH OWNER.
- NOTIFY DESIGNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- ALL WORK TO CONFORM TO STATE AND LOCAL CODES.

Project Square Footage	
MAIN: 1,827 SF	
2ND: 1,204 SF	
TOTAL: 3,021 SF	
GARAGE: 648 SF	
3-SEASON: 181 SF	

No.	Description	Date
1	Issued for Bid	6/10/2022
2	Re-issued for Bid	11/21/2024

TITLE

Project Number:
Date: 11/21/2024
Drawn By: TKK

T

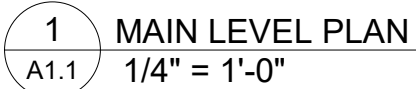
PROVIDE ENGINEERED STUDS AT SHOWER WALLS AND ALL CABINET LOCATION WITH COUNTERS	VERIFY POINT LOADS FROM TRUSSES WITH TRUSS LAYOUT PRIOR TO POURING FOOTINGS
WINDOWS TO BE ANDERSON 400 SERIES	ALL MICRO LAM BEAMS AND GIRDER TRUSS SIZES AND LOCATIONS ARE TO STRUCTURALLY ENGINEERED & VERIFIED PRIOR TO CONSTRUCTION
ALL R.O.'S TO BE VERIFIED PRIOR TO CONSTRUCTION	SAFETY GLAZING REQ'D FOR ALL GLASS WITHIN 18" OF FLOOR AND GREATER THAN 9 SQ FT IN AREA
9' - 1 1/8" CEILING HEIGHT MAIN LEVEL - VARIES - SEE SECTION	SAFETY GLAZING REQ'D FOR ALL GLASS WITHIN 24" ARC OF DOORS
VAULT AT FOYER, GREAT ROOM, DINING & KITCHEN - SEE SECTION	VAPOR RETARDER REQ'D UNDER ALL CONC. SLABS IN HABITABLE AREAS
8' - 0" HEADER HEIGHT - VARIES - SEE SECTION	SEALED, CONTINUOUS AIR AND VAPOR BARRIER TO BE INSTALLED ON WARM SIDE OF EXTERIOR WALLS WITH ALL JOINTS, OPENINGS AND PENETRATIONS SEALED IN PERMANENT MANNER
IN-FLOOR HEAT ON MAIN FLOOR (NO IN FLOOR HEAT IN MECH OR GARAGE)	WINDOWS TO BE CAULKED AND TAPED, FLASHING INSTALLED TO MANUF. SPECS
POLISHED CONCRETE FLOORS ON MAIN (NO POLISHED CONCRETE IN MECH OR GARAGE)	SILL SEALER TO BE INSTALLED UNDER ALL SILL PLATES
SOIL BEARING REQ'D AT ALL BEAMS & HEADERS	
ALL BEAMS AND HEADERS TO BE CALLED OUT BY SUPPLIER	

THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS

www.hartmanhomesinc.com

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. This design and all information included is issued for construction by Hartman Homes only

WINDOW SCHEDULE								
Type Mark	Count	Width	Height	Rough Width	Rough Height	Head Height	Description	Comments
MAIN FLOOR								
A31	2	2'- 11 15/16"	2'- 0 1/8"	3'- 0 7/16"	2'- 0 5/8"	2'- 3 3/16"	Vinyl-clad wood awning window	
A41	3	4'- 0"	2'- 0 1/8"	4'- 0 1/2"	2'- 0 5/8"	2'- 3 3/16"	Vinyl-clad wood awning window	
A51	3	4'- 11 7/8"	2'- 0 1/8"	5'- 0 3/8"	2'- 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A61	2	5'- 11 7/8"	2'- 0 1/8"	6'- 0 3/8"	2'- 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A351	5	3'- 4 13/16"	2'- 0 1/8"	3'- 5 5/16"	2'- 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	1	4'- 4 13/16"	2'- 0 1/8"	4'- 5 5/16"	2'- 0 5/8"	11'- 11 1/2"	Vinyl-clad wood awning window	SEE ELEVATIONS
ASW3921	1	3'- 9 1/16"	2'- 0 1/8"	3'- 9 9/16"	2'- 0 5/8"	11'- 11 1/2"	Vinyl-clad wood awning window	
ASW6551	1	5'- 11 7/8"	4'- 4 13/16"	6'- 0 3/8"	5'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
CW145	2	2'- 4 3/8"	4'- 4 13/16"	2'- 4 7/8"	4'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement window	
CXW155	3	2'- 11 7/8"	5'- 4 13/16"	3'- 0 3/8"	5'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement window	
P3555	3	3'- 4 13/16"	5'- 4 13/16"	3'- 5 5/16"	5'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4'- 0"	4'- 4 13/16"	4'- 0 1/2"	4'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	3	4'- 0"	5'- 4 13/16"	4'- 0 1/2"	5'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4545	1	4'- 4 13/16"	4'- 4 13/16"	4'- 5 5/16"	4'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
P9055	1	4'- 11 7/8"	5'- 4 13/16"	5'- 0 3/8"	5'- 5 5/16"	7'- 11 1/2"	Vinyl-clad wood casement/awning picture window	
T1	1	5'- 11 7/8"	4'- 2 1/2"	6'- 0 3/8"	4'- 3"	16'- 5 1/2"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T2	1	3'- 4 13/16"	5'- 2 1/16"	3'- 5 5/16"	5'- 2 9/16"	17'- 5 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T3	1	3'- 4 13/16"	2'- 10 5/16"	3'- 5 5/16"	2'- 10 13/16"	12'- 9 11/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T4	1	3'- 0"	3'- 10 15/16"	3'- 9 1/2"	3'- 11 7/16"	13'- 10 5/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T5	1	3'- 0"	2'- 15 15/16"	3'- 9 1/2"	2'- 8 7/16"	14'- 10 15/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T6	1	3'- 4 13/16"	3'- 8 3/16"	3'- 5 5/16"	2'- 8 11/16"	15'- 11 3/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T7	1	4'- 4 13/16"	5'- 6 1/16"	4'- 5 5/16"	5'- 6 9/16"	17'- 9 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
UPPER LEVEL PLAN								
A41	3	4'- 0"	2'- 0 1/8"	4'- 0 1/2"	2'- 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	2	4'- 4 13/16"	2'- 0 1/8"	4'- 5 5/16"	2'- 0 5/8"	6'- 10 1/2"	Vinyl-clad wood awning window	
CW155	4	2'- 4 3/8"	5'- 4 13/16"	2'- 4 7/8"	5'- 5 5/16"	6'- 10 1/2"	Vinyl-clad wood casement window	
CXW155	2	2'- 11 7/8"	5'- 4 13/16"	3'- 0 3/8"	5'- 5 5/16"	6'- 10 1/2"	Vinyl-clad wood casement window	
P3555	2	3'- 4 13/16"	5'- 4 13/16"	3'- 5 5/16"	5'- 5 5/16"	6'- 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4'- 0"	4'- 4 13/16"	4'- 0 1/2"	4'- 5 5/16"	6'- 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	4	4'- 0"	5'- 4 13/16"	4'- 0 1/2"	5'- 5 5/16"	6'- 10 1/2"	Vinyl-clad wood casement/awning picture window	
Grand total	57							



A1.1

UPPER LEVEL PLAN NOTES:

PROVIDE ENGINEERED STUDS AT SHOWER WALLS AND ALL CABINET LOCATION WITH COUNTERS

WINDOWS TO BE ANDERSON 400 SERIES

ALL R.O.'S TO BE VERIFIED PRIOR TO CONSTRUCTION

8' - 1 1/8" CEILING HEIGHT UPPER

6' - 11" HEADER HEIGHT

SOIL BEARING REQ'D AT ALL BEAMS & HEADERS

ALL BEAMS AND HEADERS TO BE CALLED OUT BY SUPPLIER

VERIFY POINT LOADS FROM TRUSSES WITH TRUSS LAYOUT PRIOR TO POURING FOOTINGS

ALL MICRO LAM BEAMS AND GIRDER TRUSS SIZES AND LOCATIONS ARE TO STRUCTURALLY ENGINEERED & VERIFIED PRIOR TO CONSTRUCTION

SAFETY GLAZING REQ'D FOR ALL GLASS WITHIN 18" OF FLOOR AND GREATER THAN 9 SQ FT IN AREA

SAFETY GLAZING REQ'D FOR ALL GLASS WITHIN 24" ARC OF DOORS

VAPOR RETARDER REQ'D UNDER ALL CONC. SLABS IN HABITABLE AREAS

SEALED, CONTINUOUS AIR AND VAPOR BARRIER TO BE INSTALLED ON WARM SIDE OF EXTERIOR WALLS WITH ALL JOINTS, OPENINGS AND PENETRATIONS SEALED IN PERMANENT MANNER

WINDOWS TO BE CAULKED AND TAPED, FLASHING INSTALLED TO MANUF. SPECS

SILL SEALER TO BE INSTALLED UNDER ALL SILL PLATES

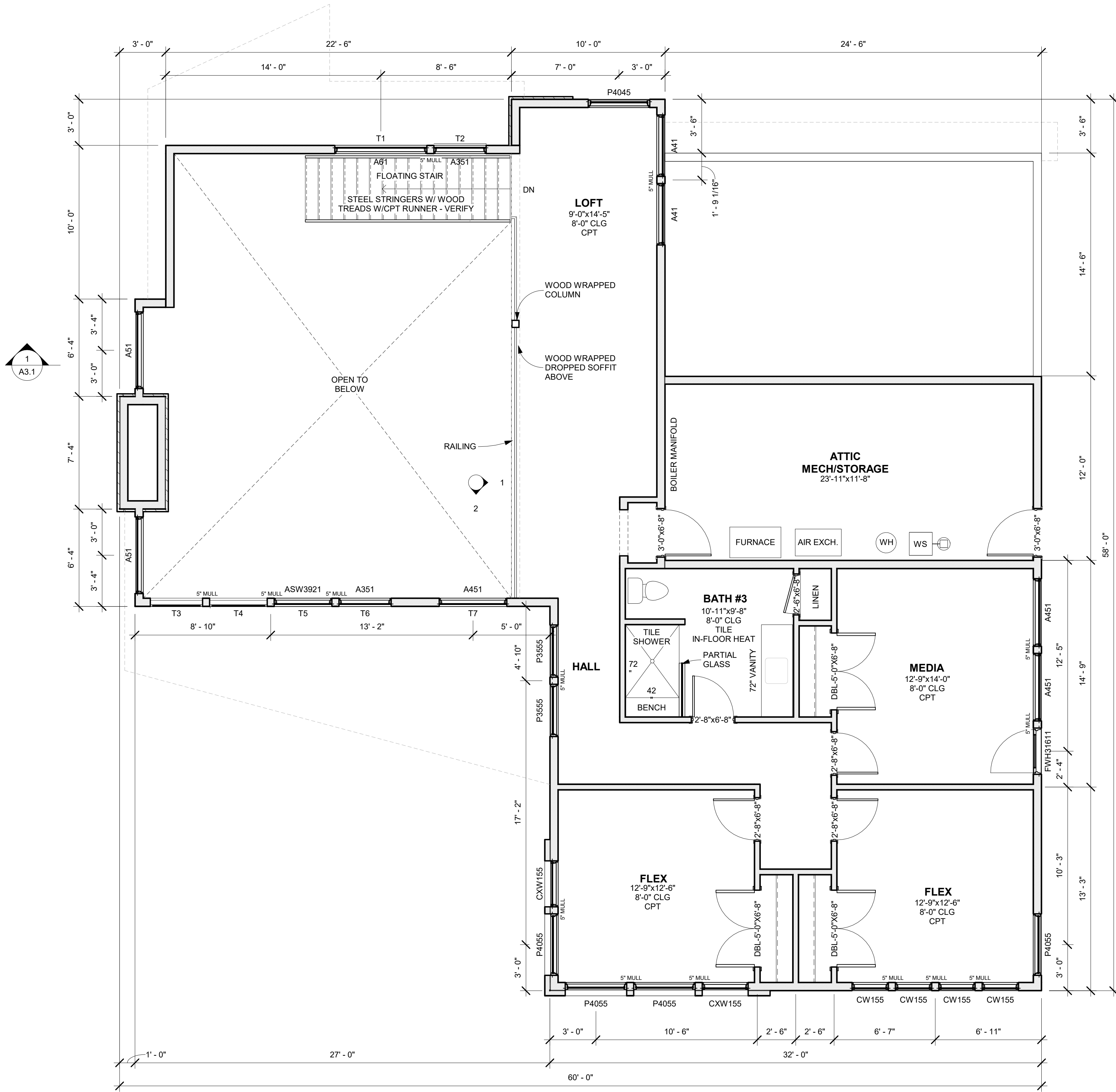
DOOR SCHEDULE							
Type Mark	Count	Width	Height	Rough Width	Rough Height	Description	Comments
MAIN FLOOR							
2'-6"x6'-8"	2	2' - 6"	6' - 8"	2' - 8"	6' - 11"	INSWING	
2'-8"x6'-8"	4	2' - 8"	6' - 8"	2' - 10"	6' - 11"	INSWING	
3'-0"x6'-8"	3	3' - 0"	6' - 8"	3' - 2"	6' - 11"	INSWING	
3'-0"x8'-0"	1	3' - 0"	8' - 0"	3' - 2"	8' - 11"	INSWING EXTERIOR	
DBL-4'-0"x6'-8"	1	4' - 0"	6' - 8"	4' - 2"	6' - 11"	DOUBLE INSWING	
DBL-4'-0"x8'-0"	1	4' - 0"	8' - 0"	4' - 2"	8' - 3"	DOUBLE INSWING	
FWG8080	2	7' - 11 1/2"	7' - 11 1/2"	8' - 0"	8' - 0"	Vinyl-clad wood Gliding Patio Door	
OH-18'-0"x8'-0"	1	18' - 0"	8' - 0"	18' - 2"	8' - 1"	OVERHEAD	
PKT-2'-6"x6'-8"	1	2' - 6"	6' - 8"	2' - 7"	6' - 11 1/2"	POCKET	
PKT-2'-8"x6'-8"	3	2' - 8"	6' - 8"	2' - 9"	6' - 11 1/2"	POCKET	
UPPER LEVEL PLAN							
2'-6"x6'-8"	1	2' - 6"	6' - 8"	2' - 8"	6' - 11"	INSWING	
2'-8"x6'-8"	4	2' - 8"	6' - 8"	2' - 10"	6' - 11"	INSWING	
3'-0"x6'-8"	2	3' - 0"	6' - 8"	3' - 2"	<varies>	<varies>	
DBL-5'-0"x6'-8"	3	5' - 0"	6' - 8"	5' - 2"	6' - 11"	DOUBLE INSWING	
FWH31611	1	3' - 0 1/8"	6' - 10 3/8"	3' - 0 5/8"	6' - 10 7/8"	Vinyl-clad wood single inswing door	
Grand total: 30							

WINDOW SCHEDULE								
Type Mark	Count	Width	Height	Rough Width	Rough Height	Head Height	Description	Comments
MAIN FLOOR								
A31	2	2' - 11 15/16"	2' - 0 1/8"	3' - 0 7/16"	2' - 0 5/8"	2' - 3 3/16"	Vinyl-clad wood awning window	
A41	3	4' - 0"	2' - 0 1/8"	4' - 0 1/2"	2' - 0 5/8"	2' - 3 3/16"	Vinyl-clad wood awning window	
A51	3	4' - 11 7/8"	2' - 0 1/8"	5' - 0 3/8"	2' - 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A61	2	5' - 11 7/8"	2' - 0 1/8"	6' - 0 3/8"	2' - 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A351	5	3' - 4 13/16"	2' - 0 1/8"	3' - 5 5/16"	2' - 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	1	4' - 4 13/16"	2' - 0 1/8"	4' - 5 5/16"	2' - 0 5/8"	11' - 11 1/2"	Vinyl-clad wood awning window	SEE ELEVATIONS
ASW3921	1	3' - 9 1/16"	2' - 0 1/8"	3' - 9 9/16"	2' - 0 5/8"	11' - 11 1/2"	Vinyl-clad wood awning window	
ASW6055	1	5' - 11 7/8"	5' - 4 13/16"	6' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
CW145	2	2' - 4 3/8"	4' - 4 13/16"	2' - 4 7/8"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement window	
CXW155	3	2' - 11 7/8"	5' - 4 13/16"	3' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement window	
P3555	3	3' - 4 13/16"	5' - 4 13/16"	3' - 5 5/16"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4' - 0"	4' - 4 13/16"	4' - 0 1/2"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	3	4' - 0"	5' - 4 13/16"	4' - 0 1/2"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4545	1	4' - 4 13/16"	4' - 4 13/16"	4' - 5 5/16"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P5055	1	4' - 11 7/8"	5' - 4 13/16"	5' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
T1	1	5' - 11 7/8"	4' - 2 1/2"	6' - 0 3/8"	4' - 3"	16' - 5 1/2"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T2	1	3' - 4 13/16"	5' - 2 1/16"	3' - 5 5/16"	5' - 2 9/16"	17' - 5 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T3	1	3' - 4 13/16"	2' - 10 5/16"	3' - 5 5/16"	2' - 10 13/16"	12' - 9 11/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T4	1	3' - 9"	3' - 10 15/16"	3' - 9 1/2"	3' - 11 7/16"	13' - 10 5/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T5	1	3' - 9"	2' - 7 15/16"	3' - 9 1/2"	2' - 8 7/16"	14' - 10 15/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T6	1	3' - 4 13/16"	3' - 8 3/16"	3' - 5 5/16"	3' - 8 11/16"	15' - 11 3/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T7	1	4' - 4 13/16"	5' - 6 1/16"	4' - 5 5/16"	5' - 6 9/16"	17' - 9 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
UPPER LEVEL PLAN								
A41	3	4' - 0"	2' - 0 1/8"	4' - 0 1/2"	2' - 0 5/8"	<varies>	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	2	4' - 4 13/16"	2' - 0 1/8"	4' - 5 5/16"	2' - 0 5/8"	6' - 10 1/2"	Vinyl-clad wood awning window	
CW155	4	2' - 4 3/8"	5' - 4 13/16"	2' - 4 7/8"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement window	
CXW155	2	2' - 11 7/8"	5' - 4 13/16"	3' - 0 3/8"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement window	
P3555	2	3' - 4 13/16"	5' - 4 13/16"	3' - 5 5/16"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4' - 0"	4' - 4 13/16"	4' - 0 1/2"	4' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	4	4' - 0"	5' - 4 13/16"	4' - 0 1/2"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
Grand total 57								

FOR BIDDING PURPOSES ONLY

NOT FOR CONSTRUCTION

THESE PLANS ARE PREPARED TO AID IN BID PURPOSES ONLY. ALL INFORMATION AND DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO CHANGE PRIOR TO FINAL CONSTRUCTION DOCUMENTS



1 UPPER LEVEL PLAN
1/4" = 1'-0"

HARTMAN HOMES

715.377.1555

744 Ryan Drive, Suite 102, Hudson, WI 54016

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. This design and all information included is issued for construction by Hartman Homes only.

