CPED STAFF REPORT

Prepared for the Zoning Board of Adjustment
BOA Agenda Item #3
November 19, 2015
BZZ-7477

LAND USE APPLICATION SUMMARY

Property Location: 2505 East Lake of the Isles Parkway, 2514 Lake Place

Project Name: New Single-Family Home

Prepared By: Joseph Giant, City Planner, (612) 673-3489

Applicant: Peterssen/Keller Architecture

Project Contact: Lars Peterssen

Request: To construct a new single-family family home with accessory dwelling unit

Required Applications:

Variance	• To reduce the established front yard from 55.4 feet to 29.5 feet to allow a retaining wall that retains modified grade. • To reduce the established front yard setback from 55.4 feet to 45 feet to allow a patio greater than 100 square feet in area in the established front yard setback. • To develop on or within 40 feet of the top of a steep slope in the SH Shoreland Overlay District. • To allow a retaining wall that retains modified grade in the south interior side yard setback **(returned to applicant)** • To allow egress window wells exceeding 16 square feet in area in the north interior side yard setback **(returned to applicant)** • To allow a patio in the interior side yard setback **(returned to applicant)**

SITE DATA

Existing Zoning	R1 Single-Family District SH Shoreland Overlay District
Lot Area	38,173 sq. ft./0.88 acres (2505 Lake of the Isles Parkway only) 53,562 sq. ft./1.23 acres (2505 Lake of the Isles and 2514 Lake Place combined)
Ward(s)	7
Neighborhood(s)	East Isles (East Isles Residents Association)
Designated Future Land Use	Urban Neighborhood
Land Use Features	NA
Small Area Plan(s)	NA

Date Application Deemed Complete	October 15, 2015	**Date Extension Letter Sent**	NA
End of 60-Day Decision Period	December 15, 2015	**End of 120-Day Decision Period**	NA

BACKGROUND

SITE DESCRIPTION AND PRESENT USE. The subject property, 2505 East Lake of the Isles Parkway, is situated across the Parkway from the east shore of Lake of the Isles, between 25th Street West and 26th Street West. The property has an area of 38,173 square feet, making it one of the largest single-family home lots in Minneapolis.

The property currently contains a one-story single-family mid-century modern home constructed in 1958. The home has a gross floor area of approximately 7,495 square feet. The home has been determined not to be a contributing structure in the Lake of the Isles Potential Historic District because it was constructed outside the period of significance. An historic review letter is attached. A second property, 2514 Lake Place, is located to the rear (east) of the larger property. This property has historically served as the "driveway lot" for 2505 East Lake of the Isles Parkway. This property has an area of 15,389 square feet and currently accommodates a driveway leading to the larger property and landscaping along Lake Place. The combined area of the two lots is 53,562 square feet.

The frontage of the subject property along East Lake of the Isles Parkway contains a slope that rises from the sidewalk by approximately 17 feet towards the interior of the lot. At its steepest point, the slope rises at approximately 34% over a distance of 50 feet. Slopes with a grade change of at least 18% over a horizontal distance of 50 feet are considered a steep slope. The steep slope exists along the entire East Lake of the Isles frontage and the majority of the 25th Street West frontage. A retaining wall exists adjacent to the property line along the entire front and corner side lot lines.

SURROUNDING PROPERTIES AND NEIGHBORHOOD. The subject properties are located in the R1 Single-Family Zoning District and SH Shoreland Overlay District in the East Isles neighborhood. The site is located across East Lake of the Isles Parkway from the east shore of the northern, narrower portion of Lake of the Isles. Nearby properties contain primarily large and architecturally significant homes on lots with an average area of over 10,000 square feet.

PROJECT DESCRIPTION. The applicant proposes to construct a single-family home with an attached garage. An attached accessory dwelling unit (ADU) would be located above the garage. The design of the home features three two-story stone pavilions joined by one-story flat-roofed sections encircling an inner courtyard. The gross floor area of the home would be 8,832 square feet, resulting in an FAR of 0.23. Preliminary plans for the development include several environmentally conscious features such as green roofs on the flat-roofed sections of the home, a stormwater capture system that would store water in a cistern, a geothermal heat pump, and the possibility of solar installations.

The home would be subject to Administrative Site Plan Review. With quality exterior materials (stone and copper), a height within a ½ story of the predominant height of homes within 100 feet, 20% windows on street-facing elevations, 10% windows on interior elevations, and a basement, the home achieves 18 out of 27 possible urban design points, exceeding the minimum of 17. The proposed home would be built approximately 10 to 15 feet behind the top of the steep slope that extends along the front portion of the property. A walkway, retaining wall, and a small portion a patio would be located on the slope itself. Due to the location of the development, the applicant seeks a variance to develop on or within 40 feet of the top of a steep slope in the SH Shoreland Overlay District.

The home would continue to be accessed via the "driveway lot" at 2514 Lake Place. Besides replacing the driveway and retaining wall adjacent to the public sidewalk along Lake Place, no development would occur on the driveway lot.

The home would be situated on the southern portion of the site, creating a large undeveloped northern portion that would be split into a separate residential zoning lot.[1] The southern lot containing the home would have an area of 21,561 square feet (excluding the "driveway lot") and a width of 126 linear feet. The northern lot would have an area of 16,612 square feet and a width of 90.1 linear feet. Although no development is currently planned for the northern lot, lot splits requiring Shoreland development variances must include a development plan demonstrating that a home could be built on the new parcel without triggering additional variances. The applicant has provided a development plan demonstrating compliance with this requirement that can be found in the attachments (pp. 29-35). Taking the lot split into account, the FAR of the proposed home on the southern lot increases to 0.40.

As part of the project the hillside would be re-graded and landscaped with native meadow grasses. The 1-foot retaining wall along the public sidewalk would be rebuilt to approximately the same dimensions and a new retaining wall would be built at the top of the hill. The retaining wall would level the area in front of the home to approximately the same level as the patio of the existing home. The retaining wall would extend along the length of the property, parallel to and 29.5 feet behind the front lot line.

In the corners of the yard, portions of the grade would be raised by four to five feet to match the grade at the top of the slope. In the center of the yard, grade would be raised by one to two feet. Retaining walls are only allowed in the front yard setback if the wall retains natural grade. Because backfill would be added behind the wall, the wall would be retaining modified grade rather than natural grade. Therefore, the applicant is seeking a variance to construct a retaining wall retaining modified grade 29.5 feet behind the front lot line.

As proposed, the retaining wall would be built to a height of approximately four feet above the adjacent grade facing the street, and approximately 1.5 feet above the adjacent grade facing the house. The purpose of the additional 1.5 feet of wall height facing the house is to provide a safety edge between the flat portion of the yard and the steep slope. Staff has expressed concerns regarding the height of the retaining wall that are addressed in the variance findings.

Preliminary plans called for the extension of the wall around the south corner of the home past the established front yard setback line. Extending the wall past this line would have required a variance to the required interior side yard. The applicant has revised the plans so that the retaining wall does not encroach into the interior side yard, eliminating the need for this variance.

Similar to the existing home, a ground-level patio would extend from the front façade of the home. Patios up to 100 square feet in area are permitted in the front yard setback. The proposed patio has an area of approximately 957 square feet (of which 728 square feet is in the setback) and extends between 8 feet to 15 feet from the front façade of the home, and 6.7 to 10.3 feet into the established front yard

[1] The subject parcel is in a "large lot district." These districts exist where the average lot area of single- or two-family zoning lots within 350 feet of the subject property is at least 50% larger than the minimum lot area of the primary zoning district (Section 598.240(2)(a)). The minimum lot area in the R1 district is 6,000 square feet, so a large lot district would exist where the minimum lot area of parcels within 350 feet of the subject parcel is greater than 9,000 square feet. The average lot area of qualifying parcels within 350 feet of the subject parcel is 10,639 square feet. Since the minimum lot area within 350 feet is greater than 9,000, the minimum lot area increases to 10,639.

setback. In order to allow the proposed patio, the applicant has applied for a variance to reduce the established front yard setback from 55.4 feet to 45 feet to allow the patio.

Preliminary plans called for the extension of the patio around the north corner of the house. A ground level patio closer than eight feet to the north interior side property line would have required a variance. The plans have been revised so the edge of the patio is no closer than eight feet from the north property line, thereby eliminating the need for a variance to allow a patio in the north interior side yard.

Likewise, preliminary plans included egress/light wells larger than 16 square feet in area along the north façade of the home. Window wells larger than 16 square feet in area are not permitted in the required interior side yard and would have required a variance. The applicant has revised the plans so that the well is no closer than eight feet from the property line, thereby eliminating the need for a variance to allow egress window wells larger than 16 square feet in area.

Public Comments. Staff has received one message from an adjacent neighbor in support of the variance. The applicant presented the project to the East Isles Residents Association Zoning and Land Use Committee meeting on April 21, 2015. The neighborhood supports the project and recommends approval of the proposed variances. Any additional comments received prior to the hearing will be forwarded to the Board of Adjustment for consideration.

ANALYSIS

VARIANCE – Retaining Wall

The Department of Community Planning and Economic Development has analyzed the application for a variance to reduce the established front yard setback from 55.4 feet to 29.5 feet to allow a retaining wall that retains modified grade based on the following findings:

1. *Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.*

   The slope of the site along the front lot line is a practical difficulty unique to the property. The proposed retaining wall would shore up the hillside, stabilize the buildable portion of the yard, and create green space between the front of the home and the slope. Constructing a retaining wall without adding fill would require the removal of a substantial amount of soil from a steep slope in an environmentally sensitive area. The deteriorating hillside on the front portion of the property is a practical difficulty not created by the applicant.

2. *The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.*

   Staff finds that the construction of a retaining wall to stabilize the hillside and buildable area of the lot is a reasonable use of property. The purpose of ordinances regulating wall/fence height and setbacks is to allow for privacy while encouraging an aesthetically pleasing environment and to promote crime prevention through natural surveillance. The proposed retaining wall promotes an aesthetic environment by creating an opportunity for a more manageable site and does not compromise natural surveillance.

However, the proposed structure could result in the creation of a blank wall along the street. The maximum height of a privacy fence in a front yard is three feet. As proposed, the retaining wall would extend four feet above the grade adjacent to the base of the wall. Staff is concerned that a retaining wall taller than three feet would create an effect similar to the adverse impact created by a privacy fence taller than three feet. Therefore, staff recommends as a condition of approval that the height of the retaining wall be limited to three feet above the adjacent grade.

The intent of the ordinance requiring that retaining walls retain natural (as opposed to modified) grade is to prevent the construction of a wall, and then the subsequent construction of a privacy fence on top of the wall. This scenario can quickly result in tall, blank walls adjacent to the street. In order to maintain visibility and lines of sight, staff recommends as a condition of approval that no fences be installed on top of the wall, and any fence constructed between the wall and the front façade of the home be constructed of open, decorative, and/or ornamental materials that are less than 60% opaque.

3. *The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.*

   The proposed retaining wall at the top of the slope will not alter the essential character of the locality or be injurious to the use or enjoyment of other properties in the vicinity. Many similarly situated properties around Lake of the Isles are located atop slopes and have retaining walls maintaining modified grade between the home and the public sidewalk. The property directly to the north, 2427 East lake of the Isles Parkway, has a wall along the front and side of the home in the established front yard that does not retain natural grade that would be similar in size to the proposed wall at the subject property.

   The proposed retaining wall would not be detrimental to the health, safety, and welfare of the general public. The property most affected by the presence of the retaining wall would likely be the adjacent property to the south. The top of the wall would be located two feet higher than the first floor elevation of this property. As such, it is unlikely that the wall would obstruct views from this vantage point or detract from a sense of openness. Further, the adjacent home has a row of hedges along the shared property line that would substantially limit visibility of the wall.

   The wall would play an important role in on-site stormwater management. The retaining will enable the creation of a level green space between the home and the slope, which will allow stormwater to infiltrate into the on-site stormwater retention system rather than flowing down the slope as currently occurs.

VARIANCE – Patio

The Department of Community Planning and Economic Development has analyzed the application for a variance to reduce the established front yard setback from 55.4 feet to 45 feet to allow a patio larger than 100 square feet in area based on the following findings:

1. *Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.*

   The applicant proposes to construct a patio with an area of 957 square feet along the front façade of the proposed home. A substantial portion of the patio would be located in front of the established front yard setback line. A practical difficulty exists due to the unique size and location of the property as well as the unusually large front yard setback created by the adjacent home to the

south. The area of the subject property is 38,173 square feet. Including the driveway lot, the area is 53,562 square feet. In contrast, the typical lot in the R1 district is 6,000 square feet, and average size of residential zoning lots within 350 feet of the subject property is approximately 10,369 square feet. Even after the property is split, the remainder of 2505 East Lake of the Isles Parkway would have an area of 21,561 square feet (36,950 square feet including the driveway lot). Other properties around Lake of the Isles Parkway generally range from15,000 to 20,000 square feet (although several outliers exist in both directions). Even after the property is split, the property would be among the larger lots on the lake.

The regulations governing permitted obstructions in required yards and building setbacks create a predictable development pattern throughout neighborhoods where lots are narrow and streets are straight. However, the subject property is among the largest low-density residential zoning lots in the city, and Lake of the Isles Parkway follows the shoreline rather than the typical grid pattern. As such, the home does not relate to the surrounding structures in the same manner as typical homes throughout the city.

Observing the 100-square-foot limit on patio area is disproportionate to the very large size of the lot and corresponding size of the home. It also does not anticipate a 45-foot separation distance between the edge of the patio and the street, and the lack of close neighbors. These factors create a practical difficulty that is unique to the property.

Staff recognizes that an outdoor social space in front of the proposed house could easily be accomplished without a variance. The large size of the lot introduces a wide variety of layout options that meet zoning requirements. However, staff recognizes that a large property presents its own set of unique challenges, especially in light of a zoning ordinance that deals almost exclusively with absolute numbers rather than proportions. Challenges such as this arise when regulations are tailored to 5,000 to 6,000 square foot lots.

The large established front yard setback, the unique size of the property, and the setting of the property with regards to other homes are circumstances unique to the property that were not created by the applicant.

2. *The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.*

   The applicant proposes to use the property in a reasonable manner. Many similarly situated homes around the lake have ground-level patios in the front yard, including the adjacent property to the north.

   The intent of the size limitation for patios in the front yard setback is to provide for an open and park like setting along a block face and to limit haphazard development between the house and the street. The patio would be located adjacent to the home, 45 feet from the front sidewalk, atop a 17-foot slope. Due to the location of the patio atop the hill, the patio itself would not be visible from the public right of way, although furniture may be visible. The area between the sidewalk and the patio would be landscaped. The patio would extend eight feet from the portion of the front façade closest to the street, which is the same distance that a front porch may project.

3. *The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.*

   The proposed structure is in keeping with the essential character of the locality. In Minneapolis, outdoor social space in the front of the home typically takes the form of a covered front porch. Front porches are allowed to extend up to 8 feet from the front façade of the house into the

setback, and there is no size limit provided the porch does not exceed the maximum depth. However, covered front porches are a somewhat proscriptive design feature that may not be appropriate in all settings. Lake of the Isles Parkway exhibits some of the most distinctive and historically significant homes in the city embodying a wide variety of architectural styles. Many homes contain front porches, but many more do not. However, nearly all homes have some form of outdoor social space in the front of the home to enjoy the proximity to the lake. Staff finds that a ground-level patio in front of the proposed home will not alter the essential character of the area due to the prevalence of similar development in the vicinity.

The home that currently exists at the subject property contains a large cement patio that spans the entire width of the dwelling. The area of the existing patio is 2,925 square feet and it extends as close as 27.5 feet from the property line. Approximately 2,065 square feet of the patio is located in the established front yard. In contrast, the proposed patio has an area of approximately 957 square feet with approximately 721 square feet located in the established front yard setback. The proposed patio would be located 45 feet from the front lot line.

The variance will not be detrimental to the health, safety, and welfare of the general public. The adjacent neighbor to the south would likely be most affected by the patio. The patio would not extend along the southern portion of the front façade of the proposed home. At its closest point, the patio would be located 35 feet from the shared property line and approximately 45 feet from the principal structure on the adjacent property.

VARIANCE – Shoreland Development

The Department of Community Planning and Economic Development has analyzed the application for a variance to develop on or within 40 feet of the top of a steep slope based on the following findings:

1. *Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.*

   A steep slope exists along the entire East Lake of the Isles Parkway frontage and a portion of the 25th Street West frontage. The slope rises approximately 17 feet from the sidewalk over a horizontal distance of approximately 40 feet towards the interior of the site. Without a variance, any development on the site must be located 40 feet from the top of the slope, resulting in an 80- to100-foot setback from the front property line. As proposed, the front façade of the home ranges in distance from 10 to 20 feet from the top of the slope and more than 55 feet from the front property line. The proposed home is in line with the adjacent home to the south. The adjacent home is similarly situated with regard to the steep slope.

   Even with an 80- or 90-foot setback, due to the large size of the property, a home that meets zoning requirements could be constructed without a variance. However, pushing the structure substantially further from the front lot line would not match the character of the area. Further, a development variance would still be necessary because the retaining wall and walkway would be on or within 40 feet from the top of the steep slope. The presence of the steep slope and its impact upon the buildable area of the lot are practical difficulties unique to the property not created by the applicant.

2. *The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.*

   The purpose of the Shoreland Overlay District is to preserve and enhance the environmental qualities of surface waters and the natural and economic values of shoreland areas. In order to

ensure that adverse environmental impacts are minimal or nonexistent, development on or within 40 feet of the top of a steep slope in the Shoreland Overlay District can only be approved through a variance. According to the zoning ordinance, development on a steep slope may be approved if certain conditions are met:

1. *Development must currently exist on the steep slope or within 40 feet from the top of a steep slope within 500 feet of the proposed development.*

   Development currently exists on the subject property as well as within 500 feet of the project area. The adjacent property to the south has similar topographical features as the subject property and the home on this property is located within 40 feet of the top of a steep slope.

2. *The foundation and underlying material must be adequate for the slope condition and soil type.*

   Although the front portion of the lot changes elevation by 17 feet over a horizontal distance of between 40 and 50 feet, the remainder of the site is relatively level. The buildable area of the lot would be stabilized by a retaining wall that would be located at the top of the slope. According to NCRS soil maps[2], the soil type appears to be suitable for development. The footings and foundation will be required to comply with all building code requirements.

3. *The development shall present no danger of falling rock, mud, uprooted trees or other materials.*

   The proposed development will present no danger of falling rock, mud, uprooted trees or other materials. All erosion control mechanisms will be installed prior to the demolition of the current home. An erosion control plan and stormwater pollution prevention plan were created by a civil engineer to ensure that construction and conservation techniques are effective and appropriate for this setting.

4. *The view of the developed slope from the protected water shall be consistent with the natural appearance of the slope, with any historic areas, and with the surrounding physical context.*

   The slope will be landscaped with native grasses and trees. The proposed planting material, called fescue grass, is a thick and hearty natural meadow grass that requires little maintenance and grows to a length that far exceeds typical turf grass. Several photos showing this planting material are available in the attachments (pg. 48) . The usage of this material is intended to create a restored and natural looking setting. A mature cottonwood tree with a trunk diameter of 54 inches will be preserved. However, several mature trees would be removed (visibility and mitigation are addressed in the additional Shoreland findings).

[2] The Natural Resource Conservation Service (NRCS) is a department within the US Dept. of Agriculture that creates and archives soils maps for public use. Site design has assumed a hydrologic soil group 'B' based on the available soils maps. Group B soils have moderate infiltration rates when thoroughly wetted and consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission (0.15-0.30 in/hr) (http://wetlandstudies.com/newsletters/2012/september/docs/hydro_soil_groups.pdf)

The view of the slope from the protected water will be similar to the view of most other residential properties in the vicinity. Although the proposed home would be taller than the existing home, it would be set back further form the front lot line than the existing home.

The proposed single-family residence is in keeping with the planned character of the area, and the erosion control plan and stormwater management plan sufficiently demonstrate that the development addresses the aesthetic and environmental concerns listed in Chapter 551, Article VI, Shoreland Overlay District.

3. *The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.*

Strict development standards in the Shoreland Overlay District were created to ensure that new development does not adversely affect the health, safety, and welfare of both the human and natural environment. In order to ensure that the project will not adversely affect the quality of protected bodies of water or the natural environment, shoreland development variances require the submission of an erosion control plan. This plan is discussed in the additional findings for the Shoreland Overlay District, and a preliminary version of the plan can be found in the attachments. If the erosion control plan is implemented in the manner described then the development should not be injurious to the use or enjoyment of other properties or detrimental to the natural environment.

Additional Standards for Variances within the SH Shoreland Overlay District

In addition, the Zoning Board of Adjustment shall consider, but not be limited to, the following factors when considering conditional use permit or variance requests within the SH Shoreland Overlay District:

1. *The prevention of soil erosion or other possible pollution of public waters, both during and after construction.*

The site currently accommodates a sprawling single-story home and a large amount of impervious surfaces in the front and rear yards. The edge of the patio in front of the home coincides with the top of the steep slope. Due to the large amount of impervious surfaces and lack of effective stormwater management, the site generates a substantial amount of surface runoff. The runoff has stripped the hillside of ground cover and exposed the roots of the trees and bushes on the slope.

To ensure that the new home does not create similar issues, the applicant has created a detailed erosion control plan and accompanying stormwater pollution prevention plan (SWPPP) drawn to a significant level of detail (found in attachments pp.36-48). The plan is based on best industry practices as well as Better Site Design (BSD)/Low Impact Development techniques. The plans address specific environmental concerns that appear in the zoning ordinance including grading and filing (551.510), removal of vegetation (551.520), and stormwater management (551.530). Prior to any work being done on the property, the soil erosion control plan must be approved by the department of Public Works and the Zoning Administrator.

Erosion control will be installed prior to the demolition of the existing home, and work on the site will be phased so that the smallest amount of bare ground is exposed for as short a time as feasible. Examples of other techniques outlined in the plan are mandatory time frames for grade stabilization after disturbance, perimeter protection, heavy-duty erosion control blankets installed on all slopes, a rock construction entrance, inlet protection at all public and private catch basins, and frequent street sweeping.

The steep slope will be re-graded and stabilized with retaining walls at the top and bottom of the hill. Permanent erosion control will consist of sod on flat portions of the site and native grasses

(fescue) on the hillside. Native grasses can be an effective erosion control technique because their roots take hold quickly and they are typically more robust than turf grass.

An extensive stormwater drainage analysis was performed at the subject property culminating in the creation of a stormwater pollution prevention plan (SWPPP). A summary of the analysis and the SWPPP can be found in the attachments, and the calculations themselves can be made available upon request. A stormwater management treatment system will be implemented to reuse a substantial portion of water that is captured on site. An underground rain-harvesting cistern will be constructed on-site to capture the stormwater runoff from the house and driveway, thereby substantially reducing runoff. Overflow from the cistern will be directed to a perforated storm sewer pipe with rock bedding.

Retaining existing trees and landscaping is often regarded as the best form of erosion control. The applicant proposes to preserve the 54" cottonwood that currently exists on the slope. However, most other trees on the hillside would be removed. These trees consist of which consist of elm, ash, and box elder. According to Section 551.520(1) from the zoning code, the clear cutting of vegetation is prohibited in the shoreland areas unless necessary for an approved development, except that diseased vegetation and noxious weeds may be removed. According to the applicant, a certified arborist has reviewed these trees and has recommended their removal due to current plant disease issues that affect these trees. Best management practices will utilized with the removal of the trees. The trees would be cut at their base and ground down to the stumps while keeping the root structures in place. Maintaining the root systems will stabilize the slope until the fescue lawn and additional landscaping becomes established. In order to mitigate the environmental impact sustained from the loss of mature trees, staff recommends as a condition of approval that trees removed from the slope be replaced at a 1:1 ratio with trees that are well-suited for the climate and location.

If the plans are implemented in the manner described then the project should not contribute towards soil erosion and will not degrade the quality of the protected water, both during and after construction.

The proposed structure would be located on the south portion of the subject property, leaving the north portion available for a second home. Although a second shoreland development variance would not be necessary if permits for a new home are applied for within two years of an approved variance, staff recommends as a condition of approval that a new or substantially revised erosion control plan be approved by the department of Public Works and by the Zoning Administrator prior to the issuance of a building permit for a new home during this period.

