

Planning Memorandum

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

From: Lori Johnson, City Planner

Date: June 6, 2023

Re: 11 Salem Lane – Major Site Plan Review
WSB Project No. 021843-000

GENERAL INFORMATION

Applicant:	Kerry Hage, Hage Homes		
Property Owner:	Adele and Cody Langeness		
Project Location:	11 Salem Lane – PID 389050000060		
Acreage:	2.52 acres		
Existing Land Use	Single-Family Residential		
Zoning:	Zoned R-1 within Shoreland Overlay District (partial)		
Surrounding Land Use / Zoning:	Surrounded by Single Family Homes/R-1 Zoning		
Comprehensive Plan:	The City of Sunfish Lake (2040) Comprehensive Plan guides this property for Rural Residential land use.		
Deadline for Agency Action:	Application Date:	03-22-2023	
	60 Days:	05-21-2023	
	Extension Letter Mailed:	05-02-2023	
	120 Days:	07-01-2023	
Attachments:	Location Map Aerial Narrative Existing Survey Proposed Survey Site Construction Plans Landscape Plans Renderings/Architectural Plans		

CONSIDERATIONS RELATED TO THE REQUEST

1. Overview.

Kerry Hage, on behalf of Adele and Cody Langeness who are the property owners at 11 Salem Lane, has made an application for Major Site and Building Plan Review to allow for the construction of a new 7,695 square foot, single-family home including an attached garage and screen porch. The existing home on site was demolished in early 2023 to prepare for the new home. Major Site and Building Plan Review is required for all new homes in Sunfish Lake.

2. General Zoning Review—New Home

Setbacks: The new home and attached garage are set back at a distance greater than what is required by the ordinance. The required front yard setback is 100 feet, and the required side and rear yard setbacks are 50 feet. The front yard setback of the proposed home is 139.9 feet. The side yard setbacks for the proposed home are 71.3 feet and 70.1 feet. The rear yard setback for the proposed home is 112.2 feet. The home is partially within the Shoreland Overlay District, as the far northwest corner of the property is in the district. However, the increased setback requirement of 200 feet to the OHWL does not apply to this property as it is not located on the shoreland of any lake.

Impervious Surface and Building Coverage: The total proposed impervious surface coverage for the lot on which the home is to be located is 14.8%. 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 4% which meets ordinance requirements.

Accesses: The new home will have an access located on Salem Lane, which is a private road. The lot on which the home will be located is also adjacent to Windy Hill Road on the northeast corner of the site, and another private drive on the northwest corner of the site. The property does not currently have nor will it have access to either Windy Hill Road or the other private drive.

Size: The home that is being constructed is 7,695 square foot, single-family home including an attached garage and screen porch. The home is a one-story walkout.

Exterior Elevations and Height: The exterior home elevations include natural stone, wood siding, stucco, metal panels and metal roofing. The overall height of the structure is 26 feet 7 inches 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.

Tree Preservation: There will be 102 trees removed on site to accommodate the construction of the new home. Twenty of the removed trees are ash trees and they are not counted towards the final mitigation plan as they are not a preferred species.

Landscaping: The landscape plan indicates that 89 trees will be planted on site to mitigate for 82 removed trees. Other improvements around the home and the lot include a pickleball court on the north side of the lot and outdoor living areas. A condition has been added to the findings of fact that require the applicant to submit a new landscape plan with tree installation sizes.

Also included on the landscape plan is the installation of monuments with a gate at the entrance to the site from Salem Lane. The zoning ordinance indicates that a conditional use permit is required for all security gates. The zoning ordinance also requires that such gates must be within the buildable area of the lot, which would mean that the gate would need to be located 100 feet from the front property line. The gate and monument as proposed would not meet this requirement. Therefore, a variance to the setback requirement would be required unless the gate

is moved past the front yard setback line. A condition has been added to the approval of the major site and building plan review that a conditional use permit and possibly a variance would need to be obtained before permits are granted for the security gate and associated monuments.

Lighting: A lighting plan indicating foot candle levels on the property after lighting installation was submitted to staff on May 24, which was after the Planning Commission meeting. The plan indicates the foot candle measurements at the property line are zero, which meets ordinance requirements.

DNR Approval: The Minnesota DNR Area Hydrologist was notified of the proposed request. The Hydrologist did not offer any further comments or express concerns.

Planning Commission Update: The Planning Commission held an onsite meeting, a public hearing and discussion regarding this project at their regular meeting on May 18th. Three residents attended the on-site meeting and had questions regarding use of the private road for construction, tree removal and setbacks. The Planning Commission reminded the applicant of the need for the lighting plan and a conditional use/possible variance for the monuments and gate. As stated above, the lighting plan has been submitted and the contents of the plan meet ordinance requirements. The Planning Commission unanimously recommended approval of the major site and building plan review on a 4-0 vote.

Site Plan Review Criteria

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 above criteria have been met for major site plan approval and shoreland considerations.

No public comments have been formally received as of the date of the staff report publication.

RECOMMENDATION

Based on the foregoing considerations and applicable ordinances, staff recommends approval of the major site and building plan review for a new home subject to the following findings of fact and conditions of approval:

Findings of Fact:

1. The location of the subject property is as follows:

11 Salem Lane
SUNFISH LAKE, MN 55077
2. The planning reports dated May 18, 2023 and June 6, 2023, prepared by WSB is incorporated herein by reference.
3. The Applicants have submitted an application for a major site and building plan review.
4. Requests for major site and building plan review require Planning Commission review and City Council approval.
5. Notices for public hearings regarding requests on lots within the Shoreland Overlay district must be sent to the Department of Natural Resources.
6. The Sunfish Lake Planning Commission reviewed the applicant's request for major site and building plan approval at the May 18, 2023, Planning Commission meeting.
7. Upon review of the planning report and application information, the Planning Commission found that the proposed site and building plans meet Ordinance requirements. The following findings support the Planning Commission's recommendation for approval:

Major Site and Building Plans:

- a. The proposed improvements meet R-1 and Shoreland Overlay District requirements and standards.
- b. The proposed development addresses Ordinance requirements pertaining to grading, drainage and stormwater management, landscaping, and screening.
- c. The proposed home meets Ordinance requirements pertaining to building size, and material use.

- d. The development meets other applicable Zoning Ordinance criteria.

Conditions of Approval:

1. Construction of the home and all improvements shall occur in substantial conformance with the plans recommended for approval at the May 18, 2023, Planning Commission meeting.
2. The applicant must obtain all other permits as may be required.
3. The applicant shall comply with all applicable federal, state, and local laws, rules and ordinances.
4. 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.
5. 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.
6. This Resolution is subject to the condition that all representations, written and oral, made by the Applicant and its agents and representatives to the City contained in and concerning the Applicant's application for the site plan review must have been true, complete and accurate at the time they were made, and that they remain true and accurate for the duration of the development.
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. All retaining walls greater than 42" in height (measured from bottom of footing to top of wall) must be designed by a qualified professional and the design must be submitted to the building inspector for review and approval.
11. 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.
12. The applicant to submit a new landscape plan with tree installation sizes.
13. A conditional use permit and possibly a variance would need to be obtained before permits are granted for the security gate and associated monuments. No work can begin on the monuments or gate until the necessary approvals have been granted. If the applicant wishes to begin work on the rest of the development on this lot, a new site plan must be submitted that removes the monument and the gate from the plans prior to issuance of building permit.

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

RESOLUTION NO. 23-XX

**RESOLUTION APPROVING A MAJOR SITE PLAN AND BUILDING REVIEW FOR
THE PROPERTY AT 11 SALEM LANE, SUNFISH LAKE, DAKOTA COUNTY,
MINNESOTA.**

WHEREAS, Kerry Hage, on behalf of Adele and Cody Langeness, submitted an application for the approval of a major site plan and building review for the property at 11 Salem Lane, Sunfish Lake, Dakota County, Minnesota, legally described as:

REGISTERED LAND SURVEY #50 TRACT F PID 38-90500-00-060

WHEREAS, a request for major site and building plan review requires Planning Commission review and City Council approval; and

WHEREAS, City staff reviewed the application and outlined their review comments in planning reports dated May 18, 2023 and June 6, 2023, prepared by WSB; and

WHEREAS, the Sunfish Lake Planning Commission held a public hearing at their May 18, 2023 meeting and reviewed the major site and building plan review application, along with the referenced staff report; and

WHEREAS, upon hearing the staff presentations, applicant testimony, and public testimony, the Planning Commission closed the public hearing and recommend to the City Council approval of the major site and building plan review on a vote of 4-0 vote; and

WHEREAS, the following findings support the Planning Commission recommendation for approval:

1. The location of the subject property is as follows:

11 Salem Lane
SUNFISH LAKE, MN 55077
2. The planning reports dated May 18, 2023, and June 6, 2023 and prepared by WSB is incorporated herein by reference.
3. The Applicant submitted applications for a major site and building plan review and a CUP request.

4. Requests for major site and building plan review require Planning Commission review and City Council approval.
5. Notices for public hearings regarding requests on lots within the Shoreland Overlay district must be sent to the Department of Natural Resources.
6. The Sunfish Lake Planning Commission reviewed the applicant's request for major site and building plan approval at the May 18, 2023 Planning Commission meeting.
7. Upon review of the planning report and application information, the Planning Commission found that the proposed site and building plans meet Ordinance requirements. The following findings support the Planning Commission's recommendation for approval:

Major Site and Building Plans:

- a. The proposed improvements meet R-1 and Shoreland Overlay District requirements and standards.
- b. The proposed development addresses Ordinance requirements pertaining to grading, drainage and stormwater management, landscaping, and screening.
- c. The proposed home meets Ordinance requirements pertaining to building size, and material use.
- d. The development meets other applicable Zoning Ordinance criteria.

Shoreland Overlay District:

- a. The prevention of soil erosion or other possible pollution of public waters, both during and after construction.
- b. The visibility of structures and other facilities as viewed from public waters is limited.
- c. The site is adequate for water supply and on-site sewage treatment.
- d. The types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate these watercrafts.

WHEREAS, the Sunfish Lake City Council considered the application for major site and building plan approval at their meeting on June 6, 2023 and agrees with the findings of the Planning Commission.

NOW THEREFORE BE IT RESOLVED THAT the City Council of the City of Sunfish Lake hereby approves the major site and building plan review for 11 Salem Lane with the following conditions:

1. Construction of the home and all improvements shall occur in substantial conformance with the plans recommended for approval at the May 18, 2023, Planning Commission meeting and the June 6, 2023 City Council meeting.
2. The applicant must obtain all other permits as may be required.
3. The applicant shall comply with all applicable federal, state, and local laws, rules and ordinances.
4. 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.
5. 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.
6. This Resolution is subject to the condition that all representations, written and oral, made by the Applicant and its agents and representatives to the City contained in and concerning the Applicant's application for the site plan review must have been true, complete and accurate at the time they were made, and that they remain true and accurate for the duration of the development.
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. All retaining walls greater than 42" in height (measured from bottom of footing to top of wall) must be designed by a qualified professional and the design must be submitted to the building inspector for review and approval.
11. 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.
12. The applicant to submit a new landscape plan with tree installation sizes.
13. A conditional use permit and possibly a variance would need to be obtained before permits are granted for the security gate and associated monuments. No work can begin on the monuments or gate until the necessary approvals have been granted. If the applicant wishes to begin work on the rest of the development on this lot, a new site plan must be submitted that removes the monument and the gate from the plans prior to issuance of building permit.

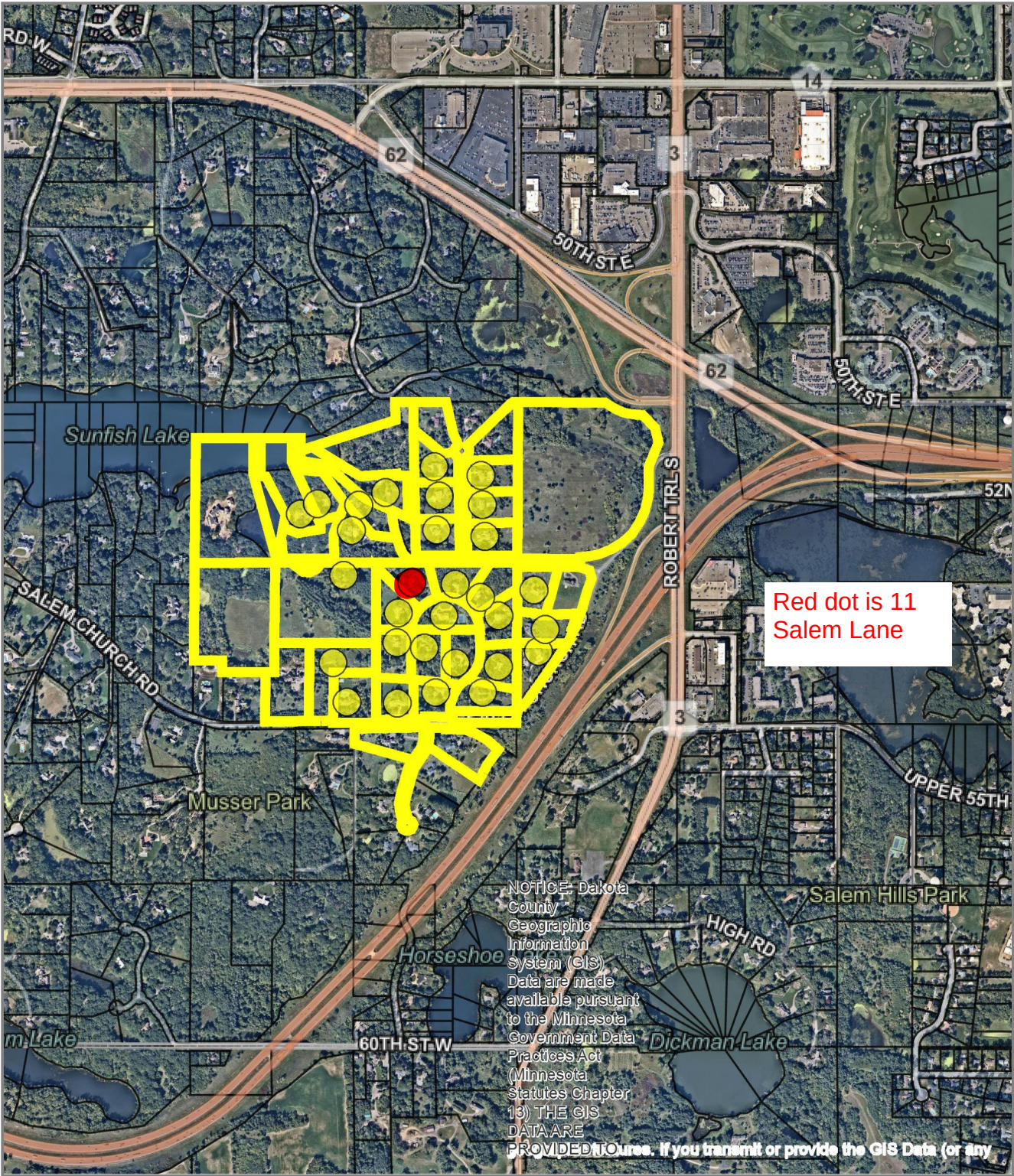
This resolution is adopted by the City Council of the City of Sunfish Lake this 6th day of June, 2023.

Dan O'Leary, Mayor

Attest:

Christy Wilcox, City Clerk

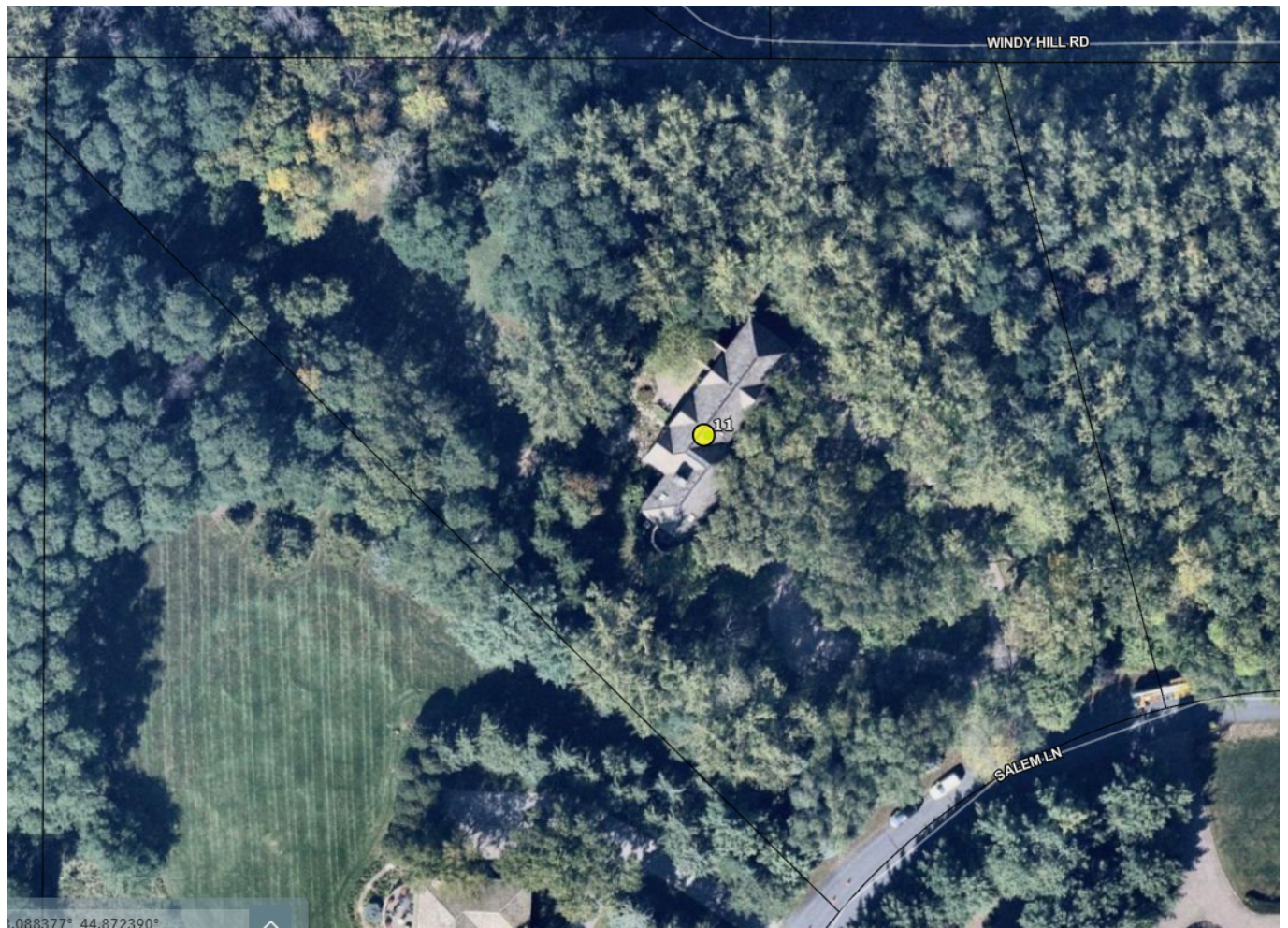
Dakota County, MN



Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed.
This is not a legal document and should not be substituted for a title search, appraisal, survey, or
for zoning verification.