Project Square Footage		1,827 SF
MAIN:	1,204 SF	
2ND:		
TOTAL:	3,021 SF	
GARAGE:	648 SF	
3-SEASON:	181 SF	

Revision Record		Date
No.	Description	
1	Issued for Bid	6/10/2022
2	Re-issued for Bid	11/21/2024

UPPER LEVEL PLAN

Project Number:

Date: 11/21/2024

Drawn By: TKK

A1.2

THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS

HARTMAN HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016 715.377.1555

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR,
SUNFISH LAKE, MN 55077

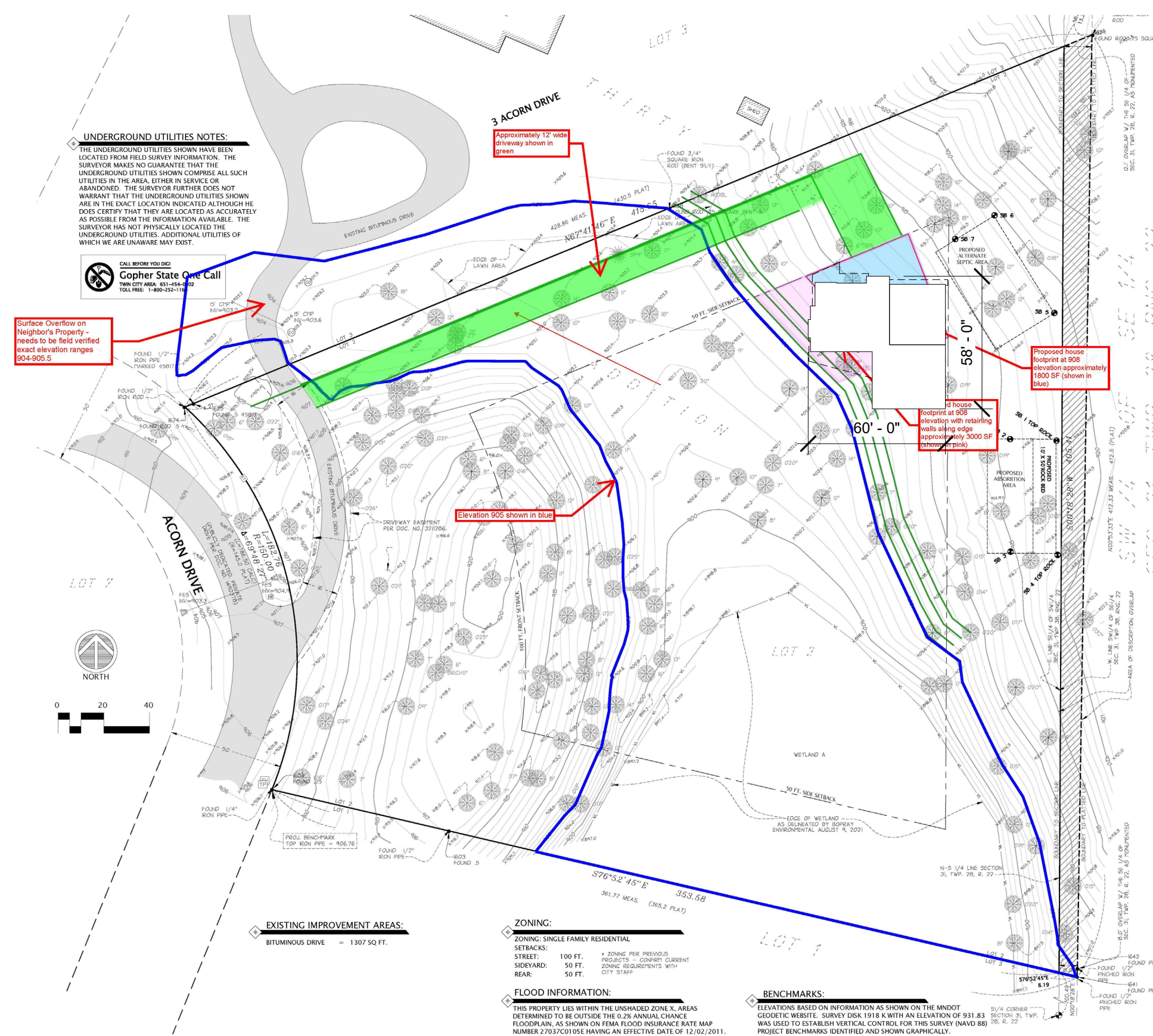
These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. This design and all information included is issued for construction by Hartman Homes only

Project Square Footage	
MAIN:	1,827 SF
2ND:	1,204 SF
TOTAL:	3,021 SF
GARAGE:	648 SF
3-SEASON:	181 SF

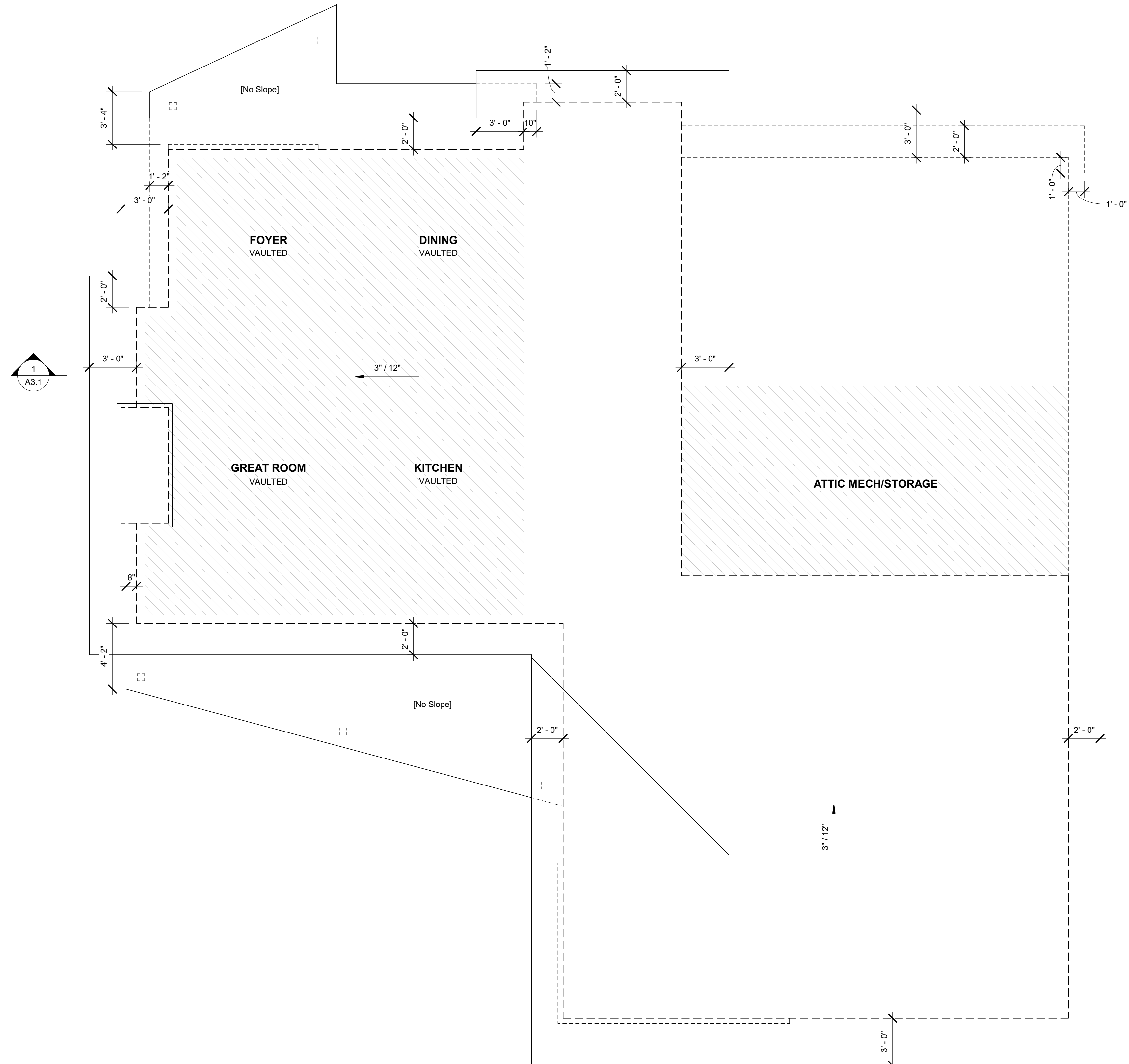
[illegible]

Project Number:	
Date:	11/21/2024
Drawn By:	TKK

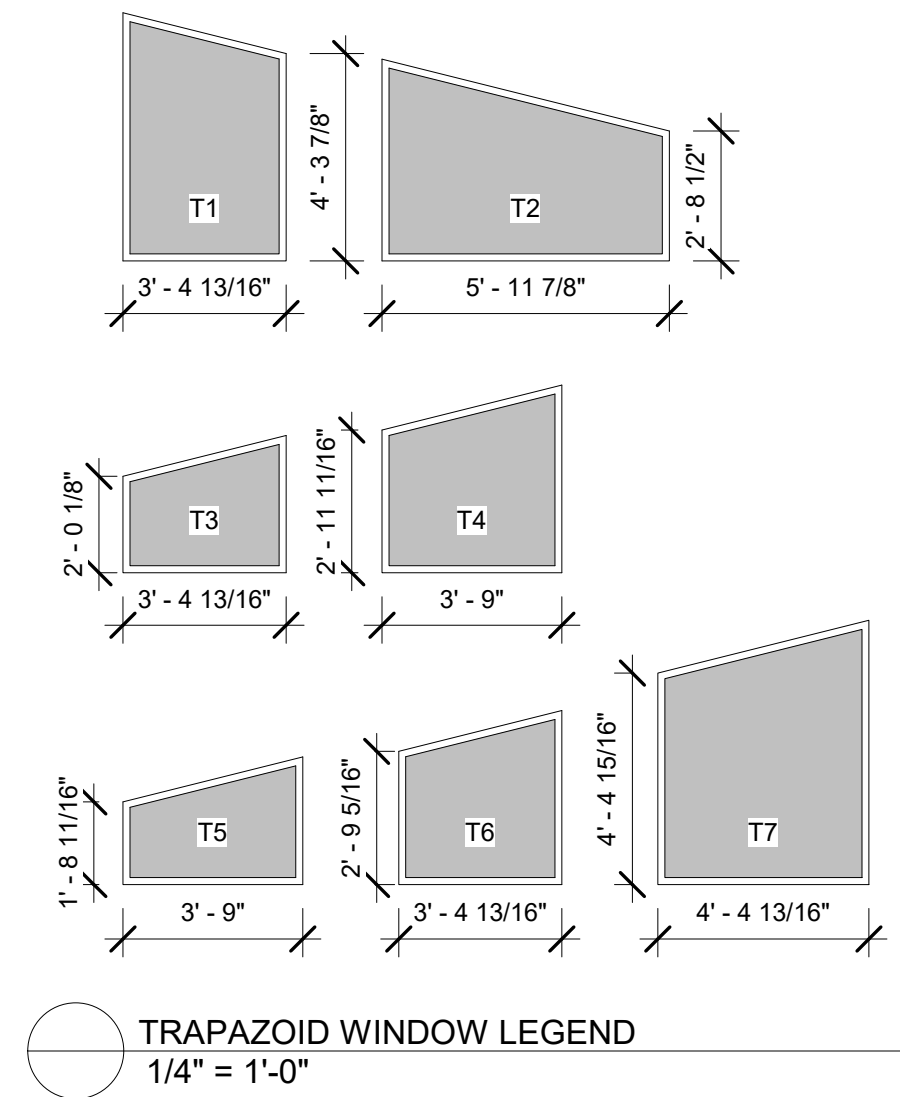
A1.3



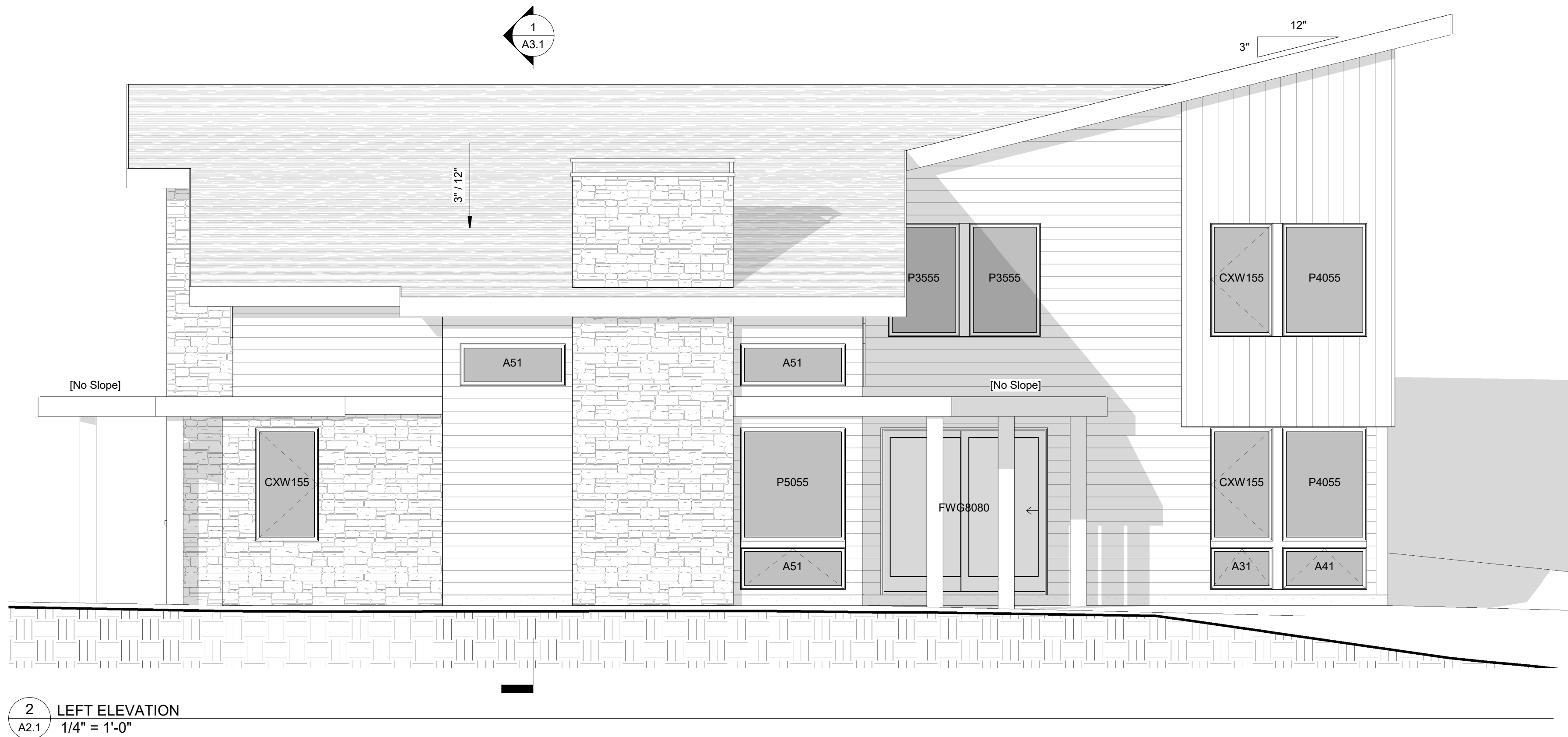
2 SITE PLAN OPTION
A1.3 1" = 50'-0"