2. *Limiting the visibility of structures and other development from protected waters.*

The SH Shoreland Overlay District requires that selective vegetation can be removed, provided sufficient vegetative cover remains to screen development when viewed from the protective water. Several trees and shrubs would be removed on the hillside. Although these sensitive areas would be re-vegetated with hearty meadow grasses and stabilized in a timely manner, the fescue grass would not screen the home as effectively as the existing trees and shrubs. In addition, the new home would be two-stories rather than one-story.

As a result, the home would be more visible from the lake than the current home. However, the new home would be no more visible than other similarly situated homes, and would be located ten feet further from the water than the existing home. A line of trees and tall grasses currently existing along the lakeshore and a second line of trees existing along the boulevard would provide a reasonable amount of screening. A cottonwood with a diameter of 54 inches located on the slope would be preserved. In order to mitigate the loss of several mature trees, staff reaffirms its

recommendation requiring the replacement of trees removed from the slope at a 1:1 ratio. As proposed, seven trees would be removed from the slope.

Finally, the home would be located in the Lake of the Isles Potential Historic District. Many stately and architecturally significant homes are located in the vicinity of the subject property and contribute to the character of the area arguably as much as the lake itself. In the past, the subject property accommodated the Gates mansion, which is believed to have been the largest residence in Minneapolis. Traditional building materials and architectural features of the proposed home fit the historic character of the area to a much greater degree than the existing home. However, modern building elements such as the one-story connections with green roofs and large windows effectively distinguish the home from potential historic resources. Therefore, staff finds that visibility from the protected water is limited by the existing mature vegetation in the right of way, tree preservation and replacement, the re-vegetation of the hillside with meadow grasses and the consistency of the design with the surrounding homes.

3. *The suitability of the protected water to safely accommodate the types, uses and numbers of watercraft that the development may generate.*

   The new home will not generate any watercraft.

RECOMMENDATIONS

The Department of Community Planning and Economic Development recommends that the Zoning Board of Adjustment adopt staff findings for the application by Lars Peterssen for the properties located at 2505 East Lake of the Isles Parkway and 2514 Lake Place:

A. Variance of the established front yard setback.

Recommended motion: **Approve** the application to reduce the established front yard from 55.4 feet to 29.5 feet to allow a retaining wall that retains modified grade, subject to the following conditions:

1. Approval of the final site, elevation, and floor plans by the Department of Community Planning and Economic Development;

2. All site improvements shall be completed by November 19, 2017, unless extended by the Zoning Administrator, or the permit may be revoked for non-compliance;

3. The retaining wall may extend no more than three (3) feet above the grade adjacent to the base of the wall facing the front lot line.

4. No fences may be installed on top of the retaining wall, and any fence constructed between the retaining wall and the front façade of the home must be constructed of open, decorative, and/or ornamental materials that are less than 60% opaque.

B. Variance of the established front yard setback.

Recommended motion: **Approve** the application to reduce the established front yard setback from 55.4 feet to 45 feet to allow a ground-level patio greater than 100 square feet in area, subject to the following conditions:

1. Approval of the final site, elevation, and floor plans by the Department of Community Planning and Economic Development;

2. All site improvements shall be completed by November 19, 2017, unless extended by the Zoning Administrator, or the permit may be revoked for non-compliance;

C. Variance of the SH Shoreland Overlay District development standards.

Recommended motion: **Approve** the application to permit development in the SH Shoreland Overlay District on or within forty (40) feet of the top of a steep slope, subject to the following conditions:

1. Approval of the final site, elevation, and floor plans by the Department of Community Planning and Economic Development;

2. All site improvements shall be completed by November 19, 2017, unless extended by the Zoning Administrator, or the permit may be revoked for non-compliance;

3. In order to maintain the natural appearance of the slope, trees that are removed shall be replaced at a 1:1 ratio in the area between the front lot line and the retaining wall located 29.5 feet behind the front lot line, and between the north and south side lot lines. Trees shall be spaced more of less evenly along the entirety of the slope. Trees included in this calculation shall be a minimum of two and one-half (2.5) inches caliper in size, measured at breast height.

4. Approval of a soil erosion control plan as part of the site plan review application;

5. If a building permit for a new home on the north property is applied for before November 19, 2017, a new or substantially revised erosion control plan shall be approved by the department of Public Works and by the Zoning Administrator prior to the issuance of a building permit.

D. Variance to allow a retaining wall retaining modified grade in the south required interior side yard.

Staff has **returned** the variance application to the applicant.

E. Variance to allow a window well in the north required interior side yard.

Staff has **returned** the variance application to the applicant.

F. Variance to allow a patio in the north required interior side yard.

Staff has **returned** the variance application to the applicant.

ATTACHMENTS

1. Zoning map
2. Written statement and variance findings by applicant
3. Land survey of existing and proposed conditions
4. Floor plans and elevation drawings
5. Photographic simulations
6. Development plan for northern parcel
7. Erosion control / Stormwater management plan and analysis
8. Photographs of site
9. Potential Historic Resource determination letter
10. Letters to neighborhood group and Ward 7 office
11. Correspondence

Lars Peterssen — NAME OF APPLICANT

7th — WARD

PROPERTY ADDRESS

2505 East Lake of the Isles Parkway & 2514 Lake Place

FILE NUMBER

BZZ-7477

EXHIBIT "A"

Legal Description

File No. 14-16105

Par 1:
The Southwesterly 81.09 feet front and rear of Lot 2, except the Northwesterly 58 feet 6 inches of the Southeasterly 63 feet of the Northeasterly 3 feet thereof;
All of Lot 3, and the Southeasterly ½ of that certain vacated alley adjacent to said premises, and bounded by the side lines of said premises extended Westerly to the center of said alley, except the Southwesterly 90 feet front and rear of said Lot 3, and of said Southeasterly ½ of alley adjacent to said Southwesterly 90 feet,

All in Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

Par 2:
Lot 5; and Northwesterly ½ of vacated alley lying between extensions of side lines of said Lot,

Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

Par 3:
Lot 6; and Northwesterly ½ of vacated alley lying between extensions of side lines of said Lot, Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

2505 EAST LAKE OF THE ISLES PARKWAY

REVISED NOVEMBER 5, 2015

STATEMENT OF PURPOSE AND PROJECT DESCRIPTION

The proposed project at 2505 East Lake of the Isles Parkway is a new, two-story single-family home with an accessory dwelling unit (ADU) that will be both contextual with the neighborhood and provide a modern living experience for our clients and their family. The design of the home features three stone pavilions with either cedar shake or copper gable roofs. These more traditional forms are reminiscent of older stone homes along Lake of the Isles. One pavilion comprises the private areas of the home, another along the lake the formal spaces, and the third, towards the back of the site, the three-car garage and ADU. These pavilions are joined by flat-roofed sections that allow sweeping vistas of the lake and the neighborhood as well as the interior courtyard formed by the house. As is currently the case, the reconstructed driveway will occupy a portion of the lot at 2514 Lake Place, which is under common ownership with the 2505 parcel.

Green roofs are being explored for the flat roof portions of the house to reduce both energy consumption and rainwater runoff during the summer months. Runoff from onsite hardcover and terraces will be captured and stored in a cistern and reused for irrigation, further protecting the water quality of Lake of the Isles. A geothermal heat pump adds another environmentally-friendly feature to the home; a solar panel installation is also being considered. New trees are planned to replace the existing damaged, diseased or invasive trees that will be removed from the site. Existing significant trees located outside the proposed areas of work are intended to remain and be maintained.

The house is located on the southern portion of the site, which creates a large open yard on the northern side overlooking Lake of the Isles. The existing 2505 parcel comprises two, very large platted lots totaling 38,173 SF in area. Although there are no current plans for additional development, a lot line adjustment and tax parcel division of the existing 2505 parcel will be applied for separately in order for the north yard to have the potential for development with a second home. For purposes of this application, the lot on which the new home will be located is referred to as "Lot A" and the lot that will serve as the north yard is referred to as "Lot B." Assuming approval of the lot line adjustment, the area of Lot A will be 21,561 SF and the area of Lot B will be 16,612 SF.

The new home will sit further from the lake than the existing house and will have less breadth along East Lake of the Isles Parkway. The proposed home is 100'-4" wide, compared with the approximate 170-foot width of the existing house. In addition to a smaller lakeside façade, the footprint of the proposed home is 6,525 SF (less than the current 7,495 SF house), and its gross floor area is 8,916 SF, yielding a floor area ratio of 0.41 based on the area of Lot A (well below the allowable FAR of 0.5). We have taken care to ensure that this home is a good neighbor and an asset to the architectural character of the Parkway and neighborhood. As such, we are not seeking any variances for height, building bulk, or percentage of hardcover.

The proposed project requires the following variances to allow: 1) development on and within 40 feet of a steep slope in the Shoreland Overlay District; 2) retaining walls higher than three feet (the proposed design is for four feet) in the required front and corner side yards; and 3) a patio greater than 100 SF in area in the required front yard.

REQUIRED FINDINGS FOR VARIANCES

1) Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.

Development on and within 40 feet of a steep slope in the Shoreland Overlay District.

A steep slope with irregular contours is located in the front part of the property. The existing home and terraces are located within 40 feet of the top of this slope. The proposed new home and front patio would also be located within 40 feet of the top of the slope, but further away than the existing development. In addition, a new stair and walkway are proposed to connect the house to the public sidewalk in front of the lot – no such access to the street currently exists. Compliance with the ordinance would reduce the buildable area of the lot compared to existing conditions. The new home is proposed to be built at the 55'-4" front yard setback established by the adjacent house to the south, which is also located within 40 feet of the top of the steep slope.

The existing grade / steep slope along this segment of Lake of the Isles Parkway was unnaturally created and manipulated when the Parkway was constructed and over time as a series of houses were constructed on this property, including the Gates Mansion. When the existing structure was built, the grade and slope were again manipulated to accommodate views of the lake and create a usable front yard space adjacent to the Parkway. A series of low retaining walls were built to support the grading and slope, however these walls have deteriorated. In addition, the existing hillside appears to have been severely degraded over time, exposing roots of existing trees and washing out groundcovers and landscaping, due to erosion from stormwater runoff.

Many of the existing trees located on the steep slope that are proposed to be removed are tree species consisting of elm, ash and boxelder. A certified arborist has reviewed these trees and has recommended their removal due to current plant disease issues that affect these trees. Best management practices will be utilized with the removal of the trees, cutting the trees off at the base of the tree and grinding down the stumps while keeping the root structures in place in an effort to help with stabilizing the soils until final landscaping is to commence. New native trees will be planted along the front of the home and elsewhere on the property.

The proposed design will repair and extend the existing retaining walls and construct new retaining walls in the steep slope area in order to minimize the amount of run-off to the existing sloped areas. The new grading design will collect and divert the onsite runoff into a new site drainage system that will repurpose the collected water for irrigation. The sloped areas of the site will be restored with new vegetation that will require minimal maintenance and stabilize the

sloped areas of the site. The retaining wall system will also create a more usable front yard space.

Retaining walls higher than three feet in the required front and corner side yards.

There is an existing 4 – 4.5-foot retaining wall on the east side of the north property line. The existing retaining wall on the west side of that property line is approximately 2 feet high. The proposed design will extend the existing 4 – 4.5 foot high retaining wall along the entire north property line in order to better manage the grades and runoff. In addition, a new, 4-foot retaining wall is proposed to be constructed approximately 29.5 feet from the front property line and partially wrap around the sides of the front lawn above the steep slope. This new retaining wall will stabilize the lawn area and provide runoff control. The 4-foot height is called for in order to provide a safety edge (it will extend 1.5 feet above grade on the lawn side. A height variance for this new retaining wall would not be required if the generally-applicable 25-foot yard required, instead of the increased, 55'-4" front setback.

Patio greater than 100 SF in area in the required front yard.

The 55'-4" front yard setback for this lot is more than twice the generally-applicable 25-foot setback for the R1 District. The patio in front of the existing house comes as close as 27.5' to the front property line. In comparison, the proposed patio will be over 44 feet from the front lot line and much smaller than the existing patio, both in overall area and area within the front yard. Many homes along the Parkway with similar increased front setbacks have paved, ground-level outdoor spaces in the front yard for the enjoyment and view of the lake. In addition, a 100-foot limit on patio area in the front yard is disproportionate with the very large size of this lot and the reasonable corresponding size of the proposed house.

2) The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.

Development on and within 40 feet of a steep slope in the Shoreland Overlay District.

The Shoreland Overlay District is established to preserve and enhance the environmental qualities of surface waters and the natural and economic values of shoreland areas within the city. The proposed development is consistent with the spirit and intent of the ordinance because it complies with the following conditions that must be met for a variance to allow development on or within 40 feet of a steep slope:

1. Development currently exists on the subject property and on the adjacent property to the south that is on the steep slope and within 40 feet of the steep slope.
2. The foundation of the new house will be located on an area of the lot that has little slope, the soil type is suitable for development and the footings and foundation will be required to comply with building code requirements.

3. The proposed development will present no danger of falling rock, mud, uprooted trees or other materials. A soil erosion control plan and a landscaping plan address these environmental concerns. Runoff from the site will be reduced.
4. The view of the developed slope from the protected water will be consistent with the existing view of the developed site and the other residential lots along the Parkway. The condition and appearance of the slope will be improved from its current degraded state.

The proposed development is a reasonable use of the property that is similar to the existing conditions on this lot and to other residential properties along the Parkway. In addition, the Zoning Code requires new homes to include a paved walkway leading from the front door to the public sidewalk, a feature that is absent from the current house.

Retaining walls higher than three feet in the required front and corner side yards.

The intent of the ordinance limiting the height of fences (and retaining walls that don't retain natural grade) to three feet in a front or corner side yard is to preserve a feeling of openness along the public sidewalk and to prevent blocking of views of oncoming traffic at driveway and street intersections. Because the property currently slopes up steeply from the sidewalk and existing retaining wall, the repaired and new retaining walls will not block views into or out of the property or at the corner. The proposed height of the retaining walls is consistent with the intent of the ordinance and is reasonable in context of the slope condition on this lot. Further, retaining walls of greater than 3 feet are commonly used to mitigate the grade on properties around lakes in Minneapolis.

Patio greater than 100 SF in area in the required front yard.

The intent of the ordinance limiting the size of patio areas in the front yard is to provide for open space and pervious area and to prevent use of front yards for off-street parking. The proposed patio is not accessible to vehicles and the increased front yard setback on this lot ensures substantial pervious area in front of the house. The patio will be approximately 18 feet above the elevation of the adjacent public sidewalk and will be set back more than 44 feet from the front property line. The proposed patio area and location are reasonable in light of the size and front yard setback on this lot and consistent with the intent of the ordinance.

3) The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.

Development on and within 40 feet of a steep slope in the Shoreland Overlay District.

The requested variance to allow construction of a new home and patio further from the top of the steep slope than the existing development and to allow the proposed stairs and walkway to the street and proposed retaining walls is consistent with the character of residential properties along

the Parkway and will have no injurious or detrimental effects. Pervious area will increase and stormwater runoff will be managed more effectively to prevent existing erosion problems.

Retaining walls higher than three feet in the required front and corner side yards.

The proposed retaining walls are similar to existing conditions and will not alter the character of the area or have injurious or detrimental effects due to their 4-foot height.

Patio greater than 100 SF in area in the required front yard.

The proposed patio is smaller and further set back than the terrace of the existing house, so it will not alter the essential character of the area or have injurious or detrimental effects. It is also similar in character to front yard patios and terraces of other residences along the Parkway.

Additional Considerations for the Variance to Allow Development on and within 40 Feet of a Steep Slope in the Shoreland Overlay District

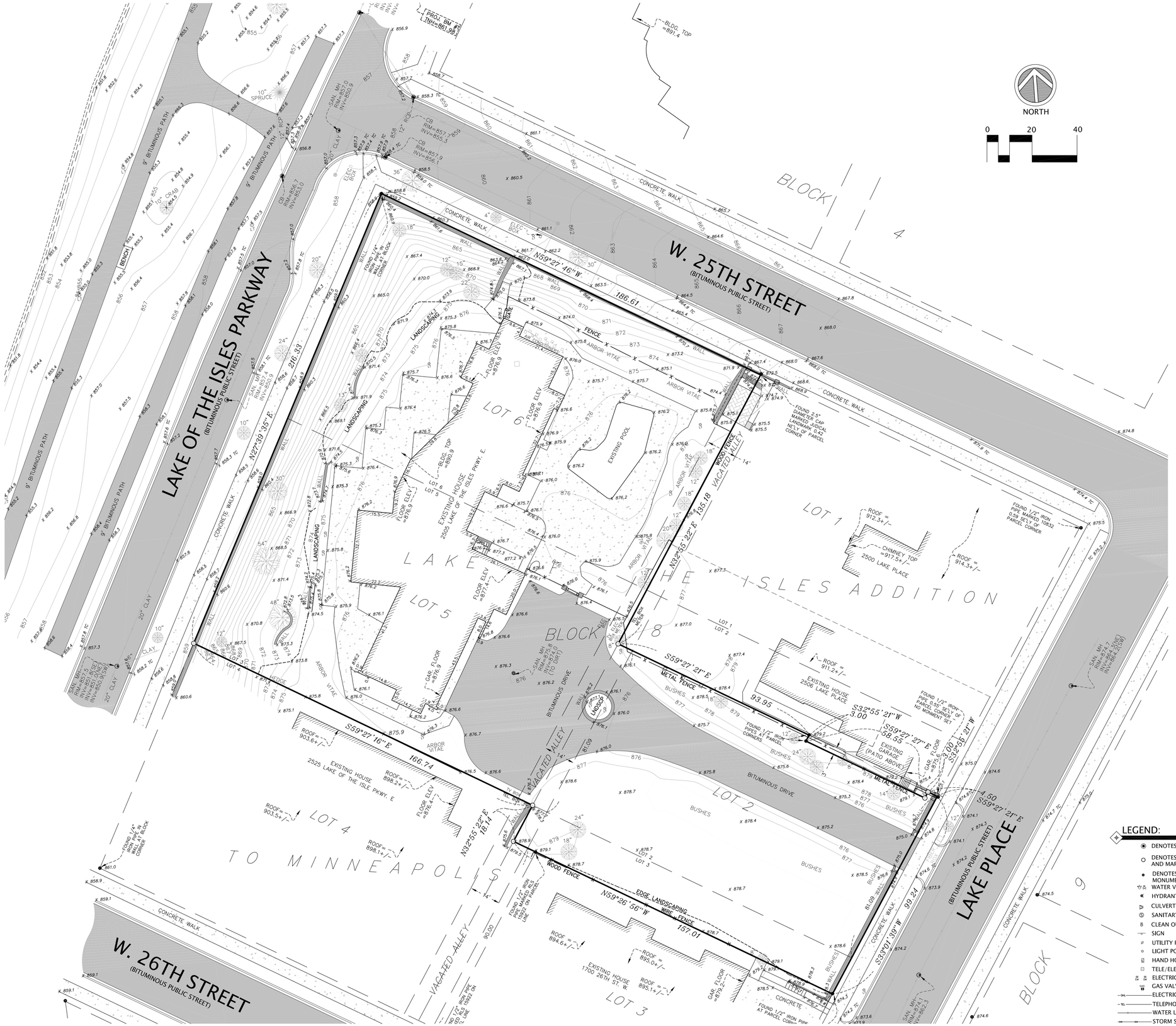
1) The prevention of soil erosion or other possible pollution of public waters, both during and after construction.

The proposed retaining wall system, grading changes and re-vegetation of the steep slope are intended to minimize erosion due to stormwater runoff. A soil erosion control plan will manage environmental impacts during and after construction.

(2) Limiting the visibility of structures and other development from protected waters.
The new home proposed for the site will be set back 55'-4" from the street, much further from that from the lake, and further back than the existing house. Vegetation will further screen views of the house from the lake.

3) The suitability of the protected water to safely accommodate the types, uses and numbers of watercraft that the development may generate.

The property does not have direct access to Lake of the Isles and will not require the accommodation of watercraft.



LEGAL DESCRIPTION:

Par 1: The Southwesterly 81.09 feet front and rear of Lot 2, except the Northwesterly 58 feet 6 inches of the Southeasterly 63 feet of the Northeasterly 3 feet thereof; All of Lot 3, and the Southeasterly 1/2 of that certain vacated alley adjacent to said premises, and bounded by the side lines of said premises extended Westerly to the center of said alley, except the Southwesterly 90 feet front and rear of said Lot 3, and of said Southeaterly 1/2 of alley adjacent to said Southwesterly 90 feet, All in Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

Par 2: Lot 5; and Northwesterly 1/2 of vacated alley lying betwee extensions of side lnes of said Lot, Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

Par 3: Lot 6; and Northwesterly 1/2 of vacated alley lying betwee extensions of side lnes of said Lot, Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

(PER CERTIFICATE OF TITLE NO. 116799)

AREA:

PARCEL AREA: 53,563 SF = 1.23 ACRES

SURVEY NOTES:

1. FIELDWORK COMPLETED OCTOBER 17, 2014.
2. BEARINGS ARE BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM
3. THERE WERE NO EASEMENTS MEMORIALIZED ON THE CERTIFICATE OF TITLE.
4. THERE WAS NO MENTION OF JUDICIAL LANDMARKS BEING SET ON THE CERTIFICATE OF TITLE. CONSULT A TITLE COMPANY TO RESEARCH IF THE BOUNDARIES OF TEH SUBJECT PROPERTY HAVE BEEN ADJUDICATED BY COURT ORDER.

BENCHMARK:

CITY OF MINNEAPOLIS GEODETIC MONUMENT #452A ON 26TH NW OF LAKE PLACE.
ELEVATION =868.98 (NGVD29)

PROJECT BENCHMARKS SHOWN IN GRAPHICS

EXISTING IMPERVIOUS DATA:

HOUSE	7495 SF
DRIVEWAY	7361 SF
CONCRETE	8862 SF
WALLS	886 SF
TOTAL IMPERVIOUS AREA	24604 SF
% IMPERVIOUS COVERAGE (TO OHW	45.9%

UNDERGROUND UTILITY 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 COMPROMISE 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 #1142901370 AND 142901717. SOME MAPS WERE RECEIVED, WHILE OTHER UTILITIES DID NOT RESPOND TO THE LOCATE REQUEST, ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST. AT THE TIME OF THIS SURVEY ONLY THE UNDERGROUND ELECTRIC AS SHOWN WAS FILED MARKED BY GOPHER STATE ONE. OTHER UTILITIES EXIST ON THIS THIS THAT WERE NOT MARKED UP.

CALL BEFORE YOU DIG!
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166
GOPHER ONE CALL STATE

LEGEND:

- DENOTES HENNEPIN CO. DISK FOUND
- DENOTES MONUMENT SET AND MARKED RLS 25718
- DENOTES FOUND MONUMENT AS MARKED
- WATER VALVES
- HYDRANT
- CULVERT/F.E.S.
- SANITARY MANHOLE
- CLEAN OUT
- SIGN
- UTILITY POLE
- LIGHT POLE
- HAND HOLE
- TELE/ELEC BOX
- ELECTRIC METER/GAS METER
- GAS VALVE
- ELECTRIC LINE
- TELEPHONE LINE
- WATER LINE
- STORM SEWER LINE
- SANITARY SEWER LINE
- WALL
- FENCE
- CURB
- CONCRETE
- DENOTES DECIDUOUS TREE
- DENOTES CONIFEROUS TREE
- DENOTES TREELINE
- DENOTES TREE TO BE REMOVED
- DENOTES HARDCOVER KEY
- EXISTING CONTOURS

1 FOOT CONTOUR INTERVAL

2505 LAKE OF THE ISLES PARKWAY E.

CONTACT:

DAVID ERICSON
745 Spring Hill Road
Wayzata, MN 55391
CELL: 952-564-7362
EMAIL: dave.ericson@mercedcapital.com

COUNTY:

HENNEPIN COUNTY

SEAL:

THE STATE OF MINNESOTA DOES NOT REQUIRE A SEAL.

