

## Riley Purgatory Bluff Creek Watershed District Permit Application Review

**Permit No:** 2024-049

**Considered at Board of Managers Meeting:** October 14, 2024

**Received complete:** October 14, 2024

**Applicant:** RidgeCrest Eden Prairie II LLC, Trent Mayberry

**Consultant:** Kimley-Horn, Matt Lingam

**Project:** 11609 Leona Road Redevelopment– the applicant proposes to reduce the size of the existing building, develop a new one-story building, with associated parking revisions, utilities, and stormwater management facilities. The stormwater management system includes an underground treatment system, two rainwater harvest and reuse systems, two manufactured treatment devices, along with modifications to the existing onsite stormwater facility, all to provide runoff volume abstraction, water quality treatment, and rate control.

**Location:** 11609 Leona Road, Eden Prairie, Minnesota

**Reviewer:** Scott Sobiech, PE, Barr Engineering

### Proposed Board Action

Manager \_\_\_\_\_ moved and Manager \_\_\_\_\_ seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the December 11, 2024 meeting of the managers:

Resolved that the application for Permit 2024-049 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval of the permit have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2024-049 to the applicant, on behalf of RPBCWD.

Upon vote, the resolutions were adopted, \_\_\_\_\_ [VOTE TALLY].

### Applicable Rule Conformance Summary

Rule	Issue	Conforms to RBPCWD Rules?	Comments
B	Floodplain Management and Drainage Alterations	Yes	
C	Erosion Control Plan	See comment	See rule-specific permit condition C1 related to identifying erosion prevention on the erosion control plan.
J	Stormwater Management	Rate	Yes
		Volume	Yes
		Water Quality	Yes
		Low Floor Elev.	Yes

Rule	Issue	Conforms to RBPCWD Rules?	Comments
	Maintenance	See comment	See rule-specific permit condition J1 related to recordation of stormwater facilities maintenance declaration.
	Chloride Management	See comment	See stipulation #3 related to providing an executed chloride management plan prior to permit close-out.
	Wetland Protection	Yes	
<b>L</b>	<b>Permit Fee Deposit</b>	Yes	\$3,000 deposit fee received August 22, 2024. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of November 27, 2024, the amount due is \$5,842.
<b>M</b>	<b>Financial Assurance</b>	See Comment	The financial assurance is calculated at \$712,220

**Background**

The redevelopment is located on a 3.44 acre site at the southeast corner of Leona Road and Flying Cloud Drive in Eden Prairie. The proposed redevelopment of the site will include a new one-story, approximately 2,447-square foot building with a drive through, patio, and associated utility, landscape, and parking improvements. The applicant also proposes demolition of a portion of the existing retail building and develop an approximately 18,500-square foot building with associated utility, landscape, and parking improvements. The stormwater management system includes an underground treatment system, rainwater harvest and reuse systems, two manufactured treatment devices, along with modifications to the existing onsite stormwater facility, all to provide runoff volume abstraction, water quality treatment, and rate control.

While there are no on-site or adjacent Wetland Conservation Act (WCA) protected wetlands for which wetland buffers would be required, the treated runoff leaving western portion of the site is conveyed via storm sewer directly to an off-site high-value protected wetland.

The project site information is summarized in the following table.

**Project site information**

Site Information	Project Area
Total Site Area (acres)	3.5
Existing Site Impervious Area (acres)	2.55
Post Construction Site Impervious (acres)	2.49
Decrease in Site Impervious Area (acres)	0.06
Percent decrease in Impervious Surface	-1.9%
Disturbed Site Impervious Area (acres)	1.48
Percent Disturbance of Existing Impervious Surface	58%
Regulated impervious area (acres)	2.49
Total Disturbed Area (acres)	2.22

Exhibits:

1. Permit application dated June 28, 2024 (Notified applicant on July 5, 2024 and August 22, 2024 that submittal was incomplete, revised materials completing the application received October 14, 2024)
2. Stormwater Management Plan dated June 23, 2024 (revised August 20, 2024, October 14, 2024, November 4, 2024, and November 18, 2024)
3. Geotechnical Evaluation Report dated June 28, 2024
4. Project Plans (11 sheets) dated May 20, 2024 (revised August 19, 2024 (30 sheets), October 14, 2024 (36 sheets), November 4, 2024, and November 18, 2024)
5. Existing and Proposed electronic HydroCAD Model received August 20, 2024 (revised October 14, 2024)
6. Existing and Proposed MIDS Model results report received August 20, 2024 (revised October 14, 2024, November 4, 2024, and November 18, 2024)
7. P8 model received November 4, 2024 (revised November 18, 2024)
8. Review Responses dated August 19, 2024
9. Review Responses dated October 28, 2024
10. Review Responses dated November 18, 2024
11. Engineer's Estimate of Probable Construction Cost spreadsheet received October 14, 2024 (revised November 4, 2024)

**Rule Specific Permit Conditions**

**Rule B: Floodplain Management and Drainage Alterations**

Because the proposed redevelopment project involves land-disturbing activity below the 100-year flood elevation (893.44 ft) of an existing stormwater detention facility on the site to reconfigure the facility for use as part of the proposed reuse system, the project activities must conform to the RPBCWD's Floodplain Management and Drainage Alterations rule (Rule B).

Because the applicant proposes a new structure and modification to an existing structure, the project must conform with low floor elevation requirements set forth by Rule B, Subsection 3.1 which references the low floor criteria in Rule J, subsection 3.6. All new and reconstructed buildings must be constructed such that the lowest floor is at least two feet above the 100-year high-water elevation or one foot above the natural overflow of a waterbody according to Rule J, Subsection 3.6a. In addition, a stormwater-management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with this requirement according to Rule J, Subsection 3.6b. Low floor requirements were evaluated for the proposed structure, modified existing structure, and off-site structure adjacent to the stormwater facilities. As shown in the table below, the provided freeboard is greater than the minimum required, thus complying with Rule B, Subsection 3.1.

Structure	Low Floor Elevation of Building (ft)	Stormwater Facility	100-year Event Flood Elevation of Stormwater Facility (ft)	Freeboard to 100-year Event (ft)
New Structure	896.85	Modified Detention Facility	893.31	3.54
Modified Structure	897.62	Proposed Underground System	892.48	5.14
Offsite Building	897.7	Modified Detention Facility	893.31	4.39

Placement of fill below the 100-year flood elevation is prohibited unless fully compensatory flood storage is provided within the same floodplain and at or below the same elevation for fill in the floodplain of a water basin (Rule B, Subsection 3.2b). The supporting materials summarized in the following table demonstrate, and the RPBCWD Engineer concurs, that an aggregate floodplain storage in the modified detention facility is more than in the existing facility, thus providing a net increase in the floodplain storage below elevation 893.44 feet.

Stormwater Facility	100-Year Elevation (feet)	Existing Storage (CF)	Proposed Feature Providing Compensatory Storage	Proposed Storage (CF)
Existing Detention Facility	893.44	34,807	Modified Detention Basin	34,929

Because modification to the exiting stormwater detention basins could alter the timing and duration of flows leaving the site, the applicant must demonstrate that the alterations will not have an adverse offsite impact and will not adversely affect flood risk, basin or channel stability, groundwater hydrology, stream baseflow, water quality, or aquatic or riparian habitat (Rule B subsection 3.3). The RPBCWD engineer concurs with the applicant’s use of Board of Water and Soil Resources’ Recommended Wetland Management Standards: Minnesota Routine Assessment Method for Evaluating Wetland Functions, Version 3.0 to demonstrate the change in hydrology will not adversely impact the downstream wetlands. These are the same criteria listed in Table J1 of the stormwater rule for wetland protection. Because the applicant’s HydroCAD model results demonstrate, and the engineer concurs, that the proposed flow rate and volumes flowing towards the off-site wetland are less than the under existing conditions, the bounce and inundation will not increase. In addition, MIDS modeling results show the proposed stormwater management on the site provides 94% TSS and 75% TP removals, thus the engineer finds the applicant has demonstrated the project will not adversely impact the downstream wetlands.

The applicant also provided pre- and post-project water quality modeling to demonstrate no adverse impact to water quality. The modeling results show the total suspended solids and total phosphorus load leaving the site after the development will be less than the existing load leaving the site (see Water Quality section of the Rule J analysis). In addition, the applicant’s modeling indicates the peak discharge rates leaving the site are less under proposed conditions than for existing conditions. These also support the engineer’s determination that the project is not reasonably likely to adversely affect flood risk, basin or channel stability, or stream baseflow, thus meeting the requirements of Rule B, subsection 3.3.



Because no watercourses exist on the site, Rule B, Subsection 3.4 does not impose requirements on the project. See Rule C analysis of the applicant's submitted erosion control plan to demonstrate conformance with Rule B, Subsection 3.5.

The proposed project conforms to RPBCWD Rule B requirements.

### **Rule C: Erosion Prevention and Sediment Control**

Because the applicant proposes to alter of 2.22 acres of land-surface area and vegetation, the project must conform to the erosion prevention and sediment control requirements established in Rule C.

The erosion control plan prepared by Landform Professional Services includes installation of perimeter control (silt fence or sediment control logs), a stabilized rock construction entrance, inlet protection, weekly inspection, staging areas, placement of a minimum of 6 inches of topsoil (at 5% organic matter), and decompaction of areas compacted during construction. To conform to RPBCWD Rule C requirements, the following revisions are needed:

- C1. The Applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.

### **Rule J: Stormwater Management**

Because the applicant proposes to disturb 2.22 acres of land-surface area, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 will apply to the entire project site because the site activity will disturb more than 50 percent of the existing impervious surface on the parcel (Rule J, Subsection 2.3).

The applicant is proposing an underground treatment system, rainwater harvest and reuse systems, two manufactured treatment devices, along with modifications to the existing onsite stormwater facility to provide runoff volume abstraction, water quality treatment, and rate control.

#### ***Rate Control***

To meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates for existing and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below. The proposed stormwater management plan will provide rate control in compliance with the RPBCWD requirements for the 2-, 10-, and 100-year events. Thus, the proposed project meets the rate control requirements in Rule J, Subsection 3.1a.

#### **Existing and Proposed Peak Runoff Rates**

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Flying Cloud Drive – Pipe	1.9	1.6	2.1	2.1	13.8	7.6	1.3	1.0
Flying Cloud – Overland	0.2	0.2	0.3	0.3	0.7	0.7	<0.1	<0.1
Leona Road	0.4	0.4	0.7	0.7	1.3	1.3	<0.1	<0.1
Den Road – Pipe	4.2	4.0	6.5	6.2	11.5	10.4	0.4	0.4
Den Road – Overland	0.5	0.5	1.0	1.0	1.9	1.9	0.1	0.1

**Volume Abstraction**

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the impervious surface of the parcel. An abstraction volume of 9,942 cubic feet is required from the proposed 2.49 acres of regulated impervious area.

Soil borings performed by Braun Intertec show that soils in the project area are predominately clayey soils, including those under the proposed underground system. In addition, hand auger borings collected near the existing stormwater facility indicate groundwater is only 1-foot below the existing ground surface. Because the engineer concurs that the soil boring information and groundwater near the surface support that the abstraction standard in subsection 3.1b of Rule J cannot practicably be met, the site is considered restricted and stormwater runoff volume must be managed in accordance with subsection 3.3 of Rule J.

For restricted sites, subsection 3.3 of Rule J requires rate control in accordance with subsection 3.1.a and that abstraction and water quality protection be provided in accordance with the following sequence:

- (a) Abstraction of 0.55 inches of runoff from site impervious surface determined in accordance with paragraphs 2.3, 3.1 or 3.2, as applicable, and treatment of all runoff to the standard in paragraph 3.1c; or
- (b) Abstraction of runoff onsite to the maximum extent practicable and treatment of all runoff to the standard in paragraph 3.1c; or
- (c) Off-site abstraction and treatment in the watershed to the standards in paragraph 3.1b and 3.1c.

The applicant is proposing rainwater harvesting and irrigation of available green space to provide volume abstraction. The abstraction volume provided by the two proposed irrigation systems is 1,057 cubic feet, thus demonstrating the project is providing abstraction to the maximum extent practicable according to Rule J, Subsection 3.3.b. The designed abstraction performance for the project site is summarized in the table below.

**Volume Abstraction Summary**

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
0.55	4,971	0.13	1,178

Because the proposed stormwater reuse systems require consistent use at a specified rate (1.11 in/week) over the 0.68 acres of green space to meet District requirements, performance monitoring for the site will be required to ensure that the project provides the proposed volume abstraction.

**Water Quality Management**

Subsection 3.1.c of Rule J requires the Applicant to provide volume abstraction in accordance with 3.1b or least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff, and no net increase in TSS or TP loading leaving the site from existing conditions. MIDS water quality models were developed to estimate the TP and TSS loading from the subwatersheds and the removal capacity of the proposed BMPs. The results of this modeling are summarized in the following tables. The results show the proposed project will remove sufficient TSS and TP to achieve an overall pollutant reduction in accordance with the required annual removals (Rule J, Subsection 3.2c).

**Annual TSS and TP removal summary**

Downstream Resource	Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr)	Provided Load Reduction (lbs/yr)
Off-site, High Value Wetland	Total Suspended Solids (TSS)	604	543 (90%)	567 (94%)
	Total Phosphorus (TP)	3.3	1.98 (60%)	2.48 (75%)
NW Anderson Lake	Total Suspended Solids (TSS)	281	253 (90%)	255 (91%)
	Total Phosphorus (TP)	1.55	0.93 (60%)	0.94 (61%)

Summary of net change in TSS and TP leaving the site

Resource	Pollutant of Interest	Existing Site Loading (lbs/yr)	Proposed Site Load after Treatment (lbs/yr)	Change (lbs/yr)
Flying Cloud Drive	Total Suspended Solids (TSS)	239	37	-202
	Total Phosphorus (TP)	2.2	0.82	-1.38
Den Road	Total Suspended Solids (TSS)	281	26	-255
	Total Phosphorus (TP)	1.55	0.61	-0.94

**Low floor Elevation**

All new buildings must be constructed such that the lowest floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a stormwater-management facility according to Rule J, Subsection 3.6a. Stormwater management facilities must be constructed at an elevation and location that ensure no habitable structure will be brought into noncompliance with the low floor criteria according to Rule J, subsection 3.6b. Low floor requirements were evaluated for the proposed structure (QRS), modified existing structure (Retail), and off-site structure adjacent stormwater facilities. The results demonstrate the provided freeboard is greater than the minimum required, thus complying with Rule B, Subsection 3.6.

Structure	Low Floor Elevation of Building (ft)	Stormwater Facility	100-year Event Flood Elevation of Stormwater Facility (ft)	Freeboard to 100-year Event (ft)
New Structure	896.85	Modified Detention Facility	893.31	3.54
Modified Structure	897.62	Proposed Underground System	892.48	5.14
Offsite Building	897.7	Modified Detention Facility	893.31	4.39

**Maintenance**

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The following revisions are needed:

- J1. Permit applicant must submit a draft maintenance and inspection declaration to incorporate the facilities proposed under this application, including the appropriate permit number, pre-treatment facilities, reuse systems, underground stormwater management facility, manufactured treatment devices (stormfilter with Phosphosorb cartridges), and the modified existing stormwater facility. Stormwater reuse rates and protection of greenspace to be irrigated must be included. A maintenance declaration template is available on the permits page of the RPBCWD website.

(<http://www.rpbcwd.org/permits/>). A draft declaration must be provided for District review and approval prior to recording.

### ***Chloride Management***

Subsection 3.8 of Rule J requires the submission of chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan. To close out the permit and release the \$5,000 in financial assurance held for the purpose of chloride management, the permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.

### ***Wetland Protection***

Because runoff from the redeveloped site is tributary to a downstream, high-value wetland, the project must comply with RPBCWD's wetland protection criteria in Rule J, subsection 3.10. In accordance with Rule J, subsection 3.10a, the proposed land-disturbing activities will not increase the bounce in water level, duration of inundation, or change the runout elevation in the subwatershed, for the receiving wetland. Because the applicant's HydroCAD model results demonstrate, and the engineer concurs, that the proposed flow rate and volumes flowing towards the off-site wetland are less than the under existing conditions, the bounce and inundation will not increase, thus the project meets the Bounce and Inundation criterion.

Rule J, Subsection 3.10b requires that treatment of runoff to high value wetlands achieve 90 percent total suspended solids removal and 75 percent total phosphorus removal. MIDS modeling results show the proposed underground infiltration system provides 94% TSS and 75% TP removals, thus the engineer finds that the proposed project is in conformance with Rule J, Subsection 3.10b.

### **Rule L: Permit Fee**

The RPBCWD permit fee schedule adopted in February 2020 requires permit applicants to deposit \$3,000 to be held in escrow and applied to cover the \$10 permit-processing fee and reimburse RPBCWD for permit review and inspection-related costs and when a permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. A permit fee deposit of \$3,000 was received on August 22, 2024. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. Subsequently, if the costs of review, administration, inspections and closeout-related or other regulatory activities exceed the fee deposit amount, the applicant will be required to replenish the deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 30 days of receiving notice that such deposit is due. The administrator will close out the relevant application or permit and revoke prior approvals, if any, if the permit-fee deposit is not timely replenished.

- L1. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of November 27, 2024 the amount due is \$5,842.

**Rule M: Financial Assurance**

	Unit	Unit Cost	# of Units	Total
Rules C: Silt fence:	LF	\$2.50	1,504	\$3,760
Inlet protection	EA	\$100	10	\$1,000
Rock Entrance	EA	\$250	2	\$500
Restoration	Ac	\$2,500	2.22	\$5,550
Rules J: Chloride Management	LS	\$5,000	1	\$5,000
Rules J: Stormwater Management: 125% of engineer's opinion of cost (\$505,530*1.25)	EA	125% OPC	1	\$631,913
Contingency (10%)		10%		\$64,747
<b>Total Financial Assurance</b>				<b>\$712,220</b>

**Applicable General Requirements:**

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
3. The grant of the permit will not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
4. The issuance of this permit will not convey any rights to either real or personal property, or any exclusive privileges, nor will it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
5. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
6. RPBCWD's determination to approve the permit application was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
7. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

## **Findings**

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project conforms to Rule B and will conform to rules C and J if the Rule Specific Permit Conditions listed above are met.

## **Recommendation:**

Approval of the permit contingent upon:

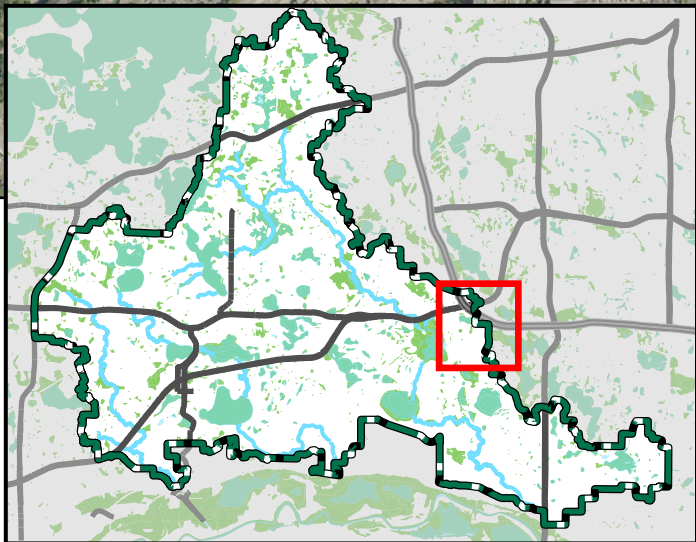
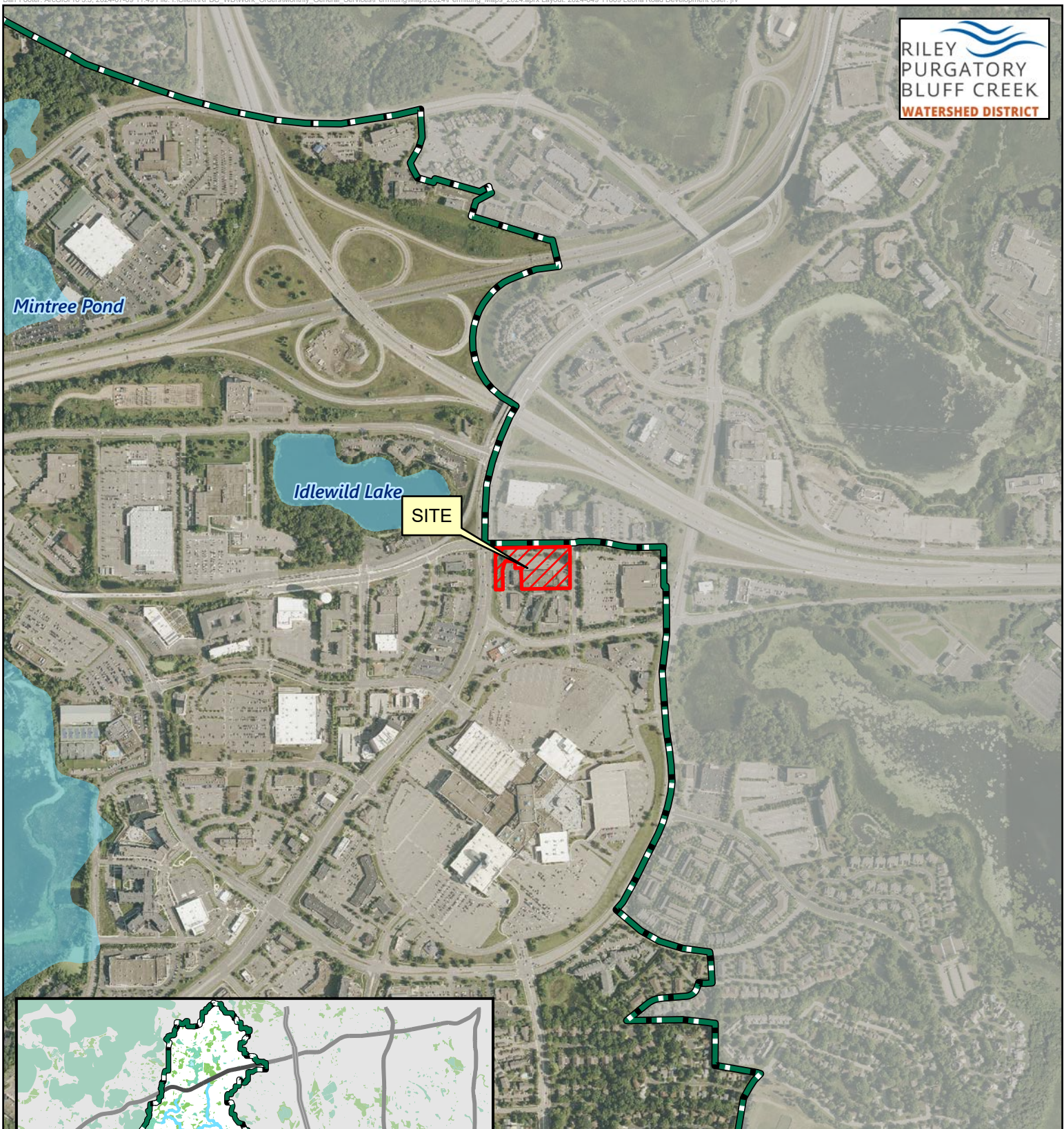
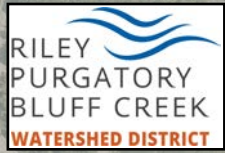
1. Financial Assurance in the amount of \$712,220.
2. Permit applicant must provide the name and contact information of the general contractor responsible for the site. RPBCWD must be notified if the responsible party changes during the permit term.
3. Permit applicant must submit a draft maintenance and inspection declaration to incorporate the facilities proposed under this application, including the appropriate permit number, pre-treatment facilities, two rainwater harvest and reuse systems, two Stormfilter manufactured treatment devices with phosphosorb cartridges, and modifying two existing stormwater facilities. The agreement must also include a stormwater reuse monitoring and reporting plan that includes protection of the greenspace to be irrigated and metering of the volume of reuse, as well as maintenance specifics provided by the manufacturer(s) or installer(s) for the proprietary system and be consistent with the MPCA's manufactured treatment device maintenance provisions in the MN Stormwater Manual. The draft agreement must be reviewed and approved by RPBCWD prior to execution as a condition of issuance of the permit.
4. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. The amount needed to replenish the permit fee deposit is \$5,842 as of November 27, 2024.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Continued compliance with General Requirements.
2. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization the stormwater management facilities conforms to design specifications and functions as intended and approved by the District. As-built/record drawings must be signed by a professional engineer licensed in Minnesota and include, but not limited to:
  - a) the surveyed bottom elevations, water levels, and general topography of all facilities;
  - b) the size, type, and surveyed invert elevations of all stormwater facility inlets and outlets;
  - c) the surveyed elevations of all emergency overflows including stormwater facility, street, and other;
  - d) other important features to show that the project was constructed as approved by the Managers and protects the public health, welfare, and safety.

3. To close out the permit and release the \$5,000 in financial assurance held for the purpose of the chloride management, the permit applicant must provide an executed chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.





Feet



Permit Location Map

11609 LEONA ROAD  
DEVELOPMENT

**Permit 2024-049**

Riley Purgatory Bluff Creek  
Watershed District



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# SITE DEVELOPMENT PLANS FOR FLYING CLOUD DR & LEONA RD

**11609 LEONA RD AND S14 T116N R22W  
EDEN PRAIRIE, HENNEPIN COUNTY, MN**

**PROJECT TEAM:**

ENGINEER & LANDSCAPE ARCHITECT  
KIMLEY-HORN AND ASSOCIATES, INC.



11995 SINGLETREE LANE, SUITE 225  
EDEN PRAIRIE, MN 55344  
TELEPHONE (651) 645-4197

ARCHITECT  
ARCHITECTURAL CONSORTIUM  
1600 W LAKE STREET, STE 127  
MINNEAPOLIS, MN 55408  
TELEPHONE: 612-314-4372  
CONTACT: CHRIS MUELLER

OWNER / DEVELOPER  
TOLD DEVELOPMENT CO.



200 SOUTHDAL CENTER  
EDINA, MN 55435  
TELEPHONE: (952) 278-0112  
CONTACT: TRENT MAYBERRY

SURVEYOR  
EVS, INC.  
10025 VALLEY VIEW ROAD, SUITE 140  
EDEN PRAIRIE, MN 55344  
TELEPHONE: 952-646-0236  
CONTACT: SCOTT ALWIN



**VICINITY  
N.T.S.**



**SITE**

**NOTES:**

1. CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A 22x34 SHEET.
3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

Sheet List Table	
Sheet Number	Sheet Title
C000	COVER SHEET
C100	GENERAL NOTES
C200	SITE DEMOLITION PLAN
C201	TREE INVENTORY & PRESERVATION PLAN
C300	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1
C301	EROSION AND SEDIMENT CONTROL PLAN - PHASE 2
C302	EROSION AND SEDIMENT CONTROL DETAILS
C303	SWPPP NOTES
C400	OVERALL SITE PLAN
C401	ENLARGED SITE PLAN
C402	ENLARGED SITE PLAN
C403	SITE DETAILS
C404	SITE DETAILS
C405	STARBUCKS DETAILS
C406	STARBUCKS DETAILS
C407	STARBUCKS DETAILS
C408	STARBUCKS DETAILS
C409	STARBUCKS DETAILS
C500	GRADING PLAN
C501	ENLARGED GRADING PLAN
C502	ENLARGED GRADING PLAN
C503	STORM SEWER PLAN
C504	GRADING AND STORM SEWER DETAILS
C505	GRADING AND STORM SEWER DETAILS
C506	GRADING AND STORM SEWER DETAILS
C507	GRADING AND STORM SEWER DETAILS
C600	UTILITY PLAN
C601	ENLARGED UTILITY PLAN
C602	ENLARGED UTILITY PLAN
C603	UTILITY DETAILS
C700	CONSTRUCTION PHASING PLAN - PHASE 1
C701	CONSTRUCTION PHASING PLAN - PHASE 2
L100	OVERALL LANDSCAPE PLAN
L101	ENLARGED LANDSCAPE PLAN
L102	ENLARGED LANDSCAPE PLAN
L103	LANDSCAPE DETAILS

**BENCHMARKS**

SITE BENCHMARKS:  
(LOCATIONS SHOWN ON SURVEY)  
  
SBM #1 MNDOT MONUMENT "2785 CW".  
ELEVATION=881.75



Know what's below.  
Call before you dig.

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR &  
LEONA RD  
PREPARED FOR  
TOLD  
DEVELOPMENT CO.  
EDEN PRAIRIE, MN

**COVER SHEET**

SHEET NUMBER  
**C000**



PROJECT NO. 24-0001  
DATE: 09/05/2024  
SCALE: AS SHOWN  
DESIGNED BY: BSK  
DRAWN BY: BSK  
CHECKED BY: MTI

No.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK

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GENERAL CONSTRUCTION NOTES

- 1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE LOCAL JURISDICTION AND STATE DEPARTMENT OF TRANSPORTATION AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK...
2. PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE CITY REGULATIONS, STATE CODES, AND O.S.H.A. STANDARDS...
3. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS...
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION...
5. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMPs AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE...
6. BMPs SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN AND IN THE STORM WATER POLLUTION PREVENTION PLAN...
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION...
8. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS...
9. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK...
10. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY...
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION...
12. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR...
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS...
14. THE CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES...
15. SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS...
16. CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES...
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION...

THIRD PARTY SUPPLEMENTAL INFORMATION

- 1. BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY E.V.S. INC. ADDRESS: 1031 HANSHIRE AVENUE S EDEN PRAIRIE, MN 55344 PHONE: 952-946-2236
2. GEOTECHNICAL EVALUATION REPORT PERFORMED BY BRAUN INTEREC ADDRESS: 1101 HANSHIRE AVENUE S EDEN PRAIRIE, MN 55344 PHONE: 952-946-2236
3. CONSTRUCTION TESTING TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

EROSION CONTROL NOTES

- 1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE AS APPLICABLE...
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION...
5. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMPs AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE...
6. BMPs SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN AND IN THE STORM WATER POLLUTION PREVENTION PLAN...
7. EROSION & SEDIMENT CONTROL BMPs SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING:
- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF WEARING OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO VERIFY THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED...
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED...
- THE ROCK STRUCTURE (FLOW MUDS) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR ENTRANCE OF FLOOD ONTO PUBLIC RIGHTS-OF-WAY...
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION...
- FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO STATE DOT STANDARDS...
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS...
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION...
- SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING...
- THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS...
- PAVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATION OF THE SITE SPECIFIC GEOTECHNICAL EVALUATION REPORT AND CITY & STATE DOT SPECIFICATIONS.
- SPOT ELEVATIONS REPRESENT THE FINISHED SURFACE GRADE OR FLOWLINE OF CURB UNLESS OTHERWISE NOTED.
- LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
- IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES...
- BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- ALL PROPOSED GRADES ON SITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS...
- ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.

PAVING AND STRIPING NOTES

- 1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKSMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCAL CITY OR COUNTY SPECIFICATIONS AND STANDARDS...
2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY STANDARDS.
3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LINES, ROADWAY LINES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
4. ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.
6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
7. THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. AMERICAN CONCRETE INSTITUTE MANUAL OF CONCRETE PRACTICE.
8. CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE BY OWNER...
9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE...
10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER ADA) GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS...
11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

GRADING AND DRAINAGE NOTES

- 1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION...
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMPs AS NECESSARY...
3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS...
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES...
5. BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS...
6. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 4" OF TOPSOIL AT COMPLETION OF WORK...
7. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT...
8. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED...
9. THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES...
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS...
11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY...
12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS...
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING...
14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES...
15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS...
16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING...
17. PAVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATION OF THE SITE SPECIFIC GEOTECHNICAL EVALUATION REPORT...
18. SPOT ELEVATIONS REPRESENT THE FINISHED SURFACE GRADE OR FLOWLINE OF CURB...
19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE...
20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES...
22. BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
23. ALL PROPOSED GRADES ON SITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS...
24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.