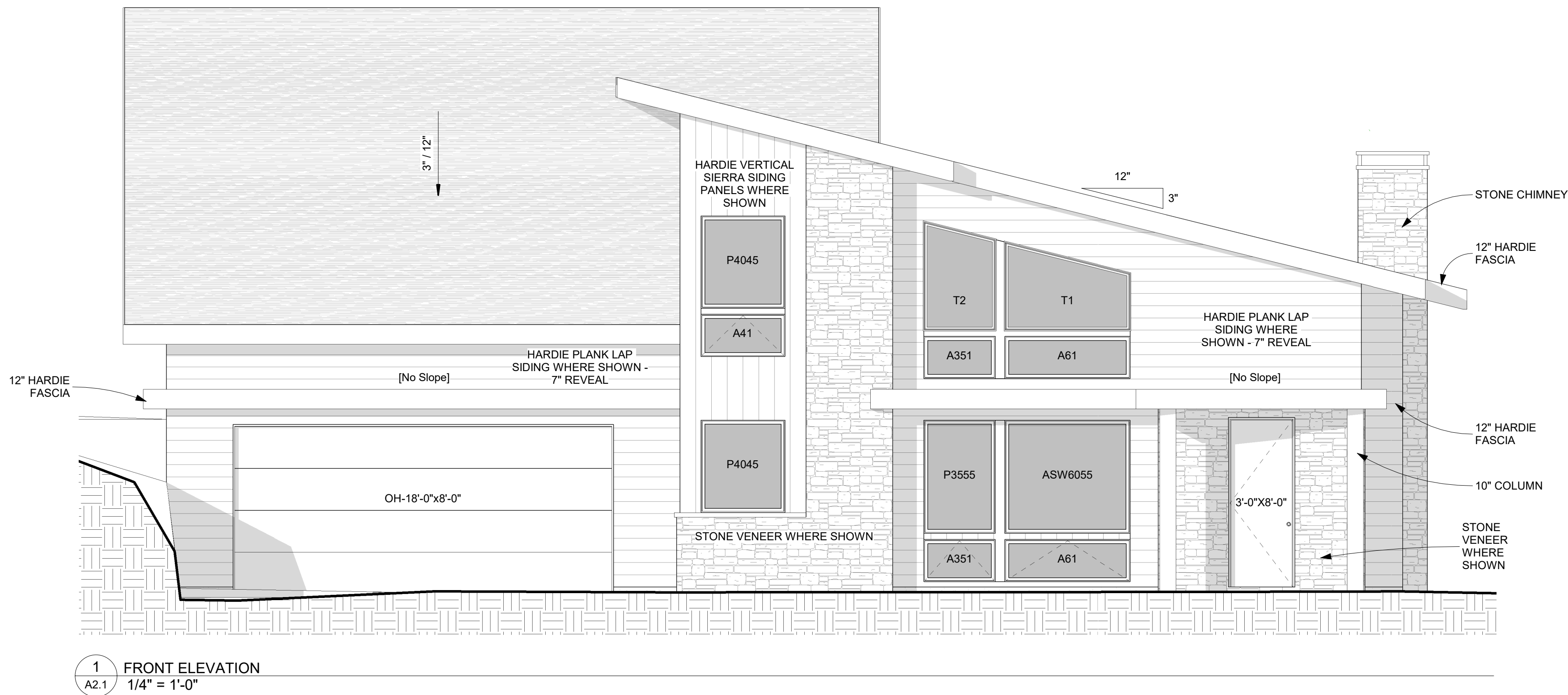
1 ROOF PLAN
A1.3 1/4" = 1'-0"



TRAPAZOID WINDOW LEGEND
1/4" = 1'-0"



2 LEFT ELEVATION
A2.1 1/4" = 1'-0"



1 FRONT ELEVATION
A2.1 1/4" = 1'-0"

FOR BIDDING PURPOSES ONLY NOT FOR CONSTRUCTION

THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS

HARTMAN
HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016
715.377.1555
www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction
or other use of these plans is strictly prohibited. This design and all information
included is issued for construction by Hartman Homes only

Project Square Footage	
MAIN:	1,827 SF
2ND:	1,204 SF
TOTAL:	3,021 SF
GARAGE:	648 SF
3-SEASON:	181 SF

No.	Description	Date
1	Issued for Bid	6/10/2022
2	Re-issued for Bid	11/21/2024

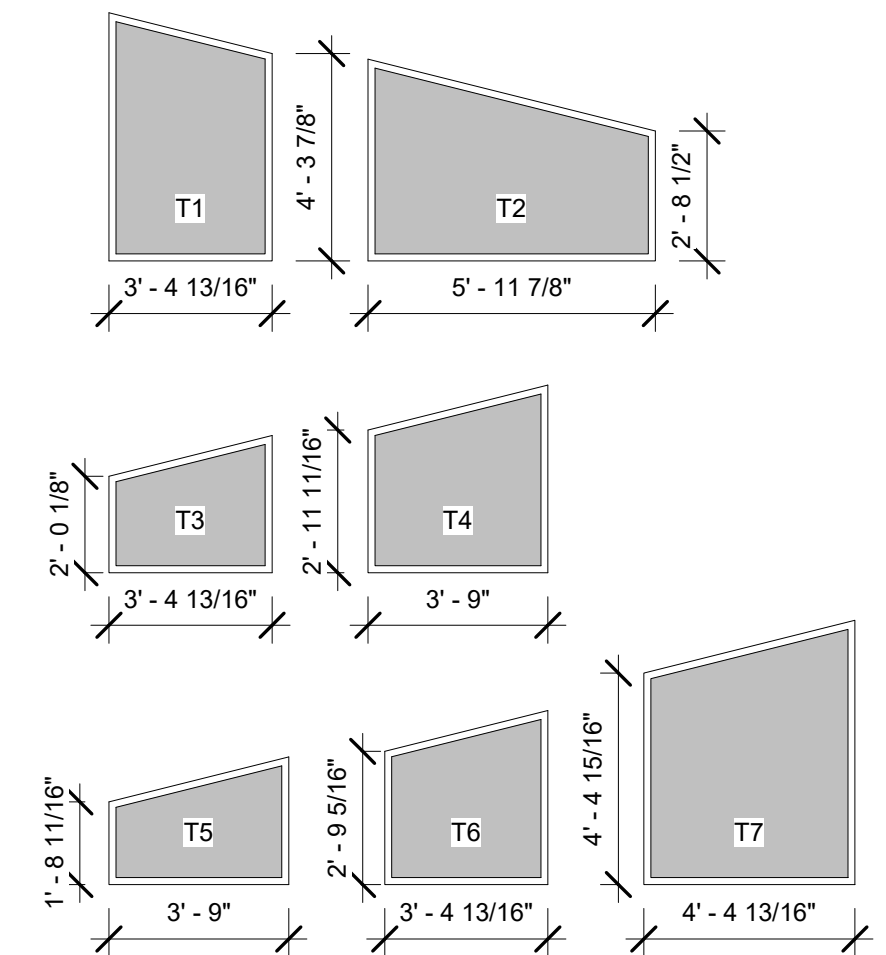
EXTERIOR
ELEVATIONS

Project Number:
Date: 11/21/2024
Drawn By: TKK

A2.1

FOR BIDDING PURPOSES ONLY
NOT FOR CONSTRUCTION

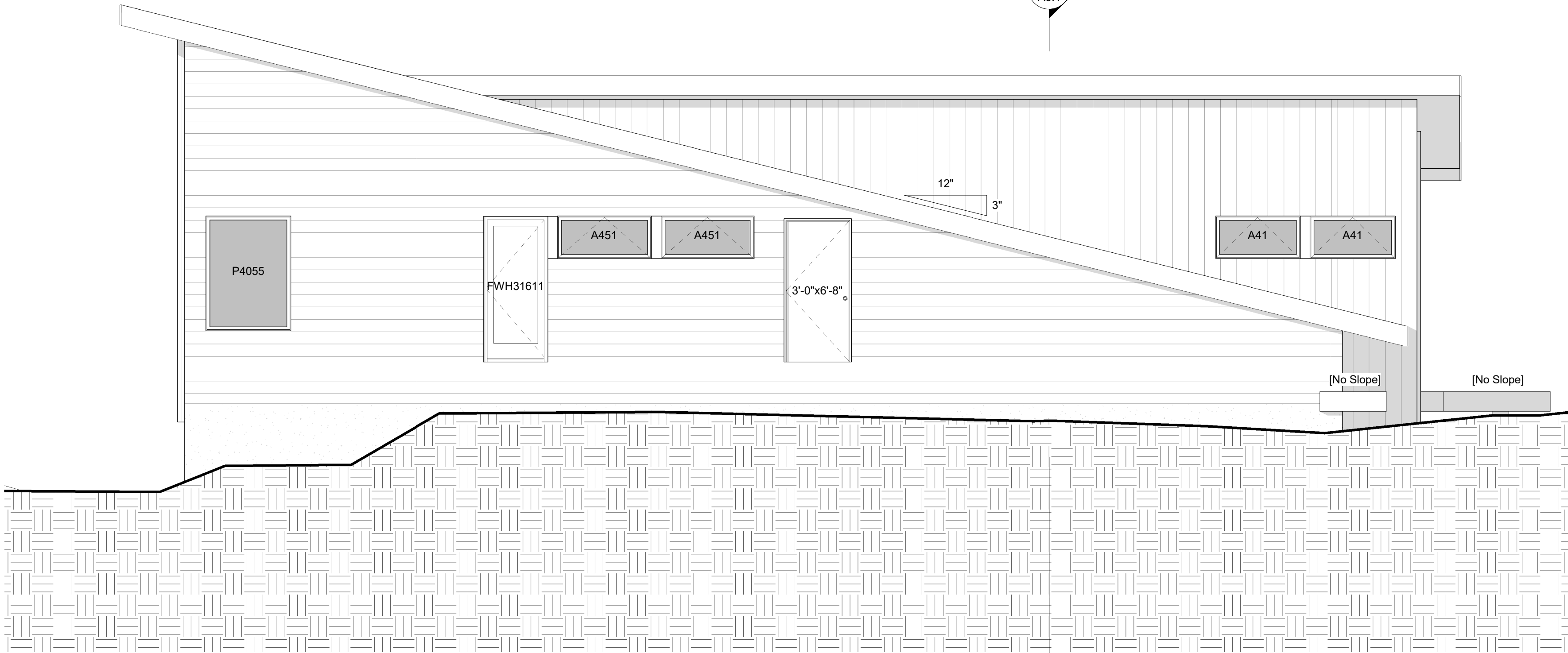
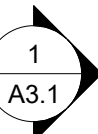
THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS



TRAPAZOID WINDOW LEGEND
1/4" = 1'-0"



1 REAR ELEVATION
A2.2 1/4" = 1'-0"



2 RIGHT ELEVATION
A2.2 1/4" = 1'-0"

HARTMAN
HOMES

715.377.1555

744 Ryan Drive, Suite 102, Hudson, WI 54016

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR
SUNFISH LAKE, WI 53077

These plans are designed exclusively for Hartman Homes only. Any reproduction
or other use of these plans is strictly prohibited. This design and all information
included is issued for construction by Hartman Homes only

Project Square Footage

MAIN:	1,827 SF
2ND:	1,204 SF
TOTAL:	3,021 SF
GARAGE:	648 SF
3-SEASON:	181 SF

Revision Record

No.	Description	Date
1	Issued for Bid	6/10/2022
2	Re-issued for Bid	11/21/2024

Project Number:	
Date:	11/21/2024
Drawn By:	TKK

A2.2

FOR BIDDING PURPOSES ONLY
NOT FOR CONSTRUCTION
THESE PLANS ARE PREPARED TO AID IN BID
PURPOSES ONLY. ALL INFORMATION AND
DIMENSIONS LISTED ARE NOT FINAL AND SUBJECT TO
CHANGE PRIOR TO FINAL CONSTRUCTION
DOCUMENTS

HARTMAN
HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016
715.377.1555
www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR
SUNFISH LAKE, WI 53077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. The design and all information included is issued for construction by Hartman Homes only.

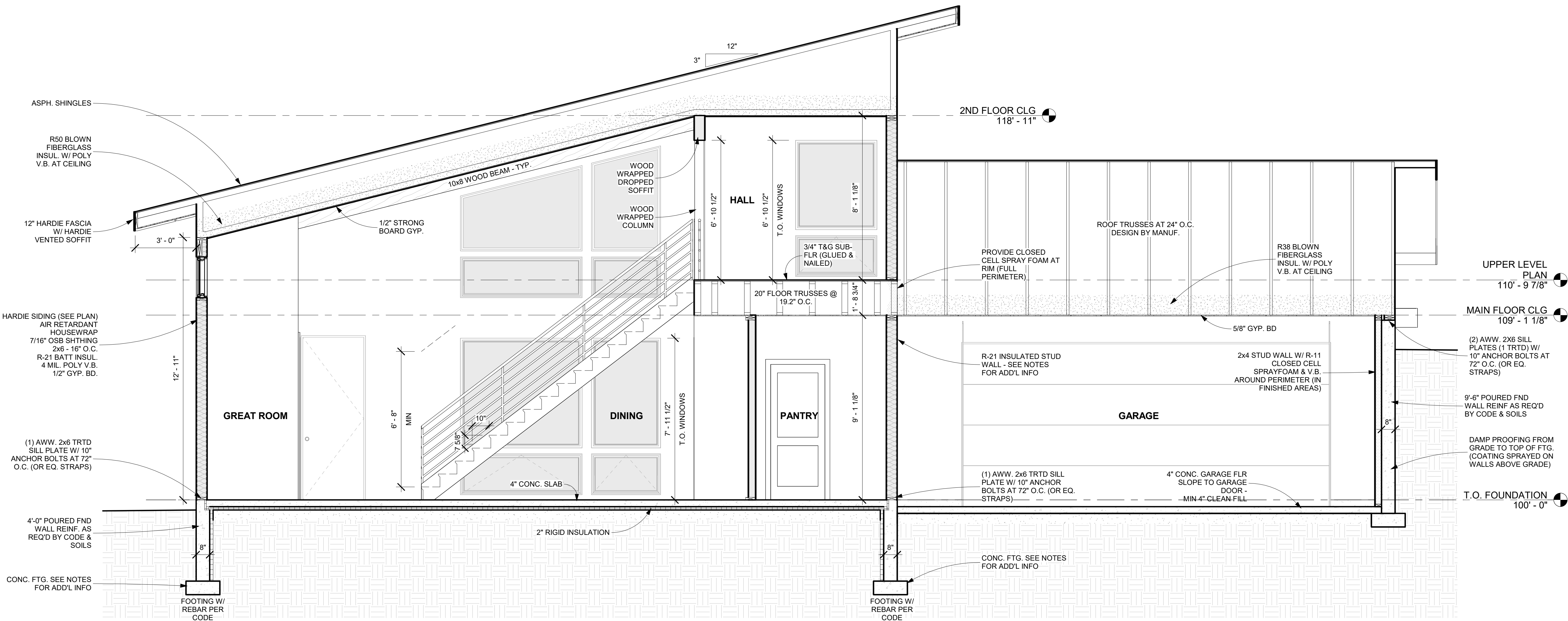
Project Square Footage		1,827 SF
MAIN:	1,204 SF	
2ND:		
TOTAL:	3,021 SF	
GARAGE:	648 SF	
3-SEASON:	181 SF	

Revision Record		Date
No.	Description	
1	Issued for Bid	6/10/2022
2	Re-issued for Bid	11/21/2024

BUILDING
SECTION

Project Number:
Date: 11/21/2024
Drawn By: TKK

A3.1



1 BUILDING SECTION
A3.1 3/8" = 1'-0"

DOOR SCHEDULE							
Type Mark	Count	Width	Height	Rough Width	Rough Height	Description	Comments
MAIN FLOOR							
2'-6"x6'-8"	2	2' - 6"	6' - 8"	2' - 8"	6' - 11"	INSWING	
2'-8"x6'-8"	4	2' - 8"	6' - 8"	2' - 10"	6' - 11"	INSWING	
3'-0"x6'-8"	3	3' - 0"	6' - 8"	3' - 2"	6' - 11"	INSWING	
3'-0"X8'-0"	1	3' - 0"	8' - 0"	3' - 2"	8' - 1"	INSWING EXTERIOR	
DBL-4'-0"x6'-8"	1	4' - 0"	6' - 8"	4' - 2"	6' - 11"	DOUBLE INSWING	
DBL-4'-0"x8'-0"	1	4' - 0"	8' - 0"	4' - 2"	8' - 3"	DOUBLE INSWING	
FWG8080	2	7' - 11 1/2"	7' - 11 1/2"	8' - 0"	8' - 0"	Vinyl-clad wood Gliding Patio Door	
OH-18'-0"x8'-0"	1	18' - 0"	8' - 0"	18' - 2"	8' - 1"	OVERHEAD	
PKT-2'-6"x6'-8"	1	2' - 6"	6' - 8"	2' - 7"	6' - 11 1/2"	POCKET	
PKT-2'-8"x6'-8"	3	2' - 8"	6' - 8"	2' - 9"	6' - 11 1/2"	POCKET	
UPPER LEVEL PLAN							
2'-6"x6'-8"	1	2' - 6"	6' - 8"	2' - 8"	6' - 11"	INSWING	
2'-8"x6'-8"	4	2' - 8"	6' - 8"	2' - 10"	6' - 11"	INSWING	
3'-0"x6'-8"	2	3' - 0"	6' - 8"	3' - 2"	<varies>	<varies>	
DBL-5'-0"X6'-8"	3	5' - 0"	6' - 8"	5' - 2"	6' - 11"	DOUBLE INSWING	
FWH31611	1	3' - 0 1/8"	6' - 10 3/8"	3' - 0 5/8"	6' - 10 7/8"	Vinyl-clad wood single inswing door	

Grand total: 30

HARTMAN
HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016 715.377.1555

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR,
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. this design and all information included is issued for construction by Hartman Homes only

SCHEDULES

Project Number:

Date: 11/21/2024

Drawn By: TKK

A4.1

WINDOW SCHEDULE								
Type Mark	Count	Width	Height	Rough Width	Rough Height	Head Height	Description	Comments
MAIN FLOOR								
A31	2	2' - 11 15/16"	2' - 0 1/8"	3' - 0 7/16"	2' - 0 5/8"	2' - 3 3/16"	Vinyl-clad wood awning window	
A41	3	4' - 0"	2' - 0 1/8"	4' - 0 1/2"	2' - 0 5/8"	2' - 3 3/16"	Vinyl-clad wood awning window	
A51	3	4' - 11 7/8"	2' - 0 1/8"	5' - 0 3/8"	2' - 0 5/8"	VARIES	Vinyl-clad wood awning window	SEE ELEVATIONS
A61	2	5' - 11 7/8"	2' - 0 1/8"	6' - 0 3/8"	2' - 0 5/8"	VARIES	Vinyl-clad wood awning window	SEE ELEVATIONS
A351	5	3' - 4 13/16"	2' - 0 1/8"	3' - 5 5/16"	2' - 0 5/8"	VARIES	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	1	4' - 4 13/16"	2' - 0 1/8"	4' - 5 5/16"	2' - 0 5/8"	11' - 11 1/2"	Vinyl-clad wood awning window	SEE ELEVATIONS
ASW3921	1	3' - 9 1/16"	2' - 0 1/8"	3' - 9 9/16"	2' - 0 5/8"	11' - 11 1/2"	Vinyl-clad wood awning window	
ASW6055	1	5' - 11 7/8"	5' - 4 13/16"	6' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
CW145	2	2' - 4 3/8"	4' - 4 13/16"	2' - 4 7/8"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement window	
CXW155	3	2' - 11 7/8"	5' - 4 13/16"	3' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement window	
P3555	3	3' - 4 13/16"	5' - 4 13/16"	3' - 5 5/16"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4' - 0"	4' - 4 13/16"	4' - 0 1/2"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	3	4' - 0"	5' - 4 13/16"	4' - 0 1/2"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P4545	1	4' - 4 13/16"	4' - 4 13/16"	4' - 5 5/16"	4' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
P5055	1	4' - 11 7/8"	5' - 4 13/16"	5' - 0 3/8"	5' - 5 5/16"	7' - 11 1/2"	Vinyl-clad wood casement/awning picture window	
T1	1	5' - 11 7/8"	4' - 2 1/2"	6' - 0 3/8"	4' - 3"	16' - 5 1/2"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T2	1	3' - 4 13/16"	5' - 2 1/16"	3' - 5 5/16"	5' - 2 9/16"	17' - 5 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T3	1	3' - 4 13/16"	2' - 10 5/16"	3' - 5 5/16"	2' - 10 13/16"	12' - 9 11/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T4	1	3' - 9"	3' - 10 15/16"	3' - 9 1/2"	3' - 11 7/16"	13' - 10 5/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T5	1	3' - 9"	2' - 7 15/16"	3' - 9 1/2"	2' - 8 7/16"	14' - 10 15/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T6	1	3' - 4 13/16"	3' - 8 3/16"	3' - 5 5/16"	3' - 8 11/16"	15' - 11 3/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
T7	1	4' - 4 13/16"	5' - 6 1/16"	4' - 5 5/16"	5' - 6 9/16"	17' - 9 1/16"	Vinyl-clad wood casement/awning picture window	SEE ELEVATIONS
UPPER LEVEL PLAN								
A41	3	4' - 0"	2' - 0 1/8"	4' - 0 1/2"	2' - 0 5/8"	VARIES	Vinyl-clad wood awning window	SEE ELEVATIONS
A451	2	4' - 4 13/16"	2' - 0 1/8"	4' - 5 5/16"	2' - 0 5/8"	6' - 10 1/2"	Vinyl-clad wood awning window	
CW155	4	2' - 4 3/8"	5' - 4 13/16"	2' - 4 7/8"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement window	
CXW155	2	2' - 11 7/8"	5' - 4 13/16"	3' - 0 3/8"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement window	
P3555	2	3' - 4 13/16"	5' - 4 13/16"	3' - 5 5/16"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4045	1	4' - 0"	4' - 4 13/16"	4' - 0 1/2"	4' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
P4055	4	4' - 0"	5' - 4 13/16"	4' - 0 1/2"	5' - 5 5/16"	6' - 10 1/2"	Vinyl-clad wood casement/awning picture window	
Grand total	57							

HARTMANHOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016 715.377.1555

www.hartmanhomesinc.com

RE-ISSUED FOR BID

CHRIS NELSON & DAVID
CARLSON RESIDENCE

2 ACORN DR,
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. this design and all information included is issued for construction by Hartman Homes only

SCHEDULES

Project Number:

Date: 11/21/2024

Drawn By: TKK

A4.2



1 KITCHEN ELEVATION 1
A5.1 3/8" = 1'-0"

HARTMAN
HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016 715.377.1555
www.hartmanhomesinc.com

RE-ISSUED FOR BID

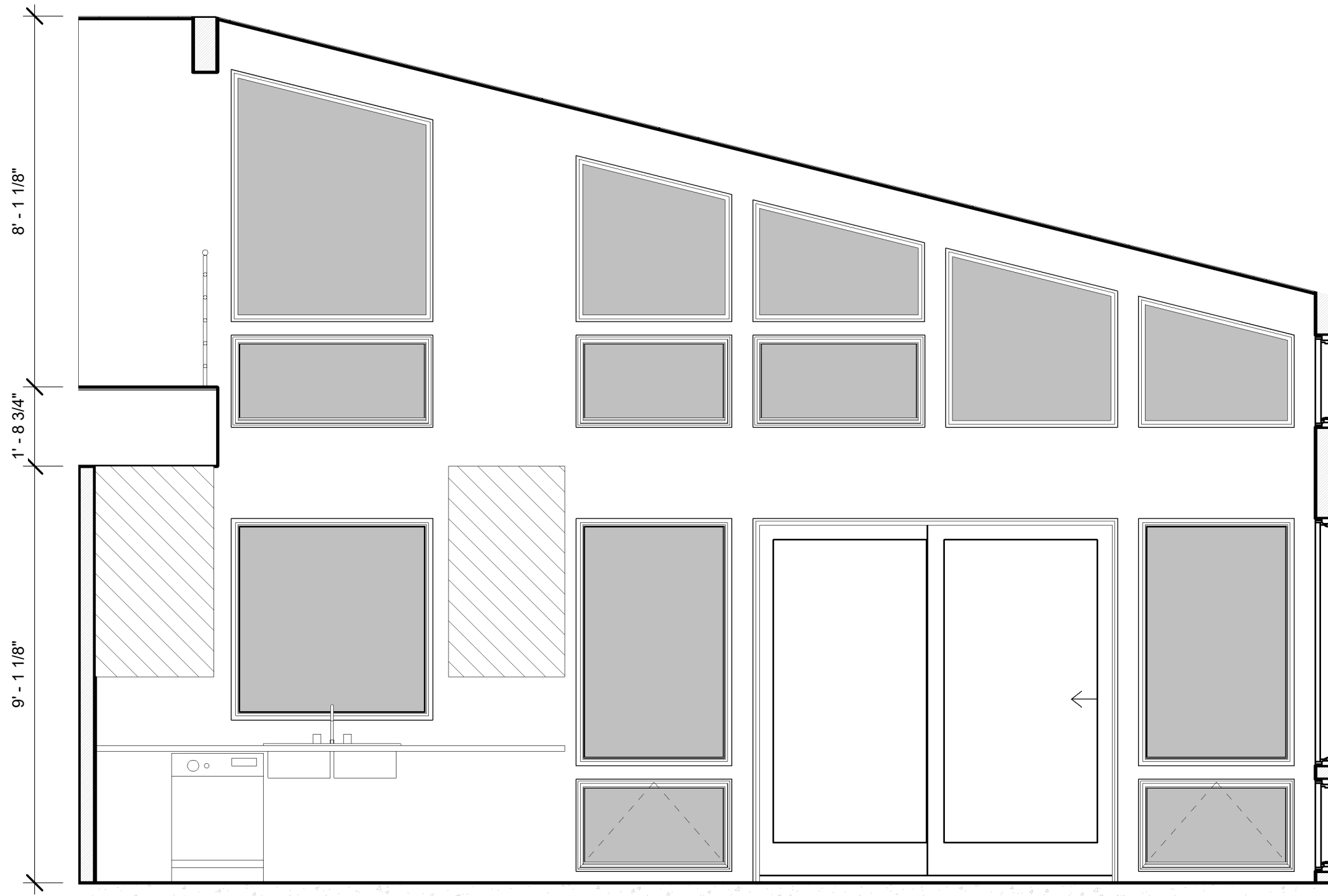
**CHRIS NELSON & DAVID
CARLSON RESIDENCE**
2 ACORN DR,
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. This design and all information included is issued for construction by Hartman Homes only

INTERIOR
ELEVATIONS

Project Number:
Date: 11/21/2024
Drawn By: TKK

A5.1



2 KITCHEN ELEVATION 2
A5.2 3/8" = 1'-0"

HARTMAN
HOMES

744 Ryan Drive, Suite 102, Hudson, WI 54016 715.377.1555
www.hartmanhomesinc.com

RE-ISSUED FOR BID

**CHRIS NELSON & DAVID
CARLSON RESIDENCE**
2 ACORN DR,
SUNFISH LAKE, MN 55077

These plans are designed exclusively for Hartman Homes only. Any reproduction or other use of these plans is strictly prohibited. This design and all information included is issued for construction by Hartman Homes only

INTERIOR
ELEVATIONS

Project Number:
Date: 11/21/2024
Drawn By: TKK

A5.2

Memorandum

To: Lori Johnson, AICP – City Planner

From: Justin Messner, PE – City Engineer

Date: March 20, 2025

Re: 2 Acorn Drive – Major Site Plan Review
City of Sunfish Lake, MN
WSB Project No. 027923-000

Project Background

The Applicant is proposing to construct a new house along with the necessary grading and stormwater management improvements on a currently undeveloped parcel of land. The following review is only for engineering, stormwater management, and site grading issues. The building compliance will be handled by the City planner and building official. Comments are based on the submittal received from the applicant on March 13, 2025. Additional engineering comments may be provided upon revised submittals.

The following requirements and comments need to be addressed for the project to move forward:

General Notes

1. All retaining walls exceeding 42" (measured from footing to top of wall) will need engineered drawings submitted for review by the City of Sunfish Lake Building Official.

Stormwater Management

1. Please update the site construction planset accordingly:
 - a. Show/call out the utility easement
 - b. Show wetland buffer
 - c. Note the wetland HWL on the plans.
2. In the stormwater report the overflow for the wetland is noted at 904.0. Does this go over the proposed driveway? Callout the location and elevation of this overflow on the plans.
3. Rate control should be met for the 100-year, 10-day snowmelt event. Please update model to include this additional event.
4. The stormwater management plan states the project is not within a DWSMA while the SWPPP states it is. Update SWPPP to reflect the project is not within a DWSMA.
5. Confirm boundary of filtration basin, the basin footprint on the plans does not seem to match the operation and maintenance guide.
6. Minimum time of concentration to be used should be 10 minutes, update subcatchment C2.
7. The report states the total impervious area in existing conditions is 0.03 acres, however the HydroCAD model does not include any impervious area, please update model.

Grading, Erosion Control and Restoration

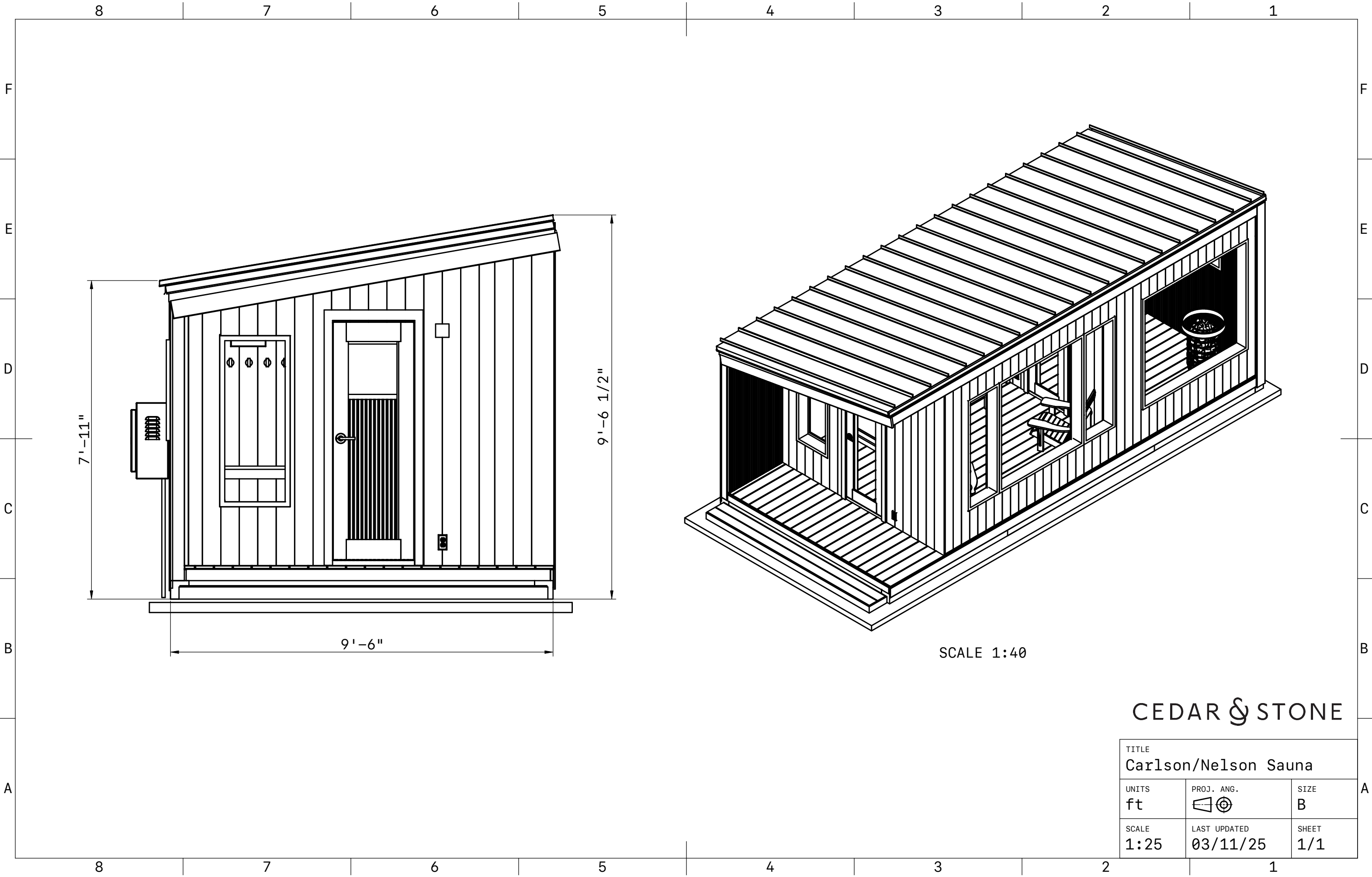
1. See the attached plan for comments related to grading throughout the site.
2. An as-built survey will be required upon project completion that demonstrates the improvements were constructed per the approved plans.

3. Upon completion of the as-built, an on-site final inspection with city staff, the builder, and the resident will be required.

Conclusions and Recommendations

Based upon our review of the engineering, stormwater management and site grading for this proposed development, we have determined that the proposed site and grading plans submitted do not conform to City requirements and recommend the project does not advance to Planning Commission and City Council until the above-mentioned comments are satisfied.