REVISIONS:

DATE	REVISION
10-21-14	INITIAL ISSUE
05-26-15	ADJACENT ROOF ELEVATIONS

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 No: 25718

Date: 10-21-14

PROJECT LOCATION:

2505 LAKE OF THE ISLSE PKWY E.
PID#3302924240071

2514 LAKE PLACE
PID#3302924240068

Suite #1
6750 Stillwater Blvd. N.
Stillwater, MN 55082
Phone 651.275.8969
Fax 651.275.8976
dan@cssurvey.net

CORNERSTONE
LAND SURVEYING, INC

FILE NAME	SURVPK02
PROJECT NO.	PK14002

CERTIFICATE OF SURVEY

EXISTING HARDCOVER

HOUSE	7,495 SQ. FT.
PAVING	8,862 SQ. FT.
DRIVEWAY	7,361 SQ. FT.
WALLS	886 SQ. FT.
TOTAL EXISTING HARDCOVER	24,604 SQ. FT.
AREA OF LOT	53,563 SQ. FT.
PERCENTAGE OF HARDCOVER TO LOT	45.9%

PROPOSED HARDCOVER

PROPOSED HOUSE	6,558 SQ. FT.
PROPOSED DRIVEWAY	3,296 SQ. FT.
PROPOSED PAVING AREAS	3,258 SQ. FT.
PROPOSED WALLS	822 SQ. FT
EX. WALLS	555 SQ. FT.
PROPOSED WATER FEATURE	195 SQ. FT.
PROPOSED HARDCOVER	14,684 SQ. FT.
AREA OF LOT	53,563 SQ. FT.
PERCENTAGE HARDCOVER TO LOT	27.4%

11-02-2015
REVISED HARDCOVER PER PLAN CHANGES

(EF) PURPLE LEAF WINTERCREEPER | 115
12" O.C. (TRIANGULAR) | 3" POTS

680 | (EF) PURPLE LEAF WINTERCREEPER
3" POTS | 12" O.C. (TRIANGULAR)

6 | (AAB) AUTUMN BLAZE MAPLE
3" CAL. B+B | 15' O.C.

NEW 4' HT ENTRY GATE @ DRIVEWAY (60% MAX OPAQUE)

(AAB) AUTUMN BLAZE MAPLE | 9
16' O.C. | 3" CAL. B+B

(TO) TECHNY ARBORVITAE | 40
4' O.C. | 6-7' HT. B+B

EX. NEIGHBORING FENCE TO REMAIN

NEW HEDGE PLANTINGS

FESCUE LAWN SLOPE

6' HT GATE ACCESS

EX. UTILITIES BOXES TO BE RELOCATED, COORDINATE W/ UTILITY COMPANY

PROPOSED TRASH / REFUSE CART STORAGE AREA

3' (W) SERVICE PATH

PROPOSED METER LOCATIONS

NEW 6' HT WOOD FENCE AT PROPERTY LINE TO REPLACE EXISTING FENCES ON PROPERTY

(TO) TECHNY ARBORVITAE | 26
4' O.C. | 6-7' HT. B+B

REPLACE SECTION OF RETAINING WALL AT NEIGHBORING PROPERTY. TIE INTO EX. WALLS

(AAB) AUTUMN BLAZE MAPLE | 7
16' O.C. | 3" CAL. B+B

(BGM) GREEN MOUNTAIN BOXWOOD | 36
3' O.C. | 36" HT. CONT.

EX. CONCRETE / STUCCO RETAINING WALL TO REMAIN, REPAIR AND REFINISH STUCCO

(BC) CHICAGOLAND BOXWOOD | 74
24" O.C. | 18" HT. CONT.

EX. BOULEVARD TREES TO REMAIN, SAVE AND PROTECT

PROPOSED FESCUE GRASS LAWN / SOD AT SLOPE AREA

NEW 4' HT RETAINING WALL AT LAKESIDE

REPLACE SECTION OF EXISTING STONE WALL AT BOULEVARD. EXTEND 4' HT CONCRETE / STUCCO WALL FOR GRADES

(QE) NORTHERN PIN OAK | 2
V.I.F. | 3" CAL. B+B

PROPOSED NEW RETAINING WALL TO REPLACE EXISTING WALL

PROPOSED NEW TREE PLANTINGS

FESCUE LAWN SLOPE

PROPOSED SNOW STORAGE TO BE ALONG SOUTH SIDE OF DRIVE

717 | PT) JAPANESE SPURGE
3" POTS | 12" O.C. (GRID)

PROPOSED CISTERN TO COLLECT HOUSE AND SITE RUNOFF TO BE REUSED FOR IRRIGATION. SEE STORMWATER MANAGEMENT PLANS

4 | (GT) SKYLINE HONEYLOCUST
3" CAL. B+B | 12' O.C.

PROPOSED GEOTHERMAL WELL SYSTEM TO BE LOCATED UNDER DRIVEWAY

1 | (AG) AUTUMN BRILLIANCE SERVICEBERRY
10' HT | V.I.F.

3 | (BP) WHITESPIRE BIRCH
2" CAL. B+B | 7' O.C.

125 | PT) JAPANESE SPURGE
3" POTS | 12" O.C. (GRID)

PROPOSED WATER FEATURE

1 | (GT) SKYLINE HONEYLOCUST
3" CAL. B+B | V.I.F.

70 | (TO) TECHNY ARBORVITAE
6-7' HT. B+B | 4' O.C.

CONT. DRAIN AT BASE OF WATER FEATURE. CONNECT TO SITE DRAINAGE SYSTEM

11-02-2015
ADJUSTED SIDE YARD PATIO AND WINDOW WELLS

11-02-2015
REMOVED SECTION OF WALL FROM SIDE YARD

11-02-2015
REVISED PLANT QNTY PER WALL ADJUSTMENT

2 | (AG) AUTUMN BRILLIANCE SERVICEBERRY
10' HT | V.I.F.

71 | (BC) CHICAGOLAND BOXWOOD
18" HT. CONT. | 24" O.C.

NEW 4' HT RETAINING WALL AT LAKESIDE

1 | (QE) NORTHERN PIN OAK
3" CAL. B+B | V.I.F.

EX. SIGNIFICANT TREE TO REMAIN, SAVE AND PROTECT

PROPOSED \FESCUE GRASS LAWN / SOD AT SLOPE AREA

EX. STONE WALL AT BOULEVARD TO REMAIN, SAVE AND PROTECT

NEW 4' WIDE STAIRS / ENTRY WALK

262 | (EF) PURPLEAF WINTERCREEPER
3" POTS | 12" O.C. (TRIANGULAR)

1 SITE / LANDSCAPE PLAN
SCALE: 1/16" = 1' - 0"

0 4 8 16 32 64
1/16" = 1'-0"
one sixteenth inch equals one foot

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING INFORMATION.
2. REFER TO EXISTING SITE SURVEY FOR EXISTING CONDITIONS / BOUNDARY INFORMATION.
3. REFER TO CIVIL DRAWINGS FOR STORMWATER MANAGEMENT AND EROSION CONTOL PLANS

SITE / LANDSCAPE PLAN NOTES:

1. PLAN SHOWN IS CONSIDERED SCHEMATIC AND SHALL BE SUBJECT TO CHANGES , ADJUSTMENTS AND REVISIONS AS IT IS CONTINUED TO BE DEVELOPED
2. EXISTING SIGNIFICANT TREES ON SITE SHALL REMAIN (WHERE APPLICABLE). EXISTING DEAD, DISEASED, NOXIOUS MATERIAL IDENTIFIED ON SITE WILL BE REMOVED PRIOR TO COMMENCING WITH CONSTRUCTION.
3. PROPOSED LIGHTING FOR SITE WILL BE MINIMAL LOW VOLTAGE LANDSCAPE LIGHTING TYPICAL FOR A RESIDENTIAL PROJECT OF THIS NATURE. NO OVERHEAD OR POLE LIGHTING WILL BE UTILIZED FOR THIS PROJECT.
4. PROPOSED UTILITIES FOR PROJECT ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL COORDINATION WITH LOCAL UTILITY COMPANIES.

LEGEND

- LAWN / SOD
- SEEDED AREAS
- AGGREGATE SURFACING
- STONE SURFACING
- GROUNDCOVER PLANTING
- CONCRETE / BIT. / STONE SURFACING
- CONCRETE PAVERS
- WOOD DECKING
- EXISTING CONTOUR
- PROPOSED CONTOUR
- x 867.56 EXISTING SPOT ELEVATION
- + 867.50 PROPOSED SPOT ELEVATION
- EXISTING TREES TO BE PROTECTED AND SAVED
- PROPOSED NEW TREE
- EXISTING TREES TO BE REMAIN
- PROPOSED SHRUB / PERENNIAL
- 39" ASH EXISTING TREES TO BE REMOVED
- DRAINAGE FLOW
- TRAFFIC FLOW
- PROPOSED ENTRANCES

KEYED NOTES

1. EXISTING SIGNIFICANT TREE(S), SAVE AND PROTECT
2. EXISTING CITY SIDEWALK, SAVE AND PROTECT
3. EXISTING SITE FEATURE TO REMAIN, SAVE AND PROTECT
4. EXISTING UTILITES TO REMAIN, SAVE AND PROTECT
5. EXISTING NEIGHBORING PROPERTY
6. EXISTING NEIGHBORING FENCE / WALL TO REMAIN, SAVE AND PROTECT
7. EXISTING BOULEVARD TREES TO REMAIN, SAVE AND PROTECT
8. EXISTING UTILITIES TO BE RELOCATED, COORDINATE WITH APPLICABLE UTILITY COMPANIES
9. PROPOSED UNDERGROUND CISTERN LOCATION, SEE STORMWATER MANAGEMENT PLAN
10. PROPOSED GEO THERMAL LOCATION. V..I.F.
11. PROPOSED GAS AND ELECTRICAL METER LOCATIONS, VERIFY IN FIELD

PLANTING SCHEDULE

TREES & SHRUBS

SYM	DESCRIPTION	QTY	SIZE	COMMENTS
AG	*AMELANCHER X GRANDIFLORA* AUTUMN BRILLIANCE SERVICEBERRY	5	10' HT B+B	VERIFY FINAL LOCATIONS IN FIELD. TREE TO BE 3 - 5 STEM CLUMP
AAB	*ACER FREMANNII 'AUTUMN BLAZE'* AUTUMN BLAZE MAPLE	31	3" CAL. B+B	VERIFY LOCATION IN FIELD. SINGLE STEM SPECIES. PLANTS TO BE FULL FORM AND MATURING
BP	*BETULA POPULIFOLIA 'WHITESPIRE'* WHITESPIRE BIRCH	3	2" CAL. B+B	VERIFY LOCATION IN FIELD. SINGLE STEM SPECIES. PLANTS TO BE FULL FORM AND MATURING
GT	*GLEDITSIA TRICANTHOS 'INERMIS'* SKYLINE HONEYLOCUST	3	3" CAL. B+B	VERIFY LOCATION IN FIELD. SINGLE STEM SPECIES. PLANTS TO BE FULL FORM AND MATURING
TO	*THUJA OCCIDENTALIS 'TECHNY'* TECHNY ARBORVITAE	136	6-7' HT B+B	VERIFY LOCATION IN FIELD. PLANT 48" O.C. ADJUST QUANTITY AND SPACING IF NEEDED SO PLANTS ARE TOUCHING
QE	*QUERCUS ELLIPSOIDALIS* NORTHERN PIN OAK	3	3" CAL. B+B	VERIFY LOCATION IN FIELD. SINGLE STEM SPECIES. PLANTS TO BE FULL FORM AND MATURING
BGM	*BUXUS 'GREEN MOUNTAIN'* GREEN MOUNTAIN BOXWOOD	36	36" HT B+B OR SIM. HT IN CONT.	VERIFY LOCATION IN FIELD. PLANTS TO FULL FORM AND MATURING. PLANT 36" O.C.
BC	*BUXUS 'GLENCOE'* CHICAGOLAND BOXWOOD	145	36" HT B+B OR SIM. HT IN CONT.	VERIFY LOCATION IN FIELD. PLANTS TO FULL FORM AND MATURING. PLANT 24" O.C. GRID PATTERN

PERENNIALS, VINES, GROUNDCOVERS AND ANNUALS

SYM	DESCRIPTION	QTY	SIZE	COMMENTS
PT	*PACHYSANDRA TERMINALIS* JAPANESE SPURGE	842	3" POTS	VERIFY FINAL LOCATIONS IN FIELD. PLANT 12" O.C.GRID PATTERN. SEE PLANS FOR LOCATIONS.
EF	*EUONYMUS 'FORTUNEI' COLORATUS* WINTERCREEPER	1057	3" POTS	VERIFY FINAL LOCATIONS IN FIELD. PLANT 12" O.C. SEE PLANS FOR LOCATIONS.
G1	SOD / LAWN	SEE PLAN		ALL AREAS INDICATED ON PLAN. STAGGER JOINTS OF SOD MATS. LAY SOD PERPENDICULAR TO CONTOURS.
G2	FESCUE SOD (RTF SOD)	SEE PLAN		ALL AREAS INDICATED ON PLAN. STAGGER JOINTS OF SOD MATS. LAY SOD PERPENDICULAR TO CONTOURS.

TVLS
LANDSCAPE ARCHITECTURE

TRAVIS VAN LIERE STUDIO, LLC
211 1ST STREET NORTH #350
MINNEAPOLIS, MN 55406

t 612 760 0494
tvlstudio.com

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

print name: TRAVIS VAN LIERE

signature:

license no: 43728 date: 10.07.15

NOTE:
NOT FOR CONSTRUCTION

Issue	Revision
SD SITE PLAN	04.14.15
VARIANCE APPLICATION	10.07.15
△1 VARIANCE APPLICATION REVISIONS	11.02.15

Lake of the Isles Residence

2505 East Lake of the Isles Parkway
Minneapolis, MN 55405

Drawing
Site / Landscape Plan

Project	1502
Drawn by	TVL
Date	02.01.15
Scale	1/16"=1'-0"
Sheet	L 100

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filepath: /Users/travisvanliere/Desktop/TVLS/ERICSON RESIDENCE/AUTOCAD/L100_UPDATED.dwg
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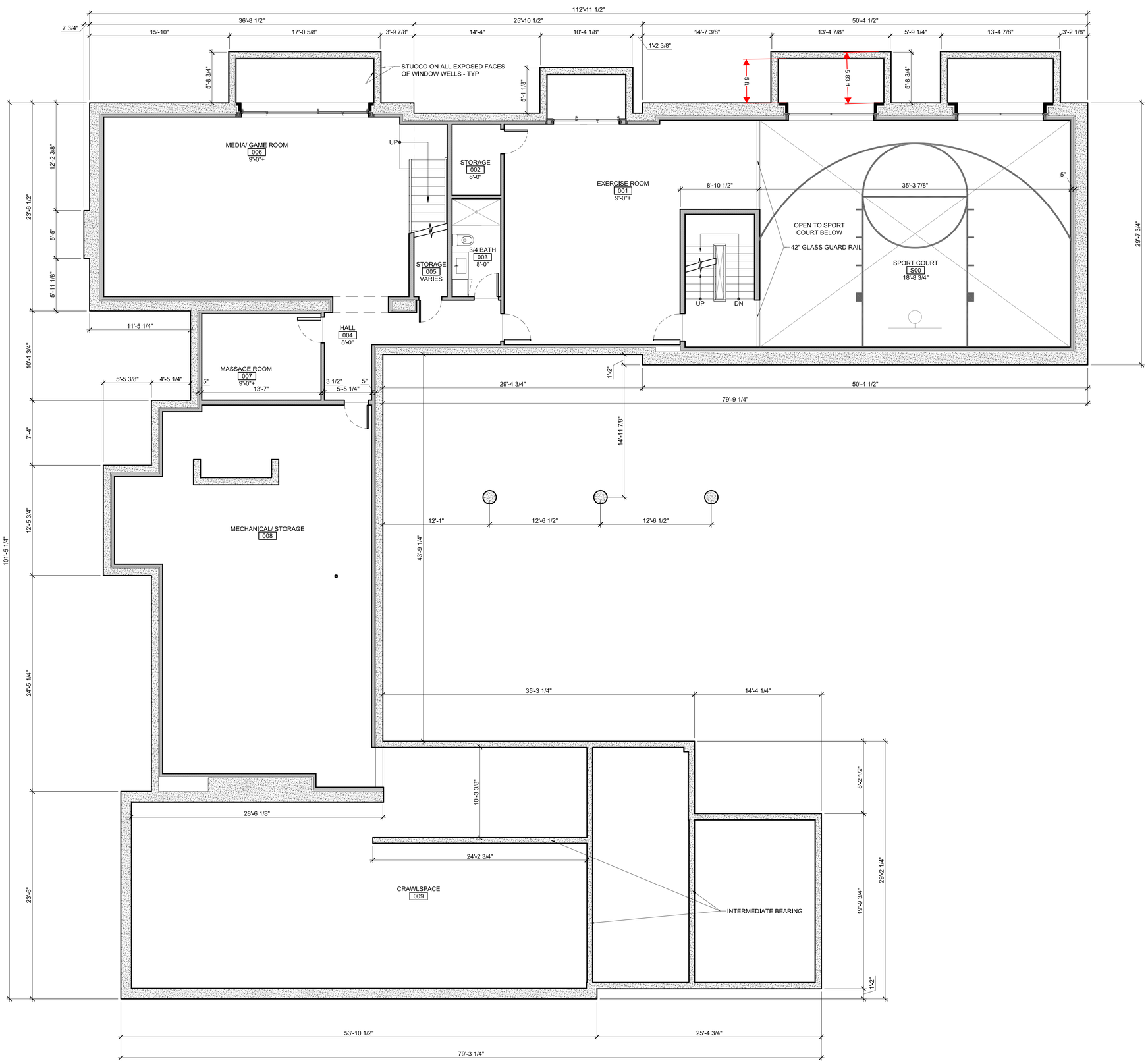

1 LOWER LEVEL PLAN
SCALE: 3/16" = 1'-0"

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P/K
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architecture
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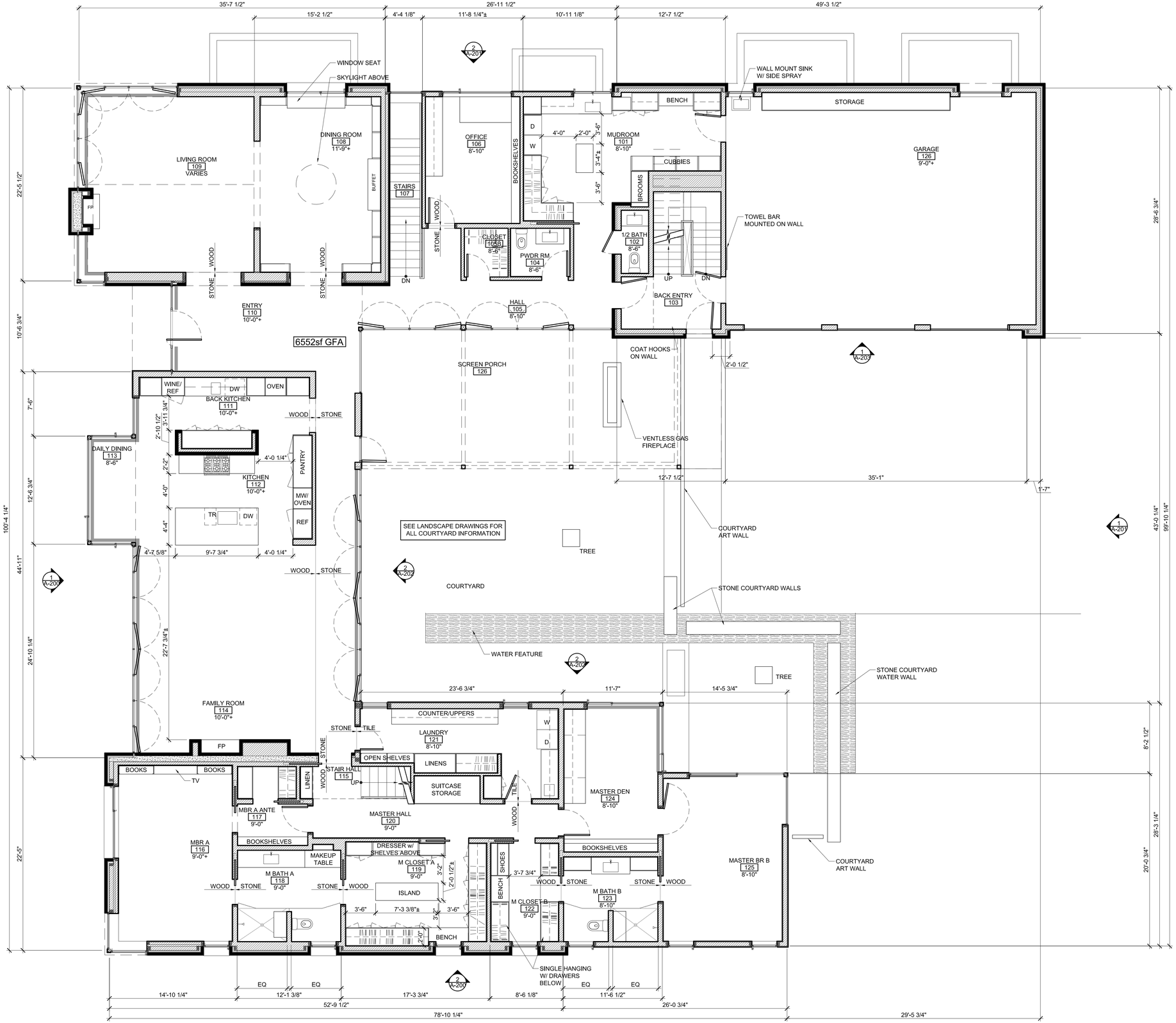
MINNEAPOLIS, MINNESOTA 55408
612.353.4920

2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-100



1 MAIN LEVEL PLAN
SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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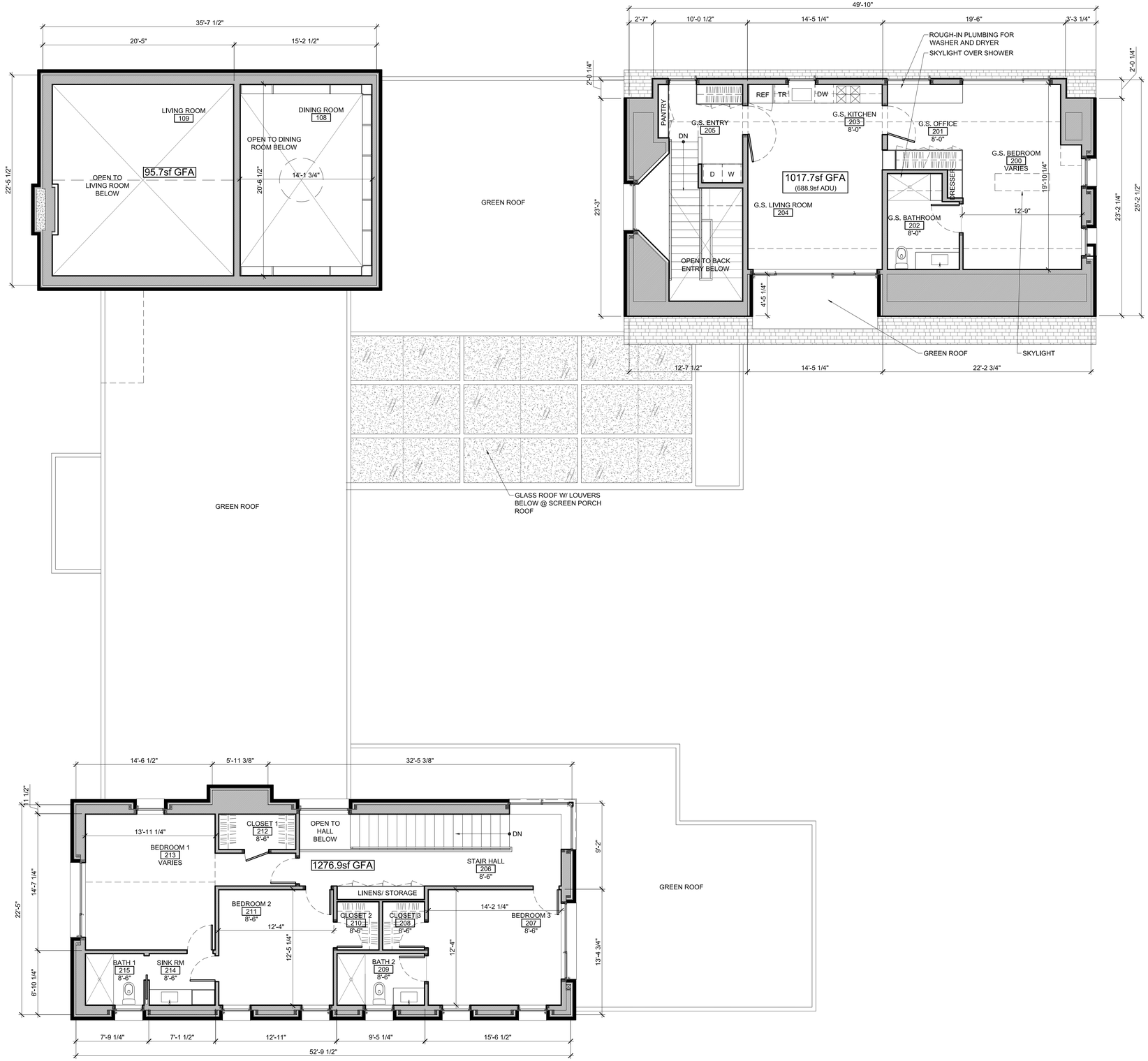
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-101