Map Scale
1 inch = 1200 feet
4/19/2023

Aerial for 11 Salem Lane



11 Salem Lane Narrative

The following is a narrative for the new home that we are proposing to build for the Langeness family at 11 Salem Lane in Sunfish Lake, MN.

The existing home is a single family, 2-story home that is 5900 square feet. The Langeness Residence is to be a 5 bedroom, 4 bathroom, single family home that was built in 1989. The existing property is planned for demolition because it would require extensive renovation and does not meet the needs of the family.

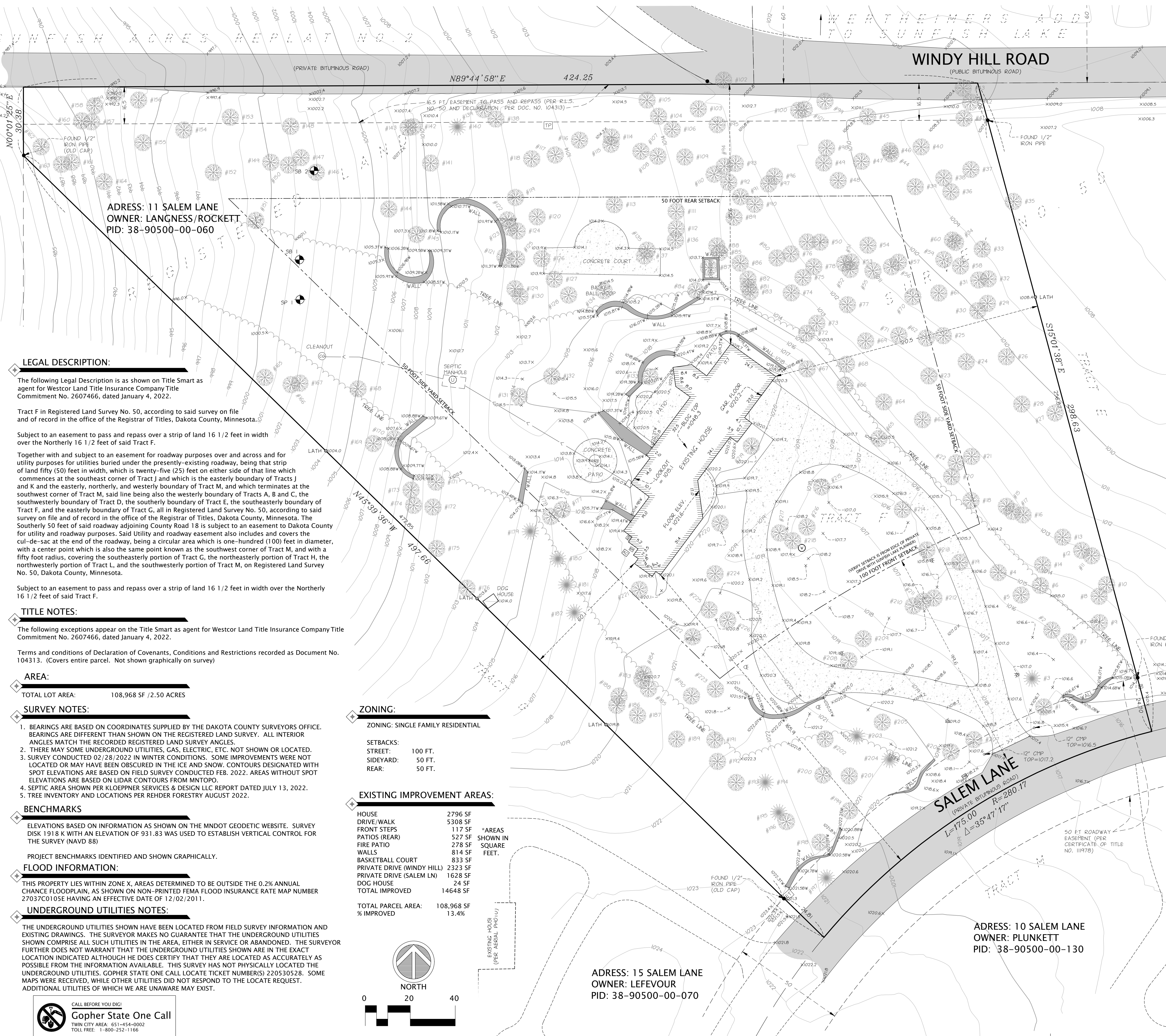
The proposed home is a single family, 1-story, lower level walkout with approximately 4,815 finished square feet and 1,425 unfinished space, a 1,115 square foot attached garage and a 340 square foot attached screen porch. Materials to include natural stone, wood siding, stucco, metal panels and metal roofing. The home also features large windows to maximize views and natural light.

We have partnered with a company called Better Futures of Minnesota to recycle as many of the finishes from the interior of the existing home. This company specializes in salvaging items from existing homes and repurposing them to use in other projects. We have a list of the items that we recycled attached to the information we are submitting for the project.

Regarding the site work at the home we have partnered with Pierce and Pini on the civil engineering, Cornerstone Land Surveying on the survey, Bollig and sons on the demo, erosion control and large soil work and LIVIT Site and Structure for the design and landscaping work. These partners have worked with and in the city of Sunfish Lake and are familiar with the expectations from the city. We are planning the following work to be done:

- Demo/Removals:
 - Remove 102 existing trees as shown on sheet L0.0 and outlined in the tree spreadsheet.
 - 20 proposed tree removals are ash, which are not counted towards the final mitigation total of 82 replacement trees.
 - LIVIT proposes to plant 89 replacement trees.
 - Demo and removal of all existing hardscape. This includes the driveway, all patios concrete and all retaining walls.
- Boulder walls:
 - We are removing several of the existing retaining walls (which are small) and regrading the entire site for better drainage and water management. The current site has areas that do not drain properly and can hold water during certain weather events.
- Hardscapes:
 - Stone patios: LIVIT will install the front patio, upper-back patio, and lower-back patio and lower-back patio per plan. Stone type and pattern pending final selections.
 - Stone Steps Steppers: LIVIT will install stone steps between the upper and lower back patios. Landings to be cut stone. Stone steps and steppers to be installed on the south side of the house for access to the back patios from the driveway.
 - Driveway: LIVIT will install the auto court and asphalt driveway per plan. The auto court as proposed features a paver field within a concrete border. Paver color and pattern pending final selection.
- Fire Feature:
 - Livit will install an approximate 3' x 7' gas fire table on the back-lower patio, per plan. Materials pending final selections.

- Entry Monument:
 - LIVIT will install footings, stone columns and gate for the entry monument (see drawings for elevations). Materials pending final selections.
- Landscape Beds:
 - Plantings: LIVIT will install all planting materials per plan. Final plant selections TBD. Approximately 500 perennials, 100 shrubs and 89 trees.
 - Edging: LIVIT will install both steel and poly edging as proposed on sheet L1.0.
 - Ground Cover: LIVIT will install beach pebbles, landscape trap rock and mulch as proposed on sheet L1.1.
- Irrigation:
 - LIVIT will install. And irrigation system for Sod areas around the home ad planting beds. Irrigation zones and layout pending final plant selections and budget.
- Landscape Lighting:
 - LIVIT will install the landscape lighting package. Lighting deign is pending overall object approval; at this time LIVIT will submit a lighting/lumen plan per city requirements.
- Sod:
 - LIVIT will spread and grade approximately 3" of soils within the disturbed areas as a base for sod installation.
- Silt fencing:
 - The silt fencing and erosion control measures have been designed by Pierce and Pini. They will be installed by Bollig and sons excavation prior to the demo of the existing home. They will be removed and disposed of by LIVIT at the completion of the landscaping of the project.



TREE INVENTORY:

ID	Species	DBH	Cond	Notes
1	Elm, siberian	22	Fair	
2	Elm, american	20	Good	
3	Spruce, blue	6	Fair	
4	Cottonwood, eastern	19	Good	
5	Elm, american	6	Good	
6	Ash, green	10	Fair	
7	Boxelder	7	Fair	
8	Cottonwood, eastern	17	Good	
9	Cottonwood, eastern	16	Good	
10	Cottonwood, eastern	10	Good	
11	Elm, siberian	7	Fair	
12	Elm, siberian	7	Fair	
13	Cottonwood, eastern	7	Fair	
14	Birch, paper	7	Good	
15	Cottonwood, eastern	19	Good	
16	Birch, paper	8	Good	
17	Cottonwood, eastern	8	Good	
18	Birch, paper	7	Fair	
19	Cottonwood, eastern	21	Good	
20	Aspen, quaking	11	Good	
21	Aspen, quaking	12	Good	
22	Birch, paper	8	Good	
23	Birch, paper	8	Good	
24	Boxelder	6	Good	
25	Cottonwood, eastern	15	Good	
26	Locust, black	7	Good	
27	Locust, black	9	Good	
28	Locust, black	9	Good	
29	Cottonwood, eastern	8	Good	
30	Locust, black	8	Good	
31	Aspen, quaking	8	Good	
32	Cottonwood, eastern	7	Good	
33	Cottonwood, eastern	6	Fair	
34	Pine, white	10	Good	
35	Cottonwood, eastern	19	Good	
36	Cottonwood, eastern	15	Good	
37	Cottonwood, eastern	10	Good	
38	Cottonwood, eastern	9	Good	
39	Cottonwood, eastern	12	Good	
40	Birch, paper	11	Good	
41	Ash, green	12	Fair	
42	Boxelder	7	Fair	
43	Boxelder	13	Fair	
44	Cottonwood, eastern	19	Fair	
45	Boxelder	16	Fair	
46	Aspen, quaking	11	Good	
47	Birch, paper	12	Good	
48	Birch, paper	11	Good	
49	Birch, paper	12	Good	
50	Birch, paper	8	Good	
51	Birch, paper	7	Good	
52	Birch, paper	9	Good	
53	Cottonwood, eastern	10	Good	
54	Locust, black	8	Good	
55	Birch, paper	8	Good	
56	Cottonwood, eastern	18	Good	
57	Locust, black	9	Good	
58	Locust, black	10	Good	
59	Cottonwood, eastern	9	Good	
60	Aspen, quaking	10	Good	
61	Pine, white	9	Fair	
62	Birch, paper	9	Good	
63	Cottonwood, eastern	17	Good	
64	Birch, paper	7	Fair	
65	Cottonwood, eastern	36	Good	2x 18 18
66	Cottonwood, eastern	16	Good	
67	Elm, american	10	Good	
68	Cottonwood, eastern	20	Good	
69	Birch, paper	6	Good	
70	Cottonwood, eastern	15	Fair	
71	Cottonwood, eastern	14	Good	
72	Cottonwood, eastern	16	Good	
73	Ash, mountain	8	Fair	
74	Cottonwood, eastern	14	Good	
75	Crabapple	7	Good	
76	Cottonwood, eastern	8	Fair	
77	Cottonwood, eastern	8	Fair	
78	Ash, mountain	7	Fair	
79	Cottonwood, eastern	12	Good	
80	Cottonwood, eastern	7	Fair	
81	Cottonwood, eastern	15	Good	
82	Cottonwood, eastern	14	Good	
83	Cottonwood, eastern	15	Good	
84	Cottonwood, eastern	17	Good	
85	Cottonwood, eastern	7	Good	
86	Cottonwood, eastern	18	Good	
87	Cottonwood, eastern	10	Good	
88	Cottonwood, eastern	18	Good	
89	Ash, mountain	8	Fair	
90	Cottonwood, eastern	11	Good	
91	Cottonwood, eastern	22	Good	
92	Cottonwood, eastern	19	Good	
93	Cottonwood, eastern	11	Good	
94	Cottonwood, eastern	12	Good	
95	Cottonwood, eastern	12	Good	
96	Cottonwood, eastern	7	Good	
97	Cottonwood, eastern	7	Good	
98	Birch, paper	16	Good	
99	Boxelder	8	Fair	
100	Boxelder	16	Fair	2x 8 8
101	Boxelder	18	Fair	
102	Ash, green	7	Fair	
103	Locust, black	10	Good	
104	Locust, black	7	Fair	
105	Locust, black	8	Good	
106	Cottonwood, eastern	14	Good	
107	Cottonwood, eastern	18	Good	
108	Cottonwood, eastern	15	Good	
109	Cottonwood, eastern	11	Good	
110	Cottonwood, eastern	20	Fair	3x 8 6 6
111	Locust, black	7	Fair	
112	Locust, black	7	Fair	
113	Cottonwood, eastern	16	Good	

LEGAL DESCRIPTION:

The following Legal Description is as shown on Title Smart as agent for Westcor Land Title Insurance Company Title Commitment No. 2607466, dated January 4, 2022.

Tract F in Registered Land Survey No. 50, according to said survey on file and of record in the office of the Registrar of Titles, Dakota County, Minnesota.

Subject to an easement to pass and repass over a strip of land 16 1/2 feet in width over the Northerly 16 1/2 feet of said Tract F.

Together with and subject to an easement for roadway purposes over and across and for utility purposes for utilities buried under the presently-existing roadway, being that strip of land fifty (50) feet in width, which is twenty-five (25) feet on either side of that line which commences at the southeast corner of Tract J and which is the easterly boundary of Tracts J and K and the easterly, northerly, and westerly boundary of Tract M, and which terminates at the southwest corner of Tract M, said line being also the westerly boundary of Tracts A, B and C, the southwesterly boundary of Tract D, the southerly boundary of Tract E, the southeasterly boundary of Tract F, and the easterly boundary of Tract G, all in Registered Land Survey No. 50, according to said survey on file and of record in the office of the Registrar of Titles, Dakota County, Minnesota. The Southerly 50 feet of said roadway adjoining County Road 18 is subject to an easement to Dakota County for utility and roadway purposes. Said Utility and roadway easement also includes and covers the cul-de-sac at the end of the roadway, being a circular area which is one-hundred (100) feet in diameter, with a center point which is also the same point known as the southwest corner of Tract M, and with a fifty foot radius, covering the southeasterly portion of Tract G, the northeasterly portion of Tract H, the northerly portion of Tract L, and the southwesterly portion of Tract M, on Registered Land Survey No. 50, Dakota County, Minnesota.

Subject to an easement to pass and repass over a strip of land 16 1/2 feet in width over the Northerly 16 1/2 feet of said Tract F.

TITLE NOTES:

The following exceptions appear on the Title Smart as agent for Westcor Land Title Insurance Company Title Commitment No. 2607466, dated January 4, 2022.

Terms and conditions of Declaration of Covenants, Conditions and Restrictions recorded as Document No. 104313. (Covers entire parcel. Not shown graphically on survey)

AREA:

TOTAL LOT AREA: 108,968 SF / 2.50 ACRES

SURVEY NOTES:

- BEARINGS ARE BASED ON COORDINATES SUPPLIED BY THE DAKOTA COUNTY SURVEYORS OFFICE. BEARINGS ARE DIFFERENT THAN SHOWN ON THE REGISTERED LAND SURVEY. ALL INTERIOR ANGLES MATCH THE RECORDED REGISTERED LAND SURVEY ANGLES.
- THERE MAY SOME UNDERGROUND UTILITIES, GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
- SURVEY CONDUCTED 02/28/2022 IN WINTER CONDITIONS. SOME IMPROVEMENTS WERE NOT LOCATED OR MAY HAVE BEEN OBLISCURED IN THE ICE AND SNOW. CONTOURS DESIGNATED WITH SPOT ELEVATIONS ARE BASED ON FIELD SURVEY CONDUCTED FEB. 2022. AREAS WITHOUT SPOT ELEVATIONS ARE BASED ON LIAR SURVEY CONDUCTED FEB. 2022.
- SEPTIC AREA SHOWN PER KLOEPFNER SERVICES & DESIGN LLC REPORT DATED JULY 13, 2022.
- TREE INVENTORY AND LOCATIONS PER REHDER FORESTRY AUGUST 2022.

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 THE SURVEY (NAVD 88)

PROJECT BENCHMARKS IDENTIFIED AND SHOWN GRAPHICALLY.