We request a new set of plans addressing these comments and new drainage calculations be resubmitted to our office prior to final approval. **The Applicant should submit a memo that restates each comment from this memorandum and details how each comment was addressed.**



CEDAR & STONE

TITLE Carlson/Nelson Sauna		
UNITS ft	PROJ. ANG. 	SIZE B
SCALE 1:25	LAST UPDATED 03/11/25	SHEET 1/1



Sunfish Lake lots less than 2.5 acres

Address	Acreage	Value (\$1,000s)	Homes
2196 CHARLTON RD = 0.46 acres valued \$469K	0.46	\$ 469	1
2230 DELAWARE AVE = 0.6 acres valued \$392K	0.6	\$ 392	1
2194 CHARLTON RD = 0.63 acres valued \$614K	0.63	\$ 614	1
40 WOODRIDGE LN = 0.82 acres valued \$465K	0.82	\$ 465	1
50 WOODRIDGE LN = 0.84 acres valued \$445K	0.84	\$ 445	1
30 WOODRIDGE LN = 0.94 acres valued \$577K	0.94	\$ 577	1
5775 ROBERT TRL S = 0.99 acres valued \$415K	0.99	\$ 415	1
349 SALEM CHURCH RD = 1.36 acres valued \$962K	1.36	\$ 962	1
5865 ROBERT TRL S = 1.8 acres valued \$765K	1.8	\$ 765	1
240 HIGHWAY 62 = 1.96 acres valued \$546K	1.96	\$ 546	1
PO BOX 7037 = 2.03 acres valued \$689K	2.03	\$ 689	1
2040 CHARLTON = 2.04 acres valued \$648K	2.04	\$ 648	1
290 SALEM CHURCH RD = 2.09 acres valued \$1.18M	2.09	\$ 1,180	1
2 SALEM LN = 2.2 acres valued \$946K	2.2	\$ 946	1
2190 CHARLTON RD = 2.23 acres valued \$1.1M1.1M	2.23	\$ 1,100	1
400 SALEM CHURCH RD = 2.38 acres valued \$959K	2.38	\$ 959	1
390 SALEM CHURCH RD = 2.41 acres valued \$953K	2.41	\$ 953	1
500 SALEM CH RD = 2.41 acres valued \$935K	2.41	\$ 935	1
85 SALEM CHURCH RD = 2.42 acres valued \$1.14M	2.42	\$ 1,140	1
341 SALEM CHURCH RD = 2.42 acres valued \$924K	2.42	\$ 924	1
410 SALEM CHURCH RD = 2.44 acres valued \$1.6M	2.44	\$ 1,600	1
336 SALEM CHURCH RD = 2.47 acres valued \$1.8M	2.47	\$ 1,800	1
2058 CHARLTON RD = 2.47 acres valued \$974K	2.47	\$ 974	1
AVERAGE/TOTAL	1.76	\$ 848	23

avg

avg

total

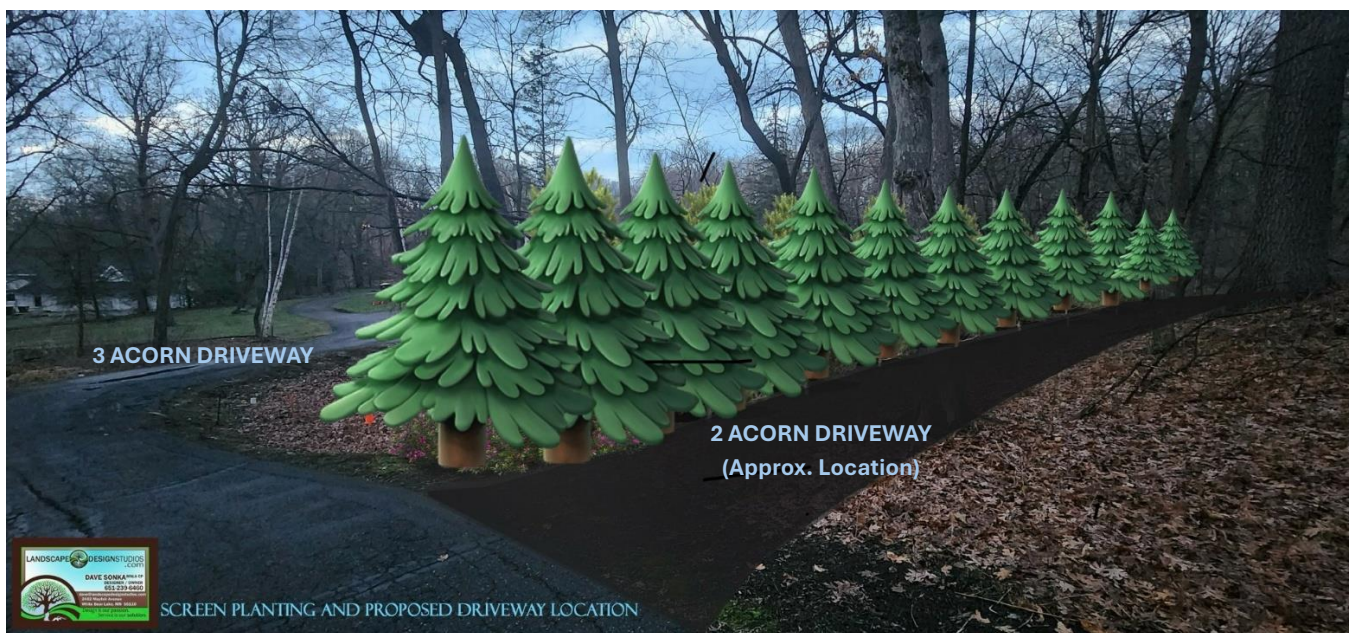
\$ 19,498
total taxable (\$1,000s)

Fact Sheet for Driveway Variance Approval

Location: 2 Acorn Drive

Proposed Driveway Location at 10 Feet From North Property Line:

- **Recommended** by the surveyor and engineering team based on onsite visits and analysis.
 - **Benefits:**
 - Preserves mature trees.
 - Minimizes invasive excavation.
 - **Screening:** Full driveway will be screened by evergreen trees.
 - Shields view of driveways and headlights for both 3 Acorn and 2 Acorn.
 - More trees will be planted than required for replacement.



Alternative Location at 25 Feet From North Property Line:

- **Drawbacks:**
 - More mature trees would need to be removed.
 - More invasive excavation required due to ground elevation.

Wetland Delineation Report

2 Acorn Drive

Sunfish Lake, Minnesota

Prepared for: David Carlson and Chris Nelson



October 1, 2021

BES Project No. 2021-033

 **Bopray
Environmental**
N7831 920th St. River Falls, WI 54022
715-307-4577 kjbopray@yahoo.com

Wetland Delineation Report

2 Acorn Drive

Sunfish Lake, Minnesota

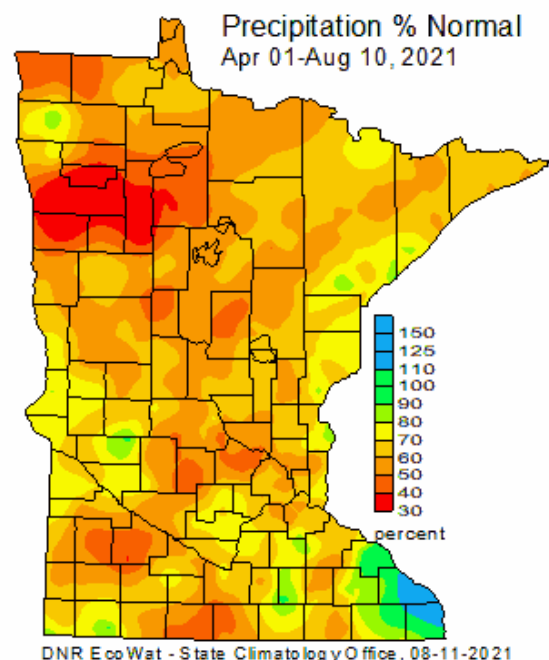
October 1, 2021

Background

Bopray Environmental Services LLC (BES) has completed a wetland delineation on a 2.36-acre site located in the SE ¼, SW ¼, Section 31, T28N, R22W, City of Sunfish Lake, and Dakota County, Minnesota (**Figure 1**). The site consists of a wooded residential lot. The topography of the site is rolling according to the U.S.G.S. quadrangle topographic map (**Figure 2**). The approximate site and sample locations are shown on an aerial photo in **Figure 3**. The wetland delineation was surveyed by Cornerstone Surveying and a map is included in **Appendix A**. The field wetland delineation was done on August 9, 2021. The purpose of this delineation was to identify potential wetlands on the site for planning for construction of a home and for regulatory purposes.

Methodologies

The site was evaluated for wetlands based on the methods contained in the “Level 2 Routine Wetland Delineation” section of the U.S. Army Corps of Engineers “Wetland Delineation Manual” (Technical Report Y87-1, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. This is the methodology currently used to determine wetlands by both the U.S. Army Corps of Engineers for implementation of Section 404 of the Clean Water Act and by the Minnesota Wetland Conservation Act. According to the Climatology Working Groups’ webpage, the area was at 60-70% of normal year to date



precipitation at the time of the site visit. Using the WETS Table method for the proceeding three months the antecedent precipitation was Drier Than Normal at the time of the site visit.

Results

Resource Maps Review

The National Wetlands Inventory (NWI) (**Figure 4**) identifies one wetland that encroaches on the south side of the site. The NWI classifies the basin as a Palustrine, Aquatic Bed, Permanently flooded, excavated (PABHx) wetland. The DNR Protected Waters Inventory map (**Figure 5**) does not identify any public waters on the site. The Dakota County Soils Survey (**Figure 6**) shows the site is mapped as Kingsley sandy loam (342C), and Kennebec variant silt loam (1816) soil map units. The Kingsley soil map unit is listed as having 0% hydric soils inclusions. The Kennebec variant soil map unit is listed as having 10% hydric soils inclusions.

Wetland A

Wetland A is a closed depression surrounded by steep, wooded, slopes (**Figure 7**). The basin is classified as a Palustrine, Aquatic Bed, Intermittently exposed (PABG) shallow marsh wetland. The vegetation at the wetland boundary (SA-W) is dominated by arrow leaf tear thumb (*Persicaria sagittata*), clearweed (*Pilea pumila*), hop hornbeam (*Ostrya virginiana*) and green ash (*Fraxinus pennsylvanica*). The plant community did meet the dominance test and had a prevalence index of 1.70. Soils at SA-W consisted of eight inches of 10YR 2/1 silt loam, over five inches of 10Y 2/1 loam with 8% 10YR 4/4 iron concentrations, over three inches of mixed 10YR 3/1 and 10YR 4/2 sandy loam with 5% 10YR 5/3 iron concentrations, over three inches of 10YR 4/2 sandy loam with 5% 10YR 5/3 iron concentrations, over 10YR 4/1 sandy loam with 3% 10YR 5/3 iron concentrations (A12, F6). Surface water (A1) up to six inches deep was observed in the center of the basins at the time of the site visit. The water table and soil saturation were not observed within 24 inches in the SA-W soil pit at the time of the site visit. The other wetland hydrology indicators observed in the wetland include; inundation visible on aerial imagery (B7), true aquatic plants (B14), geomorphic position (D2) and a positive FAC-Neutral test (D5). The adjacent upland hillslope (SA-U) is dominated by black cherry (*Prunus serotina*), white oak (*Quercus alba*), hop hornbeam, Virginia creeper (*Parthenocissus quinquefolia*), and white snakeroot (*Ageratina altissima*). The plant community did not meet the dominance test and had a prevalence index of 3.91. The upland soils consisted of six inches of 10YR 3/2 sandy loam, over six inches of 10YR 4/2 sandy loam, over five inches of 10YR 4/2 loamy sand, over 10YR 4/3 loamy sand with 8% 10YR 4/4 iron concentrations. The redox features are too deep and the matrix chroma is too high to meet the hydric soils criteria. The water table and soil saturation were not observed within a depth of 24 inches in the upland soil pit. There were no other wetland hydrology indicators observed at the SA-U sampling point.

Sample Point 1

Sample Point 1 (SP-1) was established in the topographical saddle area north of Wetland A (**Figure 8**). The vegetation at SP-1 is dominated by box elder (*Acer negundo*), black cherry, Virginia creeper, wild carrot (*Daucus carota*), and white snakeroot. The vegetation community did not meet the dominance test and had a prevalence index of 3.81. The soils consisted of four inches of 10YR 2/1 loam, over seven inches of 10YR 2/2 loam, over seven inches of 10YR 2/1 loam, over 10YR 3/1 loam. No redox features were observed in the soil profile. The water table and saturated soil were not observed within a depth of 24 inches in the SP-1 soil pit at the time of the site visit. There were no other wetland hydrology indicators observed at the SP-1 sample point. The area failed to meet all three wetland criteria.

Wetland Classification

BES' classification of the wetlands is based on observations of the site and is include in Table 1 below.

Table 2. Summary of Wetland Characteristics

Wetland	Class	Circ. 39 Type	Isolated Y/N	Comments
A	PABG Shallow marsh	3	Y	Wetland A is a closed depression that normally has standing water but is dry due to the extended dry conditions in 2021. Annuals like smartweed, beggar's tick and water plantain have colonized the center of the basin.

Jurisdiction

Table 2 indicates whether the wetlands are isolated or not for purposes of U.S. Army Corps of Engineers (COE) jurisdiction under Section 404 of the Clean Water Act. This determination is made by BES in the field at the time of the delineation and is essentially our best professional opinion based on the portion of the particular wetland we observed. In some cases, only a small portion of the wetland edge that is present on the property being delineated is evaluated. If no inlets or outlets are observed in the evaluated area, and none are evident on topographic maps or aerial photos, we are inclined to determine the wetland is isolated. However, since the entire wetland is sometimes not assessed, it is possible that inlets and/or outlets do exist and that the wetland has a surface connection to a federal "navigable" water and, thus, falls within the jurisdiction of Section 404. Therefore, a determination by BES of whether a particular wetland is isolated or not should not be considered a final determination with regard to COE jurisdiction until the COE concurs with the determination. The wetland on this site is isolated so the COE should not have jurisdiction over the site.

The wetlands are not identified as on Minnesota protected waters inventory. The DNR will not have jurisdiction over the wetlands on this site. Wetlands in this area are regulated under the

Wetland Delineation Report
2 Acorn Dr., Sunfish Lake, MN
BES Project No. 2021-033
October 1, 2021

Minnesota Wetland Conservation Act (WCA) which is administered by the City of Sunfish Lake as the Local Government Unit (LGU).

A copy of this report should be submitted to the Corps of Engineers and the LGU responsible for administering the WCA. Supplying these agencies with reports will serve the dual purpose of determining which agencies have jurisdiction and beginning the process of obtaining concurrence with the delineated wetland boundaries. If the on-site wetlands may be affected during site construction, all necessary permits should be obtained prior to construction.

Additional information regarding the wetlands' vegetation, soils and hydrology is included in **Appendix B**. Ground level photos of the wetlands are included in **Figure 7 and 8**.

The information contained herein represents the findings of BES during wetland evaluation activities conducted on August 9, 2021, at the referenced site.

