

## MEETING QUESTION FOLLOW-UP

TO: Mark Houser, Bridge Industrial  
FROM: Jeff Ryckaert, Principal Planner and Dan Nakahara, Planner  
DATE: May 19, 2023  
RE: Questions from May 11, 2023 Plan Commission Meeting

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Below are questions from the May 11, 2023 Plan Commission Public Hearing Meeting Requiring Follow-Up:

1. How many buildings has Bridge built adjacent to a residential community and or share ingress/egress/intersection with a stoplight with a residential community?

Bridge has developed 20 industrial buildings in 9 different industrial business parks, totaling 6.5M square feet in the Chicago area over the past 10 years that are adjacent to residential zoned properties. All the properties are separated by a street or in one case, a railroad track. 12 of the buildings share the main access road with residential properties. To the best of Bridge's knowledge, there have been no issues with any of the sites. In addition to the Bridge projects listed herein, there are numerous other examples in the Chicagoland area which have industrial buildings adjacent to residential communities and or share similar ingress/ egress/ intersection dynamics with the residential community with less mitigating factors to ease community impact compared to the proposed Baxter redevelopment.
2. Why did Bridge choose this site?

Bridge chose the site due to its location and existing roadway infrastructure with easy access to I-94 and the O'Hare area. The highway frontage of the property with minimal surrounding residential is a highly desirable amenity for corporate industrial users. In addition the favorable Lake County real estate taxes versus Cook County poses a competitive advantage for users in the market..
3. Why do you want to be annexed into the Village of Deerfield?

Bridge has always preferred to develop within a municipality versus an unincorporated area due to the superior services that are typically provided by a municipality. In this case, Deerfield provides excellent utilities and services. The site itself has always been earmarked for annexation, like the neighboring property to the north and south, so Bridge felt as a potential new member of the community, it was best to follow suit.
4. Expand on what kind of industrial development is allowed under Lake County zoning.

The uses that Bridge is requesting from Deerfield (warehouse, distribution, light manufacturing) are allowed under the LI Lake County zoning "as of right" without variance but it would require some size modifications in reduction of overall square footage given that the LI zoning does not cover the entire site.

5. What efforts have you made to sit down with the neighbors (residential and commercial) community to explain your position and answer any questions?  
Bridge's attorney reached out to the objectors' attorney for a meeting with the neighbors. The objectors' attorney indicated that the objectors would be receptive to a meeting, so Bridge is in the process of scheduling an informal meeting with all interested parties.
6. Is a 24/7 operation essential and significant to this proposed development?  
24/7 operations at the proposed facilities are expected to be minimal given the history of comparable developments, but the ability to operate 24/7 is essential to the success of the proposed development. While a tenant may not operate 24/7, they still require the ability to do so if the need arises in the future. If they don't have that ability, they will elect to locate elsewhere.
7. What is the most recent discussions with the Park District? Are there any agreements in place?  
The Park District has reviewed the proposal from Bridge to donate the land and develop the outdoor fields and pickleball courts at no cost to the Park District, conditioned upon Bridge's approval and acquisition of the Baxter site. In response the Park District has asked Bridge to generate a contract to that effect. Bridge expects to have the contract to the Park District prior to June 8<sup>th</sup> at which point its Bridge's understanding that document will be presented to the Park District board for comment and approval.
8. Are there any historical elements in the Baxter architecture and or building? If so, will there be any re-use of any of the historical elements of the building?  
As determined by the IDNR, there is no historical significance to the Baxter campus. However, Bridge is exploring ways to incorporate some of the existing architectural features into the overall development.
9. Explain the factors that will mitigate trucks being backed up on Saunders Road? Reply at the meeting was: 1. Available truck parking on-site; 2. Number of truck docks; and 3. Width of the road can accommodate trucks going by on either side if truck parked in the middle.  
All trucks will be entering the property from the south on north bound Saunders Road. There is a dedicated right turn lane into the property with a yield sign so trucks will not have to stop at the light. Once on site the existing Baxter guard shack and gates will be removed and the newly constructed 43' wide entrance road, which allows three lanes of traffic, runs unobstructed for 1225' to the truck court on the east side of the west building. The combination of the dedicated right turn lane, the 1225' of an unobstructed, three lane, entrance road, and an overabundant supply of truck docks and trailer parking stalls will ensure that there is never a backup of trucks on Saunders and the entrance.
10. Provide letters from Illinois DNR that have been provided to petitioner regarding no impact on any endangered species, wildlife and any historical designated landmarks.  
See attached.

11. Plan Commission requested that the petitioner explore options for the use of the Horizon property to the south to provide access to the Baxter property to and from Lake Cook Road (to get trucks off of Saunders Road). Any status update?

Bridge's attorney had a conversation with Horizon's attorney who indicated he thought approval of Bridge's use of their entrance was unlikely, but he would review the request with the Horizon executives and get back to us with their answer. As of this letter, Bridge is still waiting for their response. Subject to any unforeseen obstacles to the extension of Takeda Drive to the Baxter site, Bridge has no objection to using that entrance for all truck traffic.

12. Are there any other options that can be explored so the Baxter property does not share the intersection with the Thorngate residential development to the west?

Bridge is still exploring the option to move a truck entrance to the south end of the site but given the current location of major utilities, wetlands and stormwater issues, an adequate solution has not been found yet.

13. Is there an equivalency of pollution for every truck to a car?

See attached.

14. Provide Tetra Tech Emissions report.

See attached.

15. Property Values next to Industrial Building: Are there any long term reports of findings on property values adjacent to Industrial development?

MaRous & Company researched peer-reviewed studies pertaining to modern distribution proximate to high quality single-family residential over 1000 feet away, and no studies were found that were comparable or relevant in this instance to the proposed subject project. See the attached for the updated property valuation report.

16. Would it be valuable to have a police presence or traffic control at the intersection during peak hours?

It is Bridge's opinion that a police presence will not be required but if it is documented to be, Bridge will be happy to comply.

17. Are there any findings on the job creation and economic impact on a community (spending in community) with the addition of an industrial development?

There are volumes of published literature on the positive impact of job creation for both temporary skilled union construction jobs as well as long term permanent jobs at the newly constructed facility. Additionally, the long-term permanent jobs bring additional consumer spending and growth to local businesses within a drive of the newly constructed facility. Below is a detailed estimated breakdown of union job creation for the project as well as total number of permanent employees based on anecdotal experience in the industrial space and discussions with Bridge's contractors:

**O'hare North Redevelopment**  
Forecasted Job Creation



**Forecasted Union Job Creation During Construction**

Trade	Estimated Employee Count	Est. Wages Hourly Rate	Est. Wages Total Construction
Pre cast & Concrete	30 Employees	\$85 / HR	\$3,645,760
Plumbing, HVAC, and Electrical	30 Employees	\$90 / HR	\$3,864,576
Demolition & Excavation	20 Employees	\$80 / HR	\$2,802,000
Glazing	15 Employees	\$83 / HR	\$517,920
Fire Protection	10 Employees	\$90 / HR	\$1,209,600
Landscaping	10 Employees	\$68 / HR	\$435,200
Site Utility	15 Employees	\$90 / HR	\$1,296,000
Roofing	10 Employees	\$88 / HR	\$1,182,720
Overhead Dock Doors and Levelers	10 Employees	\$90 / HR	\$429,600
Carpentry, Hardware, and Framing	10 Employees	\$90 / HR	\$456,832
Painting	5 Employees	\$83 / HR	\$498,000
<b>Total/ Average</b>	<b>165 Employees</b>	<b>\$85 / HR</b>	<b>\$16,338,208</b>

**Forecasted Long Term Job Creation**

Building	Site Area (SF)	Estimated Long Term Job Creation Ratio PSF	Estimated Long Term Employee Count
Building 1	1,200,000	1 Employee / 1,000 SF	1200 Employees

*Job amounts are simply estimates and Bridge cannot guarantee any specific job counts on a temporary or permanent basis.*

18. Is there any information showing that this development will not add to the ambient noise that already exists?

Bridge hired Tom Thunder from Acoustic Associates, Ltd., to conduct a noise study. We expected a summary report for this response but have not received it yet. The report will be sent to the Village as soon as Bridge receives it.

19. Comment on making every use is a Special Use. Petitioner to provide feedback and input on this.

Bridge cannot agree to making every use a Special Use. Bridge cannot agree to making every use a Special Use at this project. This condition restriction is not a "market" provision and makes the ability to lease the project not viable, therefore impacting the overall success of the project.

20. At the public hearing, it was stated that trucks would come from the south on Saunders Road and go to the south on Saunders Road. Statements were made that directional signs could be posted directing truck traffic to go south when leaving the facility, and that making a right turn out of the facility would be difficult for a truck leaving the site due to the radius of the turn. Please explain the plans for posting signs and where these signs would be located. Please also explain and provide scaled plans for any change in design of the signalized intersection so right turns cannot be physically accommodated at this intersection.

In addition to having the no right turn for trucks restriction in lease documents, posting no right turn signs for trucks along the north side of the entrance road, the curbing will be designed to prohibit a right turn by the trucks as well per the attached exhibit.



## Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Colleen Callahan, Director

January 10, 2023

Grant Wagner  
Spaceco Inc  
9575 W Higgins Road, Suite 700  
Rosemont, IL 60018

**RE: Baxter Campus**  
**Project Number(s): 2308769 [12271]**  
**County: Lake**

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe  
Division of Ecosystems and Environment  
217-785-5500



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

Lake County  
Deerfield

Demolition and New Construction of 3 Industrial Office/Warehouse Facilities  
1 Baxter Parkway  
SPACECO-12271  
SHPO Log #005011023

January 27, 2023

Brett Duffy  
SPACECO, Inc.  
9575 W. Higgins Road, Suite 700  
Rosemont, IL 60018

Dear Mr. Duffy:

This letter is to inform you that we have reviewed the information provided concerning the referenced project.

Our review of the records indicates that no historic, architectural or archaeological sites exist within the project area.

Please retain this letter in your files as evidence of compliance with Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.). This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at [Rita.E.Baker@illinois.gov](mailto:Rita.E.Baker@illinois.gov).

Sincerely,

A handwritten signature in black ink that reads "Carey L. Mayer".

Carey L. Mayer, AIA  
Deputy State Historic  
Preservation Officer

#13

Question: *Is there an equivalency of pollution for every car to a truck?*

USEPA Estimated National Average Vehicle Emission Rates per Vehicle by Vehicle Type using Gasoline and Diesel (2023):

Emissions	Light-duty Vehicles/Cars	Heavy-duty Vehicles/Semi-Trucks
Total Hydrocarbons	0.241	0.209
Carbon Monoxide	3.664	1.783
Nitrogen Oxides	0.143	3.269
Particulate Matter	0.004	0.065

Units in grams per mile

The data indicates that compared to cars, semi-trucks generate a net emission decrease in total hydrocarbons and carbon monoxide, and a net emission increase in nitrogen oxides and particulate matter.



May 11, 2023

Mr. Mark Houser  
Bridge Industrial Acquisition, LLC  
9525 Bryn Mawr Avenue, Suite 700  
Rosemont, Illinois 60018

**RE: Limited Emissions Assessment for Commercial Development  
1 Baxter Parkway, Deerfield, Illinois**

Dear Mr. Houser:

Bridge Industrial Acquisition, LLC (Bridge) retained Tetra Tech, Inc. (Tetra Tech) to advise on environmental matters associated with redevelopment of the 101-acre commercial property at 1 Baxter Parkway in Deerfield, Illinois (the site). This includes an assessment of vehicle emissions associated with a planned warehouse/distribution center at the site. This letter presents site background information, procedures used to assess vehicle emissions, and our conclusions.

**BACKGROUND INFORMATION**

The site is currently developed with ten mid-rise office buildings occupying 645,000 square feet (SF) and three 4-story parking garages. The site has served as the headquarters for Baxter International, Inc.; buildings at the site were constructed in 1972. The site is bordered by commercial properties to the north and south, Interstate 94 (I-94, also known as the Edens Expressway) to the east, and a residential subdivision to the west, across Saunders Road.

Redevelopment plans call for site clearing and construction of two warehouse buildings, 900,000 SF and 228,000 SF in size (herein referred to as the “warehouse development”) and outdoor athletic fields. The proximity of the residential subdivision to the site and the I-94 are shown in **Figure 1**.

Tetra Tech previously conducted environmental studies at the site, including soil, groundwater, and soil-gas sampling/analyses. Subsurface exploration shows the site is underlain by 130 feet of clay soil over limestone bedrock. Analysis of environmental samples of various media collected at the site did not detect chemical impacts at concentrations exceeding remediation objectives cited by the Illinois EPA.

**OBJECTIVES AND SCOPE OF WORK**

Bridge retained Tetra Tech to assess the air quality impact at a residential subdivision from site-related vehicle emissions. To meet his objective, we considered the current site use as an office campus compared to the proposed use as a warehouse development. Our assessment considers the volume of traffic, the number and type of vehicles, and emissions from I-94 vehicles, and the results of air dispersion modeling, discussed in the following sections.

**Tetra Tech, Inc.**

1 S. Wacker Drive, 37<sup>th</sup> Floor, Chicago, IL 60606  
Tel 312-201-7700 Fax 312-201-0031 [tetrattech.com](http://tetrattech.com)

## AIR DISPERSION MODELING

As described by the USEPA, dispersion modeling uses mathematical formulas to characterize the atmospheric processes where pollution emitted from a source is transported downwind. Based on emissions and meteorological inputs<sup>1</sup>, a dispersion model can be used to predict ambient air concentrations at selected downwind receptor locations. These air quality models are used to determine compliance with National Ambient Air Quality Standards (NAAQS), and other regulatory requirements. (Source: [www.epa.gov/scram/air-quality-dispersion-modeling](http://www.epa.gov/scram/air-quality-dispersion-modeling).)

Tetra Tech conducted air dispersion modeling (AERMOD) to assess potential impacts from vehicle emissions on the residential subdivision. Input parameters included (1) the frequency and type of vehicles described in the traffic study by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA)<sup>2</sup>; (2) prominent air pollutants identified by USEPA; (3) Bureau of Transportation estimates for vehicle emissions<sup>3</sup>; and (4) a five-year hourly meteorological data set obtained from a nearby meteorological station<sup>4</sup>. The modeling also considers average traffic flow over a 24-hour period, and truck routes on Saunders Road and I-94 shown in **Figure 2**.

**Frequency and Type of Vehicles.** The traffic study was used to determine the traffic volumes and vehicle types (passenger vehicles verses semi-tucks) to compare the peak use to the proposed use. Input parameters assumed traffic flow over a 24-hour period.

The traffic study shows a peak employee occupancy for the office campus use, with 4,440 daily trips (2,220 trips incoming and 2,220 trips outgoing). The traffic study also projects a reduced volume of vehicle traffic for the proposed use as a warehouse development, with 2,102 daily trips (1,051 trips incoming and 1,051 trips outgoing).

**Pollutants of Concern.** The pollutants of concern include nitrogen oxides (NO, NO<sub>2</sub>), carbon monoxide (CO), and particulate matter (PM). These pollutants are produced by the high temperature combustion of fuel.

Compound	Comments
Nitrogen Oxides (NO <sub>x</sub> )	NO <sub>x</sub> are gas molecules that react in the atmosphere and contribute to both formation of and depletion of ground-level ozone (smog) depending on the presence of sunlight.
Carbon Monoxide (CO)	CO is a common pollutant emitted from fuel combustion and can be an asphyxiant at high levels (i.e., generators or cars running in closed garages pose a serious health risk).
Particulate Matter (PM)	Particulates are microscopic solids or liquid droplets generated by combustion. Particulates include dust, dirt, smoke, soot, etc.

<sup>1</sup> [www.epa.gov/scram/air-modeling-observational-meteorological-data](http://www.epa.gov/scram/air-modeling-observational-meteorological-data)

<sup>2</sup> KLOA, *Traffic Impact Study, Proposed Industrial Development, Deerfield, Illinois*, report dated March 23, 2023.

<sup>3</sup> Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type Using Gasoline and Diesel | Bureau of Transportation Statistics ([bts.gov](https://bts.gov))

<sup>4</sup> USEPA Meteorological Station # 17-031-4201, Northbrook, Illinois, Coordinates 42°08'24.0"N 87°47'57.2"W

The model uses USEPA National Average Vehicle Emission Rates for the pollutants of concern listed in **Table 1**.

**Estimates for Site Vehicle Emissions.** The Bureau of Transportation estimates vehicle emissions based upon vehicle type<sup>5</sup>. We used the US Department of Transportation’s *compound-specific emission factors* to calculate vehicle emissions for cars and semi-trucks for both the current and proposed use scenarios.

Use	Vehicle Type	Daily Trips	Calculated Emissions (lb./day)		
			NOx	CO	PM
Current Use	Light-Duty Gasoline (Cars)	4,440	2.10	53.80	0.117
Proposed Use	Light-Duty Gasoline (Cars)	1,200	0.57	14.54	0.032
	Heavy Duty Diesel (Trucks)	616	6.66	3.63	0.159
	<b>Total</b>	<b>1,816</b>	<b>7.23</b>	<b>18.17</b>	<b>0.191</b>

The data indicates that increased truck traffic will result in

- A net emission decrease in carbon monoxide
- A net emission increase in nitrogen oxides and particulate matter

The calculated emissions are used as input parameters in the model; these emissions are representative of warehouse developments of a similar scale.

**Estimates for Interstate 94 Vehicle Emissions.** Tetra Tech also considered vehicle emissions from I-94. The Illinois Department of Transportation<sup>6</sup> indicates I-94 serves 180,000 vehicles per day, approximately 163,800 cars and 16,200 trucks traverse the eastern frontage each day. Traffic routes used in our assessment are shown in **Figure 2**. For comparison purposes, the following summarizes the daily vehicle emissions from I-94:

Use	Vehicle Type	Daily Trips	Calculated Emissions (lb./day)		
			NOx	CO	PM
Interstate 94	Light-Duty Gasoline (Cars)	163,800	51.64	1,323.13	2.889
	Heavy Duty Diesel (Trucks)	16,200	116.75	63.68	2.786
	<b>Total</b>	<b>180,000</b>	<b>168.39</b>	<b>1,386.81</b>	<b>5.675</b>

<sup>5</sup> [Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type Using Gasoline and Diesel | Bureau of Transportation Statistics \(bts.gov\)](#)

<sup>6</sup> Source: email message from Adam Lintner, April 25, 2023, [alintner@getipass.com](mailto:alintner@getipass.com)

Based on these data, vehicle emissions from I-94 will far exceed site vehicle emissions for the proposed use. Further, vehicle emissions from I-94 will disperse across the site; therefore, the relatively low emissions generated from the proposed site use will not be discernable from those associated with I-94.

**Meteorologic Data.** Atmospheric conditions affect how vehicle emissions disperse. For atmospheric dispersion modeling, meteorological conditions (wind speed and direction, temperature, humidity, pressure and air stability class) are considered.

Tetra Tech obtained meteorological data from a nearby station in Northbrook, Illinois (source: <https://www.epa.gov/aqs>). The data consists of wind speed and wind direction measurements collected at one-hour increments over a five-year period. The weather station data demonstrate that prevailing wind directions are southwest to northeast, northeast to southwest, and broadly west-northwest to east-southeast. The wind speed and direction data collected over a five-year period is illustrated in a wind rose diagram included as **Attachment 1**.

**Model Input Parameters & Procedures.** Tetra Tech applied site-specific input parameters including (1) the frequency and type of vehicles described in the traffic study; (2) the pollutants of concern; (3) the Bureau of Transportation estimates for vehicle emissions; (4) site-specific calculated emissions; and (5) meteorological data.

To assess potential impacts on the east and west sides of the residential subdivision, our analysis considers

- Average traffic flow over a 24-hour duration
- Truck routes on Saunders Road
- Vehicle emissions from I-94

The site-related traffic routes on Saunders Road and I-94 are shown in **Figure 2**.

**Modeling Results.** Receptors are positioned along the east and west sides of the residential subdivision. The model runs consider two sources of emissions: Saunders Road (specifically traffic induced by the warehouse development) and I-94.

Emission Source	Averaging Period: 24 hours					
	NO <sub>2</sub>		CO		PM	
	(ug/m <sup>3</sup> )		(ug/m <sup>3</sup> )		(ug/m <sup>3</sup> )	
	East	West	East	West	East	West
Saunders Road	13.30	0.83	33.44	2.10	0.35	0.02
Interstate-94	18.03	11.34	148.52	93.39	0.61	0.38

ug/m<sup>3</sup> = micrograms per cubic meter

Our calculations show that at the eastern side of the subdivision, 24-hour average ambient air concentrations attributable to I-94 vehicle emissions *exceed* that attributable to vehicle emissions generated by the project on the site and on Saunders Road. The calculated Vehicle Tailpipe Emissions and the AERMOD model results are summarized in **Tables 2 and 3**, respectively.

Modeling results are also compared to the National Ambient Air Quality Standards (40 CFR Part 51) using appropriate averaging periods (1-hour and 24-hour averages) per the NAAQS as indicated below.

Emission Source	NO <sub>2</sub> , 1-Hour Average (ug/m <sup>3</sup> )		CO, 1-Hour Average (ug/m <sup>3</sup> )		PM, 24-Hour Average (ug/m <sup>3</sup> )	
	East	West	East	West	East	West
Saunders Road	60.15	2.79	151.15	7.02	0.35	0.02
I-94	57.08	40.67	470.08	334.96	0.61	0.38
NAAQS	188		40,000		35	

ug/m<sup>3</sup> = micrograms per cubic meter

The calculated site-generated vehicle emissions are not expected to appreciably change ambient air quality, which based on modeling, will continue to meet USEPA’s standards. The results of the dispersion modeling are summarized in **Table 3**.

### SUMMARY AND CONCLUSION

Bridge Industrial Acquisition, LLC retained Tetra Tech to advise on environmental matters associated with redevelopment of the 101-acre commercial property at 1 Baxter Parkway in Deerfield, Illinois (the site). This includes ambient air quality assessment of vehicle emissions associated with a planned warehouse development at the site.

- The site is currently developed with ten mid-rise office buildings that served as the corporate headquarters for Baxter International, Inc. Buildings at the site were constructed in 1972. The site is bordered to the north and south by commercial properties, to the east by Interstate 94 and to the west by a residential subdivision, across Saunders Road. Redevelopment plans call for site clearing and construction of two warehouse buildings and outdoor athletic fields.
- Bridge retained Tetra Tech to assess the potential for site-related vehicle emissions to impact air quality at the residential subdivision. Our assessment considered the volume of traffic, the type of vehicles, and emissions from I-94 vehicles. It is worth noting that meteorological data indicate prevailing winds blow from the west to the east, from the residential subdivision towards the site.
- Tetra Tech conducted air dispersion modeling to assess impacts from vehicle emissions. Input parameters included (1) the frequency and type of vehicles described in the traffic study; (2) pollutants of concern (3) Bureau of Transportation estimates for vehicle emissions; and (4) meteorologic data obtained from a nearby meteorological station. The dispersion modeling also considers traffic flow over a 24-hour duration, and truck routes on Saunders Road associated with the proposed site use and on I-94.
- The data indicates increased truck traffic will result in a net emission decrease in carbon monoxide and net emission increase in nitrogen oxides and particulate emissions.

Based on the results of limited emissions assessment, Tetra Tech concludes that while the proposed development will significantly reduce overall traffic volume, the associated truck traffic will result in a net emission increase for some pollutants of concern. Notwithstanding, the modeling demonstrates compliance with the National Ambient Air Quality Standards for nitrogen oxides, carbon monoxide and particulate emissions.

Thank you for requesting our assistance with this matter.