WATER STORM SEWER & SANITARY SEWER NOTES

- 1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS...
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE...
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS...
5. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS...
6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR...
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED...
8. UNDERGROUND UTILITY LINES SHALL BE SURVEYED BY A STATE LICENSED PROFESSIONAL LAND SURVEYOR...
9. CONTRACTOR SHALL PERFORM AT THEIR OWN EXPENSE ANY AND ALL TESTS REQUIRED...
10. BETWEEN WATER AND SEWER MANHOLES AND PIPES...
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION...
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GASKETED AND/OR GROUTED...
13. UNLESS OTHERWISE STATED IN CITY AND STATE DESIGN STANDARDS...
14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS...
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES...
16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT TO INVERT...
17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES...
18. PROVIDE INSULATION OF UNDERGROUND ROOF DRAINS AND SANITARY SEWER SERVICES...
19. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES...
20. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES...
21. A MINIMUM SEPARATION OF 5-FEET IS REQUIRED BETWEEN UNDERGROUND UTILITIES...
22. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES...
23. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED...
24. REFERENCE ARCHITECTURAL PLANS (BY OTHERS) FOR EXACT BUILDING DIMENSIONS...
25. REFERENCE M.E.P. PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS...
26. CONTRACTOR SHALL REFERENCE STRUCTURAL PLANS (BY OTHERS) FOR FOOTING AND FOUNDATION...
27. CONTRACTOR SHALL REFERENCE M.E.P. PLANS (BY OTHERS) FOR ROUTING OF PROPOSED ELECTRICAL & COMMUNICATIONS SERVICES AND SITE LIGHTING LAYOUT.

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD PREPARED FOR TOLD DEVELOPMENT CO. (MN) EDEN PRAIRIE

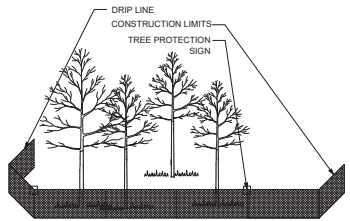
Kimley-Horn & Associates, Inc. 200 KIMBLEY HORN BLVD. SUITE 200 EDEN PRAIRIE, MN 55344 PHONE: 952-946-4419 WWW.KIMLEY-HORN.COM

Table with columns: DATE, REVISIONS, NO. COMMENTS, DATE, BY. Includes rows for WATERSHED COMMENTS dated 11/18/2024 and 10/29/2024.





KITOW\_LDEV12aribuskeden praire, mm- flying cloud dr & leona rd13 DesignCADplan1sheet1,1-TREE INVENTORY AND PRESERVATION PLAN.dwg November 18, 2024 - 9:55am  
 This document, together with the concepts and designs presented herein, is an intended offering for the specific purpose and client for which it was prepared. Release of and temporary reliance on this document without authorization and adaptation by Kimley-Horn and Associates, Inc. shall be the responsibility of the recipient and not Kimley-Horn and Associates, Inc.



FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SPECIFIED, PRIOR TO ANY CONSTRUCTION. WHEN POSSIBLE PLACE FENCE 25 FEET BEYOND THE DRIP LINE. PLACE PROTECTION SIGNS ALONG FENCE AT 20' INTERVALS.

**1 TEMPORARY TREE PROTECTION FENCE PLACEMENT**  
 SCALE: N.T.S.

**TREE MITIGATION DATA**

**SIGNIFICANT TREE REMOVAL:** 12 TREES / 159.5 CAL. IN.  
Any tree with dbh greater than 12" and 27" dbh, or smaller if 20" dbh.

**SIGNIFICANT TREE MITIGATION REQUIRED:** 15.99 CAL. IN.  
 [(159.5/795.5) X 0.5] X 159.5 = 15.99 CAL. IN.

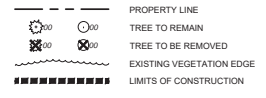
**(A/B) X C] X A = D**  
 A = TOTAL DIAMETER INCHES OF SIGNIFICANT TREES LOST  
 B = TOTAL DIAMETER INCHES OF SIGNIFICANT TREES ON SITE  
 C = TREE REPLACEMENT CONSTANT (1.5)  
 D = REPLACEMENT TREES (CAL. INCHES)

**SIGNIFICANT MITIGATION PROVIDED:** 54 CAL. IN. - SEE LANDSCAPE PLAN

**TREE PROTECTION NOTES**

- PRUNING WILL BE DONE BY PROFESSIONALS DURING APPROPRIATE PRUNING SEASON.
- NO STORAGE OF MATERIALS, OPERATION OF MACHINERY, OR DEVELOPMENT OF ANY SORT WILL OCCUR WITHIN THE FENCE-LINE WITHOUT APPROVAL IN WRITING FROM CITY.
- SITE GRADING TO BE DONE ONLY AFTER PROTECTIVE MEASURES HAVE BEEN TAKEN. CITY HAS APPROVED FENCING LOCATIONS, AND ALL CONTRACTORS HAVE BEEN BRIEFED ON TREE PRESERVATION TECHNIQUES.
- EXISTING TREES TO REMAIN OR REMOVED TO BE CLEARLY IDENTIFIED, WITHIN DISTURBANCE LIMITS AND 10' OUTSIDE OF THE DISTURBANCE LIMITS.
- TREE PRESERVATION TO BE APPROVED BY OWNER AND PER LOCAL GOVERNMENTAL AUTHORITY.

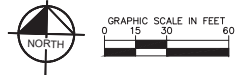
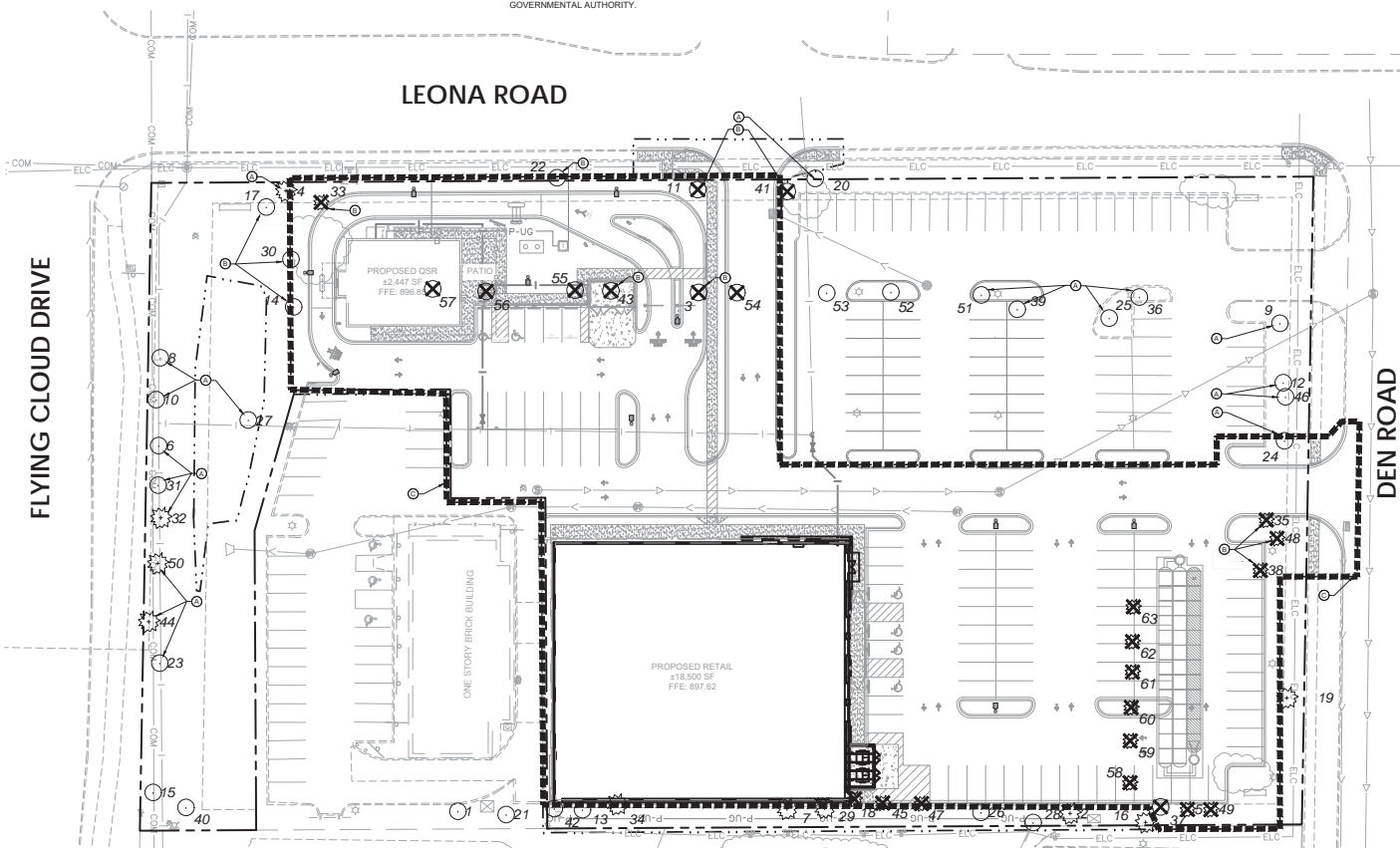
**LEGEND**



**KEYNOTE LEGEND**

- ⊙ EXISTING TREE TO BE SAVED (TYP.)
- ⊗ EXISTING TREE TO BE REMOVED (TYP.)
- ⊕ LIMITS OF CONSTRUCTION (TYP.)
- ⊖ TREE PROTECTION FENCE (SEE DETAIL) (TYP.)

TREE #	SPECIES	DBH	CONDITION	STATUS
1	FRAXINUS AMERICANA - WHITE ASH	13	DEAD	EXEMPT - OFFSITE
2	PINUS RESINOSA - RED PINE	9	POOR	SAVED
3	QUERCUS TRICANTHOS - HONEY LOCUST	13.5	FAIR	REMOVED
4	PICEA PUNGENS - BLUE SPRUCE	14	FAIR	SAVED
5	PINUS STROBUS - EASTERN WHITE PINE	11	FAIR	REMOVED
6	MALUS - CRABAPPLE	15	FAIR	SAVED
7	PICEA ABIES - NORWAY SPRUCE	9	FAIR	SAVED
8	MALUS - CRABAPPLE	15.5	FAIR	SAVED
9	QUERCUS TRICANTHOS - HONEY LOCUST	21.5	GOOD	SAVED
10	MALUS - CRABAPPLE	13, 8, 9	FAIR	SAVED
11	TILIA AMERICANA - BASSWOOD	17.5	FAIR	REMOVED
12	POPULUS DELTOIDES - EASTERN COTTONWOOD	31, 15.5	GOOD	SAVED
13	TILIA AMERICANA - BASSWOOD	18	GOOD	SAVED
14	QUERCUS TRICANTHOS - HONEY LOCUST	13.75	GOOD	SAVED
15	MALUS - CRABAPPLE	18	FAIR	SAVED
16	PICEA ABIES - NORWAY SPRUCE	8	GOOD	SAVED
17	QUERCUS TRICANTHOS - HONEY LOCUST	15	FAIR	SAVED
18	PICEA ABIES - NORWAY SPRUCE	8.5	FAIR	REMOVED
19	PINUS SYLVESTRIS - SCOTCH PINE	21.5	GOOD	SAVED
20	POPULUS DELTOIDES - EASTERN COTTONWOOD	26, 23, 18.5, 16	GOOD	SAVED
21	TILIA AMERICANA - BASSWOOD	18	GOOD	EXEMPT - OFFSITE
22	MALUS BACCATA - SIBERIAN CRABAPPLE	12.5	POOR	SAVED
23	MALUS - CRABAPPLE	13	FAIR	SAVED
24	BETULA Papyrifera - PAPER BIRCH	7.5, 7.5	FAIR	SAVED
25	QUERCUS TRICANTHOS - HONEY LOCUST	19	FAIR	SAVED
26	PICEA PUNGENS - BLUE SPRUCE	8.5	POOR	SAVED
27	SALIX - WILLOW	MULTISTEM, 11 STEMS, 4" DBH EACH	GOOD	EXEMPT
28	POPULUS DELTOIDES - EASTERN COTTONWOOD	29.5	GOOD	SAVED
29	PICEA ABIES - NORWAY SPRUCE	9.5	GOOD	SAVED
30	QUERCUS TRICANTHOS - HONEY LOCUST	13	GOOD	SAVED
31	MALUS - CRABAPPLE	13	FAIR	SAVED
32	PICEA PUNGENS - BLUE SPRUCE	20.5	GOOD	SAVED
33	PICEA PUNGENS - BLUE SPRUCE	8.5	FAIR	REMOVED
34	PINUS STROBUS - EASTERN WHITE PINE	9	FAIR	SAVED
35	PICEA GLAUCOA - WHITE SPRUCE	10.5	FAIR	REMOVED
36	QUERCUS TRICANTHOS - HONEY LOCUST	13	POOR	SAVED
37	QUERCUS TRICANTHOS - HONEY LOCUST	17	GOOD	SAVED
38	PICEA PUNGENS - BLUE SPRUCE	13.5	POOR	REMOVED
39	QUERCUS TRICANTHOS - HONEY LOCUST	20.5	FAIR	SAVED
40	MALUS - CRABAPPLE	16	POOR	SAVED
41	TILIA AMERICANA - BASSWOOD	13.5	GOOD	REMOVED
42	QUERCUS TRICANTHOS - HONEY LOCUST	15, 8	POOR	SAVED
43	QUERCUS TRICANTHOS - HONEY LOCUST	13	POOR	REMOVED
44	PICEA PUNGENS - BLUE SPRUCE	16	GOOD	SAVED
45	PICEA ABIES - NORWAY SPRUCE	8	DEAD	REMOVED / EXEMPT - DEAD
46	TILIA AMERICANA - BASSWOOD	14.5	GOOD	SAVED
47	PICEA ABIES - NORWAY SPRUCE	8	DEAD	REMOVED / EXEMPT - DEAD
48	PICEA PUNGENS - BLUE SPRUCE	20	GOOD	REMOVED
49	PICEA GLAUCOA - WHITE SPRUCE	13	GOOD	REMOVED
50	PICEA PUNGENS - BLUE SPRUCE	20	GOOD	SAVED
51	QUERCUS TRICANTHOS - HONEY LOCUST	12.25	FAIR	SAVED
52	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
53	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
54	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
55	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
56	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
57	QUERCUS TRICANTHOS - HONEY LOCUST	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
58	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
59	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
60	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
61	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
62	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT
63	ARBORVITAE	INSIGNIFICANT	INSIGNIFICANT	EXEMPT - INSIGNIFICANT



NO.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	RSK
2	WATERSHED COMMENTS	10/29/2024	RSK
3	WATERSHED COMMENTS	10/29/2024	RSK

**Kimley-Horn**  
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 PHONE: 612-464-1199  
 WWW.KIMLEY-HORN.COM

PREPARED FOR: TOLD DEVELOPMENT CO. (MN)  
 PROJECT: FLYING CLOUD DR & LEONA RD  
 DATE: 09/05/2024  
 SCALE: AS SHOWN  
 DRAWN BY: CFC  
 CHECKED BY: RSK

**TREE INVENTORY & PRESERVATION PLAN**

PRELIMINARY - NOT FOR CONSTRUCTION  
 PREPARED FOR: TOLD DEVELOPMENT CO. (MN)  
 SHEET NUMBER: C201

This document, together with the concepts and designs presented herein, is an intended contract document and shall be read in conjunction with the general conditions of contract, which have been prepared. Release of all temporary release on this document without authorization and distribution by Kimley-Horn and Associates, Inc. shall be the responsibility of the recipient.

### EROSION CONTROL PLAN NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE AND LOCAL REQUIREMENTS AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER.
4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A MANNER THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ANY FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO A PUBLIC RIGHT OF WAY SHALL BE PAID BY THE CONTRACTOR.
5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
6. THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED BEFORE DISPOSAL.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS AND LEAKS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. STAGING AREAS, STOCKPILES, SPILLS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE STABILIZATION MEASURES SUCH AS PERMETER EROSION CONTROL BMPs, SEEDING, OR OTHER COVERING AS NECESSARY TO PREVENT EROSION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE, DUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS.
14. EROSION CONTROL BMPs SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS PRACTICABLE.
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMPs AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.

### PHASE 1 SEQUENCE OF CONSTRUCTION

1. INSTALL PERIMETER EROSION CONTROL (I.E. SILT FENCE) AND INLET PROTECTION AT EXISTING STORMWATER INLETS.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. CONSTRUCT AND STABILIZE DIVERSION AND TEMPORARY SEDIMENT BASINS.
5. CLEAR AND GRUB THE SITE.
6. BEGIN MASS SITE GRADING AND ROUGH GRADE SITE SUFFICIENTLY TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
7. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
8. TEMPORARILY SEED THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE OR AS REQUIRED BY THE NPDES AND/OR CITY GRADING PERMITS.

NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY.

### SWPPP UPDATES & AMENDMENTS

THE CONTRACTOR MUST UPDATE THE SWPPP BY NOTING ON THE SITE MAPS IN THE JOB SITE BINDER TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. AT A MINIMUM, UPDATES SHALL BE MADE DAILY TO TRACK CONSTRUCTION PROGRESS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTING THE LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LAYOUT AREAS, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL MATERIAL STORAGE, SOLID WASTE CONTAINERS, AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF.

### RPCBCWD EROSION CONTROL PLAN NOTES

1. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ON SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
2. ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE PERMITTING AGENCY, MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
3. FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
4. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
7. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERSISTENT UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF THE SOIL PROFILE WHILE TAKING CARE TO PROTECT UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION.
8. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER BODY WITHIN 14 DAYS ELSEWHERE.
9. THE PERMITTEE MUST AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.

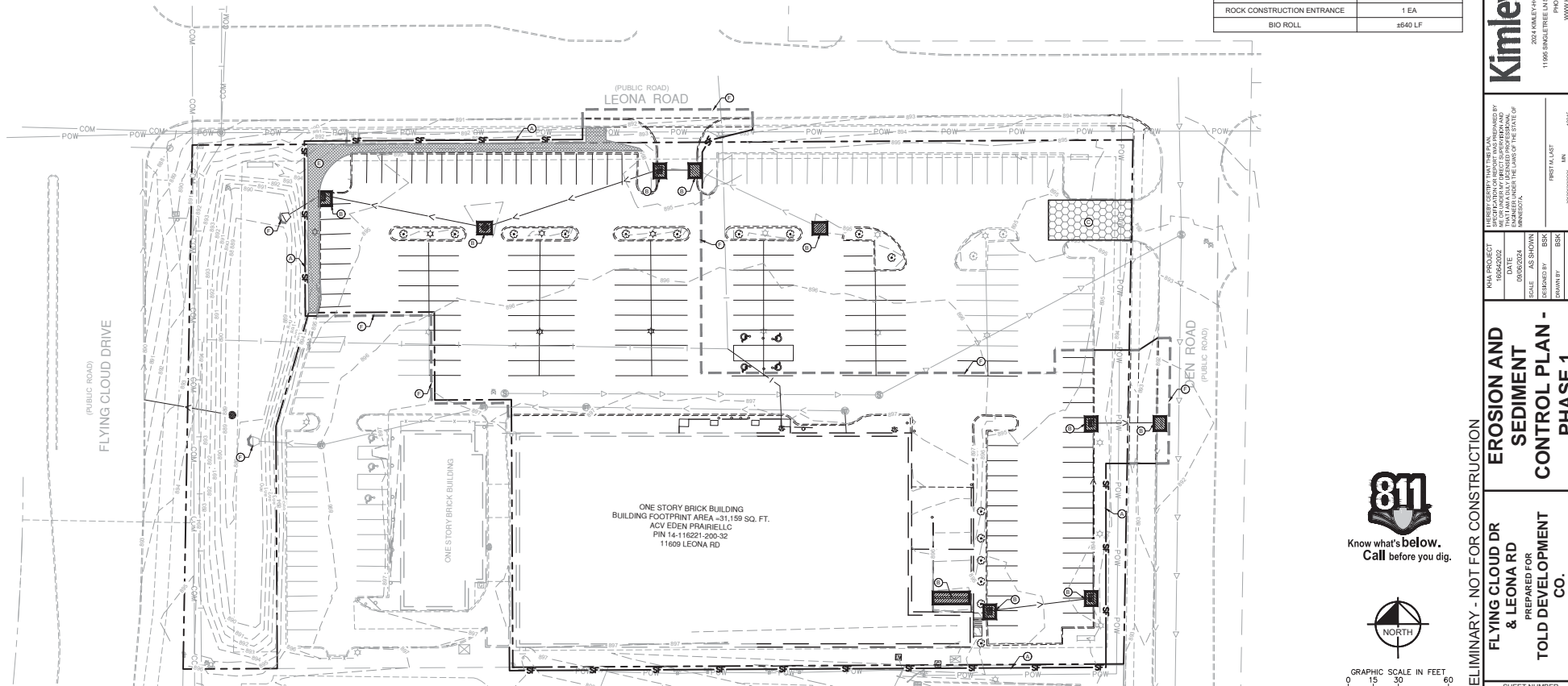
### LEGEND

- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE
- SAFETY FENCE
- BIOROLL

### KEYNOTE LEGEND

- (A) SILT FENCE
- (B) INLET PROTECTION
- (C) ROCK CONSTRUCTION ENTRANCE
- (E) EROSION CONTROL BLANKET
- (F) BIOROLL

PHASE I BMP QUANTITIES	
SILT FENCE	±865 LF
EROSION CONTROL BLANKET	±1,880 SF
INLET PROTECTION	10 EA
ROCK CONSTRUCTION ENTRANCE	1 EA
BIO ROLL	±640 LF



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

GRAPHIC SCALE IN FEET  
0 15 30 60

WATER SHED COMMENTS	11/18/2024	ERK
WATER SHED COMMENTS	10/29/2024	ERK
WATER SHED COMMENTS	10/29/2024	ERK
REVISIONS	DATE	BY
No		

**Kimley-Horn**  
2024 KIMLEY-HORN AND ASSOCIATES, INC.  
11996 SINGLE TREE LAUREL DRIVE, EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

PROJECT TITLE: FLYING CLOUD DR & LEONA RD  
DATE: 09/30/2024  
SCALE: AS SHOWN  
DRAWN BY: ERK  
CHECKED BY: MTJ  
DATE: 09/30/2024  
SHEET NUMBER: C300

PRELIMINARY - NOT FOR CONSTRUCTION  
EROSION AND SEDIMENT CONTROL PLAN - PHASE 1  
EDEN PRAIRIE, MN

K:\ITCW\_LDEV\atvairbus\evden\prairie\_mm-flying cloud dr & leona rd\3-EROS PH2 PLAN.dwg November 18, 2024 - 9:35am  
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### EROSION CONTROL PLAN NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE AND LOCAL REQUIREMENTS, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER.
4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A MANNER THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ANY FINES WASHED FOR DISCHARGING SEDIMENT ONTO A PUBLIC RIGHT OF WAY SHALL BE PADDED BY THE CONTRACTOR.
5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
6. THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED BEFORE DISPOSAL.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUELS OR CHEMICAL SPILLS AND LEAKS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO ORANGE DITCHES OR WATERS OF THE STATE.
12. STAGING AREAS, STOCKPILES, SPILLS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE STABILIZATION MEASURES SUCH AS PERIMETER EROSION CONTROL BMPs, SEEDING, OR OTHER COVERING AS NECESSARY TO PREVENT EROSION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISBURBANCES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE, CLUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS.
14. EROSION CONTROL BMPs SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS PRACTICABLE.
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMPs AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.

### PHASE 2 SEQUENCE OF CONSTRUCTION

1. TEMPORARILY SEED THROUGHOUT CONSTRUCTION, DENIED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
2. CONSTRUCT UNDERGROUND SITE UTILITIES AND STORM SEWER, INCLUDING UNDERGROUND STORMWATER MANAGEMENT SYSTEM.
3. INSTALL APPROPRIATE INLET PROTECTION AT ANY NEW STORM SEWER STRUCTURES AS EACH STRUCTURE IS CONSTRUCTED.
4. COMPLETE SITE GRADING AND PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. PLACE APPROPRIATE BASE MATERIAL AND INSTALL SUBDRAINAGE SYSTEM.
6. CONSTRUCT PAVEMENTS, CURBS & GUTTER, AND SIDEWALKS.
7. AS APPROPRIATE, REPLACE & MAINTAIN INLET PROTECTION DEVICES WITHIN PAVED AREAS AS WORK PROGRESSES.
8. COMPLETE FINAL GRADING AND INSTALL OF PERMANENT STABILIZATION (SEEDING, SOILING, ETC.) WITHIN LANDSCAPED AREAS.
9. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION AS DEFINED BY THE APPLICABLE EROSION CONTROL PERMITS, REMOVE ALL REMAINING TEMPORARY EROSION & SEDIMENT CONTROL BMPs AND RE-STABILIZE ALL AREAS DISTURBED BY THE REMOVAL.

NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY.

### SWPPP UPDATES & AMENDMENTS

THE CONTRACTOR MUST UPDATE THE SWPPP BY NOTING ON THE SITE MAPS IN THE JOB SITE BINNER TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. AT A MINIMUM, UPDATES SHALL BE MADE DAILY TO TRACK CONSTRUCTION PROGRESS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTING THE LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LANDSCAPED AREAS, LOTTYPY WHEEL WASH, CONCRETE WASHOUT, FUEL & MATERIAL STORAGE, SOLID WASTE CONTAINERS, AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF.

### RPBICWD EROSION CONTROL PLAN NOTES

1. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ONSITE OF NATIVE TOPSOIL, TO THE GREATEST EXTENT POSSIBLE.
2. ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
3. FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED. TOPSOIL TO CONTAIN AT LEAST 5% ORGANIC CONTENT.
4. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS IS DETERMINED BY THE DISTRICT.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
7. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF THE SOIL PROFILE WHILE TAKING CARE TO PROTECT UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION.
8. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS ELSEWHERE.
9. THE PERMITTEE MUST, AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND-DISTURBING ACTIVITY HAS CEASED THEREAFTER. THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.

### LEGEND

- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE
- SAFETY FENCE
- BIOROLL

### KEYNOTE LEGEND

- (A) SILT FENCE
- (B) INLET PROTECTION
- (C) ROCK CONSTRUCTION ENTRANCE
- (E) EROSION CONTROL BLANKET
- (F) BIOROLL

### PHASE 2 BMP QUANTITIES

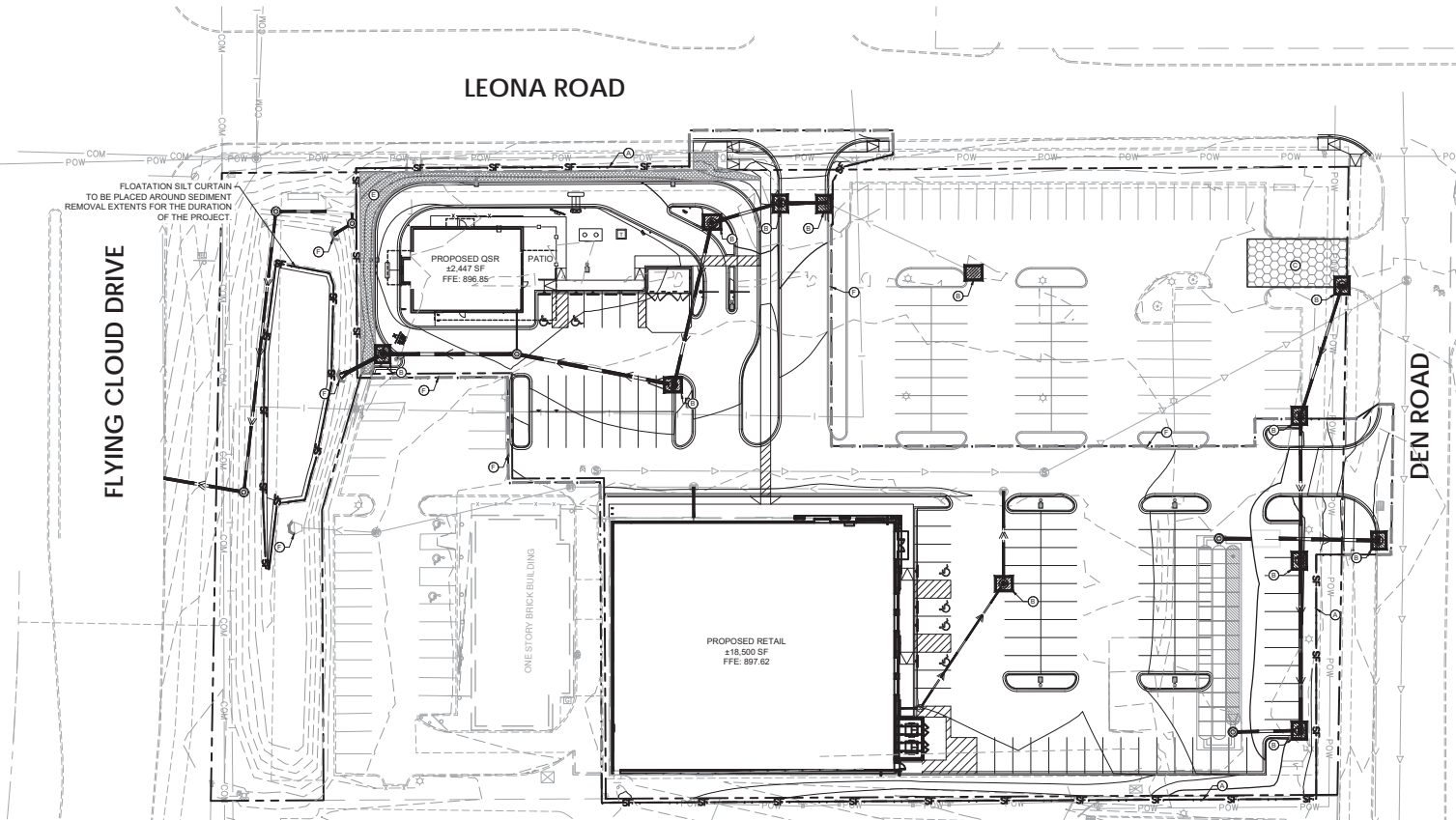
BMP TYPE	QUANTITY
SILT FENCE	#865 LF
EROSION CONTROL BLANKET	#1,880 SF
INLET PROTECTION	12 EA
ROCK CONSTRUCTION ENTRANCE	1 EA
BIO ROLL	#640 LF

### SITE COMPACTION NOTES

1. THE CONTRACTOR SHALL ENSURE ALL SOIL SURFACE COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE:
  - 1.1. A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF SOIL, OR
  - 1.2. A BULK DENSITY OF LESS THAN 1.4 GRAMS PER CUBIC CENTIMETER OR 170 POUNDS PER CUBIC FOOT IN THE UPPER 12 INCHES OF SOIL.
2. IN ADDITION, UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION MUST BE PROTECTED UNTIL FINAL VEGETATION OR OTHER STABILIZATION OF THE SITE.
3. STABILIZATION OF DISTURBED AREAS MUST BEGIN IMMEDIATELY WHENEVER LAND-DISTURBING ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME WITHIN SEVEN CALENDAR DAYS ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS ELSEWHERE.

### DREDGING & SEDIMENT REMOVAL NOTES

- 1.1. THE CONTRACTOR SHALL SUBMIT TO RPBICWD THE CONSTRUCTION SCHEDULE, DESCRIPTION OF EQUIPMENT TO BE USED, AND LOCATION MAP OF SPILL CONTAINMENT AREA PRIOR TO START OF CONSTRUCTION.
- PROPOSED VOLUME OF SEDIMENT TO BE REMOVED= 150 CY.
- VOLUME IS APPROXIMATE AND SHOWN FOR REFERENCE ONLY. ANALYSIS NOT TO BE USED IN PROJECT COST ESTIMATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL EARTHWORK. KIMLEY-HORN ASSUMES NO LIABILITY FOR VOLUME ANALYSIS.