1 UPPER LEVEL PLAN

SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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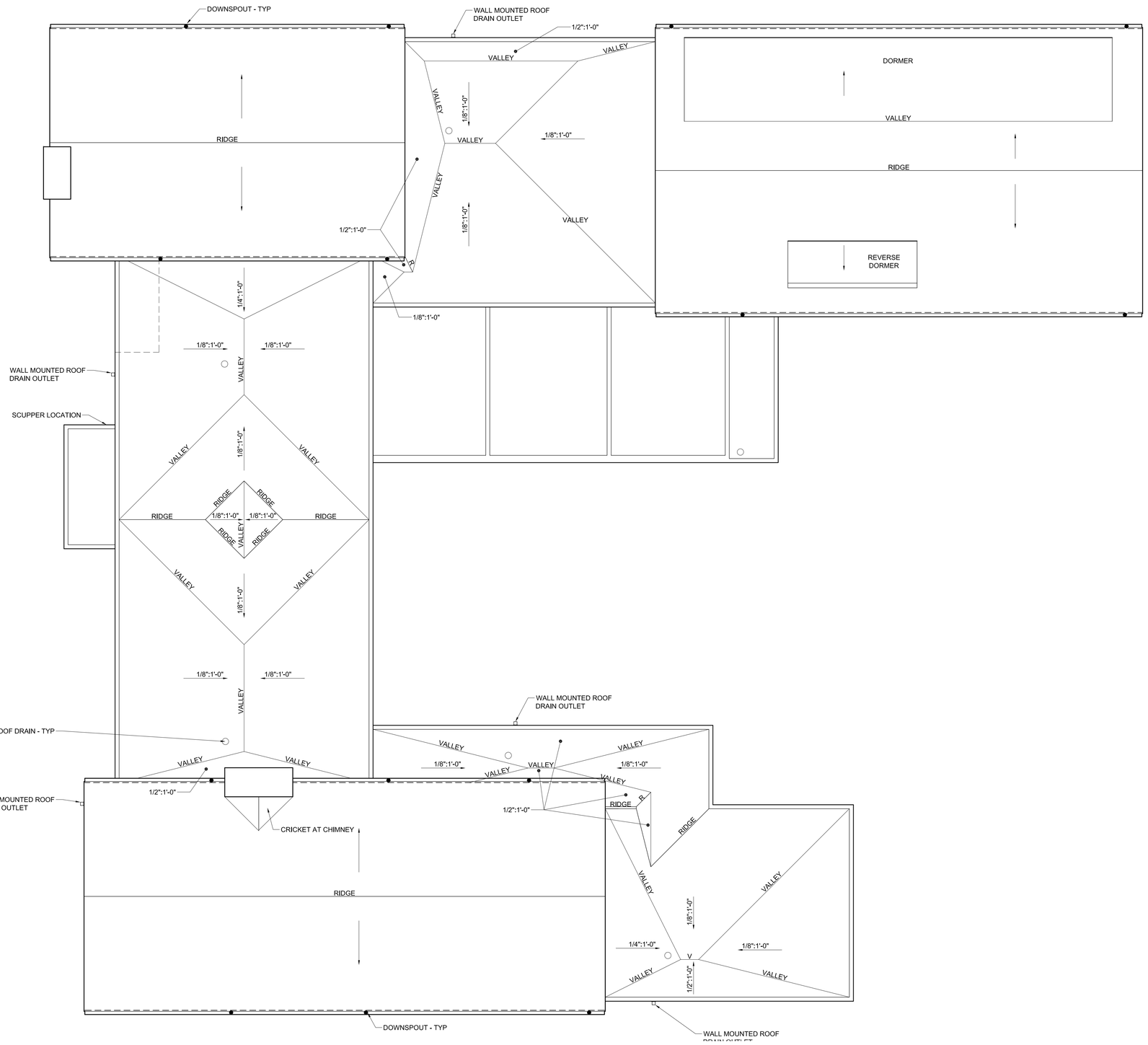
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-102



1 ROOF PLAN
SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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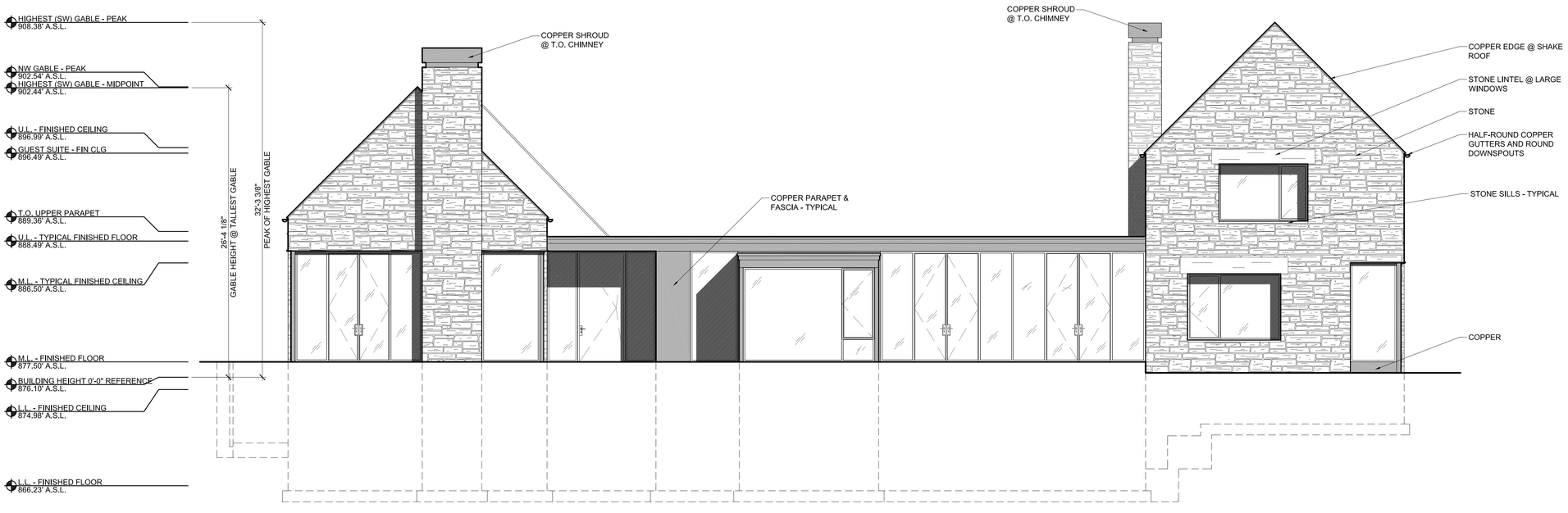
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

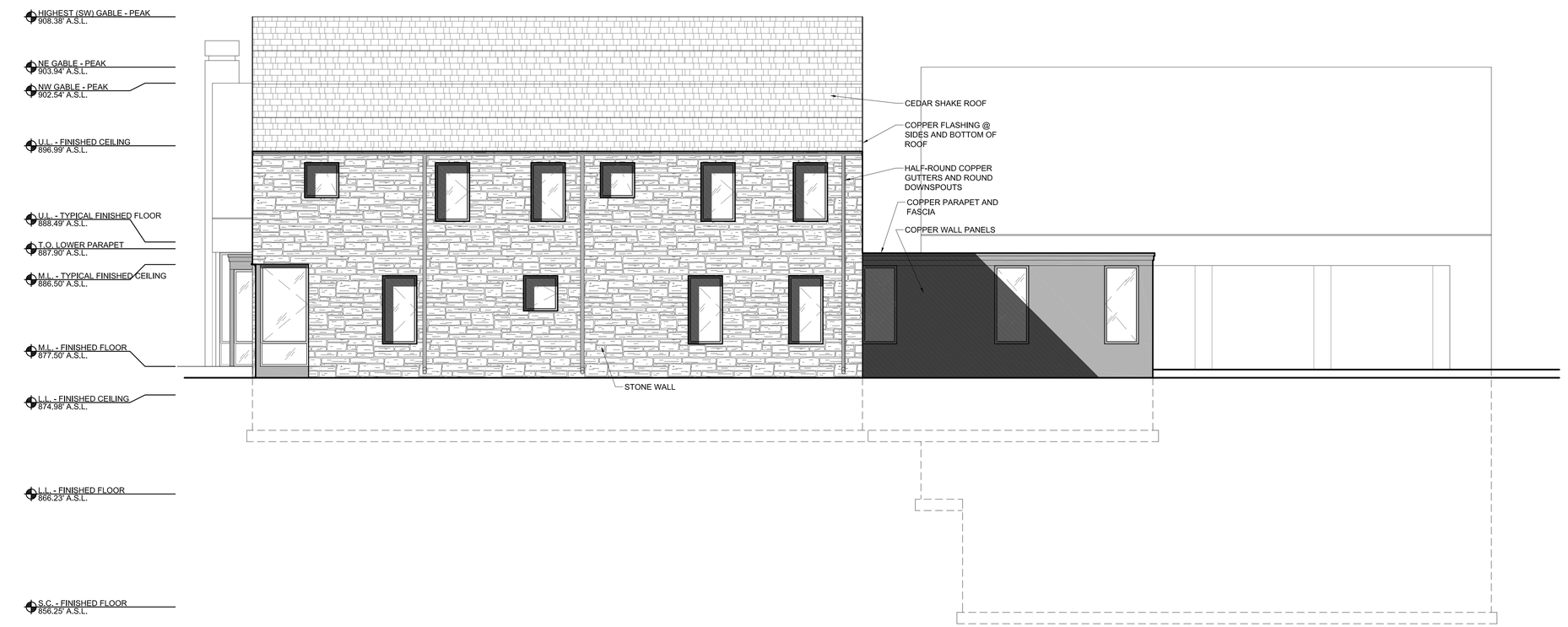
DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-103



1 WEST ELEVATION

SCALE: 3/16" = 1'-0"



2 SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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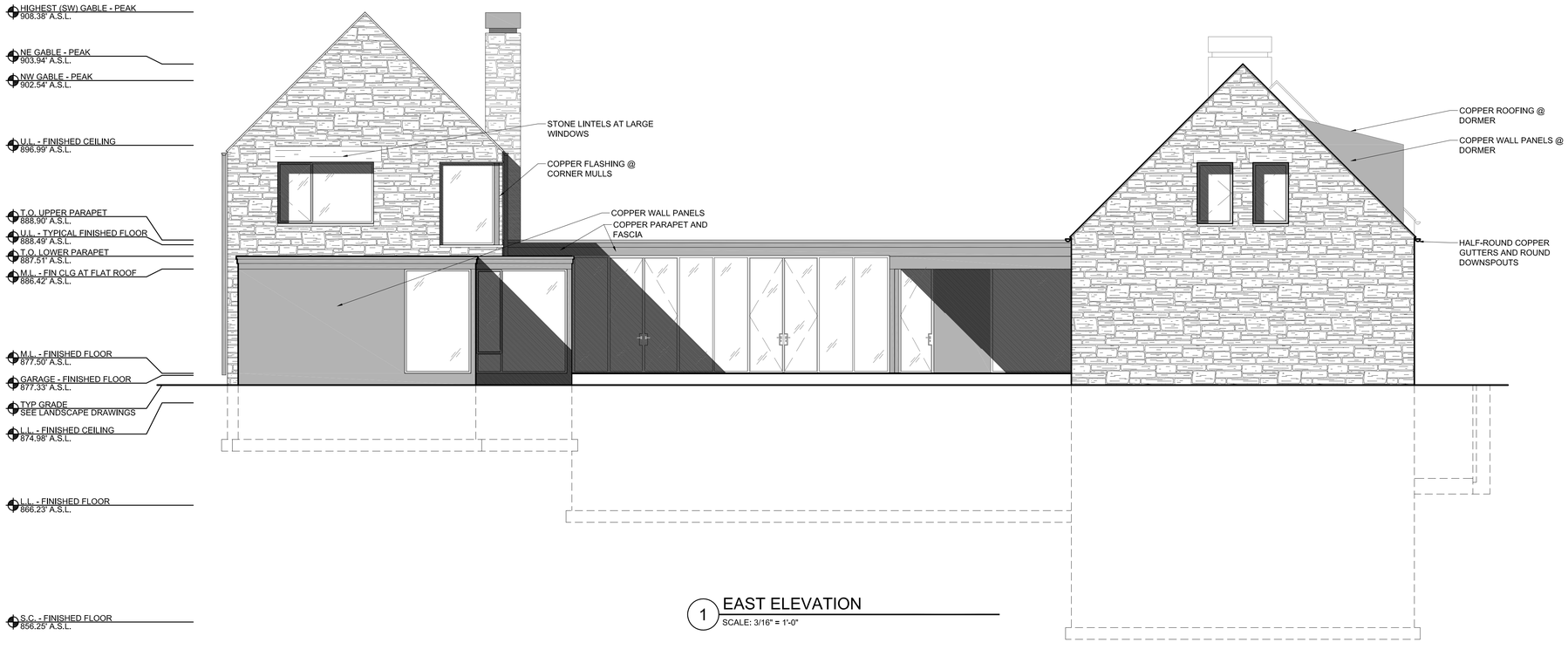
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

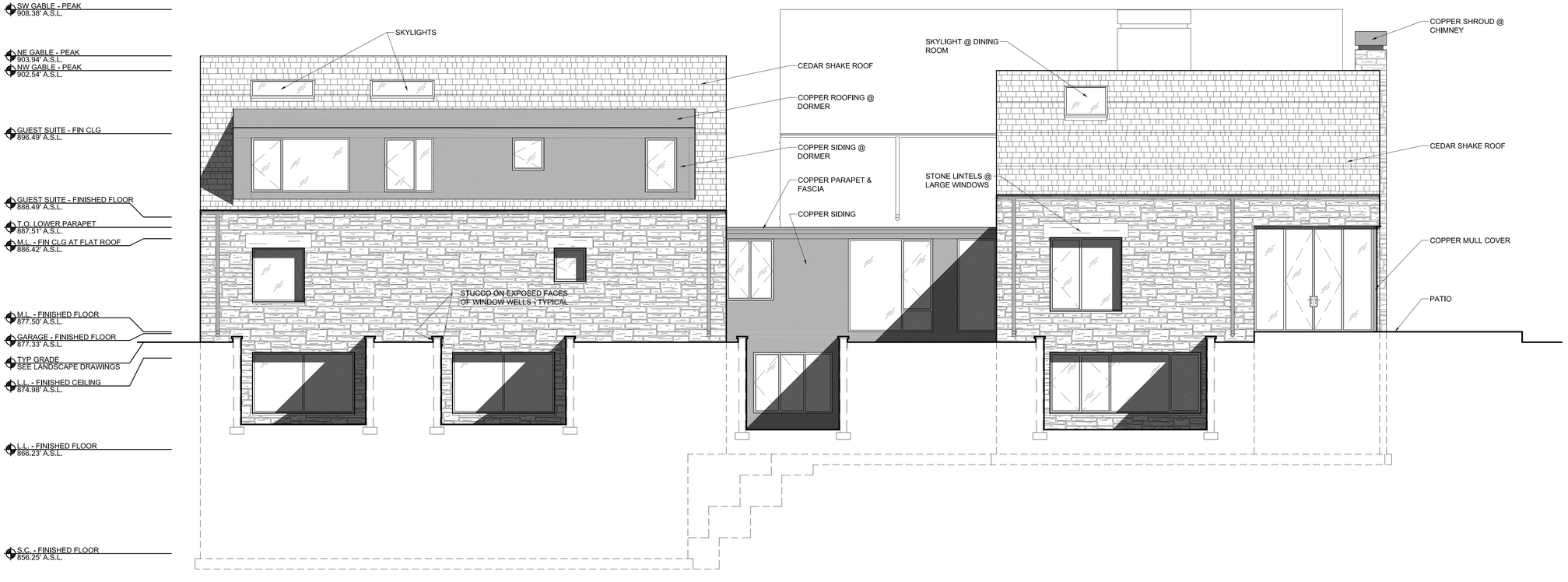
DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-200



1 EAST ELEVATION

SCALE: 3/16" = 1'-0"



2 NORTH ELEVATION

SCALE: 3/16" = 1'-0"

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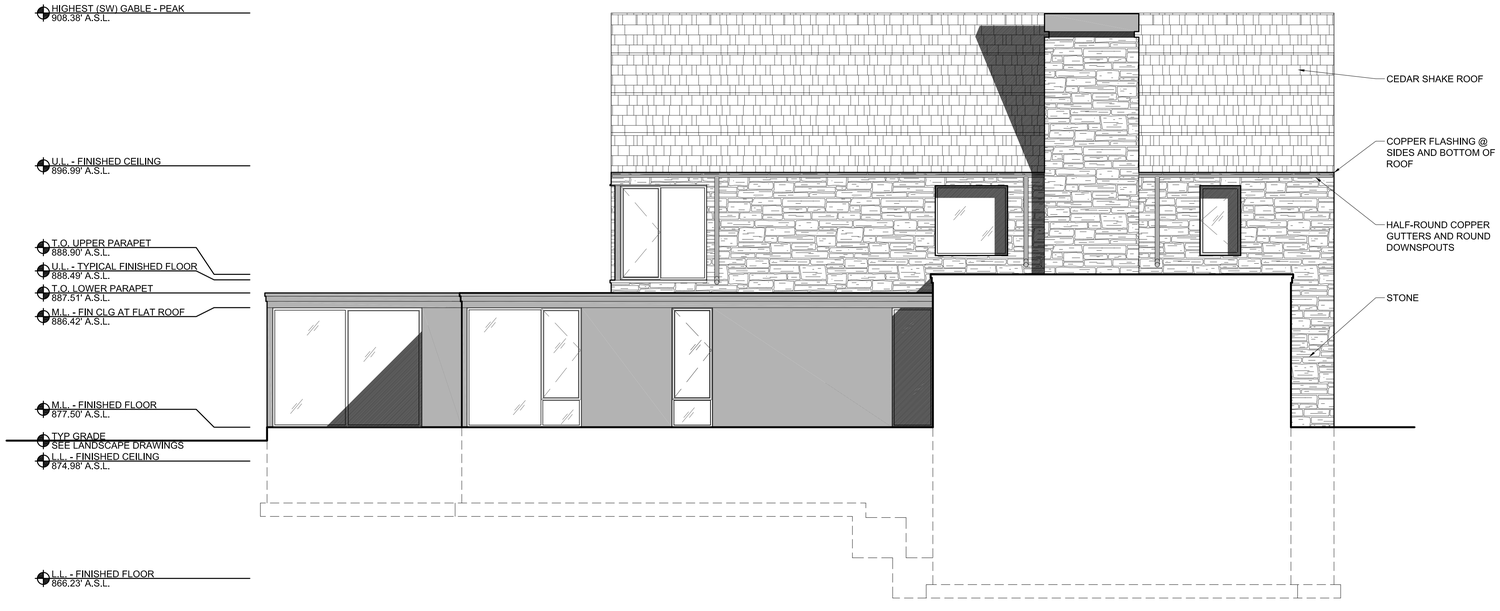
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

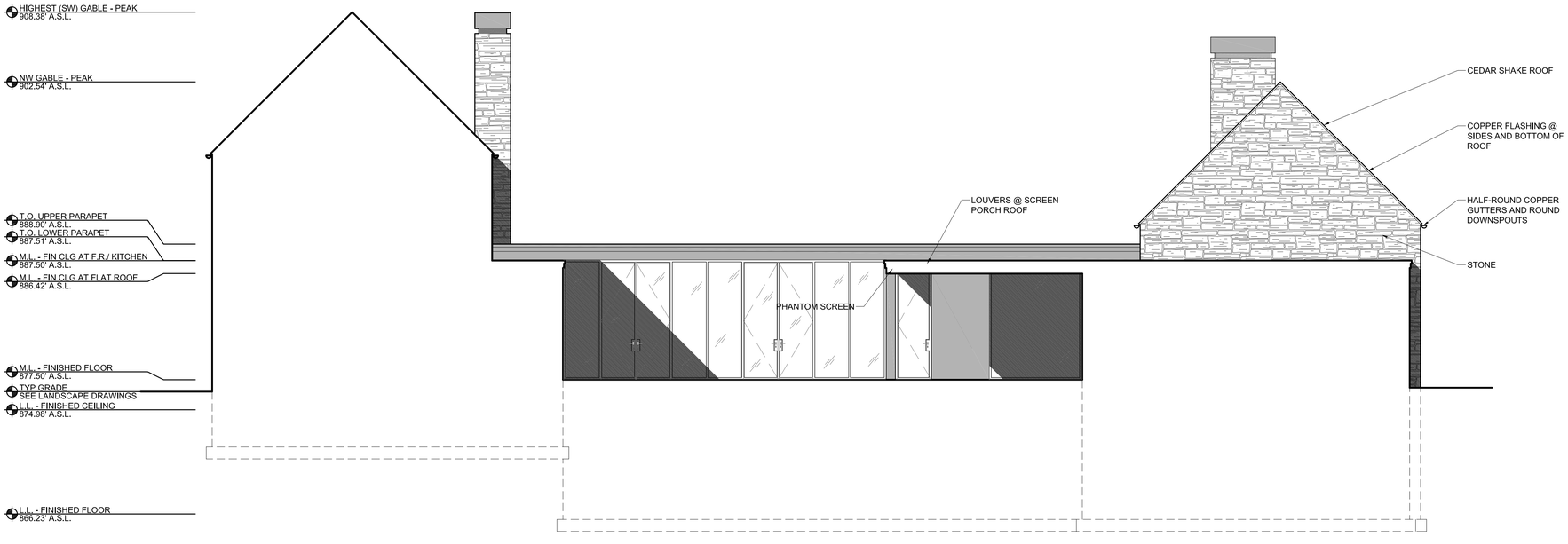
DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-201



1 SOUTH COURTYARD ELEVATION

SCALE: 3/16" = 1'-0"



2 WEST COURTYARD ELEVATION

SCALE: 3/16" = 1'-0"

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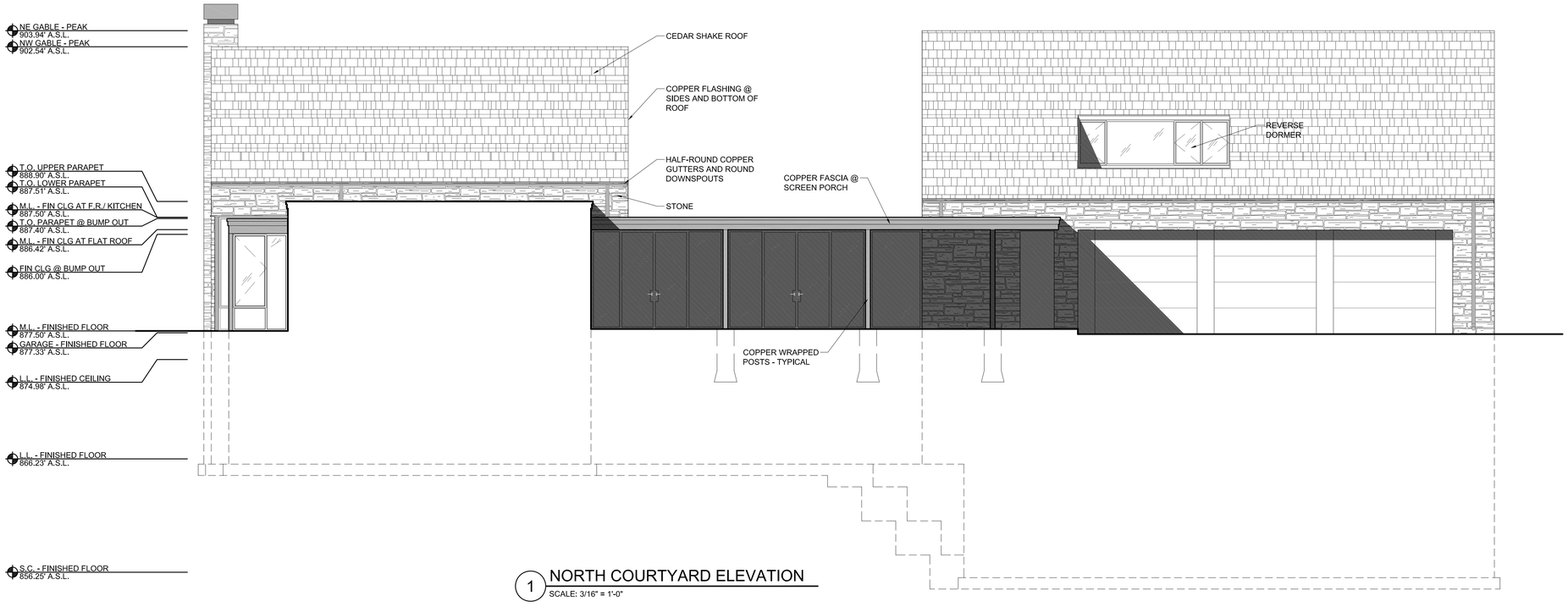
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