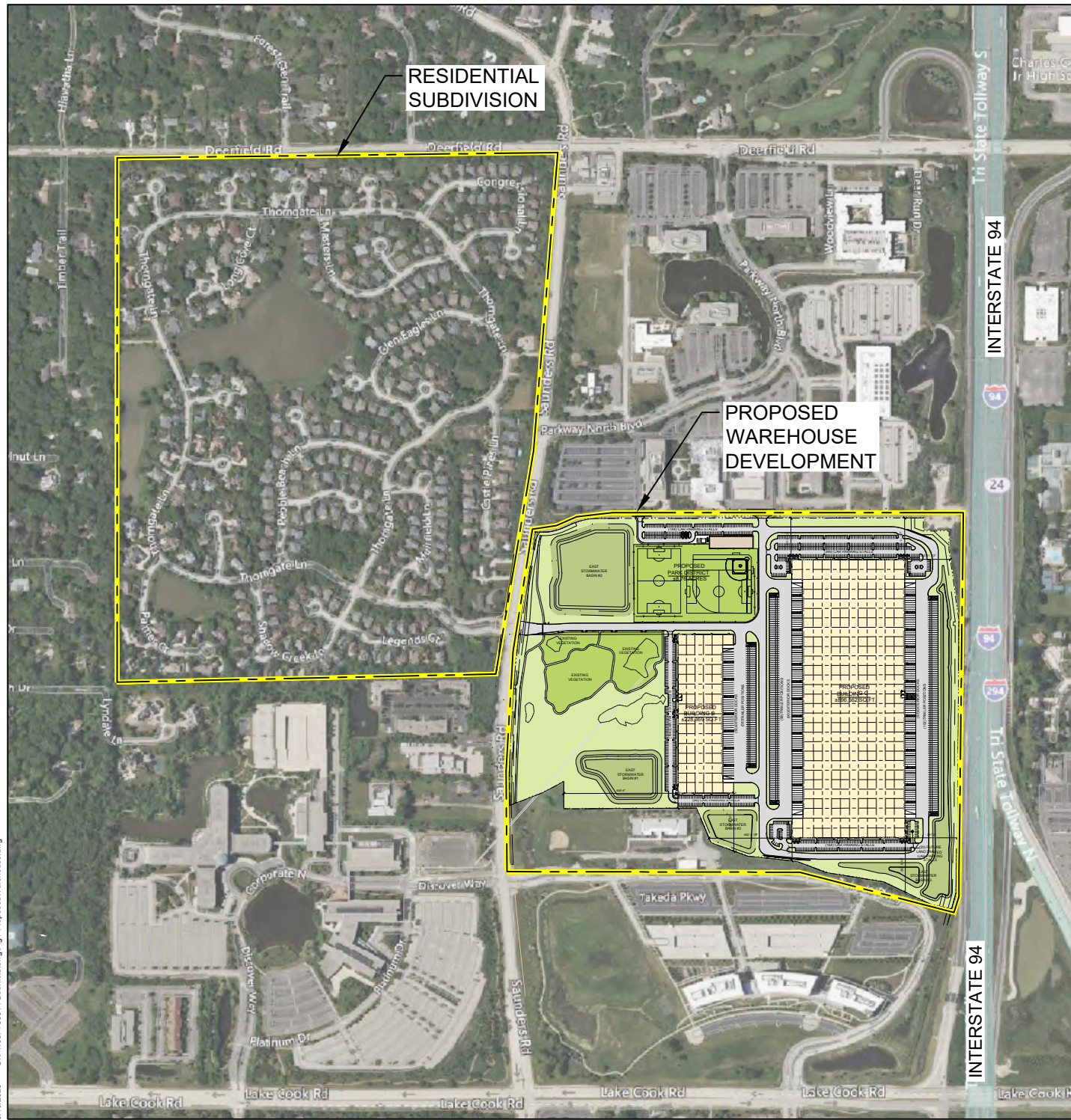
Respectfully Submitted,



Stephen G. Torres, P.G.  
Senior Engineering Geologist

Attachments:

- Figure 1: Site Plan Showing the Redevelopment Site and Vicinity
- Figure 2: Aerial Photograph Showing Dispersion Model Source and Receptor Locations
- Table 1: Estimated National Average Vehicle Emission Rates
- Table 2: Calculated Vehicle Tailpipe Emissions
- Table 3: AEROMOD Results
- Attachment 1, Wind Rose Diagram



RESIDENTIAL  
SUBDIVISION

PROPOSED  
WAREHOUSE  
DEVELOPMENT



SCALE IN FEET  
0 400 800

1 Baxter Parkway  
Deerfield, Illinois

Figure 1  
Site Plan Showing the Redevelopment  
Site and Vicinity



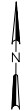


**Subdivision Receptors  
(yellow symbols)**

**Roadway Emissions Sources  
(blue lines)**

INTERSTATE 94

INTERSTATE 94



SCALE IN FEET



**1 Baxter Parkway  
Deerfield, Illinois**

**Figure 2**  
*Aerial Photograph Showing Dispersion  
Model Source and Receptor Locations*



**Table 1: Estimated National Average Vehicle Emissions Rates per Vehicle by Vehicle Type using Gasoline and Diesel (Grams per mile)**

	(P) 2023	(P) 2024	(P) 2025	(P) 2026	(P) 2027	(P) 2028	(P) 2029	(P) 2030
<b>GASOLINE</b>								
<b>Light-duty vehicles</b>								
Total HC	0.241	0.228	0.218	0.195	0.187	0.175	0.166	0.159
Exhaust CO	3.664	3.534	3.359	3.171	3.005	2.845	2.668	2.508
Exhaust NOx	0.143	0.117	0.103	0.088	0.081	0.070	0.063	0.054
Exhaust PM2.5	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Brakewear PM2.5	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Tirewear PM2.5	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
<b>DIESEL</b>								
<b>Heavy-duty vehicles</b>								
Total HC	0.209	0.195	0.183	0.174	0.165	0.157	0.150	0.145
Exhaust CO	1.783	1.724	1.671	1.626	1.586	1.549	1.517	1.492
Exhaust NOx	3.269	3.060	2.883	2.742	2.616	2.501	2.396	2.315
Exhaust PM2.5	0.065	0.057	0.049	0.043	0.038	0.033	0.029	0.026
Brakewear PM2.5	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Tirewear PM2.5	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003

**KEY:** CO = carbon monoxide; HC = hydrocarbons; NOx = nitrogen oxides; P = projection; PM2.5 = particulate matter with diameter <= 2.5 micrometers; R = revised.

**NOTES**

Estimates are by calendar year. Vehicles types are defined as follows: light-duty vehicles (passenger cars); light-duty trucks (two axle, four tire); heavy-duty vehicles (trucks with more than two axles or four tires); motorcycle (highway only).

Emissions factors are averages based on the national average age distributions, vehicle activity (speeds, operating modes, vehicle-miles traveled fractions, starts and idling), temperatures, inspection/maintenance and antitampering programs, and average gasoline fuel properties in that calendar year. Total HC includes exhaust and evaporative emissions.

Average emissions per vehicle rates assume a fleet comprised exclusively of gasoline and diesel vehicles. Gasoline-electric hybrids are accounted for in the values for gasoline vehicles.

This table was generated using MOVES3, the U.S. Environmental Protection Agency's (EPA) mobile source emissions model. More information on MOVES is available at [www.epa.gov/moves](http://www.epa.gov/moves).

Data for this update are based on new estimation models and are not comparable to previous releases. MOVES3 includes updates to historical data and methods as well as updates to future year projections and thus provides the current best estimates of emissions for all calendar years. Data for 2021 and later are projections.

**SOURCE** U.S. Environmental Protection Agency, Office of Transportation and Air Quality, personal communication, Apr. 30, 2021.

**Table 2. Calculated Vehicle Tailpipe Emissions**

Use	Vehicle Type	Daily Trips	Trip Dist. (mi)	Daily VMT	2023 MOVES Emission Factor (g/VMT)			Calculated Emissions (lb/day)		
					NOx	CO	PM	NOx	CO	PM
Current Use	Light-Duty Gasoline (Cars)	4,440	1.5	6,660	0.143	3.664	0.008	2.10	53.80	0.12
Proposed Use	Light-Duty Gasoline (Cars)	1,200	1.5	1,800	0.143	3.664	0.008	0.57	14.54	0.03
	Heavy Duty Diesel (Trucks)	616	1.5	924	3.269	1.783	0.078	6.66	3.63	0.16
	<b>Total</b>	<b>1,816.0</b>		<b>2,724.0</b>				<b>7.23</b>	<b>18.17</b>	<b>0.19</b>
I-94	Light-Duty Gasoline (Cars)	163,800	1	163,800	0.143	3.664	0.008	51.64	1323.13	2.89
	Heavy Duty Diesel (Trucks)	16,200	1	16,200	3.269	1.783	0.078	116.75	63.68	2.79
	<b>Total</b>	<b>180,000.0</b>		<b>180,000.0</b>				<b>168.39</b>	<b>1,386.81</b>	<b>5.67</b>

VMT = Vehicles miles of travel

**Table 3. AERMOD Results**

Subdivision Location	Use	Predicted 24-Hour Average Concentration (ug/m3)		
		NOx	CO	PM
East Side Receptors	Current Use	3.86	99.00	0.22
	Proposed Use	13.30	33.44	0.35
	I-94	18.03	148.52	0.61
West Side Receptors	Current Use	0.24	6.21	0.01
	Proposed Use	0.83	2.10	0.02
	I-94	11.34	93.39	0.38

Results are the maximum predicted 24-hour average concentration at the east side and west side receptor locations over a 5-year period.

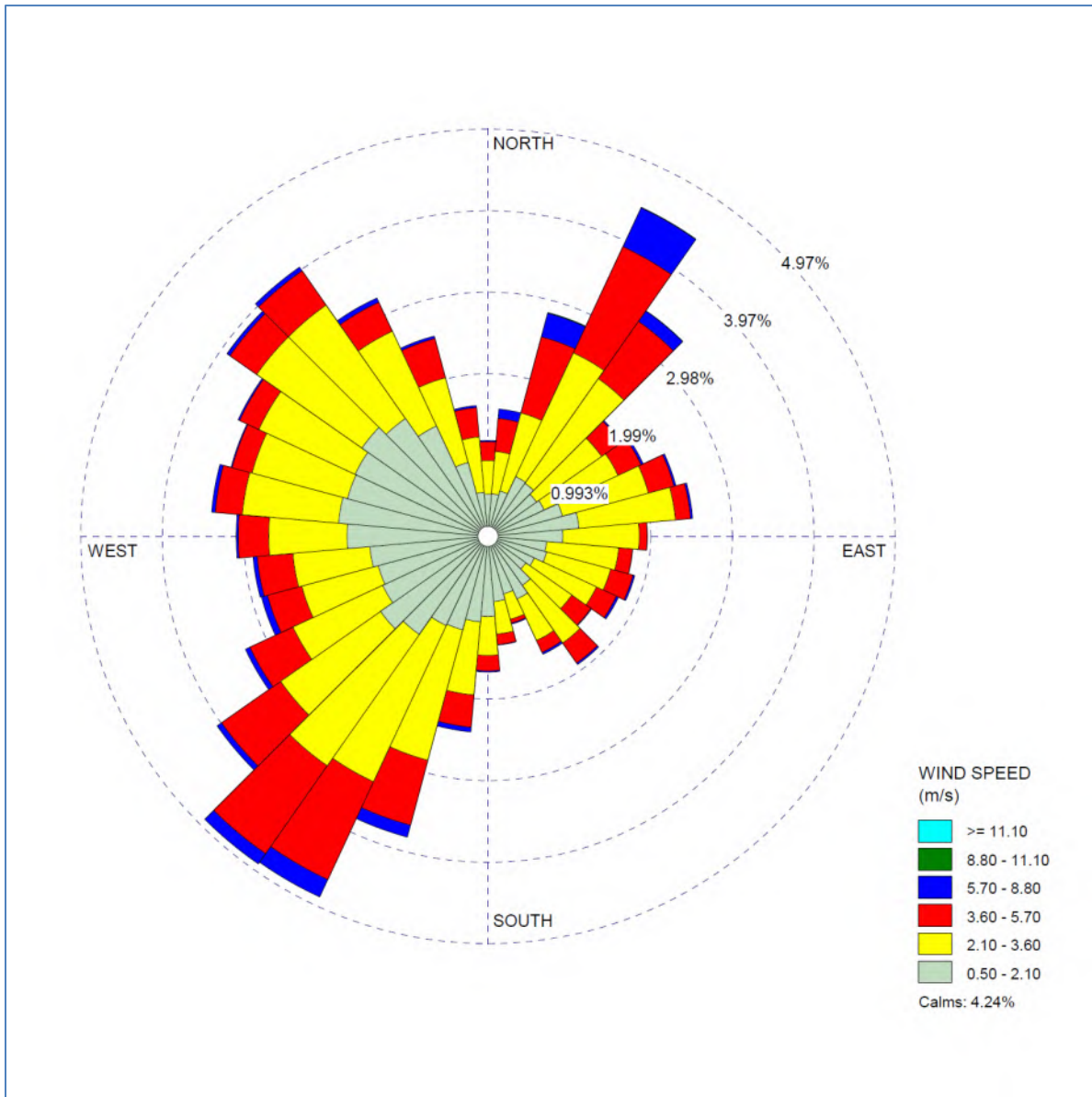
Results are based on average annual daily traffic, thus 24-hour average concentrations are estimated and presented.

Current use and proposed use scenarios address only that traffic induced by the current and proposed use of the site.

Current use and proposed use traffic are assumed to conservatively transit only Saunders Road.

## Attachment 1

### Rose Diagram Showing Wind Speed and Direction USEPA Weather Station 17-031-4201, Northbrook, Illinois Hourly Measurements for the Years 2005-2006 and 2008-2010



Source: <https://www.epa.gov/aqs>

The wind rose shows the frequency of occurrence of wind direction and speed for the 5-year period. The circular format of the wind rose shows the direction the winds blew from and the length of each "spoke" around the circle shows how often the wind blew from that direction. The different colors of each spoke provide details on the speed, in meters per second of the wind from each direction. This wind rose demonstrates that prevailing winds are from three sectors: southwest to northeast, northeast to southwest, and broadly west-northwest to east-southeast. Generally speaking, winds are much more likely to blow from the residential subdivision towards the site much more frequently than from the site toward the residential subdivision.

#15

PROPERTY VALUE IMPACT PRESENTATION  
BAXTER REDEVELOPMENT  
UNINCORPORATED LAKE COUNTY, ILLINOIS

Presentation Provided by:



## MAROUS & COMPANY INTRODUCTION

MaRous & Company specializes in valuation of unique and complex investment-grade real estate and has conducted similar market impact studies for a variety of clients and for several different proposed developments for over 40 years.



Clients have ranged from municipalities, counties, and school districts, to corporations, developers, and citizen's groups. The types of projects analyzed include commercial zoned land re-zoned to industrial development, commercial developments such as shopping centers and big-box retail facilities; religious facilities such as mosques and mega-churches; residential developments such as high-density multifamily and congregate-care buildings and large single-family subdivisions; recreational uses such as skate parks and lighted high school athletic fields; and industrial uses such as waste transfer stations, landfills, and quarries.

Projects related to this one include but are not limited to the proposed redevelopment of Signode to modern industrial use in Glenview; proposed development of a modern manufacturing/distribution park in South Elgin; a proposed modern distribution park in Carpentersville; a proposed modern distribution building in Aurora; and proposed redevelopment of a commercial site to distribution in Hillside.

Along with the various projects described above, MaRous & Company has conducted numerous market studies of energy-related projects. These projects consist of analyzing the impact of wind energy facilities, solar energy facilities, and transmission lines on adjacent residential uses, as well as several proposed natural gas-fired electric plants in various locations.

## SCOPE OF WORK

- Review of the proposed site development plans.
- Review of Lake County's zoning and comprehensive plan documents.
- Review and analysis of the demographics in the area of the proposed project.
- Data on the general market area of the proposed project.
- An inspection of the proposed project site and area on May 18, 2022.
- Interviews of the client for stabilized project information.
- Review of a property tax due diligence acquisition report by Ryan LLC dated March 23, 2023.
- Review of a traffic study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc., dated March 23, 2023.
- Review of an emissions assessment conducted by Tetra Tech dated May 11, 2023.
- Data for the nearby home sales by the proposed project and from public records.
- Researched specific peer-reviewed studies of distribution use near residential use.
- Interviews of local real estate professionals concerning sales in the area, local market conditions, and the impact of industrial use on property values in the area.
- Distribution uses and nearby residential used for development of the matched pair analysis were physically inspected on the exterior, and photographs of the interiors were reviewed where available.
- Consideration of the previous 645,000 square foot Baxter facility in existence for over 40 years and containing 2,500 employees.

# MARKET IMPACT ANALYSIS CONCLUSIONS

As a result of the analysis undertaken,

MaRous & Company concluded that there is no market data indicating the project will have a negative impact on residential property values in the immediate area.

Further, market data from Deerfield supports the conclusion that the project will not have a negative impact on residential property values in the surrounding area.

- An analysis of residential sales proximate to existing distribution use which includes a residential sale as close as 160 feet to distribution use, did not support any finding that proximity to the distribution use had any impact on property values; compared to the proposed project, where the closest west single-family home on Saunders Road will be approximately 1,030 feet away from a subject building and the nearest Thorngate home will be approximately 1,285 feet away from a subject building.
- The site of the proposed project is mostly zoned for industrial use already by Lake County.
- The land and the soccer/baseball fields, 6 pickle ball courts, with parking and washrooms, will be donated to the park district which will be an amenity to the community.
- The project will meet or exceed all the required development and operating standards.
- Distribution use creates many temporary and permanent jobs.
- The use will pay significant taxes that go to the local taxing bodies, potentially over \$2,500,000 annually as stabilized with little burden to village services.
- The proposed project will have a low-impact visual appearance due to the significant landscape screening and a large setback due to the retention ponds and the donated park district land/improvements.
- The proposed development could reduce the tax rate for nearby properties which could lower their real estate taxes and positively impact their market value.
- The volume of traffic estimated to be generated by the proposed development will be less than would have been generated by the Baxter Corporate Headquarters at full occupancy.
- All truck traffic approaching and departing the warehouse buildings will be required to utilize the Baxter Parkway entrance. Further, truck traffic will be directed to approach and depart the site via Lake Cook Road and to avoid Deerfield Road.
- The results of the capacity analyses indicate that the existing roadway system will have sufficient reserve capacity to accommodate the traffic that will be generated by the proposed development.
- The proposed development access system will adequately accommodate the traffic estimated to be generated by the proposed development.
- The proposed development generated vehicle emissions are not expected to appreciably change ambient air quality conditions, which presently meet USEPA's ambient air quality standards.

## Project Information Summary

<b>Location</b>	Southeast corner of Hawthorne Lane and Saunders Road, Unincorporated Lake County, Illinois			
<b>Property Type</b>	Proposed Distribution and Park District Area			
<b>Project Site Area</b>	Approximately 101 acres			
<b>Traffic Counts</b>	Interstate 94 – 164,200 Vehicles Per Day			
<b>Current Zoning</b>	G.O. – General Office			
<b>Code/Description</b>	L.I. – Limited Industrial			
<b>Proposed Zoning</b>	I-2 Limited Industrial District			
<b>Immediate Environs</b>	North Parkway North Center office park, zoned I-I Office, Research, and Restricted Industrial District in the Village of Deerfield	East Illinois Tri-State Tollway	South Horizon Therapeutics campus, zoned I-I Office, Research, and Restricted Industrial District in the Village of Deerfield	West Village of Riverwoods – Thorngate Subdivision, single family homes, R-1 PUD; 3 office buildings, O & RC Office & Research Compatible; Center for Holistic Medicine, Center for Enriched Living, R-1 Residential; Discover Financial Services, O & R-1
<b>Scope of Project</b>	The petitioner is proposing to demolish existing structures and redevelop the property with three buildings. The proposed plan includes an 896,562 square foot, speculative, multi-tenant distribution building (186 exterior docks and 396 car parking spaces); a 228,369 square foot, speculative, multi-tenant, distribution building (50 exterior docks and 256 car parking spaces); and two outdoor soccer/baseball fields, 6 pickleball courts, washrooms and parking; which will be donated to the park district when completed (originally in the general area of open space were Baxter had room for potential expansion). The two distribution buildings would be able to accommodate a variety of uses including warehouse, distribution, assembly, and light manufacturing which range in building heights between approximately 44 feet and 49 feet. The petitioners have designed the proposed landscaping around the perimeter of the property to buffer sight lines from the buildings. The proposed landscaping along Saunders Road will consist of an existing natural wooded and wetland area with walking path and a mixture of evergreen, shade trees on landscaped berms with prairie grasses. The proposed stormwater detention facilities basins throughout the property will have native plantings. Shade trees and planting will be in the parking lot islands and on the property's perimeter.			

SUBJECT PROPERTY



**PROPOSED PROJECT AERIAL**

# DEMOGRAPHIC SUMMARY

Deerfield Village, IL  
Geography: Place

## KEY FACTS

19,726  
Population



7,314  
Households

44.7

Median Age

\$124,256  
Median Disposable Income

## EDUCATION

1%

No High School Diploma



6%  
High School Graduate



12%  
Some College



82%  
Bachelor's/Grad/Prof Degree

## INCOME



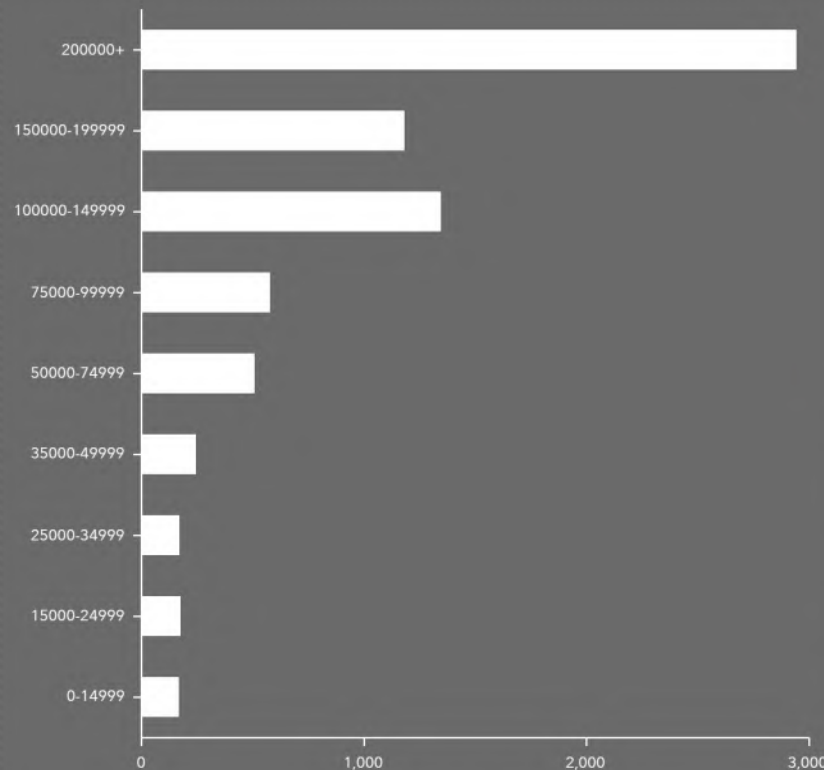
\$166,188  
Median Household Income



\$85,740  
Per Capita Income



\$1,071,790  
Median Net Worth



HOUSEHOLD INCOME



## EMPLOYMENT



White Collar

90%



Blue Collar

5%



Services

5%

2.1%

Unemployment Rate

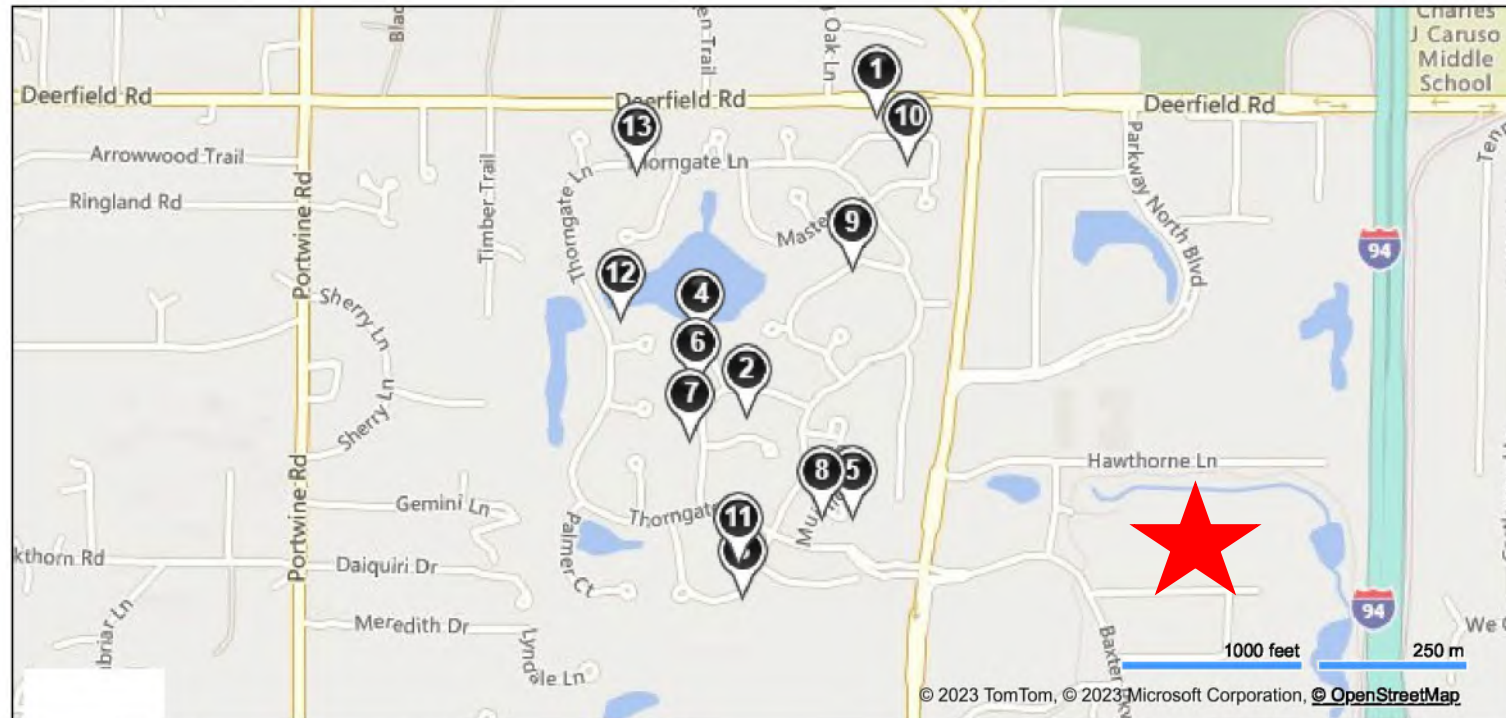
# DETACHED HOME VALUES NEAR THE PROPOSED PROJECT WITHIN THE LAST 18 MONTHS

	Stat	Street #	Str Name	Sfx	City	All Beds	Baths	Yr Blt	ASF	Acreage	Closed Date	Sold Pr	Taxes
1	CLSD	2300	Congressional	Ln	Riverwoods	5	3	1994	3245	0.2	08/02/2022	\$570,000	\$19,274.06
2	CLSD	2416	Spyglass Hill	Ct	Riverwoods	3	3	1997	3181	0.24	06/30/2022	\$600,000	\$17,179.26
3	CLSD	2421	Shadow Creek	Ln	Riverwoods	4	2.1	1996	3061	0.21	12/15/2021	\$620,000	\$16,032.78
4	CLSD	574	Cypress Point	Ct	Riverwoods	3	2.1	1996	3118	0.28	06/02/2022	\$649,900	\$15,163.70
5	CLSD	421	Muirfield	Ln	Riverwoods	4	4	1994	3245	0.25	09/12/2022	\$670,000	\$19,571.38
6	CLSD	534	Pebble Beach	Ln	Riverwoods	3	2.1	1995	3108	0.24	11/14/2022	\$690,000	\$14,196.44
7	CLSD	484	Pebble Beach	Ln	Riverwoods	3+1 bsmt	3.1	1997	2433	0.22	09/15/2022	\$699,900	\$14,684.86
8	CLSD	407	Muirfield	Ln	Riverwoods	4	3.1	1995	3244	0.44	12/03/2021	\$705,000	\$15,358.04
9	CLSD	2323	Glen Eagles	Ln	Riverwoods	3	2.1	1999	2379	0.25	08/11/2022	\$754,000	\$11,989
10	CLSD	2282	Congressional	Ln	Riverwoods	4	4	1995	3245	0.19	07/15/2022	\$818,000	\$14,856.28
11	CLSD	2413	Seminole	Ct	Riverwoods	5	3.1	1996	2922	0.32	06/09/2022	\$835,000	\$15,484
12	CLSD	2536	Royal Troon	Ct	Riverwoods	4+1 bsmt	4.2	1995	4551	0.49	12/03/2021	\$918,000	\$22,683.38
13	CLSD	2520	Thorngate	Ln	Riverwoods	4	5.1	1996	6188	0.5	05/03/2023	\$1,150,000	\$33,843.78