NO.	REVISIONS	DATE	BY
1	WATER SHED COMMENTS	11/18/2024	BRK
2	WATER SHED COMMENTS	10/29/2024	BRK
3	WATER SHED COMMENTS	10/29/2024	BRK

**Kimley-Horn**  
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 11996 SINGLETREE LAUREL DRIVE, EDEN PRAIRIE, MN 55534  
 PHONE: (612) 464-1197  
 WWW.KIMLEY-HORN.COM

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

PROJECT: FLYING CLOUD DR & LEONA RD  
 DATE: 09/05/2024  
 SCALE: AS SHOWN  
 DRAWN BY: BRK  
 CHECKED BY: MTT

PRELIMINARY - NOT FOR CONSTRUCTION

**EROSION AND SEDIMENT CONTROL PLAN - TOLD DEVELOPMENT CO. (MN)**

PHASE 2

SHEET NUMBER  
**C301**







K:\TOW\_LDEV\atubus\edem prairie\_m-flying cloud dr & horn rd\edem prairie\SWPPP.dwg November 18, 2024 - 9:38am  
This document, together with the concepts and designs presented herein, is an instrument of service, to be used only for the specific purpose and client for which it was prepared. Release of any information contained herein without the written consent of Kimley-Horn and Associates, Inc. shall be held strictly confidential by the recipient.

**GENERAL NOTES**

- A. PROJECT OFFICE WALL SWPPP POSTINGS:**  
THE FOLLOWING ITEMS MUST BE POSTED TOGETHER IN A SINGLE, ORGANIZED LOCATION ON A WALL INSIDE THE PROJECT OFFICE: 1) SWPPP SITE MAPS (ALL PHASES); 2) SWPPP DETAIL SHEETS; 3) MAP SHOWING LOCATION OF OFFSITE IMPORT OR EXPORT FACILITY; 4) REVISIONS TO DETAILS, SITE MAPS, OR SWPPP-RELATED REFS; 5) SITE SWPPP BINDER; 6) SWCT PLACARD; 7) CURRENT OWNER STORMWATER COMPLIANCE TRAINING CERTIFICATES FOR SUPERINTENDENTS AND COMPLIANCE OFFICERS; AND 8) CERTIFICATIONS AND/OR TRAINING CERTIFICATES REQUIRED TO PERFORM INSPECTIONS BY THE APPLICABLE CONSTRUCTION GENERAL PERMIT OR AUTHORITY HAVING JURISDICTION.
- B. PERMITTED PROJECT AREA:**  
FOR PURPOSES OF THIS SWPPP AND ASSOCIATED STORMWATER PERMIT, PERMITTED PROJECT AREA IS DEFINED AS ANY AND ALL AREAS WITHIN THE PROJECT LIMITS OF DISTURBANCE, AS SHOWN ON THE SWPPP SITE MAPS AND IDENTIFIED IN THE NOTICE OF INTENT TO THE AGENCY. ALL GROUND-DISTURBING AND CONSTRUCTION-RELATED ACTIVITIES (MATERIAL STORAGE, DUMPSTERS, PARKING AREAS, PROJECT OFFICE TRAILER, ETC.) MUST BE INCLUDED WITHIN THE PERMITTED PROJECT AREA LIMITS OF DISTURBANCE.  
  
ALL AREAS OUTSIDE THE PERMITTED PROJECT AREA (I.E. LIMITS OF DISTURBANCE) ACQUIRED FOR USE BY THE GC OR A SUBCONTRACTOR OF THE GC (BORROW SOURCES, DISPOSAL AREAS, ETC.) MUST BE MANAGED IN ACCORDANCE WITH THE NPDES PERMIT. THE CONTRACTOR IS REQUIRED TO LOCATE OFFICE TRAILERS AND MATERIAL STORAGE AREAS FOR THE PROJECT WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR MAY REQUEST USE OF OFF-SITE LOCATIONS FOR OFFICE TRAILERS OR NON-ERODIBLE MATERIAL STORAGE. HOWEVER, APPROVAL MUST BE OBTAINED FROM THE CONSTRUCTION MANAGER, AND THE ENGINEER PRIOR TO THEIR USE. REQUESTS WILL BE REVIEWED ON A CASE BY CASE BASIS AND IF APPROVED, LIMITATIONS ON USE WILL BE PROVIDED BY THE ENGINEER.
- C. SPECIAL PROJECT AREAS:**  
THERE ARE SPECIAL PROJECTS, LOCATED BEYOND THE OWNER PERMITTED PROJECT AREA, REQUIRING INSPECTION AND MAINTENANCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT.
- D.1. NON-STORMWATER DISCHARGES:**  
THE GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES PROHIBITS MOST NON-STORMWATER DISCHARGES DURING THE CONSTRUCTION PHASE. ALLOWABLE NON-STORMWATER DISCHARGES THAT OCCUR DURING CONSTRUCTION ON THIS PROJECT, ARE INCLUDED IN THE SECTION PART IV.D OF THE GENERAL PERMIT.  
  
BEST MANAGEMENT PRACTICES (BMPs) MUST BE IMPLEMENTED FOR THE GENERAL PERMIT ALLOWABLE DISCHARGES FOR THE DURATION OF THE PERMIT. THE TECHNIQUES DESCRIBED IN THIS SWPPP FOCUS ON PROVIDING CONTROL OF POLLUTANT DISCHARGES WITH PRACTICAL APPROACHES THAT UTILIZE READILY AVAILABLE EXPERTISE, MATERIAL, AND EQUIPMENT.  
  
NON-STORMWATER COMPONENTS OF SITE DISCHARGES MUST BE UNCONTAMINATED NON-TURBID WATER. ALL NON-STORMWATER DISCHARGES MUST BE ROUTED TO A STORMWATER CONTROL PRIOR TO DISCHARGE. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN RETENTION PONDS UNTIL IT INFILTRATES OR EVAPORATES. WHEN NON-STORMWATER IS DISCHARGED FROM THE SITE, IT MUST BE DONE IN A MANNER SUCH THAT IT DOES NOT CAUSE EROSION OF THE SOIL DURING DISCHARGE.
- D.2. POWER WASHING:**  
PROCESS WATER SUCH AS POWER WASHING WATER AND CONCRETE CUTTING EFFLUENT, AMONG OTHERS, MUST BE COLLECTED FOR TREATMENT AND DISPOSAL. IT MUST NOT BE FLUSHED INTO THE SITE STORM DRAIN SYSTEM OR DISCHARGED OFF-SITE.
- D. DISCHARGE POINTS:**  
ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENTATION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE AND/OR IMPACTS TO RECEIVING WATERS. SEDIMENT ACCUMULATION DOWNGRADIENT OF DISCHARGE LOCATIONS SHALL BE REPORTED AS A SEDIMENT DISCHARGE AND THE POTENTIAL UPSTREAM CAUSE SHALL BE INVESTIGATED TO PREVENT FUTURE OCCURRENCE. CONTACT THE CM AND CEC TO DETERMINE APPROPRIATE ACTION FOR CLEANUP OF DISCHARGED SEDIMENT THAT MAY BE OUTSIDE OF THE LIMITS OF DISTURBANCE. SEE SAMPLING AND MONITORING OF EFFLUENT PLAN (IF APPLICABLE).
- E. CHAIN OF RESPONSIBILITY:**  
TRENT MAYHEBRY  
TOLD DEVELOPMENT CO.  
200 SOUTHDALE CENTER  
EDINA, MN 55435  
(952) 278-0112  
  
LONG-TERM OPERATION AND MAINTENANCE OF THE STORM WATER TREATMENT SYSTEM  
TRENT MAYHEBRY  
TOLD DEVELOPMENT CO.  
200 SOUTHDALE CENTER  
EDINA, MN 55435  
(952) 278-0112
- F. RECEIVING WATER:**  
THE SITE IS PART OF THE RILEY BLUFF PURGATORY CREEK WATERSHED. THE PROPOSED SITE DISCHARGES TO THE CITY STORMWATER SYSTEM AND IS ASSUMED TO DISCHARGE TO LAKE IDELVILD & ANDERSON LAKES

**SWPPP DESIGNER:**

BRIAN M. WURDEMAN, P.E.  
11996 SINGLETREE LANE, SUITE 225  
EDEN PRAIRIE, MN 55344  
CERTIFICATION EXPIRES 2025

SIGNATURE: *[Signature]*

<b>INSTALLER CERTIFICATION</b>	<b>INSPECTOR CERTIFICATION</b>
NAME: _____	NAME: _____
ADDRESS: _____	ADDRESS: _____
SWPPP CERTIFICATION	SWPPP CERTIFICATION
SIGNATURE: _____	SIGNATURE: _____

**EROSION AND SEDIMENT CONTROL NOTES**

- A. SUBCONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.**
- B. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.**
- C. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.**
- D. SUBCONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH SWPPP IMPLEMENTATION SEQUENCE, OR AS REQUIRED BY THE APPLICABLE GENERAL PERMIT. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.**
- E. ALL DENUDED/BARE AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITY, WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAB VARIETIES, STRAWHAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING AND/OR BLANKETS. COMPLETION MUST BE ACHIEVED WITHIN 14 DAYS.**
- F. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEED, SODED, AND/OR VEGETATED IMMEDIATELY, AND COMPLETED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS, REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.**
- G. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE APPLIED PER REQUIREMENTS IN THESE E&S CONTROL NOTES.**
- H. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE OFF-SITE.**
- I. ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE SITE PLANS.**
- J. STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION, THAT WILL ALSO PROVIDE STORM WATER MANAGEMENT AFTER CONSTRUCTION, ARE INCLUDED IN THE CONTRACT DOCUMENTS. THE SITE-SPECIFIC POST CONSTRUCTION STORM WATER OPERATION AND MAINTENANCE (O&M) MANUAL IS INCLUDED IN THE CONTRACT DOCUMENTS.**
- K. ALL PERMANENT CONTROLS AND SYSTEMS MUST BE INSTALLED AND FUNCTIONING AS DESIGNED AND FREE OF ACCUMULATED SEDIMENT AND DEBRIS DURING FINAL PROJECT INSPECTION AND APPROVAL.**

**HAZARDOUS MATERIAL MANAGEMENT & SPILL REPORTING**

ANY HAZARDOUS OR POTENTIALLY HAZARDOUS MATERIAL THAT IS BROUGHT ONTO THE CONSTRUCTION SITE SHALL BE HANDLED PROPERLY TO REDUCE THE POTENTIAL FOR STORMWATER POLLUTION. ALL MATERIALS USED ON THIS CONSTRUCTION SITE SHALL BE PROPERLY STORED, HANDLED, DISPENSED AND DISPOSED OF FOLLOWING ALL APPLICABLE LABEL DIRECTIONS. FLAMMABLE AND COMBUSTIBLE LIQUIDS SHALL BE STORED AND HANDLED ACCORDING TO APPLICABLE REGULATIONS, AND, AT A MINIMUM, ACCORDING TO 29 CFR 192.103. ONLY APPROVED CONTAINERS AND PORTABLE TANKS SHALL BE USED FOR STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.

MATERIAL SAFETY DATA SHEETS (MSDS) INFORMATION SHALL BE KEPT ON SITE FOR ANY AND ALL APPLICABLE MATERIALS. HOWEVER, MSDS MAY ALSO BE ACCESSED VIA TELEPHONE OR OTHER ELECTRONIC MEANS OR APPARATUS.

IN THE EVENT OF AN ACCIDENTAL SPILL, IMMEDIATE ACTION SHALL BE TAKEN BY THE SUBCONTRACTOR TO CONTAIN AND REMOVE THE SPILLED MATERIAL. THE SPILL SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES, AS REQUIRED UNDER THE PROVISIONS OF THE CLEAN WATER ACT. ANY SPILL OR DISCHARGE ENTERING WATERS OF THE UNITED STATES SHALL BE PROPERLY REPORTED.

ALL HAZARDOUS MATERIALS, INCLUDING CONTAMINATED SOIL AND LIQUID CONCRETE WASTE, SHALL BE DISPOSED OF BY THE SUBCONTRACTOR IN THE MANNER SPECIFIED BY FEDERAL, STATE AND LOCAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.

THE SUBCONTRACTOR SHALL PREPARE A WRITTEN RECORD OF ANY SPILL AND ASSOCIATED CLEAN-UP ACTIVITIES OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF 1 GALLON OR REPORTABLE QUANTITIES, WHICHEVER IS LESS, ON THE DAY OF THE SPILL. THE SUBCONTRACTOR SHALL PROVIDE NOTICE TO OWNER, VIA THE ONLINE CRITICAL INCIDENT REPORT, IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL. SPILL REPORT FORMS ARE AVAILABLE IN THE ONLINE SWPPP REPORTING SYSTEM PROVIDED BY THE OWNER. COPIES OF SPILL CRITICAL INCIDENT REPORTS SHALL BE PRINTED AND MAINTAINED IN THE JOBSITE BINDER.

ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA OR STATE OR LOCAL AGENCY REGULATIONS, SHALL BE IMMEDIATELY REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) AND THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES (1-800-943-0003)

**THE STATE REQUIRES REPORTING WHEN:**

- THERE IS AN IMPACT TO HUMAN HEALTH
- THERE IS AN IMPACT TO THE ENVIRONMENT
- THERE IS A FIRE, EXPLOSION, OR SAFETY HAZARD
- A SPILL IS NOT IMMEDIATELY CLEANED UP
- THE SPILL WAS MORE THAN THE REPORTABLE QUANTITY OF 1 GALLON OF A PETROLEUM PRODUCT

**THE REPORT SHOULD BE FILED WITH THE STATE OF MINNESOTA. ALL REPORTS SHOULD BE FILED WITHIN 24 HOURS OF A SPILL OCCURRING.**

THE REPORTABLE QUANTITY FOR HAZARDOUS MATERIALS CAN BE FOUND IN 40 CFR 302 AND THE US EPA WEBSITE:  
[HTTP://WWW.EPA.GOV/UPERFUND/POLICY/RELEASE/RG](http://www.epa.gov/uperfund/policy/release/rg)

TO MINIMIZE THE POTENTIAL FOR A SPILL OF PETROLEUM PRODUCT OR HAZARDOUS MATERIALS TO COME IN CONTACT WITH STORMWATER, THE FOLLOWING STEPS SHALL BE IMPLEMENTED:

- 1) ALL MATERIALS WITH HAZARDOUS PROPERTIES, SUCH AS PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS, SOAPS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, BASIS, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE CURING COMPOUNDS AND ADDITIVES, ETC., SHALL BE STORED IN A SECURE LOCATION, UNDER COVER AND IN APPROPRIATE, TIGHTLY SEALED CONTAINERS WHEN NOT IN USE.
- 2) THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.
- 3) A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL, SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND ITS LOCATIONS SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGE AND SHOWN ON SITE MAPS.
  - a. THE SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.
  - b. CONTAINERS SHALL BE INSPECTED DAILY DURING THE DAILY STORMWATER INSPECTION.
- 4) ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE.
- 5) ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL.
- 6) THE DISPOSAL OF EXCESS OR USED PRODUCTS SHALL BE IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND REGULATIONS.



**VICINITY N.T.S.**

**CITY APPROVED DEWATERING/PUMPING PLAN IS REQUIRED PRIOR TO ANY PUMPING ACTIVITY**

	2-YEAR	10-YEAR	100-YEAR
PRE-DEVELOPMENT CONDITIONS	7.09 CFS	10.32 CFS	17.43 CFS
POST-DEVELOPMENT CONDITIONS	6.82 CFS	10.00 CFS	16.93 CFS

PROPERTY SUMMARY	
TOTAL LOD AREA	2.20 AC
TOTAL PROPERTY AREA	3.44 AC
PRE-CONSTRUCTION IMP	2.57 AC (74.7%)
POST-CONSTRUCTION IMP	2.51 AC (73.0%)

PHASE 1 BMP QUANTITIES	
INLET PROTECTION	10 EA
ROCK CONSTRUCTION ENTRANCE	1 EA
SILT FENCE	865 LF
BIOROLL	640 LF
EROSION CONTROL BLANKET	1,880 SF
SAFETY FENCE	- LF
DISTURBED AREA	2.20 ACRES
IMPERVIOUS AREA	2.51 ACRES
RECEIVING WATER	LAKE IDELVILD & ANDERSON LAKES

DATE	BY	REVISIONS
11/18/2024	BRK	WATERSHED COMMENTS
10/29/2024	BRK	WATERSHED COMMENTS
10/09/2024	BRK	WATERSHED COMMENTS

**Kimley Horn**  
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11996 SINGLETREE LANE, SUITE 225, EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4199  
WWW.KIMLEY-HORN.COM

MIN. PROJECT NO.	DATE	SCALE	AS SHOWN	DESIGNED BY	DRWN BY	CHECKED BY	DATE	U.S. G.S.	U.S. G.S.
	09/05/2024		BRK				08/23/2024		XXXXXX

**SWPPP NOTES**  
PRELIMINARY - NOT FOR CONSTRUCTION  
FLYING CLOUD DR & LEONA RD  
PREPARED FOR TOLD DEVELOPMENT CO.  
EDEN PRAIRIE, MN

SHEET NUMBER  
**C303**

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**SITE PLAN NOTES**

- REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF STOPS, TRUCK DOCKS, TRASH ENCLOSURES & PRECISE BUILDING DIMENSIONS. REFER TO THE SITE ELECTRICAL PLAN FOR LOCATIONS OF PROPOSED LIGHT POLES, CONDUITS, AND ELECTRICAL EQUIPMENT.
- REFER TO CERTIFIED SITE SURVEY OR PLAT FOR EXACT LOCATION OF EXISTING EASEMENTS, PROPERTY BOUNDARY DIMENSIONS, AND ADJACENT RIGHT-OF-WAY & PARCEL INFORMATION.
- DIMENSIONS AND RADIUS ARE DRAWN TO THE FACE OF CURB, UNLESS OTHERWISE NOTED. DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT, AND AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING EXISTING SITE IMPROVEMENTS THAT CONFLICT WITH THE PROPOSED WORK, INCLUDING BUT NOT LIMITED TO TRAFFIC SIGNS, LIGHT POLES, ABOVEGROUND UTILITIES, ETC. PERFORM WORK IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS. COST SHALL BE INCLUDED IN BASE BID.
- TYPICAL PARKING STALL DIMENSIONS SHALL BE 9.0 FEET IN WIDTH AND 18 FEET IN LENGTH UNLESS OTHERWISE INDICATED.
- MONUMENT (SIGNS) ARE DETAIL ON THE ARCHITECTURAL PLANS AND ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIGN DIMENSIONS, LOCATION AND REQUIRED PERMITS WITH THE OWNER.

PROPERTY SUMMARY	
TOTAL PROPERTY AREA	3.44 AC / 149,849 SF
DISTURBED AREA	2.20 AC / 96,090 SF
EXISTING IMPERVIOUS AREA	2.57 AC / 112,017 SF / 74.75%
EXISTING PERVIOUS AREA	0.87 AC / 37,832 SF / 25.25%
PROPOSED IMPERVIOUS AREA	2.51 AC / 109,429 SF / 73.03%
PROPOSED PERVIOUS AREA	0.93 AC / 40,420 SF / 27.97%
NET DECREASE IN IMPERVIOUS AREA	0.06 AC / 2,588 SF

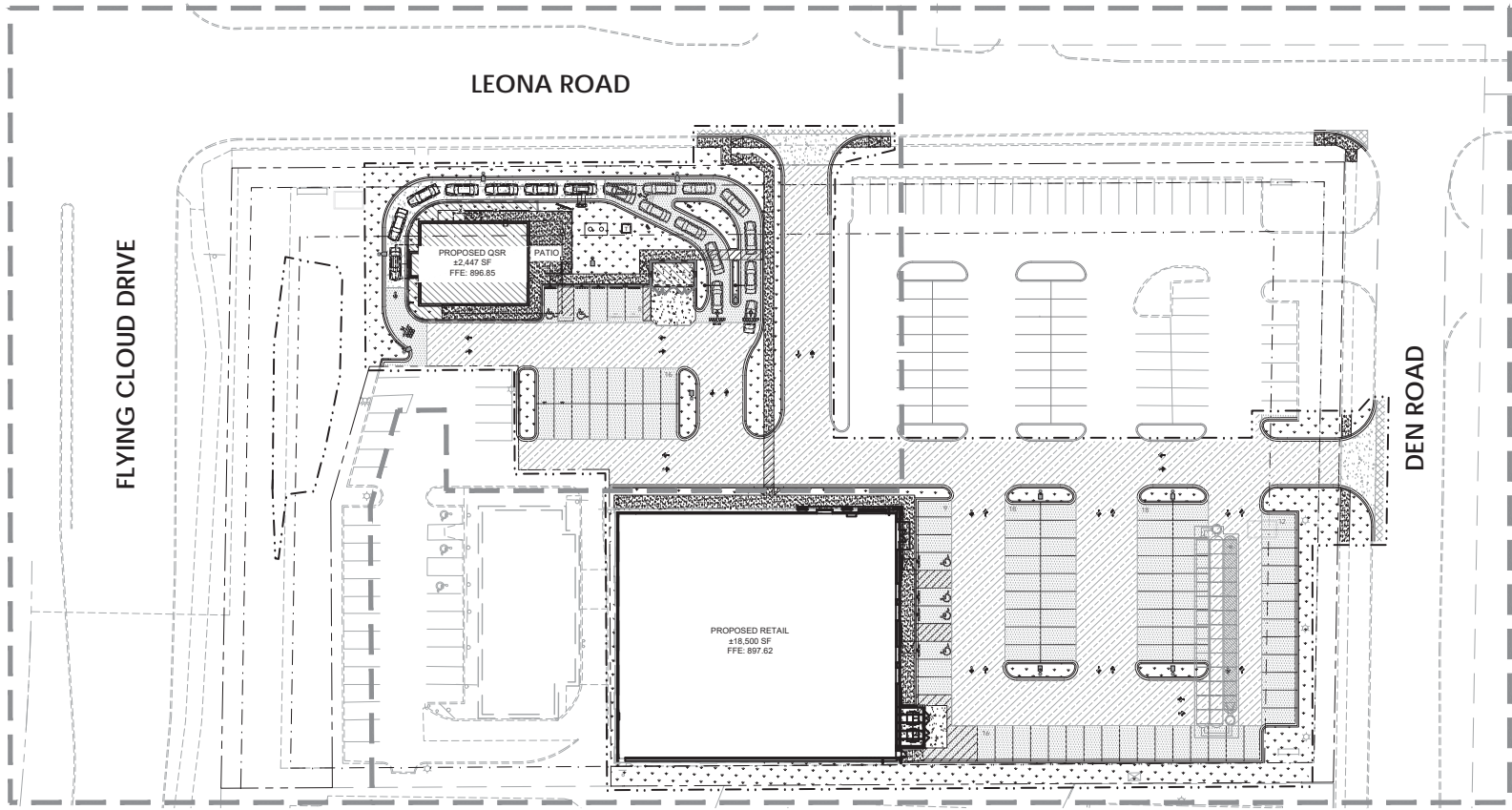
SITE DATA	
EXISTING ZONING	C-REG-SER REGIONAL SERVICE COMMERCIAL
PROPOSED LAND USE	DRIVE THROUGH, RETAIL
PARKING SETBACKS	SIDE/REAR = 10' STREET = 10'
BUILDING SETBACKS	STREET = 35' SIDE = 20' REAR = 20' CORNER STREET = 35'
LOT REQUIREMENTS	MINIMUM WIDTH = 80' MINIMUM DEPTH = 100'

BUILDING DATA SUMMARY	
AREAS	
QSR BUILDING AREA	2,447 SF
RETAIL BUILDING AREA	18,500 SF
BAR & FAR	0.14
PARKING	
REQUIRED TYPE 1 RESTAURANT PARKING	20 SPACES @ 1/2.5 SEATS
REQUIRED RETAIL PARKING	93 SPACES @ 5/1,000 SF
TOTAL REQUIRED PARKING	113 SPACES
TOTAL PROPOSED PARKING	171 SPACES
ADA STALLS REQ'D / ADA STALL PROVIDED	5 STALLS / 6 STALLS

PARKING RATIO SUMMARY	
PARKING	
QSR PROVIDED PARKING	21 SPACES @ 8.56/1,000 SF
RETAIL PROVIDED PARKING	150 SPACES @ 8.11/1,000 SF
PARKING SUMMARY	
EXISTING VS PROPOSED PARKING	
TOTAL EXISTING PARKING	183 SPACES
TOTAL PROPOSED PARKING	171 SPACES

**LEGEND**

- PROPERTY LINE
- SETBACK LINE
- LIMITS OF DISTURBANCE, OFFSET 2' FOR CLARITY
- MATCH LINE
- DRAINAGE AND UTILITY EASEMENT
- PROPOSED FENCE
- PROPOSED FLUSH CURB
- PROPOSED CURB AND GUTTER
- STANDARD DUTY ASPHALT PAVEMENT  
SEE DETAILS FOR SECTION
- HEAVY DUTY ASPHALT PAVEMENT  
SEE DETAILS FOR SECTION
- RIGHT OF WAY PAVEMENT  
SEE DETAILS FOR SECTION
- HEAVY DUTY CONCRETE PAVEMENT  
SEE DETAILS FOR SECTION
- CONCRETE SIDEWALK  
SEE DETAILS FOR SECTION
- LANDSCAPE AREA  
SEE LANDSCAPE PLAN FOR DETAILS
- STORMWATER MANAGEMENT AREA  
SEE STORM SILVER PLAN FOR DETAILS



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

NORTH

GRAPHIC SCALE IN FEET  
0 15 30 60

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD  
PREPARED FOR  
TOLD DEVELOPMENT CO.  
EDEN PRAIRIE, MN

OVERALL SITE PLAN

DATE: 09/05/2024  
SCALE: AS SHOWN  
DRAWN BY: [blank]  
CHECKED BY: [blank]

WATERSHED COMMENTS: 11/18/2024, BSK  
WATERSHED COMMENTS: 10/29/2024, BSK  
WATERSHED COMMENTS: 10/09/2024, BSK

REVISIONS: [blank] DATE: [blank] BY: [blank]

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THIS DOCUMENT AND THE WORKS HEREON WERE PREPARED BY AN ENGINEER OR ARCHITECT WHO IS LICENSED UNDER THE PROFESSIONAL ENGINEERING AND ARCHITECTURE ACTS OF THE STATE OF MINNESOTA.  
FIRST FLUSH  
DATE: XX/XX/XXXX, U.S. NO.: 12345  
MTI

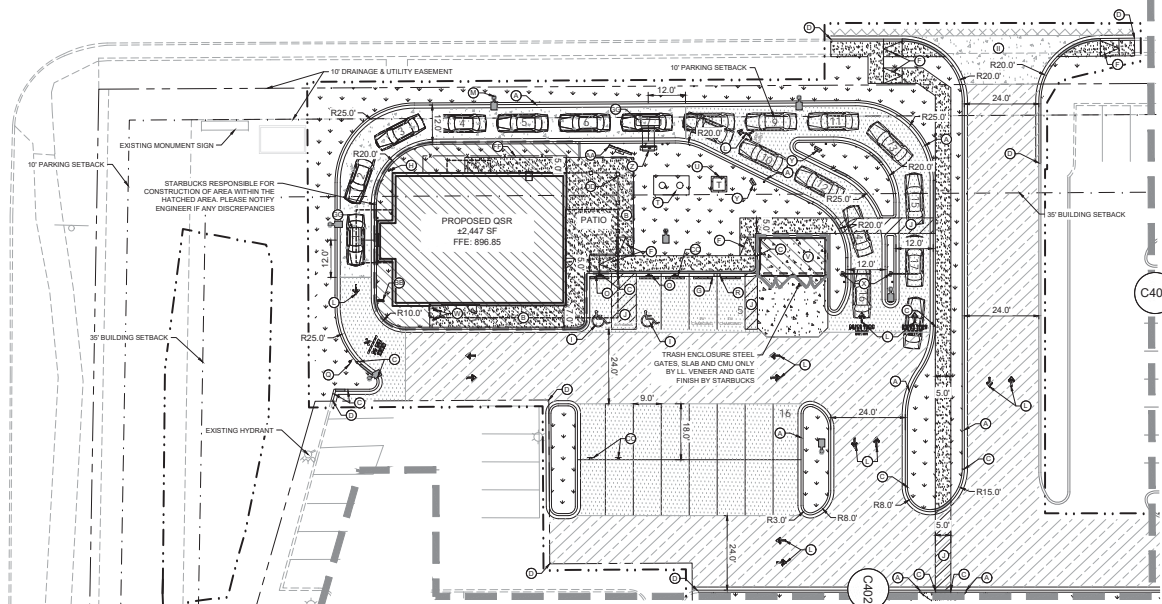
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FLYING CLOUD DRIVE

LEONA ROAD



**LEGEND**

- PROPERTY LINE
- - - PROPOSED SUBDIVISION LINE
- - - SETBACK LINE
- - - LIMITS OF DISTURBANCE, OFFSET 2' FOR CLARITY
- - - MATCHLINE
- - - DRAINAGE AND UTILITY EASEMENT
- - - PROPOSED FENCE
- - - PROPOSED FLUSH CURB
- - - PROPOSED CURB AND GUTTER
- ▨ STANDARD DUTY ASPHALT PAVEMENT  
SEE DETAILS FOR SECTION
- ▨ HEAVY DUTY ASPHALT PAVEMENT  
SEE DETAILS FOR SECTION
- ▨ RIGHT OF WAY PAVEMENT  
SEE DETAILS FOR SECTION
- ▨ HEAVY DUTY CONCRETE PAVEMENT  
SEE DETAILS FOR SECTION
- ▨ CONCRETE SIDEWALK  
SEE DETAILS FOR SECTION
- ▨ LANDSCAPE AREA  
SEE LANDSCAPE PLAN FOR DETAILS
- ▨ STORMWATER MANAGEMENT AREA  
SEE STORM SEWER PLAN FOR DETAILS

**KEYNOTE LEGEND**

- ① 6" CONCRETE CURB & GUTTER (B612) - SEE DETAIL
- ② CONCRETE SIDEWALK - SEE DETAIL
- ③ CURB TRANSITION FROM 6" TO FLUSH - SEE DETAIL
- ④ MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER
- ⑤ "NO PARKING" SIGN IN BOLLARD - SEE DETAIL
- ⑥ ACCESSIBLE CURB RAMP - SEE DETAIL
- ⑦ CONCRETE WHEEL STOP - SEE DETAIL
- ⑧ 6" CONCRETE FILLED PIPE BOLLARD - SEE DETAIL
- ⑨ ACCESSIBLE PARKING SYMBOL & LOADING AREA - SEE DETAIL
- ⑩ STRIPED WHITE CROSS-HATCH AREA 4" SOLID LINES @ 45° Z O.C.
- ⑪ 4" WIDE WHITE PAINTED SOLID PARKING LOT LINE
- ⑫ PAINTED WHITE DIRECTIONAL ARROW - SEE DETAIL
- ⑬ LIGHT POLE - REFER TO PHOTOMETRIC PLANS
- ⑭ 24" WIDE PAINTED WHITE STOP BAR - SEE DETAIL
- ⑮ ADA PARKING SIGN IN BOLLARD - SEE DETAIL
- ⑯ STOP SIGN - SEE DETAIL
- ⑰ "DO NOT ENTER" SIGN - SEE DETAIL
- ⑱ EV CHARGING STATION - REFER TO MEP PLANS
- ⑲ MONUMENT SIGN - REFER TO ARCHITECTURAL PLANS
- ⑳ GREASE TRAP - REFER TO MEP PLANS
- ㉑ TRANSFORMER/EQUIPMENT PAD - REFER TO MEP PLANS
- ㉒ TRASH ENCLOSURE - REFER TO ARCHITECTURAL PLANS
- ㉓ BIKE RACK - SEE DETAIL
- ㉔ CLEARANCE BAR FOOTING & CONDUIT W/ BOLLARD
- ㉕ PRE-MENU BOARD FOOTING & CONDUIT W/ BOLLARD
- ㉖ ORDER POINT CANOPY W/ DIGITAL ORDER SCREEN & BOLLARD @ 8' CAR STACK - INDICATES 120" FROM CENTER POINT OF DRIVE THRU WINDOW TO ORDER POINT FOOTING & CONDUIT W/ BOLLARD
- ㉗ 5' PANEL MENU BOARD, FOOTING & CONDUIT
- ㉘ "THANK YOU / EXIT ONLY" SIGNAGE - FOOTING & CONDUIT
- ㉙ "MOBILE ORDER PARKING ONLY" SIGN IN BOLLARD - LL TO PROVIDE POST & BOLLARD
- ㉚ PATIO RAILING, SEE ARCH PLANS FOR DETAILS
- ㉛ DIRECTIONAL SIGNAGE, SEE ARCH PLANS FOR DETAILS
- ㉜ UTILITY SCREENING FENCE, SEE ARCH PLANS FOR DETAILS
- ㉝ DRIVE THRU TIME LOOP, REFER TO MEP PLANS FOR DETAILS
- ㉞ MOUNTABLE CURB - SEE DETAIL
- ㉟ COMMERCIAL DRIVEWAY APRON - SEE DETAIL
- ⓪ TRUNCATED DOMES - SEE DETAIL

**SITE PLAN NOTES**

1. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF STOPS, TRUCK DOORS, TRASH ENCLOSURES & PRECISE BUILDING DIMENSIONS. REFER TO THE SITE ELECTRICAL PLAN FOR LOCATIONS OF PROPOSED LIGHT POLES, CONDUITS, AND ELECTRICAL EQUIPMENT.
2. REFER TO CERTIFIED SITE SURVEY OR PLAT FOR EXACT LOCATION OF EXISTING EASEMENTS, PROPERTY BOUNDARY DIMENSIONS, AND ADJACENT RIGHT-OF-WAY & PARCEL INFORMATION.
3. DIMENSIONS AND RADII ARE DRAWN TO THE FACE OF CURB, UNLESS OTHERWISE NOTED. DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT, AND AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
4. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING EXISTING SITE IMPROVEMENTS THAT CONFLICT WITH THE PROPOSED WORK, INCLUDING BUT NOT LIMITED TO TRAFFIC SIGNS, LIGHT POLES, ABOVEGROUND UTILITIES, ETC. PERFORM WORK IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS. COST SHALL BE INCLUDED IN BASE BID.
5. TYPICAL PARKING STALL DIMENSIONS SHALL BE 9.0 FEET IN WIDTH AND 18 FEET IN LENGTH UNLESS OTHERWISE INDICATED.
6. MONUMENT SIGNS ARE DETAIL ON THE ARCHITECTURAL PLANS AND ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIGN DIMENSIONS, LOCATION AND REQUIRED PERMITS WITH THE OWNER.