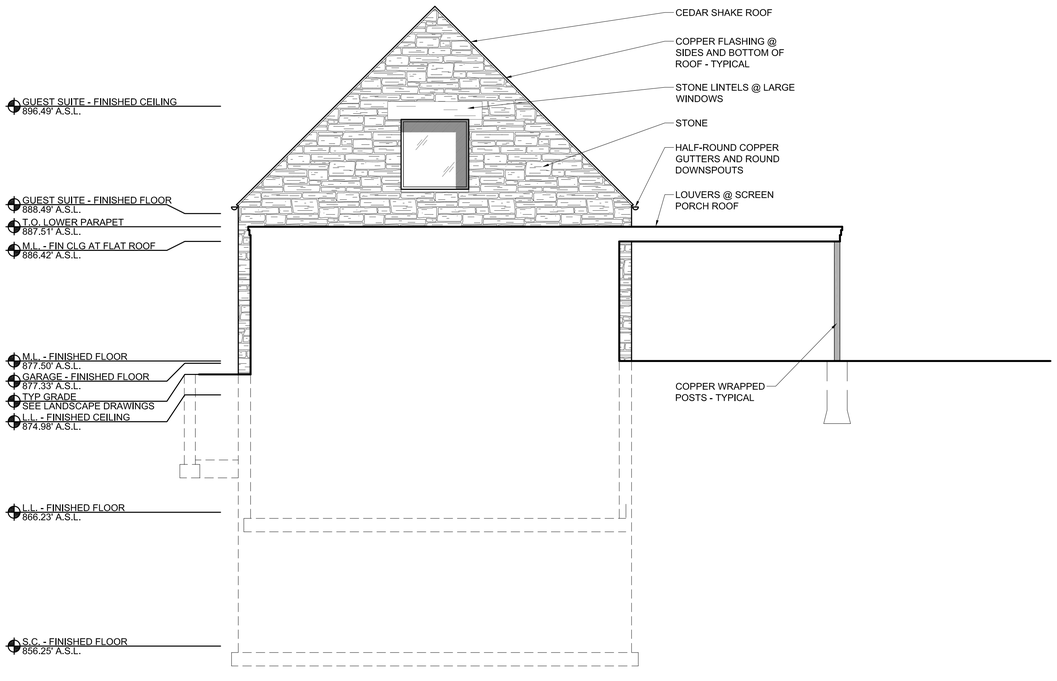
DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-202



1 NORTH COURTYARD ELEVATION

SCALE: 3/16" = 1'-0"



2 EAST COURTYARD ELEVATION

SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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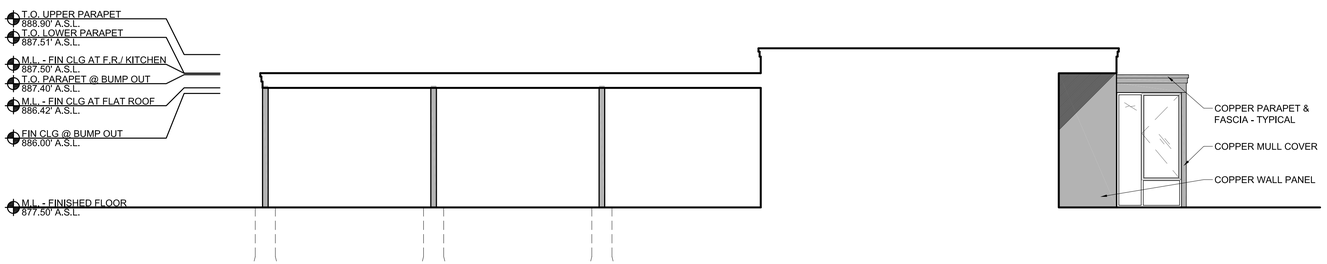
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

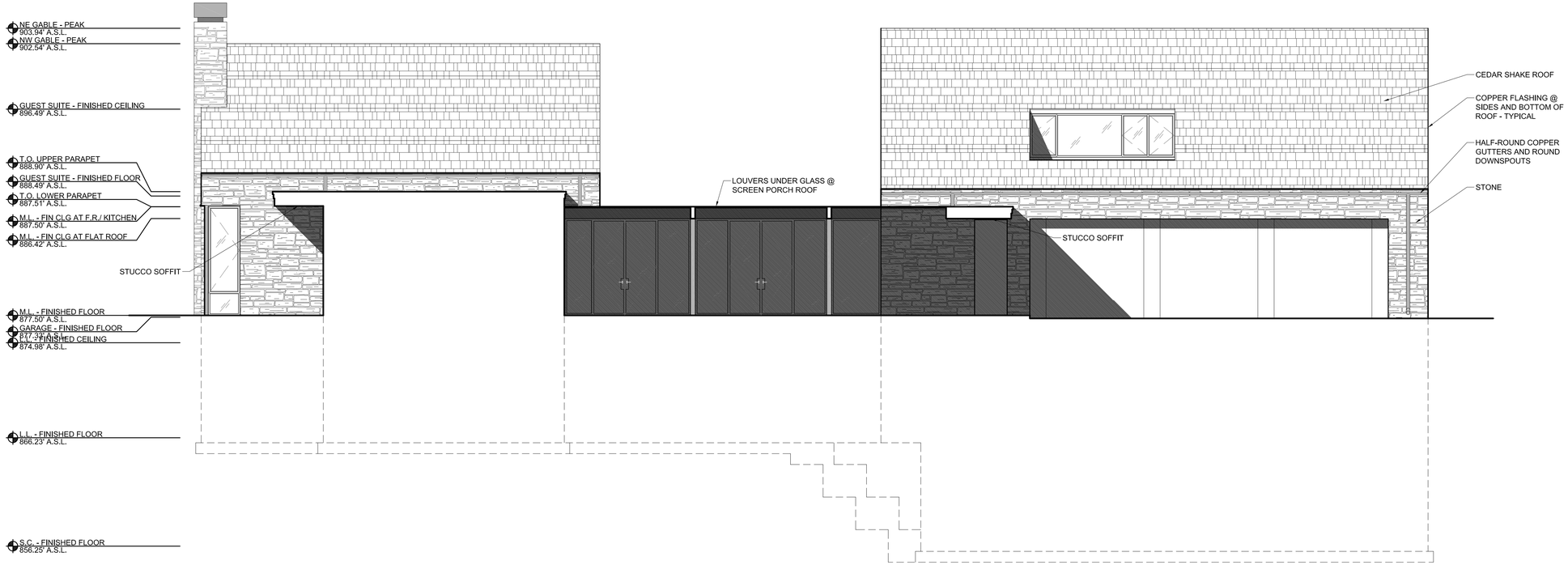
DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-203



1 SOUTH COVERED TERRACE ELEVATION

SCALE: 3/16" = 1'-0"



2 NORTH COVERED TERRACE ELEVATION

SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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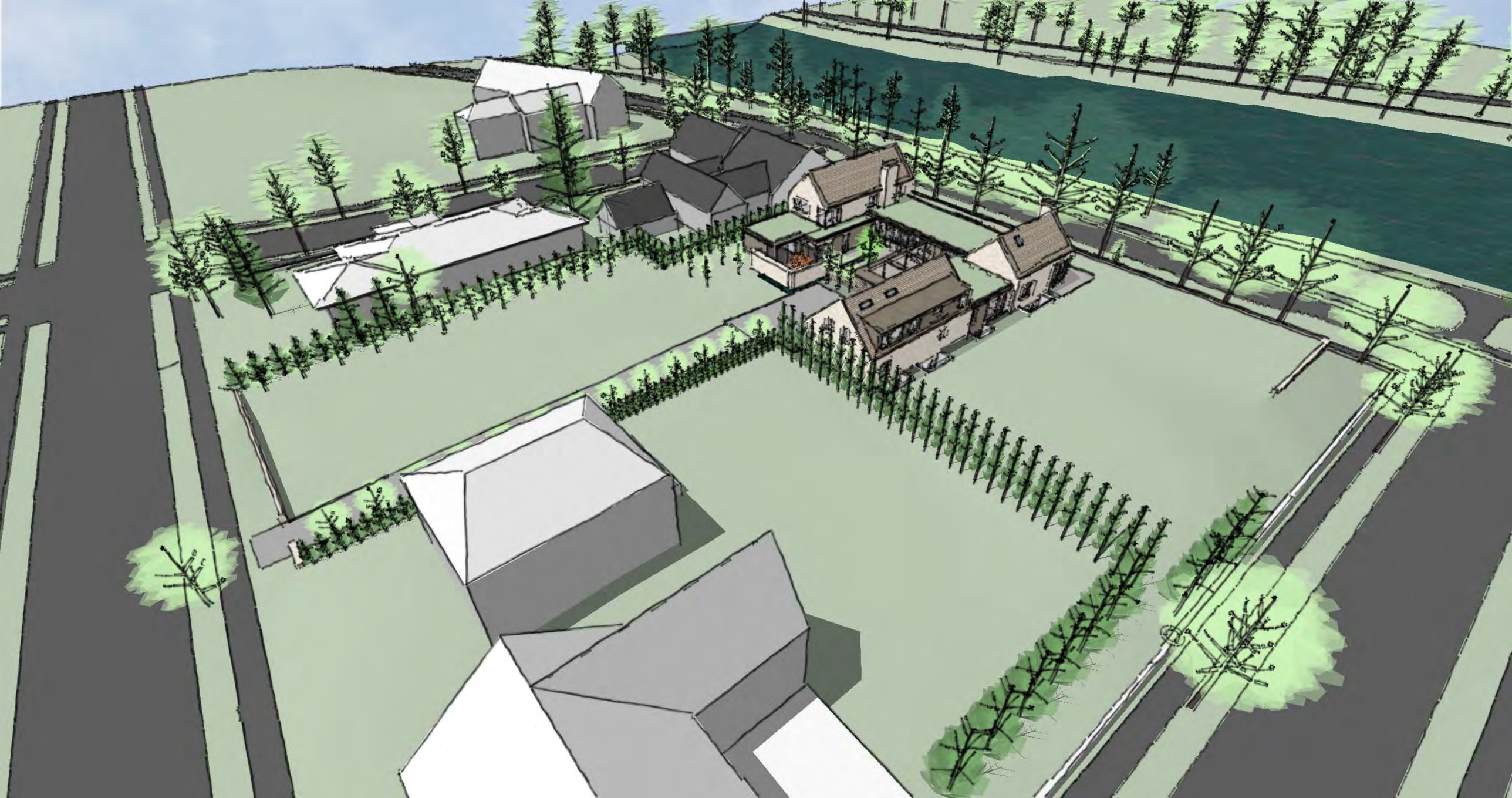
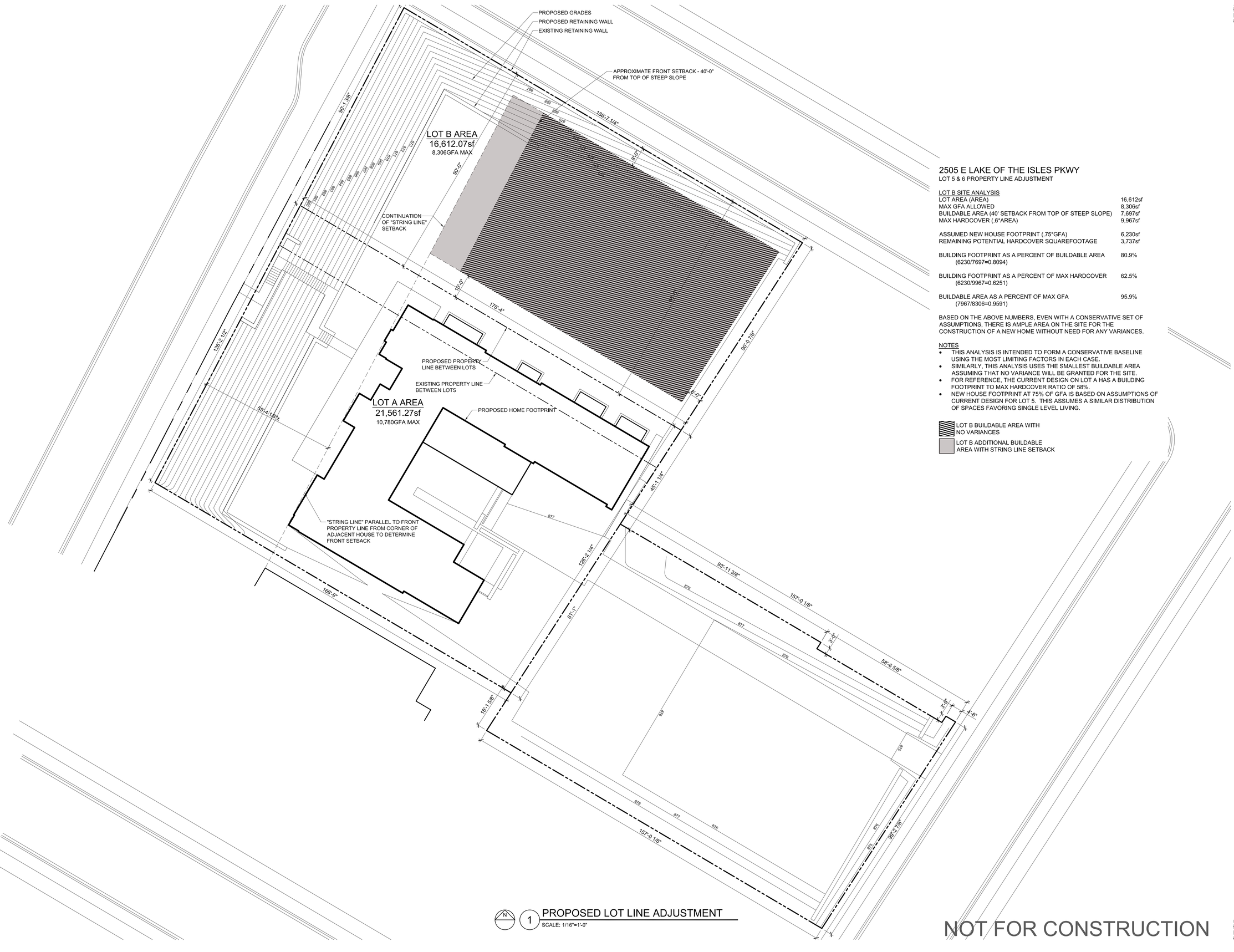
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

A-204





1 PROPOSED LOT LINE ADJUSTMENT
SCALE: 1/16"=1'-0"

2505 E LAKE OF THE ISLES PKWY

LOT 5 & 6 PROPERTY LINE ADJUSTMENT

LOT B SITE ANALYSIS

LOT AREA (AREA)	16,612sf
MAX GFA ALLOWED	8,306sf
BUILDABLE AREA (40' SETBACK FROM TOP OF STEEP SLOPE)	7,697sf
MAX HARDCOVER (.6*AREA)	9,967sf
ASSUMED NEW HOUSE FOOTPRINT (.75*GFA)	6,230sf
REMAINING POTENTIAL HARDCOVER SQUAREFOOTAGE	3,737sf
BUILDING FOOTPRINT AS A PERCENT OF BUILDABLE AREA (6230/7697=0.8094)	80.9%
BUILDING FOOTPRINT AS A PERCENT OF MAX HARDCOVER (6230/9967=0.6251)	62.5%
BUILDABLE AREA AS A PERCENT OF MAX GFA (7967/8306=0.9591)	95.9%

BASED ON THE ABOVE NUMBERS, EVEN WITH A CONSERVATIVE SET OF ASSUMPTIONS, THERE IS AMPLE AREA ON THE SITE FOR THE CONSTRUCTION OF A NEW HOME WITHOUT NEED FOR ANY VARIANCES.

NOTES

- THIS ANALYSIS IS INTENDED TO FORM A CONSERVATIVE BASELINE USING THE MOST LIMITING FACTORS IN EACH CASE.
- SIMILARLY, THIS ANALYSIS USES THE SMALLEST BUILDABLE AREA ASSUMING THAT NO VARIANCE WILL BE GRANTED FOR THE SITE.
- FOR REFERENCE, THE CURRENT DESIGN ON LOT A HAS A BUILDING FOOTPRINT TO MAX HARDCOVER RATIO OF 58%.
- NEW HOUSE FOOTPRINT AT 75% OF GFA IS BASED ON ASSUMPTIONS OF CURRENT DESIGN FOR LOT 5. THIS ASSUMES A SIMILAR DISTRIBUTION OF SPACES FAVORING SINGLE LEVEL LIVING.

LOT B BUILDABLE AREA WITH NO VARIANCES

LOT B ADDITIONAL BUILDABLE AREA WITH STRING LINE SETBACK

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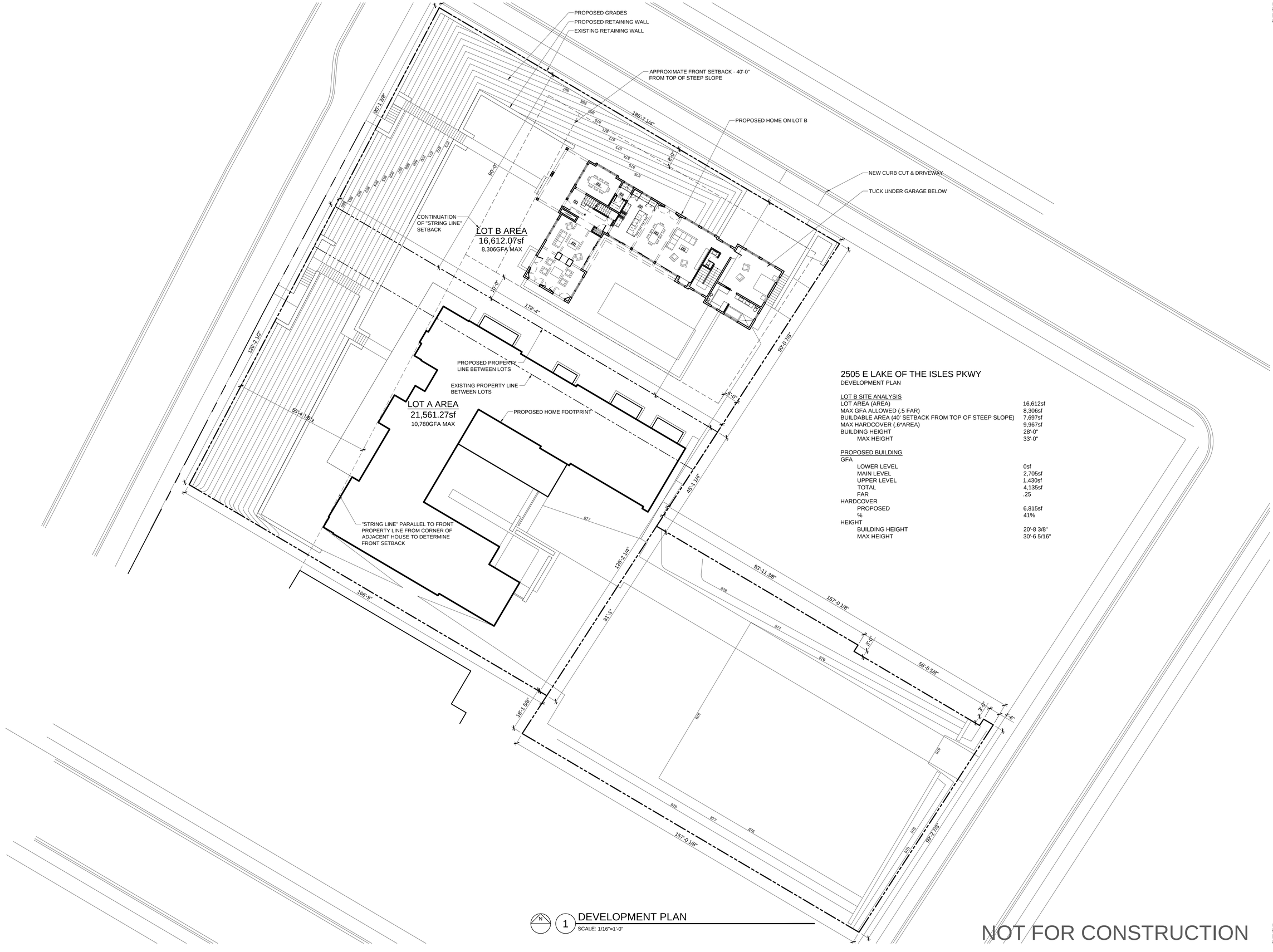
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

NOT FOR CONSTRUCTION



2505 E LAKE OF THE ISLES PKWY
DEVELOPMENT PLAN

LOT B SITE ANALYSIS	
LOT AREA (AREA)	16,612sf
MAX GFA ALLOWED (.5 FAR)	8,306sf
BUILDABLE AREA (40' SETBACK FROM TOP OF STEEP SLOPE)	7,697sf
MAX HARDCOVER (.6*AREA)	9,967sf
BUILDING HEIGHT	28'-0"
MAX HEIGHT	33'-0"
PROPOSED BUILDING	
GFA	
LOWER LEVEL	0sf
MAIN LEVEL	2,705sf
UPPER LEVEL	1,430sf
TOTAL	4,135sf
FAR	.25
HARDCOVER	
PROPOSED	6,815sf
%	41%
HEIGHT	
BUILDING HEIGHT	20'-8 3/8"
MAX HEIGHT	30'-6 5/16"

1 DEVELOPMENT PLAN
SCALE: 1/16"=1'-0"

NOT FOR CONSTRUCTION

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2505 E LAKE OF THE ISLES PKWY
2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15
VARIANCE SUBMITTAL	10.23.15

DP-100

1 SOUTH ELEVATION

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

2 NORTH (25TH ST) ELEVATION

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

NOT FOR CONSTRUCTION

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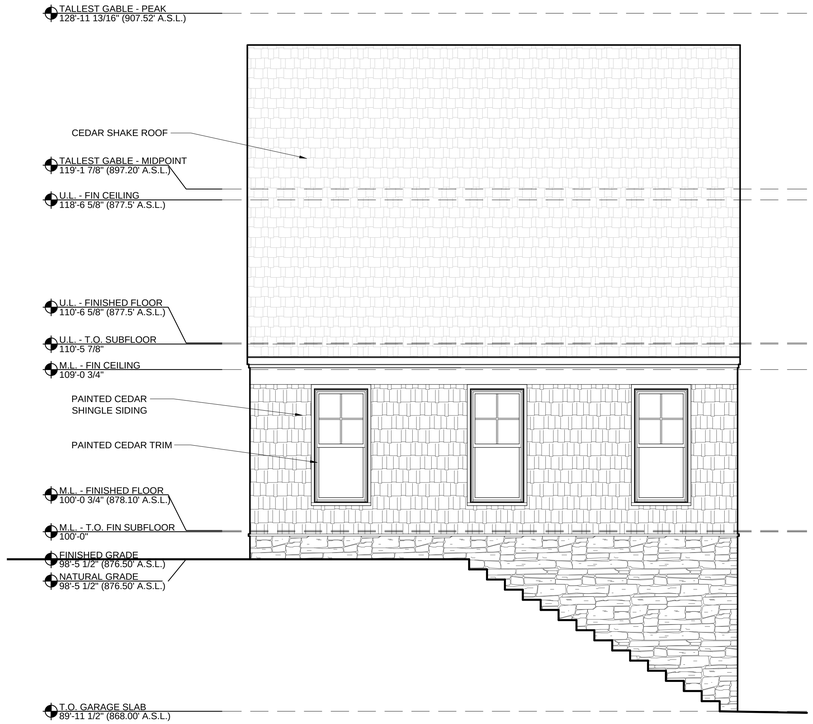
2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minnneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15
VARIANCE SUBMITTAL	10.23.15