FLOOD INFORMATION:

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

UNDERGROUND UTILITIES NOTES:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. 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. THIS SURVEY HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. GOPHER STATE ONE CALL LOCATE TICKET NUMBER(S) 220530528. SOME MAPS WERE RECEIVED, WHILE OTHER UTILITIES DID NOT RESPOND TO THE LOCATE REQUEST. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST.

LEGEND:

- FOUND MONUMENT
- SET 1/2" IRON PIPE MARKED RLS NO. 25718
- CABLE TV PEDISTAL
- AIR CONDITIONER
- ELECTRIC METER
- ELECTRIC PEDISTAL
- ELECTRIC TRANSFORMER
- LIGHT POLE
- CITY WIRE
- POWER POLE
- GAS MANHOLE
- GAS METER
- TELEPHONE MANHOLE
- TELEPHONE PEDISTAL
- SANITARY CLEANOUT
- CATCH BASIN
- STORM DRAIN
- FLARED END SECTION
- STORM MANHOLE
- WATER WELL
- BOLLARD
- FLAG POLE
- MAIL BOX
- TRAFFIC SIGN
- AIR CONDITIONER
- SOIL BORING
- SPOT ELEVATION
- TRAFFIC SIGNAL
- CONFERRUS TREE
- DECIDUOUS TREE
- OVERHEAD UTILITY
- UNDERGROUND GAS
- STORM SEWER
- FENCE
- CONTOURS
- EXISTING HOUSE (PER AERIAL PHOTO)

CONTACT:

Kristine Anderson
PKA Architects
2919 James Avenue S.
Minneapolis, MN 55408
Tel: 612.353.4920
Email: kristine@pkarch.com

COUNTY/CITY:

DAKOTA COUNTY
CITY OF SUNFISH LAKE

REVISIONS:

DATE	REVISION
03-20-2022	PRELIMINARY ISSUE
03-24-2022	INITIAL ISSUE
08-01-2022	ADD SEPTIC
08-11-2022	ADD REHDER TREES
12-15-2022	FINAL EXISTING
01/25/2023	ADD SEPTIC BORING

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. Thurnes
Daniel L. Thurnes Registration Number: 25718
Date: 03-24-2022

PROJECT LOCATION:

SALEM LANE
PID#38-90500-00-060

ADDRESS: 11 SALEM LANE

OWNER: LANGNESS/ROCKETT
PID: 38-90500-00-060

ADDRESS: 10 SALEM LANE

OWNER: PLUNKETT
PID: 38-90500-00-130

ADDRESS: 15 SALEM LANE

OWNER: LEFEVOUR
PID: 38-90500-00-070

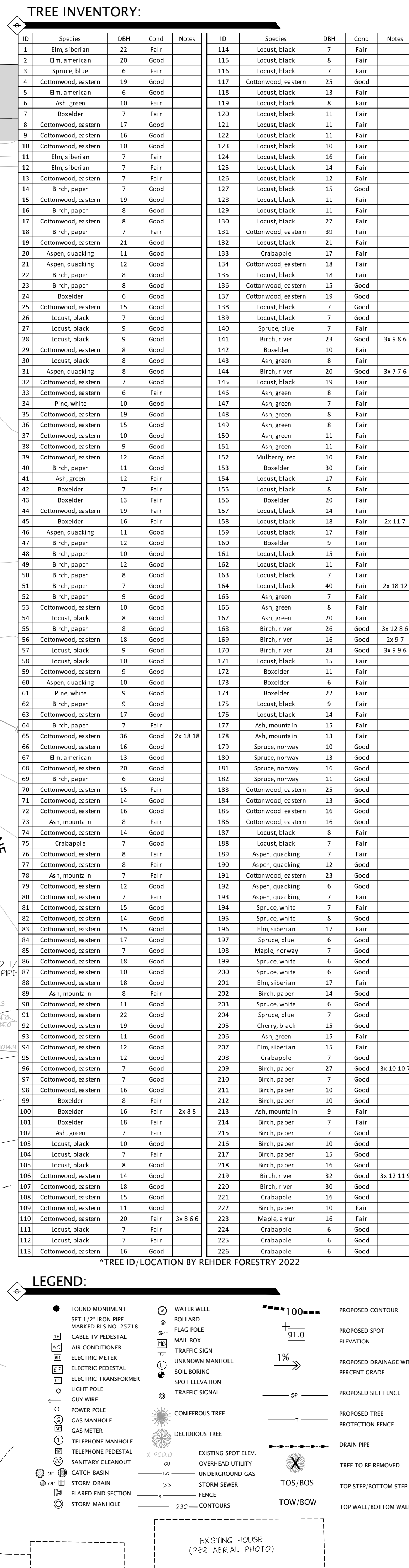
Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

CORNERSTONE LAND SURVEYING, INC.

FILE NAME: SURVPK39
PROJECT NO.: PK22039

BOUNDARY/TOPOGRAPHIC SURVEY



SUNFISH LAKE, MINNESOTA

CONTACT:

Kristine Anderson
PKA Architects
2919 James Avenue S.
Minneapolis, MN 55408
Tel: 612.353.4920
Email: kristine@pkarch.com

COUNTY/CITY:

**DAKOTA
COUNTY**CITY OF
SUNFISH LAKE

REVISIONS

DATE	REVISION
03-20-2022	PRELIMINARY ISSUE
03-24-2022	INITIAL ISSUE
08-01-2022	ADD SEPTIC
08-11-2022	ADD REHDER TREES
12-15-2022	FINAL EXISTING
01-18-2023	PROPOSED IMPROV
01-25-2023	ENG. REV5

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 Registration Number: 25718
Date 03-24-2022

PROJECT LOCATION:

SALEM LANE

PID#38-90500-00-060

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

CORNERSTONE
LAND SURVEYING, INC.

FILE NAME	2SURVPK39
PROJECT NO.	PK22039

PROPOSED IMPROVEMENTS SURVEY

LANGENESS RESIDENCE

11 SALEM LANE
SUNFISH LAKE, MINNESOTA

GRADING, STORMWATER MANAGEMENT AND EROSION CONTROL PLANS

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
C401 - GRADING PLAN ENLARGEMENT
C402 - GRADING PLAN ENLARGEMENT
C403 - GRADING PLAN ENLARGEMENT
C451 - STORMWATER PIPING PLAN
C452 - STORMWATER PIPING PLAN
C500 - STORMWATER MANAGEMENT DETAILS

PROPERTY INFORMATION

ADDRESS: 11 SALEM LANE, SUNFISH LAKE, MN 55118
PARCEL ID: 38-90500-00-060
LOT AREA: 108,968 SQ. FT. (2.50 ACRES)
WATERSHED: LOWER MISSISSIPPI RIVER

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

ARCHITECT
PETERSSEN KELLER ARCHITECTURE
2919 JAMES AVENUE SOUTH
MINNEAPOLIS, MN 55408
CONTACT: Corey Schmitt
TEL: 612-353-4920

BUILDER
HAGE HOMES
275 MARKET STREET
MINNEAPOLIS, MN 55405
CONTACT: Kerry Hage
TEL: 763-286-3369

CONSTRUCTION NOTES

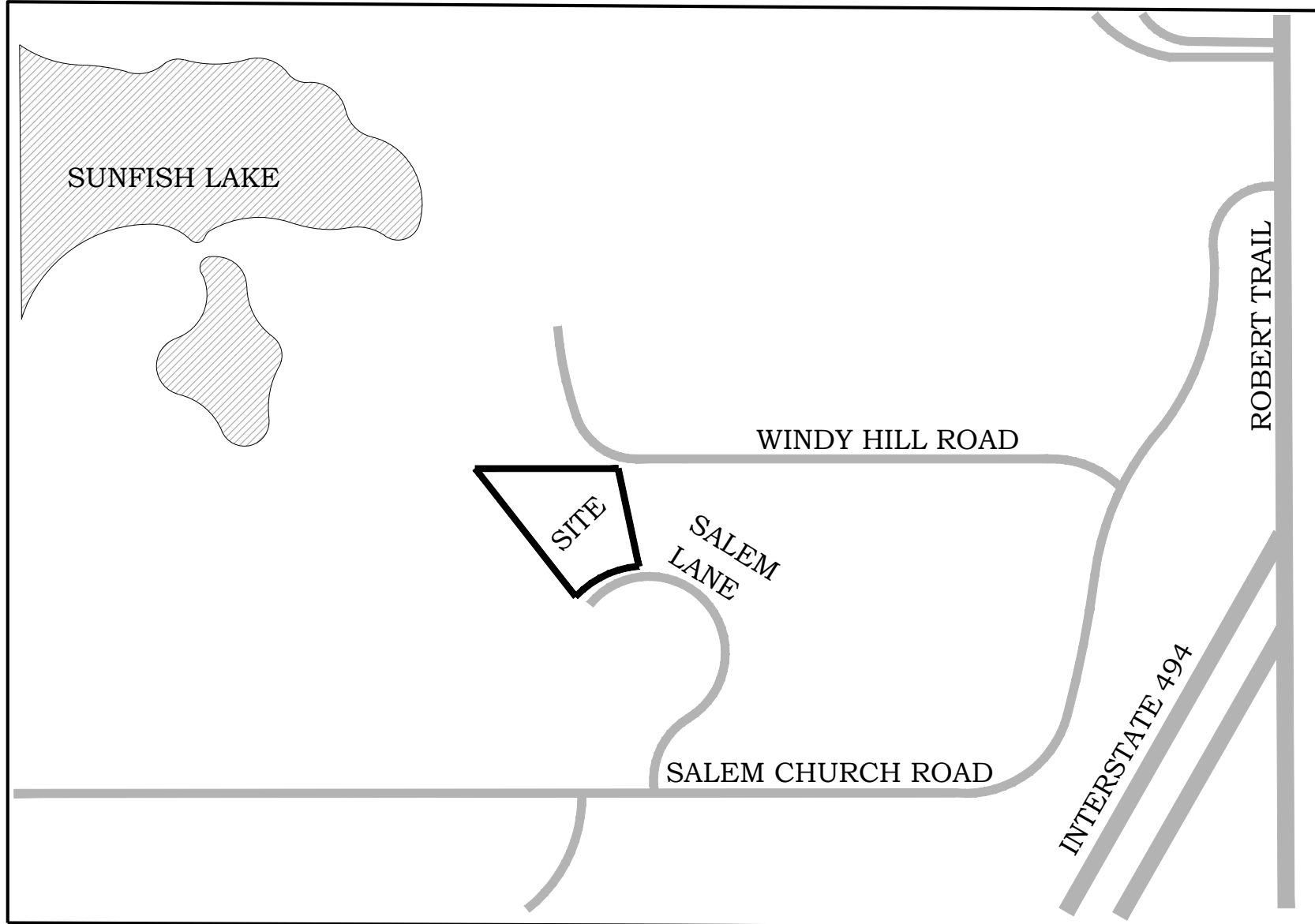
- ALL EXISTING INFORMATION AND PROPOSED SITE IMPROVEMENTS TAKEN FROM CERTIFICATE OF SURVEY BY CORNERSTONE LAND SURVEYING, DATED AUGUST 11, 2022.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS OF EXISTING UTILITIES, AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
- 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 MMUTCD, 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.

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

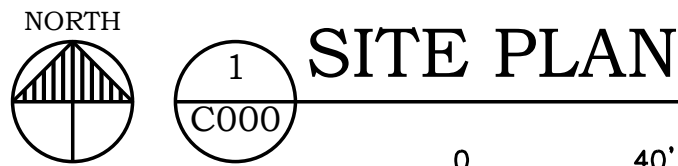
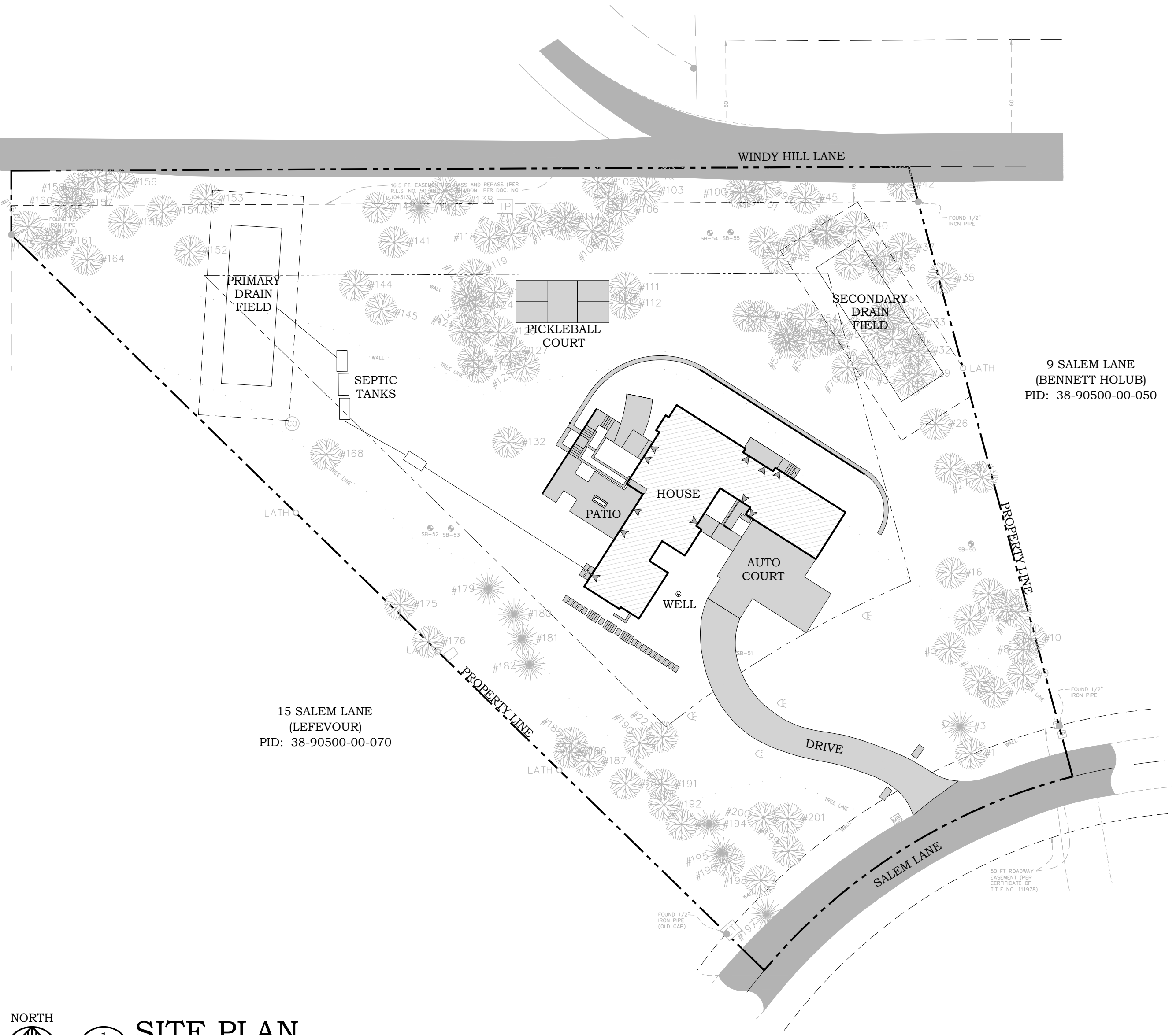
- OBTAIN PERMITS FOR SITE WORK FROM CITY OF SUNFISH LAKE AND ALL GOVERNING AUTHORITIES WITH JURISDICTION IN THIS CONSTRUCTION AREA.
- INSTALL PERIMETER EROSION CONTROL AND TREE PROTECTION WITHIN AND ADJACENT TO LIMITS OF CONSTRUCTION. INSTALL EROSION CONTROL INSERTS AT ALL CATCH BASINS AND MANHOLES AND 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



SITE PLAN

1" = 40' (24" x 36")
1" = 80' (12" x 18")

PIERCE PINI &
ASSOCIATES, INC.
Consulting Civil Engineers

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

LANGENESS RESIDENCE

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

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: 03/20/2023

Reg. No: 45815

Issued for

Date

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Comm. No. 22-046

Drawn RZ

Checked KG

Date 03/20/2023

City Approval

Drawing Title

COVER SHEET

C000

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

Company: PIERCE PINI & ASSOCIATES

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

[illegible]

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Comm. No. 22-046

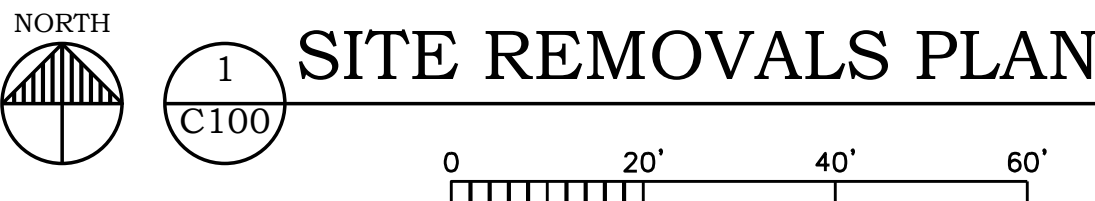
Drawn R2

Checked KG

Date 03/20/2023

Drawing Title

SITE REMOVALS PLAN



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

C100

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

111 SALEM LANE

SUNFISH LAKE, MINNESOTA 55118

Company: PIERCE PINI & ASSOCIATES

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

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Comm. No. 22-046

Checked KG

Drawing Title

C200

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.