Respectfully,

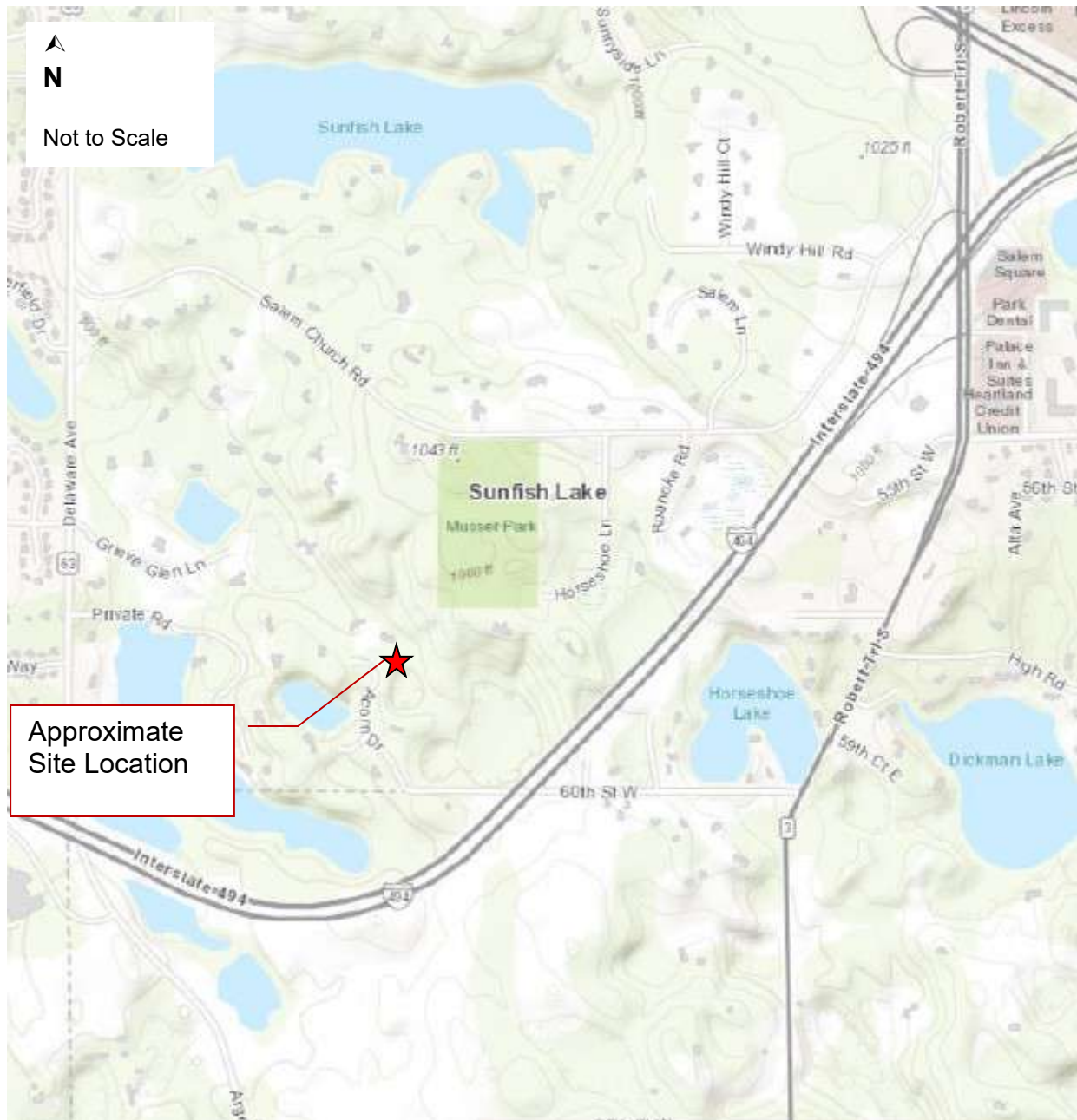
Bopray Environmental Services LLC



Kelly J. Bopray
Professional Soil Scientist
Certified Wetland Delineator

October 1, 2021
Date

Enclosures



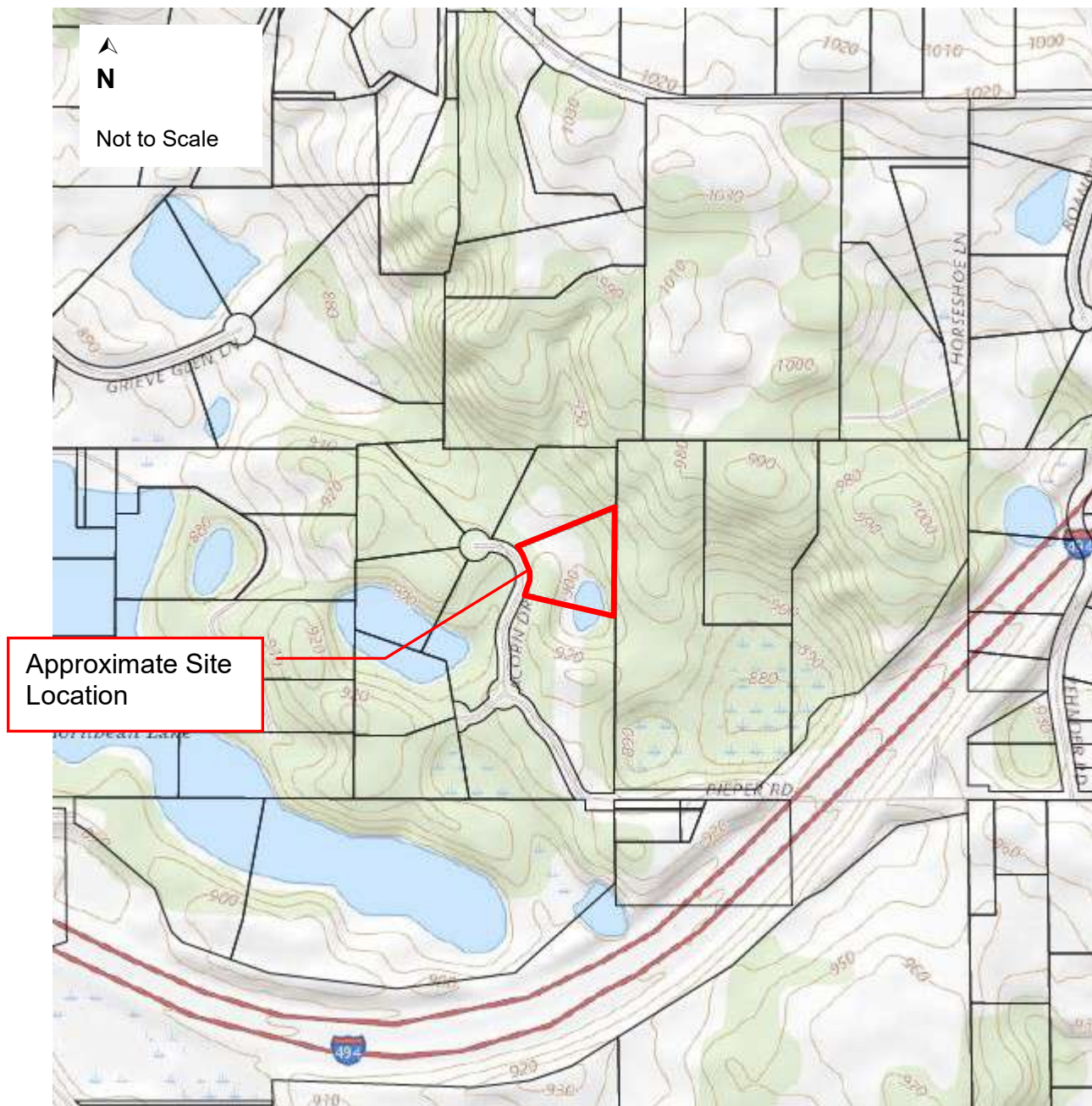


Figure 2. USGS Quadrangle Map

2 Acorn Drive
Sunfish Lake, Minnesota

Project No. 2021-033

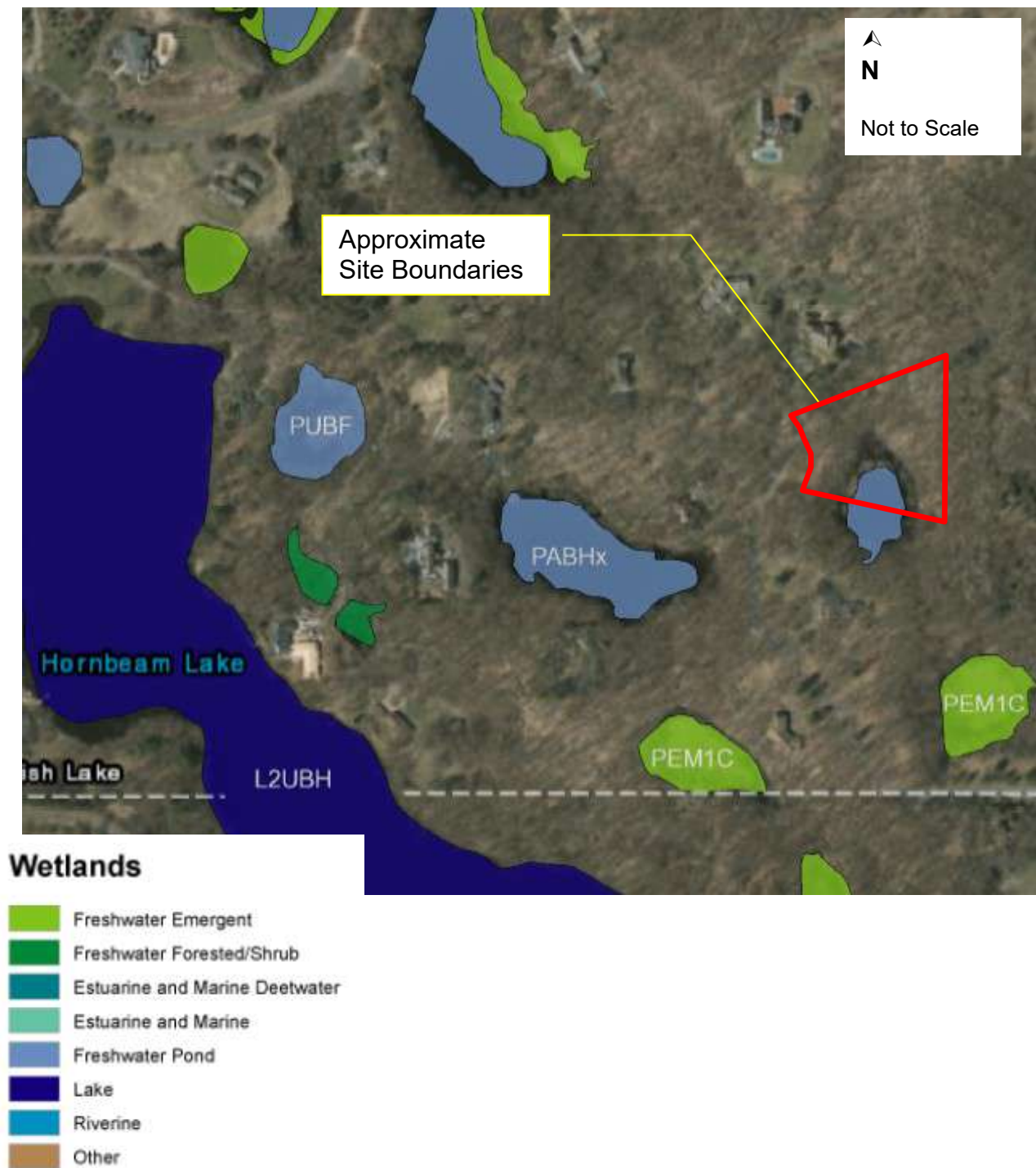


**Figure 3. Aerial Photo with
Approximate Wetland Boundary**

2 Acorn Drive
Sunfish Lake, Minnesota



Project No. 2021-033

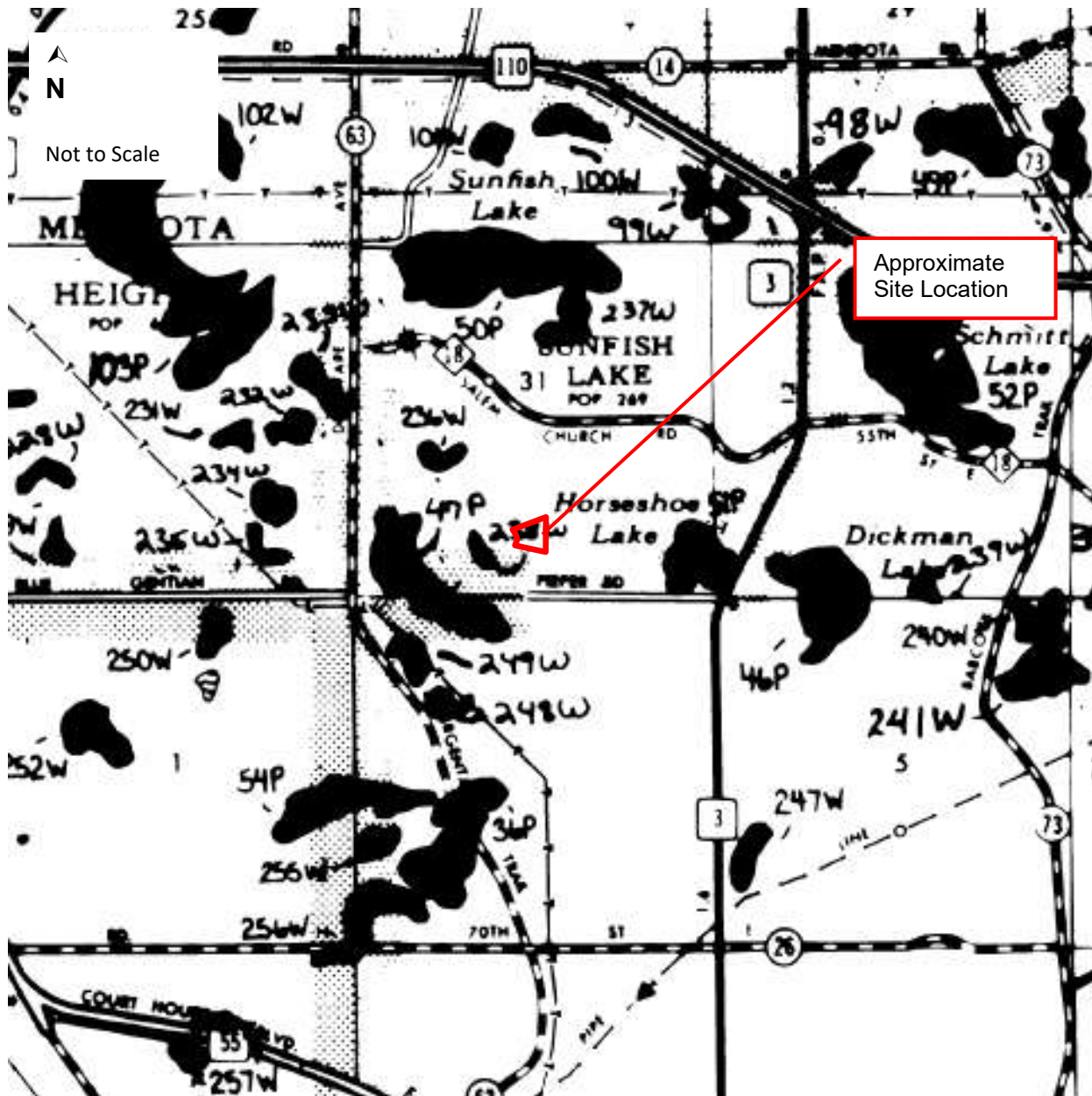


**Figure 4. National Wetland
Inventory Map**

2 Acorn Drive
Sunfish Lake, Minnesota

Project No. 2021-033





**Figure 5. DNR Protected Waters
Inventory Map**
2 Acorn Drive
Sunfish Lake, Minnesota



**Figure 6. Dakota County
Soil Survey Map**
2 Acorn Drive
Sunfish Lake, Minnesota

Project No. 2021-033



Wetland A looking south along the wetland boundary.

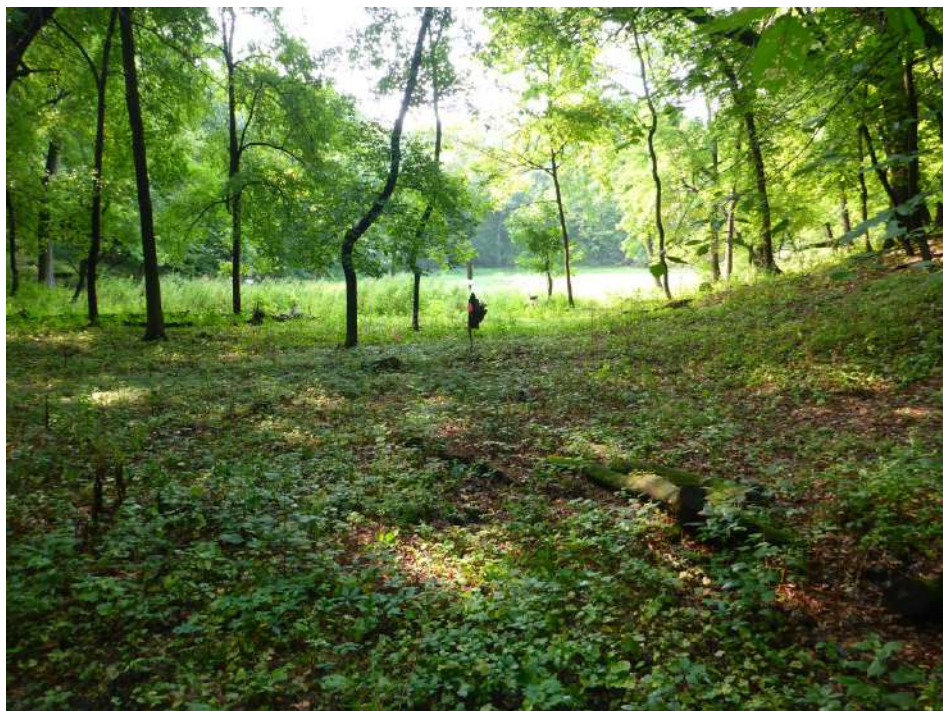


Wetland A soil profiles (SA-W on top). SA-W meets the redox dark surface (F6) and deep dark surface (A12) criteria. The SA-U soil profile has redox features at a depth of 17 inches which is too deep and the surface is not dark enough to meet the hydric soils criteria.

Figure 7. Ground Photos

2 Acorn Drive
Sunfish Lake, Minnesota

Project No. 2021-033



Sample point 1 (SP-1) is in the low area north of Wetland A.



SP-1 soil profile. The soil is a mollisol, but does not have redox features within 24 inches of the surface.

Figure 8. Ground Photos

2 Acorn Drive
Sunfish Lake, Minnesota

Project No. 2021-033

Appendix A

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST.



BITUMINOUS DRIVE = 1307 SQ. FT.

REAR:

THIS PROPERTY LIES WITHIN THE UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27037C0105E HAVING AN EFFECTIVE DATE OF 12/02/2011.

ELEVATIONS BASED ON INFORMATION AS SHOWN ON THE MNDOT
 GEODETIC WEBSITE. SURVEY DISK 1918 K WITH AN ELEVATION OF 931.83
 WAS USED TO ESTABLISH VERTICAL CONTROL FOR THIS SURVEY (NAVD 88
 PROJECT BENCHMARKS IDENTIFIED AND SHOWN GRAPHICALLY.

The following Legal Description is as shown on Trademark Title Services, Inc. as agent for Fidelity National Title Insurance Company Title Commitment No. 21-4872, dated July 6, 2021.

Lot 2, Thirty Oaks Addition, according to the recorded plat thereof, Dakota County Minnesota. (Abstract Property).

*There appears to be an overlap in legal descriptions with the property lying to the east as shown graphically on the survey. Contact a real estate attorney for legal advice relating to this issue

TOTAL AREA TO SECTION LINE = 101,925 SQ. FT. / 2.34 ACRES
 AREA OF DESCRIPTION OVERLAP = 4,121 SQ. FT. / 0.09 ACRES
 AREA OF LOT AS PLATTED = 106,046 SQ. FT. / 2.43 ACRES

The following exceptions appear on the Trademark Title Services, Inc. as agent for Fidelity National Title Insurance Company Title Commitment No. 1-4872, dated July 6, 2021.

Subject to terms and conditions contained in Resolution per Doc. No. 1490378. (Noted in right of way of Acorn Drive).

Subject to terms and conditions contained in Driveway Easement per Doc No. 3211286. (Shown Graphically).

3. THERE APPEARS TO BE AN OVERLAP IN LEGAL DESCRIPTIONS WITH THE PROPERTY TO THE EAST. CONTACT A REAL ESTATE ATTORNEY FOR LEGAL ADVICE RELATING TO THIS ISSUE.

TREES LOCATED AUGUST 2021, NO TAGS OR ID INFORMATION AVAILABLE AT THIS TIME.

EMAIL: cinmpls@yahoo.com

CITY OF
SUNFISH LAKE

09-27-2021

FOUND MONUMENT	✚	FIRE DEPT. CONNECTION
SET 1/2" IRON PIPE	✚	HYDRANT
MARKED SEE NO. 25718	✚	CURB STOP
CABLE TV PEDESTAL	①	WATER WELL
AIR CONDITIONER	②	WATER MANHOLE
ELECTRIC MANHOLE	③	WATER METER
ELECTRIC METER	④	POST INDICATOR VALVE
ELECTRIC PEDESTAL	⑤	ROCK
ELECTRIC TRANSFORMER	⑥	ROLLARD
LIGHT POLE	⑦	FLAG POLE
GUY WIRE	⑧	MAIL BOX
POWER POLE	⑨	TRAFFIC SIGN
GAS MANHOLE	⑩	TRAFFIC SIGNAL MANHOLE
GAS METER	⑪	SINK BORING
TELEPHONE MANHOLE	⑫	SPOT ELEVATION
TELEPHONE PEDESTAL	⑬	TRAFFIC SIGNAL
TELEPHONE SCAFFOLD	⑭	
CATCH BASIN	⑮	CONFEROUS TREE
STORM DRAIN	⑯	
FLARED END SECTION	⑰	DECIDUOUS TREE
—U—	⑱	UNDERGROUND ELECTRIC
—C—	⑲	UNDERGROUND CABLE TV
—T—	⑳	UNDERGROUND FIRE OPTIC
—O—	㉑	OVERHEAD UTILITY
—G—	㉒	UNDERGROUND GAS
—S—	㉓	STORM SEWER
—X—	㉔	FENCE
—P—	㉕	CURB (CURB VALVE)
	㉖	CONTOURS

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

P. Shumway

Daniel L. Thurmes Registration Number: 25718

Date: 09-27-2021

PID#38-76000-00-02

Suite #20
1970 Northwestern Ave
Stillwater, MN 55082
Phone 651.275.8966
Fax 651.275.8977
danc
cssurve
.ne

CORNERSTONE
AND SURVEYING, INC.