NO.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/29/2024	BSK

**Kimley-Horn**  
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 1186 SINGLE TREE LAUREL DRIVE, EDEN PRAIRIE, MN 55544  
 PHONE: 612-464-4197  
 WWW.KIMLEY-HORN.COM

DATE	09/05/2024	SCALE	AS SHOWN
DRAWN BY	BSK	CHECKED BY	BSK
DATE	XXXXXX/XXXX/XX	SCALE	XXXXXX

**ENLARGED SITE PLAN**

PRELIMINARY - NOT FOR CONSTRUCTION  
 FLYING CLOUD DR & LEONA RD  
 PREPARED FOR  
**TOLD DEVELOPMENT CO.**  
 EDEN PRAIRIE, MN

SHEET NUMBER	C401
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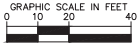


K:\ITCW\_LDEV\starbucks\eden prairie, mn- flying cloud dr & leona rd\3 Design\CAD\plan\sheet\C4-SITE PLAN.dwg November 18, 2024 - 9:38am

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Know what's below.  
Call before you dig.



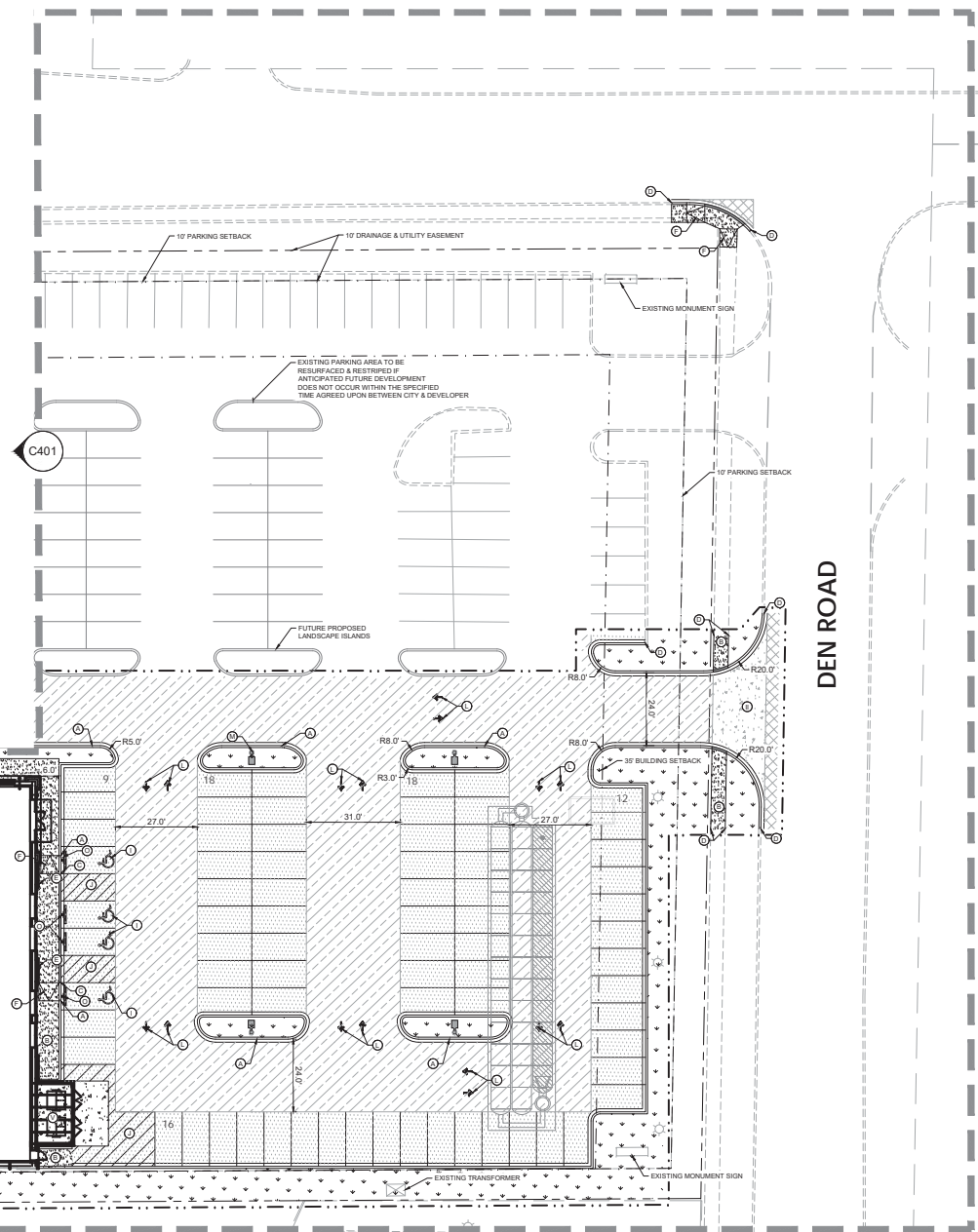
LEGEND	
	PROPERTY LINE
	PROPOSED SUBDIVISION LINE
	SETBACK LINE
	LIMITS OF DISTURBANCE, OFFSET 2' FOR CLARITY
	MATCH LINE
	DRAINAGE AND UTILITY EASEMENT
	PROPOSED FENCE
	PROPOSED FLUSH CURB
	PROPOSED CURB AND GUTTER
	STANDARD DUTY ASPHALT PAVEMENT SEE DETAILS FOR SECTION
	HEAVY DUTY ASPHALT PAVEMENT SEE DETAILS FOR SECTION
	RIGHT OF WAY PAVEMENT SEE DETAILS FOR SECTION
	HEAVY DUTY CONCRETE PAVEMENT SEE DETAILS FOR SECTION
	CONCRETE SIDEWALK SEE DETAILS FOR SECTION
	LANDSCAPE AREA SEE LANDSCAPE PLAN FOR DETAILS
	STORMWATER MANAGEMENT AREA SEE STORM SEWER PLAN FOR DETAILS

**SITE PLAN NOTES**

- REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF STOPS, TRUCK DOORS, TRASH ENCLOSURES & PRECISE BUILDING DIMENSIONS. REFER TO THE SITE ELECTRICAL PLAN FOR LOCATIONS OF PROPOSED LIGHT POLES, CONDUITS, AND ELECTRICAL EQUIPMENT.
- REFER TO CERTIFIED SITE SURVEY OR PLAT FOR EXACT LOCATION OF EXISTING EASEMENTS, PROPERTY BOUNDARY DIMENSIONS, AND ADJACENT RIGHT-OF-WAY & PARCEL INFORMATION.
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**KEYNOTE LEGEND**

- (A) 6" CONCRETE CURB & GUTTER (B612) - SEE DETAIL
- (B) CONCRETE SIDEWALK - SEE DETAIL
- (C) CURB TRANSITION FROM 6" TO FLUSH - SEE DETAIL
- (D) MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER
- (E) "NO PARKING" SIGN IN BOLLARD - SEE DETAIL
- (F) ACCESSIBLE CURB RAMP - SEE DETAIL
- (G) CONCRETE WHEEL STOP- SEE DETAIL
- (H) 6" CONCRETE FILLED PIPE BOLLARD - SEE DETAIL
- (I) ACCESSIBLE PARKING SYMBOL & LOADING AREA - SEE DETAIL
- (J) STRIPED WHITE CROSS-HATCH AREA 4" SOLID LINES @ 45° Z O.C.
- (K) 4" WIDE WHITE PAINTED SOLID PARKING LOT LINE
- (L) PAINTED WHITE DIRECTIONAL ARROW - SEE DETAIL
- (M) LIGHT POLE- REFER TO PHOTOMETRIC PLANS
- (N) 24" WIDE PAINTED WHITE STOP BAR - SEE DETAIL
- (O) ADA PARKING SIGN IN BOLLARD - SEE DETAIL
- (P) STOP SIGN - SEE DETAIL
- (Q) "DO NOT ENTER SIGN" - SEE DETAIL
- (R) EV CHARGING STATION- REFER TO MEP PLANS
- (S) MONUMENT SIGN - REFER TO ARCHITECTURAL PLANS
- (T) GREASE TRAP- REFER TO MEP PLANS
- (U) TRANSFORMER/EQUIPMENT PAD - REFER TO MEP PLANS
- (V) TRASH ENCLOSURE - REFER TO ARCHITECTURAL PLANS
- (W) BIKE RACK- SEE DETAIL
- (X) CLEARANCE BAR FOOTING & CONDUIT W/ BOLLARD
- (Y) PRE-MENU BOARD FOOTING & CONDUIT W/ BOLLARD ORDER POINT CANOPY W/ DIGITAL ORDER SCREEN & BOLLARD
- (Z) 8 CAR STACK - INDICATES 120' FROM CENTER POINT OF DRIVE THRU WINDOW TO ORDER POINT FOOTING & CONDUIT W/ BOLLARD
- (AA) 5 PANEL MENU BOARD, FOOTING & CONDUIT
- (AB) "THANK YOU / EXIT ONLY" SIGNAGE -- FOOTING & CONDUIT
- (AC) "MOBILE ORDER PARKING ONLY" SIGN IN BOLLARD- LL TO PROVIDE POST & BOLLARD
- (AD) PATIO RAILING, SEE ARCH PLANS FOR DETAILS
- (AE) DIRECTIONAL SIGNAGE, SEE ARCH PLANS FOR DETAILS
- (AF) UTILITY SCREENING FENCE, SEE ARCH PLANS FOR DETAILS
- (AG) DRIVE THRU TIME LOOP, REFER TO MEP PLANS FOR DETAILS
- (AH) MOUNTABLE CURB- SEE DETAIL
- (AI) COMMERCIAL DRIVEWAY APRON- SEE DETAIL
- (AJ) TRUNCATED DOMES- SEE DETAIL



DEN ROAD

PROPOSED RETAIL  
±18,500 SF  
FFE: 897.62

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD  
PREPARED FOR  
TOLD DEVELOPMENT CO. (MN)

ENLARGED SITE PLAN

MINI PROJECT	DATE	SCALE	DRAWN BY	CHECKED BY
09/05/2024	AS SHOWN	ESK	ESK	MTI

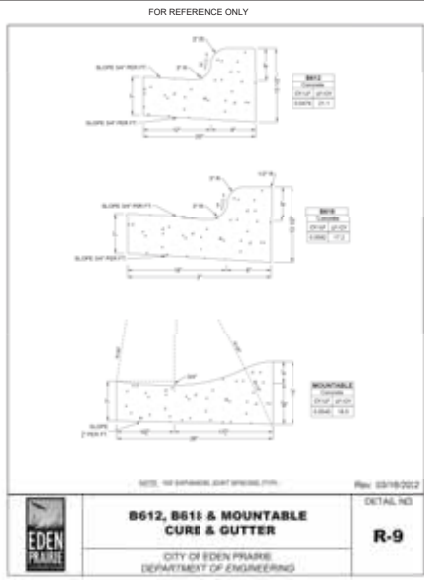
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1199 SINGLETREE LANE SUITE 205 EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

NO.	DATE	BY	REVISIONS
1	11/18/2024	ESK	WATERSHED COMMENTS
2	10/29/2024	ESK	WATERSHED COMMENTS
3	10/09/2024	ESK	WATERSHED COMMENTS

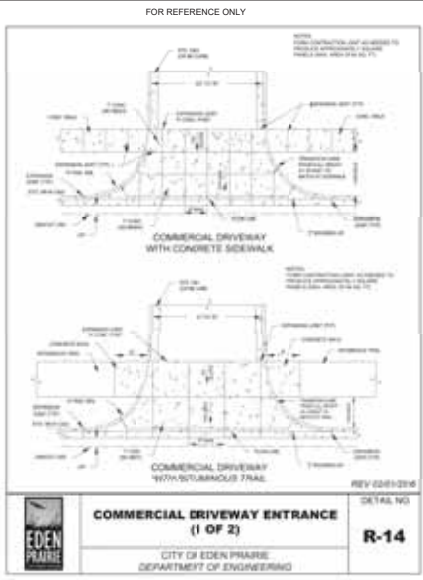
SHEET NUMBER  
C402

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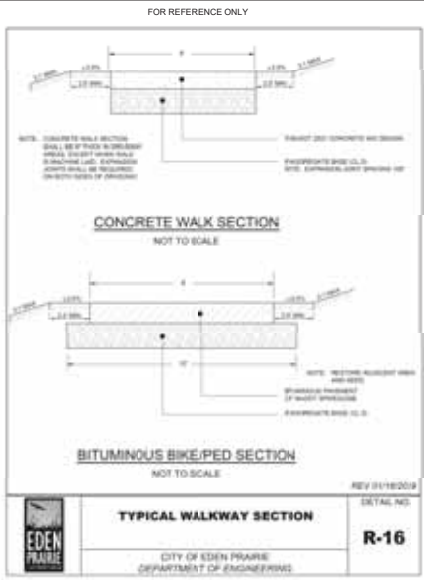
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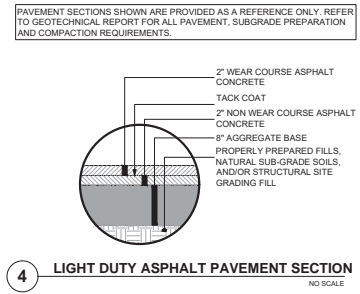
1 CURB AND GUTTER  
SCALE: NTS



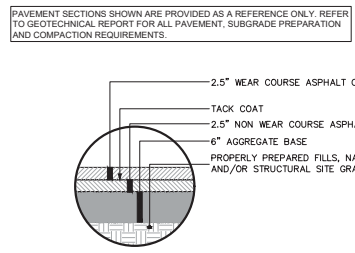
2 COMMERCIAL DRIVEWAY  
SCALE: NTS



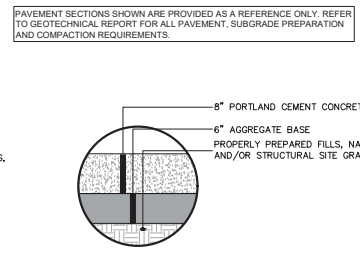
3 CONCRETE SIDEWALK  
SCALE: NTS



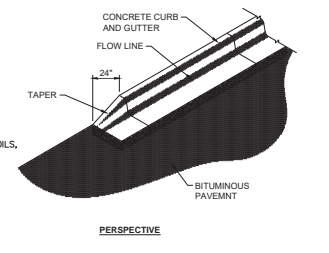
4 LIGHT DUTY ASPHALT PAVEMENT SECTION  
NO SCALE



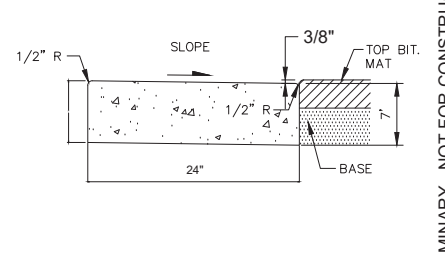
5 HEAVY DUTY ASPHALT PAVEMENT SECTION  
NO SCALE



6 HEAVY DUTY CONCRETE PAVEMENT SECTION  
NO SCALE



7 CURB TAPER  
NO SCALE



8 FLUSH CURB  
SCALE: NTS

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD  
PREPARED FOR  
TOLD DEVELOPMENT CO. MN

SHEET NUMBER  
C403

DATE: 11/18/2024  
BY: BSK

DATE: 10/29/2024  
BY: BSK

DATE: 10/29/2024  
BY: BSK

REVISIONS

NO. DATE BY

Kimley-Horn  
2024 KIMLEY-HORN ASSOCIATES, INC.  
1196 SINGLE TREE LAKE BLVD, EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

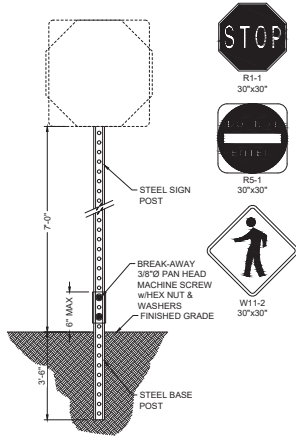
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DATE: 09/05/2024  
SCALE: AS SHOWN  
DESIGNED BY: BSK  
DRAWN BY: BSK  
CHECKED BY: MTL

DATE: 09/05/2024  
SCALE: AS SHOWN  
DESIGNED BY: BSK  
DRAWN BY: BSK  
CHECKED BY: MTL

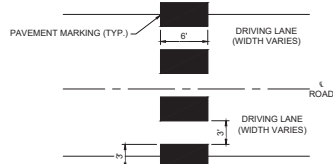
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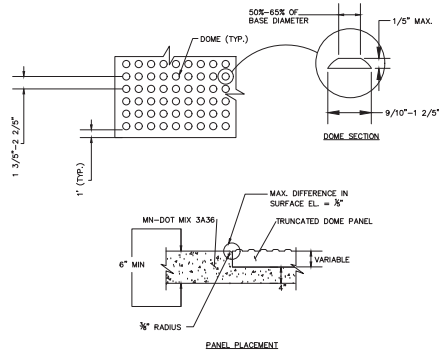
- NOTES:**
1. SIGNS SHALL BE 18 GAUGE STEEL.
  2. POSTS SHALL BE GALVANIZED STEEL U-CHANNEL, PERFORATED WITH 3/8" HOLES AT 1" CENTERS.
  3. SIGNS SHALL COMPLY WITH LOCAL MUTCD REQUIREMENTS.

**1 TRAFFIC SIGN POST** NO SCALE

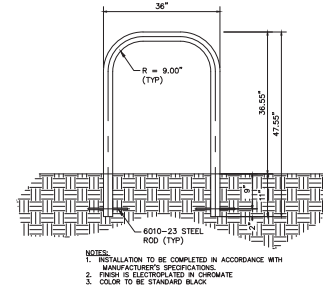


- NOTE:**
1. TAPED AREAS TO BE CENTERED AND ALIGNED ON CENTER LINE AND LANE LINES. MAKE ADJUSTMENTS IN CENTER MEDIAN AREA.
  2. ZEBRA CROSSWALKS SHALL BE WHITE POLYMER-PREFORMED TAPE OR AN ACCEPTABLE EQUIVALENT APPROVED BY THE ENGINEER.
  3. A MINIMUM OF 1.5 FT. CLEAR DISTANCE MUST BE LEFT ADJACENT TO CURB. IF LAST STRIPED AREA FALLS INTO THIS DISTANCE, IT MUST BE OMITTED.
  4. REMOVE ALL CONFLICTING PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.
  5. AT SKEWED CROSSWALKS, THE TAPED AREAS ARE TO REMAIN PARALLEL TO THE LANE LINES.
  6. WHERE PAVEMENT MARKINGS CAN NOT BE INLAYED INTO THE HOT MAT, PAVEMENT SHALL BE GROOVED FOR THE INSTALLATION OF THE POLYMER-PREFORMED MARKINGS. SEE MnDOT STANDARD SPECIFICATION 2594.

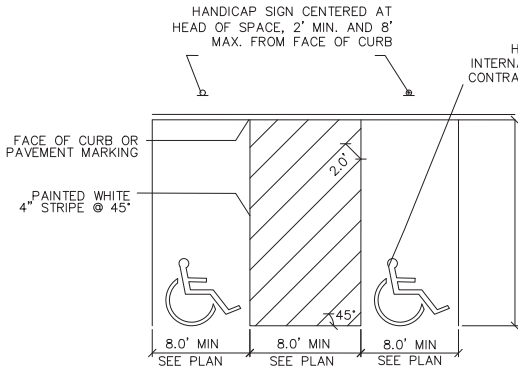
**2 CROSSWALK STRIPING** NO SCALE



**3 TRUNCATED DOMES** SCALE: NTS



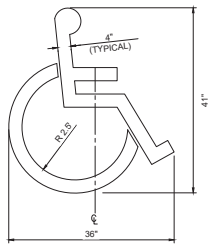
**4 BIKE RACK** SCALE: NTS



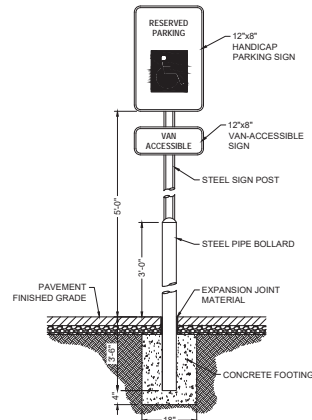
**ACCESSIBLE PARKING STALL LAYOUT**  
NOT TO SCALE

**5 ADA PARKING STALL LAYOUT** SCALE: NTS

HANDICAP PARKING SPACE WITH PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH CONTRASTING SQUARE BACKGROUND, CENTERED TOWARD DRIVE AISLE

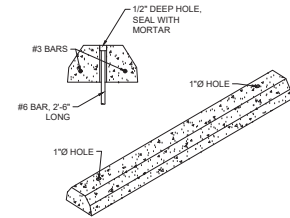


**6 ACCESSIBLE PARKING SYMBOL** NO SCALE



- NOTES:**
1. SIGNS SHALL BE 18 GAUGE STEEL WITH BAKED ENAMEL WHITE LETTERS AND BORDER ON BLUE BACKGROUND, WHERE APPLICABLE.
  2. POST SHALL BE 3"x3" 11-GAUGE GALVANIZED SQUARE STEEL.
  3. BOLLARD SHALL BE 6"Ø SCH-40 STEEL PIPE FILLED WITH CONCRETE & PAINTED YELLOW.
  4. SIGNS SHALL COMPLY WITH LOCAL MUTCD REQUIREMENTS.

**7 ACCESSIBLE PARKING SIGN IN BOLLARD** NO SCALE



**8 PRECAST WHEEL STOP** NO SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR  
& LEONA RD  
PREPARED FOR  
TOLD  
DEVELOPMENT CO. (MN)

**SITE DETAILS**

THIS SHEET AND ALL SHEETS THEREON SHALL BE PREPARED BY THE ENGINEER OR ARCHITECT AND SHALL BE THE PROPERTY OF THE ENGINEER OR ARCHITECT. NO PART SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM THE ENGINEER OR ARCHITECT.

DATE: 09/09/2024  
SCALE: AS SHOWN  
DESIGNED BY: BSK  
DRAWN BY: BSK  
CHECKED BY: MTI

FIRST PLOTTED: 11/18/2024  
DATE: 11/18/2024  
SCALE: 1/8"=1'-0"

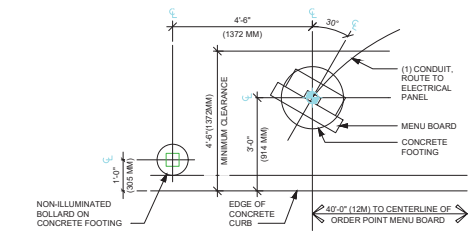
**Kimley-Horn**  
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PHONE: 612-464-4197  
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NO.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
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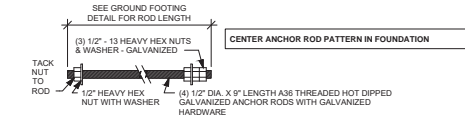
SHEET NUMBER  
**C404**

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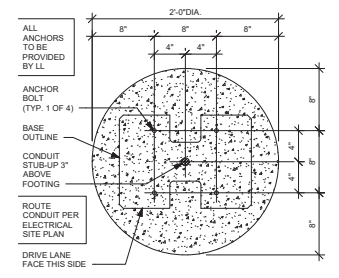
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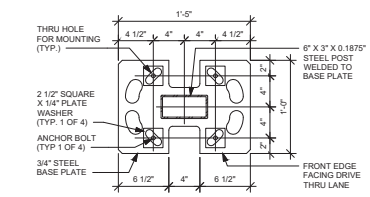
1 PRE-MENU 30 DEG  
Scale: 1/2" = 1'-0"



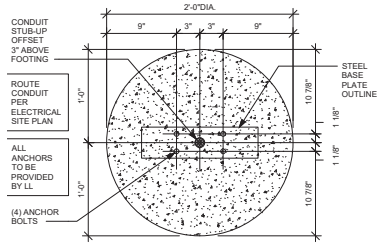
2 DTE PRE-MENU ANCHOR ROD  
Scale: 3" = 1'-0"



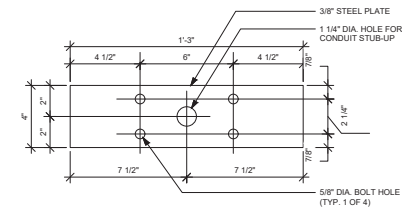
3 DTE PRE-MENU BOLT PATTERN (TOP VIEW)  
Scale: 1 1/2" = 1'-0"



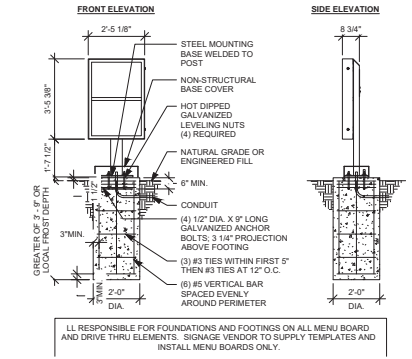
4 DTE PRE-MENU BASE PLATE  
Scale: 1 1/2" = 1'-0"



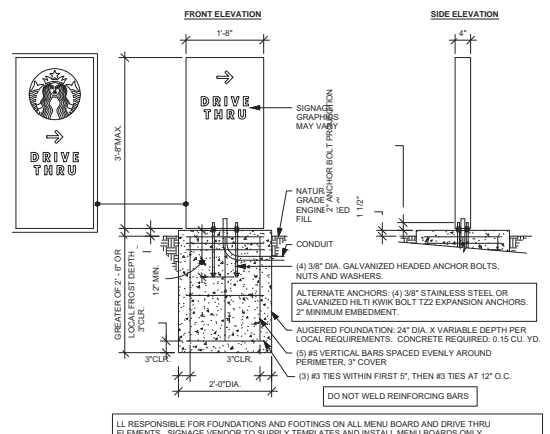
5 DTE DIRECTIONAL SIGNAGE BOLT PATTERN (TOP VIEW)  
Scale: 1 1/2" = 1'-0"



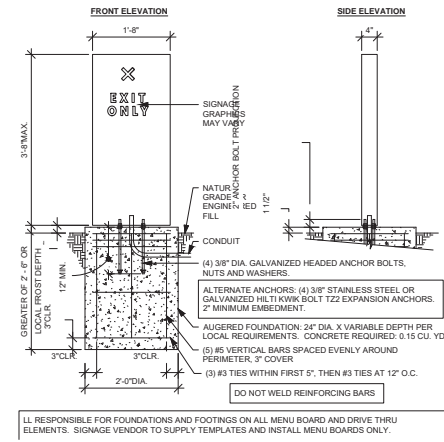
6 DTE DIRECTIONAL SIGNAGE BASE PLATE  
Scale: 3" = 1'-0"



7 DTE PRE-MENU GROUND FOOTING  
Scale: 3/8" = 1'-0"



8 DTE DIRECTIONAL SIGNAGE GROUND FOOTING  
Scale: 3/4" = 1'-0"



9 DTE DIRECTIONAL SIGNAGE GROUND FOOTING  
Scale: 3/4" = 1'-0"

NO.	REVISIONS	DATE	BY
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2	WATERSHED COMMENTS	10/29/2024	BSK
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**Kimley-Horn**  
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1199 SINGLETREE LANE SUITE 205 EDEN PRAIRIE, MN 55344  
PHONE: (612) 464-4197  
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**STARBUCKS**  
DETAILS

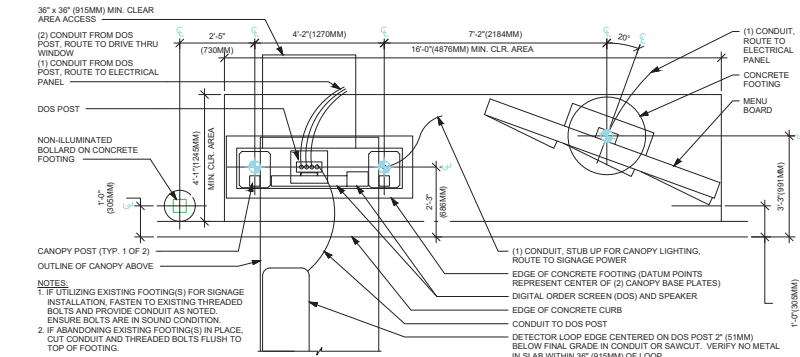
STARBUCKS  
PREPARED FOR  
TOLD  
DEVELOPMENT CO. MN

PRELIMINARY - NOT FOR CONSTRUCTION  
SHEET NUMBER  
C405

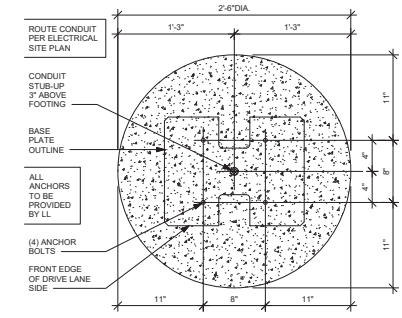




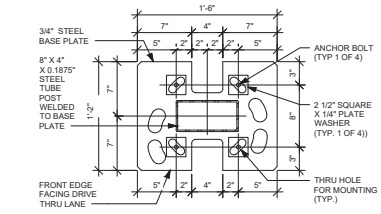
K:\COW\_LDEV\starbucks\eden prairie, mn - living cloud dr & leona rd3 Design\CAD\plan\sheet\C4-STARBUCKS DETAILS3.dwg November-18, 2024 - 9:37am  
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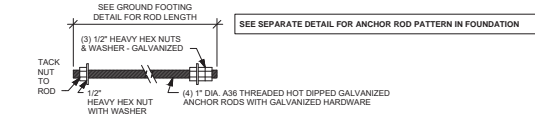
**1 DTE - 5 PANEL 20° DT MENU BOARD, DIGITAL ORDER SCREEN WITH CANOPY 1**  
 Scale: 1/2" = 1'-0"



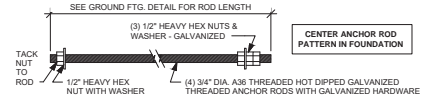
**2 DTE 5-PANEL MENU BOARD BOLT PATTERN (TOP VIEW)**  
 Scale: 1 1/2" = 1'-0"



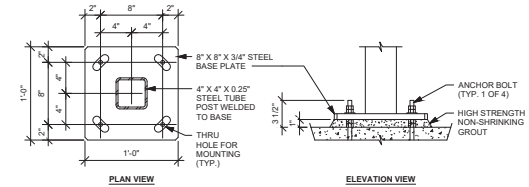
**3 DTE 5-PANEL MENU BOARD BASE PLATE**  
 Scale: 1 1/2" = 1'-0"



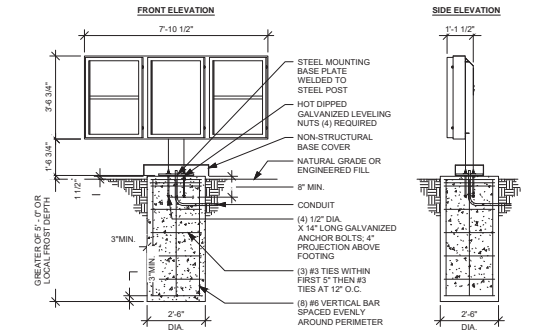
**4 DTE 5-PANEL MENU BOARD ANCHOR ROD**  
 Scale: 3" = 1'-0"



**5 DTE CLEARANCE BAR ANCHOR ROD**  
 Scale: 3" = 1'-0"

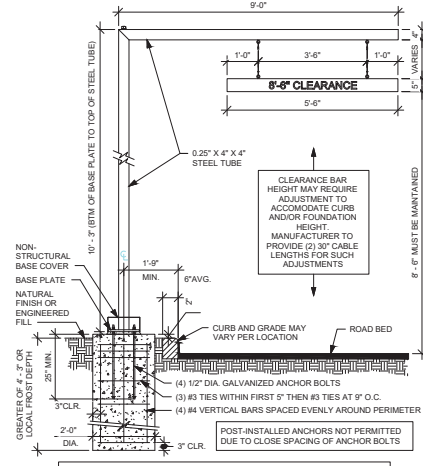


**6 DTE CLEARANCE BAR BASE PLATE**  
 Scale: 1 1/2" = 1'-0"



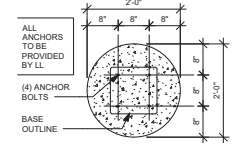
LL RESPONSIBLE FOR FOUNDATIONS AND FOOTINGS ON ALL MENU BOARD AND DRIVE THRU ELEMENTS. SIGNAGE VENDOR TO SUPPLY TEMPLATES AND INSTALL MENU BOARDS ONLY.