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

DISCHARGE TO SPECIAL OR IMPAIRED WATERS WITHIN ONE MILE OF SITE:

-N/A

-THIS PROJECT IS LOCATED WITHIN A DESIGNATED DWSMA. THE STORMWATER MANAGEMENT SYSTEMS HAVE BEEN DESIGNED AS FILTRATION BASINS WITH IMPERMEABLE LINERS TO PREVENT INFILTRATION OF STORMWATER INTO THE UNDERLYING SOILS.

-OUTSTANDING RESOURCE VALUE WATERS, TROUT WATERS, WETLANDS, CALCAREOUS FENS, PROPERTIES LISTED BY THE NATIONAL REGISTER OF HISTORIC PLACES OR ARCHAEOLOGICAL SITES

-OTHER FORMAL ENVIRONMENTAL REVIEWS, ENDANGERED OR THREATENED SPECIES

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.

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.

- 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 SHALL IDENTIFY AND JUSTIFY ALL SW 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 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 COURSE OF CONVEYANCE TO A SURFACE WATER BODY. THE PROPERTY 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 NOT TO BE SUBJECT TO EXCESSIVE INFILTRATION UNLESS INFEASIBLE. IF 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 THESE 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 ADJUSTS TO ENHANCE 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 CONDUCT 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 TO BEGINNING THE BACKWASH WATER AND DISCHARGE/DISPOSAL. RETURN THE BACKWASH WATER INTO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION.

- ### 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 DISCHARGE 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.

- D. IN AREAS OF PROJECT WHERE FINAL STABILIZATION IS COMPLETE INSPECTIONS CAN BE REDUCED TO ABOUT ONE 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 RESTORED TO ORIGINAL CONDITION BY CONTRACTOR WITHIN 72 HOURS OF DISCOVERY. 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. OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. THESE AREAS WILL BE SWEEP 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.
- I. 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.

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.

-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.

-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.

- 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:

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

DATE OF TRAINING/CERTIFICATION: 2020
CERTIFICATION PROGRAM: UNIVERSITY OF MINNESOTA - DESIGN OF CONSTRUCTION SWPPP
ARDEN HILLS, MN
INSTRUCTOR(S): DWAYNE STENLUND
CERTIFICATION EXPIRATION: 2023

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

STORMWATER POLLUTION PREVENTION DETAILS

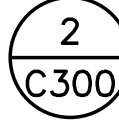
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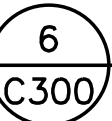
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NO SCALE



NO SCALE



NO SCALE

LANGENESS RESIDENCE

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

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Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

Issued for	Date

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Date 03/20/2023

City Approval

Drawing Title

GRADING, DRAINAGE
AND EROSION
CONTROL PLAN

C400

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED HEAVY DUTY SILT FENCE
- PROPOSED TREE FENCING
- PROPOSED EROSION LOG
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET

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.

ACREAGE SUMMARY	
TOTAL LOT AREA	2.50 ACRES
EXISTING IMPERVIOUS AREA	0.34 ACRES
PROPOSED IMPERVIOUS AREA	0.37 ACRES
DISTURBED AREA	1.05 ACRES

ESTIMATED BMP QUANTITIES	
SILT FENCE	1,200 LF
ROCK CONSTRUCTION ENTRANCE	1 EACH
CONCRETE WASHOUT AREA	1 EACH
TREE PROTECTION FENCING	550 LF
EROSION CONTROL BLANKET	3,000 SY
RIPRAP	15 CY
EROSION LOG	575 LF

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.

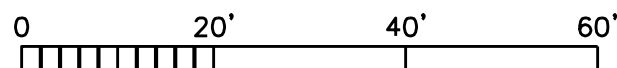
INFILTRATION BASIN TESTING AND OPERATION

- COMMENCE GRADING AND CONSTRUCTION OF FILTRATION BASIN #1 AND FILTRATION BASIN #2 AS NOTED ON THE GRADING PLAN AND DETAILS 1/C500 AND 3/C500.
- AFTER CONSTRUCTION OF EACH FILTRATION BASIN IS COMPLETED, PERFORM (2) DOUBLE-RING INFILTROMETER TESTS ON EACH BASIN TO VERIFY MEDIA HAS BEEN PROPERLY PLACED AND THAT THE AS-CONSTRUCTED FILTRATION RATE IS AT LEAST 0.45 INCHES PER HOUR.



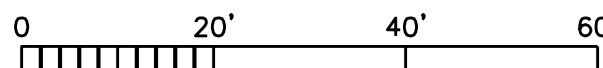
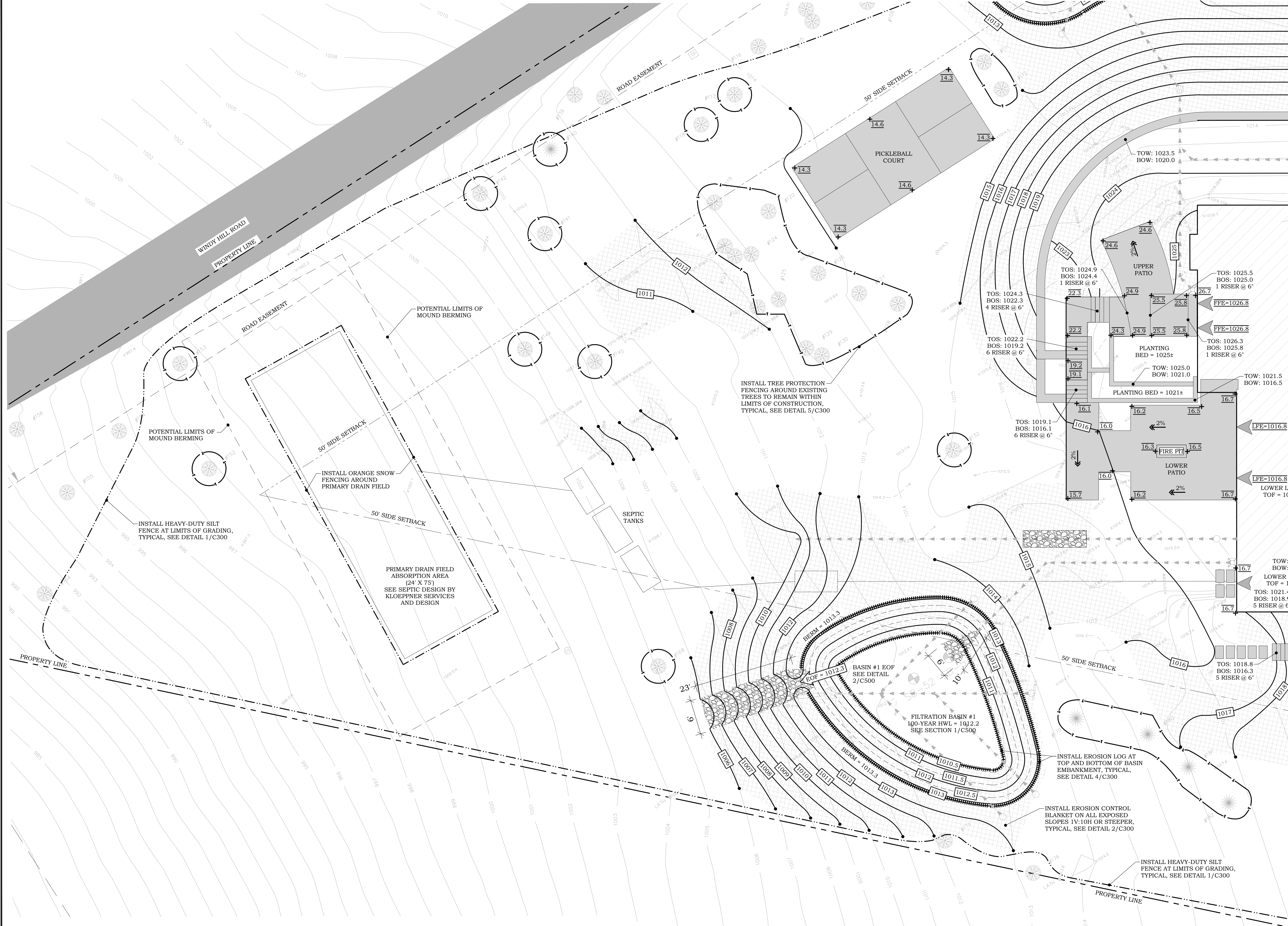
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C400

GRADING, DRAINAGE AND EROSION CONTROL PLAN



1" = 20' (24" x 36")

1" = 40' (12" x 18")



1" = 10' (24" x 36")
1" = 20' (12" x 18")

PIERCE PINI &
ASSOCIATES, INC.
Consulting Civil Engineers

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

LANGENESS RESIDENCE

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

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: *Keri Gardner*

Name: Kevin Gardner
Date: 03/20/2023 Reg. No: 45815

Issued for	Date

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Checked	KG
Date	03/20/2023

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Drawing Title
GRADING PLAN
ENLARGEMENT

C401

11 SALEM LANE
SUNFISH LAKE, MINNESOTA 55118

Company: PIERCE PINI & ASSOCIATES

Date: 03/20/2023 Reg. No: 45815

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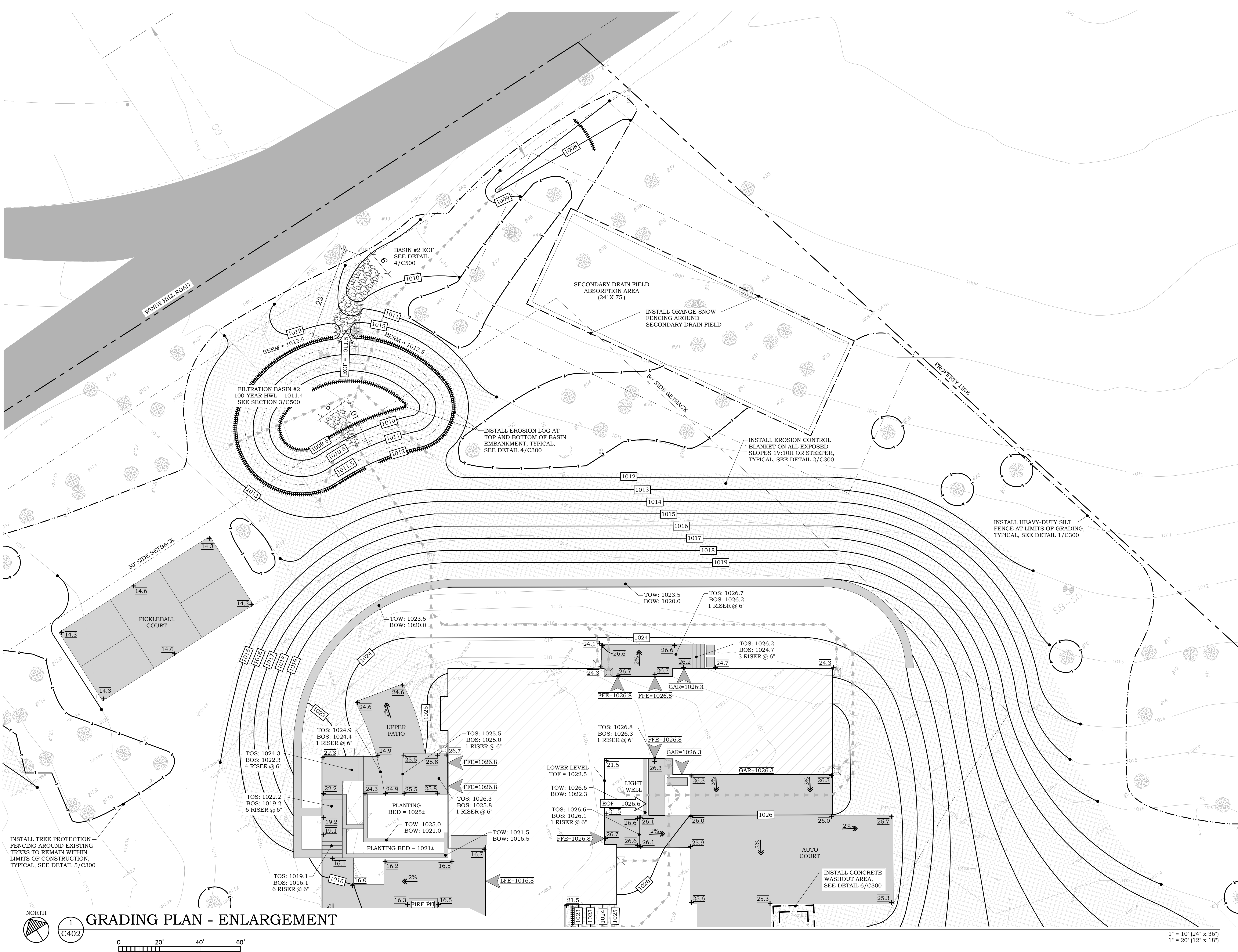
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Drawing Title

GRADING PLAN ENLARGEMENT

C402



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SUNFISH LAKE, MINNESOTA 55118

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Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

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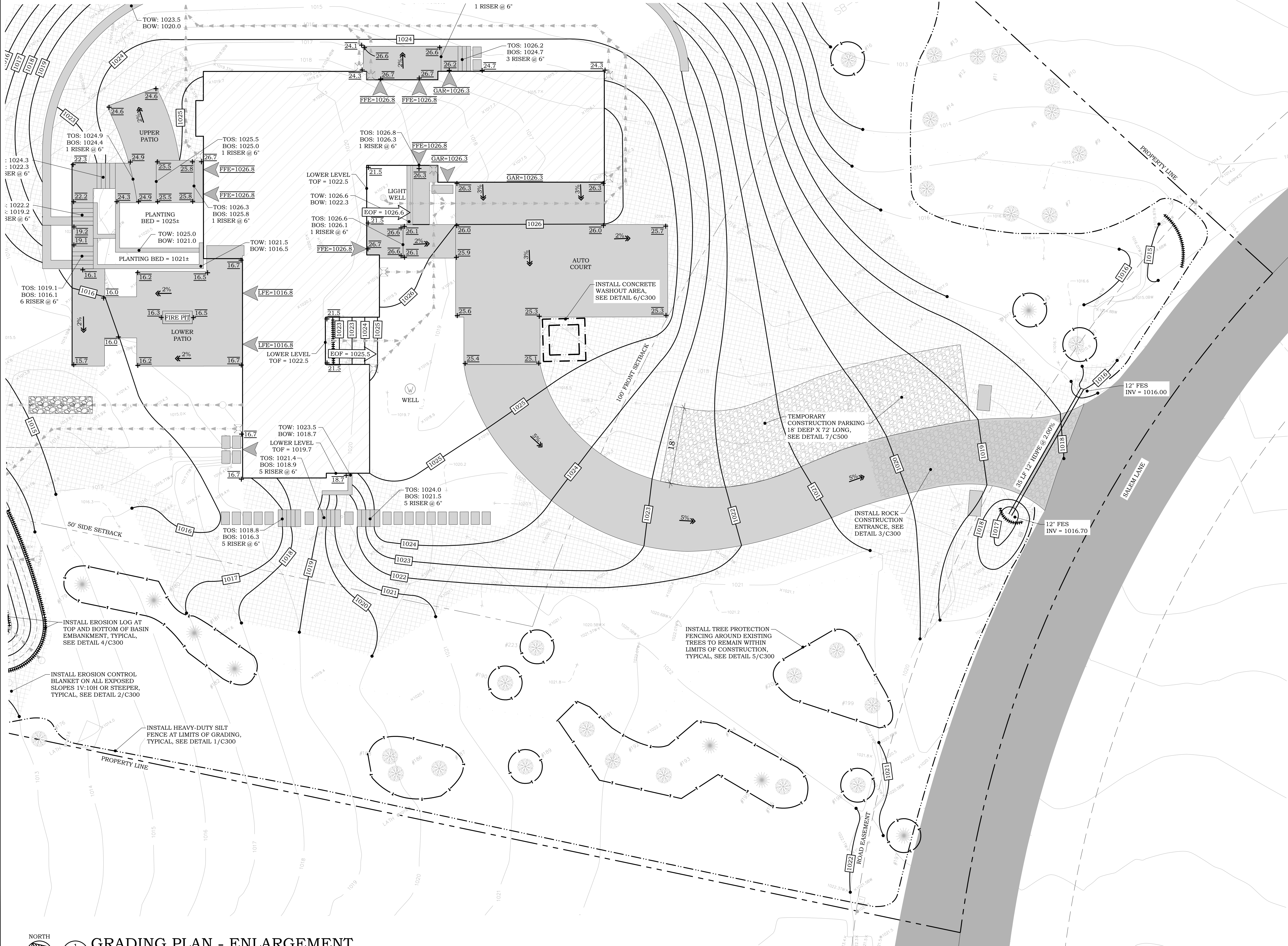
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Drawing Title

GRADING PLAN
ENLARGEMENT

C403

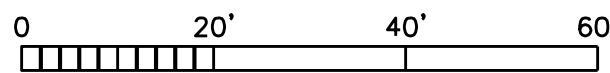


NORTH



1
C403

GRADING PLAN - ENLARGEMENT



1" = 10' (24" x 36")

1" = 20' (12" x 18")

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SUNFISH LAKE, MINNESOTA 55118

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Company: PIERCE PINI & ASSOCIATES