DP-200

1 WEST (PARKWAY) ELEVATION
SCALE: 1/16"=1'-0"



2 EAST ELEVATION
SCALE: 1/4"=1'-0"

3 EAST ELEVATION
SCALE: 1/4"=1'-0"

NOT FOR CONSTRUCTION

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2505 E LAKE OF THE ISLES PKWY

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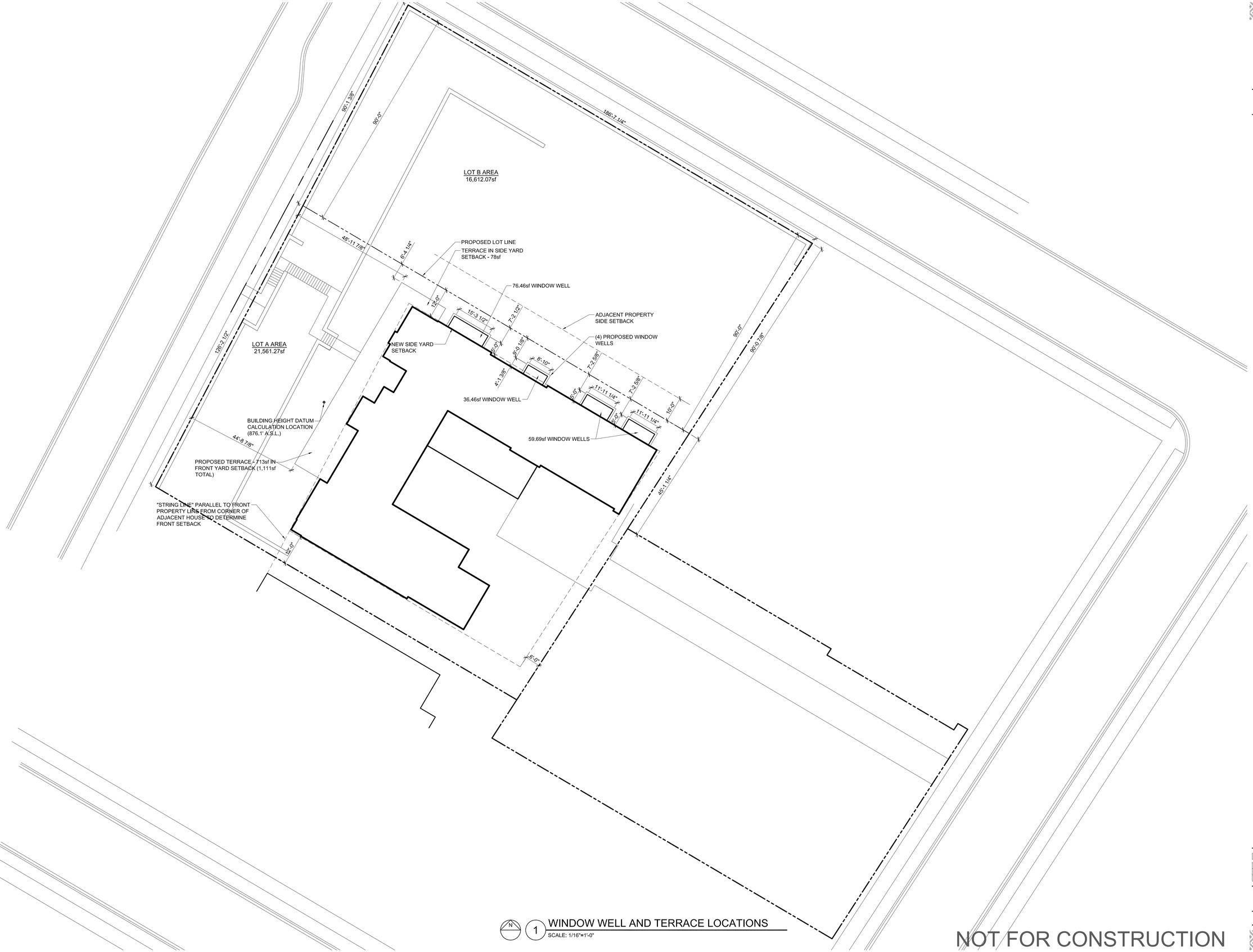
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15
VARIANCE SUBMITTAL	10.23.15

DP-201



N

1 WINDOW WELL AND TERRACE LOCATIONS

SCALE: 1/16"=1'-0"

NOT FOR CONSTRUCTION

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2505 E LAKE OF THE ISLES PKWY

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Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

V-001

SHADING KEY

HOUSE PATIO

EXISTING

PROPOSED

LAKE SIDE PATIO AND HOUSE LOCATION COMPARISON

	EXISTING	PROPOSED
TOTAL AREA OF LAKESIDE PATIOS	2,925sf	1,111sf
AREA IN PROPOSED FRONT YARD (WITHIN 55'-4 1/2" OF PROPERTY LINE)	2,065sf	712sf
SHORTEST DISTANCE BETWEEN FRONT PROPERTY LINE AND PATIO	27'-5 1/2"	44'-8 7/8"
SHORTEST DISTANCE BETWEEN FRONT PROPERTY LINE AND HOUSE	44'-5 5/8"	55'-6"

1 PROPOSED LOT LINE ADJUSTMENT

SCALE: 1/16"=1'-0"

NOT FOR CONSTRUCTION

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2505 E LAKE OF THE ISLES PKWY

2505 E Lake of the Isles Parkway
Minneapolis, MN 55405

DESCRIPTION	DATE
VARIANCE SUBMITTAL	10.07.15

V-002

2505 LAKE OF THE ISLES PARKWAY E.

EXISTING LEGAL DESC (BY PARCEL ID NO.)

2505 LAKE OF THE ISLES PARKWAY E. (PID #3302924400071):

Lot 5; and Northwesterly 1/2 of vacated alley lying between extensions of side lines of said Lot, Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

Lot 6; and Northwesterly 1/2 of vacated alley lying between extensions of side lines of said Lot, Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

PROPOSED LEGAL DESCRIPTIONS

PARCEL A:
Lot 5 and that part of the northwesterly 1/2 of the vacated alley lying between the extensions of side lines of said lot;

That part of Lot 6, and that part of the northwesterly 1/2 of the vacated alley lying between the extensions of side lines of said lot, which lies southwesterly of the northeasterly 90.00 feet thereof;

PARCEL B:
That part of Lot 6, and that part of the northwesterly 1/2 of the vacated alley lying between the extensions of side lines of said lot, which lies northeasterly of a line parallel with and 90.00 feet southwesterly from the northeasterly line of said Lot 6, all in Block 8, Lake of the Isles Addition to Minneapolis, Hennepin County, Minnesota.

AREAS:

EXISTING PID#3302924240071	38,173 SF = 0.88 ACRES
PROPOSED PARCEL A	21,751 SF = 0.50 ACRES
PROPOSED PARCEL B	16,422 SF = 0.38 ACRES

SURVEY NOTES:

1. FIELDWORK COMPLETED OCTOBER 17, 2014.
2. BEARINGS ARE BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM
3. THERE WERE NO EASEMENTS MEMORIALIZED ON THE CERTIFICATE OF TITLE.
4. THERE WAS NO MENTION OF JUDICIAL LANDMARKS BEING SET ON THE CERTIFICATE OF TITLE. CONSULT A TITLE COMPANY TO RESEARCH IF THE BOUNDARIES OF THE SUBJECT PROPERTY HAVE BEEN ADJUDICATED BY COURT ORDER.

BENCHMARKS

CITY OF MINNEAPOLIS GEODETIC MONUMENT #452A ON 26TH NW OF LAKE PLACE. ELEVATION =868.98 (NGVD29)

PROJECT BENCHMARKS SHOWN IN GRAPHICS

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 COMPROMISE 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 #142901370 AND 142901717. SOME MAPS WERE RECEIVED, WHILE OTHER UTILITIES DID NOT RESPOND TO THE LOCATE REQUEST. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST. AT THE TIME OF THIS SURVEY ONLY THE UNDERGROUND ELECTRIC AS SHOWN WAS FILED MARKED BY GOPHER STATE ONE. OTHER UTILITIES EXIST ON THIS THIS WERE NOT MARKED UP.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

LEGEND:

- DENOTES HENNEPIN CO. DISK FOUND
- DENOTES MONUMENT SET AND MARKED RLS 25718
- DENOTES FOUND MONUMENT AS MARKED
- WATER VALVES
- HYDRANT
- CULVERT/F.E.S.
- SANITARY MANHOLE
- CLEAN OUT
- SIGN
- UTILITY POLE
- LIGHT POLE
- HAND HOLE
- TELE/ELEC BOX
- ELECTRIC METER/GAS METER
- GAS VALVE
- ELECTRIC LINE
- TELEPHONE LINE
- WATER LINE
- STORM SEWER LINE
- SANITARY SEWER LINE
- WALL
- FENCE
- CURB
- CONCRETE
- DENOTES DECIDUOUS TREE
- DENOTES CONIFEROUS TREE
- DENOTES TREELINE
- DENOTES TREE TO BE REMOVED
- (A) DENOTES HARDCOVER KEY
- EXISTING CONTOURS

1 FOOT CONTOUR INTERVAL

CONTACT:

DAVID ERICSON
745 Spring Hill Road
Wayzata, MN 55391
CELL: 952-564-7362
EMAIL: dave.ericson@mercedcapital.com

COUNTY/CITY:

HENNEPIN COUNTY

CITY OF MINNEAPOLIS

REVISIONS:

DATE	REVISION
10-21-14	INITIAL ISSUE
05-26-15	ADJACENT ROOF ELEV.
10-05-15	PROP. LOT SPLIT
10-07-15	REV. SPLIT

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: 10-21-14

PROJECT LOCATION:

2505
LAKE OF THE ISLES PKWY E.
PID#3302924240071

Suite #1
6750 Stillwater Blvd. N.
Stillwater, MN 55082
Phone 651.275.8969
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dan@cssurvey.net

CORNERSTONE
LAND SURVEYING, INC.

FILE NAME SURVPK02
PROJECT NO. PK14002

LOT LINE ADJUSTMENT
SURVEY

LAKE OF THE ISLES RESIDENCE

EROSION CONTROL AND STORMWATER MANAGEMENT PLANS

EROSION CONTROL NOTES

1. INSTALL PERIMETER EROSION CONTROL AT THE LOCATIONS SHOWN ON THE PLANS PRIOR TO BEGINNING CONSTRUCTION. (HAY BALES ARE NOT AN ACCEPTABLE PERIMETER CONTROL)
2. 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. USE A GEOTEXTILE FABRIC BENEATH THE AGGREGATE IN ORDER TO PREVENT MIGRATION OF SOIL INTO THE ROCK FROM BELOW.
3. 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. SWEEPING MAY BE ORDERED BY 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.
4. INSTALL INLET PROTECTION AT ALL PUBLIC AND PRIVATE CATCH BASIN INLETS, WHICH RECEIVE RUNOFF FROM THE DISTURBED AREAS. CATCH BASIN INSERTS ARE REQUIRED IN UNDISTURBED AREAS THAT RECEIVE RUNOFF FROM DISTURBED AREAS. NOTE: HAY BALES OR FILTER FABRIC WRAPPING THE GRATES ARE NOT EFFECTIVE OR AN ACCEPTABLE FORM OF INLET PROTECTION.
5. LOCATE SOIL OR DIRT STOCKPILES NO LESS THAN 25 FEET FROM ANY PUBLIC OR PRIVATE ROADWAY OR DRAINAGE CHANNEL. IF REMAINING FOR MORE THAN SEVEN DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS. CONTROL EROSION FROM ALL STOCKPILES BY PLACING SILT BARRIERS AROUND THE PILES. 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.
6. 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.
7. TEMPORARILY OR PERMANENTLY STABILIZE ALL CONSTRUCTION AREAS WHICH HAVE BEEN FINISH GRADED, AND ALL AREAS IN WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY AGAINST EROSION DUE TO RAIN, WIND AND RUNNING WATER WITHIN 7 DAYS. USE SEEDING AND MULCHING, EROSION CONTROL MATTING, AND/OR SODDING AND STAKING IN GREEN SPACE AREAS. APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED IS RECOMMENDED FOR MINIMIZING EROSION POTENTIAL.
8. REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, NON-BIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AFTER THE SITE HAS UNDERGONE FINAL STABILIZATION AND PERMANENT VEGETATION HAS BEEN ESTABLISHED, MINIMUM VEGETATION ESTABLISHMENT IS 70% COVER, MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES UNTIL 70% ESTABLISHED COVER IS ACHIEVED.
9. READY MIXED CONCRETE AND CONCRETE BATCH PLANTS PROHIBITED WITHIN THE PUBLIC RIGHT-OF-WAY. UNDER NO CIRCUMSTANCES MAY WASHOUT WATER DRAIN ONTO THE PUBLIC RIGHT-OF-WAY OR INTO THE STORM SEWER. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DESIGNATED CONCRETE WASHOUT AREA THAT COMPLIES WITH MPCA REQUIREMENT.
10. 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.
11. EROSION CONTROL SHALL BE PLACED ALONG THE PERIMETER OF THE SITE EXCAVATION. EROSION CONTROL SHALL BE PLACED SO IT DOES NOT DISTURB THE EXISTING PAVEMENT OR DRIVE LANES THAT ARE TO REMAIN. MANY METHODS OF EROSION CONTROL WILL WORK AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE MEASURE MOST APPROPRIATE TO THE SITE CONDITIONS AND THAT WHICH MEETS THE CITY OF MINNEAPOLIS AND MPCA STANDARDS. GRAPHICALLY SHOWN ON THE PLANS FOR CLARITY BUT SHALL BE PLACED IN THE MOST APPROPRIATE LOCATIONS NOT TO DAMAGE EXISTING PAVEMENT AND/OR CURBS TO REMAIN. DAMAGED PAVEMENT AND/OR CURBS SHALL BE PAID FOR SOLELY BY THE CONTRACTOR. SEE DETAILS AND SPECIFICATIONS.
12. CONTRACTOR TO PROVIDE TEMPORARY SEED AND MULCH ON ALL NON-PAVED AREAS WITHIN 7 DAYS AFTER ROUGH GRADING IS COMPLETED. SEED WITH ANNUAL RYE SEED AT 60 LBS PER ACRE AND WOOD MULCH FIBER AT 45 LBS PER 1,000 SF.
13. CONTRACTOR TO PREVENT DIRT AND/OR DEBRIS FROM ENTERING STORM SEWER OR BEING TRANSPORTED OFF-SITE IN AN UNCONTROLLED MANNER. CONTRACTOR TO VERIFY AT PROJECT CLOSEOUT THAT STORM SEWER SYSTEM IS CLEAR OF SEDIMENT AND/OR DEBRIS AND IS FULLY FUNCTIONAL.
14. STRAWBALES ARE NOT ALLOWED ON SITE IN ANY CAPACITY.

GENERAL NOTES

1. ALL EXISTING SURVEY INFORMATION AND PROPOSED GRADING AND LANDSCAPING INFORMATION TAKEN FROM DRAWINGS BY TRAVIS VAN LIERE STUDIO, LLC DATED OCTOBER 1, 2015.
2. A GEOTECHNICAL EXPLORATION AND ENGINEERING REVIEW HAS NOT BEEN COMPLETED FOR THIS SITE. SOILS INFORMATION HAS BEEN ASSUMED USING NCRS SOIL MAPS. THE STORMWATER MANAGEMENT SYSTEM DESIGN HAS ASSUMED A HYDROLOGIC SOIL GROUP 'B' BASED ON THE AVAILABLE SOILS MAPS.
3. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS OF EXISTING UTILITIES, AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
4. DRAWINGS INDICATE EROSION CONTROL AND STORMWATER MANAGEMENT DESIGN ONLY. ALL PROPOSED SITE GRADING, PAVING, AND LANDSCAPING SHOULD BE PERFORMED USING THE LATEST DRAWINGS FROM THE LANDSCAPE ARCHITECT.
5. ALL WORK TO CONFORM WITH CITY OF MINNEAPOLIS AND STATE OF MINNESOTA STANDARDS AND REGULATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS. ALL PERMITS MUST BE OBTAINED PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCING

A. OBTAIN PERMITS FOR SITE WORK FROM CITY OF MINNEAPOLIS AND ALL GOVERNING AUTHORITIES WITH JURISDICTION IN THIS CONSTRUCTION AREA.

B. INSTALL EROSION CONTROL AND TREE PROTECTION ALONG PERIMETER OF SITE. INSTALL CONSTRUCT ROCK CONSTRUCTION ENTRANCE, CONCRETE WASHOUT, AND ALL OTHER EROSION MEASURES. SEE PLANS AND SPECIFICATIONS.

C. PROCEED WITH SITE DEMOLITION, GRADING AND CONSTRUCTION.

D. MAINTAIN EROSION CONTROL BMP'S AND CONTROL RUNOFF REQUIREMENTS AS OUTLINED ON DRAWING AND SPECIFICATIONS.

E. ALL SITE WORK SHOULD BE COMPLETE PRIOR TO WORK ON THE STORMWATER SYSTEM BEING STARTED TO THE EXTENT POSSIBLE. IF CONSTRUCTION OF THIS 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 SYSTEM NEED TO BE PROTECTED FROM EROSION AND SEDIMENT. A FENCE IS REQUIRED AROUND ITS PERIMETER TO KEEP THE AREA OF INFILTRATION PROTECTED AND UNCOMPACTED.

F. NOTIFY CIVIL ENGINEER AND CITY OF MINNEAPOLIS OF WORK BEING DONE ON STORMWATER SYSTEM 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 SO 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.

G. MAINTAIN EROSION AND SEDIMENT CONTROL ON CONTRIBUTING AREAS TO AVOID SEDIMENTATION OF THE STORMWATER SYSTEM.

H. CONSTRUCT STORMWATER SYSTEM PER DRAWINGS, DETAILS AND SPECIFICATIONS.

I. COMPLETE PAVING OF DRIVEWAY AFTER STORMWATER SYSTEM IS INSTALLED AND COMPLETED. AFTER PAVEMENT IS INSTALLED, VERIFY THAT THE SYSTEM IS CLEAR AND FULLY FUNCTIONAL. EXCAVATE, DREDGE, OR CLEAN AS NEEDED SO IT IS FULLY FUNCTIONAL AT PROJECT CLOSEOUT.

J. INSTALL LANDSCAPING AND PLANTING MATERIALS PER LANDSCAPE DRAWINGS AND SPECIFICATIONS.

K. REMOVE ALL TEMPORARY EROSION CONTROL BMP'S AFTER PAVING AND STORMWATER SYSTEM IS COMPLETE AND AFTER TURF HAS BEEN ESTABLISHED.

L. CONTRACTOR SHALL TAKE PHOTOGRAPHS AND MEASUREMENTS OF THE STORMWATER SYSTEM 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.

M. A LETTER WRITTEN ON COMPANY LETTERHEAD THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN BUILT PER THE CIVIL PLANS, OR PER REDLINE FIELD DRAWINGS, SHALL BE SUBMITTED TO THE CIVIL ENGINEER AT THE CLOSEOUT OF THE PROJECT.

N. THE CONTRACTOR SHALL SUBMIT AN AS-BUILT SURVEY OF THE COMPLETED SITE PREPARED AND SIGNED BY A LICENSED SURVEYOR TO THE CIVIL ENGINEER AT THE END OF THE PROJECT. AS-BUILT SURVEY SHALL INCLUDE ENOUGH INFORMATION TO VERIFY THE CONSTRUCTED TOPOGRAPHY, UTILITY AND SITE ELEMENTS. TOPOGRAPHY OF THE RAIN GARDEN SHALL BE INCLUDED IN THE AS-BUILT SURVEY. COORDINATE WITH OWNER AND CIVIL ENGINEER FOR SCHEDULE FOR WHEN THIS SHALL BE COMPLETED.

CONTACT INFORMATION

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9298 CENTRAL AVENUE NE, SUITE 312
BLAINE, MN 55434
CONTACT: Kevin Gardner
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LANDSCAPE ARCHITECT
TRAVIS VAN LIERE STUDIO
211 1ST STREET N., SUITE 350
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CONTACT: Travis Van Liere
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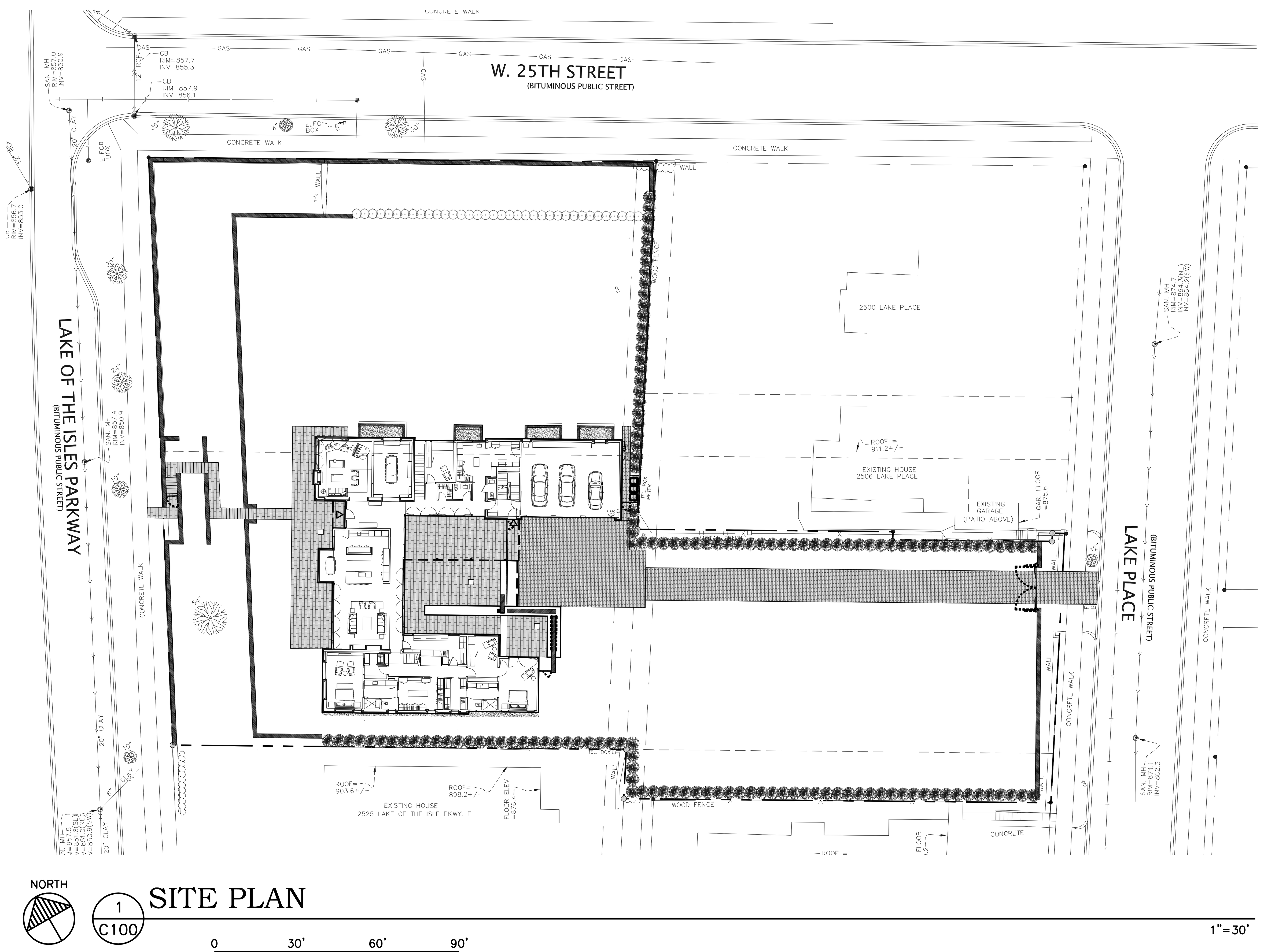


1 C100 SITE PLAN

0 30' 60' 90'

1"=30'

PIERCE PINI & ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55014
TEL 763-537-1311

LAKE OF THE ISLES RESIDENCE
2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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:

Name: Kevin Gardner

Date: 10/07/2015 Reg. No: 45815

Issued for	Date
City Review	10/07/2015
Revised Site Plan	11/03/2015

Comm. No.	15-048
Drawn	KG
Checked	RP
Date	10/07/2015

City Review

Drawing Title

COVER SHEET AND CONSTRUCTION NOTES

C100

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. THIS PERMIT IS ISSUED BY THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA).

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 DEMOLITION OF AN EXISTING HOUSE AND THE CONSTRUCTION OF A NEW HOUSE AND DRIVEWAY IN MINNEAPOLIS, MINNESOTA.