**7 DT 5-PANEL MENU BOARD GROUND FOOTING**  
 Scale: 3/8" = 1'-0"

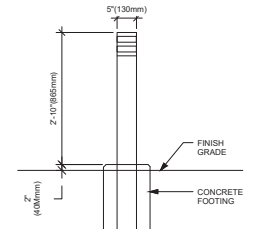


LL RESPONSIBLE FOR FOUNDATIONS AND FOOTINGS ON ALL MENU BOARD AND DRIVE THRU ELEMENTS. SIGNAGE VENDOR TO SUPPLY TEMPLATES AND INSTALL MENU BOARDS ONLY.

**8 DTE CLEARANCE BAR GROUND FOOTING**  
 Scale: 1/2" = 1'-0"



**9 DTE CLEARANCE BAR BOLT PATTERN (TOP VIEW)**  
 Scale: 3/4" = 1'-0"



**10 DTE - NON-ILLUMINATED BOLLARD**  
 Scale: 3/4" = 1'-0"

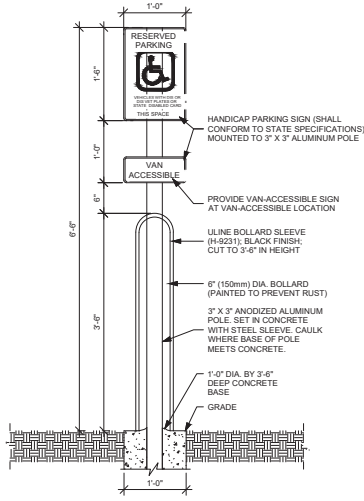
PRELIMINARY - NOT FOR CONSTRUCTION  
 STARBUCKS  
 PREPARED FOR  
 TOLD  
 DEVELOPMENT CO.  
 EDEN PRAIRIE, MN

STARBUCKS  
 DETAILS

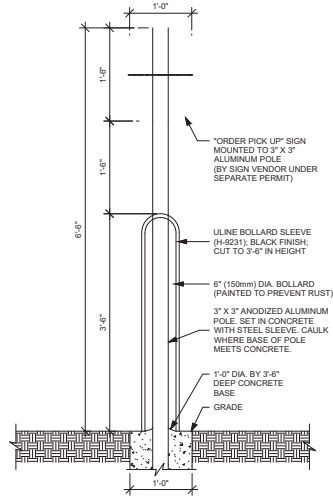
Kimley-Horn  
 2004 KIMLEY-HORN AND ASSOCIATES, INC.  
 11996 SINGLETREE LAUREL DRIVE, EDEN PRAIRIE, MN 55344  
 PHONE: (612) 464-4197  
 WWW.KIMLEY-HORN.COM

NO.	DATE	BY
1	11/18/2024	BSK
2	10/29/2024	BSK
3	10/29/2024	BSK
4	10/29/2024	BSK
5	10/29/2024	BSK
6	10/29/2024	BSK
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8	10/29/2024	BSK
9	10/29/2024	BSK
10	10/29/2024	BSK

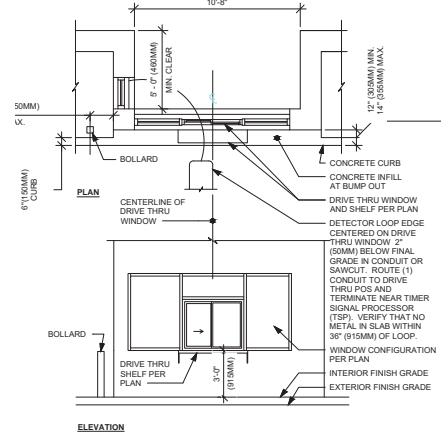
SHEET NUMBER  
**C407**



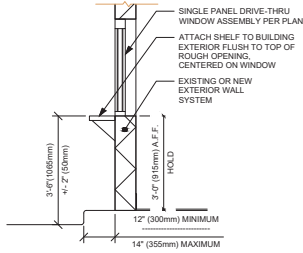
1 DETAIL - HANDICAP SIGN W/ BOLLARD & BOLLARD SLEEVE1  
Scale: 1" = 1'-0"



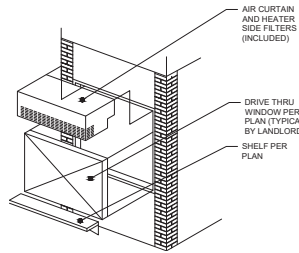
2 DETAIL - MOP SIGN W/ BOLLARD & BOLLARD SLEEVE1  
Scale: 1" = 1'-0"



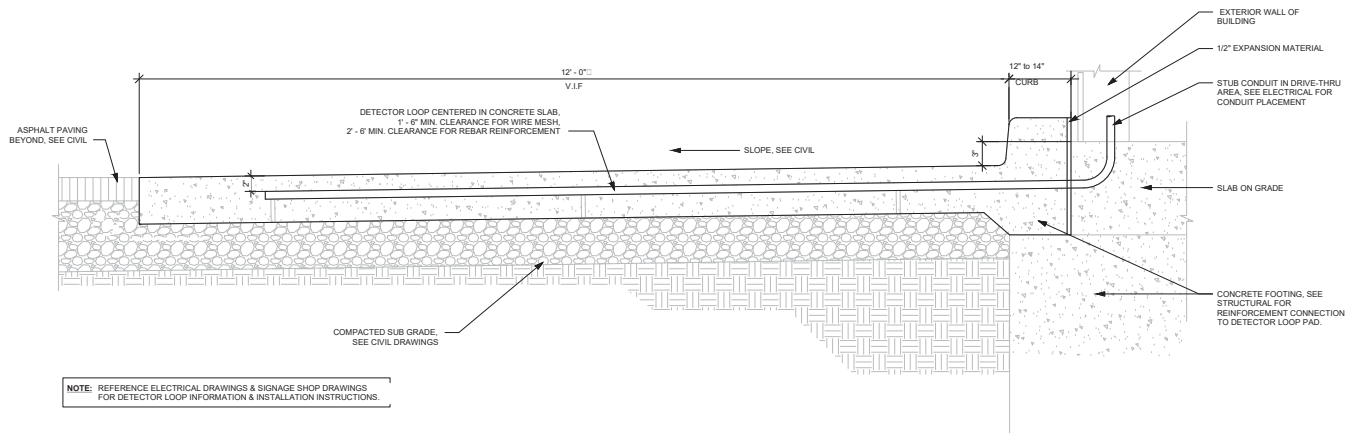
3 DTE - DRIVE THRU WINDOW BUMP-OUT  
Scale: 1/4" = 1'-0"



4 DRIVE THRU WINDOW  
Scale: 1/2" = 1'-0"

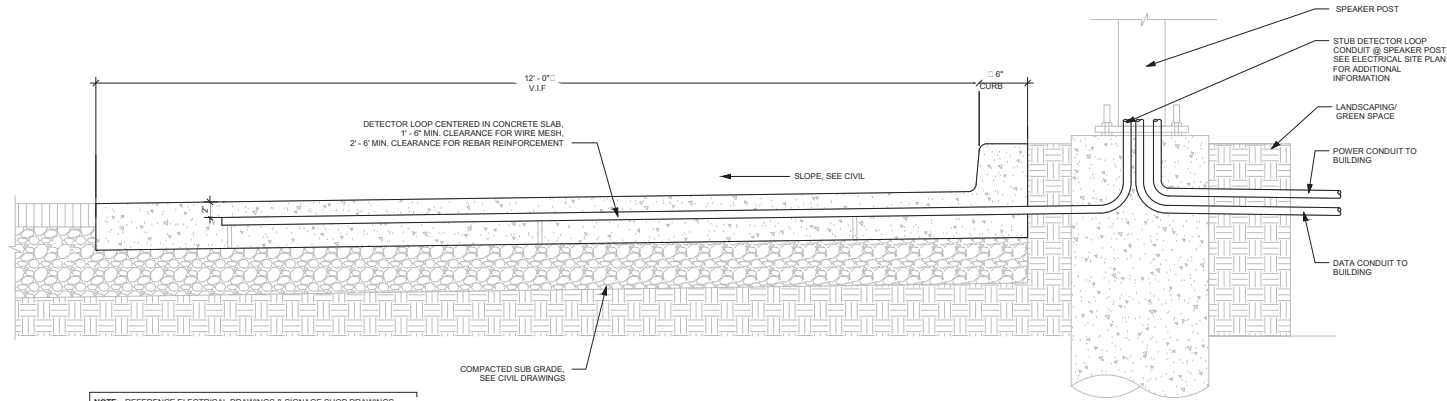


5 DRIVE THRU WINDOW  
Scale: 1/2" = 1'-0"



NOTE: REFERENCE ELECTRICAL DRAWINGS & SIGNAGE SHOP DRAWINGS FOR DETECTOR LOOP INFORMATION & INSTALLATION INSTRUCTIONS.

1 SECTION @ DETECTOR LOOP IN CONCRETE PAD AT DRIVE-THRU WINDOW1  
Scale: 1/16" = 1'-0"



NOTE: REFERENCE ELECTRICAL DRAWINGS & SIGNAGE SHOP DRAWINGS FOR DETECTOR LOOP INFORMATION & INSTALLATION INSTRUCTIONS.

2 SECTION @ DETECTOR LOOP IN CONCRETE PAD AT THE MENU BOARD1  
Scale: 1/16" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

STARBUCKS  
PREPARED FOR  
TOLD  
DEVELOPMENT CO. MN  
EDEN PRAIRIE

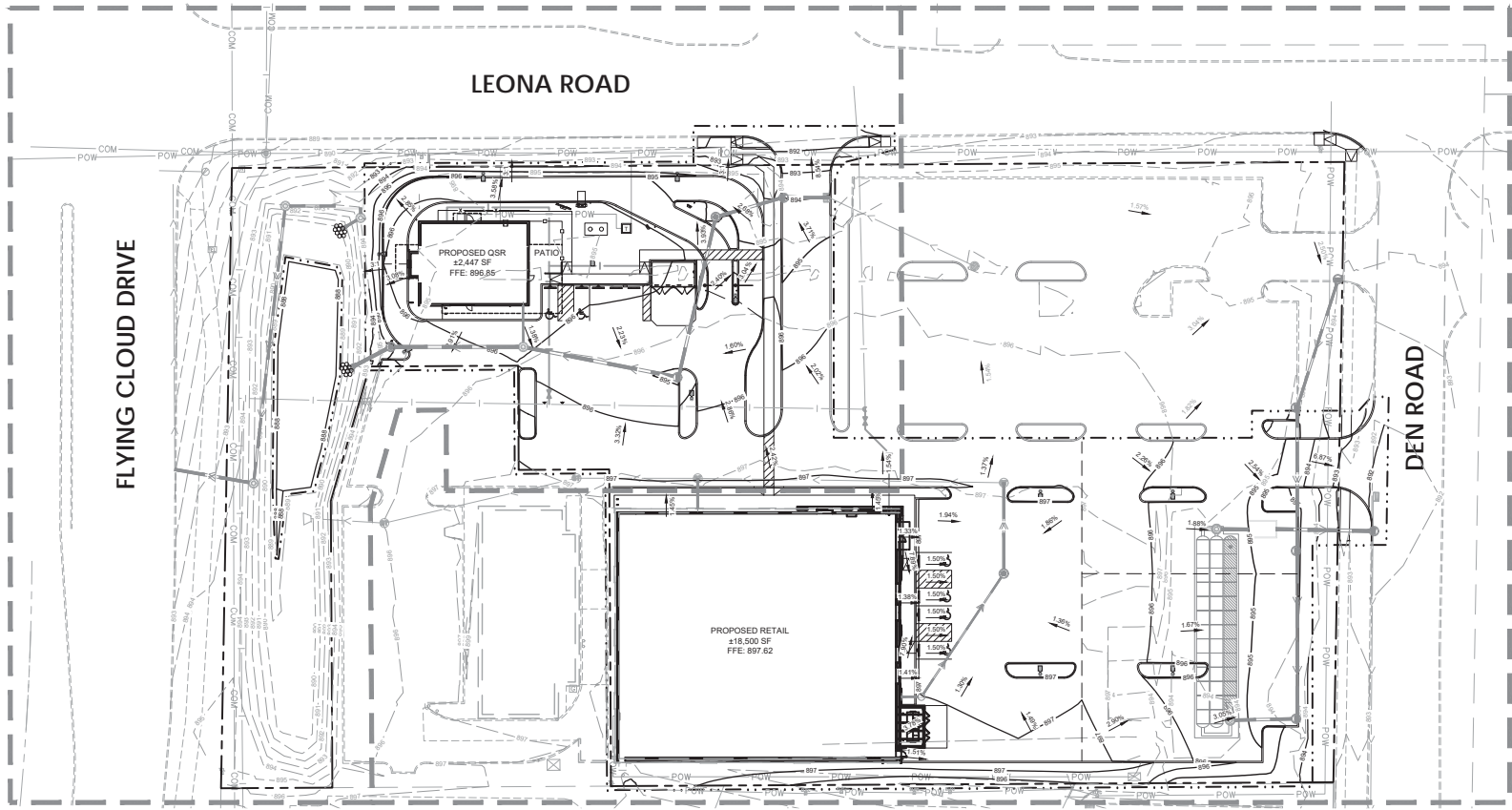
STARBUCKS  
DETAILS

**Kimley-Horn**  
2024 KIMLEY-HORN AND ASSOCIATES, INC.  
1199 SINGLETREE LA SUITE 205 EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

NO.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK

CUT/FILL ANALYSIS	
CUT VOLUME	483 CY
FILL VOLUME	973 CY
<b>NET VOLUME</b>	<b>490 CY FILL</b>

\*\* CUT/FILL ANALYSIS IS APPROXIMATE AND SHOWN FOR REFERENCE ONLY. ANALYSIS NOT TO BE USED IN PROJECT COST ESTIMATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL EARTHWORK. KIMLEY-HORN ASSUMES NO LIABILITY FOR CUT/FILL ANALYSIS.



**LEGEND**

- — — — — PROPERTY LINE
- — — — — EXISTING CONTOUR
- — — — — PROPOSED CONTOUR
- — — — — PROPOSED RIDGE LINE
- — — — — PROPOSED SWALE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM SEWER CLEANOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED FLUSH PAVEMENT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW ELEVATION
- PROPOSED TOP/BOTTOM OF WALL ELEVATION
- PROPOSED DRAINAGE DIRECTION

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

**GRAPHIC SCALE IN FEET**  
0 15 30 60

**NORTH**

PRELIMINARY - NOT FOR CONSTRUCTION

**GRADING PLAN**

**FLYING CLOUD DR & LEONA RD**  
PREPARED FOR  
**TOLD DEVELOPMENT CO. (MN)**

SHEET NUMBER  
**C500**

DESIGNED BY: J. HORN  
CHECKED BY: J. HORN  
DATE: 09/05/2024  
SCALE: AS SHOWN  
DRAWN BY: BSK  
CHECKED BY: BSK  
DATE: 09/05/2024

**Kimley-Horn**  
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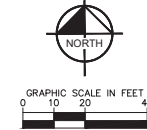
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1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK





**LEGEND**

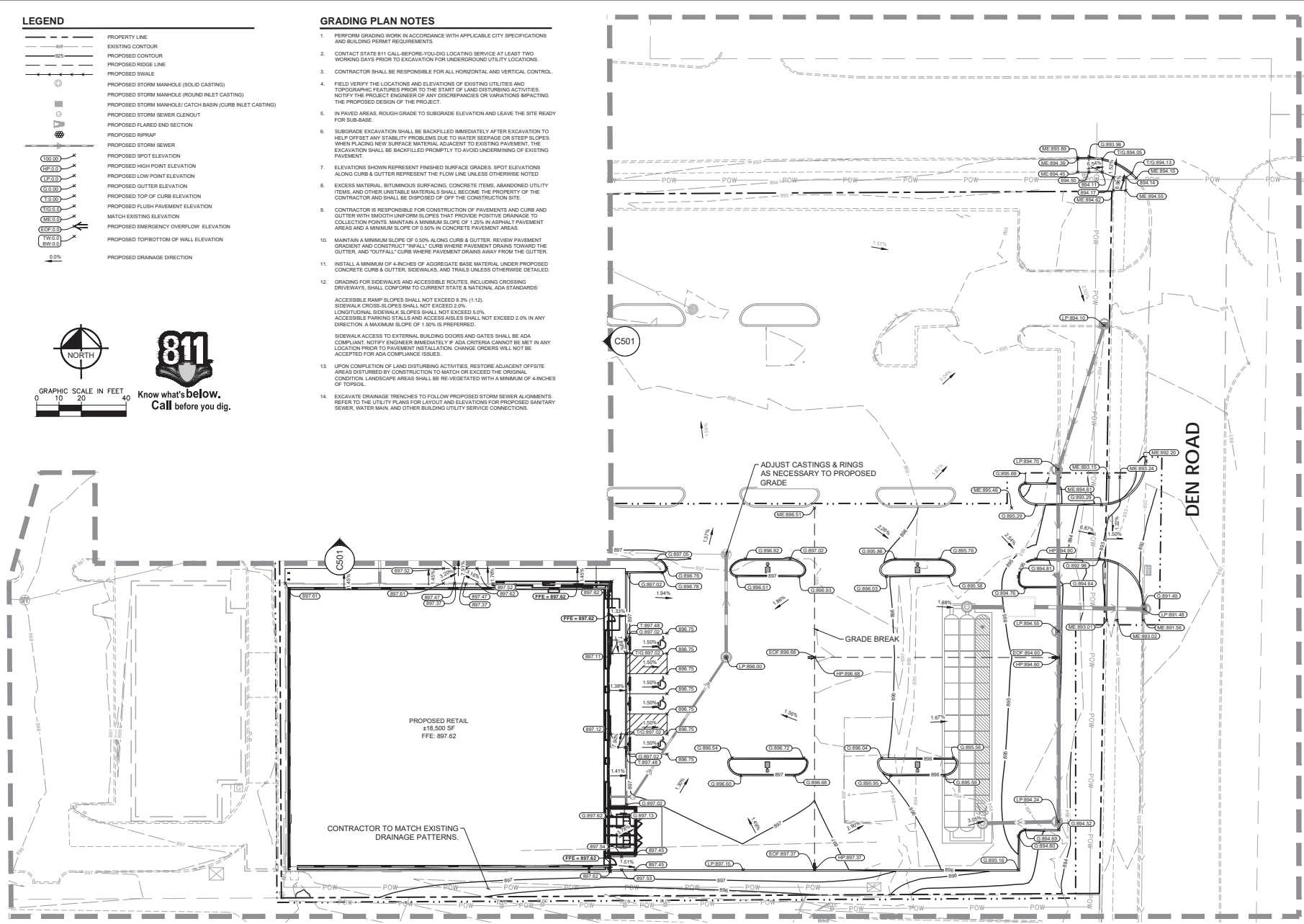
- PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - PROPOSED CONTOUR
- - - - - PROPOSED RIDGE LINE
- - - - - PROPOSED SWALE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLEANOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED FLUSH PAVEMENT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW ELEVATION
- PROPOSED TOPOBOTTOM OF WALL ELEVATION
- PROPOSED DRAINAGE DIRECTION



Call what's below.  
Call before you dig.

**GRADING PLAN NOTES**

1. PERFORM GRADING WORK IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
4. FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF LAND DISTURBING ACTIVITIES. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
5. IN PAVED AREAS, ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE THE SITE READY FOR SUB-BASE.
6. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
7. ELEVATIONS SHOWN REPRESENT FINISHED SURFACE GRADES. SPOT ELEVATIONS ALONG CURB & GUTTER REPRESENT THE FLOW LINE UNLESS OTHERWISE NOTED.
8. EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
9. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTERS WITH SMOOTH UNIFORM SLOPES THAT PROVIDE POSITIVE DRAINAGE TO COLLECTION POINTS. MAINTAIN A MINIMUM SLOPE OF 1.25% IN ASPHALT PAVEMENT AREAS AND A MINIMUM SLOPE OF 0.50% IN CONCRETE PAVEMENT AREAS.
10. MAINTAIN A MINIMUM SLOPE OF 0.50% ALONG CURB & GUTTER. REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL" CURB WHERE PAVEMENT DRAINS TOWARD THE GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM THE GUTTER.
11. INSTALL A MINIMUM OF ANCHORS OF AGGREGATE BASE MATERIAL UNDER PROPOSED CONCRETE CURB & GUTTER, SIDEWALKS, AND TRAILS UNLESS OTHERWISE DETAILED.
12. GRADING FOR SIDEWALKS AND ACCESSIBLE ROUTES, INCLUDING CROSSING DRIVEWAYS, SHALL CONFORM TO CURRENT STATE & NATIONAL ADA STANDARDS:  
 ACCESSIBLE RAMP SLOPES SHALL NOT EXCEED 8.3% (1:12).  
 SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2.0%.  
 LONGITUDINAL SIDEWALK SLOPES SHALL NOT EXCEED 5.0%.  
 ACCESSIBLE PARKING STALLS AND ACCESSIBLES SHALL NOT EXCEED 2.0% IN ANY DIRECTION. A MAXIMUM SLOPE OF 1.50% IS PREFERRED.  
 SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVEMENT INSTALLATION. CHANGE ORDERS WILL NOT BE ACCEPTED FOR ADA COMPLIANCE ISSUES.
13. UPON COMPLETION OF LAND DISTURBING ACTIVITIES, RESTORE ADJACENT OFFSITE AREAS DISTURBED BY CONSTRUCTION TO MATCH OR EXCEED THE ORIGINAL CONDITION. LANDSCAPE AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4-INCHES OF TOPSOIL.
14. EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS. REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS OR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS.



PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD

PREPARED FOR TOLD DEVELOPMENT CO. MN

ENLARGED GRADING PLAN

SHEET NUMBER C502

HWA PROJECT NO.	11/18/2024	11/18/2024	11/18/2024
DATE	09/05/2024	10/29/2024	10/29/2024
SCALE	AS SHOWN	AS SHOWN	AS SHOWN
DRAWN BY	BSK	BSK	BSK
CHECKED BY	MTI	MTI	MTI

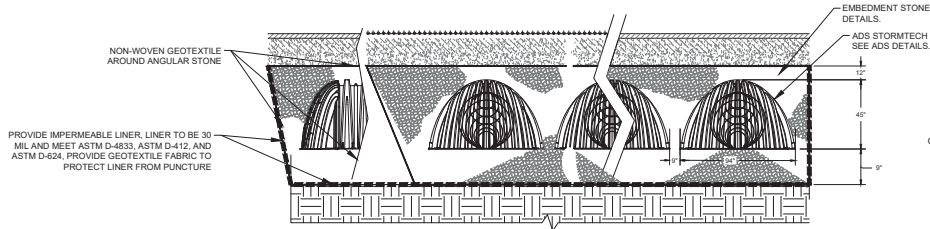
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.  
 1196 SINGLETRREE LANE SUITE 205 EDEN PRAIRIE, MN 55544  
 PHONE: 612-464-4197  
 WWW.KIMLEY-HORN.COM



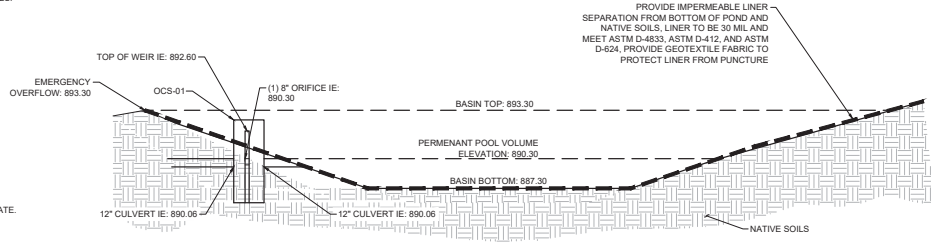




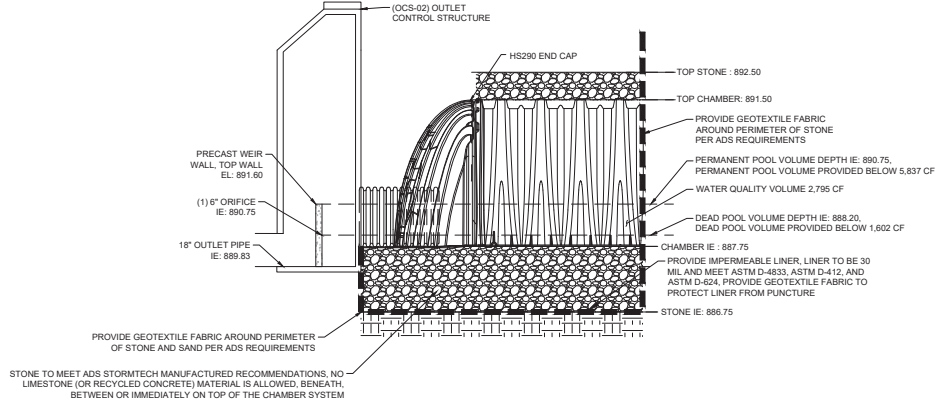
K:\TCW\_LDEV\atbarbus\eden prairie, mn- flying cloud dr & leona rd\3 Design\CAD\plansheets\C5-GRADING DETAILS.dwg November 18, 2024 - 9:38am  
 This document, together with the concepts and designs presented herein, is an intended part of a contract. It is intended only for the specific purpose and client for which it was prepared. Release of all temporary releases on this document without authorization and substitution by Kimley-Horn and Associates, Inc. shall be the responsibility of the recipient and its Association, Inc.



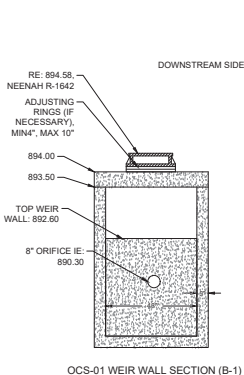
NOTES:  
 1. THE CONTRACTOR SHALL TAKE CARE TO PREVENT SEDIMENT AND DEBRIS FROM CLOGGING THE PORE SPACE IN THE COARSE FILTER AGGREGATE.  
**TYPICAL SECTION - ADS STORMTECH MC-3500 - DETENTION**



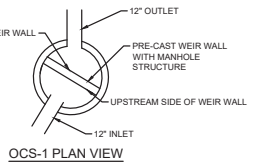
**DETENTION BASIN TYPICAL SECTION (B-1)**  
 N.T.S.