Signed: *Ken Linder*

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

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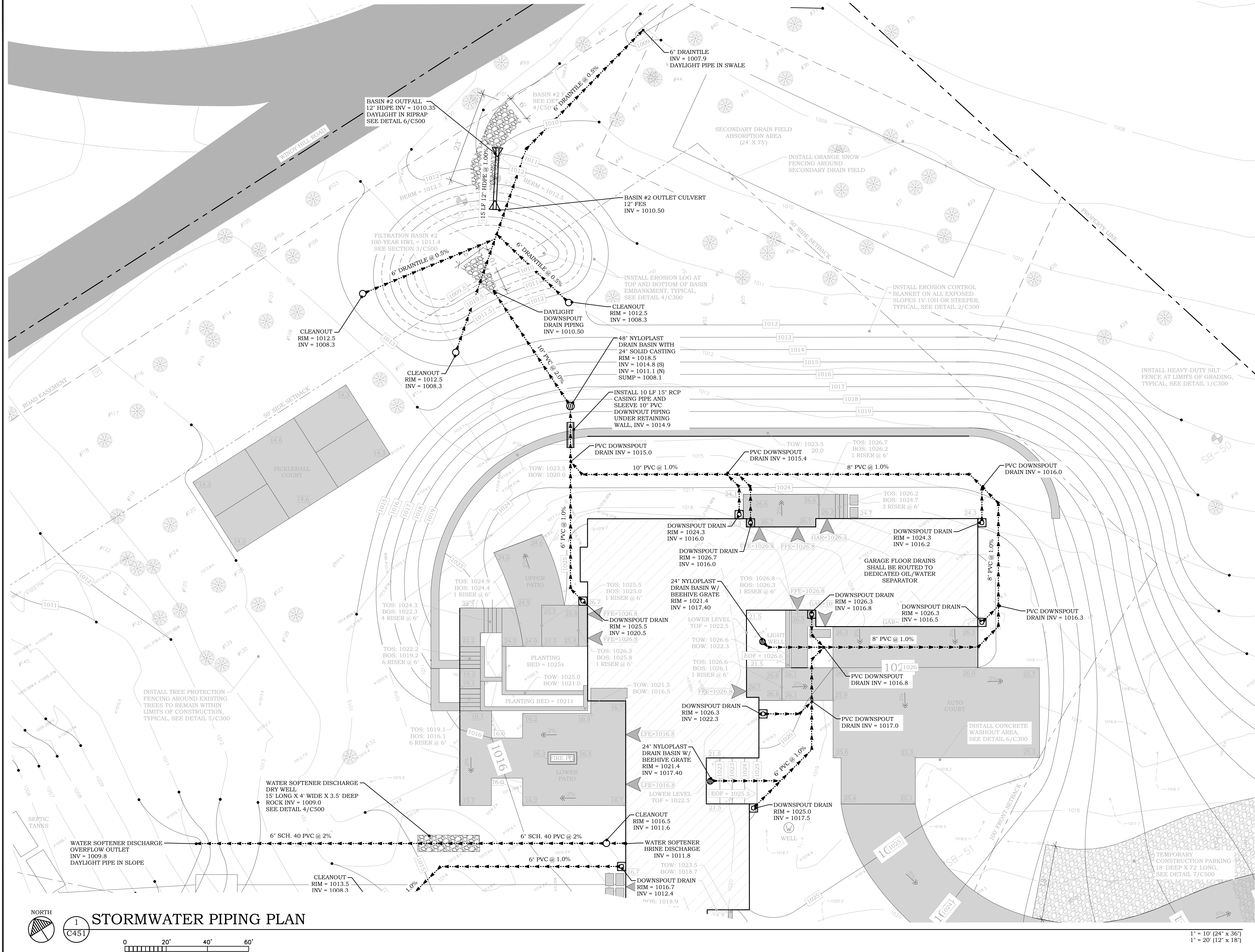
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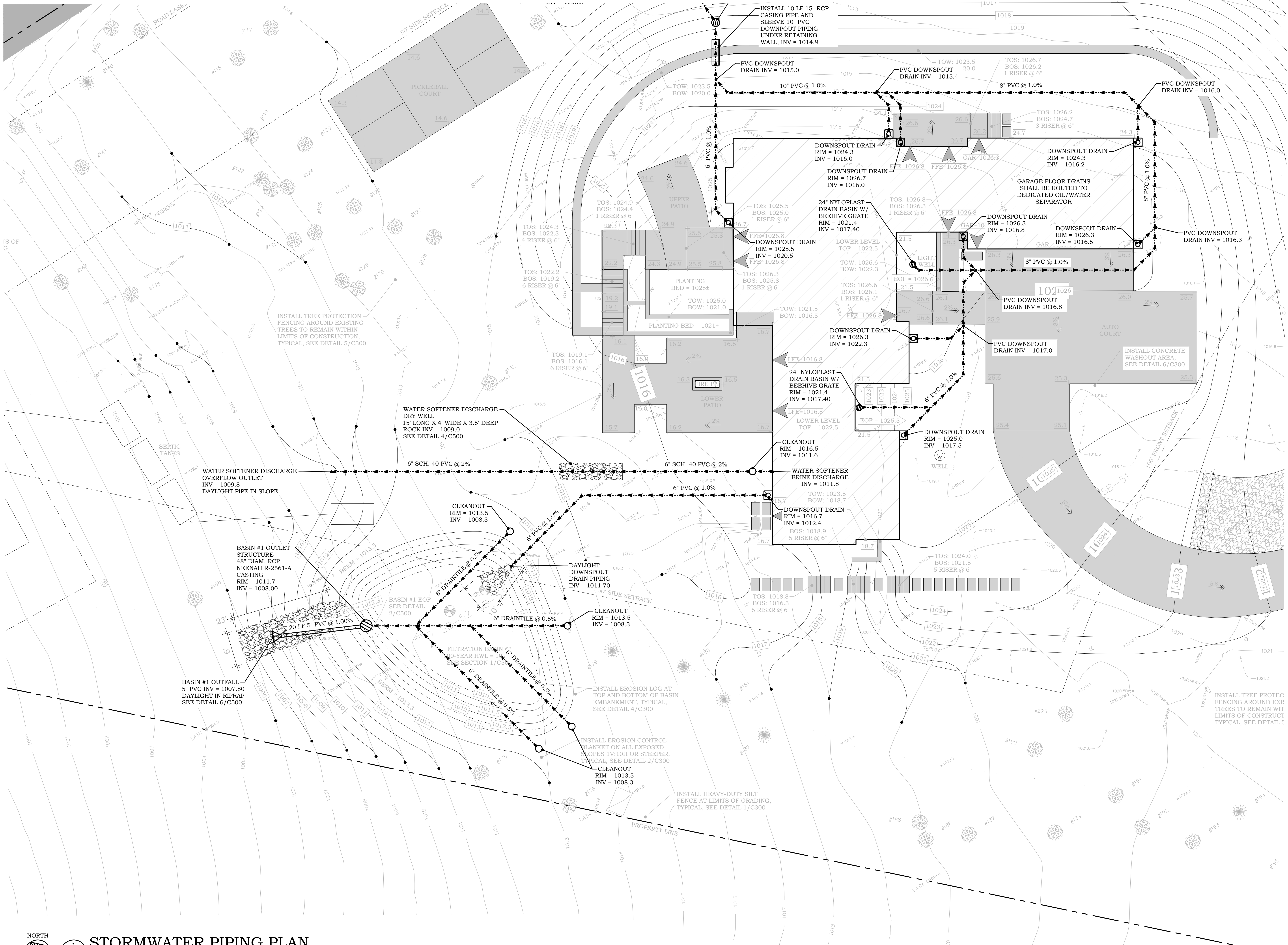
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Drawing Title

STORMWATER PIPING PLAN

C451





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SUNFISH LAKE, MINNESOTA 55118

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Company: PIERCE PINI & ASSOCIATES

Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

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Drawing Title

STORMWATER
PIPING PLAN

C452

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Signed: *Kevin Gardner*

Name: Kevin Gardner

Date: 03/20/2023 Reg. No: 45815

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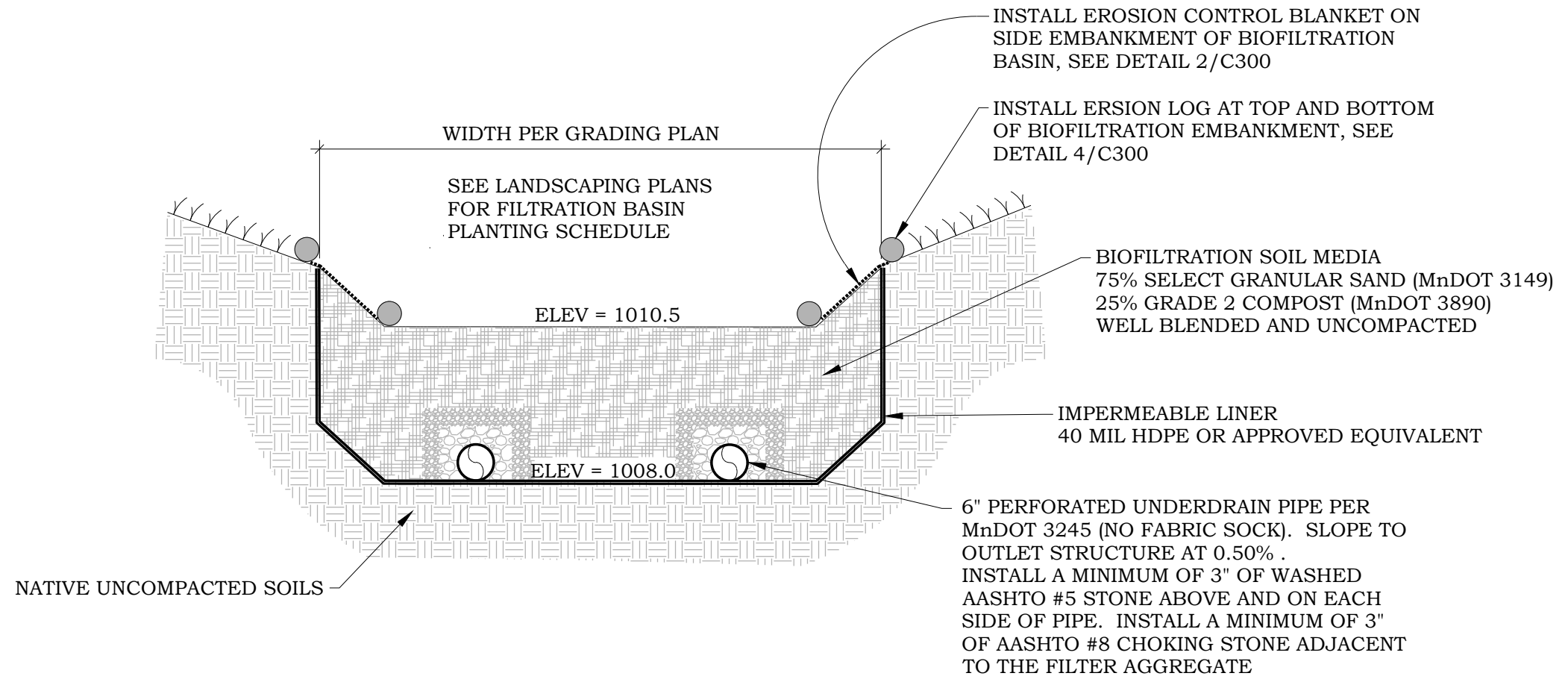
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City Approval