## 13 Sold - Detached Single Statistics

	High	Low	Average	Median
<b>List Price</b>	\$1,299,000	\$579,900	\$763,123	\$699,900
<b>Sold Price</b>	\$1,150,000	\$570,000	\$744,600	\$699,900
<b>Listing Market Time</b>	56	1	15	8
<b>Market Time</b>	131	1	30	14

# DETACHED HOME SALES CORRESPONDING MAP



	<b>MLS #</b>	<b>Status</b>	<b>Address</b>	<b>Price</b>
<b>1</b>	<a href="#">11421074</a>	<b>CLSD</b>	2300 Congressional Ln	\$570,000
<b>2</b>	<a href="#">11451229</a>	<b>CLSD</b>	2416 Spyglass Hill Ct	\$600,000
<b>3</b>	<a href="#">11214332</a>	<b>CLSD</b>	2421 Shadow Creek Ln	\$620,000
<b>4</b>	<a href="#">11389255</a>	<b>CLSD</b>	574 Cypress Point Ct	\$649,900
<b>5</b>	<a href="#">11467592</a>	<b>CLSD</b>	421 Muirfield Ln	\$670,000
<b>6</b>	<a href="#">11630812</a>	<b>CLSD</b>	534 Pebble Beach Ln	\$690,000
<b>7</b>	<a href="#">11466169</a>	<b>CLSD</b>	484 Pebble Beach Ln	\$699,900
<b>8</b>	<a href="#">11207164</a>	<b>CLSD</b>	407 Muirfield Ln	\$705,000
<b>9</b>	<a href="#">11443496</a>	<b>CLSD</b>	2323 Glen Eagles Ln	\$754,000
<b>10</b>	<a href="#">11443452</a>	<b>CLSD</b>	2282 Congressional Ln	\$818,000
<b>11</b>	<a href="#">11324161</a>	<b>CLSD</b>	2413 Seminole Ct	\$835,000
<b>12</b>	<a href="#">11153726</a>	<b>CLSD</b>	2536 Royal Troon Ct	\$918,000
<b>13</b>	<a href="#">11734666</a>	<b>CLSD</b>	2520 Thorngate Ln	\$1,150,000

## GENERAL FACTORS THAT AFFECT PROPERTY VALUES CONSIDERED

### Appearance

- Modern distribution uses have an active use of the land they occupy and are compatible with other uses in their immediate area. These uses, typically, have a low-impact appearance, usually 1 story, with no need for extraneous architectural features, causing visual impact from the surrounding to be minimal. On the next slide you will see photographs of other common structures that could be used in similar situations.
- The subject development will include significant attractive landscaping and large setbacks.

### Environment & Sustainability

- Distribution uses strive to achieve efficient land and resource use.

### Noise and Odor

- Interstate 94 exists in the subject area and is reported to service approximately 164,200 vehicles per day.
- Distribution uses do not emit as much sound or odor as Interstate 94. These issues are also controlled by zoning ordinance.

### Traffic – Conclusions by KLOA

- The volume of traffic estimated to be generated by the proposed development will be significantly less than would have been generated by the Baxter Corporate Headquarters at full occupancy.
- All truck traffic approaching and departing the warehouse buildings will be required to utilize the Baxter Parkway entrance. Further, truck traffic will be directed to approach and depart the site via Lake Cook Road and to avoid Deerfield Road.
- The results of the capacity analyses indicate that the existing roadway system will have sufficient reserve capacity to accommodate the traffic that will be generated by the proposed development.
- The proposed development access system will adequately accommodate the traffic estimated to be generated by the proposed development.

### Air Quality – Conclusions by Tetra Tech

- The proposed development generated vehicle emissions are not expected to appreciably change ambient air quality conditions, which presently meet USEPA's ambient air quality standards.

850 Asbury Drive, Buffalo Grove



325 Marriott Drive, Lincolnshire



PHOTOS OF DISTRIBUTION USES NEARBY



1200 Milwaukee Avenue, Glenview



901 East Park Avenue, Libertyville

## PROPOSED PROJECT ECONOMIC CONSIDERATIONS

### Public Services

Estimated Annual Stabilized Tax Revenue – 2026 Conclusions By Ryan LLC

- \$2,500,000+

### Infrastructure Benefits

- Modern distribution use creates many temporary and permanent jobs. The use pay significant taxes that go to the surrounding community to improve existing infrastructure without burden to the schools, police department, fire department, waste management, and other services.

### Public Safety

- The taxes paid by distribution use can also benefit public safety concerns by adding funding to first responder departments. This funding could add benefit by giving more opportunities for training, allow for better equipment, upgrade existing departments, and create higher salaries.

## MATCHED PAIR ANALYSIS

A matched pair analysis is a methodology which analyzes the importance of a selected characteristic, in this instance proximity to distribution, to the value of a property. This technique compares the sale of a property in proximity to the selected characteristic to the sale of a similar property in the same market area and under similar market conditions but without the proximity to the selected characteristic.

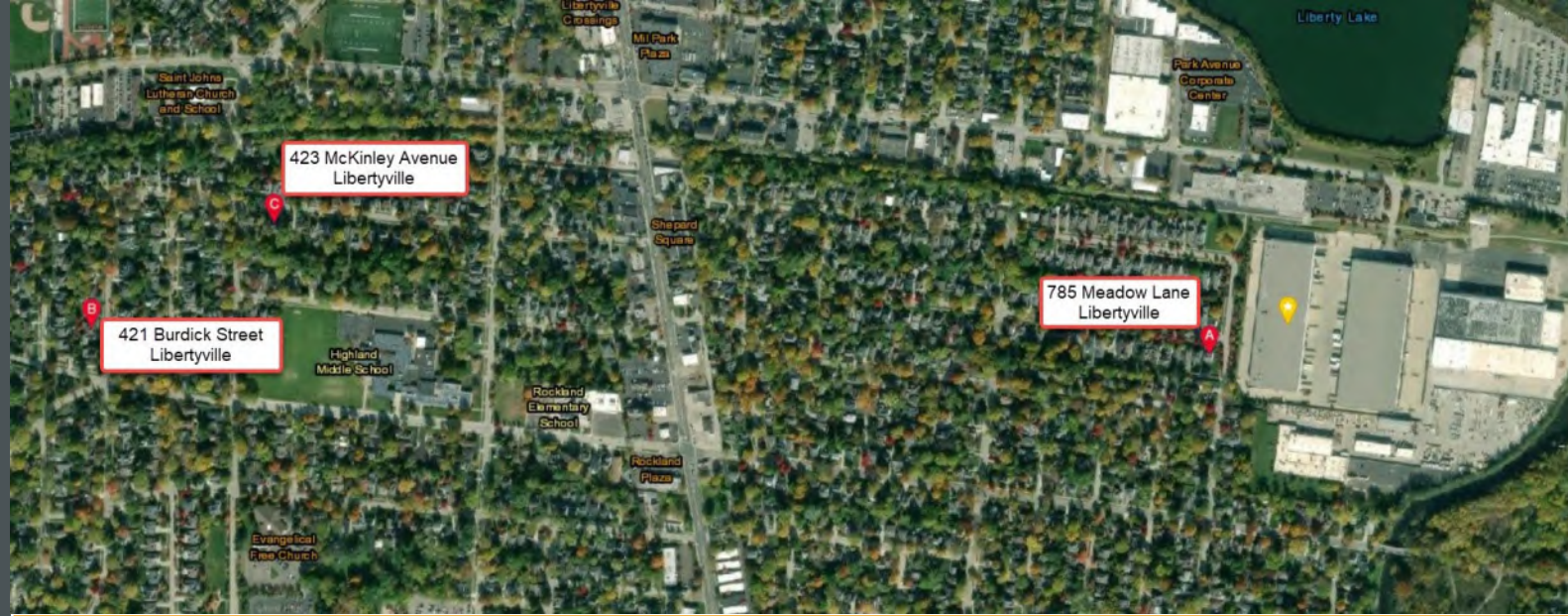
It is difficult to find properties that are identical except for proximity to distribution, and which also occurred under substantially similar market conditions. The residences included in this study were discovered in private sources, including but not limited to Zillow.com and Realtor.com, then confirmed by the corresponding the Multiple Listing Service (MLS) and municipality/county public records.

# MATCHED PAIR #1

## 859 EAST PARK AVENUE, LIBERTYVILLE



# IA



# IB



# IC

### Sale Comparison #1

	Proximate to Distribution Use IA	Not Proximate to Distribution Use IB	Not Proximate to Distribution Use IC
Address	785 Meadow Lane Libertyville	421 Burdick Street Libertyville	423 McKinley Avenue Libertyville
Property Type	Detached Single-Family	Detached Single-Family	Detached Single-Family
Approximate distance from distribution use(feet)	200	N/A	N/A
Sale Date	August 17, 2021	June ,1 2021	March 17, 2022
Sale Price	\$885,000	\$860,000	\$875,000
Year Built	2010	2012	1930
Stories	2	2	2
Beds/Baths	4 Beds 3.1 Baths	4 Beds 3.2 Baths	3 Beds 3.2 Baths
Approximate Square Footage	2814	3291	3418
Land Acreage	0.35	0.27	0.28

# MATCHED PAIR #2

## 3700 W LAKE AVE, GLENVIEW



# 2A



# 2B



# 2C



### Sale Comparison #2

	Proximate to Proposed Distribution Use 2A	Not Proximate to Proposed Distribution Use 2B	Not Proximate to Proposed Distribution Use 2C
<b>Address</b>	3419 Winchester Lane Glenview	3708 Vantage Lane Glenview	1705 Greenwood Road Glenview
<b>Property Type</b>	Detached Single-Family	Detached Single-Family	Detached Single-Family
<b>Approximate distance from distribution use(feet)</b>	373	N/A	N/A
<b>Sale Date</b>	March 17, 2023	June 4, 2021	October 26, 2022
<b>Sale Price</b>	\$1,045,000	\$985,000	\$1,050,000
<b>Year Built</b>	1997	2012	2022
<b>Stories</b>	2	2	2
<b>Beds/Baths</b>	4 Beds 3.1 Baths	4 Beds 5.1 Baths	4 Beds 2.1 Baths
<b>Approximate Square Footage</b>	3781	4626	2900
<b>Land Acreage</b>	0.26	0.34	0.33

**MATCHED PAIR #3**  
**500 CORPORATE**  
**WOODS PARKWAY,**  
**VERNON HILLS**



**3A**



**3B**



**Sale Comparison #3**

	<b>Proximate to Distribution Use 3A</b>	<b>Not Proximate to Distribution Use 3B</b>	
<b>Address</b>	350 Donnelley Place Vernon Hills	300 Ranney Avenue Vernon Hills	
<b>Property Type</b>	Detached Single-Family	Detached Single-Family	
<b>Approximate distance from distribution use(feet)</b>	410	N/A	
<b>Sale Date</b>	August 14, 2017	October 30, 2015	
<b>Sale Price</b>	\$517,500	\$530,000	
<b>Year Built</b>	2000	1998	
<b>Stories</b>	2	2	
<b>Beds/Baths</b>	5 Beds 3 Baths	5 Beds 3 Baths	
<b>Approximate Square Footage</b>	3444	3444	
<b>Land Acreage</b>	0.17	0.19	

**MATCHED PAIR #4**  
**859 EAST PARK AVENUE,**  
**GILBERTS**



**4A**



**4B**



**4C**

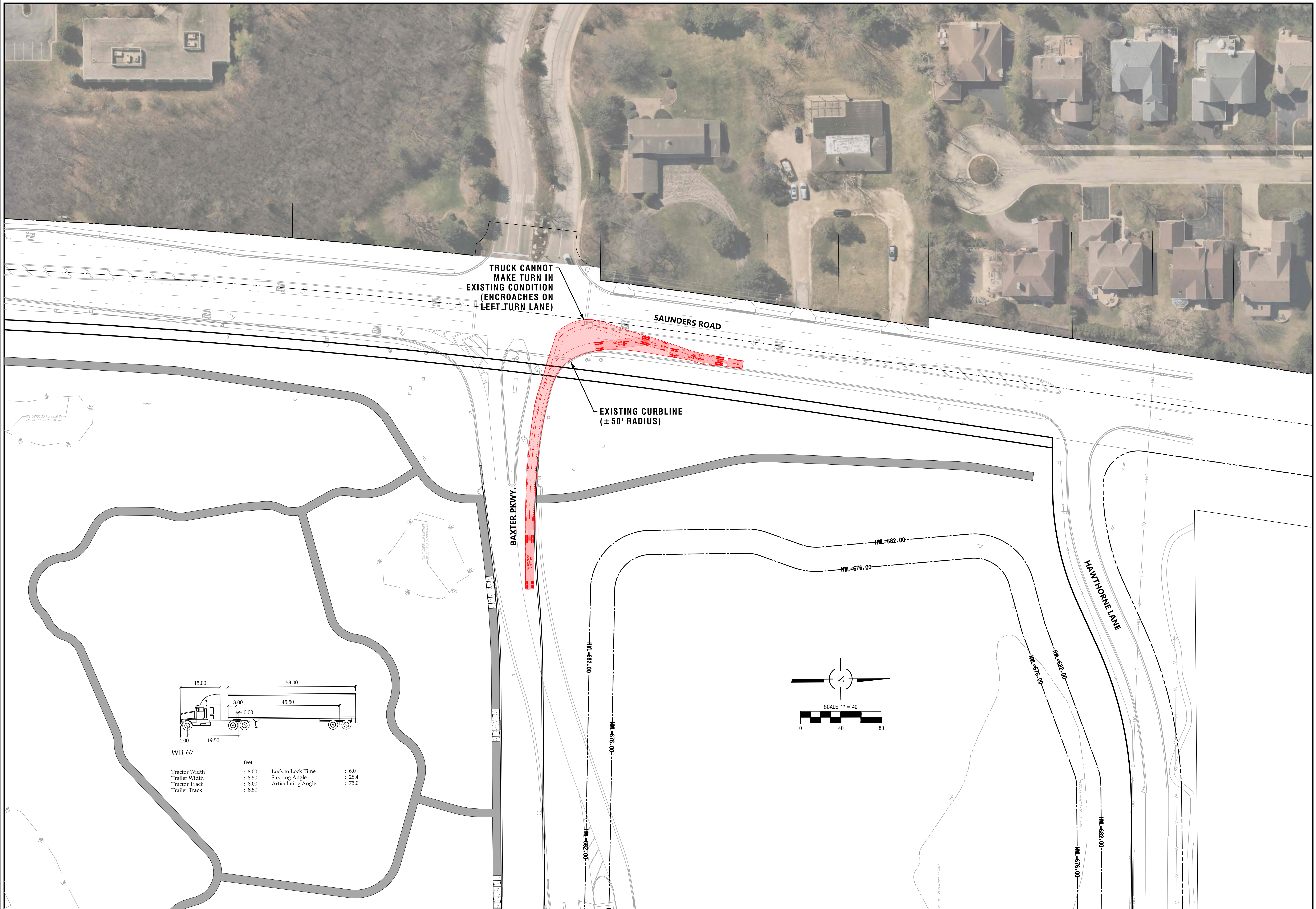


**Sale Comparison #4**

	<b>Proximate to Distribution Use 4A</b>	<b>Not Proximate to Distribution Use 4B</b>	<b>Not Proximate to Distribution Use 4C</b>
<b>Address</b>	151 Reston Lane Gilberts	268 Town Center Boulevard Gilberts	149 Redmond Boulevard Gilberts
<b>Property Type</b>	Detached Single-Family	Detached Single-Family	Detached Single-Family
<b>Approximate distance from distribution use(feet)</b>	160	N/A	N/A
<b>Sale Date</b>	May 4, 2022	April 14, 2022	May 17, 2022
<b>Sale Price</b>	\$430,275	\$430,000	\$430,000
<b>Year Built</b>	2013	2006	2006
<b>Stories</b>	2	2	2
<b>Beds/Baths</b>	4 Beds 2.1 Baths	4 Beds 2.1 Baths	4 Beds 2.1 Baths
<b>Approximate Square Footage</b>	2355	2847	3225
<b>Land Acreage</b>	0.19	0.25	0.22



MAROUS  
& COMPANY



NO.	DATE	REMARKS

NO.	DATE	REMARKS

**BAXTER PKWY. - EXISTING RADIUS**

**BRIDGE POINT O'HARE NORTH**  
DEERFIELD, IL

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
Phone: (847) 696-4060 Fax: (847) 696-4065



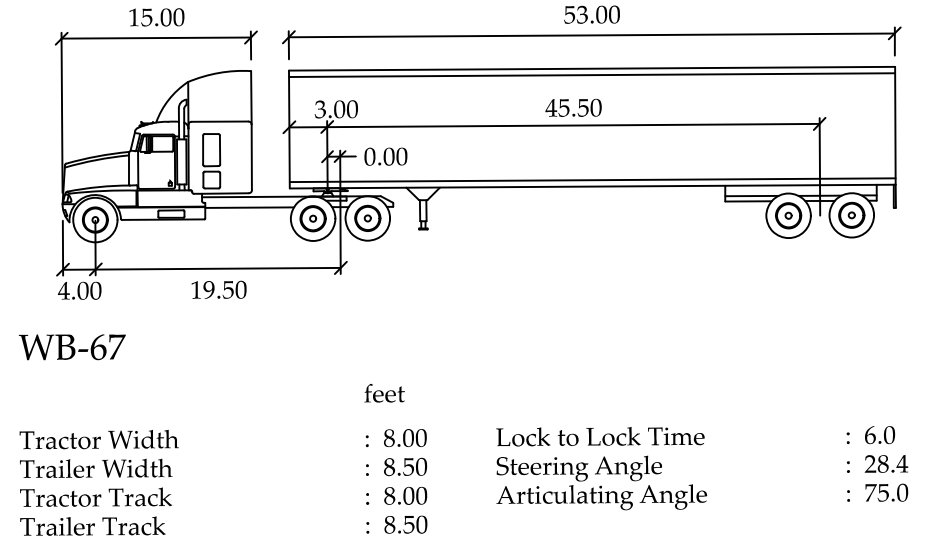
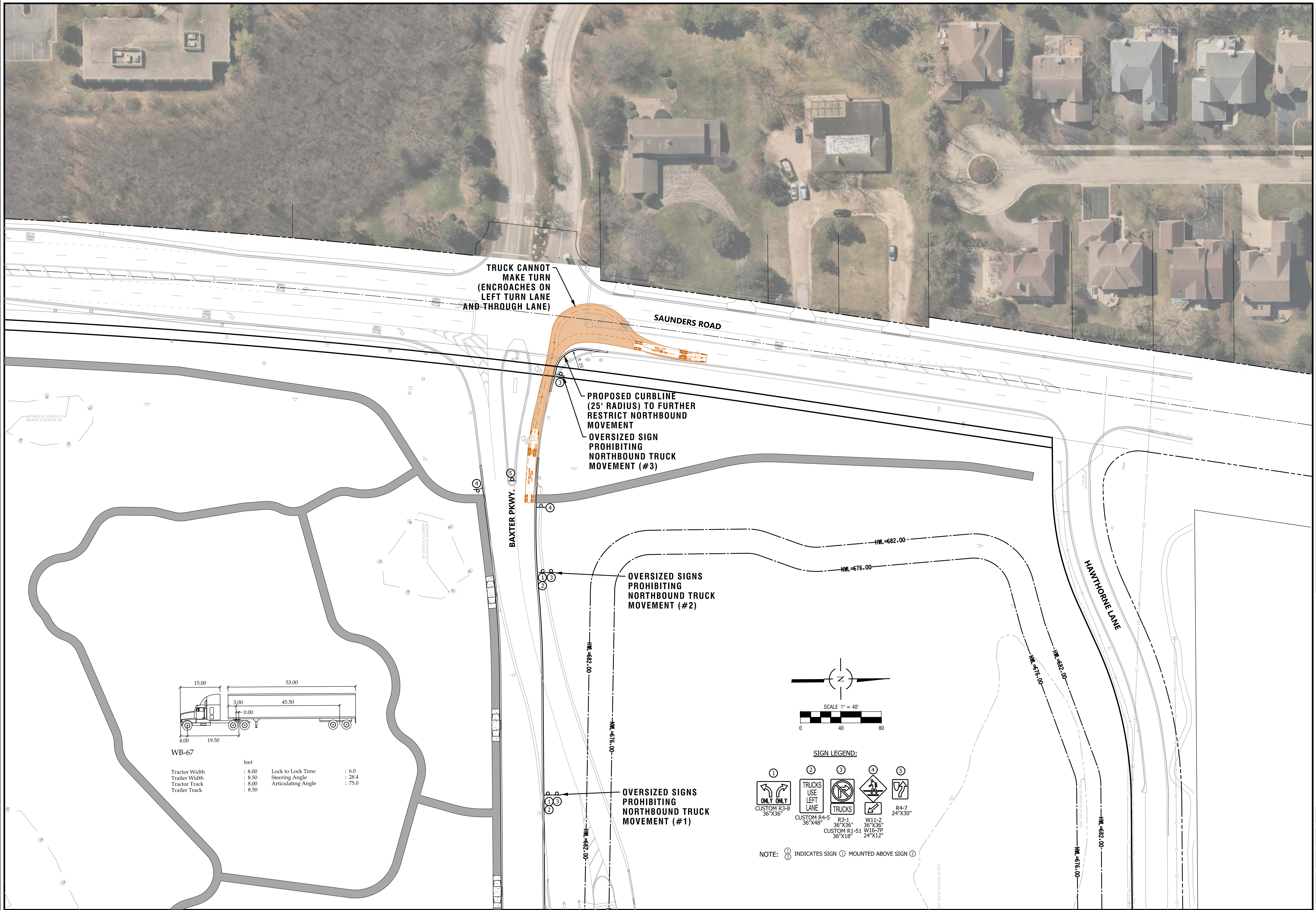
FILENAME:  
12271-EXH-1

DATE:  
05/26/23

JOB NO.  
12271

SHEET  
**RADIUS-1**

1 OF 2



SCALE 1" = 40'

SIGN LEGEND:

- ① ONLY ONLY CUSTOM R3-8 36"x36"
- ② TRUCKS USE LEFT LANE CUSTOM R4-5 36"x48"
- ③ TRUCKS R3-1 36"x36" CUSTOM R1-51 36"x18"
- ④ W11-2 36"x36" W16-7P 24"x12"
- ⑤ R4-7 24"x30"

NOTE: ② INDICATES SIGN ① MOUNTED ABOVE SIGN ②

NO.	DATE	REMARKS

NO.	DATE	REMARKS

**BAXTER PKWY. - PROPOSED REDUCED RADIUS**

**BRIDGE POINT O'HARE NORTH**  
DEERFIELD, IL

CONSULTING ENGINEERS  
SITE DEVELOPMENT ENGINEERS  
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
Phone: (847) 696-4060 Fax: (847) 696-4065