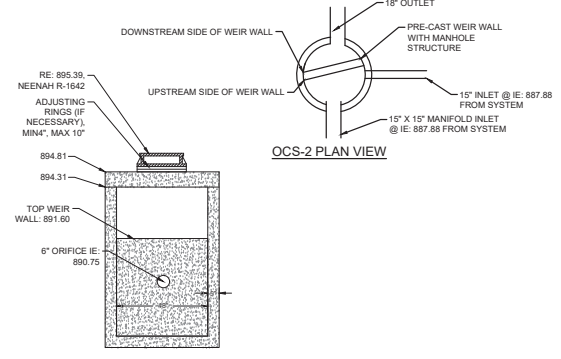
**TYPICAL SECTION - ADS STORMTECH MC-3500 - DETENTION**



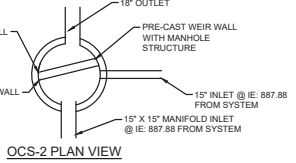
OCS-01 WEIR WALL SECTION (B-1)



OCS-1 PLAN VIEW



OCS-02 WEIR WALL SECTION (B-2)



OCS-2 PLAN VIEW

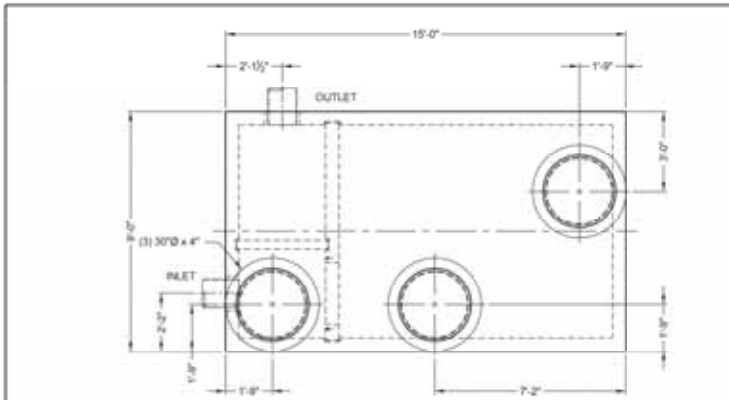
NO.	DATE	BY
1	11/18/2024	BSK
2	10/29/2024	BSK
3	10/29/2024	BSK

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 PHONE: 612-464-4197  
 WWW.KIMLEY-HORN.COM

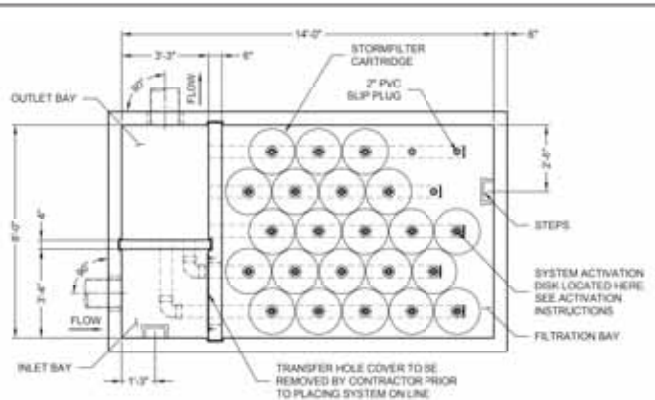
NO.	DATE	BY	MTI
1	09/05/2024	BSK	MTI
2	09/05/2024	BSK	MTI

**GRADING AND STORM SEWER DETAILS**

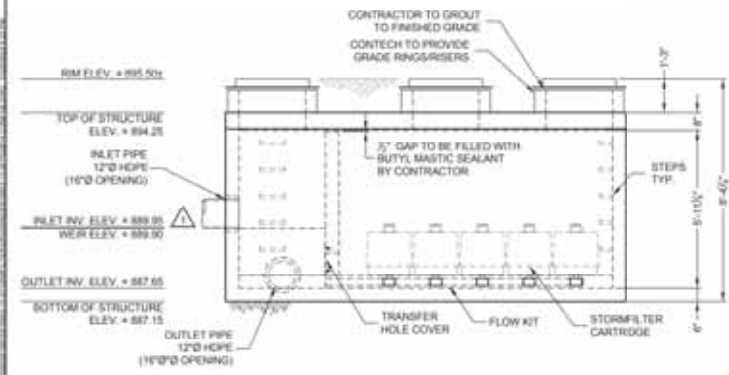
PRELIMINARY - NOT FOR CONSTRUCTION  
**FLYING CLOUD DR & LEONA RD**  
 PREPARED FOR  
**TOLD DEVELOPMENT CO.**  
 EDEN PRAIRIE, MN



PLAN VIEW



PLAN VIEW (TOP SLAB NOT SHOWN)



ELEVATION VIEW

MATERIAL LIST - PROVIDED BY CONTECH

COUNT	DESCRIPTION	INSTALLED BY
22	18" PHOSPHOSORB CARTRIDGE	CONTECH
25	RESTRICTOR DISK (RED), 12.53 GPM	CONTECH
3	2" PVC SLP PLUG	CONTECH
1	FLOW KIT (811)	CONTECH
1	36" x 14" TRANSFER HOLE COVER	CONTECH
1	JOINT SEALANT	CONTRACTOR
3 P/CS	GRADE RINGS/RISERS	CONTRACTOR
3	30\"/>	

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.62 CFS
PEAK FLOW RATE	0.94 CFS
RETURN PERIOD OF PEAK FLOW	100 YRS
FILTER MEDIA TYPE	PHOSPHOSORB

**PERFORMANCE SPECIFICATION**  
 FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. **RADIAL MEDIA DEPTH SHALL BE 7 INCHES.** FILTER MEDIA CONTACT TIME SHALL BE AT LEAST **30 SECONDS.** SPECIFIC FLOW RATE SHALL BE **2 GPM/CF (MAXIMUM).** SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE **6 GPM/CF OF MEDIA (MAXIMUM).**

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
  - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE: [www.ContechES.com](http://www.ContechES.com)
  - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
  - STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 2' - 8" AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
  - STORMFILTER STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING WITH ASTM C457 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
  - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.
  - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
  - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
  - CONTRACTOR TO REMOVE THE TRANSFER HOLE COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

**STRUCTURE WEIGHT**  
 APPROXIMATE HEAVIEST PICK = 44000 LBS OF 2 PIECES  
 BASE SECTION SHIPPED WITH CARTRIDGES INSTALLED  
 MAX FOOTPRINT = 9.00' x 15.00'

CONTECH  
 CONTRACT  
 DRAWING

WES-MR  
 5883 / 454041  
 LAYOUT #  
 CLASS 809

**CONTECH**  
 ENGINEERED SOLUTIONS LLC  
 10000 13th Avenue S, Suite 100, Eden Prairie, MN 55347  
 (952) 461-1000  
[www.conteches.com](http://www.conteches.com)

**StormFilter**  
 The Innovation in Stormwater Management

PROJECT: STORMFILTER PEAK DIVERSION SPP0818  
 816953-010  
 FLYING CLOUD DR & LEONA RD  
 EDEN PRAIRIE, MN  
 FOR SYSTEM: CONTECH STORMFILTER (WEST)

DATE: 10/09/24  
 DESIGNED BY: WPC  
 CHECKED BY: WPC  
 DRAWN BY: WPC  
 SCALE: AS SHOWN  
 SHEET: C1 OF 1

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR  
 & LEONA RD  
 PREPARED FOR  
 TOLD  
 DEVELOPMENT CO. (MN)  
 EDEN PRAIRIE

GRADING AND  
 STORM SEWER  
 DETAILS

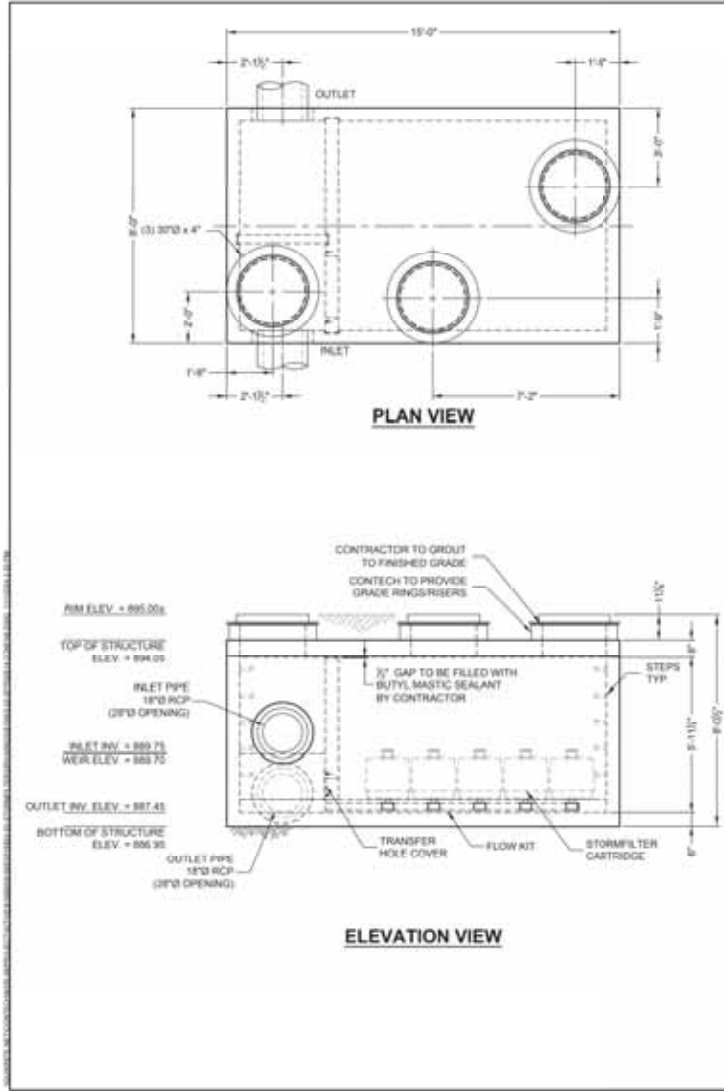
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DATE: 09/05/2024  
 DRAWN BY: BSK  
 CHECKED BY: MTI

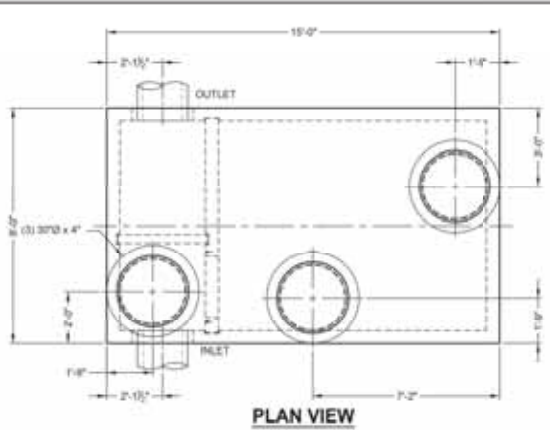
**Kimley-Horn**  
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 1196 SINGLETREE LAUREL SUITE 205 EDEN PRAIRIE, MN 55344  
 PHONE: 612-464-1197  
 WWW.KIMLEY-HORN.COM

NO.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK

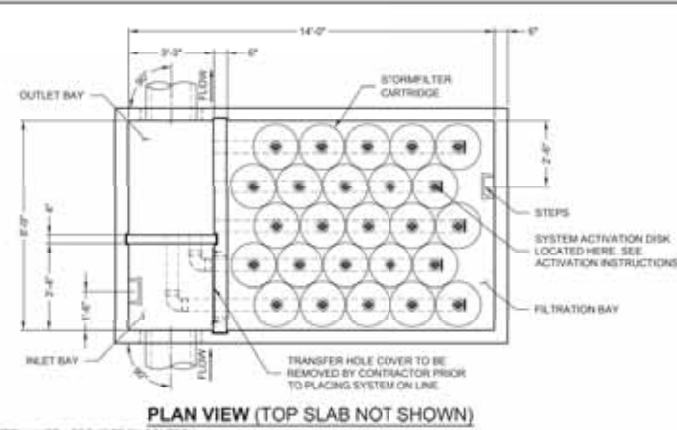
SHEET NUMBER  
**C506**



**ELEVATION VIEW**



**PLAN VIEW**



**PLAN VIEW (TOP SLAB NOT SHOWN)**

**MATERIAL LIST - PROVIDED BY CONTECH**

COUNT	DESCRIPTION	INSTALLED BY
25	18" PHOSPHORUS CARTRIDGE	CONTECH
25	RESTRICTOR DISK (RED), 12.53 GPM	CONTECH
0	2" PVC SLIP PLUGS	CONTECH
1	FLOW KIT (BTR)	CONTECH
1	36" x 14" TRANSFER HOLE COVER	CONTECH
1	JOINT SEALANT	CONTRACTOR
3	PLCS	CONTRACTOR
3	30" x 4" FRAME AND COVER, EJ #41800483, OR EQUIV.	CONTRACTOR
8	STEPS, P10CTS LANE LADDER, OR EQUIVALENT	CONTECH
1	STORMFILTER ACTIVATION DISK	CONTECH

**SITE DESIGN DATA**

WATER QUALITY FLOW RATE	0.89 CFS
PEAK FLOW RATE	10.43 CFS
RETURN PERIOD OF PEAK FLOW	100 YRS
FILTER MEDIA TYPE	PHOSPHORUS

**PERFORMANCE SPECIFICATION**  
 FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SPINON ACTIVATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 3 SECONDS. SPECIFIC FLOW RATE SHALL BE 2 GPM/SF (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE 8 GPM/CY OF MEDIA (MAXIMUM).

**GENERAL NOTES**

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR FABRICATION DIMENSIONS WITH ER TAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEER SOLUTIONS LLC REPRESENTATIVE. [www.contechES.com](http://www.contechES.com)
- STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO M8-20 LOAD RATING, ASSUMING EARTH COVER OF 2'-5" AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M206 AND BE CAST WITH THE CONTECH LOAD.
- STORMFILTER STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING WITH ASTM C-857 AND AASHTO LOAD FACTOR DESIGN METHOD.

**INSTALLATION NOTES**

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- CONTRACTOR TO REMOVE THE TRANSFER HOLE COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

**STRUCTURE WEIGHT**

APPROXIMATE HEAVIEST PICK = 43600 LBS OF 2 PIECES  
 BASE SECTION SHIPPED WITH CARTRIDGES INSTALLED

MAX FOOTPRINT = 9.00' x 15.00'



WES-ARR  
 583 / 454-11  
 LAYOUT 6  
 CLASS 600



DATE	11/01/24
DESIGNED BY	WPC
CHECKED BY	TNT
PROJECT NO.	816963
DATE PLOTTED	11/18/2024
SCALE	AS SHOWN
DRAWN BY	WPC
CHECKED BY	WPC
SHEET	C1
OF	1

STORMFILTER PEAK DIVERSION SFPD0814  
 816963-020  
 FLYING CLOUD DR & LEONA RD  
 EDEN PRAIRIE, MN  
 for SYSTEM: CONTECH STORMFILTER (CAST)

NO.	DATE	BY	REVISIONS
1	11/18/2024	BSK	WATERSHED COMMENTS
2	10/28/2024	BSK	WATERSHED COMMENTS
3	10/28/2024	BSK	WATERSHED COMMENTS

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD  
 PREPARED FOR  
 TOLD  
 DEVELOPMENT CO. MN

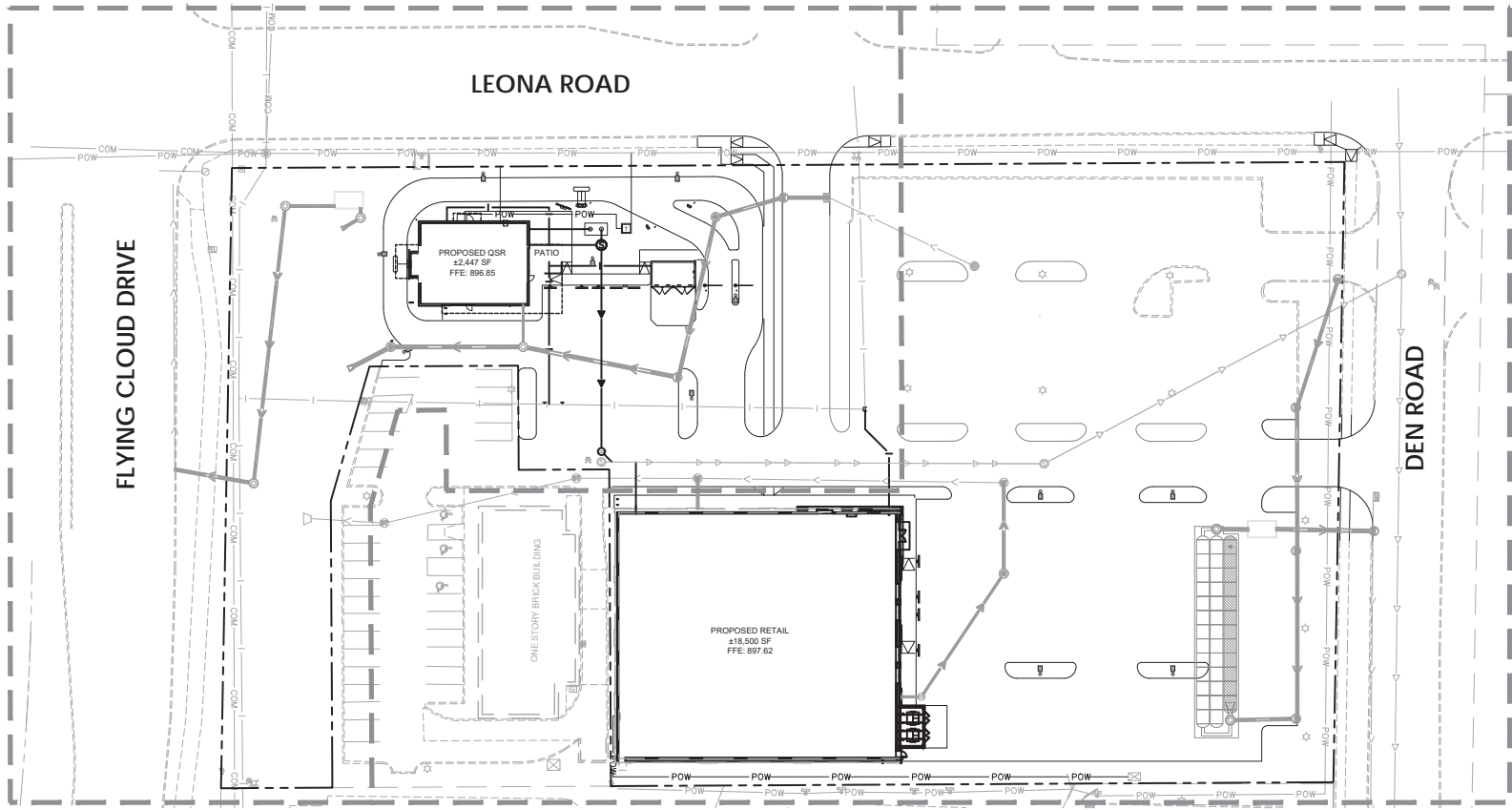
GRADING AND  
 STORM SEWER  
 DETAILS

DESIGNED BY: WPC  
 CHECKED BY: TNT  
 DATE: 09/05/2024  
 SCALE: AS SHOWN  
 DRAWN BY: BSK  
 CHECKED BY: BSK  
 DATE: 09/05/2024

**Kimley-Horn**  
 2024 KIMLEY-HORN ASSOCIATES, INC.  
 1196 SINGLETREE LA SUITE 205 EDEN PRAIRIE, MN 55344  
 PHONE: 612-464-1197  
 WWW.KIMLEY-HORN.COM

NO.	DATE	BY	REVISIONS
1	11/18/2024	BSK	WATERSHED COMMENTS
2	10/28/2024	BSK	WATERSHED COMMENTS
3	10/28/2024	BSK	WATERSHED COMMENTS

SHEET NUMBER  
**C507**



**LEGEND**

EXISTING	PROPOSED	
— — —	— — —	GATE VALVE
— — —	— — —	HYDRANT
— — —	— — —	REDUCER
— — —	— — —	TEE
— — —	— — —	SANITARY SEWER MANHOLE
— — —	— — —	SANITARY CLEANOUT
— — —	— — —	WATER MAIN
— — —	— — —	SANITARY SEWER
— — —	— — —	STORM SEWER
— — —	— — —	UNDERGROUND ELECTRIC
— — —	— — —	TELEPHONE
— — —	— — —	GAS MAIN

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

GRAPHIC SCALE IN FEET  
0 15 30 60

PRELIMINARY - NOT FOR CONSTRUCTION

**UTILITY PLAN**

FLYING CLOUD DR  
& LEONA RD  
PREPARED FOR  
TOLD  
DEVELOPMENT CO. (MN)

SHEET NUMBER  
**C600**

DESIGNED BY: JAMES W. HORN  
CHECKED BY: JAMES W. HORN  
DATE: 09/05/2024  
SCALE: AS SHOWN  
DRAWN BY: BSK  
CHECKED BY: BSK  
DATE: 09/05/2024  
MTI: JWH

**Kimley-Horn**  
2024 KIMLEY-HORN ASSOCIATES, INC.  
1199 SINGLE TREE LAUREL SUITE 205 EDEN PRAIRIE, MN 55344  
PHONE: 612-464-1199  
WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK

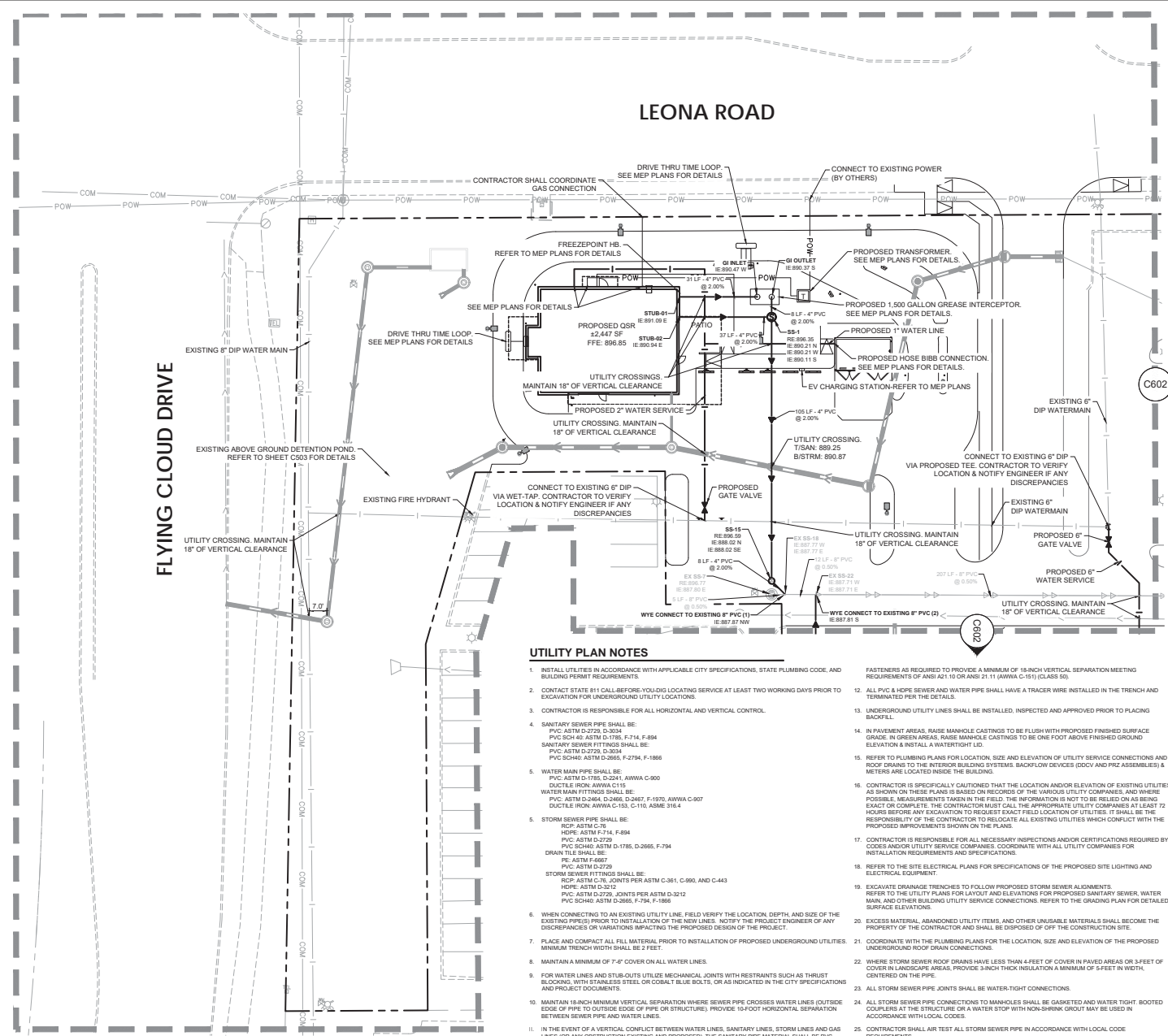


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# LEONA ROAD

## FLYING CLOUD DRIVE



### LEGEND

EXISTING	PROPOSED	DESCRIPTION
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		SANITARY SEWER
		STORM SEWER
		UNDERGROUND ELECTRIC
		TELEPHONE
		GAS MAIN

### UTILITY PLAN NOTES

- INSTALL UTILITIES IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS, STATE PLUMBING CODE, AND BUILDING PERMIT REQUIREMENTS.
- CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- SANITARY SEWER PIPE SHALL BE:  
PVC ASTM D-2729 D-3034  
PVC SCH 40 ASTM D-1785 F-714 F-884  
SANITARY SEWER FITTINGS SHALL BE:  
PVC ASTM D-2729 D-3034  
PVC SCH40 ASTM D-2665 F-794 F-1866
- WATER MAIN PIPE SHALL BE:  
PVC ASTM D-1785 D-2411 AWWA C-900  
DUCTILE IRON AWWA C-115  
WATER MAIN FITTINGS SHALL BE:  
PVC ASTM D-2464 D-2466 D-2467 F-1970 AWWA C-907  
DUCTILE IRON AWWA C-153 C-110 AISEM 318.4
- STORM SEWER PIPE SHALL BE:  
PVC ASTM D-2729  
HOPE ASTM F-714 F-884  
PVC SCH40 ASTM D-1785 D-2665 F-794  
DRAIN TILE SHALL BE:  
PE ASTM F-887  
PVC ASTM D-2729  
STORM SEWER FITTINGS SHALL BE:  
PVC ASTM SCH40 JOINTS PER ASTM C-361 C-360, AND C-443  
HOPE ASTM D-3212  
PVC ASTM D-2729 JOINTS PER ASTM D-3212  
PVC SCH40 ASTM D-2665 F-794 F-1866
- WHEN CONNECTING TO AN EXISTING UTILITY LINE, FIELD VERIFY THE LOCATION, DEPTH, AND SIZE OF THE EXISTING (PIPS) PRIOR TO INSTALLATION OF THE NEW LINES. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
- PLACE AND COMPACT ALL FILL MATERIAL PRIOR TO INSTALLATION OF PROPOSED UNDERGROUND UTILITIES. UNDERGROUND TRENCH WIDTH SHALL BE 2 FEET.
- MAINTAIN A MINIMUM OF 7" COVER ON ALL WATER LINES.
- FOR WATER LINES AND SUB-ROUTS UTILIZE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR CORAL BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
- MAINTAIN 18-INCH MINIMUM VERTICAL SEPARATION WHERE SEWER PIPE CROSSES WATER LINES (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE). PROVIDE 14" FOOT HORIZONTAL SEPARATION BETWEEN SEWER PIPE AND WATER LINES.
- IN THE EVENT OF A VERTICAL CONTACT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (OR ANY OBSTRUCTION EXISTING AND PROPOSED), THE SANITARY PIPE MATERIAL SHALL BE PVC SCHEDULE 40 OR PVC C900 AND HAVE MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18-INCH VERTICAL SEPARATION MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI Z111 (AWWA C-151) (CLASS 50).
- ALL PVC & HOPE SEWER AND WATER PIPE SHALL HAVE A TRACER WIRE INSTALLED IN THE TRENCH AND TERMINATED PER THE DETAILS.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO PLACING BACKFILL.
- IN PAVEMENT AREAS, RAISE MANHOLE CASTINGS TO BE FLUSH WITH PROPOSED FINISHED SURFACE GRADE. IN GREEN AREAS, RAISE MANHOLE CASTINGS TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATION & INSTALL A WATERTIGHT LID.
- REFER TO PLUMBING PLANS FOR LOCATION, SIZE AND ELEVATION OF UTILITY SERVICE CONNECTIONS AND ROOF DRAINS TO THE INTERIOR BUILDING SYSTEMS, BACKFLOW DEVICES (DDCV AND PWC ASSEMBLIES) & METERS ARE LOCATED INSIDE THE BUILDING.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- REFER TO THE SITE ELECTRICAL PLANS FOR SPECIFICATIONS OF THE PROPOSED SITE LIGHTING AND ELECTRICAL EQUIPMENT.
- EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS. REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS FOR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS. REFER TO THE GRADING PLAN FOR DETAILED SURFACE ELEVATIONS.
- EXCESS MATERIAL, ABANDONED UTILITY ITEMS, AND OTHER UNUSABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
- COORDINATE WITH THE PLUMBING PLANS FOR THE LOCATION, SIZE AND ELEVATION OF THE PROPOSED UNDERGROUND ROOF DRAIN CONNECTIONS.
- WHERE STORM SEWER ROOF DRAINS HAVE LESS THAN 4 FEET OF COVER IN PAVED AREAS OR 3 FEET OF COVER IN LANDSCAPE AREAS, PROVIDE 3-INCH THICK INSULATION A MINIMUM OF FEET IN WIDTH, CENTERED ON THE PIPE.
- ALL STORM SEWER PIPE JOINTS SHALL BE WATER-TIGHT CONNECTIONS.
- ALL STORM SEWER PIPE CONNECTIONS TO MANHOLES SHALL BE GASKETED AND WATER TIGHT. BOOTED COUPLERS AT THE STRUCTURE OR A WATER STOP WITH NON-SHRINK GROUT MAY BE USED IN ACCORDANCE WITH LOCAL CODES.
- CONTRACTOR SHALL AIR TEST ALL STORM SEWER PIPE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.

**811**  
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**Kimley-Horn**  
2024 KIMLEY-HORN ASSOCIATES, INC.  
1196 SINGLE TREE LANE SUITE 205 EDEN PRAIRIE, MN 55344  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

**ENLARGED UTILITY PLAN**  
PRELIMINARY - NOT FOR CONSTRUCTION  
FLYING CLOUD DR & LEONA RD  
PREPARED FOR TOLD DEVELOPMENT CO. (MN)  
EDEN PRAIRIE

NO.	DATE	BY
1	11/18/2024	BSK
2	10/29/2024	BSK
3	10/29/2024	BSK

DATE: 11/18/2024  
TIME: 12:28 PM  
SHEET NUMBER: C601

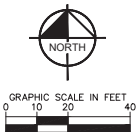
K:\ITCW\_LDE\atbarbus\eden prairie, mn - flying cloud dr & leona rd\3 Design\CAD\plansheets\C6-UTILITY PLAN.dwg November 18, 2024 - 9:39am

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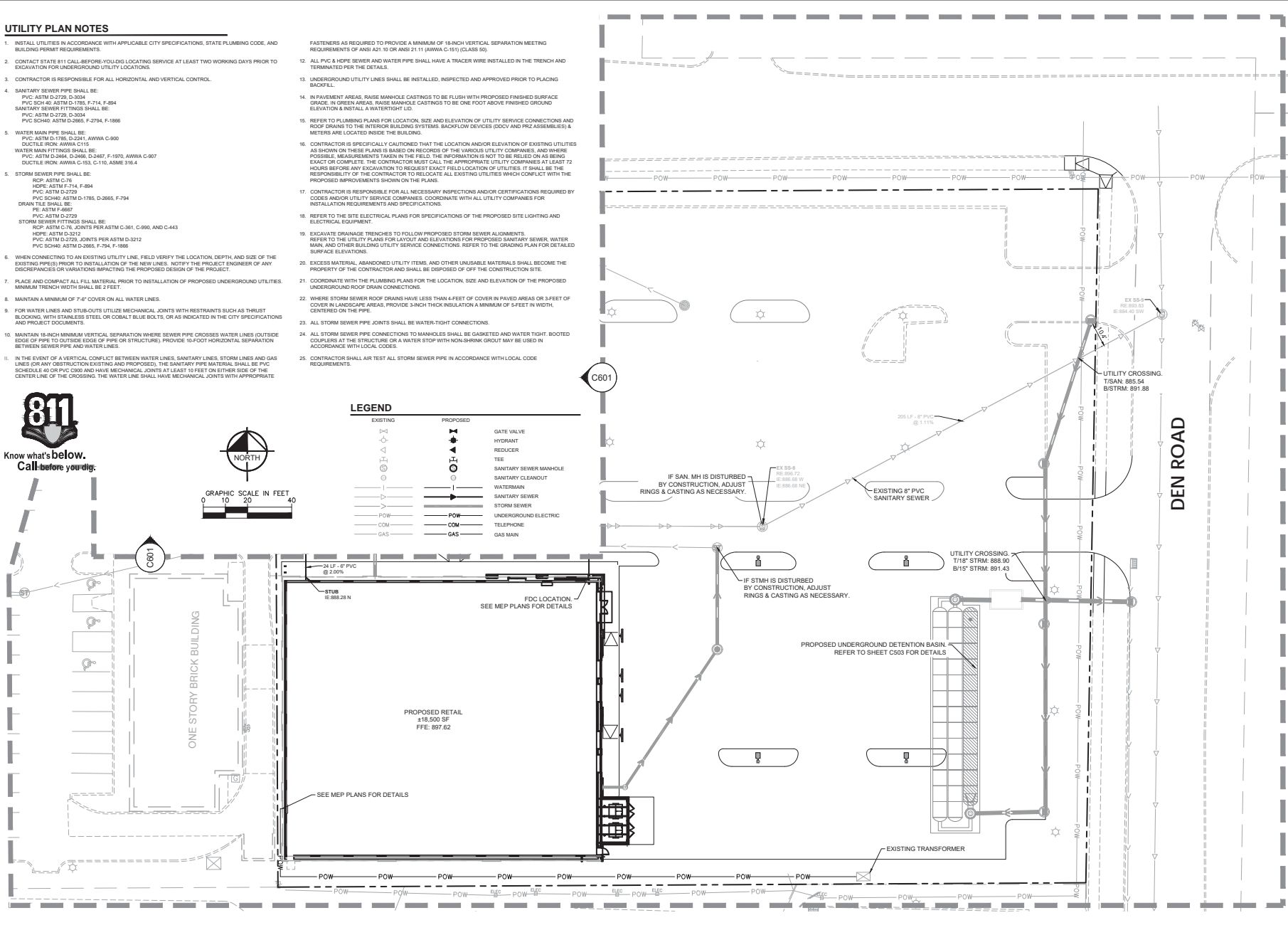
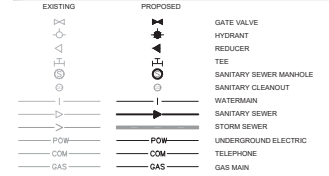
**UTILITY PLAN NOTES**

- INSTALL UTILITIES IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS, STATE PLUMBING CODE, AND BUILDING PERMIT REQUIREMENTS.
- CONTACT STATE 811 CALL BEFORE YOU DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- SANITARY SEWER PIPE SHALL BE:**  
PVC ASTM D-2729, D-3034  
PVC SCH 40 ASTM D-1785, F-714, F-894  
**SANITARY SEWER FITTINGS SHALL BE:**  
PVC ASTM D-2729, D-3034  
PVC SCH 40 ASTM D-2865, F-2794, F-1866
- WATER MAIN PIPE SHALL BE:**  
PVC ASTM D-1785, D-2241, AWWA C-900  
**DUCTILE IRON AWWA C-115**  
**WATER MAIN FITTINGS SHALL BE:**  
PVC ASTM D-2864, D-2868, D-3487, F-1970, AWWA C-907  
**DUCTILE IRON AWWA C-153, C-110, ASME 316.4**
- STORM SEWER PIPE SHALL BE:**  
RCP ASTM D-718  
HOPE ASTM F-714, F-894  
PVC ASTM D-2729  
PVC SCH 40 ASTM D-1785, D-2865, F-714  
**DRAIN TILE SHALL BE:**  
PE ASTM F-6667
- STORM SEWER FITTINGS SHALL BE:**  
RCP ASTM C-118, JOINTS PER ASTM C-391, C-990, AND C-443  
HOPE ASTM D-3212  
PVC ASTM D-2729, JOINTS PER ASTM D-3212  
PVC SCH 40 ASTM D-2865, F-714, F-1866
- WHEN CONNECTING TO AN EXISTING UTILITY LINE, FIELD VERIFY THE LOCATION, DEPTH, AND SIZE OF THE EXISTING PIPE(S) PRIOR TO INSTALLATION OF THE NEW LINES. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
- PLACE AND COMPACT ALL FILL MATERIAL PRIOR TO INSTALLATION OF PROPOSED UNDERGROUND UTILITIES. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- MAINTAIN A MINIMUM OF 7'-0" COVER ON ALL WATER LINES.
- FOR WATER LINES AND STUB-OUTS UTILIZE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
- MAINTAIN 18-INCH MINIMUM VERTICAL SEPARATION WHERE SEWER PIPE CROSSES WATER LINES (OUTSIDE SIDE OF PIPE TO OUTSIDE SIDE OF PIPE OR STRUCTURE), PROVIDE 18-FOOT HORIZONTAL SEPARATION BETWEEN SEWER PIPE AND WATER LINES.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (OR ANY OBSTRUCTION EXISTING AND PROPOSED), THE SANITARY PIPE MATERIAL SHALL BE PVC SCHEDULE 40 OR PVC COM AND HAVE MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE

- FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18-INCH VERTICAL SEPARATION MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI Z11.1 (AWWA C-151) (CLASS 50).
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- IN PAVEMENT AREAS, RAISE MANHOLE CASTINGS TO BE FLUSH WITH PROPOSED FINISHED SURFACE GRADE. IN GREEN AREAS, RAISE MANHOLE CASTINGS TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATION & INSTALL A WATER TIGHT LID.
- REFER TO PLUMBING PLANS FOR LOCATION, SIZE AND ELEVATION OF UTILITY SERVICE CONNECTIONS AND ROOF DRAINS TO THE INTERIOR BUILDING SYSTEMS, BACKFLOW DEVICES (DCCV AND PRZ ASSEMBLIES) & METERS ARE LOCATED INSIDE THE BUILDING.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
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- REFER TO THE SITE ELECTRICAL PLANS FOR SPECIFICATIONS OF THE PROPOSED SITE LIGHTING AND ELECTRICAL EQUIPMENT.
- EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS. REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS FOR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS. REFER TO THE GRADING PLAN FOR DETAILED SURFACE ELEVATIONS.
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- COORDINATE WITH THE PLUMBING PLANS FOR THE LOCATION, SIZE AND ELEVATION OF THE PROPOSED UNDERGROUND ROOF DRAIN CONNECTIONS.
- WHERE STORM SEWER ROOF DRAINS HAVE LESS THAN 4 FEET OF COVER IN PAVED AREAS OR 3 FEET OF COVER IN LANDSCAPE AREAS, PROVIDE 3-INCH THICK INSULATION A MINIMUM OF 5-FEET IN WIDTH, CENTERED ON THE PIPE.
- ALL STORM SEWER PIPE JOINTS SHALL BE WATER-TIGHT CONNECTIONS.
- WHERE STORM SEWER PIPE CONNECTIONS TO MANHOLES SHALL BE GASKETED AND WATER TIGHT. BROTTED COUPLERS AT THE STRUCTURE OR A WATER STOP WITH NON-SHRINK GROUT MAY BE USED IN ACCORDANCE WITH LOCAL CODES.
- CONTRACTOR SHALL AIR TEST ALL STORM SEWER PIPE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.