Drawing Title

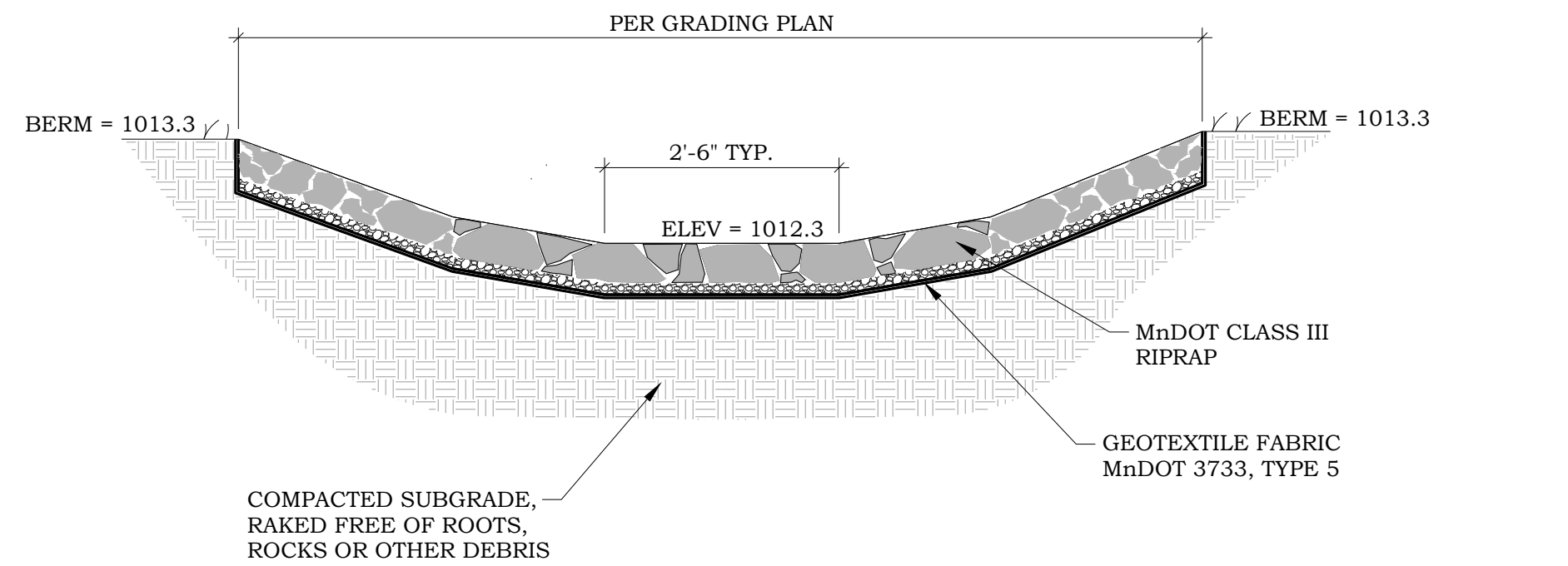
STORMWATER
MANAGEMENT
DETAILS

C500



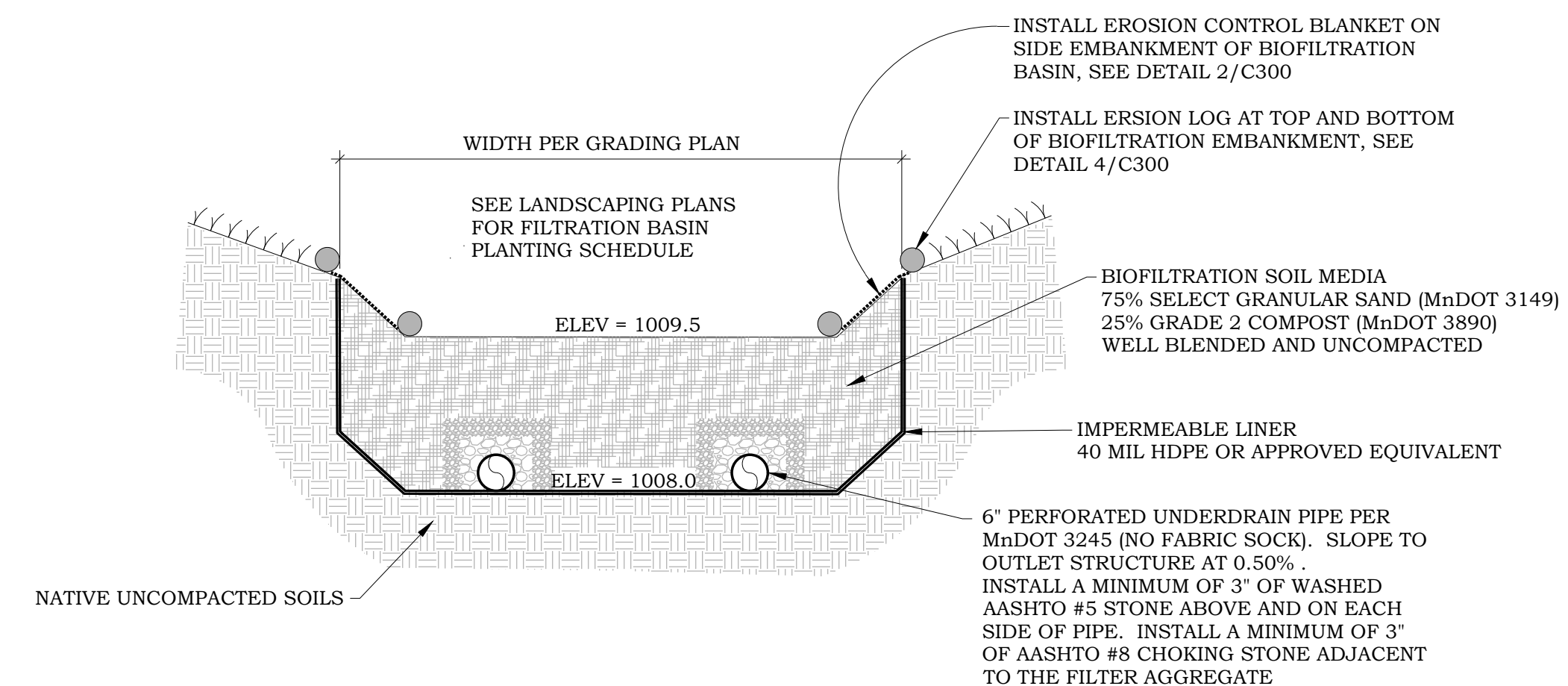
1 FILTRATION BASIN #1 SECTION
C500

NO SCALE



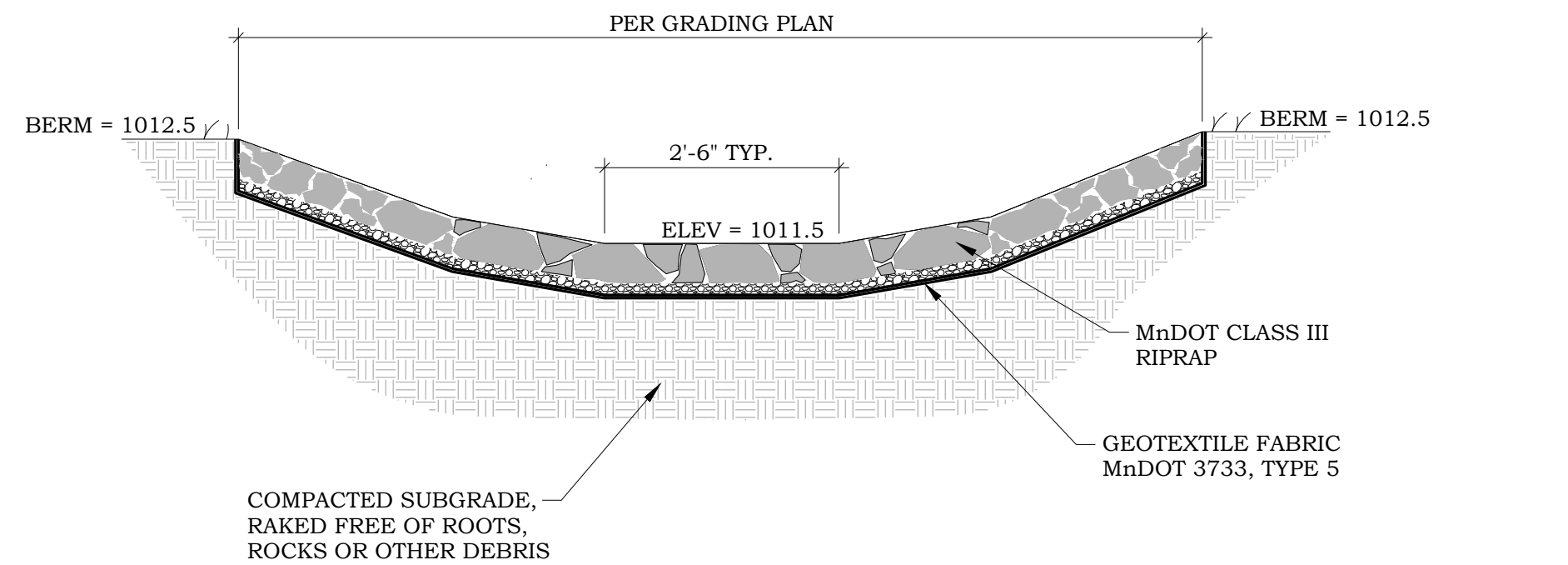
2 FILTRATION BASIN #1 OVERFLOW
C500

NO SCALE



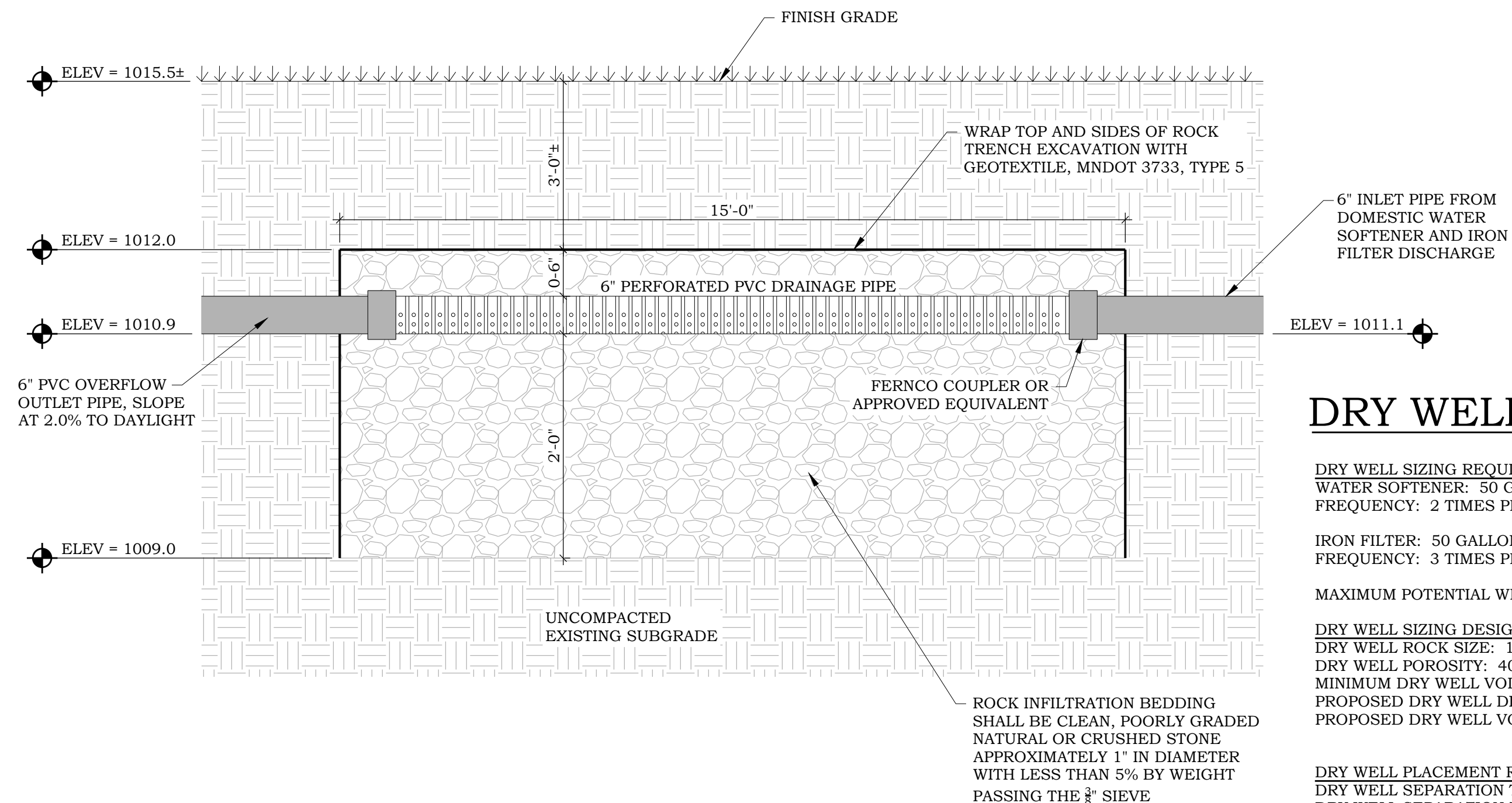
3 FILTRATION BASIN #2 SECTION
C500

NO SCALE



4 FILTRATION BASIN #2 OVERFLOW
C500

NO SCALE



4 WATER SOFTENER DRY WELL
C500

NO SCALE

DRY WELL DESIGN

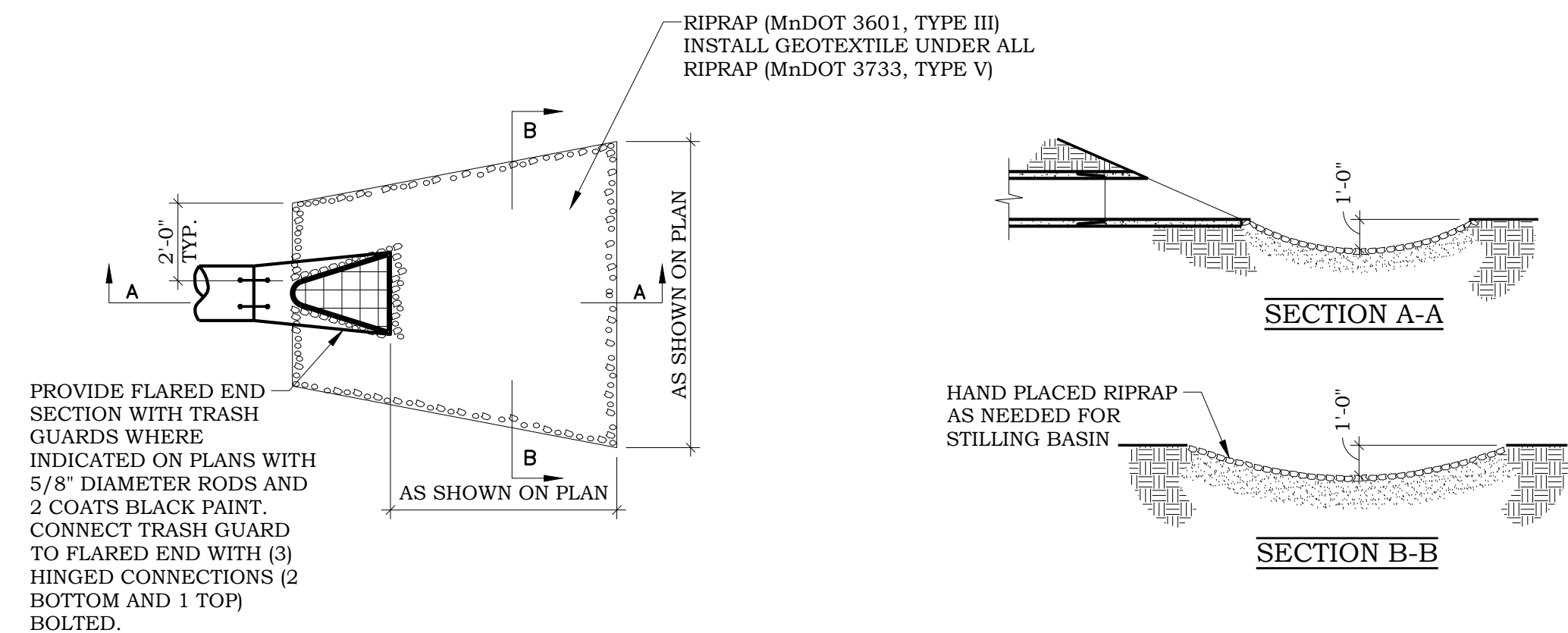
DRY WELL SIZING REQUIREMENTS
WATER SOFTENER: 50 GALLONS PER BACKWASH
FREQUENCY: 2 TIMES PER WEEK

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

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

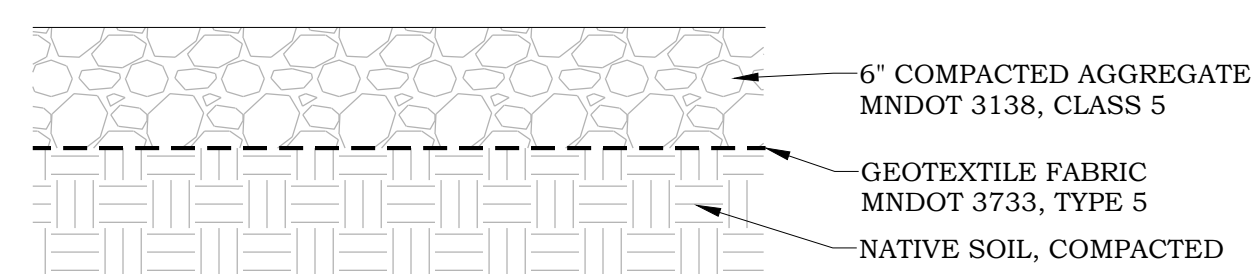
DRY WELL SIZING DESIGN
DRY WELL ROCK SIZE: 1" (APPROXIMATE) - WASHED
DRY WELL POROSITY: 40%
MINIMUM DRY WELL VOLUME: 33.4 CU. FT.
PROPOSED DRY WELL DIMENSIONS: 15' LONG X 4' WIDE X 3.5' DEEP
PROPOSED DRY WELL VOLUME: 48.0 CU. FT. (BELOW OVERFLOW)

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



6 FLARED END SECTION WITH RIPRAP
C500

NO SCALE



7 TEMPORARY CONSTRUCTION PARKING
C500

NO SCALE



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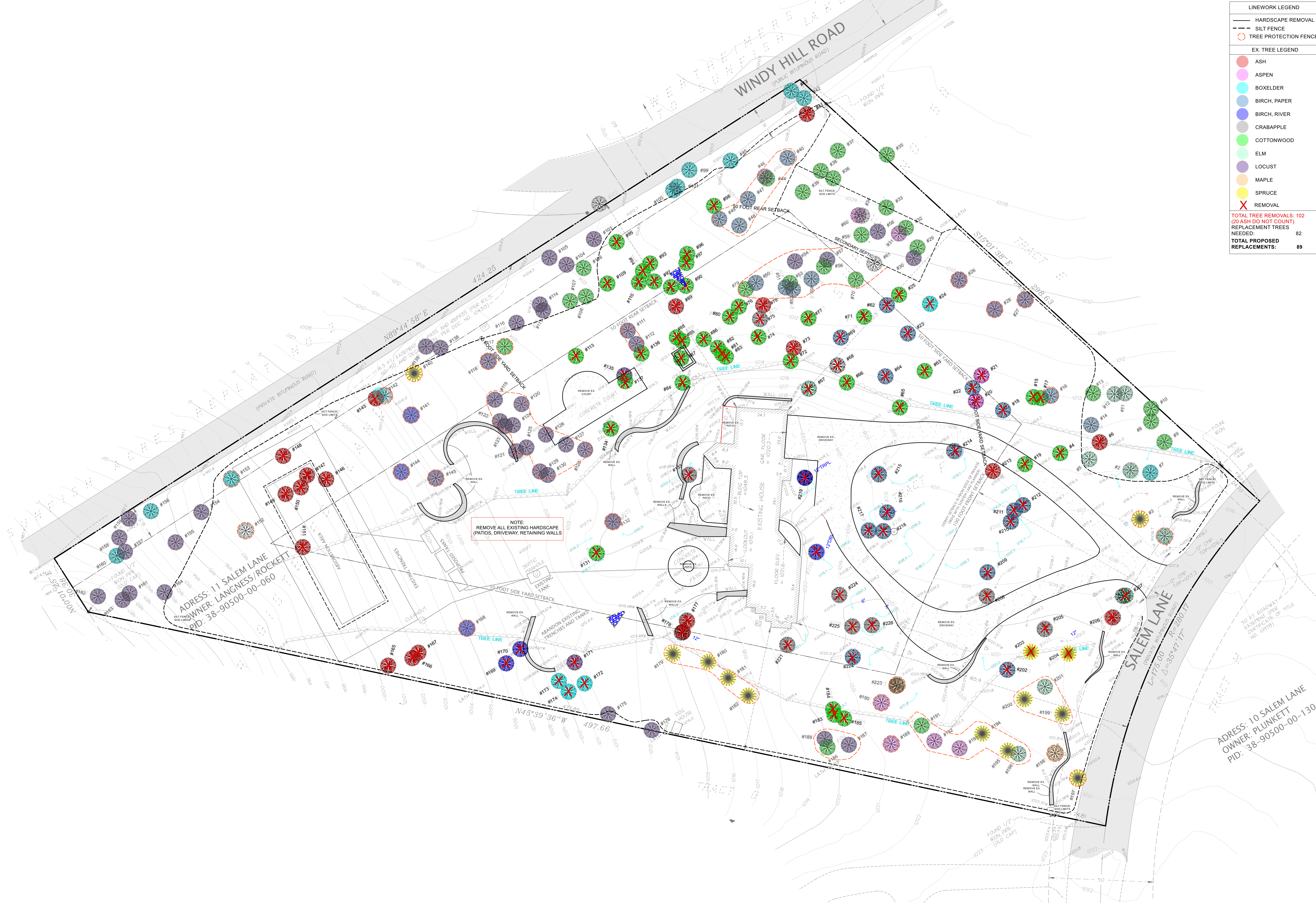
PROPOSED LANDSCAPE PLAN FOR THE
LANGENESS RESIDENCE
11 SALEM LN
SUNFISH LAKE, MN 55118

ISSUE/REVISIONS	
ISSUE:	DATE:
BASE MAP:	08.09.22
PLAN REVIEW:	09.07.22
HOUSE REV:	09.09.22
PLAN REVIEW:	10.10.22
PLAN REVIEW:	12.05.22
SUBMITTAL SET:	12.23.22
SUBMITTAL SET:	01.26.23