THE PROPOSED STORMWATER MANAGEMENT DESIGN WILL MEET THE REQUIREMENTS OF THE CITY OF MINNEAPOLIS LAKE AND THE MIDDLE MISSISSIPPI RIVER WATERSHED MANAGEMENT ORGANIZATION. THIS PROJECT IS NOT REQUIRED TO MEET THE MPCA PERMANENT STORMWATER MANAGEMENT REQUIREMENTS BECAUSE THE DISTURBED AREA IS LESS THAN ONE ACRE.

THE STORMWATER MANAGEMENT TREATMENT SYSTEM CONSISTS OF THE CONSTRUCTION OF A RAIN HARVESTING CISTERN ON-SITE TO ACCOMMODATE THE STORMWATER RUNOFF FOR THE PROPOSED HOUSE AND DRIVEWAY.

REGULATORY CONTEXT:

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

-THIS PROJECT DISCHARGES TO LAKE OF THE ISLES - THIS WATER BODY IS IDENTIFIED AS AN IMPAIRED WATER ON THE MPCA'S 303(D) IMPAIRED WATERS LIST FOR NUTRIENT/EUTRIPHICATION BIOLOGICAL INDICATORS AND MERCURY.

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. THE OWNER AND CONTRACTOR ARE PERMITTEE(S) AS IDENTIFIED BY THE NPDES PERMIT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP, INCLUDING THE ACTIVITIES OF ALL OF THE CONTRACTOR'S SUBCONTRACTORS.
3. 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.
4. CONTRACTOR SHALL PROVIDE PERSON(S) MEETING THE TRAINING REQUIREMENTS OF THE NPDES PERMIT TO CONDUCT INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY MPCA. CONTRACTOR SHALL PROVIDE TRAINING DOCUMENTATION FOR THESE INDIVIDUAL(S) AS REQUIRED BY THE NPDES PERMIT. THIS TRAINING DOCUMENTATION SHALL BE RECORDED IN OR WITH THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. DOCUMENTATION SHALL INCLUDE:
   - 4.1. NAMES OF THE PERSONNEL ASSOCIATED WITH THE PROJECT THAT ARE REQUIRED TO BE TRAINED PER PART III.F.1 OF THE PERMIT.
   - 4.2. DATES OF TRAINING AND NAME OF INSTRUCTOR AND ENTITY PROVIDING TRAINING.
   - 4.3. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.
5. FOLLOWING FINAL STABILIZATION AND THE TERMINATION OF COVERAGE FOR THE NPDES PERMIT, 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 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 SUBMITTING NOTICE OF TERMINATION (NOT).
9. SUBMIT NOTICE OF TERMINATION TO MPCA WITHIN 30 DAYS OF FINAL STABILIZATION.

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 REQUIRED BY THE PERMIT.

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 OR OTHERWISE IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS. THE CONTRACTOR SHALL ALSO PLACE ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY BY MPCA WITHIN 24 HOURS OF NOTICE FROM MPCA.

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 IN CONFORMANCE WITH NPDES PERMIT. CONTRACTOR'S RECORDS MUST NCLUDE:

   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 ANOTHER PERMITTEE HAS OBTAINED COVERAGE, OR THE PROJECT HAS UNDERGONE FINAL STABLIZATION AND AN NOT HAS BEEN SUBMITTED TO THE MPCA.

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 SWEPT 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.

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 THE NPDES PERMIT.

C. CONTRACTOR SHALL REMOVE ALL TEMPORARY SYNTHETIC AND STRUCTURAL BMPS.

RECORD AVAILABLITY AND RETENTION:

-THE CONTRACTOR SHALL MAKE THE SWPPP, INCLUDING ALL CERTIFICATES, REPORTS, RECORDS, OR OTHER INFORMATION OF THE PERMIT, AVAILABLE TO FEDERAL, STATE, OR LOCAL OFFICIALS WITHIN 72 HOURS UPON REQUEST FOR THE DURATION OF THE PERMIT AND FOR THREE YEARS FOLLOWING THE SUBMITTAL OF THE NOTICE OF TERMINATION.

-THE CONTRACTOR SHALL MAKE THE RESPONSIBLE PERSON, TRAINED AS REQUIRED BY THIS PERMIT, AVAILABLE ON SITE WITHIN 72 HOURS WHEN REQUESTED BY THE MPCA FOR AN ONSITE INSPECTION.

INSPECTION AND ENTRY:

-THE CONTRACTOR MUST ALLOW ACCESS AS REQUIRED BY STATE REGULATIONS FOR REPRESENTATIVES OF THE MPCA 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.

NOTICE OF TERMINATION:

-PERMITTEE MUST SUBMIT A NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS IF ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:

1. FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH PERMITTEE IS RESPONSIBLE INCLUDING THE REMOVAL OF ALL TEMPORARY MEASURES SUCH AS SILT FENCE.
2. ANOTHER OWNER HAS ASSUMED CONTROL OVER ALL PORTIONS OF THE SITE THAT HAVE NOT ACHIEVED FINAL STABILIZATION.

8. CHANGES TO SWPPP

-THE PERMITTEE 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 OR THE SWPPP IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THIS PERMIT.
4. THE MPCA DETERMINES THAT DISCHARGE MAY CAUSE OR CONTRIBUTE TO NON-ATTAINMENT OF ANY APPLICABLE WATER QUALITY STANDARDS OR THE SWPPP DOES NOT INCORPORATE THE REQUIREMENTS RELATED TO AN APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL).

9. SWPPP CERTIFICATION:

- THIS STORMWATER POLLUTION PREVENTION PLAN WAS PREPARED BY INDIVIDUAL(S) TRAINED IN ACCORDANCE WITH THE PERMIT'S 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: 2013
CERTIFICATION PROGRAM: UNIVERSITY OF MINNESOTA DESIGN OF CONSTRUCTION SWPPP
ARDEN HILLS, MN
INSTRUCTOR(S): JOHN CHAPMAN
CERTIFICATION EXPIRATION: 2016

ESTIMATED BMP QUANTITIES	
SILT FENCE	1,070 LF
ROCK CONSTRUCTION ENTRANCE	1 EACH
CONCRETE WASHOUT AREA	1 EACH
EROSION CONTROL BLANKET	960 SY
CATCH BASIN INSERT	19 EACH

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.

ACREAGE SUMMARY	
TOTAL SITE AREA	1.23 ACRES
EXISTING IMPERVIOUS AREA	0.57 ACRES
EXISTING PERVIOUS AREA	0.66 ACRES
PROPOSED IMPERVIOUS AREA	0.34 ACRES
PROPOSED PERVIOUS AREA	0.89 ACRES

CONTACT INFORMATION

ENGINEER/EROSION CONTROL DESIGNER

COMPANY: PIERCE PINI & ASSOCIATES
CONTACT: KEVIN GARDNER, PE
ADDRESS: 9298 CENTRAL AVENUE NE, SUITE 312
BLAINE, MN 55434
PHONE: 763-537-1311
EMAIL: KEVIN@PIERCEPINI.COM

CONTRACTOR/EROSION CONTROL INSTALLER

COMPANY:
CONTACT:
ADDRESS:

PHONE:

OWNER/LONG TERM MAINTENANCE

OWNER:
ADDRESS:

PHONE:
EMAIL:

NOTE: CONTRACTOR'S ONSITE REPRESENTATIVE INFORMATION SHALL BE COMPLETED ON THE PLAN SET KEPT IN THE CONSTRUCTION TRAILER. THIS INFORMATION SHALL ALSO BE PROVIDED TO THE OWNER AND CIVIL ENGINEER.

PIERCE PINI & ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55014
TEL 763-537-1311

LAKE OF THE ISLES RESIDENCE

2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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:
Name: Kevin Gardner
Date: 10/07/2015 Reg. No: 45815

Issued for	Date
City Review	10/07/2015
Revised Site Plan	11/03/2015

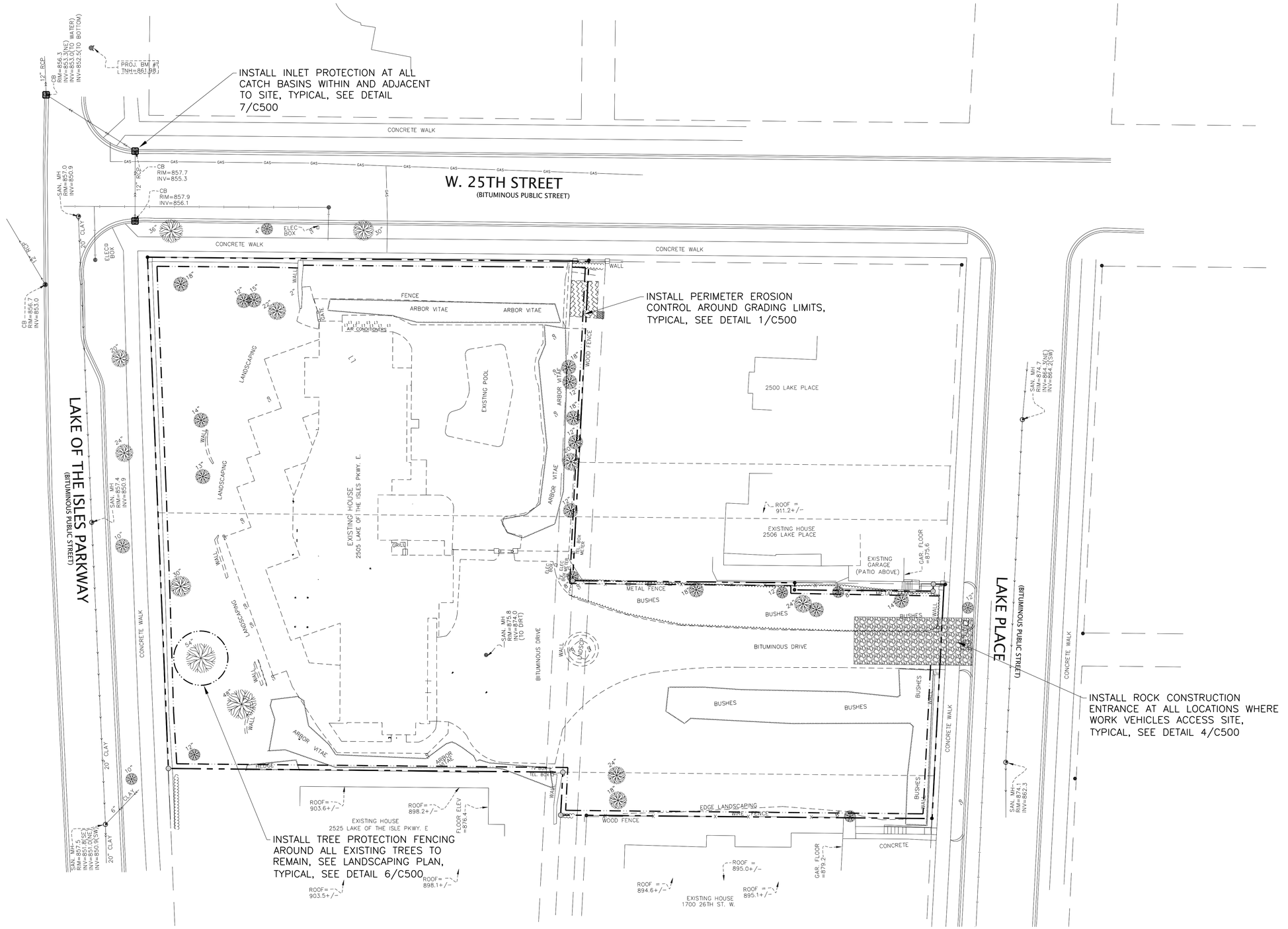
Comm. No.	15-048
Drawn	KG
Checked	RP
Date	10/07/2015

City Review

Drawing Title

STORMWATER POLLUTION PREVENTION PLAN - GENERAL INFORMATION

C200



NORTH

1 C300

STORMWATER POLLUTION PREVENTION PLAN - EXISTING CONDITIONS

0 30' 60' 90'

1"=30'

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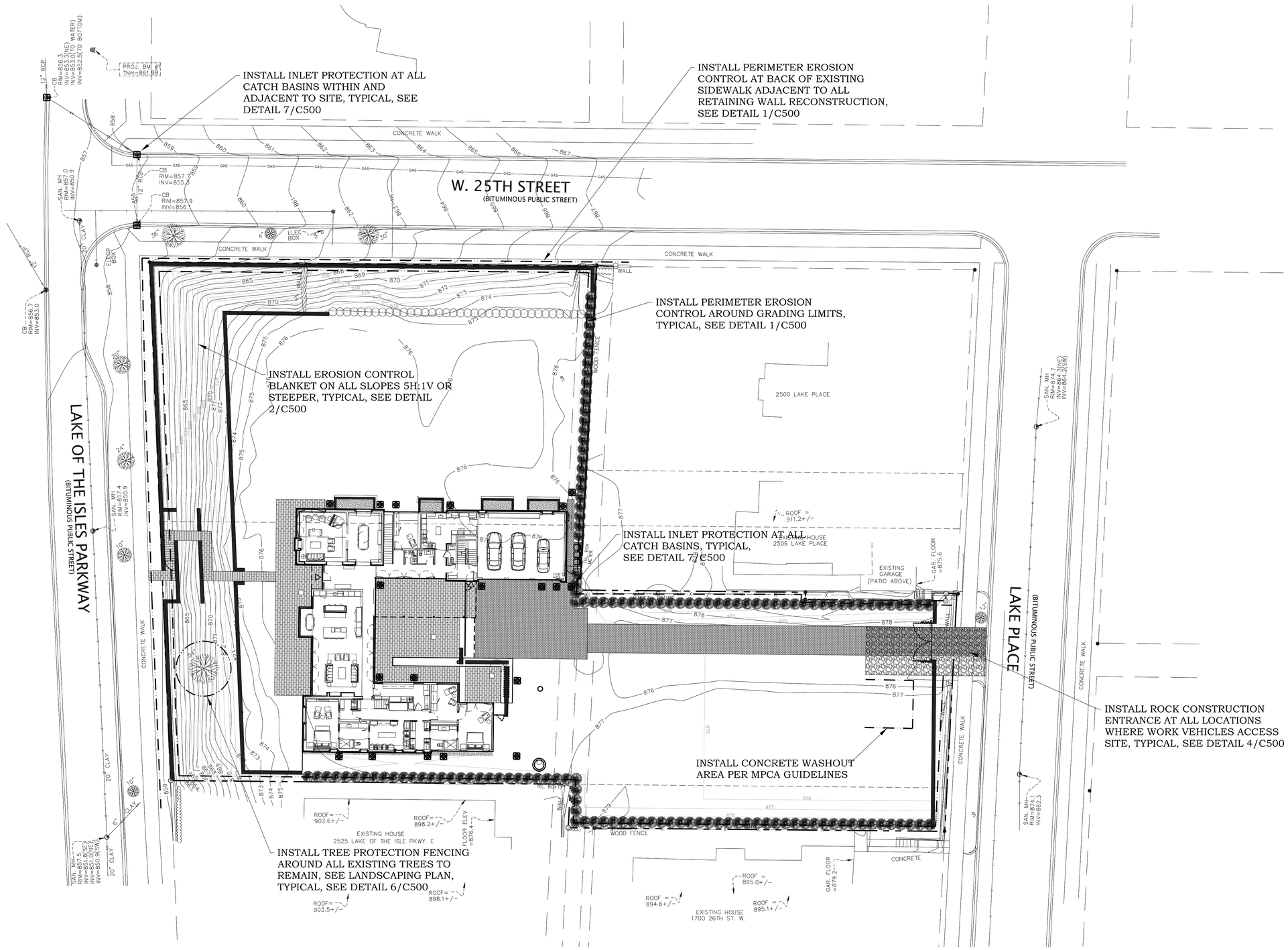
Drawing Title

STORMWATER POLLUTION PREVENTION PLAN - EXISTING CONDITIONS

C300



1 C400 STORMWATER POLLUTION PREVENTION PLAN - PROPOSED CONDITIONS

1"=30'

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Company: PIERCE PINI & ASSOCIATES

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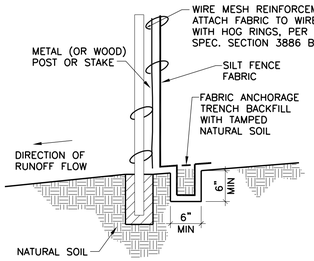
Drawing Title

STORMWATER POLLUTION PREVENTION PLAN - PROPOSED CONDITIONS

C400



NOTE: SILT FENCE SHALL FOLLOW MNDOT SPEC. SECTION 3886.

FIGURE 1 TYPICAL INSTALLATION FOR SILT FENCE

DESIGN RECOMMENDATIONS

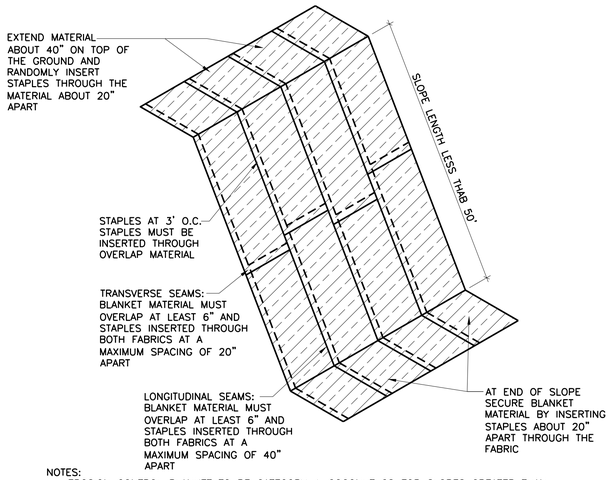
1. SILT FENCES SHOULD BE INSTALLED ON THE CONTOUR (AS OPPOSED TO UP AND DOWN A HILL) AND CONSTRUCTED SO THAT FLOW CANNOT BYPASS THE ENDS.
2. ENSURE THAT THE DRAINAGE AREA IS NO GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
3. MAKE THE FENCE STABLE FOR THE 10-YEAR PEAK STORM RUNOFF.
4. WHERE ALL RUNOFF IS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

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 C500 HEAVY DUTY SILT FENCE

NO SCALE

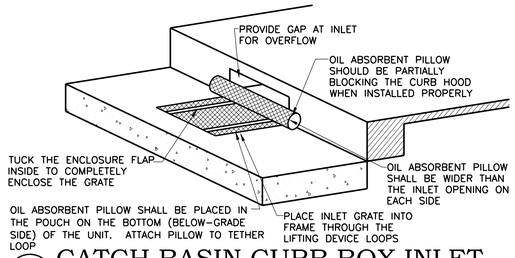


NOTES:
1. EROSION CONTROL BLANKET TO BE CATEGORY 4-COCONUT 2S FOR SLOPES GREATER THAN 5:1 AND SIDES AND BOTTOM OF ALL DRAINAGE SWALES AND PONDING AREAS AND CATEGORY 2-STRAW 2S FOR ALL SLOPES LESS THAN 5:1 PER MNDOT SPEC. SECTION 3885.
2. INSTALL PER MNDOT SPEC. SECTION 2575

2 C500 EROSION CONTROL BLANKET

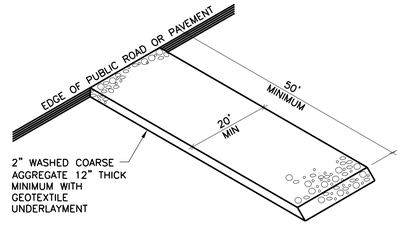
NO SCALE

1. OIL ABSORBENT PILLOW SHALL BE REMOVED AND REPLACED WHEN NEAR SATURATION.
2. PROVIDE BEAVER DAM AS MANUFACTURED BY DANDY PRODUCTS, INC.
3. AN EQUIVALENT CURB INLET EROSION CONTROL METHOD OR PRODUCT MAY BE USED WITH APPROVAL FROM ENGINEER.



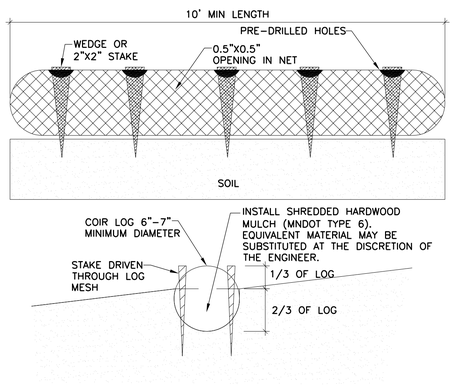
3 C500 CATCH BASIN CURB BOX INLET

NO SCALE



4 C500 GRAVEL CONSTRUCTION ENTRANCE

NO SCALE



5 C500 COIR LOG

NO SCALE

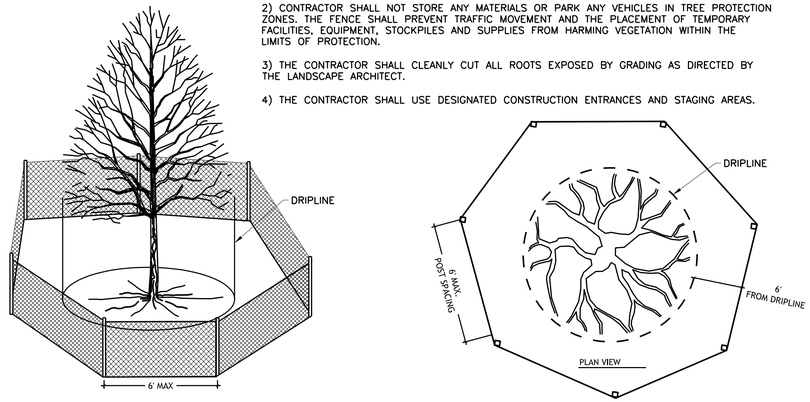
NOTES:

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.

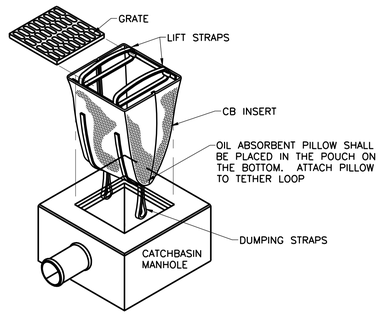
3) THE CONTRACTOR SHALL CLEANLY CUT ALL ROOTS EXPOSED BY GRADING AS DIRECTED BY THE LANDSCAPE ARCHITECT.

4) THE CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES AND STAGING AREAS.



6 C500 TREE PROTECTION FENCING

NO SCALE



1. OIL ABSORBENT PILLOW SHALL BE REMOVED AND REPLACED WHEN NEAR SATURATION.
2. USE DANDY® BAG II AS MANUFACTURED BY DANDY® PRODUCTS, INC.
3. AN EQUIVALENT CATCHBASIN EROSION CONTROL INSERT METHOD OR PRODUCT MAY BE USED WITH PRIOR APPROVAL FROM ENGINEER.