**LEGEND**



**PRELIMINARY - NOT FOR CONSTRUCTION**

**Flying Cloud Dr & Leona Rd**

**ENLARGED UTILITY PLAN**

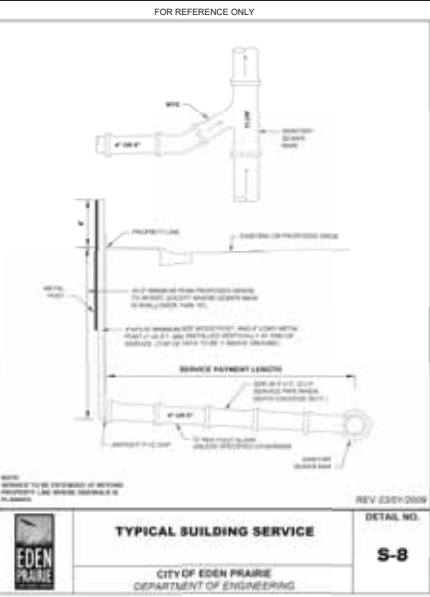
**TOLD DEVELOPMENT CO.**

**Kimley-Horn & Associates, Inc.**  
200 KIMLEY-HORN ASSOCIATES, INC.  
1100 SINGLETREE LANE SUITE 205, EDEN PRAIRIE, MN 55344  
PHONE: 612-464-1197  
WWW.KIMLEY-HORN.COM

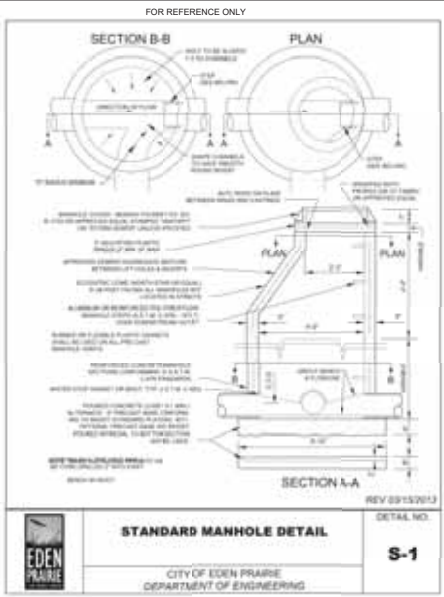
NO.	DATE	BY	REVISIONS
1	11/18/2024	BSK	WATERSHED COMMENTS
2	10/29/2024	BSK	WATERSHED COMMENTS
3	10/29/2024	BSK	WATERSHED COMMENTS

DATE: 12/26/2024  
MTL: 12295

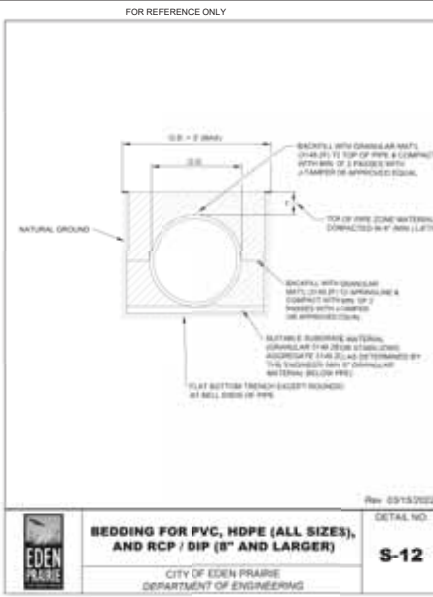
SHEET NUMBER: **C602**



1 STANDARD DETAIL SCALE: NTS



2 STANDARD DETAIL SCALE: NTS



3 STANDARD DETAIL SCALE: NTS

PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR  
& LEONA RD  
PREPARED FOR  
TOLD  
DEVELOPMENT CO.  
EDEN PRAIRIE, MN

SHEET NUMBER  
**C603**

**UTILITY DETAILS**

MM PROJECT  
DATE: 09/05/2024  
SCALE: AS SHOWN  
DESIGNED BY: BSK  
DRAWN BY: BSK  
CHECKED BY: MTL

DESIGNED BY: BSK  
CHECKED BY: MTL  
DATE: 09/05/2024  
SCALE: AS SHOWN  
DRAWN BY: BSK  
PROJECT NO.: 200000000  
SHEET NO.: 1295




**Kimley-Horn**  
2024 KIMLEY-HORN ASSOCIATES, INC.  
1199 SINGLE TREE LANE SUITE 205, EDEN PRAIRIE, MN 55344  
PHONE: 612-464-1199  
WWW.KIMLEY-HORN.COM

WATERSHED COMMENTS	11/18/2024	BSK
WATERSHED COMMENTS	10/29/2024	BSK
WATERSHED COMMENTS	10/09/2024	BSK
REVISIONS	DATE	BY
No.		

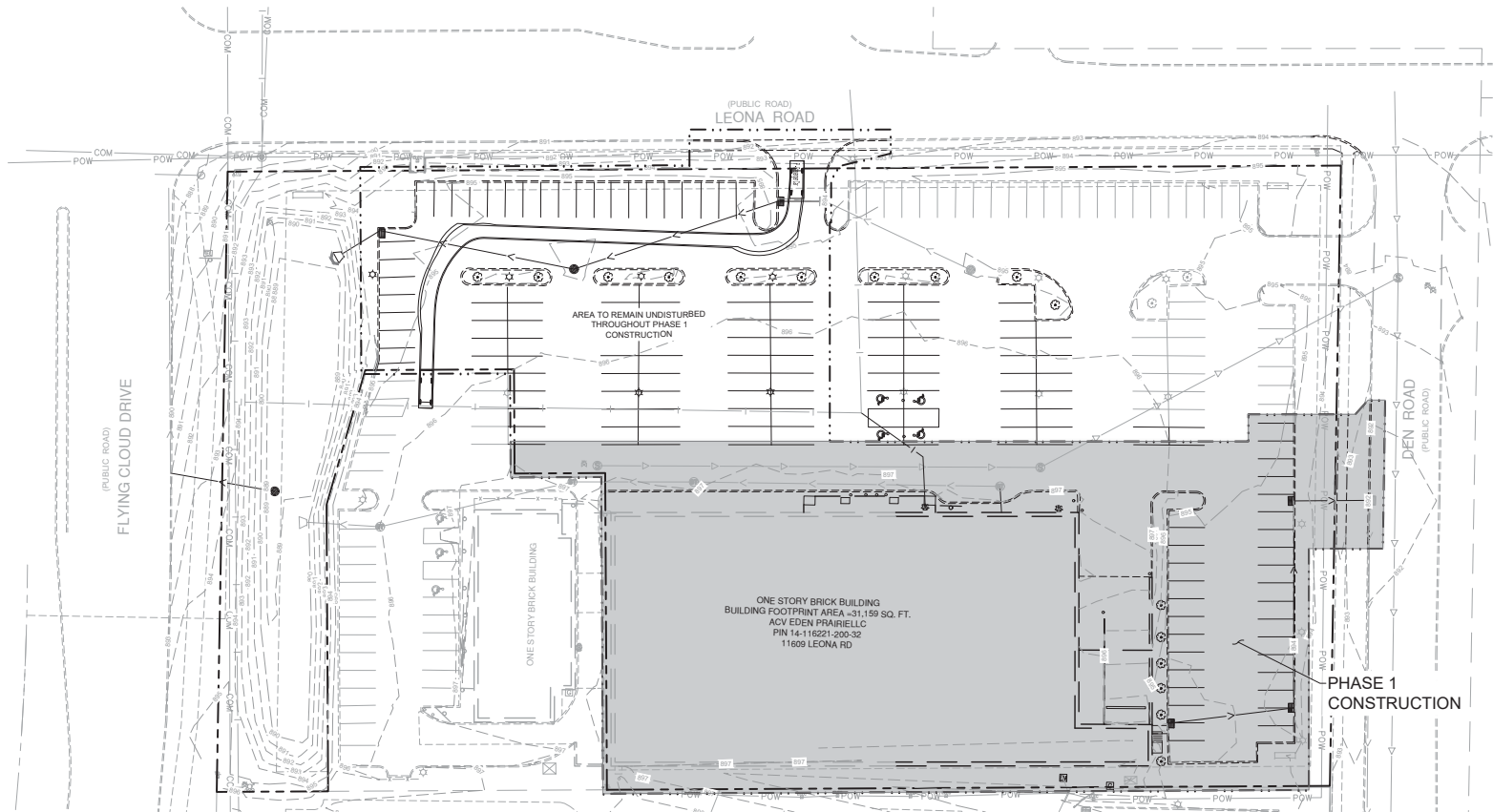
K:\ITCW\_LDEV\atbarbus\eden prairie, mn- flying cloud dr & leona rd\3 Design\CAD\plansheets\CONSTRUCTION PHASING PLAN - PH 1.dwg November 18, 2024 - 9:38am

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**LEGEND**

	CONSTRUCTION PHASE 1
	PROPERTY LINE
	LIMITS OF DISTURBANCE

**CONSTRUCTION PHASING NOTE**  
 CONSTRUCTION PHASING PLAN IS APPROXIMATE AND SHOWN FOR REFERENCE ONLY. CONTRACTOR TO BE RESPONSIBLE FOR ALL CONSTRUCTION PHASE PLANNING, DETAILS, & COORDINATION. KIMLEY-HORN ASSUMES NO LIABILITY FOR CONSTRUCTION PHASING.



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 Know what's below.  
 Call before you dig.

  
 NORTH

GRAPHIC SCALE IN FEET  
 0 15 30 60

PRELIMINARY - NOT FOR CONSTRUCTION

**CONSTRUCTION PHASING PLAN - PHASE 1**

FLYING CLOUD DR & LEONA RD  
 PREPARED FOR TOLD DEVELOPMENT CO., MN

SHEET NUMBER C700

**Kimley-Horn**  
 2024 KIMLEY-HORN AND ASSOCIATES, INC.  
 1199 SINGLETREE LANE SUITE 205 EDEN PRAIRIE, MN 55344  
 PHONE: 612-464-1197  
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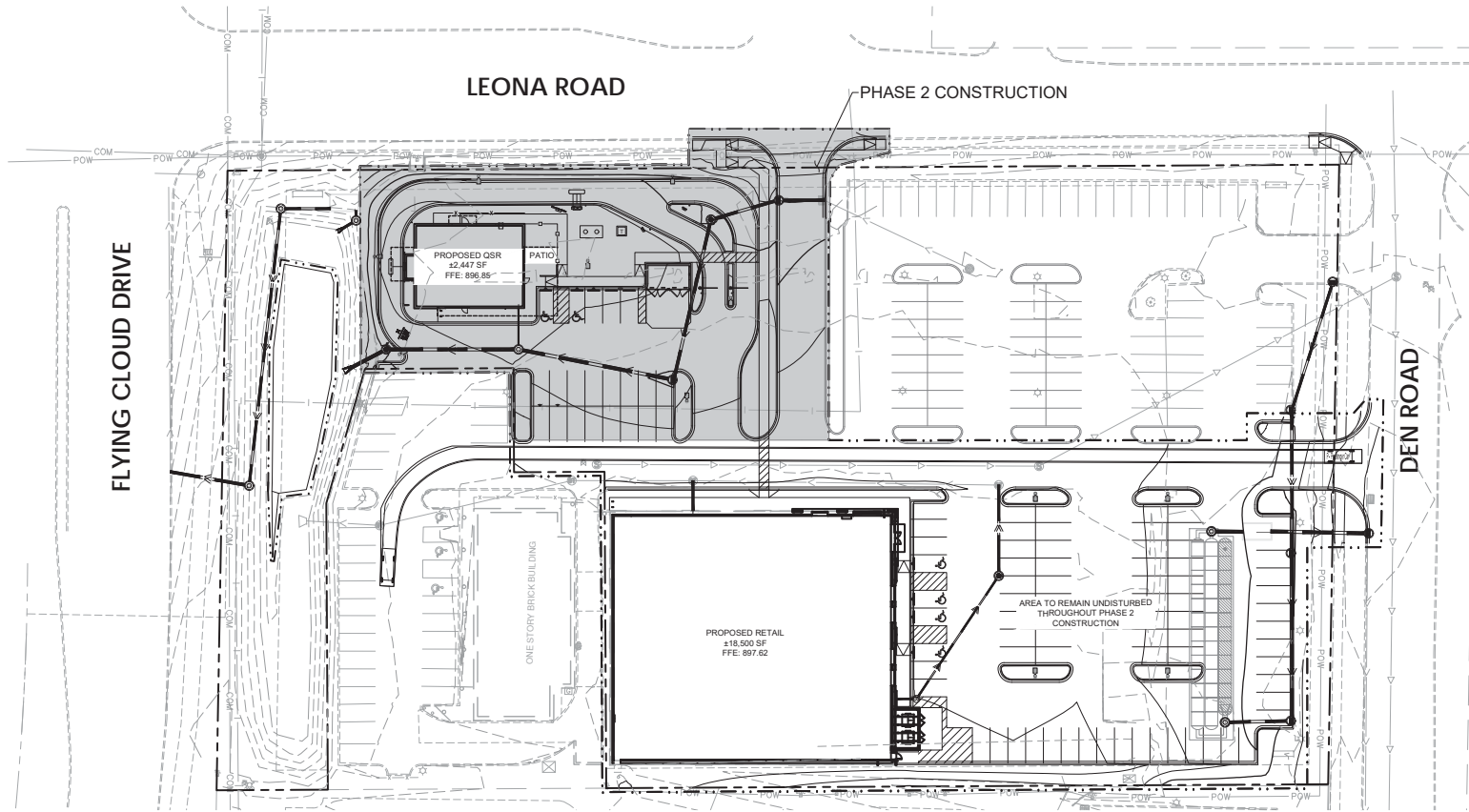
No.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	BSK
2	WATERSHED COMMENTS	10/29/2024	BSK
3	WATERSHED COMMENTS	10/09/2024	BSK



**LEGEND**

	CONSTRUCTION PHASE 2
	PROPERTY LINE
	LIMITS OF DISTURBANCE

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 0 15 30 60

PRELIMINARY - NOT FOR CONSTRUCTION

**CONSTRUCTION PHASING PLAN - PHASE 2**

FLYING CLOUD DR & LEONA RD  
 PREPARED FOR  
**TOLD DEVELOPMENT CO.**  
 EDEN PRAIRIE, MN

SHEET NUMBER  
**C701**

DATE	09/05/2024
SCALE	AS SHOWN
DESIGNED BY	ESK
DRAWN BY	AJB
CHECKED BY	MTL

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No.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	11/18/2024	ESK
2	WATERSHED COMMENTS	10/29/2024	ESK
3	WATERSHED COMMENTS	10/09/2024	ESK

LANDSCAPE REQUIREMENTS - PER CITY CODE OF ORDINANCES		
SECTION 11.42 SUBDIVISION 5.B		
ZONING ORDINANCE	REQUIRED	PROVIDED
TOTAL CALIPER INCHES: TOTAL GROSS SQUARE FOOTAGE* OF ALL FLOORS OF A BUILDING / 320 *SINGLE STORY BUILDING >20FT. CONSIDERED TWO STORY BUILDING	123.3 CAL. INCHES (2,447 G.S.F. + 118,500 G.S.F.*21) / 320 = STARBUCKS + PLANET FITNESS	720.83 CAL. INCHES 836 CAL. IN. EX. TREES + 54 CAL. IN. PROPOSED TREES + 30.83 CAL. IN. PROPOSED SHRUBS AND PERENNIALS
NO MORE THAN 80% OF TREES MAY BE OF THE MINIMUM SIZE REQUIREMENTS, 2.5" CAL OVERSTORY, 1.5" CAL UNDERSTORY	24.7 CAL. INCHES GREATER THAN MIN. SIZE REQUIREMENTS	145. CAL. IN. EX. CONIFEROUS TREES, 343 CAL. IN. EX. OVERSTORY TREES, 148 CAL. IN. EX. ORNAMENTAL TREES
UNDERSTORY TREES MAY MAKE UP NO MORE THAN 20% OF TOTAL TREE CALIPERS REQUIRED	24.66 CAL. IN. / 20% = 123.3 CAL. IN. X 0.2	>24.66 CAL. IN. = 148 CAL. IN. EX. ORNAMENTAL TREES + 4.5 CAL. IN. PROPOSED ORNAMENTAL TREES
NO LESS THAN 10% AND NO MORE THAN 25% OF TOTAL TREE CALIPER REQUIRED SHALL BE REPLACED WITH SHRUBS AND PERENNIALS REPLACEMENT RATIO: 6 SHRUBS = 3 CAL. INCHES	12.33" - 30.83" TREE INCHES REQUIRED TO BE SHRUBS	339.5" (186 SHRUBS / 6'3") + ((493 PERENNIALS / 6'3")
PLANTING BEDS MAY REPLACE UP TO 25% OF THE REQUIRED CALIPER INCHES FOR TREES REPLACEMENT RATIO: 500 S.F. OF PLANTING BEDS = 3 CAL. INCHES	30.83" OF TREES MAY BE REPLACED BY PLANTING BEDS	30.83" 5,402 S.F. OF PLANTING BED = (5,402 / 500) * 3
DIVERSITY REQUIREMENT: NO MORE THAN 30% OF PROPOSED TREES SHALL BE OF THE SAME SPECIES	3,512 S.F. / 5% = 70,244 S.F.*0.05	5,402 S.F. ISLANDS ARE PLANTED
PARKING LOT: ISLANDS REQUIRED IN LOTS WITH 20 SPACES OR MORE. 5% OF PARKING AREA TO BE ISLANDS ISLANDS SHALL BE PLANTED AND NOT FILLED WITH ONLY MULCH, STONE OR PAVING.		
SCREENING: ALL PARKING, LOADING, SERVICE, AND OUTDOOR STORAGE TO BE SCREENED FROM PUBLIC ROADS AND ADJACENT DIFFERING LAND USES. SCREEN MUST BE 3' IN HEIGHT AT PLANTING	3' HT SCREENING ALONG LEONA ROAD, DEN ROAD, AND FLYING CLOUD DRIVE	3' HT SCREENING ALONG LEONA ROAD, DEN ROAD, AND FLYING CLOUD DRIVE

**SEEDING KEYNOTES** (22-112)

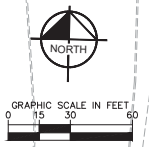
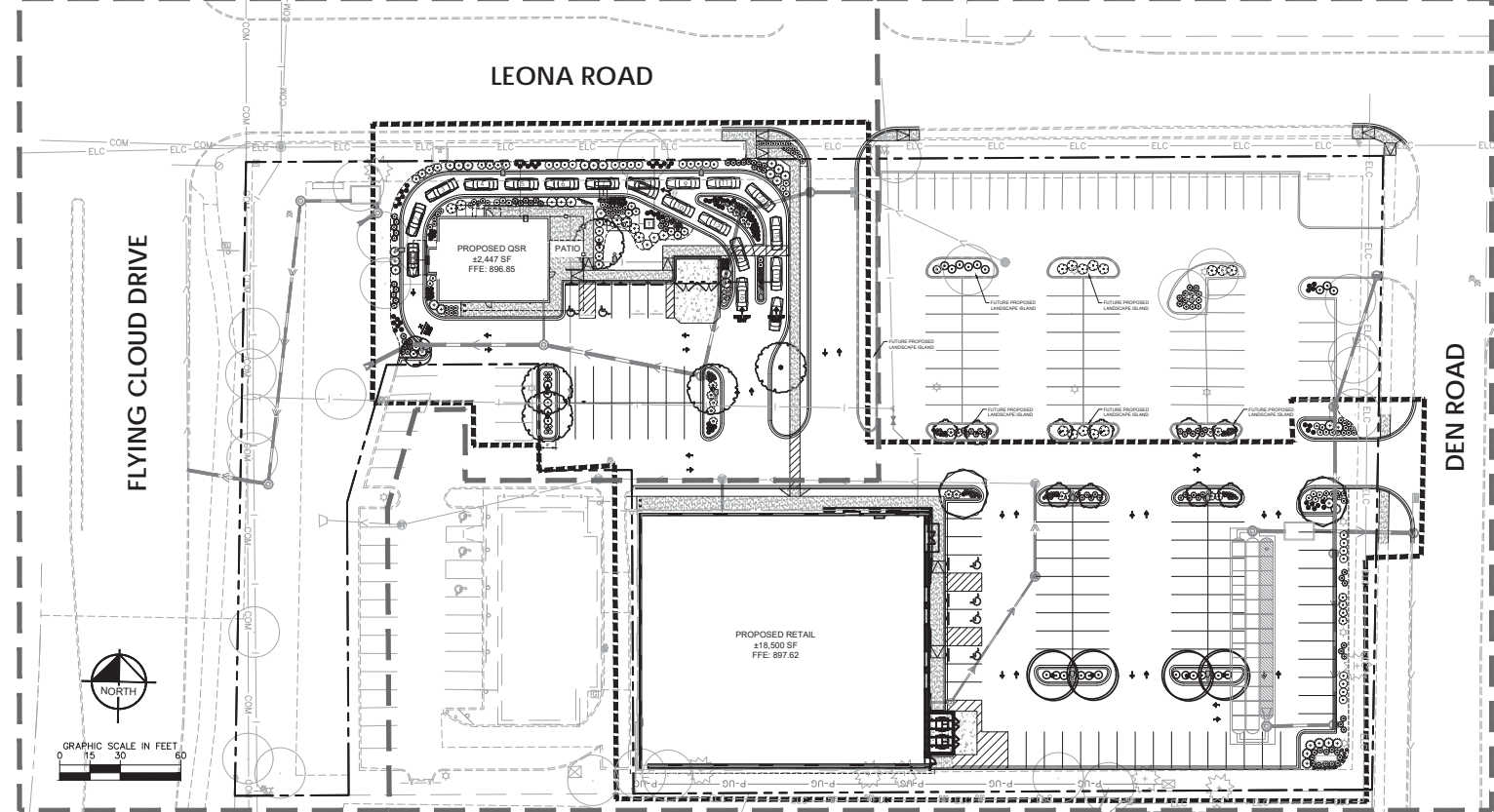
(3-20) SEED WITH MNDOT 33-261: STORMWATER SOUTH & WEST SEED MIX (TYP.)  
 NOTE:  
 SEED ALL DISTURBED AREAS OF STORMWATER BASIN WITH MNDOT SEED MIX 33-261 STORMWATER SOUTH & WEST.  
 ALL SEED MIXES SHALL INCLUDE PROPER EROSION CONTROL FEATURES, WATERING DURING THE ESTABLISHMENT PERIOD AND ONGOING MAINTENANCE PER MANUFACTURER/SUPPLIER SPECIFICATION AND REQUIREMENTS.

**LANDSCAPE LEGEND**

- EXISTING DECIDUOUS TREE (TYP.)
- EXISTING CONIFEROUS TREE (TYP.)
- EXISTING SHRUB (TYP.)
- EDGER (TYP.)
- APPROXIMATE LIMITS OF SODDING / IRRIGATION, SOD ALL DISTURBED AREAS (TYP.)

**LANDSCAPE KEYNOTES** (C)

- (A) EDGER (TYP.)
- (B) NOT USED
- (C) ROCK MULCH (TYP.)
- (D) SOD (TYP.)
- (E) MAINTENANCE STRIP (TYP.)
- (F) EXISTING TREE TO REMAIN (TYP.)
- (G) BOULDER (TYP.)