EXISTING SITE
TREE/HARDSCAPE
REMOVAL PLAN

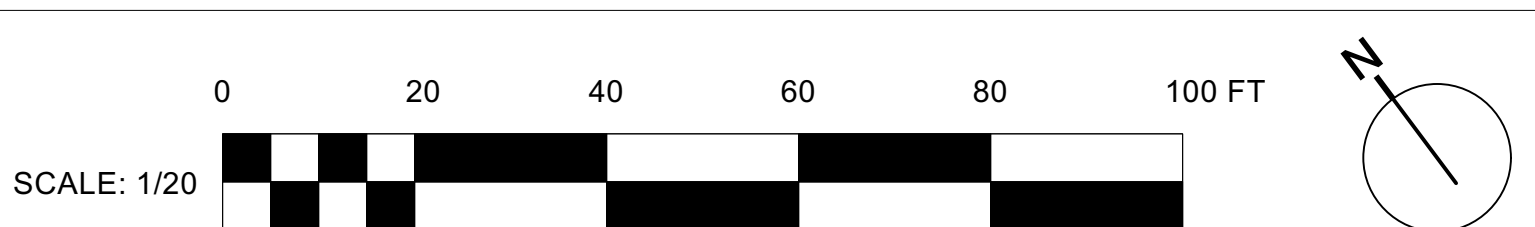
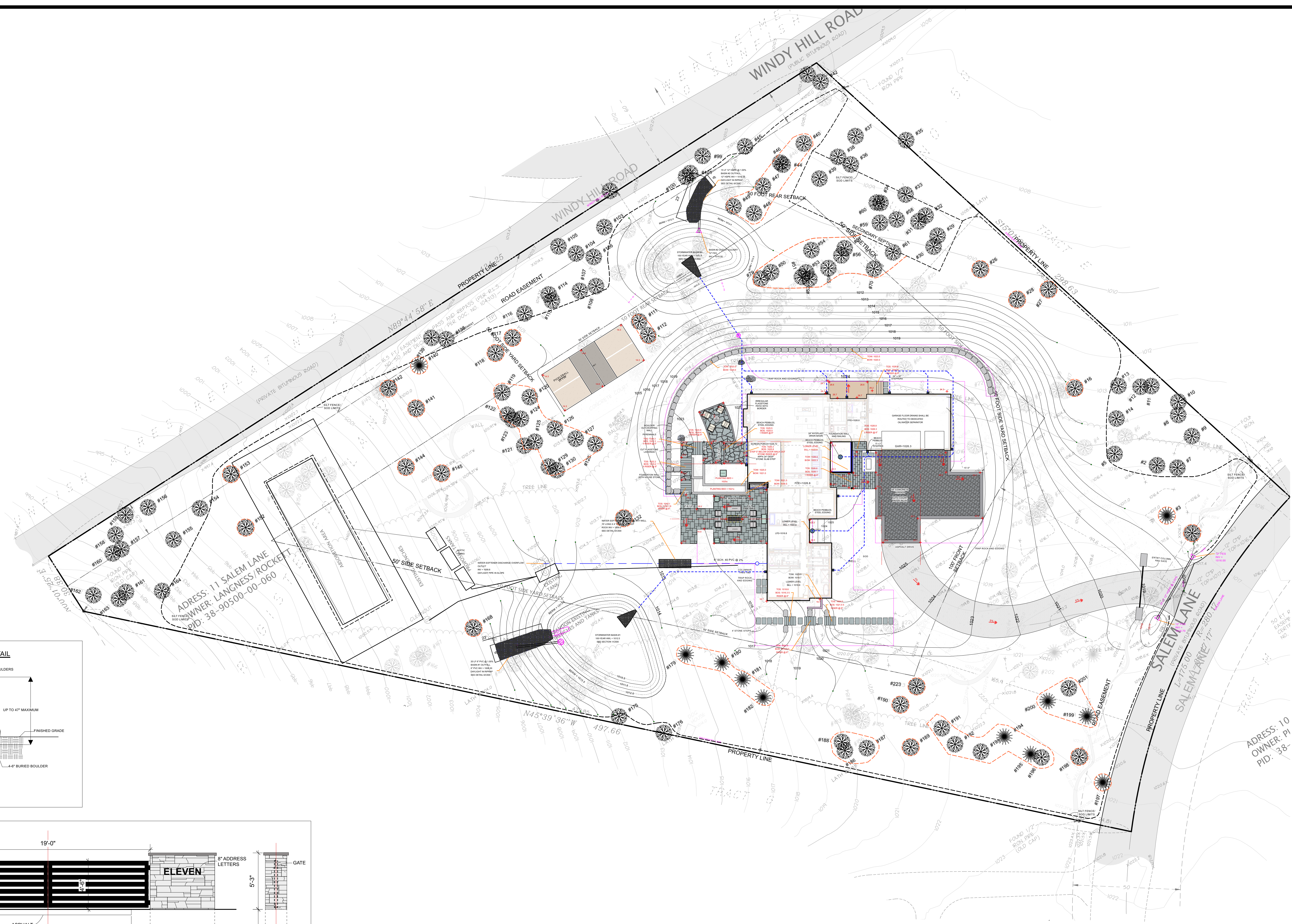
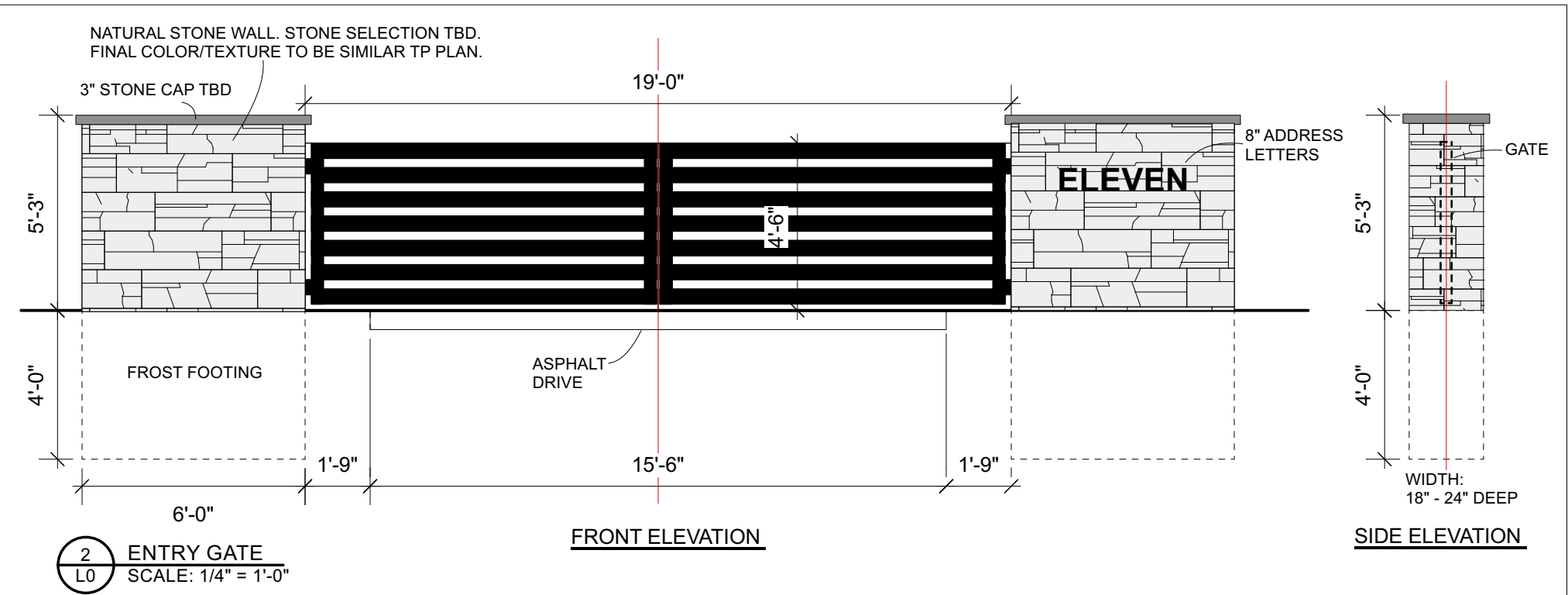
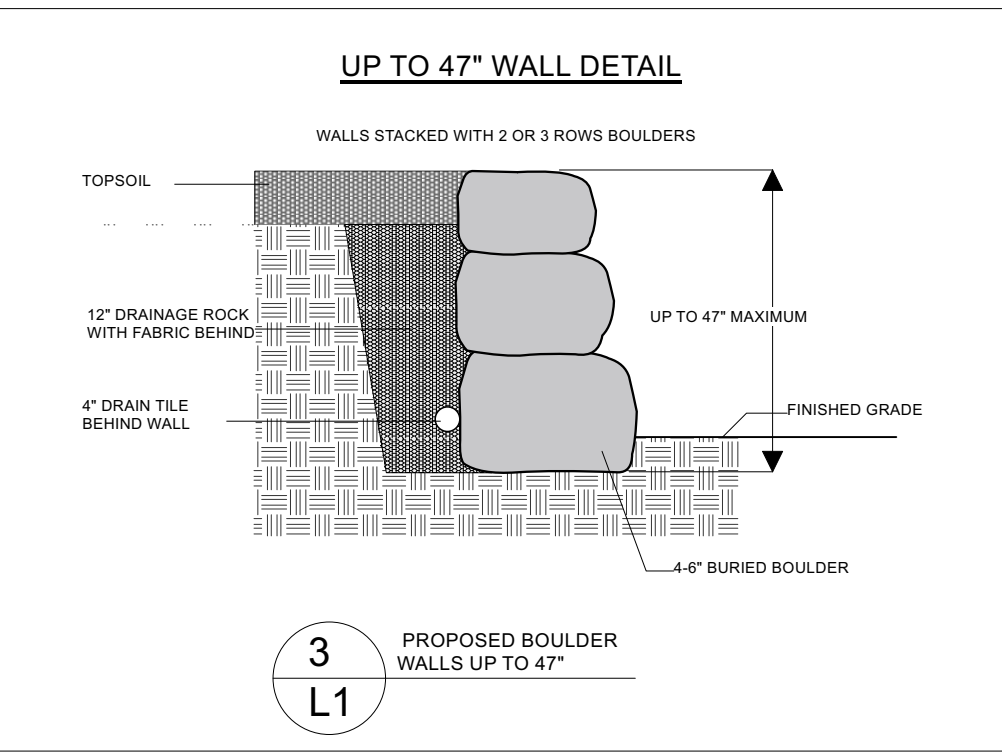
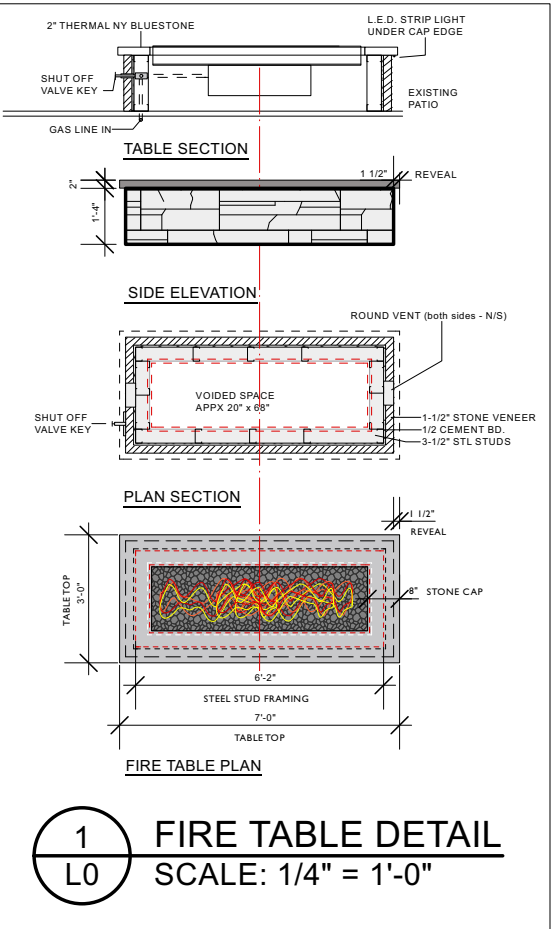
L0.0

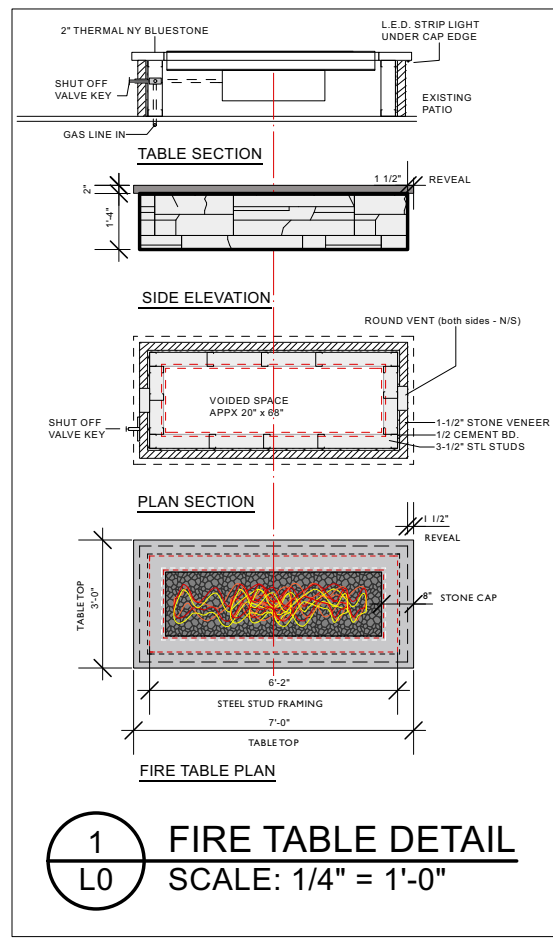
LINEWORK LEGEND	
	HARDSCAPE REMOVAL
	SILT FENCE
	TREE PROTECTION FENCE
EX. TREE LEGEND	
	ASH
	ASPEN
	BOXELDER
	BIRCH, PAPER
	BIRCH, RIVER
	CRABAPPLE
	COTTONWOOD
	ELM
	LOCUST
	MAPLE
	SPRUCE
	REMOVAL
TOTAL TREE REMOVALS: 102 (20 ASH DO NOT COUNT)	
REPLACEMENT TREES NEEDED: 82	
TOTAL PROPOSED REPLACEMENTS: 89	



LANDSCAPE AREAS	
2" TRAP ROCK:	... SF
3/4" TRAP ROCK:	... SF
MULCH - BEDS:	... SF
MULCH - TREE RINGS:	... SF
BEACH PEBBLES:	... SF
SOD:	... SF
LOW GROW SEED:	... SF
POLY EDGING:	... LF
STEEL EDGING:	... LF
SILT FENCE:	... LF

LINEWORK/SYMBOL LEGEND	
	SILT FENCE
	TREE PROTECTION FENCE
	12" CATCH BASIN
	24" DRAIN BASIN
	DRAIN TILE
	BED EDGING PERIMETER
	SLEEING
	BOULDER WALL
	BOULDER OUTCROPPINGS
LANDSCAPE LIGHTING LEGEND	
	(...) SL07-PATH LIGHT
	(...) WELL LIGHT
	(...) SL04-MINI FLOOD LIGHT
	(...) SL11-MINI ARCHER UP LIGHT
	(...) SL01-UP LIGHT
	18" LF LED STRIP LIGHT ON FIRE TABLE
	(1) TRANSFORMER LOCATION
LIGHTING PENDING FINAL CITY APPROVAL FOR OVERALL PROJECT	

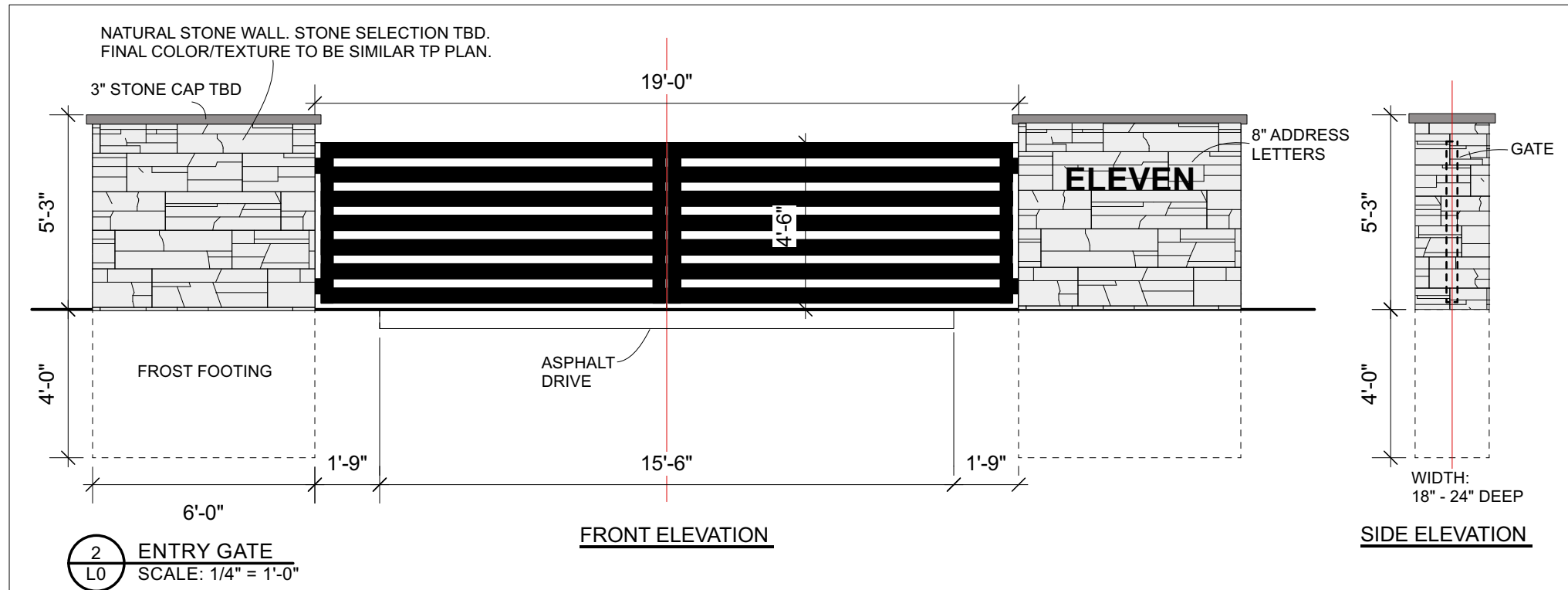




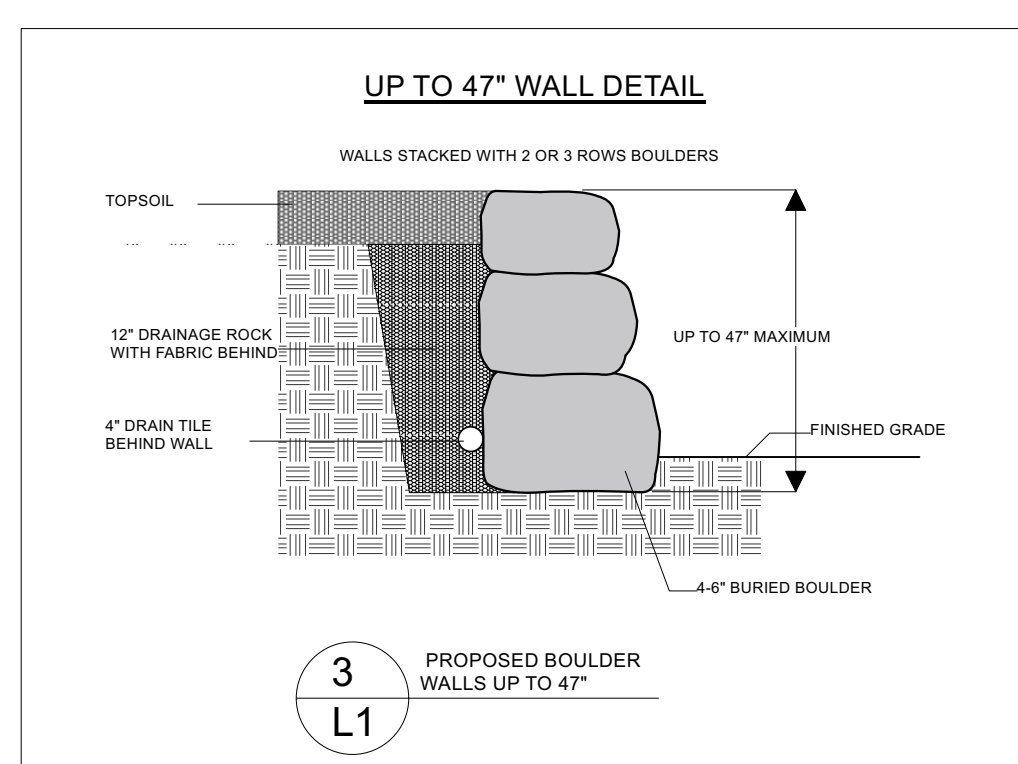
1 FIRE TABLE DETAIL
SCALE: 1/4" = 1'-0"