FILENAME:  
12271-EXH-2

DATE:  
05/23/23

JOB NO.  
12271

SHEET  
**RADIUS-2**

2 OF 2

## BRIDGE CONSULTANTS

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O'Donnell Callaghan LLC  
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847-367-2753 (direct)

Civil: Brett Duffy  
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[bduffy@spacecoinc.com](mailto:bduffy@spacecoinc.com)  
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1152 Spring Lake Drive  
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[mjb@cstonearchitects.com](mailto:mjb@cstonearchitects.com)  
O: 630.773.8363

Landscape  
Architect: Kathryn Talty  
Landscape Architect  
[kathryn@ktlandarch.com](mailto:kathryn@ktlandarch.com)  
847.612.5154

Environmental: Steve Torres  
Tetra Tech  
1 South Wacker Drive, Suite 3700  
Chicago, IL 60606  
[Steve.torres@tetrattech.com](mailto:Steve.torres@tetrattech.com)  
312.201.7434

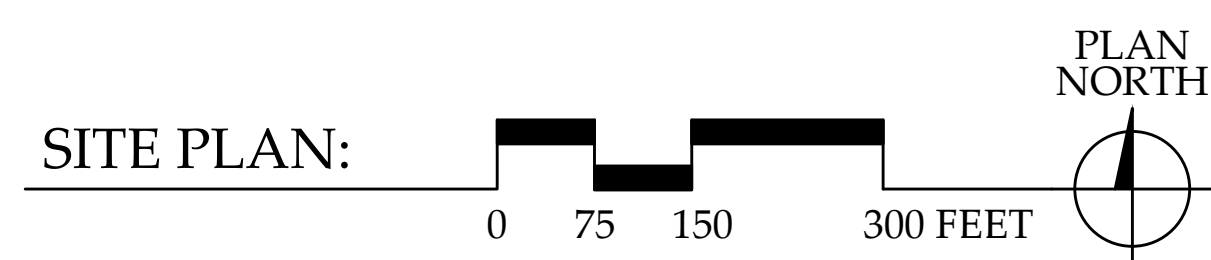
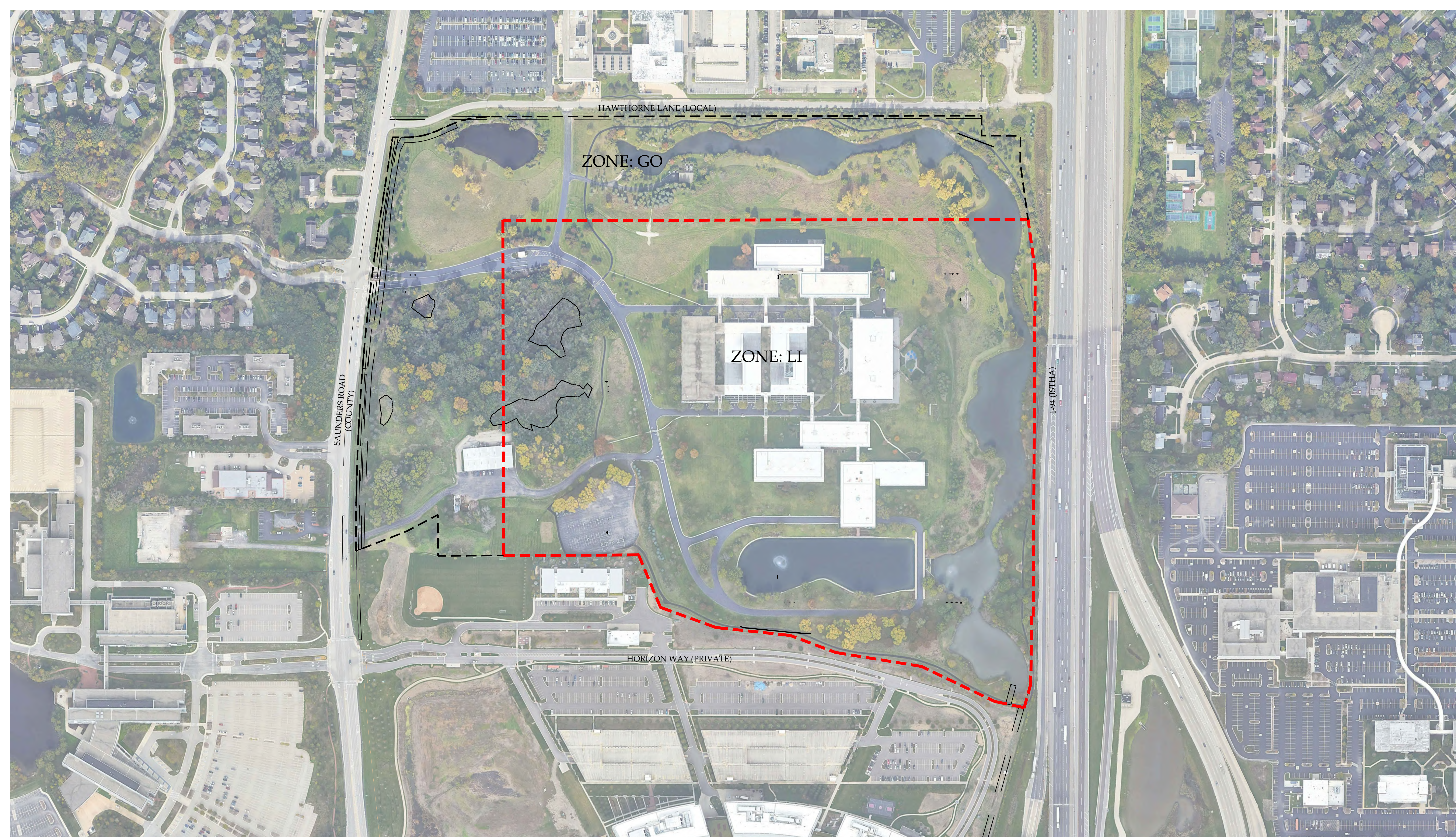
Traffic: Luay Aboona  
KLOA, Inc.  
9575 W. Higgins Road, Suite 400  
Rosemont, IL 60018  
[laboona@kloainc.com](mailto:laboona@kloainc.com)  
847.518.9990

Valuation: Michael Sullivan SRA  
Realty Valuation Services, Inc.  
1850 W Winchester Road Suite 112  
Libertyville, IL 60048  
[mike@realtyval.com](mailto:mike@realtyval.com)  
847-362-2200 ext. 36

Mike MaRous  
MaRous & Company  
[mmarous@marous.com](mailto:mmarous@marous.com)  
847.384.2031

Noise: Tom Thunder  
Acoustic Associates, Ltd.  
[tom@acousticassociates.com](mailto:tom@acousticassociates.com)  
847.359.1068

Lighting: Dan Pratt  
ARCO Murray  
[dpratt@arcomurray.com](mailto:dpratt@arcomurray.com)  
630.819.9172



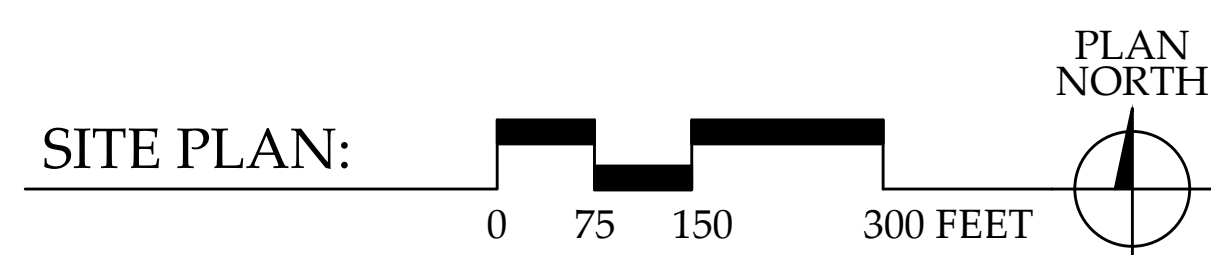
# PROPOSED BUSINESS CAMPUS

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

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MAY 22, 2023 #22283





# PROPOSED BUSINESS CAMPUS

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

©CORNERSTONE ARCHITECTS LTD. 2023



MAY 15, 2023 #22283

**DATA:**

TOTAL SITE AREA: ±4,400,463 SQ.FT.  
±101.02 ACRES

OPEN SPACE/ROAD AREA: ±1,296,922 SQ.FT.  
±29.77 ACRES

**SITE A**

SITE A AREA: ±381,715 SQ.FT.  
±8.76 ACRES

CAR PARKING: 144 CARS

**BUILDING B**

SITE B AREA: ±519,331 SQ.FT.  
±11.92 ACRES

BUILDING AREA (GROSS): ±228,369 SQ.FT.  
EXTERIOR DOCKS: 50 DOCKS  
DRIVE-IN-DOORS: 2 DOORS  
TRAILER POSITIONS: 58 POSITIONS  
CAR PARKING: 254 CARS

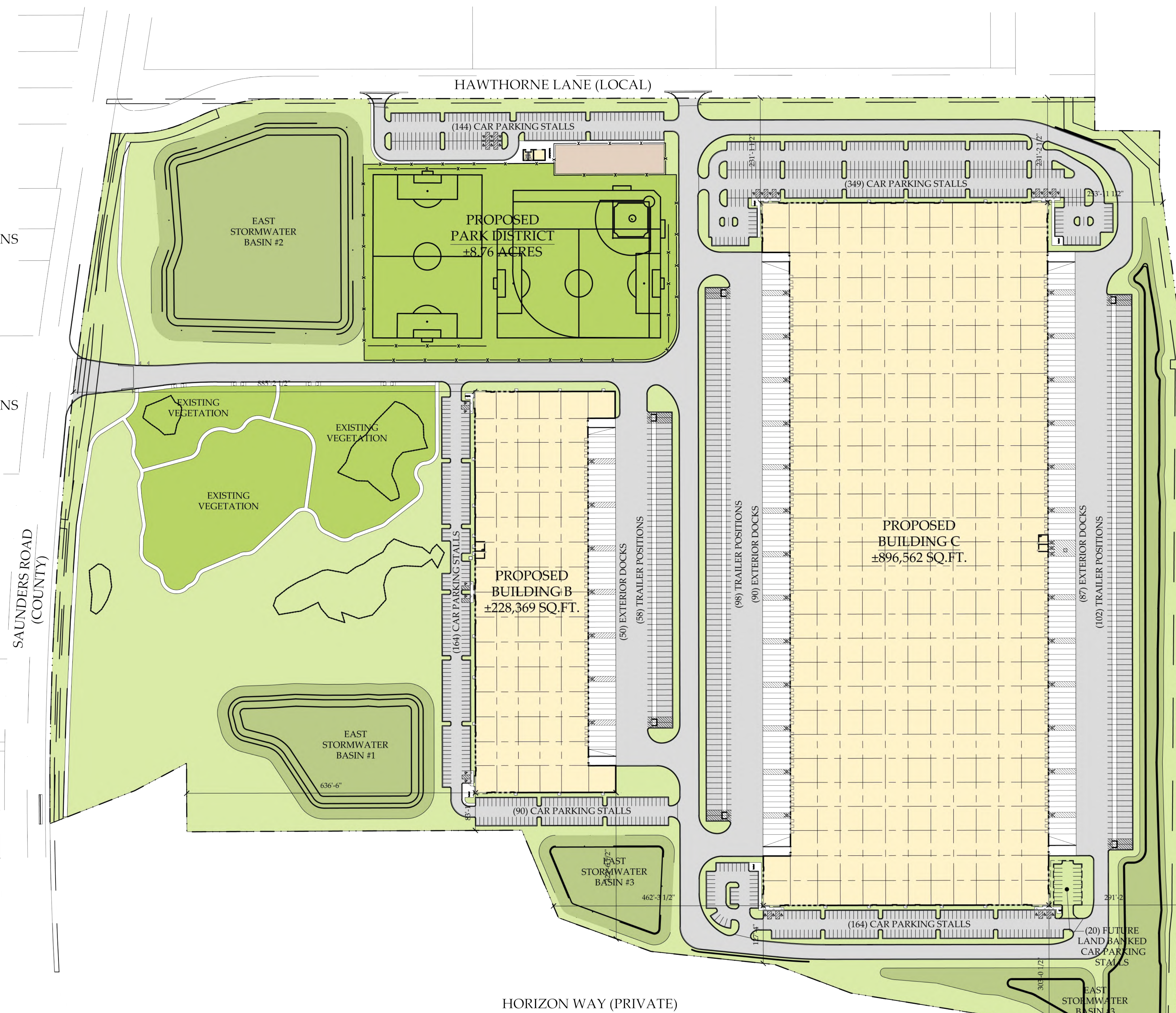
CLEAR HEIGHT: 36 FEET  
F.A.R.: .42

**BUILDING C**

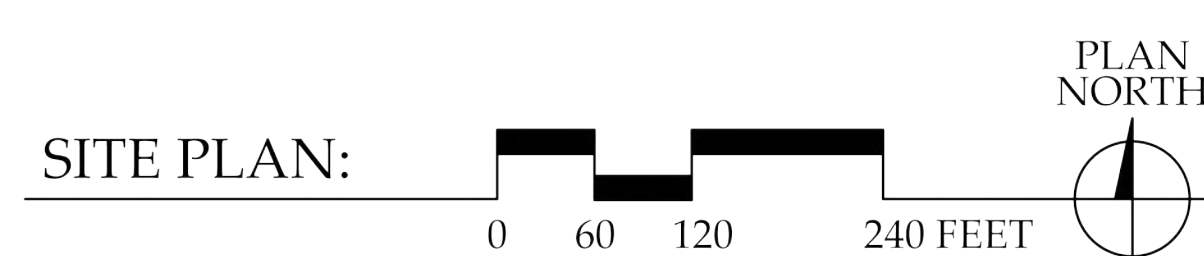
SITE C AREA: ±2,099,063 SQ.FT.  
±48.18 ACRES

BUILDING AREA (GROSS): ±896,562 SQ.FT.  
EXTERIOR DOCKS: 177 DOCKS  
DRIVE-IN-DOORS: 4 DOORS  
TRAILER POSITIONS: 200 POSITIONS  
CAR PARKING: 513 CARS  
LAND BANKED PARKING: 20 CARS

CLEAR HEIGHT: 40 FEET  
F.A.R.: .43



ZONING/DATA TABLE		
ZONE: I-2 LIMITED INDUSTRIAL		
	REQUIRED	PROVIDED
MIN. GROSS AREA OF SITE (ACRES)	5	101.1
MIN. LOT AREA PER PRINCIPAL USE (ACRES)	2	59.27
MIN. LOT WIDTH (FEET)	75	1414
MIN. USABLE OPEN SPACE (%)	≥10%	29.5%
MAX. LOT COVERAGE (%)	≤40%	29.1%
BUILDING B MAX HEIGHT (FEET)	35	44.75
BUILDING C MAX HEIGHT (FEET)	35	49.5
MIN. REQUIRED PARKING (WAREHOUSING AND STORAGE)	ONE (1) PARKING SPACE FOR EACH NINE HUNDRED (900) SQUARE FEET OF GROSS FLOOR AREA.	767 SPACES
MIN. REQUIRED PARKING (RECREATIONAL AND SOCIAL FACILITIES)	ONE (1) PARKING SPACE SHALL BE PROVIDED FOR EACH THREE (3) PATRONS, BASED ON THE DESIGN CAPACITY OF THE FACILITY IN TERMS OF THE LARGEST NUMBER OF PATRONS TO BE SERVED AT ONE TIME.	144 SPACES
MIN. PARKING STALL DIMENSIONS	9'-0"x19'-0" FOR 90° PARKING	9'-0"x19'-0"
MIN. DRIVE AISLE WIDTH (FEET)	24	24
MIN. FRONT YARD (FEET)	100	579.4
MIN. SIDE YARD (NORTH) (FEET)	100	25
MIN. SIDE YARD (SOUTH) (FEET)	25	9
MIN. REAR YARD (FEET)	25	95.4



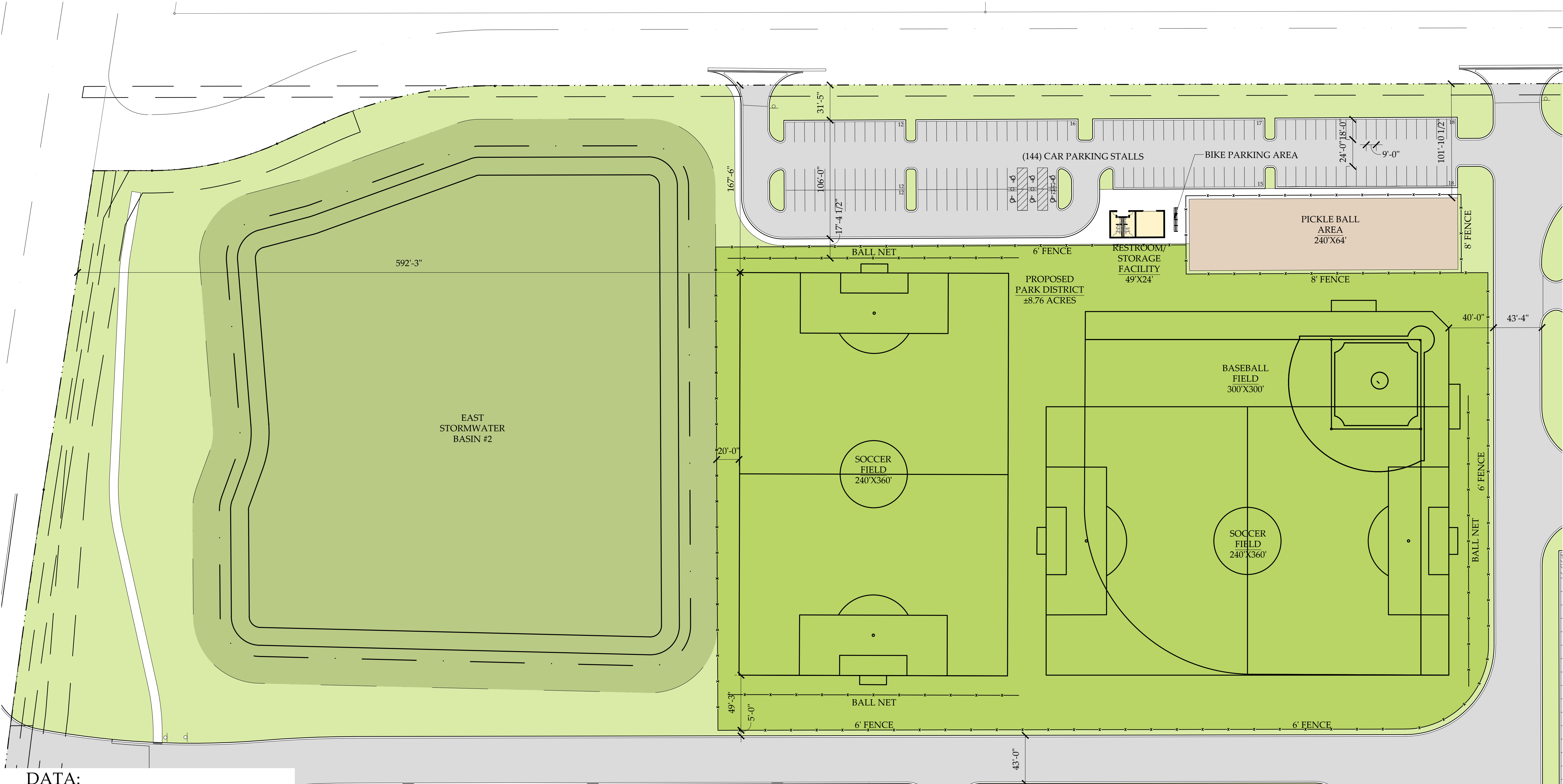
# PROPOSED BUSINESS CAMPUS

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

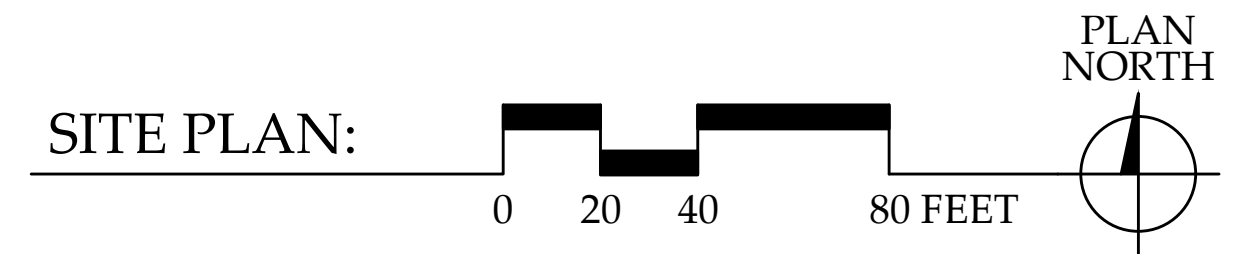
MAY 15, 2023 #22283

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**DATA:**  
 TOTAL SITE AREA: ±4,400,463 SQ.FT.  
 ±101.02 ACRES  
 OPEN SPACE/ROAD AREA: ±1,296,922 SQ.FT.  
 ±29.77 ACRES  
 SITE A  
 SITE A AREA: ±381,715 SQ.FT.  
 ±8.76 ACRES  
 CAR PARKING: 144 CARS



# PROPOSED PARK DISTRICT

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

MAY 15, 2023 #22283



# NORTHWEST AERIAL PERSPECTIVE

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

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MAY 25, 2023 #22283





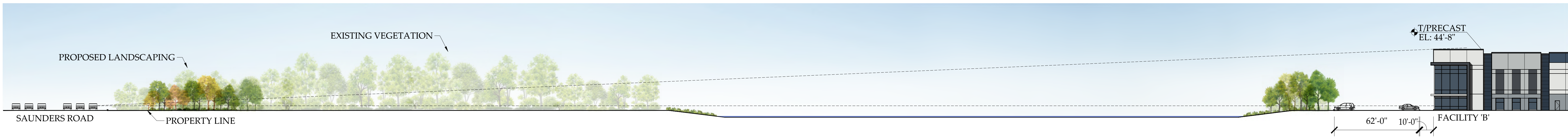
# SOUTHWEST AERIAL PERSPECTIVE

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

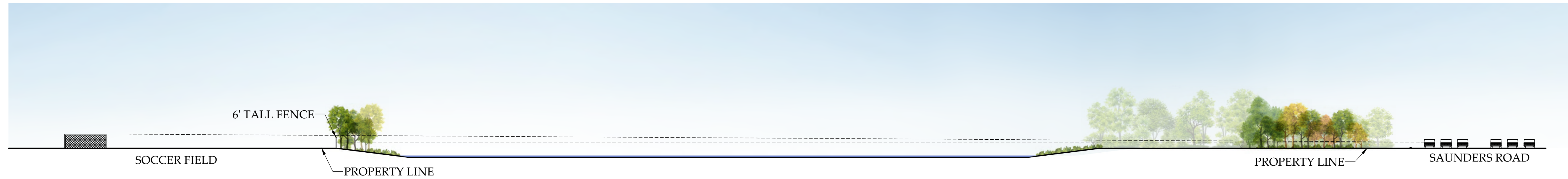
MAY 25, 2023 #22283

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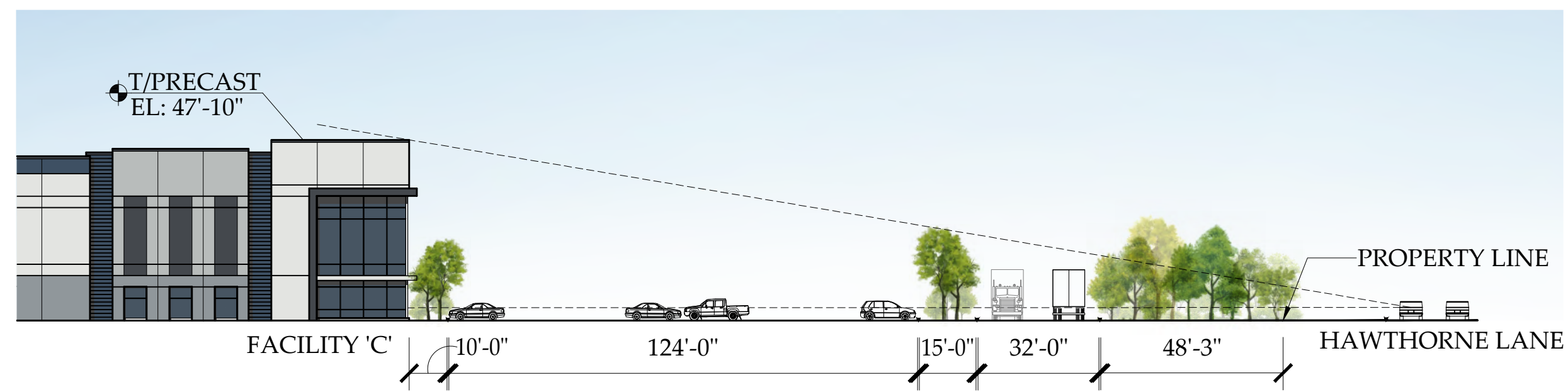