7 C500 CATCH BASIN INSERT

NO SCALE

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2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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:

Name: Kevin Gardner

Date: 10/07/2015 Reg. No: 45815

Issued for	Date
City Review	10/07/2015
Revised Site Plan	11/03/2015

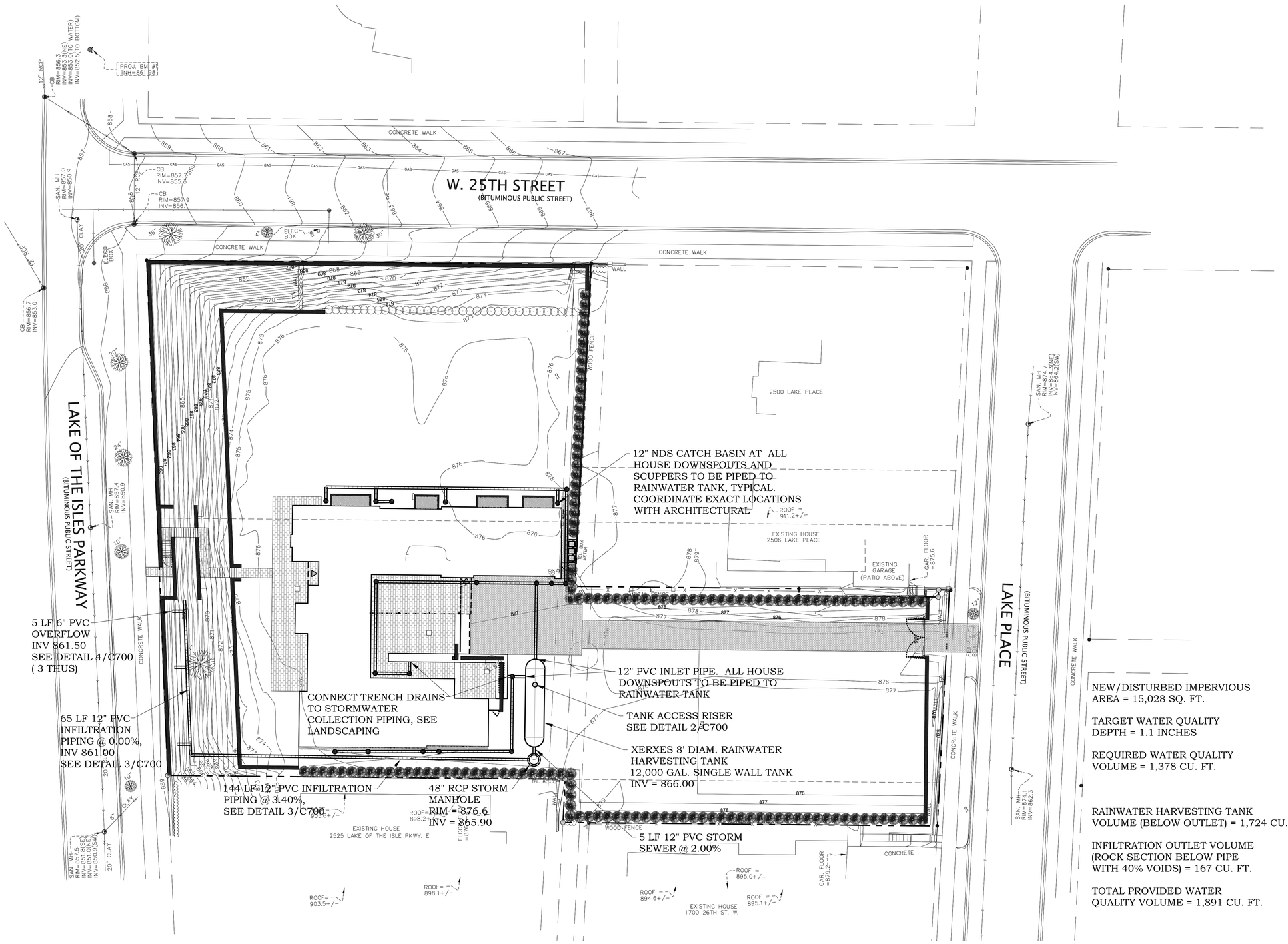
Comm. No.	15-048
Drawn	KG
Checked	RP
Date	10/07/2015

City Review

Drawing Title

STORMWATER POLLUTION PREVENTION PLAN - DETAILS

C500



NORTH

1 C600 STORMWATER MANAGEMENT PLAN

0 30' 60' 90'

1"=30'

PIERCE PINI & ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55014
TEL 763-537-1311

LAKE OF THE ISLES RESIDENCE

2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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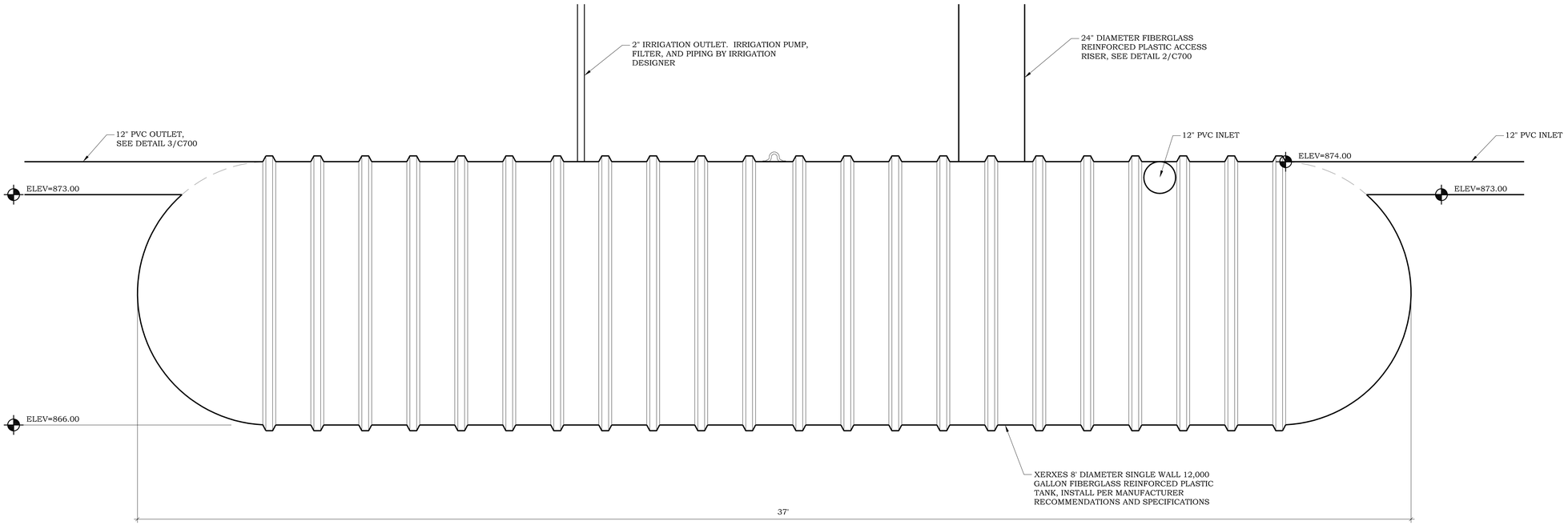
City Review

Drawing Title

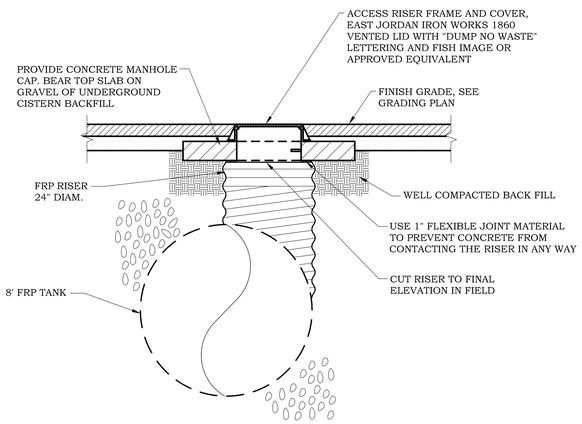
STORMWATER MANAGEMENT PLAN

C600



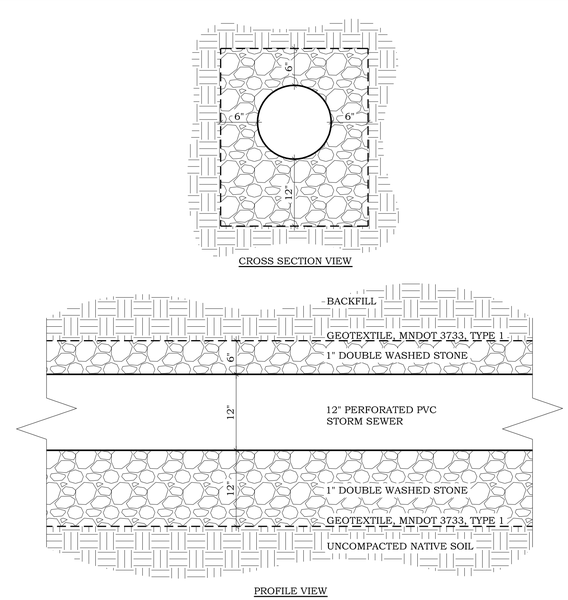
1 C700 RAINWATER HARVESTING CISTERN

NO SCALE



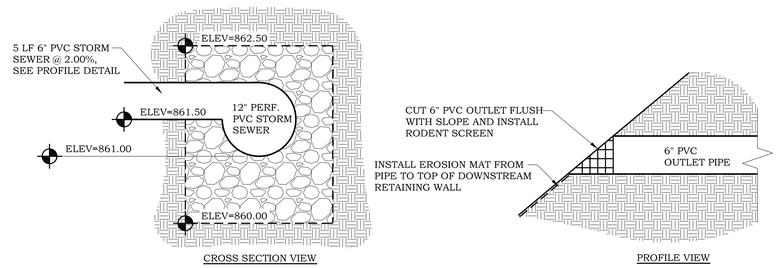
2 C700 TANK ACCESS RISER

NO SCALE



3 C700 INFILTRATION OUTLET PIPE

NO SCALE



4 C700 OUTLET WITH SCREEN

NO SCALE

PIERCE PINI & ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55014
TEL 763-537-1311

LAKE OF THE ISLES RESIDENCE

2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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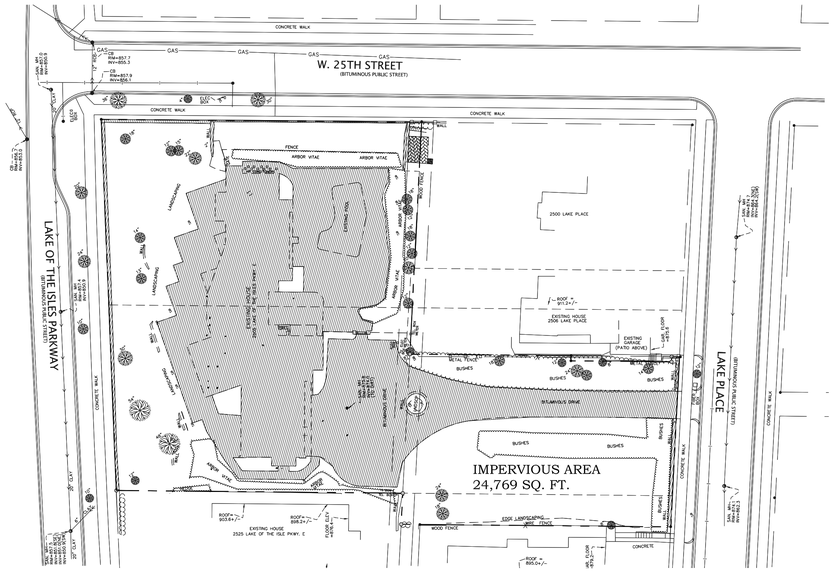
STORMWATER MANAGEMENT DETAILS

C700

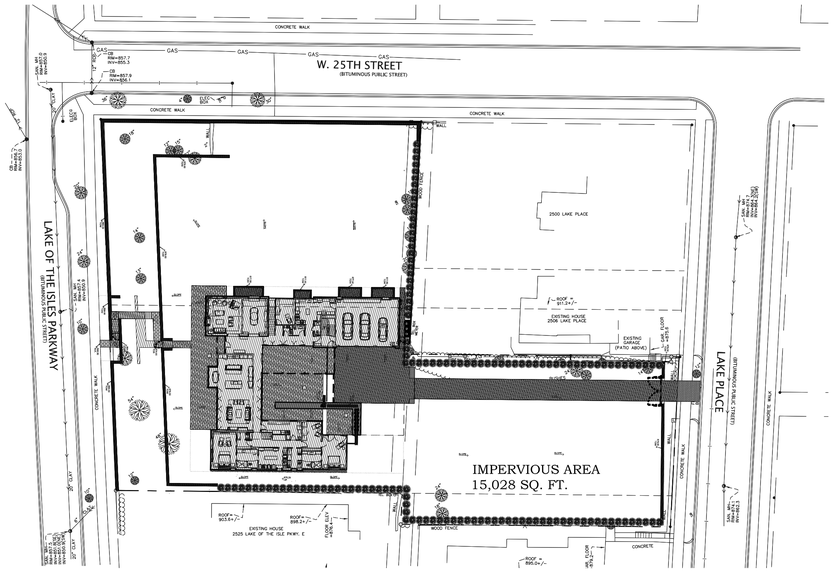


NORTH

1 C800 EXISTING CONDITIONS DRAINAGE MAP

1"=50'

0 50' 100' 150'



NORTH

2 C800 PROPOSED CONDITIONS DRAINAGE MAP

1"=50'

0 50' 100' 150'

PIERCE PINI &
ASSOCIATES, INC.
Consulting Civil Engineers

9298 CENTRAL AVENUE NE
SUITE 312
BLAINE, MN 55014
TEL 763-537-1311

LAKE OF THE ISLES RESIDENCE

2505 LAKE OF THE ISLES PARKWAY EAST
MINNEAPOLIS, MINNESOTA

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Company: PIERCE PINI & ASSOCIATES

Signed:

Name: Kevin Gardner

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City Review

Drawing Title

STORMWATER
DRAINAGE MAPS

C800

PIERCE, PINI & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS

STORMWATER CALCULATIONS

FOR

LAKE OF THE ISLES RESIDENCE

2505 LAKE OF THE ISLES PARKWAY EAST

MINNEAPOLIS, MN

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

KEVIN GARDNER	45815	10/07/2015
	LICENSE NO.	DATE

INDEX

9298 CENTRAL AVENUE NE, SUITE 312 • BLAINE, MN • 55434
PHONE: 763.537.1311 • FAX: 763.537.1354 • EMAIL: PPA@PIERCEPINI.COM

STORMWATER MANGEMENT NARRATIVE

Existing Conditions

The subject property is a 1.23 acre parcel located at 2505 Lake of the Isles Parkway East in Minneapolis. The existing property has a house, swimming pool, extensive patios and a driveway located at the high portion of the property. There is currently 24,769 square feet of impervious area on the site. The property does not have any stormwater management practices in place currently.

Proposed Conditions

The existing house, pool, patios and driveway will be removed and a new house and driveway constructed. The new construction will result in a net decrease in impervious area and will have 15,028 square feet of hardscape. The proposed project will reduce the impervious coverage from 46.2% in the existing condition to 28.0% in the proposed condition.

Better Site Design/Low Impact Development

This project will use Better Site Design (BSD)/Low Impact Development (LID) techniques during the development of the site. These techniques were used to help reduce stormwater runoff and pollutants generated by the redevelopment.

1. Shoreline Buffers: The proposed house maintains the distance between impervious surfaces and the lake as compared to the existing conditions. A grass buffer strip will be left in place to minimize pollutant runoff into Lake of the Isles.
2. Grass Filter Strips: The proposed site will utilize multiple grassed slopes to distribute stormwater. The grass lined slopes will help increase the amount of infiltration on site and will also help minimize pollutant runoff.
3. Rainwater Harvesting Cistern: A cistern will be constructed on the site. The basin will collect all roof drainage and store it on site for irrigation use. The cistern will provide water quality volume and help to reduce the runoff rate from the site.
4. Infiltration Piping: The overflow from the cistern will be directed to a perforated storm sewer pipe with rock bedding. The overflow runoff will utilize the rock voids for storage and allow infiltration for larger storm events.

Stormwater Management

The local government unit for stormwater is the City of Minneapolis. The stormwater management goals are to reduce the runoff rate from the proposed condition as compared to the existing condition. In addition, a water quality volume of 1.1 inches over the new or disturbed impervious area need to be held on site for infiltration.

Since the site is significantly reducing the impervious coverage and implementing stormwater management, the proposed runoff rate is much less than the existing condition. The following is a summary of runoff rates:

Rain Event	Existing Runoff Rate (cfs)	Proposed Runoff Rate (cfs)
2-year	2.37	0.81
10-year	4.78	2.33
100-year	10.55	8.69

The rainwater harvesting cistern has been sized to capture the 1.1-inch water quality rain event. Calculations are shown on the stormwater management plan. This volume will be held in the cistern and used for irrigation on the property. In larger storm events, the cistern will discharge via an overflow pipe at the top and drain into a large perforated pipe with rock bedding. This overflow system will infiltrate in to the underlying soils. There are a series of small 6-inch PVC pipes that daylight in to the side yard slope as an emergency overflow for a critical storm event.

Sediment and Erosion Control

Silt fence will be placed along the perimeter of the disturbed construction area prior to construction to prevent silting of the lake. A rock construction entrance will be established and site street sweeping performed throughout the construction phase. Soils stockpiles will be covered when not used for more than 48 hours or temporarily seeded to prevent windblown sediment from transporting off-site. A concrete washout area will be established per MPCA requirements. Permanent erosion control will consist of sod. Slopes and swales will be stabilized with a heavy duty erosion control mat designed for the intended area.

Examples of fescue grass ground cover:


lvd.

Minneapolis
City of Lakes

Community Planning & Economic Development
105 5th Avenue S, Suite 200
Minneapolis MN 55401

Office 612-673-2597
Fax 612-673-2728
TTY 612-673-5154

October 28, 2014

Gabriel Keller
Peterssen/Keller Architecture
1610 West Lake Street
Minneapolis, MN 55408

RE: Historic Review Letter for the property at 2505 East Lake of the Isles Parkway
PID: # 3302924240071
BZH: #28453

Mr. Keller

On October 10, 2014 you submitted an application for a historic review letter. The subject property is located at 2720 2505 East Lake of the Isles Parkway.

Section 599.460 of the City of Minneapolis Municipal Code states, "The planning director shall review all building permit applications that meet the definition for demolition for a demolition permit to determine whether the affected property is an historic resource. If the planning director determines that the property is not an historic resource, the demolition building permit shall be approved. If the planning director determines that the property is an historic resource, the building permit shall not be issued without review and approval by the commission following a public hearing as provided in section 599.170." Section 599.110 defines a historic resource as, "A property that is believed to have historical, cultural, architectural, archaeological or engineering significance and to meet at least one of the criteria for designation as a landmark or historic district as provided in this chapter."

The single family home was constructed in 1958 by D'Arcy Leck Construction for Arthur C Melamed. It was designed by architect Henry L. Newsome II. It is in a mid-century modern design and appears to retain most of its historical integrity.

The property is not currently locally or nationally designated. The property was included in the 2006 Historic Resources Inventory of Portions of Calhoun-Isles Area as a non-contributing property to the Lake of the Isles Potential Historic District. The property was determined non-contributing due to its construction outside the period of significance. The Historic Resources Inventory referenced the "Lake of the Isles Historic District" designation study work from 1984.

Henry L. Newhouse II was an architect based out of Chicago. He was the son of Chicago architect Henry Newhouse. The younger Newhouse graduated from the Massachusetts Institute of Technology. Following the completion of his studies, he joined his father's firm, Newhouse & Burnham, Inc., which he continued following the death of his father. Newhouse II died in 1964.

Several of Newhouse's Ranch and International style homes in Highland Park, Illinois are identified as locally significant to that community. Newhouse appears to have been a prolific residential architect between 1940 and 1960 in suburban Chicago. Research for this review did not reveal any additional buildings he designed in Minneapolis and provided little evidence of his work in Minnesota. While perhaps not located in Minneapolis, there appears to be better examples of his work preserved in Highland Park, IL.

The property is identified in the "AIA Guide to the Minneapolis Lakes District" by Larry Millet (2009). It is noted for its modernist style and fieldstone building material. Despite this property's identification in this publication there are appears to more representative modernist style architecture in Minneapolis.

Arthur C. Melamed was the head of Coast-to-Coast Hardware. Aside from his business accomplishments there was little evidence found to warrant consideration for designation based on his significance related to Minneapolis.

The property does not appear to meet the local designation criteria listed in section 599.210 of the Minneapolis Code of Ordinances and has been determined to not to be a historic resource.

The determinations in this letter shall be valid for one (1) year from the date of this letter.

In light of additional information CPED reserves the right to reevaluate its determination in this letter.

Sincerely,

Brian Schaffer, AICP
Principal City Planner
City of Minneapolis
Community Planning and Economic Development
Planning Division
(612) 673-2670
brian.schaffer@minneapolismn.gov

PETERSSEN/KELLER
architecture

10/7/2015

Council Member Goodman,

I am writing on behalf of our clients David Ericson and Jamie Wilson, currently of Orono, MN, who have been working with us on a new home at 2505 East Lake of the Isles Parkway (ELOTIP). We presented the previous version of this project to the EIRA Zoning Board on April 21st, 2015.

Our proposed project at 2505 ELOTIP is a new single family home (with an ADU) that is meant to be both contextual with the neighborhood and provide a modern living experience for our clients and their family. The design of the home features three stone pavilions with either cedar shake or copper roofs. These more traditional forms are reminiscent of older stone homes along the lake. These pavilions are joined by flat-roofed sections that allow sweeping vistas of the lake and the neighborhood as well as the interior courtyard formed by the house. Green roofs are being explored for the flat roof portions of the house. Run-off from on-site hardcover and terraces will likely be captured and stored in a cistern and re-used for irrigation, further protecting the lake. A planned geothermal heat pump adds another environmentally friendly feature to the home, as will a possible solar installation. The new home will be sited on the southern portion of the existing 2505 parcel, and as is currently the case, the new driveway will occupy a small portion of the lot at 2514 Lake Place.

As you may have noticed, our design has been scaled back since we met with the EIRA zoning board earlier this year. We have reduced the overall footprint and GFA of the house, while keeping the overall feel and materiality the same. The new home on Lot 5 will meet all applicable hardcover and GFA limits.

We will be seeking the following variances as part of the design. The first three variances are the same as we originally presented at the zoning committee meeting.

- Development within 40 feet of a steep slope in the Shoreland Overlay District
- Retaining wall higher than three feet (four feet is planned) in the front and corner side yards
- Patio greater than 100sf in area in the required front yard (the planned patio is farther from the street and much smaller than the existing patio; the new house will be further back than the existing and will comply with the front yard requirement)
- Patio and egress window wells larger than 16sf in the required side yard for the new house

Please note that we are not seeking a variance with respect to building height, as we are well under the 28'-0" maximum gable height and 33'-0" maximum peak height.

As part of this process, we will be requesting that the current 2505 ELOTIP property be split into two tax parcels, according to the now-existing platted lots (5 and 6), with a very modest adjustment of the existing lot line currently between such lots 5 and 6. While the owners have no plans to develop or sell lot 6, they are seeking this split in order to optimize their flexibility over the long term. The resulting corner lot will have 90'-1 3/8" of street frontage along ELOTIP – nearly an identical width to the existing lot immediately north of 25th St. and substantially similar to many other large lots around Lake of the Isles.

1610 WEST LAKE STREET MINNEAPOLIS MN 55408 / T 612.353.4920 / F 612.353.4932 / INFO@PKARCH.COM / WWW.PKARCH.COM

Feel free to contact me with any questions that you may have regarding this project. If you would like to meet in person to discuss the project in more detail, I would be more than happy to do so. We are excited to move forward with this home that we feel will be an asset to the neighborhood for generations to come.

Sincerely,

Lars Peterssen, AIA
Peterssen/Keller Architecture
2919 James Ave S
Minneapolis, MN 55408
lars@pkarch.com
621-353-4920

10/7/2015

To the Board of the East Isles Residents Association,

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Lars Peterssen, AIA
Peterssen/Keller Architecture
2919 James Ave S
Minneapolis, MN 55408
lars@pkarch.com
621-353-4920

East Isles Residents Association
2751 Hennepin Ave S #294
Minneapolis, MN 55408

November 4, 2015

Mr. Joseph Giant
Planner - City of Minneapolis
250 S 4th Street Room 300
Minneapolis, MN 55415

Dear Mr. Giant:

The East Isles Residents Association reviewed the following variance requests for the construction of a new single-family dwelling located at 2505 East Lake of the Isles Parkway at our Zoning and Land Use Committee meeting of April 21, 2015, as well as our Board of Directors meeting of May 12, 2015:

- To develop on or within 40 feet of the top of a steep slope in the Shoreland Overlay District
- To reduce the established front yard requirement in order to allow a ground-level patio larger than 100 square feet in area
- To reduce the established front yard requirement in order to allow a retaining wall that does not retain natural grade

We believe that these variance requests meet all required findings in accordance with §525.500 of the Minneapolis Code of Ordinances and recommend approval. We did not review the other three variances listed in the public hearing notice. However, it is my understanding that the applicant has made minor changes to the project so that these other variances are no longer needed.

Sincerely,

Andrew Degerstrom
President, East Isles Residents Association

From: Neal Johnson
To: Giant, Joseph R
Subject: 2505 East Lake of the Isles Parkway
Date: Friday, November 06, 2015 6:42:12 PM

Joe, we live at 1700 W 26th St adjacent to the site, we won't make the public hearing but wanted to let you know we fully support the variances the Ericson's are seeking. Thanks.

Neal R. Johnson, CFA | Managing Partner
ISLES RANCH PARTNERS
60 South 6th Street, Suite 2440 | Minneapolis, MN 55402
office: 612.404.3001 | cell: 612.860.0768 | fax: 612.404.3099
njohnson@islesranch.com | www.islesranch.com