PRELIMINARY - NOT FOR CONSTRUCTION

FLYING CLOUD DR & LEONA RD  
 PREPARED FOR  
**TOLD DEVELOPMENT CO.**  
 EDEN PRAIRIE, MN

OVERALL LANDSCAPE PLAN

DATE: 09/05/2024  
 SCALE: AS SHOWN  
 DRAWN BY: CFC  
 CHECKED BY: RAH

RYMA, WILLETTED, PA  
 DATE: 09/05/2024, U.S. NO.: 5389

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11/18/2024, BSK  
 10/29/2024, BSK  
 10/09/2024, BSK

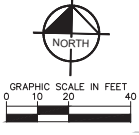
WATERSHED COMMENTS  
 WATERSHED COMMENTS  
 WATERSHED COMMENTS

REVISIONS  
 NO. DATE BY

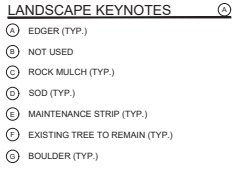
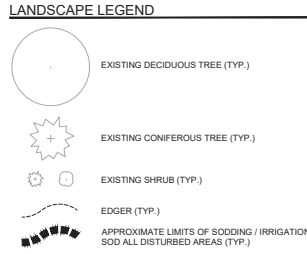
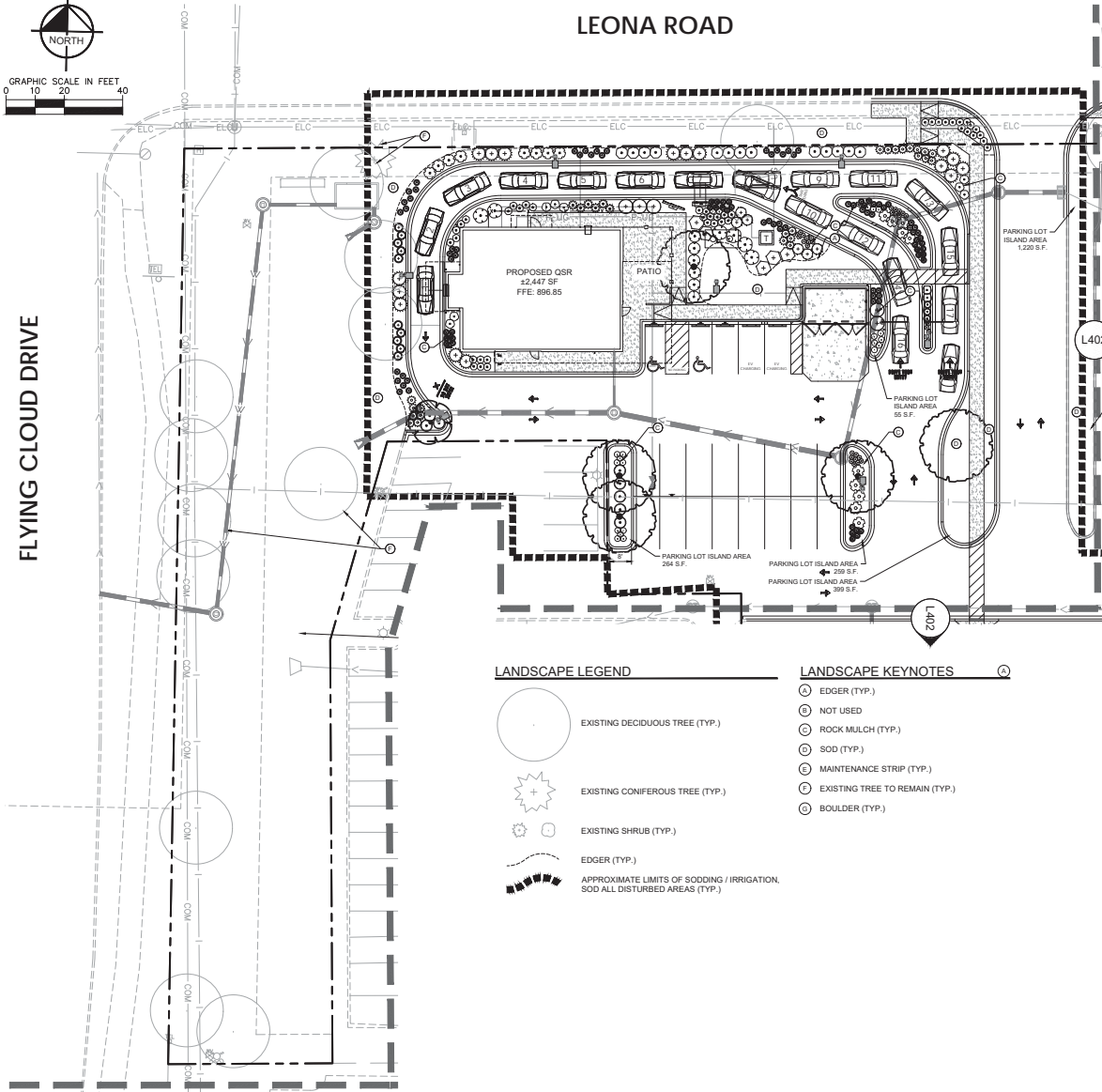
SHEET NUMBER  
**L100**

**Kimley-Horn**  
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 1196 SINGLE TREE LANE, SUITE 205, EDEN PRAIRIE, MN 55544  
 PHONE: 612-464-4197  
 WWW.KIMLEY-HORN.COM

FLYING CLOUD DRIVE



LEONA ROAD



PLANT SCHEDULE ENLARGEMENT A

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CONTAINER	CAL.
<b>ORNAMENTAL TREE</b>					
	PRC	3	PRAIRIE ROSE CRABAPPLE / MALUS IOENSIS 'PRAIRIE ROSE'	B & B	1.5" CAL.
<b>OVERSTORY TREE</b>					
	ABM	2	AUTUMN BLAZE MAPLE / ACER X FREEMANII 'AUTUMN BLAZE'	B & B	2.5" CAL.
	IHL	1	IMPERIAL HONEYLOCUST / GLEDITSIA TRACANTHOS VAR. INERMIS 'IMPERIAL'	B & B	3" CAL.
<b>PERENNIALS AND GRASSES</b>					
	BHB	6	BLUE HEAVEN LITTLE BLUESTEM / SCHIZACHYRIUM SCOPARIUM 'MINNBLUE' PP #17,310	#1 CONT.	36" O.C.
<b>CONIFEROUS SHRUBS</b>					
	GOJ	6	GREY OWL JUNIPER / JUNIPERUS VIRGINIANA 'GREY OWL'	#5 CONT.	4" O.C.
	HZA	10	HETZ MIDGET ARBORVITAE / THUJA OCCIDENTALIS 'HETZ MIDGET'	#5 CONT.	3" O.C.
	MDJ	5	MEDORA JUNIPER / JUNIPERUS SCOPULORUM 'MEDORA'	#5 CONT.	4" O.C.
	SGJ	16	SEA GREEN JUNIPER / JUNIPERUS CHINENSIS 'SEA GREEN'	#5 CONT.	5" O.C.
	TCA	5	TECHNY ARBORVITAE / THUJA OCCIDENTALIS 'TECHNY'	#5 CONT.	5" O.C.
<b>DECIDUOUS SHRUBS</b>					
	ANH	6	ANNABELLE HYDRANGEA / HYDRANGEA ARBORESCENS 'ANNABELLE'	#5 CONT.	4" O.C.
	BLC	13	IROQUOIS BEAUTY BLACK CHOKEBERRY / ARONIA MELANOCARPA 'IROQUOIS BEAUTY' TM	#5 CONT.	4" O.C.
	DBH	10	DWARF BUSH HONEYSUCKLE / DIERVILLA LONICERA	#5 CONT.	4" O.C.
	GGD	6	GARDEN GLOW DOGWOOD / CORNUS HESSEI 'GARDEN GLOW'	#5 CONT.	5" O.C.
	GLS	3	GRO-LOW FRAGRANT SUMAC / RHUS AROMATICA 'GRO-LOW'	#5 CONT.	4" O.C.
	LDN	8	LITTLE DEVIL NINEBARK / PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' TM	#5 CONT.	4" O.C.
	SEM	10	SEM FALSESPirea / SORBARIA SORBIFOLIA 'SEM'	#5 CONT.	3" O.C.
<b>ORNAMENTAL GRASSES</b>					
	HMS	23	HEAVY METAL SWITCHGRASS / PANICUM VIRGATUM 'HEAVY METAL'	#1 CONT.	3" O.C.
	KFG	29	KARL FOERSTER FEATHER REED GRASS / CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	#1 CONT.	30" O.C.
	NSG	55	NORTHWIND SWITCH GRASS / PANICUM VIRGATUM 'NORTHWIND'	#1 CONT.	24" O.C.
	PDS	37	PRAIRIE DROPSPEED / SPOROBOLUS HETEROLEPIS	#1 CONT.	24" O.C.
<b>PERENNIALS</b>					
	AFS	20	AUTUMN FIRE SEDUM / SEDUM X 'AUTUMN FIRE'	#1 CONT.	24" O.C.
	BES	31	BLACK-EYED SUSAN / RUDBECKIA FULGIDA 'GOLDSTURM'	#1 CONT.	18" O.C.
	RBS	19	RUBY STAR CONEFLOWER / ECHINACEA PURPUREA 'RUBINSTERN'	#1 CONT.	2" O.C.
	WLC	54	WALKER'S LOW CATMINT / NEPETA X FASSENII 'WALKER'S LOW'	#1 CONT.	30" O.C.



**PRELIMINARY - NOT FOR CONSTRUCTION**

FLYING CLOUD DR & LEONA RD  
PREPARED FOR  
TOLD DEVELOPMENT CO.  
EDEN PRAIRIE, MN

**ENLARGED LANDSCAPE PLAN**

DATE: 09/05/2024  
SCALE: AS SHOWN  
DESIGNED BY: CJK  
DRAWN BY: EDW/BBF  
CHECKED BY: BAH

REVISIONS

NO.	DATE	BY
1	11/18/2024	RSK
2	10/29/2024	RSK
3	10/09/2024	RSK

WATERSHED COMMENTS: 11/18/2024 RSK  
WATERSHED COMMENTS: 10/29/2024 RSK  
WATERSHED COMMENTS: 10/09/2024 RSK

**Kimley-Horn**  
2024 KIMLEY-HORN ASSOCIATES, INC.  
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PHONE: 612-464-1199  
WWW.KIMLEY-HORN.COM

THIS PLAN AND THE INFORMATION CONTAINED HEREIN WAS PREPARED BY KIMLEY-HORN ASSOCIATES, INC. IN ACCORDANCE WITH THE PROFESSIONAL ENGINEERING AND SURVEYING ACT, CHAPTER 320A, THE STATE OF MINNESOTA.

RYANA WILHELM, P.E.  
DATE: 09/05/2024, U.S. NO.: 5389

PROJECT NO.: 24-00000004

SHEET NUMBER  
**L101**

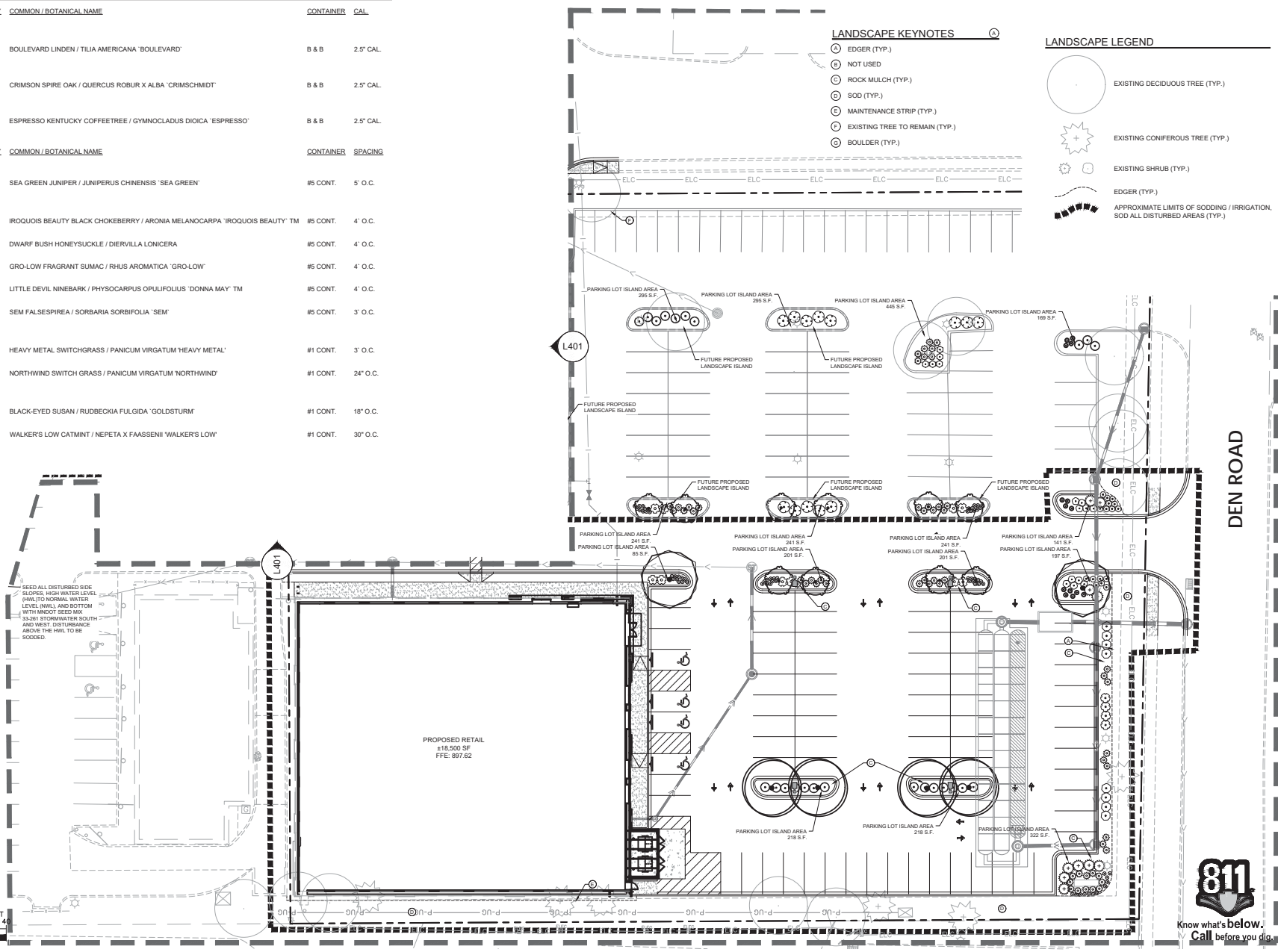
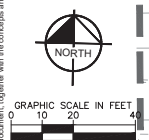
K:\ITW\_LDE\atbarbus\eden prairie, mn - flying cloud dr & leona rd\3 Design\CAD\plant\enlarged\_LANDSCAPE PLAN DWG November 18, 2024 - 9:40am

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**PLANT SCHEDULE ENLARGEMENT B**

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CONTAINER	CAL
<b>OVERSTORY TREE</b>					
	BOL	4	BOULEVARD LINDEN / TILIA AMERICANA 'BOULEVARD'	B & B	2.5" CAL.
	CSO	4	CRIMSON SPIRE OAK / QUERCUS ROBUR X ALBA 'CRIMSCHMDT'	B & B	2.5" CAL.
	KCY	2	ESPRESSO KENTUCKY COFFEETREE / GYMNOCLADUS DIOICA 'ESPRESSO'	B & B	2.5" CAL.
<b>CONIFEROUS SHRUBS</b>					
	SGJ	10	SEA GREEN JUNIPER / JUNIPERUS CHINENSIS 'SEA GREEN'	#5 CONT.	5" O.C.
<b>DECIDUOUS SHRUBS</b>					
	BLC	8	IROQUOIS BEAUTY BLACK CHOKEBERRY / ARONIA MELANOCARPA 'IROQUOIS BEAUTY' TM	#5 CONT.	4" O.C.
	DBH	6	DWARF BUSH HONEYSUCKLE / DIERVILLA LONICERA	#5 CONT.	4" O.C.
	GLS	14	GRO-LOW FRAGRANT SUMAC / RHUS AROMATICA 'GRO-LOW'	#5 CONT.	4" O.C.
	LDN	4	LITTLE DEVIL NINEBARK / PHYSCARPUS OPULIFOLIUS 'DONNA MAY' TM	#5 CONT.	4" O.C.
	SEM	10	SEM FALSESPIREA / SORBARIA SORBIFOLIA 'SEM'	#5 CONT.	3" O.C.
<b>ORNAMENTAL GRASSES</b>					
	HMS	35	HEAVY METAL SWITCHGRASS / PANICUM VIRGATUM 'HEAVY METAL'	#1 CONT.	3" O.C.
	NSG	10	NORTHWIND SWITCH GRASS / PANICUM VIRGATUM 'NORTHWIND'	#1 CONT.	24" O.C.
<b>PERENNIALS</b>					
	BES	42	BLACK-EYED SUSAN / RUDBECKIA FULGIDA 'GOLDSTURM'	#1 CONT.	18" O.C.
	WLC	16	WALKER'S LOW CATMINT / NEPETA X FAASENII 'WALKER'S LOW'	#1 CONT.	30" O.C.

SEED ALL DISTURBED SIDE SLOPES, HIGH WATER LEVEL (HWL) TO NORMAL WATER LEVEL (NWL) AND BOTTOM WITH MIXED SEED MIX:  
33-261 STORMWATER SOUTH AND WEST DISTURBANCE ABOVE THE HWL TO BE SOODED



- LANDSCAPE KEYNOTES**
- Ⓐ EDGER (TYP.)
  - Ⓝ NOT USED
  - Ⓞ ROCK MULCH (TYP.)
  - Ⓟ SOD (TYP.)
  - Ⓠ MAINTENANCE STRIP (TYP.)
  - Ⓡ EXISTING TREE TO REMAIN (TYP.)
  - Ⓢ BOULDER (TYP.)

- LANDSCAPE LEGEND**
- EXISTING DECIDUOUS TREE (TYP.)
  - EXISTING CONIFEROUS TREE (TYP.)
  - EXISTING SHRUB (TYP.)
  - EDGER (TYP.)
  - APPROXIMATE LIMITS OF SOODING / IRRIGATION, SOD ALL DISTURBED AREAS (TYP.)



**PRELIMINARY - NOT FOR CONSTRUCTION**

**ENLARGED LANDSCAPE PLAN**

**FLYING CLOUD DR & LEONA RD**

**TOLD DEVELOPMENT CO. MN**

**Kimley-Horn & Associates, Inc.**  
2024 KIMLEY-HORN AND ASSOCIATES, INC.  
11996 SINGLE TREE LA SUITE 205 EDEN PRAIRIE, MN 55534  
PHONE: 612-464-1197  
WWW.KIMLEY-HORN.COM

WATERSHED COMMENTS	11/18/2024	BSK
WATERSHED COMMENTS	10/29/2024	BSK
WATERSHED COMMENTS	10/09/2024	BSK
REVISIONS	DATE	BY

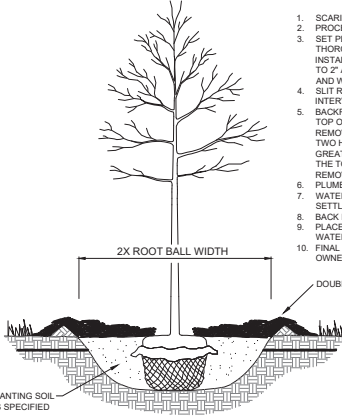
KIM PROJECT: \_\_\_\_\_  
 DATE: 09/05/2024  
 SCALE: AS SHOWN  
 DESIGNED BY: CFC  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: BAH  
 DATE: 09/05/2024  
 U.C. NO.: 5389  
 R/W/A: UNLIMITED P/LA

SHEET NUMBER **L102**



**NOTES:**

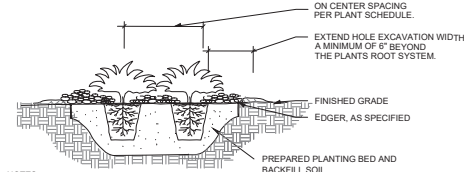
- SCARIFY SIDES AND BOTTOM OF HOLE.
- PROCEED WITH CORRECTIVE PRUNING.
- SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE WITH BURLAP AND WIRE BASKET, IF USED, INTACT.
- SLIT REMAINING TREATED BURLAP AT 6" INTERVALS.
- BACKFILL TO WITHIN APPROXIMATELY 12" OF THE TOP OF THE ROOTBALL, THEN WATER PLANT. REMOVE THE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM THE TOP 1/3 OF THE BALL. REMOVE ALL TWINE. REMOVE OR CORRECT STEM GIRDLING ROOTS.
- PLUMB AND BACKFILL WITH PLANTING SOIL.
- WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
- BACK FILL VOIDS AND WATER SECOND TIME.
- PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
- FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.



**1 TREE PLANTING DETAIL**

SCALE: N.T.S.

L103



**NOTES:**

- SCARIFY SIDES AND BOTTOM OF HOLE.
- PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
- REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
- PLUMB AND BACKFILL WITH PLANTING SOIL.
- WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
- BACK FILL VOIDS AND WATER SECOND TIME.
- PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
- MIX IN 3-4" OF ORGANIC COMPOST.

**2 SHRUB / PERENNIAL PLANTING DETAIL**

SCALE: N.T.S.

L103

**PLANT SCHEDULE**

SYMBOL	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONTAINER	COL.
<b>DECIDUOUS TREE</b>						
☉	PRC	1	PRAIRIE ROSE CRABAPPLE	MALUS IOENSIS 'PRAIRIE ROSE'	8.5	1.5" CAL.
<b>DECIDUOUS SHRUB</b>						
☉	AM5	5	AUTUMN BLAZE MAPLE	ACER X FREEMANN 'AUTUMN BLAZE'	8.5	2.5" CAL.
☉	BOL	4	BOULEVARD LINDEN	TILIA AMERICANA 'BOULEVARD'	8.5	2.5" CAL.
☉	CRD	10	CRIMSON SPINE OAK	QUERCUS ROBUR X ALBA 'CRIMSONHEAT'	8.5	2.5" CAL.
☉	KCY	2	ESPRESSO KENTUCKY COFFEETREE	GYMNOCLADUS DIOICA 'ESPRESSO'	8.5	2.5" CAL.
<b>SEMI-DECIDUOUS SHRUBS</b>						
☉	GOJ	8	GREY OWL JUNIPER	JUNIPERUS VIRGINIANA 'GREY OWL'	45 CONT.	4" D.C.
☉	HXA	10	HETZ MIDDLET ARBORVITAE	THUJA OCCIDENTALIS 'HETZ MIDDLET'	45 CONT.	3" D.C.
☉	MDJ	5	MEDORA JUNIPER	JUNIPERUS SCOPULORUM 'MEDORA'	45 CONT.	4" D.C.
☉	SGJ	28	SEA GREEN JUNIPER	JUNIPERUS CHINENSIS 'SEA GREEN'	45 CONT.	5" D.C.
☉	TCA	5	TEDEY ARBORVITAE	THUJA OCCIDENTALIS 'TEDEY'	45 CONT.	5" D.C.
<b>PERENNIAL GRASSES</b>						
☉	ANH	6	ANNABELLE HYDRANGEA	HYDRANGEA AMBORENSIS 'ANNABELLE'	45 CONT.	4" D.C.
☉	BLC	21	PRODIGE BEAUTY BLACK CHERRYBERRY	ARONIA MELANOCARPA 'PRODIGE BEAUTY™'	45 CONT.	4" D.C.
☉	DBH	20	DWARF BUSH HONEYUCKLE	DIERILLA LONICERA	45 CONT.	4" D.C.
☉	GDD	19	GARDEN GLOW SODDWOOD	CORNUS NEROSA 'GARDEN GLOW'	45 CONT.	5" D.C.
☉	GLS	32	GRASS-LEAF PRAGRANT SUMAC	Rhus ARDENTICA 'GRASS-LEAF'	45 CONT.	4" D.C.
☉	LDN	12	LITTLE DEVIL NINEBARK	PHYSCOCARPUS OULIFOLIOLUS 'DONNA MAY™'	45 CONT.	4" D.C.
☉	SEM	20	SEM FALSESPRUE	SORBARIA SORBEFOLIA 'SEM'	45 CONT.	3" D.C.
<b>PERENNIAL FLORALS</b>						
☉	HMB	80	HEAVY METAL SWITCHGRASS	PANICUM VIRGATUM 'HEAVY METAL™'	41 CONT.	3" D.C.
☉	KFG	3	KARL FORSTERER FEATHER REED GRASS	CALAMAGROSTIS X ACUTIFLORA 'KARL FORSTERER™'	41 CONT.	30" D.C.
☉	NSG	69	NORTHWIND SWITCH GRASS	PANICUM VIRGATUM 'NORTHWIND™'	41 CONT.	24" D.C.
☉	POS	37	PRAIRIE BLUESTEM	SPOROBOLUS HETEROLEPIS	41 CONT.	30" D.C.
<b>PERENNIALS</b>						
☉	AAK	5	ALICE AND KICKING ASTILBE	ASTILBE X ALICE AND KICKING™	41 CONT.	
☉	BES	33	BLACK-EYED SUSAN	RUFESCERA FULGIDA 'GOLDSTREET™'	41 CONT.	18" D.C.
☉	RBS	29	RUBY STAR CORNPOWDER	ECHINACEA PURPUREA 'RUBENSTEIN™'	41 CONT.	2" D.C.
☉	WAL	58	WALKERS LOW CATMINT	NEPETA X FAASSENS WALKERS™	41 CONT.	30" D.C.
<b>PERENNIALS AND GRASSES</b>						
☉	BBS	6	BLUE HEAVEN LITTLE BLUESTEM	SCHIZOPYRUM SCOPARIUM 'MINNELLEA PP #17 310'	41 CONT.	30" D.C.

**LANDSCAPE NOTES**

**PLANTING**

- CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL 811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
- ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
- NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
- PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
- ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:  
ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.  
ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.  
ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.  
ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.  
CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
- PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
- PLANTS TO BE INSTALLED AS PER MMLA & ANSI STANDARD PLANTING PRACTICES.
- INSTALL PLANTS BY PLANT INSTALLATION PERIOD INFORMATION IN THE LATEST STANDARD PLANTING DETAILS FROM MNDOT. PLANTINGS BEFORE OR AFTER THESE DATES ARE DONE AT RISK.
- PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY. TEMPORARY ONLY.
- PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLARE IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLARE. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLARE SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
- OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS. SPLIT AND BREAK APART PEAT POTS.
- PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
- WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
- STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.

**SOIL**

- THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
- BACKFILL SOIL AND TOPSOIL TO ADHERE TO MNDOT STANDARD SPECIFICATION 3877 (LOAM TOPSOIL, BORROW) AND TO THE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.

**MULCH**

- MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. ROCK MULCH TO BE TRAP ROCK. BUFF LIMESTONE OR RIVER ROCK 1-12" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL. APPLY PRE-EMERGENT HERBICIDE PRIOR TO MULCH PLACEMENT PER MANUFACTURER RECOMMENDATIONS. USE PREEN OR PRE-APPROVED EQUAL. ROCK MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC. BY TYPE, OR APPROVED EQUAL, WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).

**EDGING**

- EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING. 3/16" THICK X 6" TALL. COLOR BLACK OR SPANGLED EDGE, AS INDICATED. STEEL EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH TOP OF EDGING AT GRADE. FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. WHERE EDGING TERMINATES AT A SIDEWALK, BEVEL OR RECESS ENDS TO PREVENT TRIP HAZARD. SPANGLED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR BURN-GARDEN BEDS TO BE SPANGLED EDGE UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).

**SEED/SOD**

- ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX. FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED, PER MNDOT SPECIFICATIONS AND SUPPLIER/MANUFACTURER RECOMMENDATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.

**IRRIGATION**

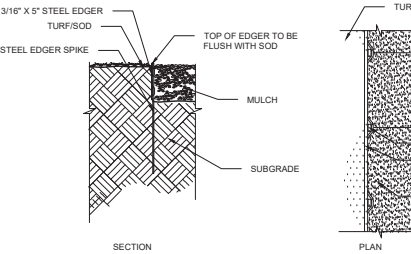
- PROVIDE IRRIGATION / PROVIDE NEW SYSTEM, OR MODIFY EXISTING IRRIGATION PER OWNER'S DIRECTION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGNED/BUILT BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CALLS TO BE OBTAINED FROM GENERAL CONTRACTOR. SYSTEM SHALL INCLUDE A RAIN SENSOR AND APPROPRIATE TECHNOLOGY.

**ESTABLISHMENT**

- PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
- REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.

**WARRANTY**

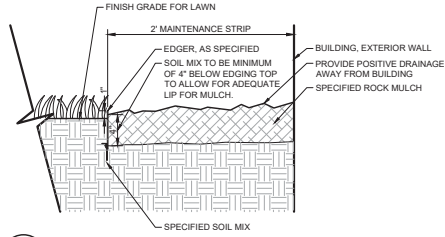
- REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
- MAINTAIN TREES, SHRUBS, SEED AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, LESS THAN FOLLOWING PERIOD: 1 YEAR AFTER PROJECT COMPLETION. MAINTAIN TREES, SHRUBS, SEED AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS, TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES AS REQUIRED. RESTORE OR REPAIR GROUND OR REFLECTIVE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. REPLENISH MULCH TO THE REQUIRED DEPTH. MAINTAIN LAWNS FOR 60 DAYS AFTER INSTALLING SOD INCLUDING MOWING WHEN SOIL RESETS 4" IN HEIGHT. WEED PLANTING BEDS AND MULCH SAUCERS AT MINIMUM ONCE A MONTH DURING THE GROWING SEASON. PROVIDE A MONTHLY REPORT TO THE OWNER ON WEEDING AND OTHER MAINTENANCE RESPONSIBILITIES.
- SEE ELECTRICAL PLANS FOR SITE LIGHTING.



**3 STEEL EDGER DETAIL**

SCALE: N.T.S.

L103



**4 MAINTENANCE STRIP DETAIL**

SCALE: 1:12\"/>

L103

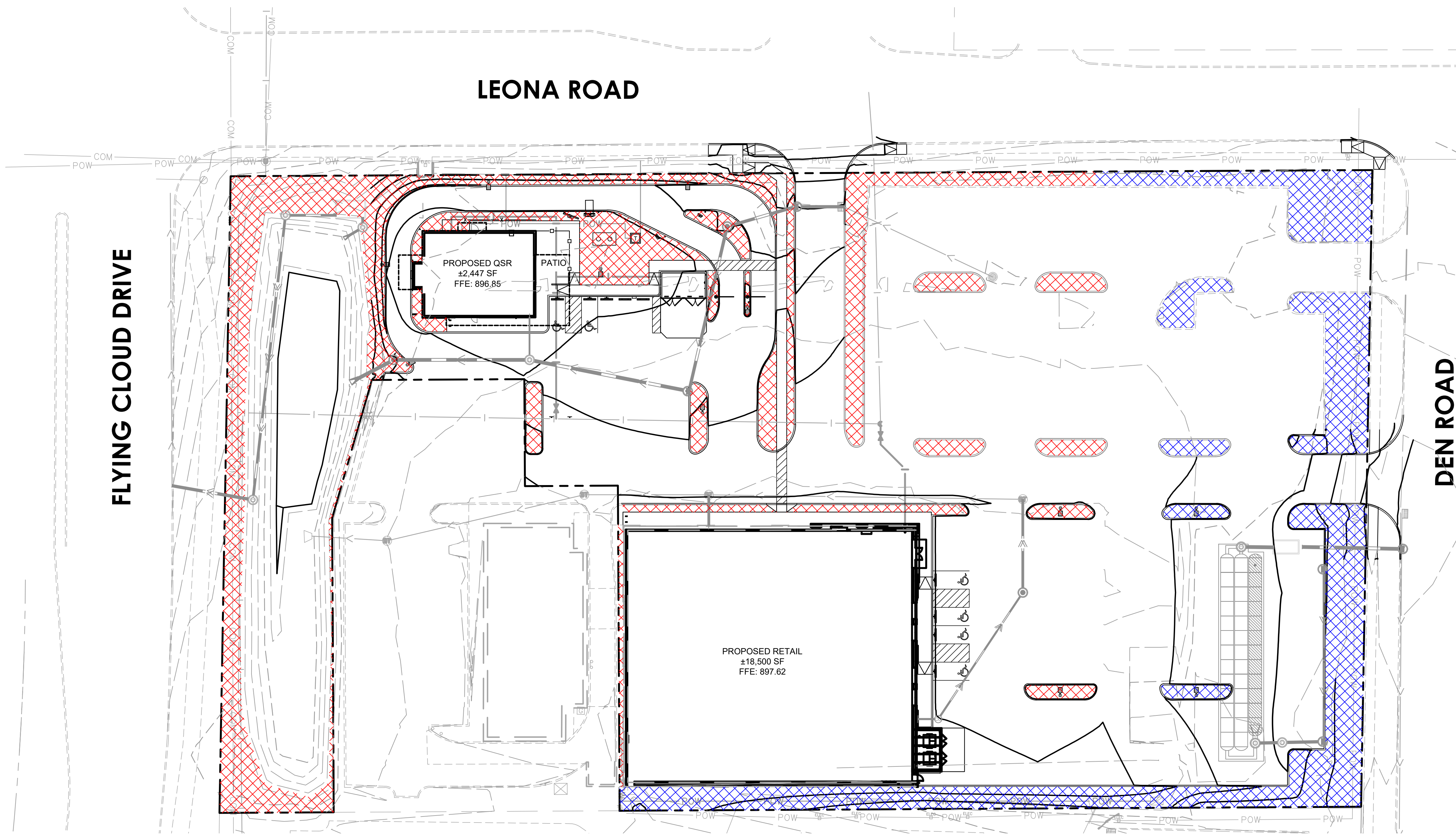
NO.	REVISIONS	DATE	BY
1	WATER SHED COMMENTS	11/18/2024	HRK
2	WATER SHED COMMENTS	10/29/2024	HRK
3	WATER SHED COMMENTS	10/29/2024	HRK

**Kimley-Horn**  
2024 KIMLEY-HORN ASSOCIATES, INC.  
11995 SINGLETREE LAUREL DRIVE, EDEN PRAIRIE, MN 55534  
PHONE: 612-464-4197  
WWW.KIMLEY-HORN.COM

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RYANA WILHELMET, P.L.A.  
DATE: 08/08/2024  
U.S. NO.: 5589





**LEGEND**

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED RIDGE LINE
- PROPOSED SWALE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED ABOVE GROUND BASIN IRRIGATED LANDSCAPE AREA
- PROPOSED UNDER GROUND BASIN IRRIGATED LANDSCAPE AREA

**IRRIGATION USAGE METER**  
 PROPOSED ABOVE GROUND & UNDERGROUND SYSTEM WILL BE USED FOR IRRIGATION REUSE. AN IRRIGATION USAGE METER WILL BE PROVIDED FOR ON-SITE MEASUREMENTS AND IS REQUIRED FOR ANNUAL DOCUMENTATION TO THE WATERSHED DISTRICT

ON-SITE GREEN SPACE SUMMARY	
PERVIOUS AREA SERVED BY ABOVE GROUND BASIN IRRIGATION REUSE	0.43 AC
PERVIOUS AREA SERVED BY UNDER GROUND BASIN IRRIGATION REUSE	0.25 AC
<b>TOTAL PERVIOUS AREA SERVED BY IRRIGATION REUSE</b>	<b>0.68 AC</b>

Know what's below.  
Call before you dig.

NORTH

GRAPHIC SCALE IN FEET  
0 15 30 60

PRELIMINARY - NOT FOR CONSTRUCTION

**FLYING CLOUD DR & LEONA RD**  
 PREPARED FOR  
**TOLD DEVELOPMENT CO.**  
 EDEN PRAIRIE, MN

**PROPOSED ON-SITE GREEN SPACE EXHIBIT**

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 WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY
1	WATERSHED COMMENTS	10/28/2024	BSK
2	WATERSHED COMMENTS	10/09/2024	BSK

SHEET NUMBER  
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