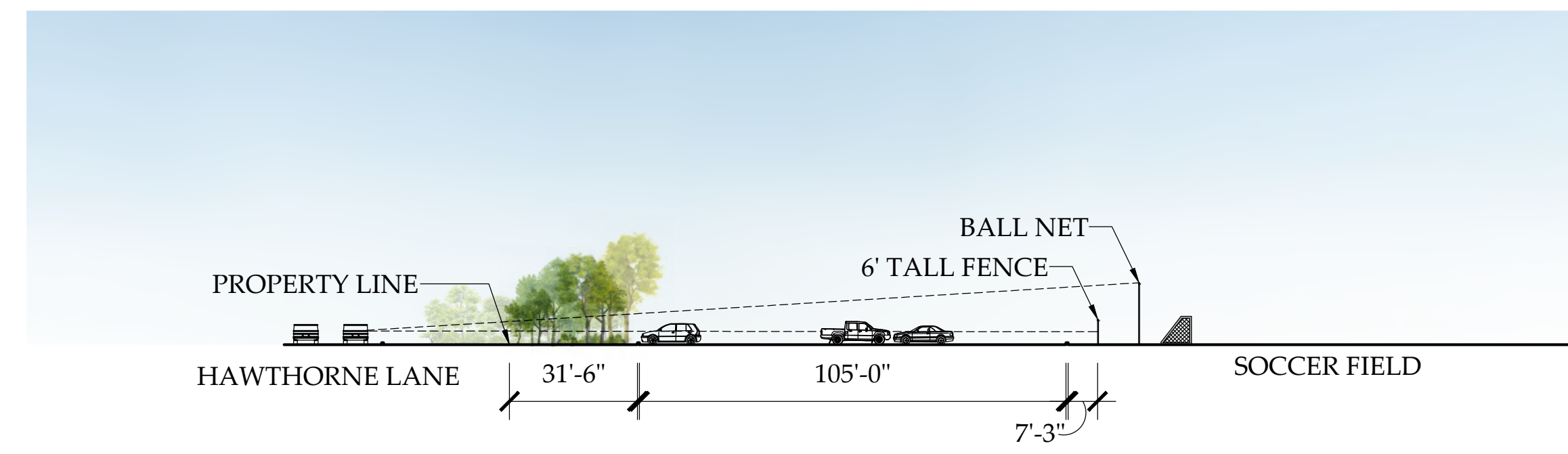
VIEW OF SAUNDERS ROAD TO FACILITY 'B'



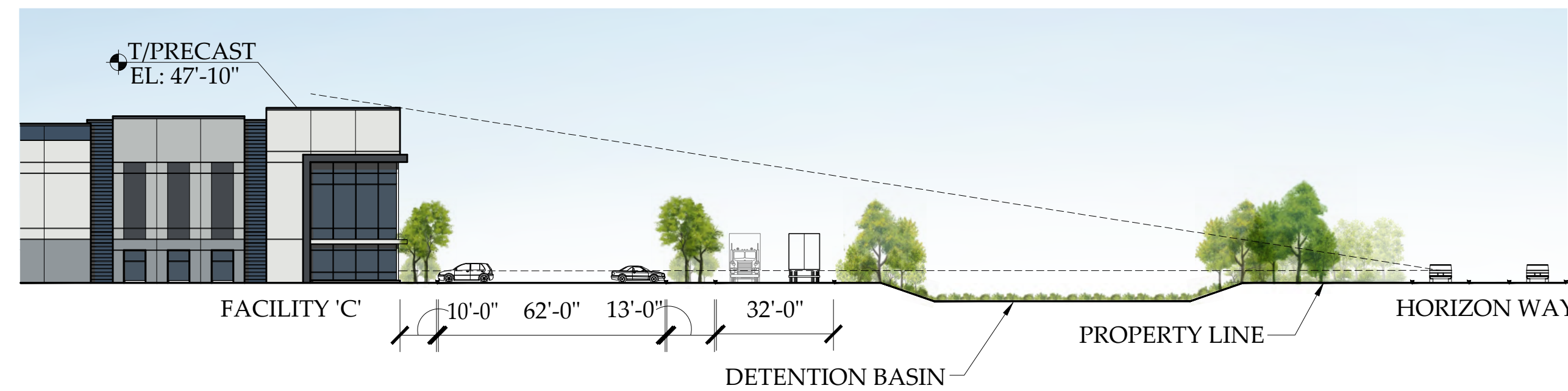
VIEW OF SAUNDERS ROAD TO PARK DISTRICT FROM NORTH



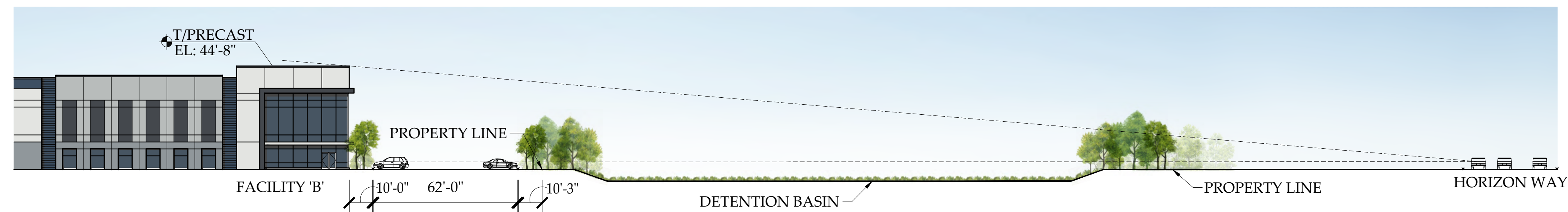
VIEW OF HAWTHORNE LANE TO FACILITY 'C'



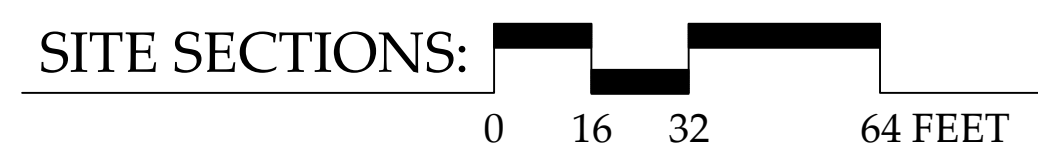
VIEW OF HAWTHORNE LANE TO PARK DISTRICT FROM WEST



VIEW OF HORIZON WAY TO FACILITY 'C'



VIEW OF HORIZON WAY TO FACILITY 'B'



# LINE OF SIGHT DRAWINGS

SAUNDERS ROAD & HAWTHORNE LANE, DEERFIELD, ILLINOIS

MAY 26, 2023 #22283

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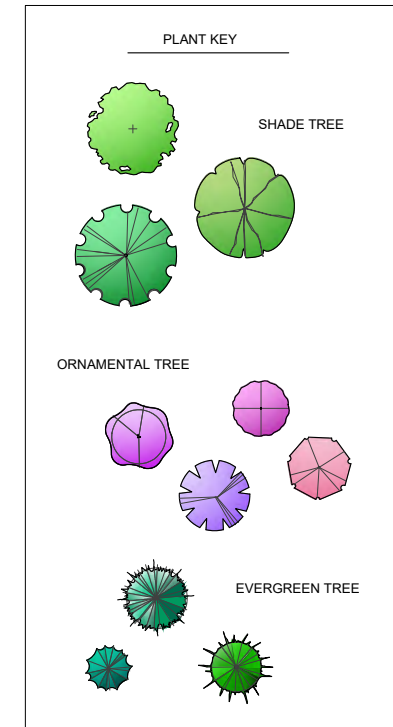
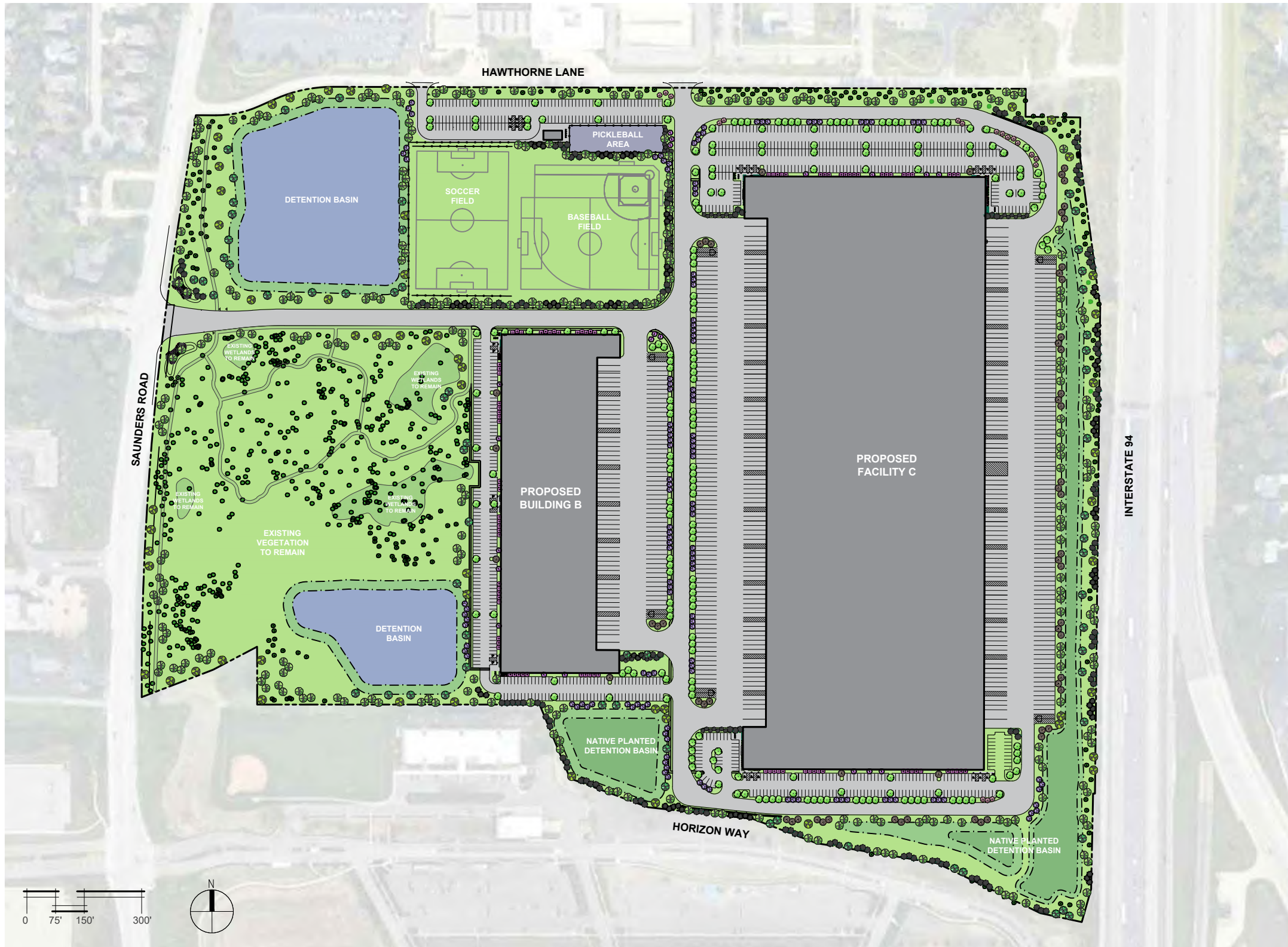
# EYE LEVEL PERSPECTIVE

SAUNDERS ROAD, DEERFIELD, ILLINOIS

MAY 25, 2023 #22283

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PROPOSED DEVELOPMENT

LANDSCAPE PLAN

FORMER BAXTER PROPERTY - DEERFIELD IL



EXISTING VEGETATION TO REMAIN ALONG SAUNDERS ROAD



NATIVE PLANTINGS



BERM WITH MIXED PLANTING

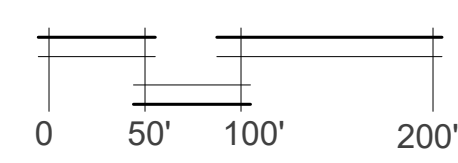
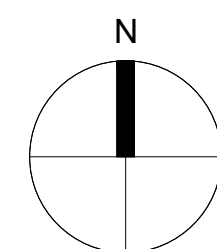


WALKING PATH



OVERALL LANDSCAPE PLAN KEY

SCALE: 1" = 100'-0"



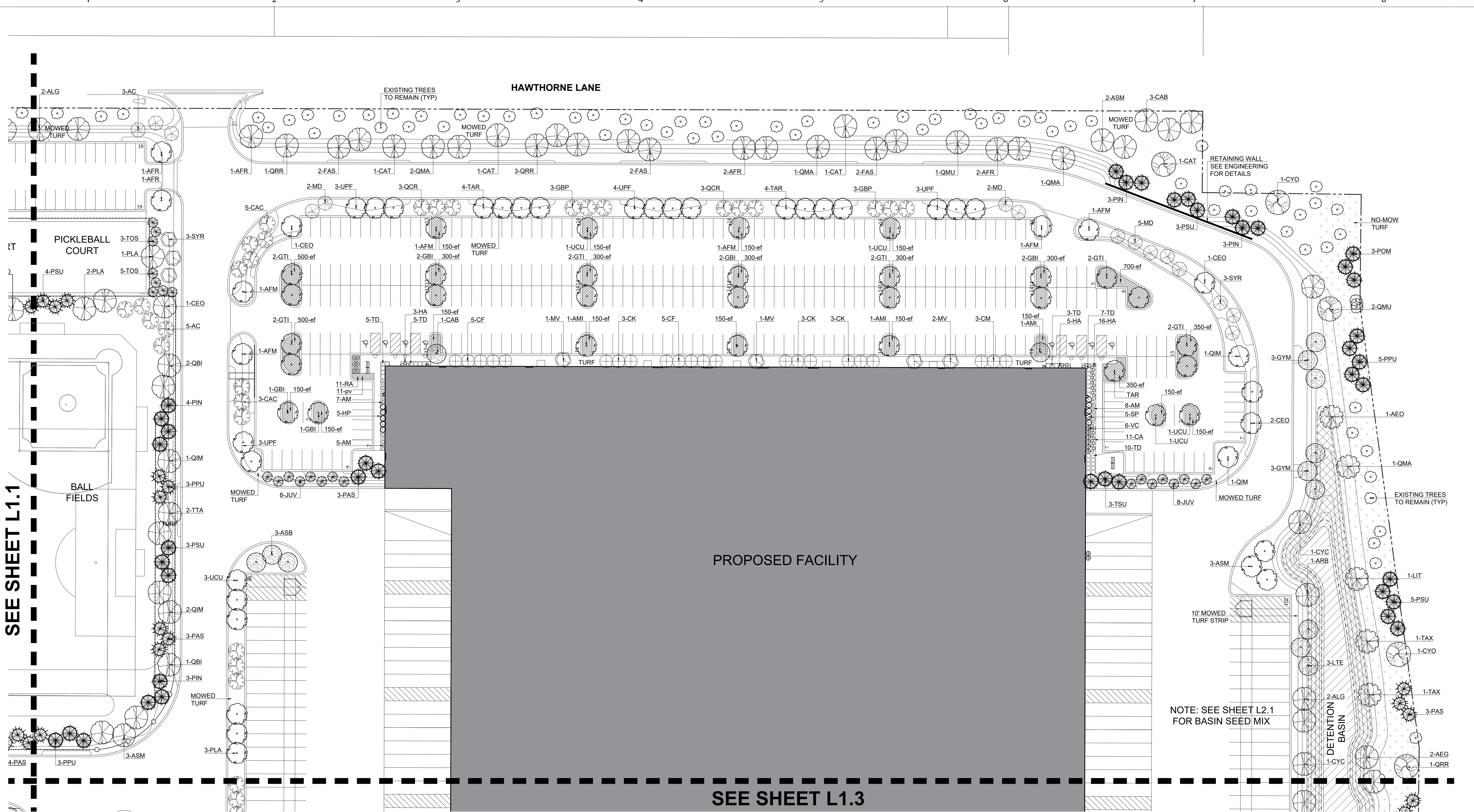
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1	ISSUED FOR REVIEW		KMT	05-23-23

OVERALL LANDSCAPE PLAN  
**PROPOSED  
BUSINESS CAMPUS**  
DEERFIELD, IL

DATE: 01-26-23  
DRAWN: DW  
CHECKED: KMT  
JOB NO.: 23060

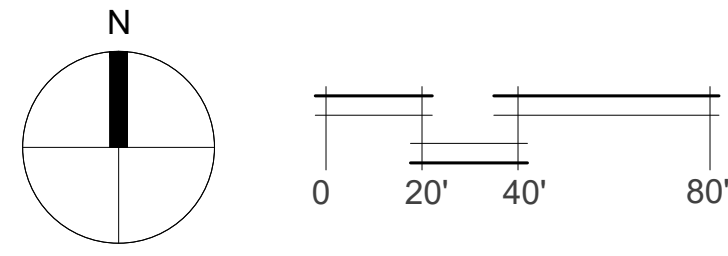
SHEET NO.: L 1.0





LANDSCAPE PLAN

SCALE: 1" = 40'-0"



no.	revision	description	initial	date
1	ISSUED FOR REVIEW		KMT	05-23-23

**PROPOSED  
BUSINESS CAMPUS  
DEERFIELD, IL**

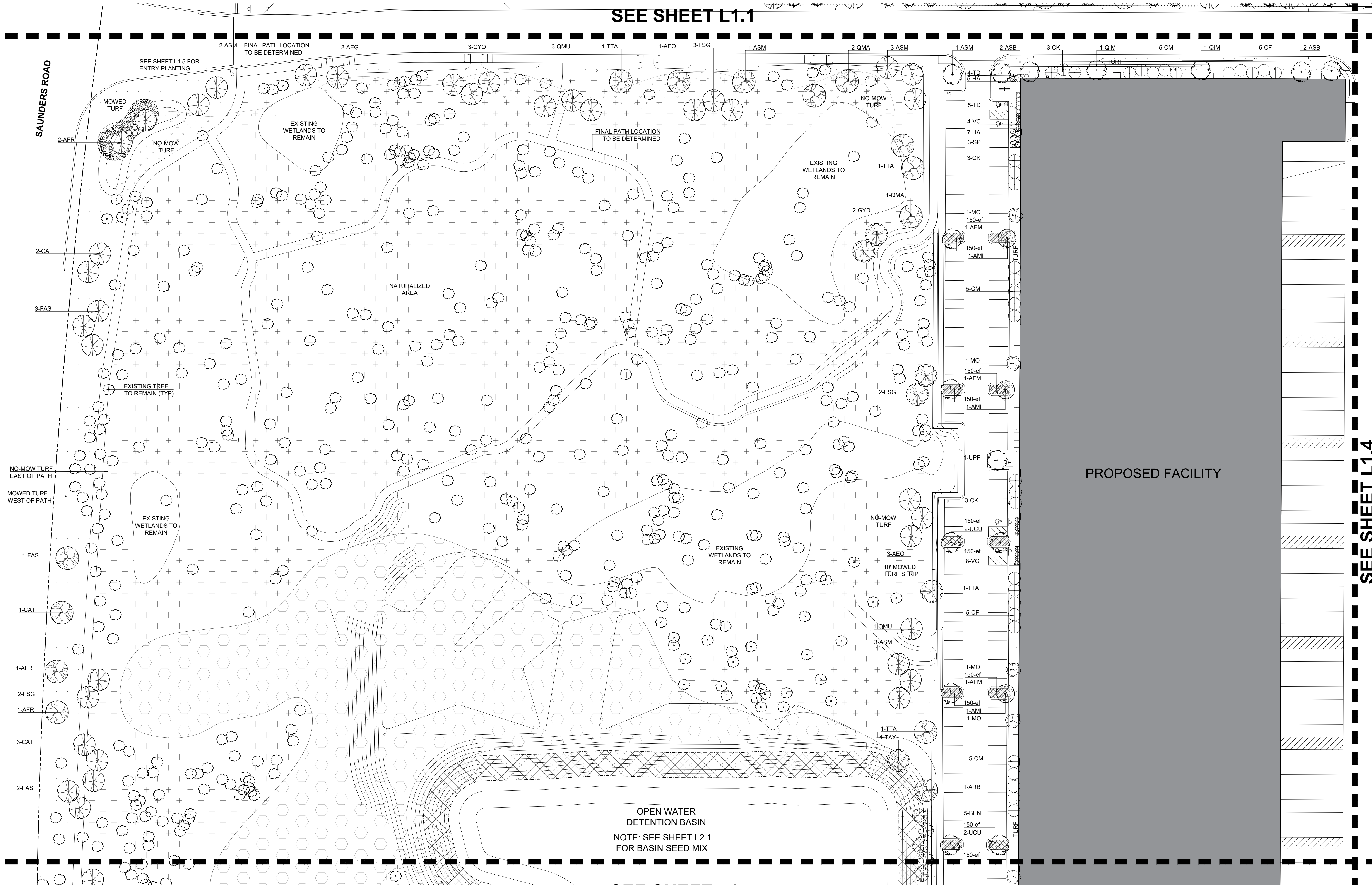
LANDSCAPE PLAN

date	01-26-23	checked	KMT
drawn	DW		

job no.  
**23060**

sheet no.  
**L 1.2**

SEE SHEET L1.1

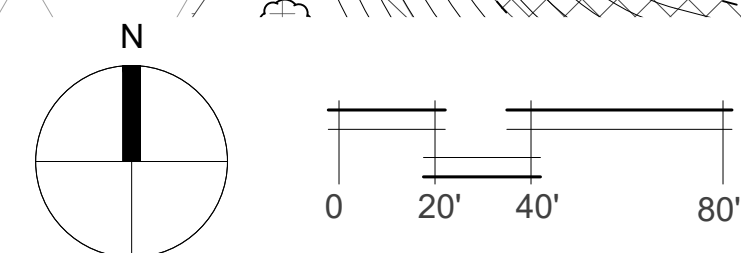


SEE SHEET L1.5

OPEN WATER  
DETENTION BASIN  
NOTE: SEE SHEET L2.1  
FOR BASIN SEED MIX

LANDSCAPE PLAN

SCALE: 1" = 40'-0"



PROPOSED FACILITY

SEE SHEET L1.4

**Kathryn Talty**  
landscape architecture

Winnetka, Illinois 60093  
847.612.5154  
www.kmtaltdesign.com

no.	revision	description	initial	date
1	ISSUED FOR REVIEW		KMT	05-23-23

LANDSCAPE PLAN

**PROPOSED  
BUSINESS CAMPUS**  
DEERFIELD, IL

date	drawn	checked
01-26-23	DW	KMT

job no.  
**23060**

sheet no.  
**L 1.3**

SEE SHEET L1.2

PROPOSED FACILITY

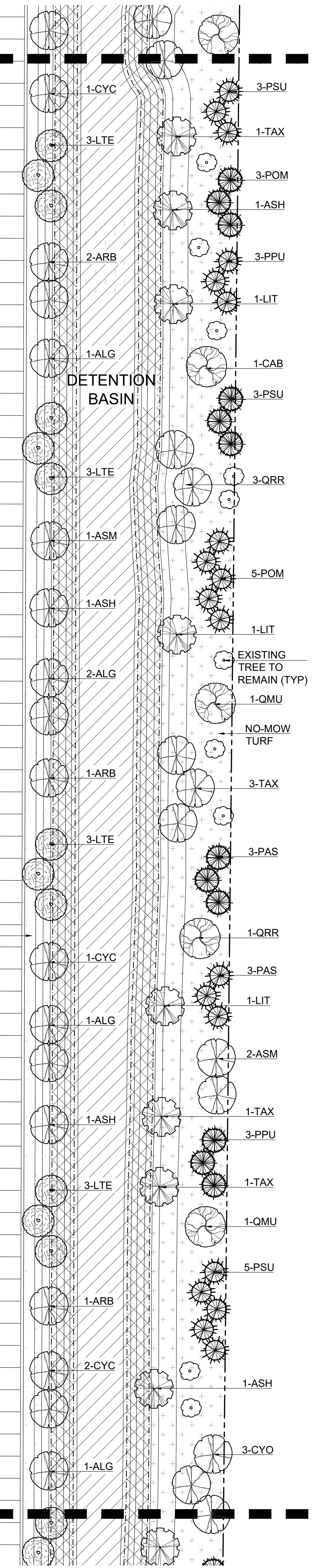
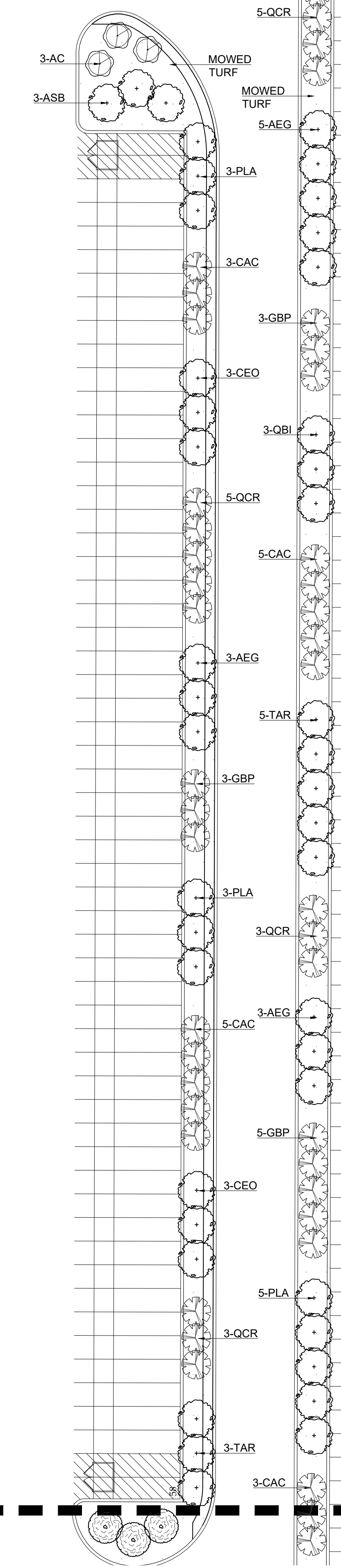
SEE SHEET L1.6