FILE NAME	SURVSFL0
PROJECT NO.	SFL2100

CERTIFICATE OF SURVEY

Appendix B

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site 2 Acorn Drive City/County: Sunfish Lake/Dakota Sampling Date: August 9/2021
 Applicant/Owner: David Carlson State: MN Sampling Point: SA-W
 Investigator(s): Kelly Bopray, PSS, CWD Section, Township, Range: Sec. 31, T28N, R22W
 Landform (hillslope, terrace, etc.): closed depression Local relief (concave, convex, none): concave
 Slope (%): 0-2% Lat: Long: Datum:
 Soil Map Unit Name W Water NWI Classification: PABHx

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation, soil, or hydrology significantly disturbed?

Are "normal circumstances"

Are vegetation, soil X, or hydrology naturally problematic?

present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? Y	Is the sampled area within a wetland? Y If yes, optional wetland site ID: Wetland A, PABG
Hydric soil present? Y	
Indicators of wetland hydrology present? Y	

Remarks: (Explain alternative procedures here or in a separate report.)

YTD precip was 60-70% of average. Per WETS Table method antecedent precip was Dryer Than Normal. Soil is a mollisol.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across all Strata: 4 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 75.00% (A/B)
1 <i>Fraxinus pennsylvanica</i>	5	Y	FACW	
2				
3				
4				
5				
5 = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species 60 x 1 = 60 FACW species 40 x 2 = 80 FAC species 0 x 3 = 0 FACU species 10 x 4 = 40 UPL species 2 x 5 = 10 Column totals 112 (A) 190 (B) Prevalence Index = B/A = 1.70
Sapling/Shrub stratum (Plot size: 15 ft)				
1 <i>Ostrya virginiana</i>	5	Y	FACU	
2				
3				
4				
5				
5 = Total Cover				Hydrophytic Vegetation Indicators: ☐ Rapid test for hydrophytic vegetation ☒ Dominance test is >50% ☒ Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
Herb stratum (Plot size: 5 ft)				
1 <i>Persicaria sagittata</i>	60	Y	OBL	
2 <i>Pilea pumila</i>	25	Y	FACW	
3 <i>Phalaris arundinacea</i>	10	N	FACW	
4 <i>Sonchus arvensis</i>	5	N	FACU	
5 <i>Malva neglecta</i>	2	N	UPL	
6				
7				
8				
9				
10				
102 = Total Cover				Hydrophytic vegetation present? Y
Woody vine stratum (Plot size: 30 ft)				
1				
2				
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SA-W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 2/1						silt loam	
8-13	10YR 2/1		10YR 4/4	8	C	PL	loam	
13-16	10YR 3/1	60	10YR 5/3	5	C	PL	sandy loam	
13-16	10YR 4/2	40						
16-19	10YR 4/2		10YR 5/3	5	C	PL	sandy loam	
19-24+	10YR 4/1		10YR 5/3	3	C	PL	sandy loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| ☐ Histisol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Stratified Layers (A5) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ 2 cm Muck (A10) | ☐ Depleted Matrix (F3) |
| ☐ Depleted Below Dark Surface (A11) | ☒ Redox Dark Surface (F6) |
| ☒ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils:

- | |
|--|
| ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Very Shallow Dark Surface (TF12) |
| ☐ Other (explain in remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

 Type: _____
 Depth (inches): _____
Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | |
|---|
| ☒ Surface Water (A1) |
| ☐ High Water Table (A2) |
| ☐ Saturation (A3) |
| ☐ Water Marks (B1) |
| ☐ Sediment Deposits (B2) |
| ☐ Drift Deposits (B3) |
| ☐ Algal Mat or Crust (B4) |
| ☐ Iron Deposits (B5) |
| ☒ Inundation Visible on Aerial Imagery (B7) |
| ☐ Sparsely Vegetated Concave Surface (B8) |
| ☐ Water-Stained Leaves (B9) |

- | |
|---|
| ☐ Aquatic Fauna (B13) |
| ☒ True Aquatic Plants (B14) |
| ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Presence of Reduced Iron (C4) |
| ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Thin Muck Surface (C7) |
| ☐ Gauge or Well Data (D9) |
| ☐ Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- | |
|--|
| ☐ Surface Soil Cracks (B6) |
| ☐ Drainage Patterns (B10) |
| ☐ Dry-Season Water Table (C2) |
| ☐ Crayfish Burrows (C8) |
| ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Stunted or Stressed Plants (D1) |
| ☒ Geomorphic Position (D2) |
| ☒ FAC-Neutral Test (D5) |

Field Observations:

Surface water present?	Yes <u>X</u>	No <u> </u>	Depth (inches): <u>0-6</u>
Water table present?	Yes <u> </u>	No <u>X</u>	Depth (inches): <u>>24</u>
Saturation present?	Yes <u> </u>	No <u>X</u>	Depth (inches): <u>>24</u>

 (includes capillary fringe)
Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water in the center of the basin, not at SA-W. Water level in the basin is down significantly due to dry conditions.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site 2 Acorn Drive City/County: Sunfish Lake/Dakota Sampling Date: August 9/2021
 Applicant/Owner: David Carlson State: MN Sampling Point: SA-U
 Investigator(s): Kelly Bopray, PSS, CWD Section, Township, Range: Sec. 31, T28N, R22W
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear
 Slope (%): 12-18% Lat: Long: Datum:
 Soil Map Unit Name 1816 Kennabec variant silt loam VWI Classification: not id'ed

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" _____

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: <u>upland adj. Wetland A</u>
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

YTD precip was 60-70% of average. Per WETS Table method antecedent precip was Drier Than Normal.

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across all Strata: <u>5</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0.00%</u> (A/B)
1	<i>Prunus serotina</i>	35	Y	FACU	
2	<i>Quercus alba</i>	25	Y	FACU	
3	<i>Acer negundo</i>	15	N	FAC	
4	<i>Ostrya virginiana</i>	5	N	FACU	
		80	= Total Cover		Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>7</u> x 2 = <u>14</u> FAC species <u>17</u> x 3 = <u>51</u> FACU species <u>161</u> x 4 = <u>644</u> UPL species <u>13</u> x 5 = <u>65</u> Column totals <u>198</u> (A) <u>774</u> (B) Prevalence Index = B/A = <u>3.91</u>
Sapling/Shrub stratum	(Plot size: 15 ft)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Ostrya virginiana</i>	20	Y	FACU	
2	<i>Betula papyrifera</i>	5	N	FACU	
3	<i>Quercus alba</i>	5	N	FACU	
4	<i>Lonicera tatarica</i>	2	N	FACU	
5	<i>Ribes cynosbati</i>	2	N	FAC	
		34	= Total Cover		Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation _____ Dominance test is >50% _____ Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) _____ *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
Herb stratum	(Plot size: 5 ft)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Parthenocissus quinquefolia</i>	30	Y	FACU	
2	<i>Ageratina altissima</i>	30	Y	FACU	
3	<i>Daucus carota</i>	10	N	UPL	
4	<i>Phalaris arundinacea</i>	5	N	FACW	
5	<i>Carex pensylvanica</i>	3	N	UPL	
6	<i>Carex gracillima</i>	2	N	FACU	
7	<i>Galium obtusum</i>	2	N	FACW	
8	<i>Oxalis corniculata</i>	2	N	FACU	
		84	= Total Cover		
Woody vine stratum	(Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>
1					
2					
		0	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SA-U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 3/2						sandy loam	
6-12	10YR 4/2						sandy loam	
12-17	10YR 4/2						loamy sand	
17-24+	10YR 4/3		10YR 4/4	8	C	PL	loamy sand	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| ☐ Histisol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Stratified Layers (A5) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ 2 cm Muck (A10) | ☐ Depleted Matrix (F3) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Redox Dark Surface (F6) |
| ☐ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils:

- | |
|--|
| ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Very Shallow Dark Surface (TF12) |
| ☐ Other (explain in remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

 Type: _____
 Depth (inches): _____
Hydric soil present? N

Remarks:

redox features are too deep and the soil matrix chroma is too bright.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Aquatic Fauna (B13) |
| ☐ High Water Table (A2) | ☐ True Aquatic Plants (B14) |
| ☐ Saturation (A3) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Water Marks (B1) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Sediment Deposits (B2) | ☐ Presence of Reduced Iron (C4) |
| ☐ Drift Deposits (B3) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Algal Mat or Crust (B4) | ☐ Thin Muck Surface (C7) |
| ☐ Iron Deposits (B5) | ☐ Gauge or Well Data (D9) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Other (Explain in Remarks) |
| ☐ Sparsely Vegetated Concave Surface (B8) | |
| ☐ Water-Stained Leaves (B9) | |

Secondary Indicators (minimum of two required)

- | |
|--|
| ☐ Surface Soil Cracks (B6) |
| ☐ Drainage Patterns (B10) |
| ☐ Dry-Season Water Table (C2) |
| ☐ Crayfish Burrows (C8) |
| ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Stunted or Stressed Plants (D1) |
| ☐ Geomorphic Position (D2) |
| ☐ FAC-Neutral Test (D5) |

Field Observations:

Surface water present?	Yes ☐	No ☒	Depth (inches):	_____
Water table present?	Yes ☐	No ☒	Depth (inches):	_____
Saturation present?	Yes ☐	No ☒	Depth (inches):	_____

 (includes capillary fringe)
Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology indicators observed

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site 2 Acorn Drive City/County: Sunfish Lake/Dakota Sampling Date: August 9/2021
 Applicant/Owner: David Carlson State: MN Sampling Point: SP-1
 Investigator(s): Kelly Bopray, PSS, CWD Section, Township, Range: Sec. 31, T28N, R22W
 Landform (hillslope, terrace, etc.): broad swale Local relief (concave, convex, none): concave
 Slope (%): 2-4% Lat: Long: Datum:
 Soil Map Unit Name 1816 Kennabec variant silt loam VWI Classification: Not id'ed

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation, soil, or hydrology significantly disturbed?

Are "normal circumstances"

Are vegetation, soil X, or hydrology naturally problematic?

present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: non-wetland
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

YTD precip was 60-70% of average. Per WETS Table method antecedent precip was Drier Than Normal. Soil is a mollisol.

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>5</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>20.00%</u> (A/B)
1	<i>Acer negundo</i>	40	Y	FAC	
2	<i>Prunus serotina</i>	15	Y	FACU	
3	<i>Ulmus thomasii</i>	10	N	FAC	
4	<i>Quercus rubra</i>	10	N	FACU	
		75	= Total Cover		Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>64</u> x 3 = <u>192</u> FACU species <u>84</u> x 4 = <u>336</u> UPL species <u>30</u> x 5 = <u>150</u> Column totals <u>178</u> (A) <u>678</u> (B) Prevalence Index = B/A = <u>3.81</u>
Sapling/Shrub stratum	(Plot size: 15 ft)				
1	<i>Rhamnus cathartica</i>	1		FAC	
2					
3					
		1	= Total Cover		
Herb stratum	(Plot size: 5 ft)				Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1	<i>Parthenocissus quinquefolia</i>	35	Y	FACU	
2	<i>Daucus carota</i>	30	Y	UPL	
3	<i>Ageratina altissima</i>	20	Y	FACU	
4	<i>Alliaria petiolata</i>	10	N	FAC	
5	<i>Carex gracillima</i>	2	N	FACU	
6	<i>Arctium minus</i>	2	N	FACU	
7					
8					
9					
		99	= Total Cover		
Woody vine stratum	(Plot size: 30 ft)				Hydrophytic vegetation present? <u>N</u>
1	<i>Smilax hispida</i>	3		FAC	
2					
		3	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10YR 2/1						loam	
4-11	10YR 2/2						loam	
11-18	10YR 2/1						loam	
18-24+	10YR 3/1						loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| ☐ Histisol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) |
| ☐ Stratified Layers (A5) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ 2 cm Muck (A10) | ☐ Depleted Matrix (F3) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Redox Dark Surface (F6) |
| ☐ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils:

- | |
|--|
| ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Very Shallow Dark Surface (TF12) |
| ☐ Other (explain in remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

 Type: _____
 Depth (inches): _____
Hydric soil present? N

Remarks:

no redox features observed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| ☐ Surface Water (A1) | ☐ Aquatic Fauna (B13) |
| ☐ High Water Table (A2) | ☐ True Aquatic Plants (B14) |
| ☐ Saturation (A3) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Water Marks (B1) | ☐ Oxidized Rhizospheres on Living Roots (C3) |
| ☐ Sediment Deposits (B2) | ☐ Presence of Reduced Iron (C4) |
| ☐ Drift Deposits (B3) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Algal Mat or Crust (B4) | ☐ Thin Muck Surface (C7) |
| ☐ Iron Deposits (B5) | ☐ Gauge or Well Data (D9) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Other (Explain in Remarks) |
| ☐ Sparsely Vegetated Concave Surface (B8) | |
| ☐ Water-Stained Leaves (B9) | |

Secondary Indicators (minimum of two required)

- | |
|--|
| ☐ Surface Soil Cracks (B6) |
| ☐ Drainage Patterns (B10) |
| ☐ Dry-Season Water Table (C2) |
| ☐ Crayfish Burrows (C8) |
| ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Stunted or Stressed Plants (D1) |
| ☐ Geomorphic Position (D2) |
| ☐ FAC-Neutral Test (D5) |

Field Observations:

Surface water present?	Yes ☐	No ☒	Depth (inches):	<u> </u>
Water table present?	Yes ☐	No ☒	Depth (inches):	<u> >24 </u>
Saturation present?	Yes ☐	No ☒	Depth (inches):	<u> >24 </u>

 (includes capillary fringe)
Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators observed.

May 23, 2025

Dear City Council Members of Sunfish Lake

I am writing you about 2 Acorn Drive, Sunfish Lake, MN.

Hartman Homes Inc. is representing the owners of 2 Acorn Drive; we recently requested a driveway variance at the last planning commission meeting in May, 2025. The request was denied by the Commission, but we do not feel that they completely understood the impact that the driveway will have on the grading on the property and the loss of mature trees, if it needs to be installed at the required 25-foot setback from the North property line.

We are submitting an updated survey showing the proposed driveway at the 25-foot setback, to show how this will impact the property, compared to the 10-foot variance requested. As you can see, there will need to be major excavation to the side-slope of the hill in this location, and a proposed retaining wall, to cut-in a level driveway. Ultimately, there will be 5 mature trees removed that are in the path of the driveway (#63,64,66,71,144), and the excavation will undermine the root system, or fill over the base of 2 other trees, potentially 3 (#62,65 and probably #60) causing them to die. (Tree site plan and tree inventory was also attached for reference; these notes refer to the section of driveway that is closer than 25-feet to the lot line, a little over 1/2 of the driveway meets the 25-ft required setback nearing the neighbors home at 3 Acorn Drive)

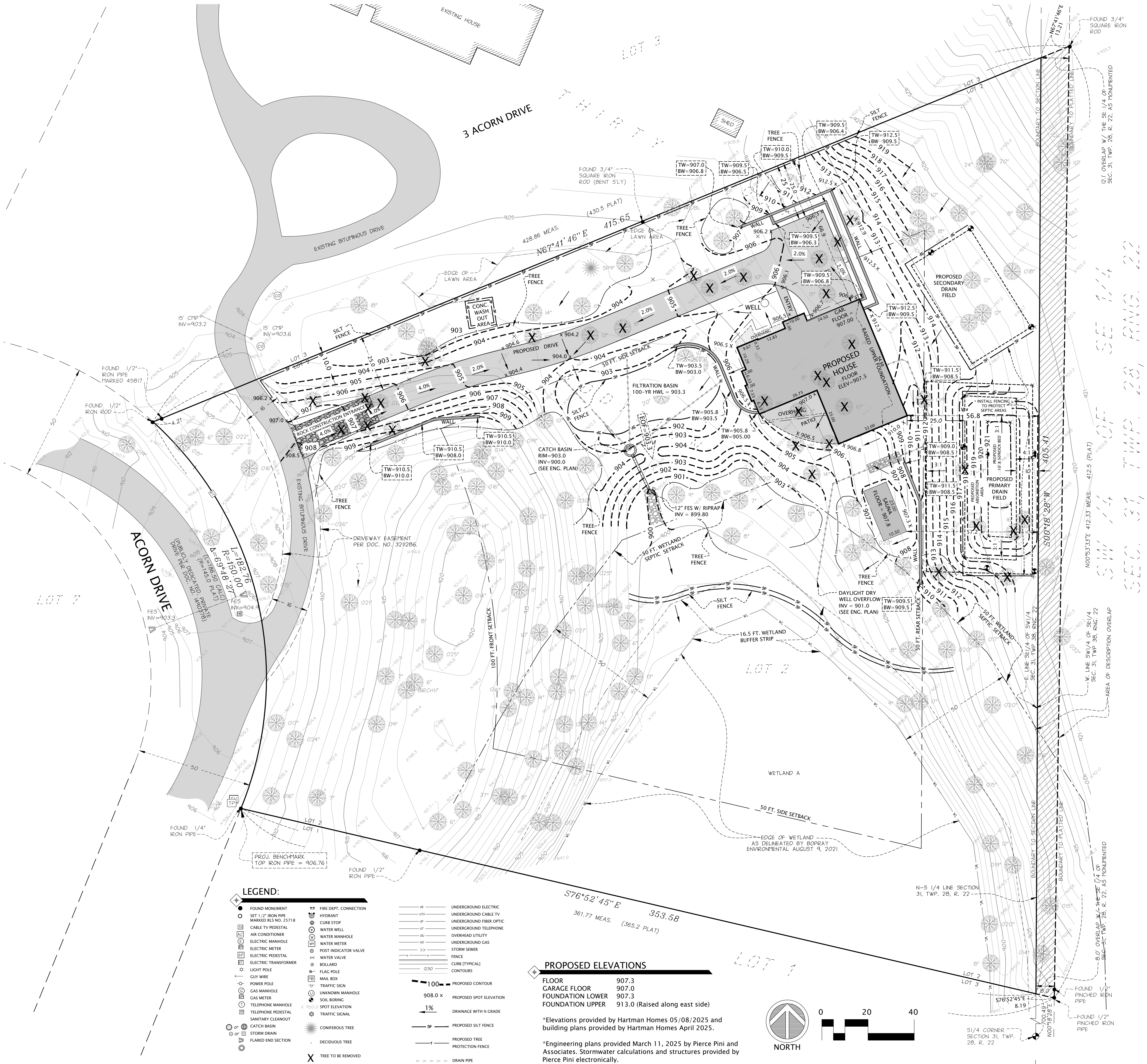
Our Surveying Company, Cornerstone Land Surveying, initially came to us with the idea for moving the driveway, to lessen grading into this hillside. Lori Johnson, Senior Community Planner, and Justin Messner the City Engineer, have suggested that this Variance would be reasonable to minimize grading concerns on the property and loss of mature trees.