PLANT SCHEDULE		
SYMBOL	COMMON NAME	QUANTITY
	Autumn Fire Sedum	0
	Becky Shasta Daisy	0
	Blooming Lilac Shrub	0
	Bobo Hydrangea	31
	Champlain Rose	0
	Chicagoland Boxwood	65
	Creme Brulee Coreopsis	0
	Globe Blue Spuce	1
	Incrediball Hydrangea	0
	Humpback Whale	0
	Kahori Scarlet Dianthus	42
	Karl Foerster Grass	41
	Kismet Red Coneflower	0
	Lavender - Hidcote Blue	124
	Little Lime Hydrangea	9
	Little Quick Fire Hydr.	0
	Millennium Allium	28
	PowWow Wildberry Cone	0
	Raspberry Monarda	0
	Ruby Star Coneflower	10
	Saucy Seduction Yarrow	0
	Starry Starry Hibiscus	0
	Quick Fire Hydr.	3

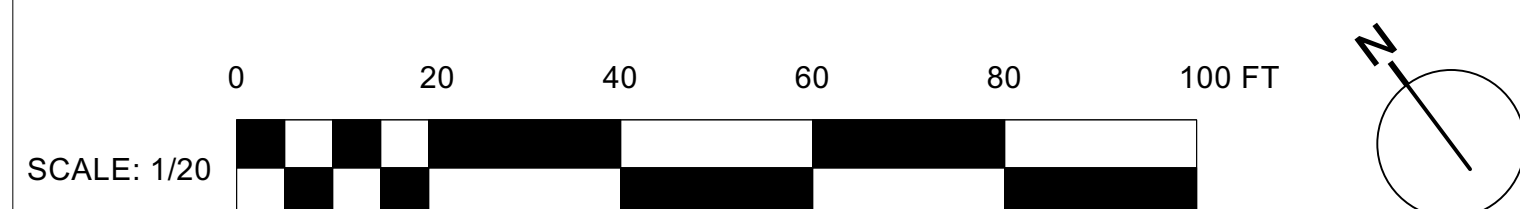
PLANT SCHEDULE		
SYMBOL	COMMON NAME	QUANTITY
	PROPOSED TREES	
	Autumn Brilliance Clump Serviceberry	1
	Armstrong Maple	3
	Black Hills Spruce	18
	Dakota Pinnacle Birch	19
	Japanese Maple	1
	River Birch	3
	Sugar Maple	10
	Tannenbaum Pine	1
	Whitespire Birch	23
	White Pine	10



2 ENTRY GATE
SCALE: 1/4" = 1'-0"

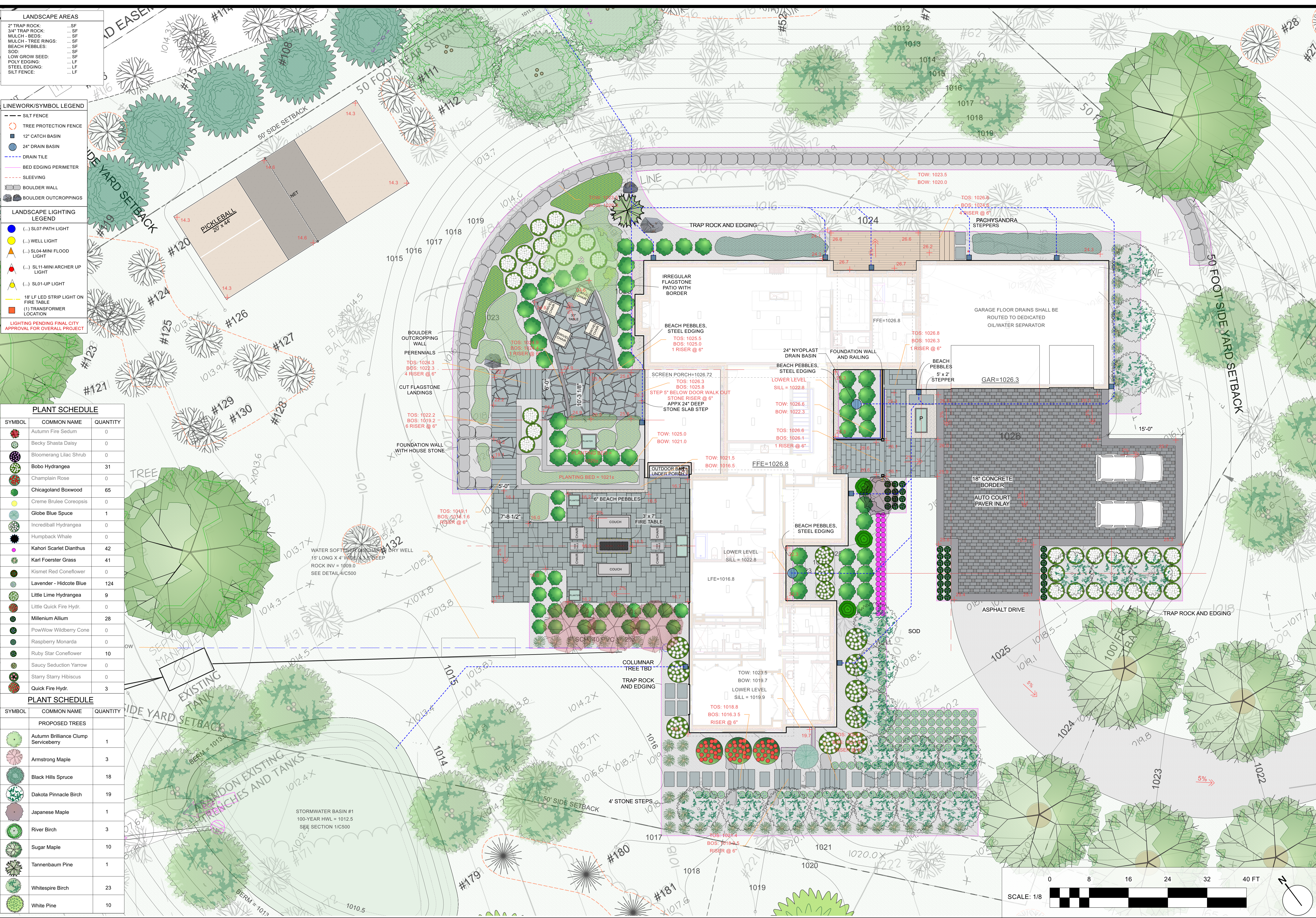


3 PROPOSED BOULDER WALLS UP TO 47"



LANDSCAPE AREAS	
2" TRAP ROCK:	...SF
3/4" TRAP ROCK:	... SF
MULCH - BEDS:	... SF
MULCH - TREE RINGS:	... SF
BEACH PEBBLES:	... SF
SOD:	... SF
LOW GROW SEED:	... SF
POLY EDGING:	... LF
STEEL EDGING:	... LF
SILT FENCE:	... LF

SYMBOL	COMMON NAME	QUANTITY
	Autumn Fire Sedum	0
	Becky Shasta Daisy	0
	Bloomerang Lilac Shrub	0
	Bobo Hydrangea	31
	Champlain Rose	0
	Chicagoland Boxwood	65
	Creme Brulee Coreopsis	0
	Globe Blue Spuce	1
	Incredible Ball Hydrangea	0
	Humpback Whale	0
	Kahori Scarlet Dianthus	42
	Karl Foerster Grass	41
	Kismet Red Coneflower	0
	Lavender - Hidcote Blue	124
	Little Lime Hydrangea	9
	Little Quick Fire Hydr.	0
	Millenium Allium	28
	PowWow Wildberry Cone	0
	Raspberry Monarda	0
	Ruby Star Coneflower	10
	Saucy Seduction Yarrow	0
	Starry Starry Hibiscus	0
	Quick Fire Hydr.	3





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FOUNDATION PLAN

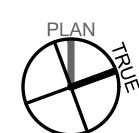
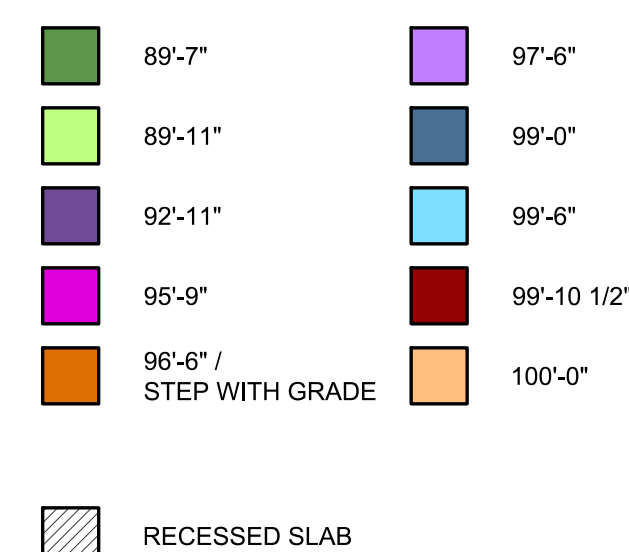
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NOTES:

- | | | | |
|---|---|---|---|
| A | G.C. TO COORDINATE FOUNDATION WALL THICKNESS, FOOTING LOCATIONS, AND T.O. WALL ELEVATIONS PRIOR TO CONSTRUCTION. CONTACT ARCHITECT OR STRUCTURAL ENGINEER W/ ANY QUESTIONS. | E | SEE STRUCTURAL DRAWINGS FOR SIZING AND REINFORCING OF FOOTINGS AND FOUNDATION WALLS. |
| B | GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR TO COORDINATE HVAC LAYOUT WITH FOUNDATION PLAN PRIOR TO POURING CONCRETE | F | REVIEW STRUCTURAL FOR DIMENSIONS OF BEAM POCKETS TO BE INCORPORATED. DIMENSIONS SHOWN HERE DO NOT REFLECT BEAM POCKETS. |
| C | PROVIDE RADON MITIGATION SYSTEM. RUN VENTS VERTICALLY IN SHAFT SPACES TO ROOF SIMILAR TO PLUMBING VENTS. VERIFY VENT LOCATIONS IN FIELD W/ ARCHITECT. | G | G.C TO COORDINATE ANY REQUIRED FOUNDATION WALL PENETRATIONS PRIOR TO CONSTRUCTION START |
| D | G.C. AND CONCRETE CONTRACTOR TO VERIFY ALL BEARING ELEVATIONS WITH STEEL AND TRUSS SIZING | H | G.C. TO COORDINATE T.O. PIER ELEVATIONS W/ FINISHED GRADE ELEVATIONS PER LANDSCAPE PLANS |

FOUNDATION WALL HEIGHTS -
BASED ON REFERENCE ELEV. 100'-0"
OF MAIN LEVEL FINISH FLOOR



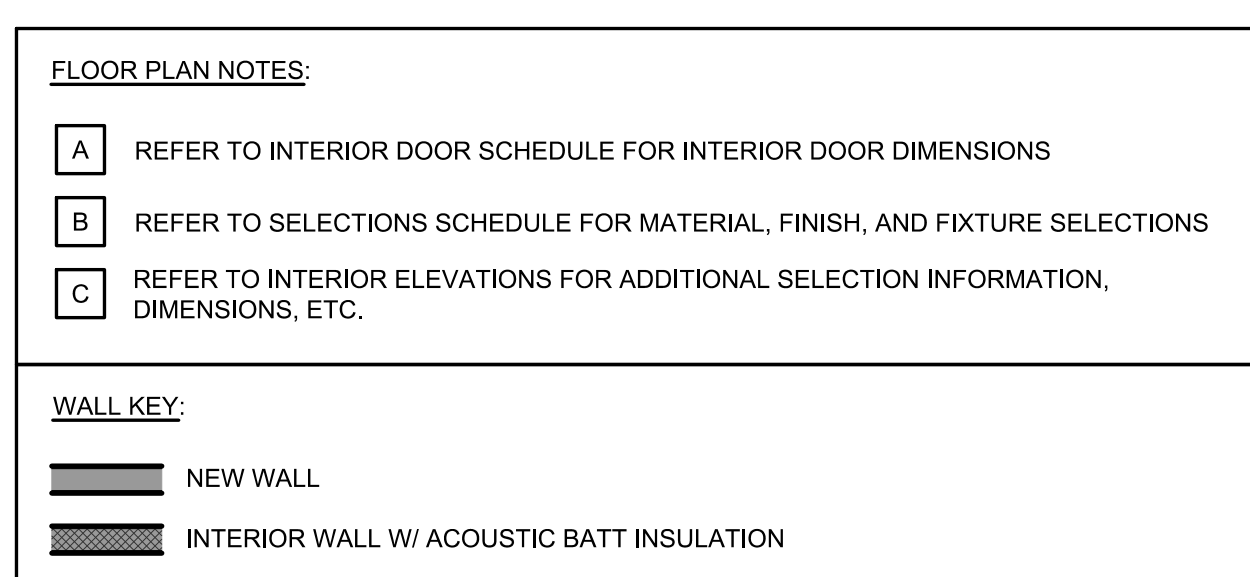
1 FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

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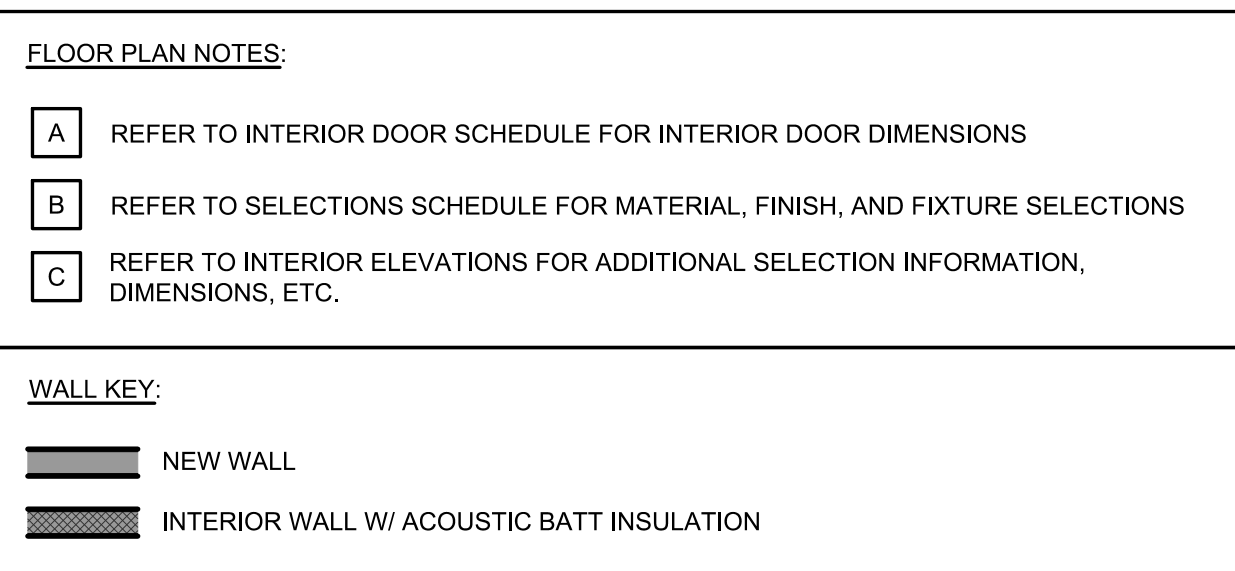
LOWER LEVEL PLAN

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[illegible]

MAIN LEVEL PLAN

A-101

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MAIN LEVEL PLAN

SCALE: 1/4" = 1'-0"



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ROOF PLAN

A-102

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