SEE SHEET L1.3

NOTE: SEE SHEET L2.1 FOR BASIN SEED MIX

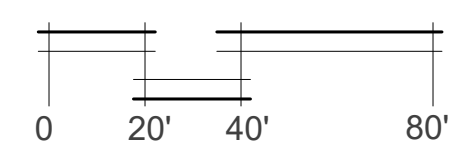
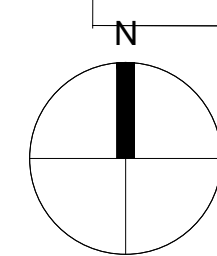
10' MOWED TURF STRIP

DETENTION BASIN



LANDSCAPE PLAN

SCALE: 1" = 40'-0"



**Kathryn Talty**  
landscape architecture

Winnetka, Illinois 60093  
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www.kmtaltdesign.com

no.	revision	description	initial	date
	ISSUED FOR REVIEW		KMT	05-23-23

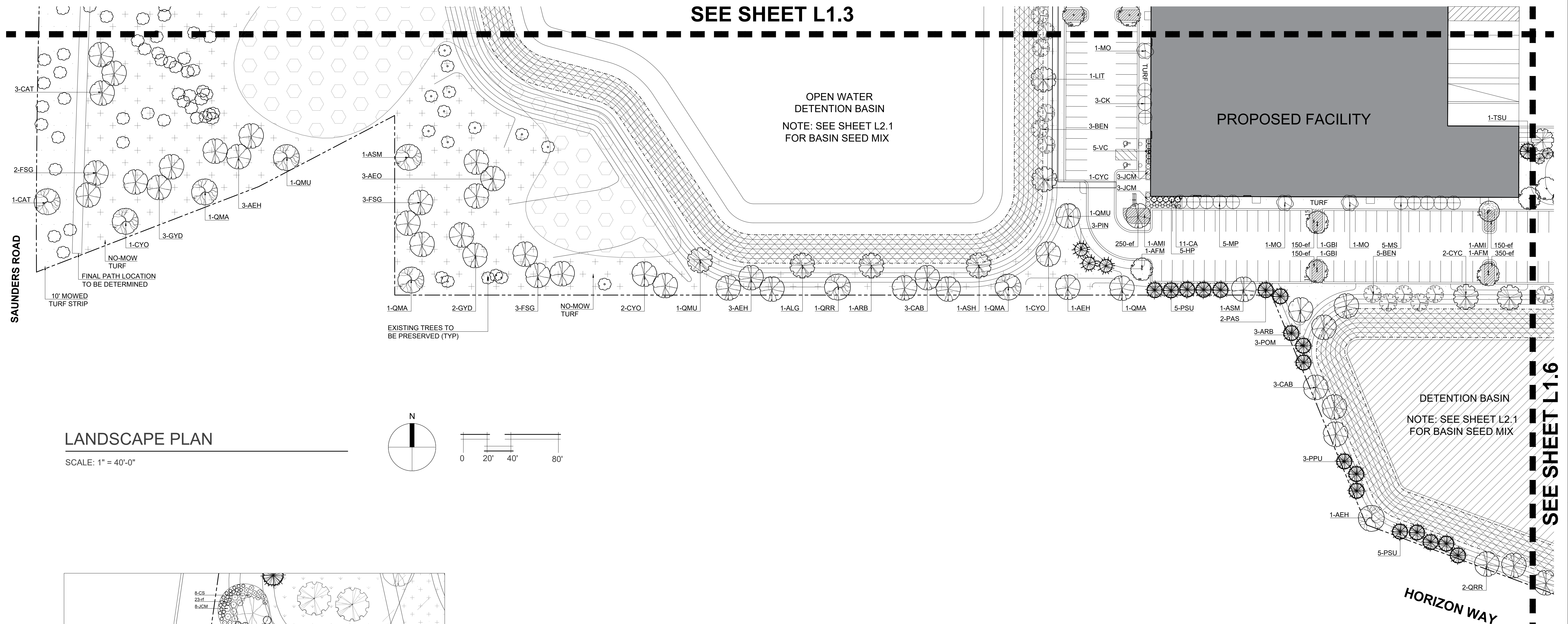
**PROPOSED  
BUSINESS CAMPUS  
DEERFIELD, IL**

LANDSCAPE PLAN

date	01-26-23	checked	KMT
drawn	DW		

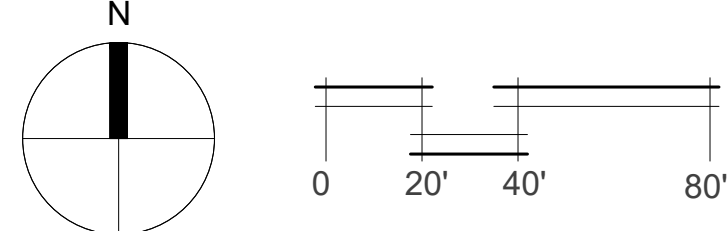
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sheet no. L 1.4



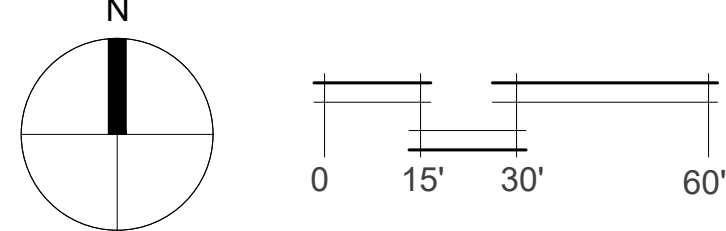
**LANDSCAPE PLAN**

SCALE: 1" = 40'-0"



**SAUNDERS ROAD ENTRY PLANTING**

SCALE: 1" = 30'-0"



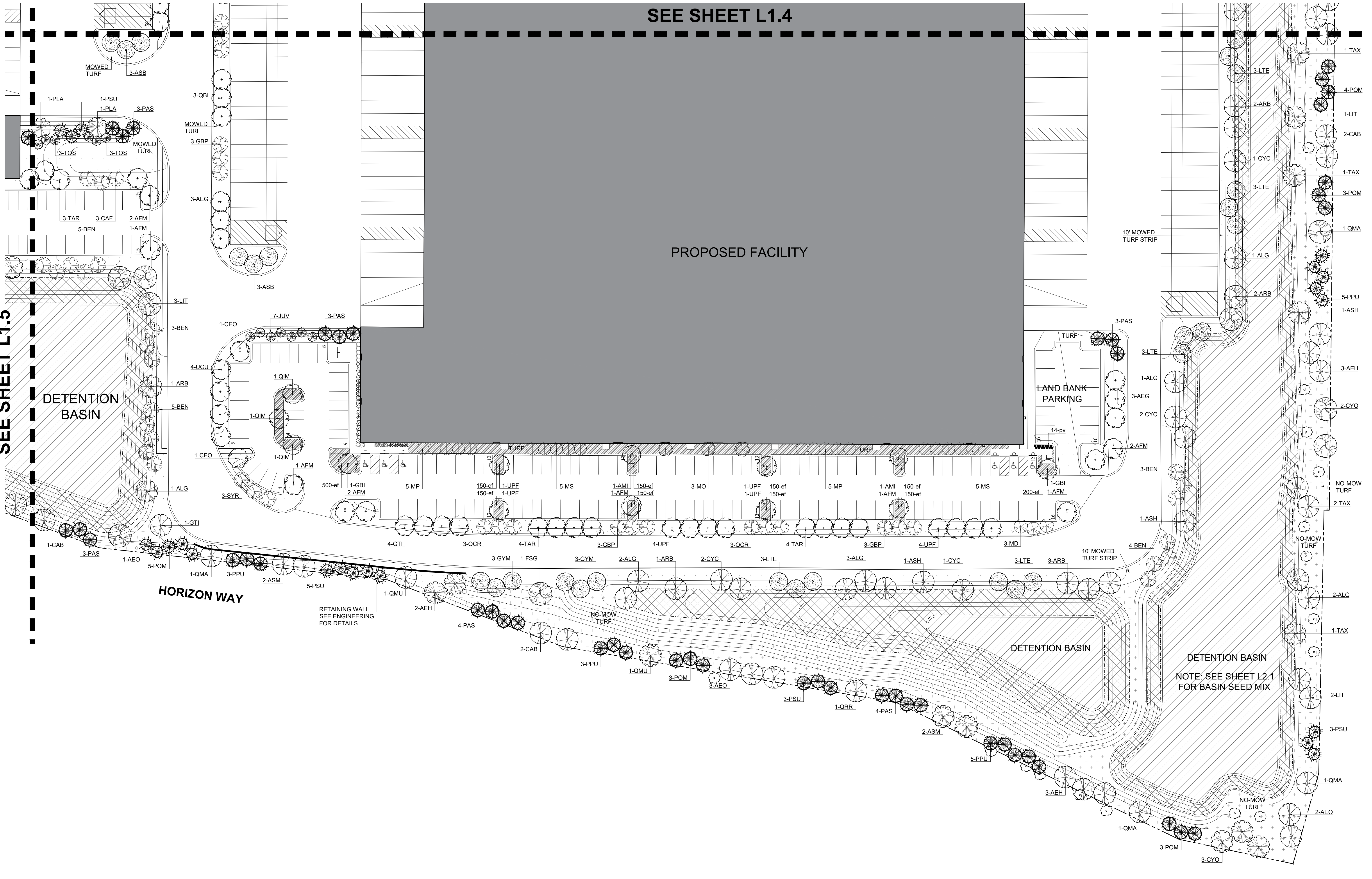
**SEE SHEET L1.6**

<p><b>Kathryn Talty</b> landscape architecture</p> <p>Winnetka, Illinois 60093 847.612.1514 www.kraltaltdesign.com</p>		
no.	revision description	
1	ISSUED FOR REVIEW	
initial	date	
KMT	05-23-23	
<p><b>PROPOSED BUSINESS CAMPUS</b> DEERFIELD, IL</p>		
<p><b>LANDSCAPE PLAN</b></p>		
date	drawn	checked
01-26-23	DW	KMT
job no.		sheet no.
23060		L 1.5

SEE SHEET L1.4

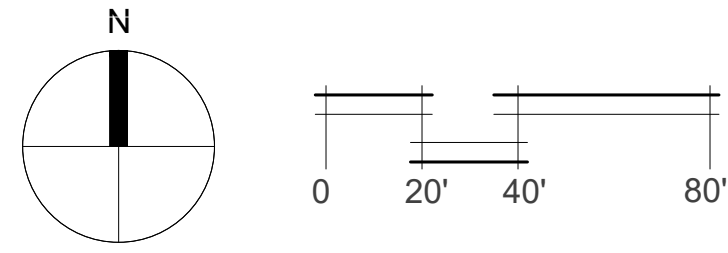
PROPOSED FACILITY

SEE SHEET L1.5



LANDSCAPE PLAN

SCALE: 1" = 40'-0"



**Kathryn Talty**  
landscape architecture  
Winnetka, Illinois 60093  
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www.kmtaltydesign.com

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	05-23-23

PROPOSED  
BUSINESS CAMPUS  
DEERFIELD, IL

LANDSCAPE PLAN

date	01-26-23	checked	KMT
drawn	DW		

job no.	23060
sheet no.	L 1.6

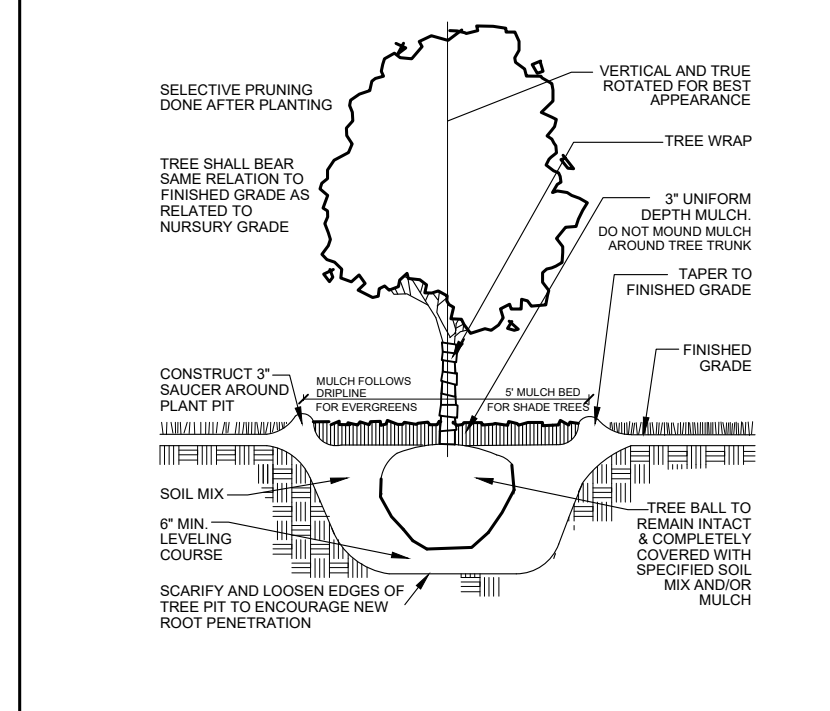
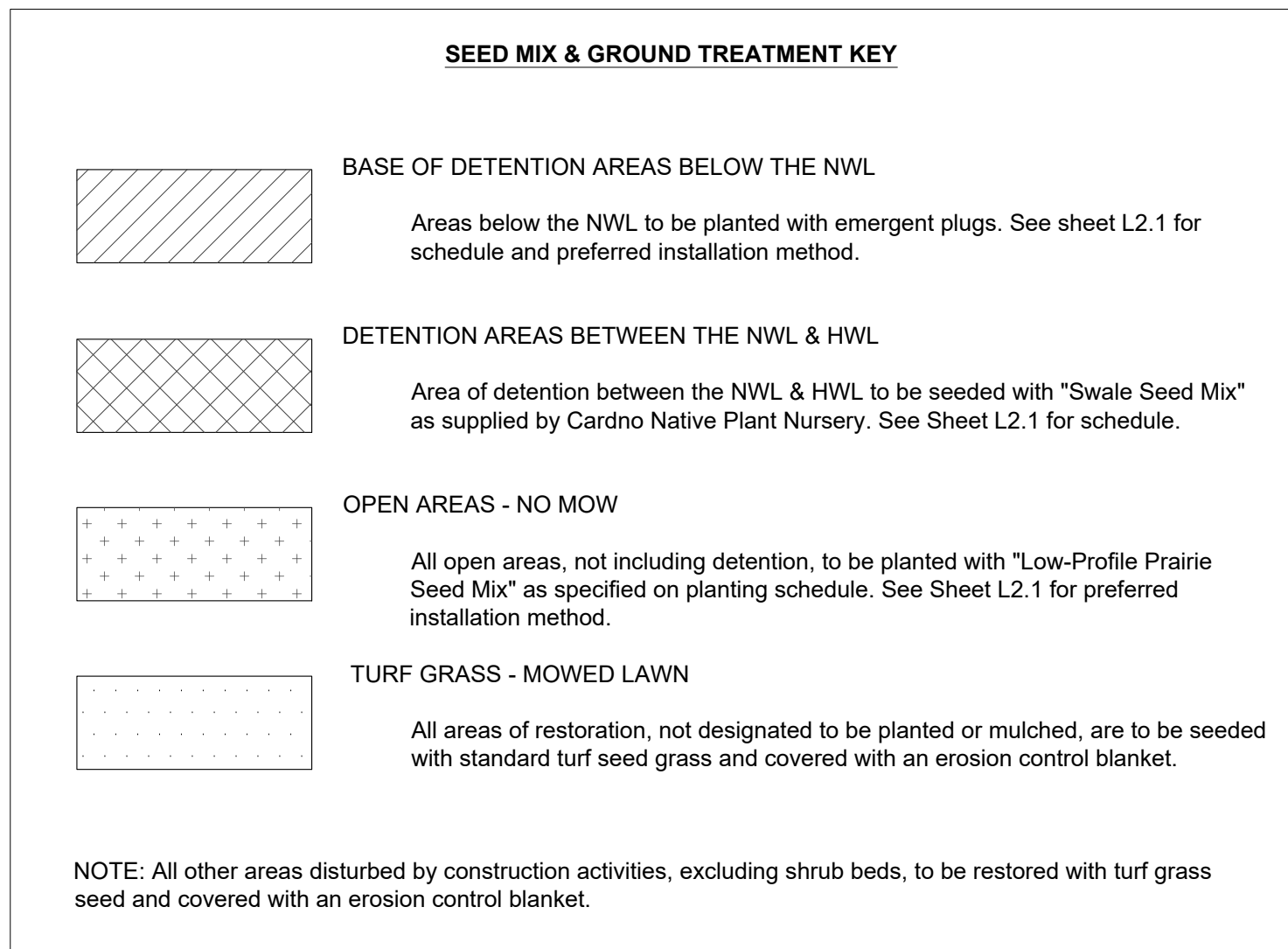
NOTE: SEE SHEET L2.1 FOR BASIN SEED MIX

Master Plant List table with columns: Symbol, Quantity, Botanical Name, Common Name, Size, Origin, Notes. Includes sections for Shade Trees, Evergreen Trees, Ornamental Trees, Evergreen Shrubs, Deciduous Shrubs, Groundcover, Perennials, and Grasses.

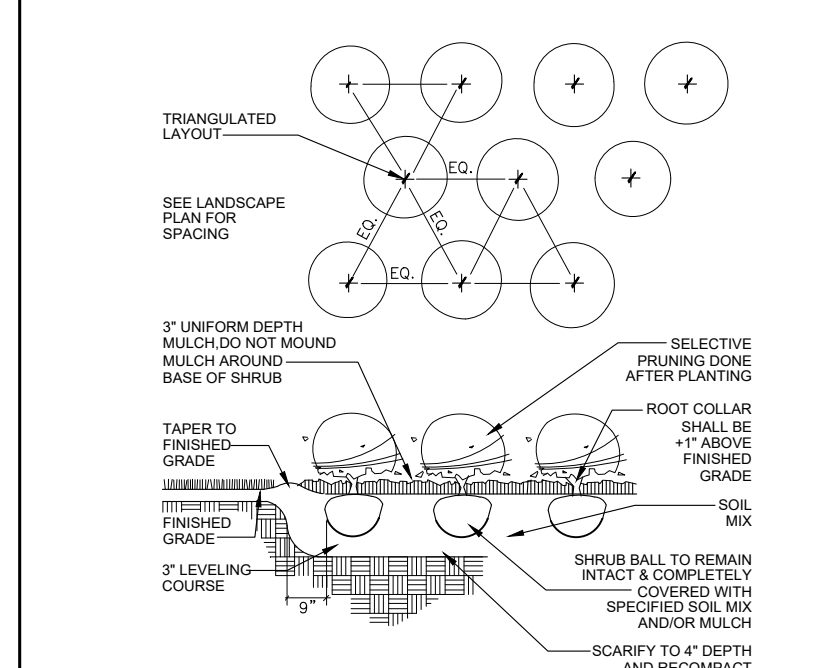
Low-Profile Prairie Seed Mix table with columns: Botanical Name, Common Name, PLS Ounces/Acre. Includes Permanent Grasses, Temporary Cover, and Forbs sections.

Swale Seed Mix table with columns: Botanical Name, Common Name, PLS Ounces/Acre. Includes Permanent Grasses/Sedges, Temporary Cover, and Forbs sections.

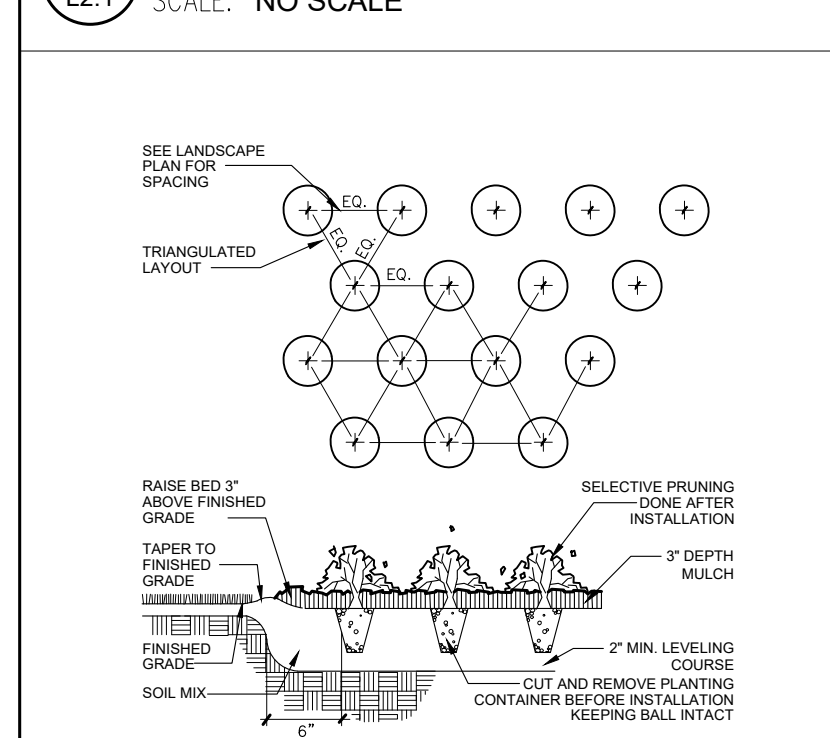
Emergent Plugs table with columns: Symbol, Quantity, Botanical Name, Common Name, Size, Mean height, Notes. Includes notes on plant quantities and final layout approval.