We followed the expert's suggestions, and applied for the Variance, but ultimately it was denied at the Planning Commission Stage. We would love for you to review this again, during the review process of the major site plan/C.P.U., at the June City Council Meeting, if possible.

Thank you for your consideration.

 V.P. Hartman Homes Inc.

Chad Maack, Hartman Homes Inc.



- LEGEND:**
- FOUND MONUMENT
 - SET 1/2" IRON PIPE MARKED RLS NO. 25718
 - CABLE TV PEDESTAL
 - AIR CONDITIONER
 - ELECTRIC MANHOLE
 - ELECTRIC METER
 - ELECTRIC PEDESTAL
 - ELECTRIC TRANSFORMER
 - LIGHT POLE
 - GUY WIRE
 - POWER POLE
 - GAS MANHOLE
 - GAS METER
 - TELEPHONE MANHOLE
 - SANITARY CLEANOUT
 - CATCH BASIN
 - STORM DRAIN
 - FLARED END SECTION
 - FIRE DEPT. CONNECTION
 - CURB STOP
 - WATER WELL
 - WATER MANHOLE
 - WATER METER
 - POST INDICATOR VALVE
 - WATER VALVE
 - BOLLARD
 - FLAG POLE
 - MAIL BOX
 - TRAFFIC SIGN
 - UNKNOWN MANHOLE
 - SOIL BORING
 - SPOT ELEVATION
 - TRAFFIC SIGNAL
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - TREE TO BE REMOVED
 - FIRE DEPT. CONNECTION
 - CURB STOP
 - WATER WELL
 - WATER MANHOLE
 - WATER METER
 - POST INDICATOR VALVE
 - WATER VALVE
 - BOLLARD
 - FLAG POLE
 - MAIL BOX
 - TRAFFIC SIGN
 - UNKNOWN MANHOLE
 - SOIL BORING
 - SPOT ELEVATION
 - TRAFFIC SIGNAL
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - TREE TO BE REMOVED

PROPOSED ELEVATIONS

FLOOR	907.3
GARAGE FLOOR	907.0
FOUNDATION LOWER	907.3
FOUNDATION UPPER	913.0 (Raised along east side)

*Elevations provided by Hartman Homes 05/08/2025 and building plans provided by Hartman Homes April 2025.

*Engineering plans provided March 11, 2025 by Pierce Pini and Associates. Stormwater calculations and structures provided by Pierce Pini electronically.

LEGAL DESCRIPTION:

The following Legal Description is as shown on Trademark Title Services, Inc. as agent for Fidelity National Title Insurance Company Title Commitment No. 21-4872, dated July 6, 2021.

Lot 2, Thirty Oaks Addition, according to the recorded plat thereof, Dakota County, Minnesota. (Abstract Property).

*There appears to be an overlap in legal descriptions with the property lying to the east as shown graphically on the survey. Contact a real estate attorney for legal advice relating to this issue

AREA:

TOTAL AREA TO SECTION LINE	= 101,925 SQ. FT. / 2.34 ACRES
AREA OF DESCRIPTION OVERLAP	= 4,121 SQ. FT. / 0.09 ACRES
AREA OF LOT AS PLATTED	= 106,046 SQ. FT. / 2.43 ACRES

EASEMENT NOTES:

The following exceptions appear on the Trademark Title Services, Inc. as agent for Fidelity National Title Insurance Company Title Commitment No. 21-4872, dated July 6, 2021.

7. Subject to terms and conditions contained in Resolution per Doc. No. 1490378. (Noted in right of way of Acorn Drive).

8. Subject to terms and conditions contained in Driveway Easement per Doc. No. 3211286. (Shown Graphically).

SURVEY NOTES:

- BEARINGS ARE BASED ON COORDINATES SUPPLIED BY THE DAKOTA COUNTY SURVEYORS OFFICE.
- UNDERGROUND UTILITIES SHOWN PER VISIBLE STRUCTURES ONLY.
- THERE MAY BE SOME UNDERGROUND UTILITIES; GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
- WETLAND DELINEATION BY KELLY BOPRAY, BOPRAY ENVIRONMENTAL SERVICES, LLC ON AUGUST 9, 2021. EMAIL: KJBOPRAY@YAHOO.COM, PHONE: 715-307-4577.
- THERE APPEARS TO BE AN OVERLAP IN LEGAL DESCRIPTIONS WITH THE PROPERTY TO THE EAST. CONTACT A REAL ESTATE ATTORNEY FOR LEGAL ADVICE RELATING TO THIS ISSUE.
- SEPTIC DESIGN BY ALEX.PEIPIN, TEN THIRTY ENVIRONMENTAL. PHONE: 612-248-4281. EMAIL: ALEX.PEIPIN@TENTHIRTY ENVIRONMENTAL.COM
- HOUSE PLANS PROVIDED BY HARTMAN HOMES DATED 11-24-2024

TREE INVENTORY:

TREES LOCATED AUGUST 2021, NO TAGS OR ID INFORMATION AVAILABLE AT THIS TIME.

EXISTING IMPROVEMENT AREAS:

BITUMINOUS DRIVE	= 1307 SQ. FT.
------------------	----------------

PROPOSED IMPROVEMENT AREAS:

HOUSE	2578
DRIVEWAY	3809
ENTRY	58
HORIZONTAL OVERHANG	76
DRIVEWAY	3984
FRONT PORCH	78
FRONT PORCH	76
PATIO	502
SAUNA BUILDING	241
STEPS	16
WETLAND DRIVEWAY	50
TOTAL	7625
EXISTING PRIV DRIVE	1307
TOTAL PARCEL AREA	106046
% IMPERVIOUS	8.32%
TOTAL AREA	106,046
% IMPERVIOUS	8.4%

ZONING:

ZONING: SINGLE FAMILY RESIDENTIAL

SETBACKS:

STREET:	100 FT.
SIDEYARD:	50 FT.
REAR:	50 FT.

* ZONING PER PREVIOUS PROJECTS - CONFIRM CURRENT ZONING REQUIREMENTS WITH CITY STAFF

FLOOD INFORMATION:

THIS PROPERTY LIES WITHIN THE UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27037C0105E HAVING AN EFFECTIVE DATE OF 12/02/2011.

BENCHMARKS:

ELEVATIONS BASED ON INFORMATION AS SHOWN ON THE MNDOT GEODETIC WEBSITE. SURVEY DISK 1918 K WITH AN ELEVATION OF 931.83 WAS USED TO ESTABLISH VERTICAL CONTROL FOR THIS SURVEY (NAVD 88) PROJECT BENCHMARKS IDENTIFIED AND SHOWN GRAPHICALLY.

UNDERGROUND UTILITIES NOTES:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST.



CARLSON/NELSON PROPERTY

SUNFISH LAKE, MINNESOTA

CONTACT:

CHRIS NELSON
5609 ALDRICH AVENUE S.
MINNEAPOLIS, MN 55419
PHONE: 612.254.5122
EMAIL: cjmnppls@yahoo.com

COUNTY/CITY:

DAKOTA COUNTY

CITY OF SUNFISH LAKE

REVISIONS:

DATE	REVISION
01-02-2025	PRELIM. DRAFT
03-13-2025	INITIAL ISSUE
04-22-2025	WL SETBACK/BUFFER
05-09-2025	REVISE SEPTIC/LAYOUT
05-23-2025	REVISE DRIVEWAY

CERTIFICATION:

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

Daniel L. Thurmes
Daniel L. Thurmes Registration Number: 25718
Date: 09-27-2021

PROJECT LOCATION:

ACORN DR.

PID#38-76000-00-020

CORNERSTONE LAND SURVEYING, INC.

Suite #200
1970 Northwestern Ave
Stillwater, MN 55082
Phone 651.275.8969
Fax 651.275.8976
dan@cssurvey.net

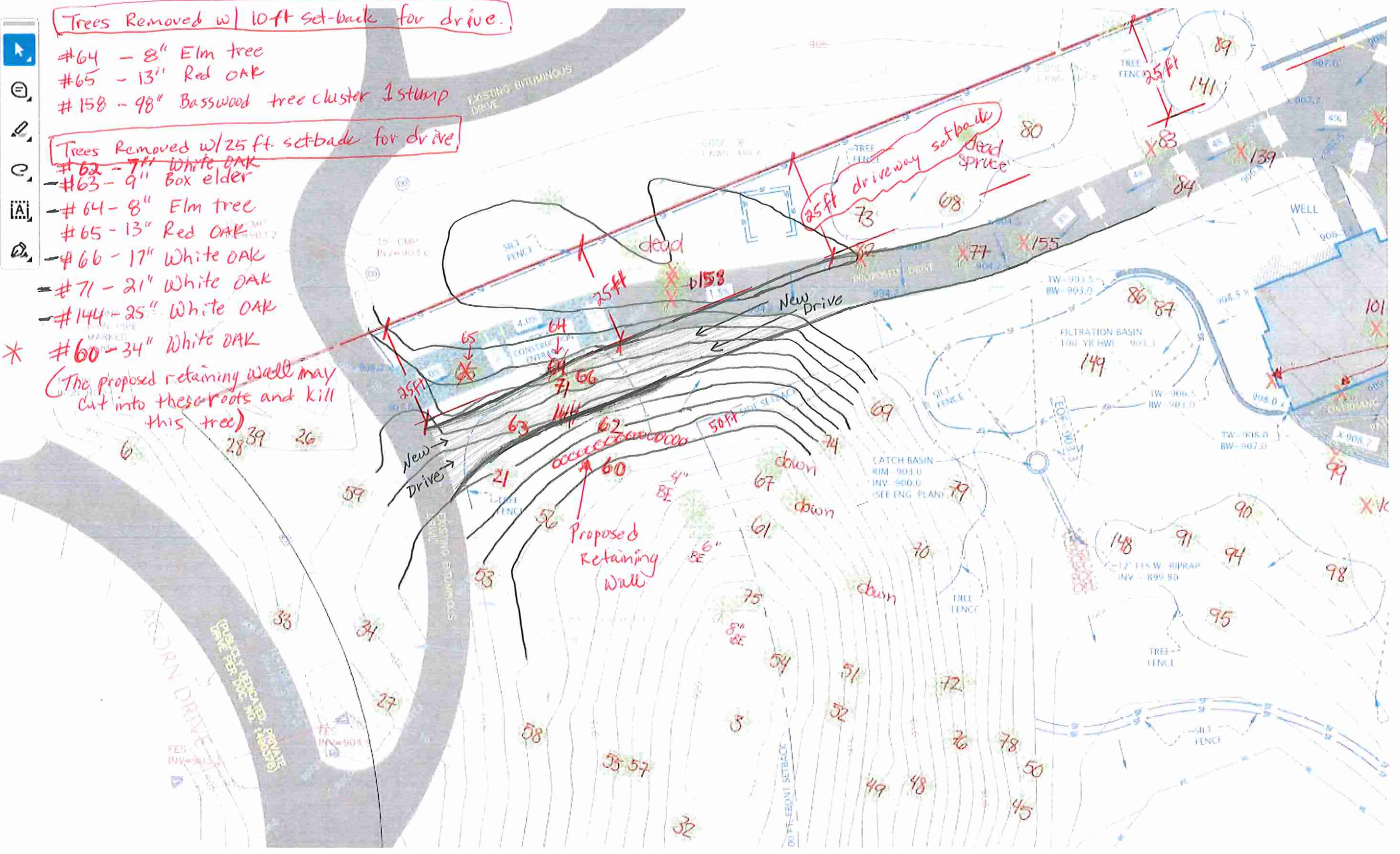
PROPOSED IMPROVEMENTS

Trees Removed w/ 10ft set-back for drive.

- #64 - 8" Elm tree
- #65 - 13" Red OAK
- #158 - 98" Basswood tree cluster 1stump

Trees Removed w/ 25 ft. setback for drive

- ~~#62 - 7" White OAK~~
 - ~~#63 - 9" Box elder~~
 - #64 - 8" Elm tree
 - #65 - 13" Red OAK
 - #66 - 17" White OAK
 - #71 - 21" White OAK
 - #144 - 25" White OAK
 - * #60 - 34" White OAK
- (The proposed retaining wall may cut into these roots and kill this tree)



2 ACORN DRIVE Sunfish Lake Tree Survey

Tag #	DBH (inches)	Species	Removal
1	22	White Oak	
2	22	White Oak	
3	6	Elm	
4	28	White Oak	
5	8	Elm	
6	7	Ironwood	
7	12	Cherry	
8	10	Ironwood	
9	12	Ironwood	
10	9	Ironwood	
11	12	Ironwood	
12	10	Ironwood	
13	7	Ironwood	
14	12	Ironwood	
15	9	Ironwood	
16	40	White Oak	
17	14	Ironwood	
18	18	White Oak	
19	22	White Oak	
20	7	Ironwood	
21	7	Boxelder	
22	6	Ironwood	
23	14	Ironwood	
24	8	Ironwood	
25	11	White Oak	
26	6	Apple	
27	20	White Oak	
28	6	Elm	
29	10	Ironwood	
30	7	Boxelder	

Removal

31	11	Poplar	
32	34	White Oak	
33	28	White Oak	
34	8	Boxelder	
35	9	Boxelder	
36	6	Boxelder	
37	30	White Oak	
38	10	Ironwood	
39	11	Ironwood	
40	14	Cherry	
41	13	White Oak	
42	15	Cherry	
43	9	White Oak	
44	9	Ironwood	
45	16	Ironwood	
46	14	Cherry	
47	22	White Oak	
48	12	White Oak	
49	7	Cherry	
50	10	Elm	
51	10	Ironwood	
52	14	Cherry	
53	31	White Oak	
54	20	White Oak	
55	25	Elm	
56	28	White Oak	
57	12	Ironwood	
58	26	White Oak	
59	5	Spruce	
60	34	Red Oak	May Die
61	20	White Oak	
62	7	White Oak	X
63	9	Boxelder	X

25 ft. drive set-back
25 ft. drive set-back

Removal

64	8	Elm	(X)
65	13	Red Oak	(X)
66	17	White Oak	X
67	11	Boxelder	
68	12	Cherry	
69	18	Ironwood	
70	36	White Oak	
71	21	White Oak	(X)
72	32	White Oak	
73	20	Cherry	X
74	24	White Oak	
75	20	White Oak	
76	11	Birch	
77	20	Elm	X
78	14	Elm	
79	14	Boxelder	
80	14	White Oak	
81	21	Apple	
82	9	Basswood	
83	24	Cherry	
84	14	Basswood	X
85	28	Ironwood	
86	6	Apple	
87	12	Apple	
88	11	Basswood	X
89	18	Apple	
90	7	Red Oak	
91	26	Hackberry	
92	14	Apple	X
93	11	Apple	X
94	18	Apple	
95	8	Apple	
96	9	Cherry	X

10 and 25 ft. drive set-back

10 and 25 ft. set-back

25 ft. drive set-back

25 ft. drive set-back

Removal

97	11	Linden	
98	18	Boxelder	
99	15	Basswood	
100	16	White Oak	
101	19	Basswood	X
102	24	Boxelder	
103	10	Boxelder	
104	7	White Oak	X
105	12	Ash	
106	12	Elm	X
107	20	Apple	
108	20	White Oak	
109	16	White Oak	
110	23	Boxelder	
111	18	Hackberry	
112	30	Cherry	
113	30	White Oak	
114	26	White Oak	
115	14	Red Oak	
116	18	Boxelder	X
117	14	Butternut	
118	11	Boxelder	
119	28	Cherry	
120	24	White Oak	
121	18	White Oak	
122	28	White Oak	
123	24	White Oak	
124	18	White Oak	
125	18	White Oak	
126	18	Cherry	
127	20	White Oak	
128	20	White Oak	X
129	30	White Oak	X

Removal

130	10	Butternut	
133	8	Ironwood	
134	20	White Oak	X
135	30	Boxelder	
138	8	White Oak	
139	18	White Oak	
140	10	White Oak	
141	25	Cherry	X
143	10	White Oak	
144	25	White Oak	(X)
147	20	Maple	
149	10	Boxelder	
153	22	White Oak	
154	22	White Oak	X
155	18	White Oak	X
158	98	Basswood clump	(X)
160	12	Apple	X
167	22	White Oak	X

25 ft drive set-back

10 ft drive set-back
 This tree may be able to stay w/ ~~25~~ 25 ft. set back but it depends on grading