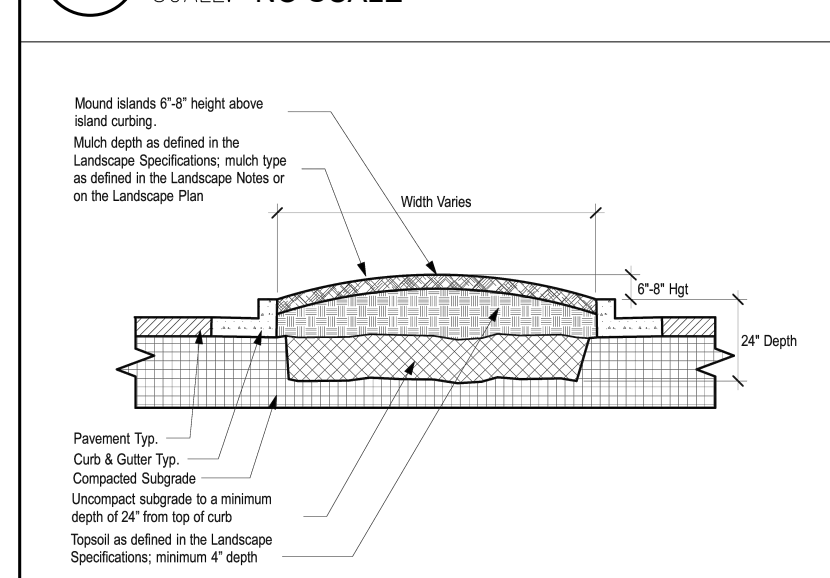
1 TREE PLANTING DETAIL SCALE: NO SCALE



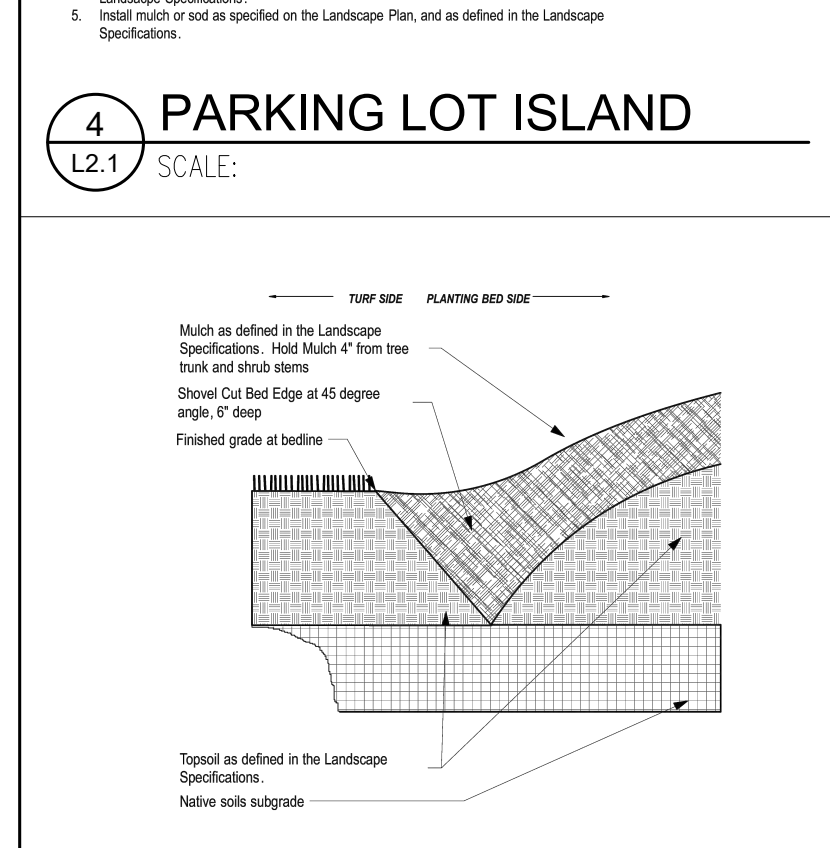
2 SHRUB PLANTING DETAIL SCALE: NO SCALE



3 GROUND COVER DETAIL SCALE: NO SCALE



4 PARKING LOT ISLAND SCALE: NO SCALE



5 SPADED PLANTING BED EDGE SCALE: NO SCALE

GENERAL CONSTRUCTION NOTES

- 1. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS... 2. BEFORE ANY EXCAVATION ON THE SITE, CALL TO LOCATE ANY EXISTING UTILITIES... 3. FOUR FOOT HIGH FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP-LINE OF ALL TREES TO BE SAVED... 4. PLANT QUANTITIES ON PLANT LIST INTENDED TO BE A GUIDE... 5. ANY DEVIATIONS FROM OR MODIFICATIONS TO THIS PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT... 6. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT UPON DELIVERY OF PLANT MATERIAL... 7. ALL PLANT MATERIAL TO BE INSTALLED PER THE PLANTING DETAILS PROVIDED ON THIS PLAN SET... 8. ALL BED EDGES TO BE WELL SHAPED, SPADE CUT, WITH LINES AND CURVES AS SHOWN ON THIS PLAN SET... 9. ALL PLANTING BEDS TO BE PREPARED WITH PLANTING MIX: 50% TOPSOIL, 50% SOIL AMENDMENTS... 10. ALL PARKING LOT ISLANDS SHALL BE BACKFILLED WITH THE FOLLOWING: 2" OF BLENDED GARDEN SOIL MIX... 11. ALL SPECIFIED LANDSCAPE MATERIAL INDICATED ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT... 12. ALL PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE FROM SUBSTANTIAL COMPLETION... 13. PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT... 14. ALL LAWN AREAS TO BE SEED WITH STANDARD TURF GRASS SEED AND COVERED WITH EROSION CONTROL BLANKET... 15. CAREFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN... 16. THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS... 17. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

Vertical sidebar containing Kathryn Talty logo, project name (PROPOSED BUSINESS CAMPUS), revision table, and drawing details (date, scale, sheet number).

**NATIVE PLANT & SEED INSTALLATION MANAGEMENT AND MONITORING PLAN**

All native planting and seeding installation, management and monitoring to be conducted by a qualified, experienced contractor specializing in restoring and managing natural landscapes in the Midwest. The selected contractor is to be held accountable for the appropriate installation methods and management and monitoring of all native areas.

**PLANT MATERIAL INSTALLATION - NATIVE SEEDING**

- Prepare area for seeding - prepare the soil and create optimal plant conditions, before disturbing any ground:
• Check for any buried utilities
• Clear area of debris that would interfere with planting
• Mow any excess existing vegetation growth
• Apply broad-spectrum or targeted herbicide, depending on species present
• De-compact any areas of special concern
o Lightly de-compact tilled or loose soil with a roller, cultipacker, or similar equipment. If using a no-till seed drill, tilling can usually be omitted.
o If ground is wet, tilling should not occur until the soil dries enough to break apart when tilled.

- Follow the appropriate timing:
• The optimal time to install seed is from the fall (November 1) to late spring (June 15).
• Wetlands should be seeded in the winter while the site is frozen and equipment can more easily access the site.

- Method for seeding and erosion control:
• Broadcasting:
o For small (typically two acres or less) or irregularly shaped areas, seed can be planted by hand broadcasting. To aid seed distribution, combine the seed mix with filler materials, such as dry sawdust, sand, or vermiculite.
o Using a hand-crank or tow-behind broadcaster, start with half of the seed and try to cover the entire area with that amount of seed. Take the remaining half of the seed, go to the opposite end of the site and cover it again. After broadcasting is complete, it is important to use a cultipacker or roller over the area to make good seed-to-soil contact. Do not cover seed more than 1/4-inch deep.

- No-Till Drill:
o For larger areas and sites with existing vegetation, use a no-till seed drill, which does not require the soil to be tilled before planting, resulting in minimal soil disturbance. No-till drills plant seed in rows by opening slits in the soil, into which seed is deposited. If using a no-till drill, seed should not be buried below 1/8" depth per specific manufacturer's recommendations. Because the diversity of seed sizes makes drill calibration a challenge, perform a few test areas first to help prevent running out of seed.

- Erosion control method:
o Install biodegradable erosion control blanket (NAG S75BN or equal) until seed has germinated.

**PLANT MATERIAL MANAGEMENT - NATIVE SEEDING - 5-YEAR PERIOD**

To help ensure success, projects need a maintenance and monitoring plan that is flexible and supports site development goals. While native plants tend to germinate and develop at a slower rate than ornamental perennials or turf grass, regular maintenance during the establishment period greatly improves project success. Regular maintenance and monitoring controls invasive species, ensures optimal moisture levels are present, and identifies other necessary management actions.

- Native areas need between 3 to 5 years to establish.
• Preferred planting late fall (any time after November 1; if the soil surface is dry and cold enough to prevent germination and seed can be worked into soil.
• Let seed germinate and grow for one full season. Do not apply herbicides for weed control within the first growing season. If large weeds are unsightly, clip off; do not pull weeds to keep growth down. Do not allow seed heads to form.
• Mow first time when established in first season to 12"-18" high, to scatter seed heads. If clumping occurs lightly rake to disburse seed.
• Mow 2-3 additional times to maintain 6-9 inches in height.
• Some perennial seeds may not germinate until the following year.
• If fall planting is not possible, spring seeding can be done (weather permitting) as early as January - preferably before April 15.
• Second season mow 3-4 times to maintain 8-10 inches in height.
• At the end of the third season a controlled burn program to be performed.
• 4 (four) annual weed control events (selective herbicide and mechanical) to be performed throughout all native plan communities starting once the seed is sown until sign-off is granted.

**MINIMUM PERFORMANCE STANDARDS AND MONITORING ACTIVITIES**

Performance standards are established for all proposed projects involving naturalized areas so that the relative success of creation and enhancement efforts may be evaluated. If the performance standards are not achieved by the end of the five-year management and monitoring program, acceptance meetings shall be held to determine the future course of action. It is likely that in such a case that the maintenance and monitoring period will be extended.

- Notification - The developer shall notify [MUNICIPALITY] upon completion of plantings.
o The Owner's Environmental Specialist shall inspect the plantings upon completion of all maintenance procedures and notify Mundelein of the remedial actions taken.
• Native areas are to be monitored for a minimum of 5 (five) years from date of installation.
o Monitor all native areas 2 (two) times annually at a time of year when plants are evident and identifiable. Visits should occur at spaced intervals throughout the growing season.
o Conduct monitoring visits utilizing systematic field techniques. Traverse entire native area, document flora and note top 3 dominant species.
• Within 3 months of seed installation, at least 90% of the seeded areas ("Low Profile", "Stormwater" and "Swale" seed mix), as measured by aerial coverage, shall be vegetated. A minimum 100% vegetative coverage shall be maintained throughout, and at the end of, the five-year period for these areas.
o This standard does not apply to the emergent zones.

- The naturalized areas shall not contain any rills greater than 4 inches wide and 4 inches deep throughout, and at the end of, the three-year period.
• At the end of the second growing season, 30% seed mix presence for the "Low Profile", "Stormwater" and "Swale" seed mixes shall be achieved. At the end of the third growing season, 50% seed mix presence for the "Low Profile", "Stormwater" and "Swale" seed mixes shall be achieved.
o Seed mix presence shall be evaluated separately for these three mixes.

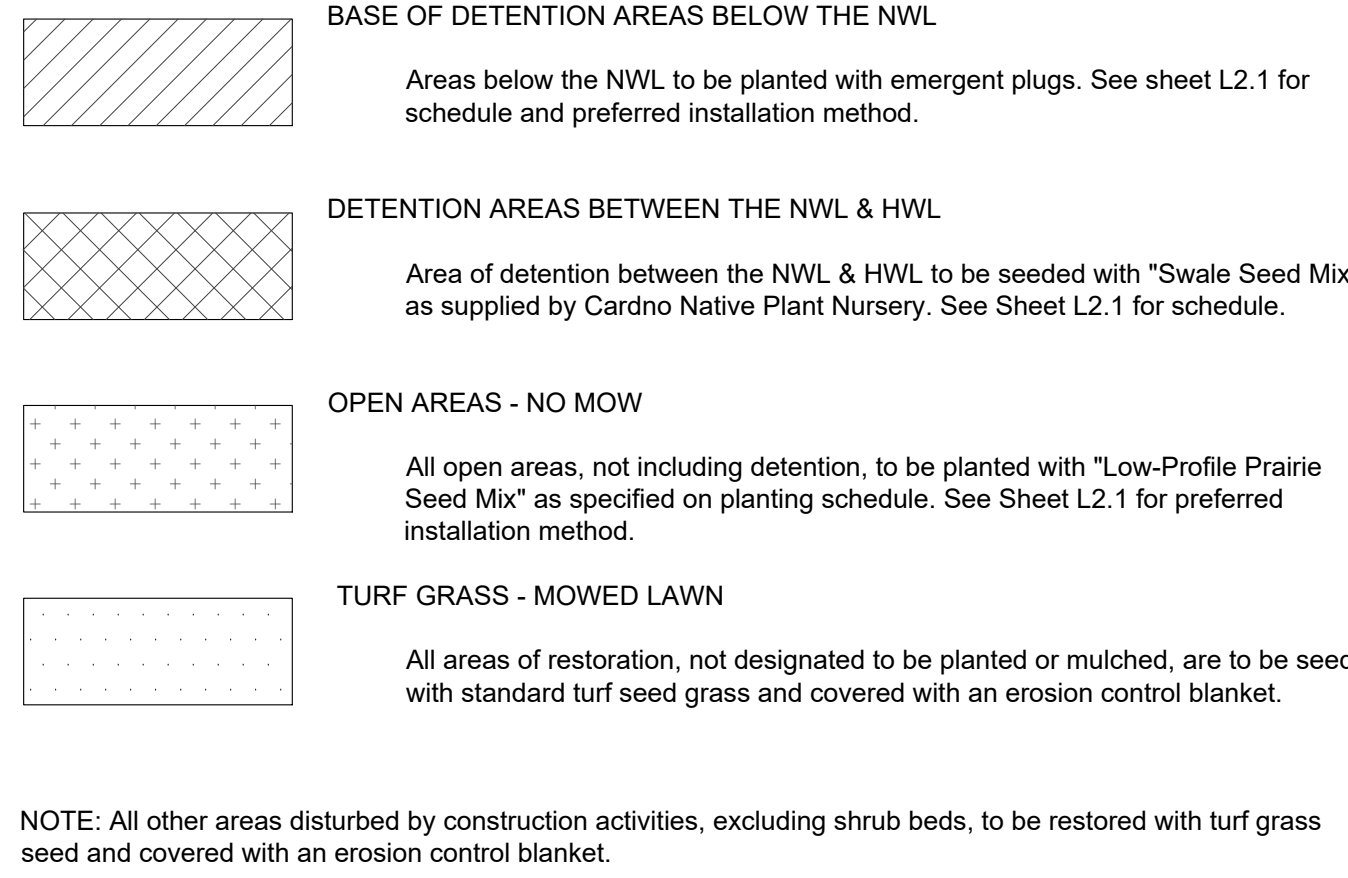
- No area over the entire native planted site greater than 1 square meter will be devoid of vegetation (as measured by aerial coverage/ocular estimation), unless specified on approved plans.
o This annual performance standard does not apply to emergent and aquatic communities.
• The native planted areas will meet the following annual standards for the presence of native, non-invasive perennial species (as measured by aerial coverage/ocular estimation): Year 1 - 15%, Year 2 - 50%, Year 3 - 75%, Year 4 & 5 - 85%.
o This standard to be measured separately for each seed mix zone.
• At the end of the third growing season, none of the three most dominant species within the planted areas will be invasive or non-native species as inspected annually. The project manager will determine the appropriate target invasive or non-native species. They will typically include, but are not limited to, the following: Ragweed (Ambrosia spp.), Cattail (Typha spp.), Reed Canary Grass (Phalaris arundinacea), Purple Loosetrife (Lythrum salicaria), Common Reed (Phragmites australis), Canadian Thistle (Cirsium arvense), Sandbar Willow (Salix interior), Kentucky Blue Grass (Poa pratensis), Yellow Sweet-Clover (Melilotus officinalis), Teasel (Dipsacae spp.), Japanese-Knotweed (Reynoutria japonica), and Asian Bittersweet (Celastrus orbiculatus), Buckthorn (Rhamnus spp.).
o This standard to be measured separately for each seed mix zone.

- Seed: At the end of the third growing season, 50% vegetative coverage shall be achieved (as measured by aerial coverage/ocular estimation).
• Emergents: Relative coverage of cattails (as measured by aerial coverage/ocular estimation) shall be less than 5% throughout, and at the end of, the three year monitoring period.
• Plugs: 90% of the plants will be alive, in healthy condition, and representative of the individual species at the end of each growing season. Replanting will take place until this standard is achieved.
• Woody plants: 100% of the planted trees and shrubs will be alive, in healthy condition, and representative of the individual species at the end of the 3rd growing season.
o Annual replacements are required to achieve this standard.
• Relative coverage (determined by ocular estimation) of invasive species (i.e., common reed, reed canary grass, purple loosetrife, etc.) in aggregate shall be less than 5% throughout, and at the end of, the three-year period.
o This standard shall be evaluated separately for each seed and plant mix zone (i.e., "Low Profile", "Stormwater" and "Swale" seed mix, emergent).
• Native Mean C value > 3.0 and Native FQI value > 20.0 for all native plant communities.
o This standard shall be evaluated separately for each seed and plant mix zone (i.e., "Low Profile", "Stormwater" and "Swale" seed mix, emergent).
• Soil erosion and sediment control measures shall be regularly maintained. Any erosion observed on-site shall be repaired to the designed condition within 30 days of observation.

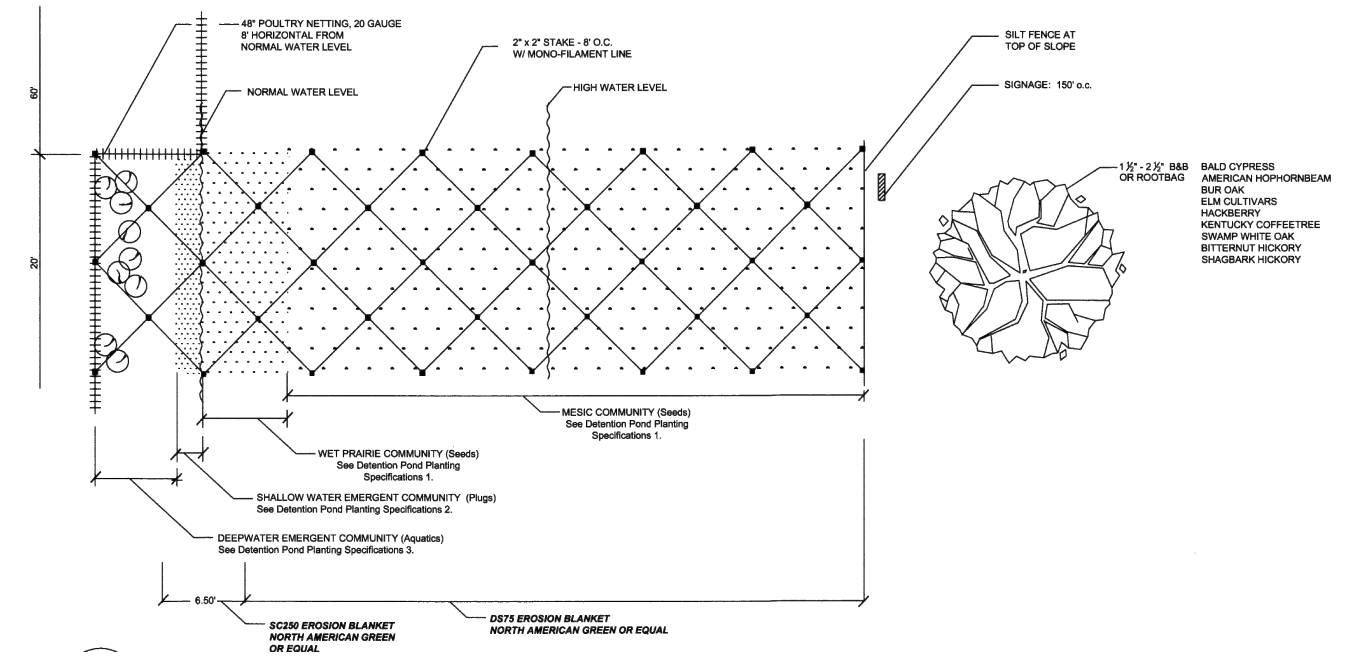
**PLANTING NOTES FOR DETENTION AREAS**

- REFER TO CIVIL ENGINEERING DRAWINGS FOR CONSTRUCTION DETAILS OF DETENTION AREAS
- REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE WATERED AND MULCHED PER CONSTRUCTION DOCUMENTS.
- ALL PROPOSED PLANT SUBSTITUTIONS WITHIN DETENTION AREAS MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON THE APPROVED PLANS WILL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE.
- CONTRACTOR RESPONSIBLE FOR THE MAINTENANCE ALL PLANT MATERIAL WITHIN DETENTION AREAS AS SPECIFIED BY THE LANDSCAPE ARCHITECT FOR THE FIRST YEAR AFTER INSTALLATION.
- ALL PLANT MATERIAL WITHIN DETENTION AREAS TO HAVE A 1 YEAR WARRANTY STARTING UPON LANDSCAPE ARCHITECT ISSUING "SUBSTANTIAL COMPLETION".
- WATER FOWL BARRIER CONTROL TO BE INSTALLED AT 8" O.C. IN ALL DETENTION AREAS PLANTED WITH PLUGS.
- METAL SIGNS (12"x18") TO BE INSTALLED AT 150' INTERVALS AROUND ALL NATIVE AREAS STATING "NATIVE PLANTING DO NOT MOW".
- ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

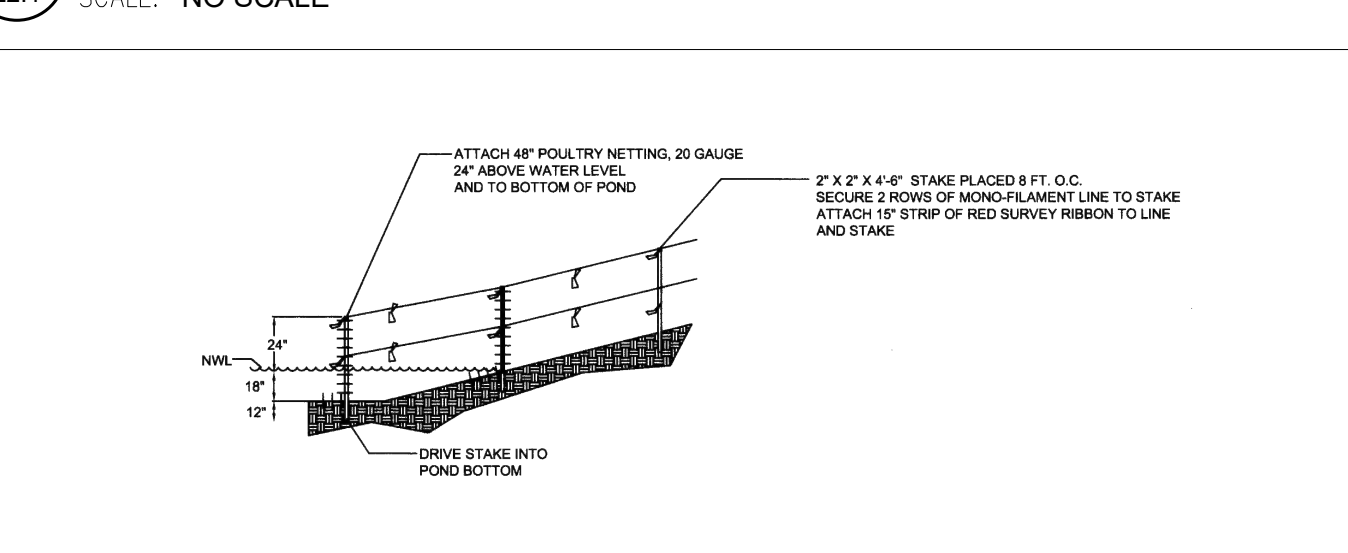
**SEED MIX & GROUND TREATMENT KEY**



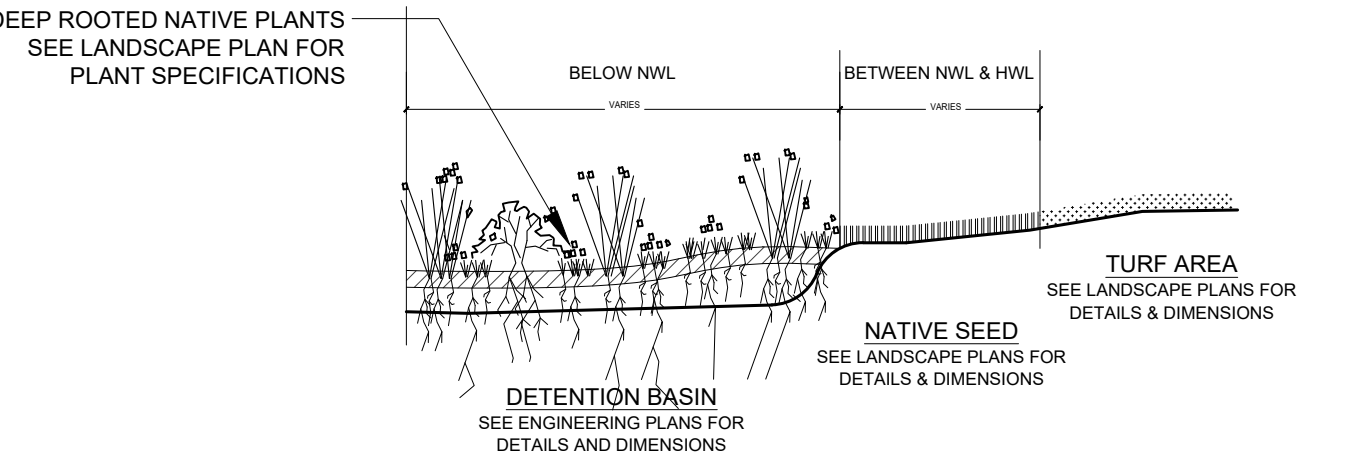
NOTE: All other areas disturbed by construction activities, excluding shrub beds, to be restored with turf grass seed and covered with an erosion control blanket.



**6 L2.1 GOOSE BARRIER PLAN SCALE: NO SCALE**



**7 L2.1 GOOSE BARRIER SECTION SCALE: NO SCALE**



**8 L2.1 BIODEGRADATION PLANTING DETAIL SCALE: NO SCALE**

**LANDSCAPE MAINTENANCE SPECIFICATIONS**

**LANDSCAPE MAINTENANCE SPECIFICATIONS**

The Contractor shall provide as a separate bid, maintenance for a period of 1 year after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

**STANDARDS**

All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices. All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

**APPROVALS**

Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative.

**SOIL TESTING**

The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Table with 3 columns: Soil Test Results, Landscape Trees & Shrubs, and Turf. Rows include pH Range, Organic Matter, Magnesium (Mg), Phosphorus (P2O5), Potassium (K2O), and Soluble salts.

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Table with 3 columns: Element, Units, and Amount. Rows include Boron, Manganese, Potassium (K2O), and Sodium.

**WORKMANSHIP**

During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

**TURF**

Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

**MOWING** Turf grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Mechanical weeders should NOT be used around trees because of potential damage to the bark.

**EDGING** Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

**FERTILIZING** Seasonally stepped fertilizer shall be applied in areas based on the existing turf species.

**LAWN WEED CONTROL: HERBICIDES** Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. Read the label prior to applying any chemical.

**INSECT & DISEASE CONTROL FOR TURF** The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

**TREES, SHRUBS, & GROUND COVER**

**PRUNING** All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

- Pruning Guidelines:
1. Prune plants that flower before the end of June (spring blooming) immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune plants that flower in July - September (summer or autumn blooming) in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as Cotoneasters and Viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
A. Yews, Junipers, Hemlocks and Arborvitae may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.
9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on Crab Apples, Lilacs, Viburnums, etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on Forsythia, Hydrangea, Spiraea, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed. Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

**SPRING CLEANUP** Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

**FERTILIZING** For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area. Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

**TREES, SHRUBS, & GROUND COVER (CONT.)**

**MULCHING** Annually, all tree and shrub beds will be prepared and mulched, to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up soil beds, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed area. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

**WEEDING**

All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times. Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

**INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUND COVER**

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is Insects that feed on Trees and Shrubs by Johnson and Lyon, Comstock Publishing Associates. For plant pathogenic diseases, two references are suggested: Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries, authorized by Gary Moorman, published by Penn State College of Agricultural Sciences, and Diseases of Trees and Shrubs by Sinclair and Lyon, published by Comstock Publishing Press.

**TRASH REMOVAL**

The maintenance contractor shall remove trash from all shrub and groundcover beds with each visit.

**LEAF REMOVAL**

All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

**WINTER CLEAN-UP**

The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March. Clean-up includes:
• Cleaning curbs and parking areas
• Removing all trash and unwanted debris
• Turning mulch where necessary
• Inspection of grounds

**SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS**

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

**SEASONAL COLOR MAINTENANCE**

Perennialization of Bulbs:
1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:
1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
A. Dead heading: Pinch and remove dead flowers on annuals as necessary.
B. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly, or mulch with compost 1" deep.
C. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

**Perennials:**
1. After initial installation, if a time-release fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year:
A. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
B. Cut all deciduous perennials flush to the ground by March 1, if this was not done the previous fall, to allow new growth to develop freely.
C. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bare in late fall, re-mulch lightly after ground is frozen to protect perennials.
D. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monardas, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
E. Weed perennial bed as specified in "WEEDING" above.
F. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
A. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g. asters and yarrow every two years; other rarely, if ever, e.g. peonies, hostas, and astilbe.
B. For detailed information regarding the care of specific perennials, refer to All About Perennials by Ortho; Perennials: How to Select, Grow and Enjoy by Pamela Harper and Frederick McGouty, Hp Books Publisher; Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes by Allan Armitage, Stipes Pub LLC.

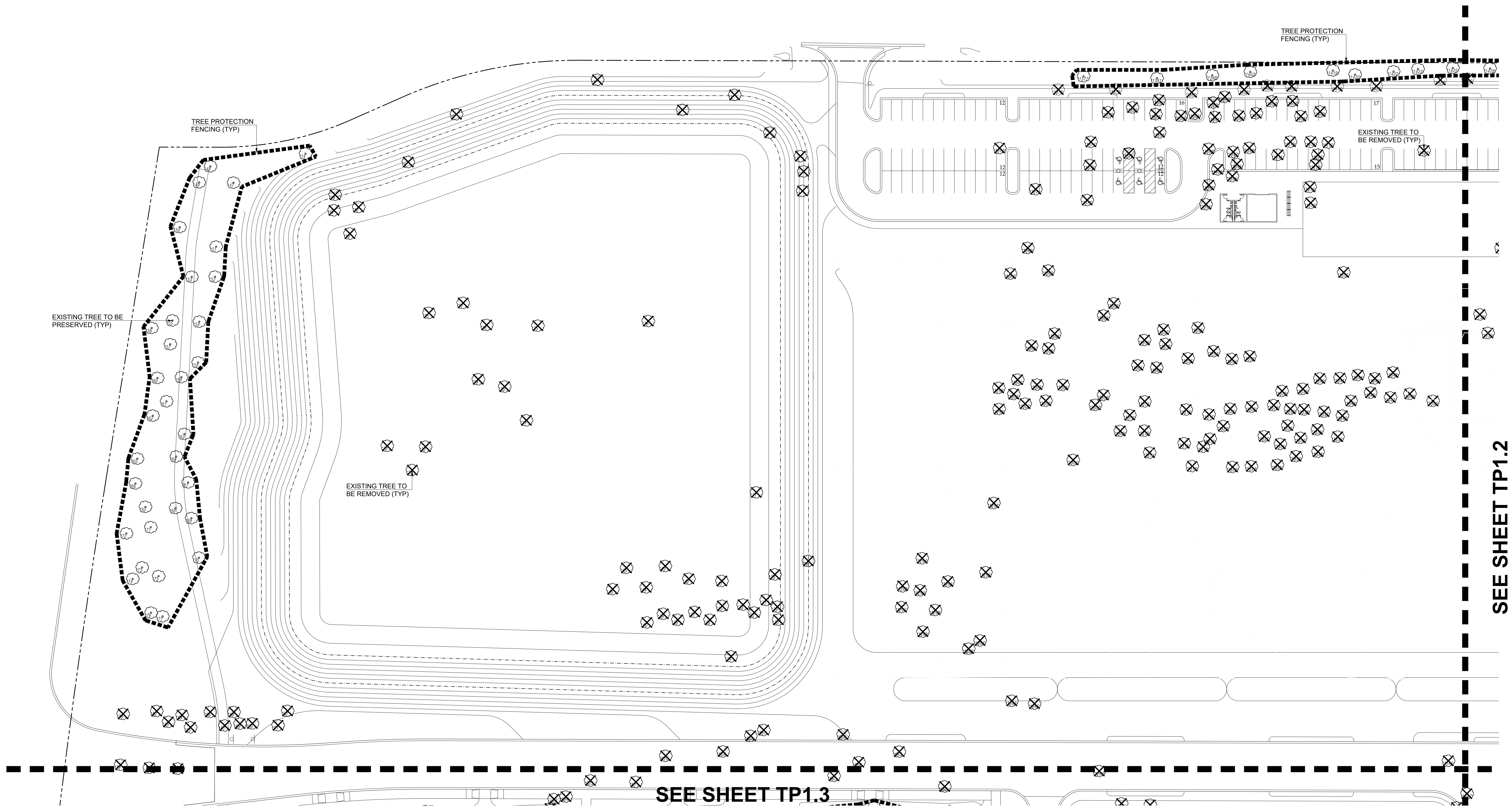
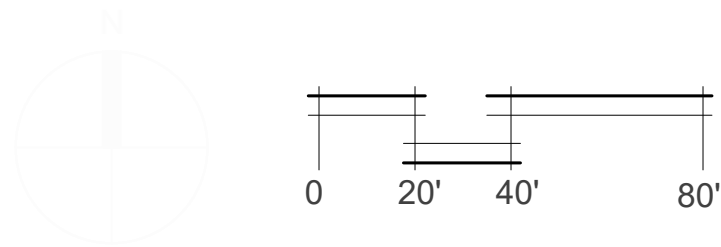
**SUMMARY OF MAINTENANCE**

- LAWN MAINTENANCE**
1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for turf grasses.
3. Mow turf on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.
- TREE, GROUND COVER AND SHRUB BED MAINTENANCE**
1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.
- GENERAL MAINTENANCE**
1. Remove all man-made debris, blow edges.
2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

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PROPOSED BUSINESS CAMPUS DEERFIELD, IL
LANDSCAPE INSTALLATION AND MONITORING SPECIFICATIONS DETENTION AREA DETAILS
date 03-23-23
drawing DJW
checked
job no. 23060
sheet no. L 2.2

**TREE PRESERVATION PLAN**

SCALE: 1" = 40'-0"



TREE PRESERVATION PLAN

**PROPOSED  
BUSINESS CAMPUS**  
DEERFIELD, IL

no. revision description

initial date

1	ISSUED FOR REVIEW	KMT	05-23-23

date drawn checked

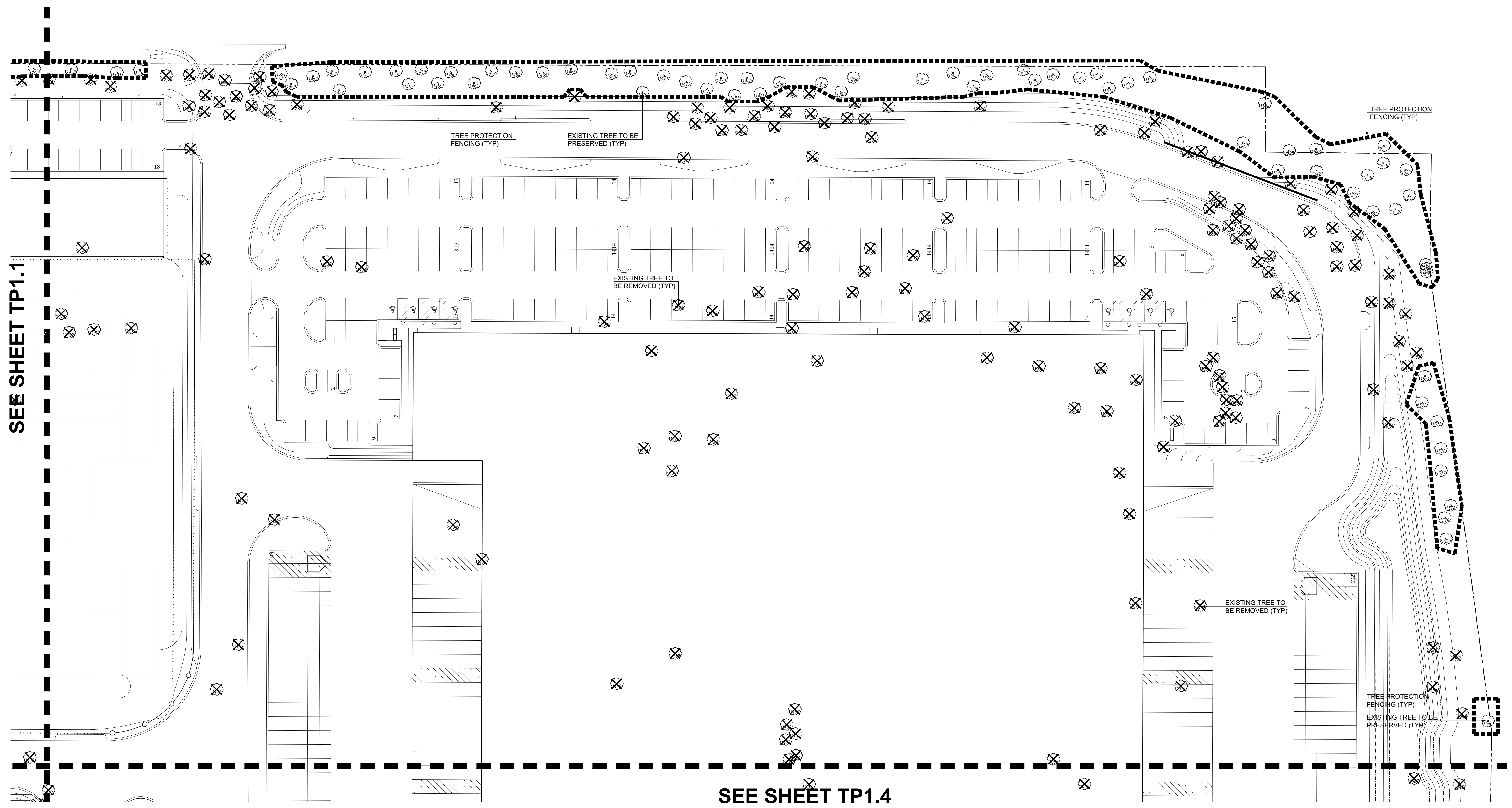
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23060

sheet no.

TP1.1

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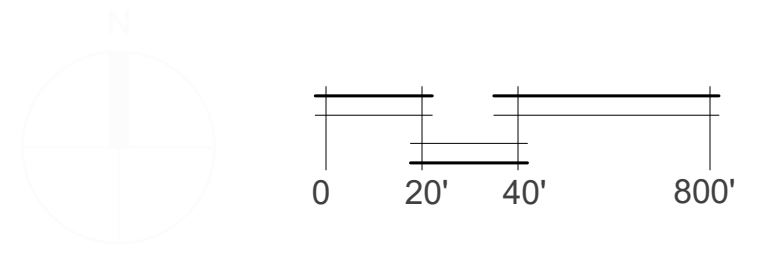


SEE SHEET TP1.1

SEE SHEET TP1.4

**TREE PRESERVATION PLAN**

SCALE: 1" = 40'-0"



no.	revision description	initial	date
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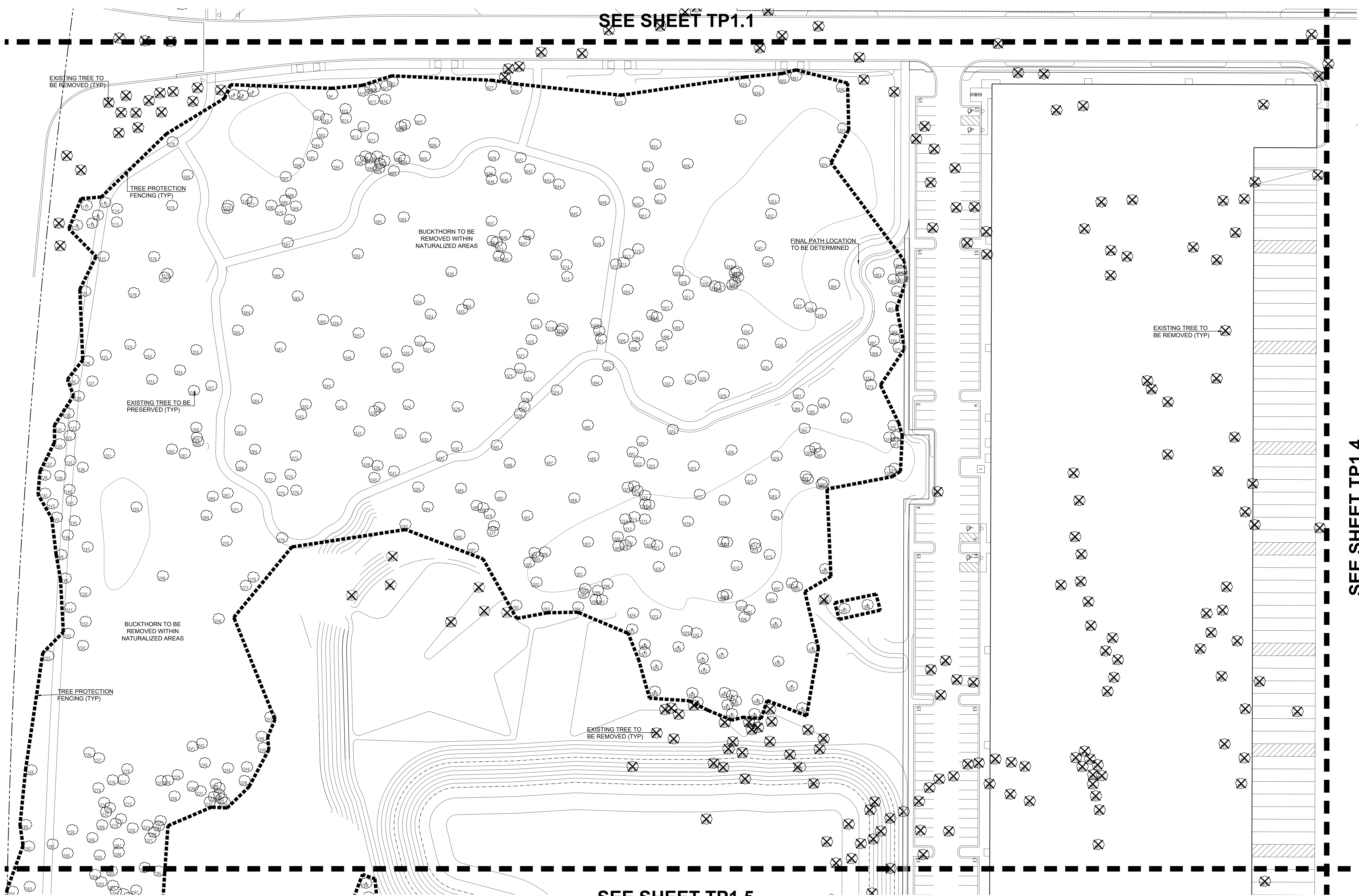
**PROPOSED BUSINESS CAMPUS**  
DEERFIELD, IL

**TREE PRESERVATION PLAN**

date	01-26-23	checked	KMT
drawn	DW		

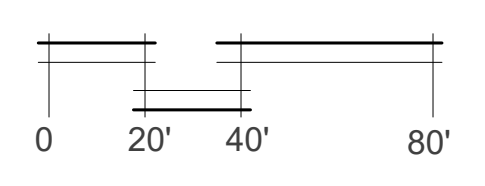
job no. **23060**

sheet no. **TP1.2**



**TREE PRESERVATION PLAN**

SCALE: 1" = 40'-0"



**SEE SHEET TP1.5**

**SEE SHEET TP1.4**

**TREE PRESERVATION PLAN**

**PROPOSED  
BUSINESS CAMPUS  
DEERFIELD, IL**

date 01-26-23  
drawn DW  
checked KMT

job no. 23060

sheet no. TP1.3

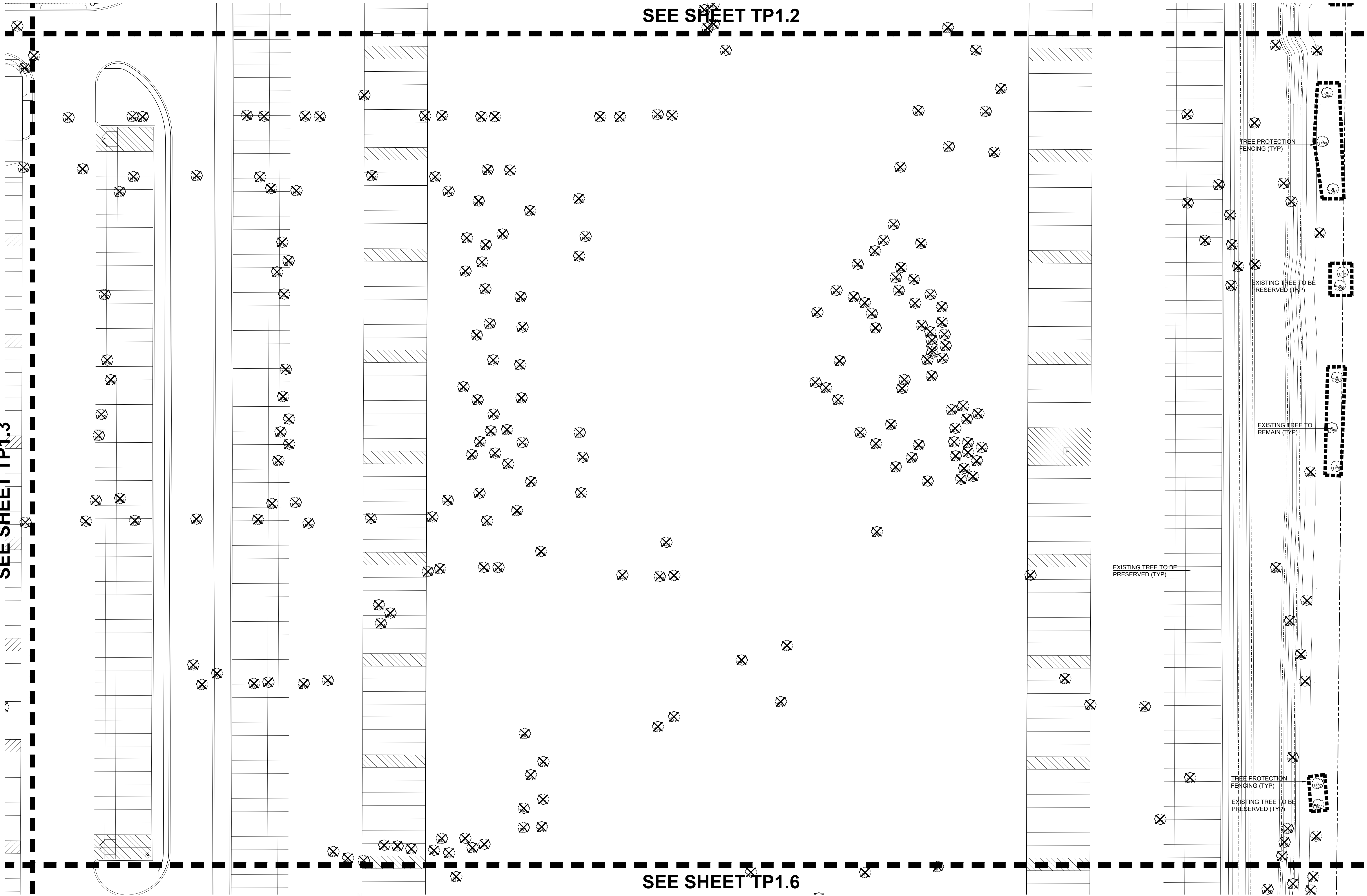
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SEE SHEET TP1.2

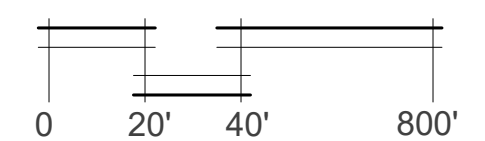
SEE SHEET TP1.3

SEE SHEET TP1.6



TREE PRESERVATION PLAN

SCALE: 1" = 40'-0"



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**TREE PRESERVATION PLAN**

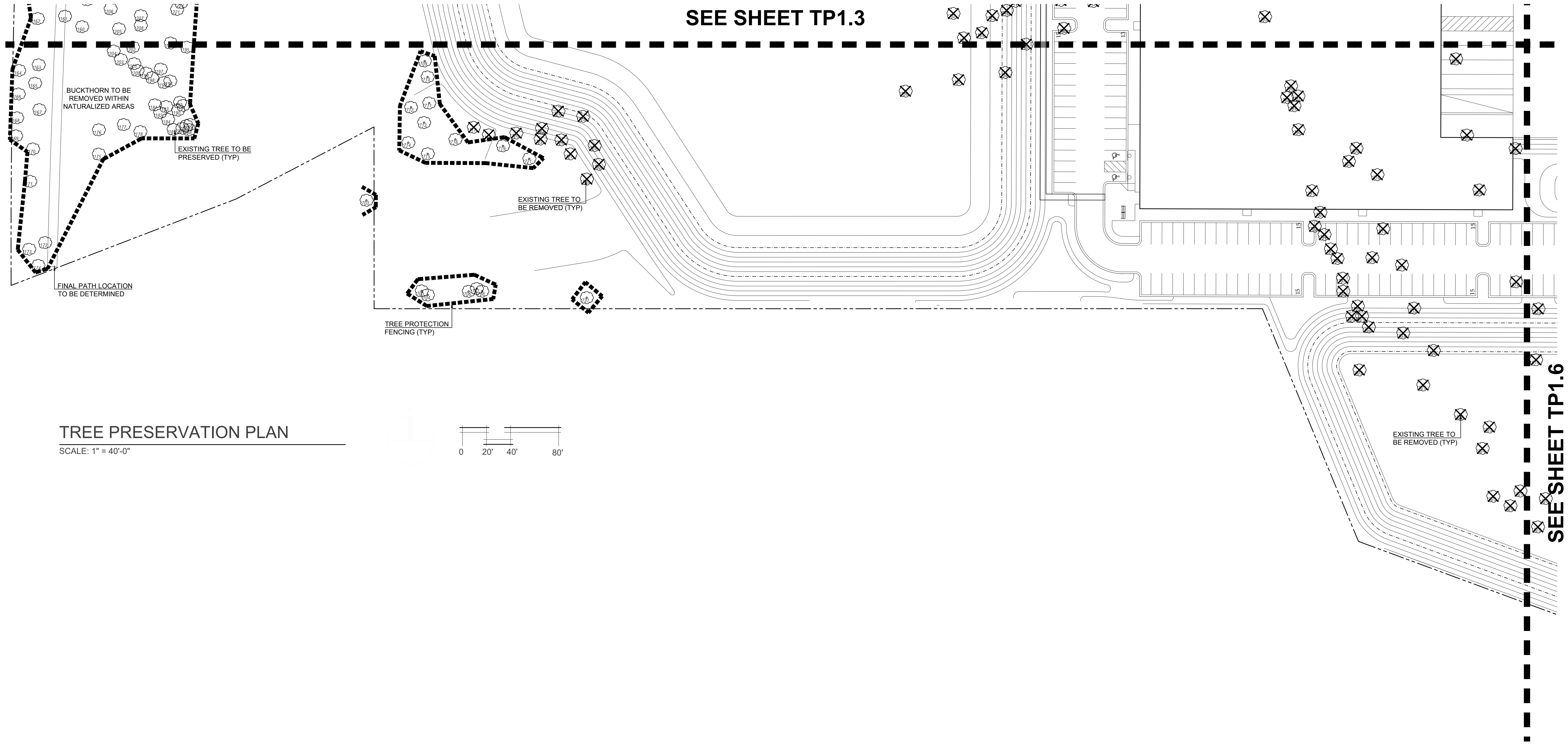
**PROPOSED BUSINESS CAMPUS**  
DEERFIELD, IL

date	drawn	checked
01-26-23	DW	KMT

job no. **23060**

sheet no. **TP1.4**

SEE SHEET TP1.3



**TREE PRESERVATION PLAN**

SCALE: 1" = 40'-0"

SEE SHEET TP1.6

TREE PRESERVATION PLAN

**PROPOSED  
BUSINESS CAMPUS  
DEERFIELD, IL**

date 01-26-23  
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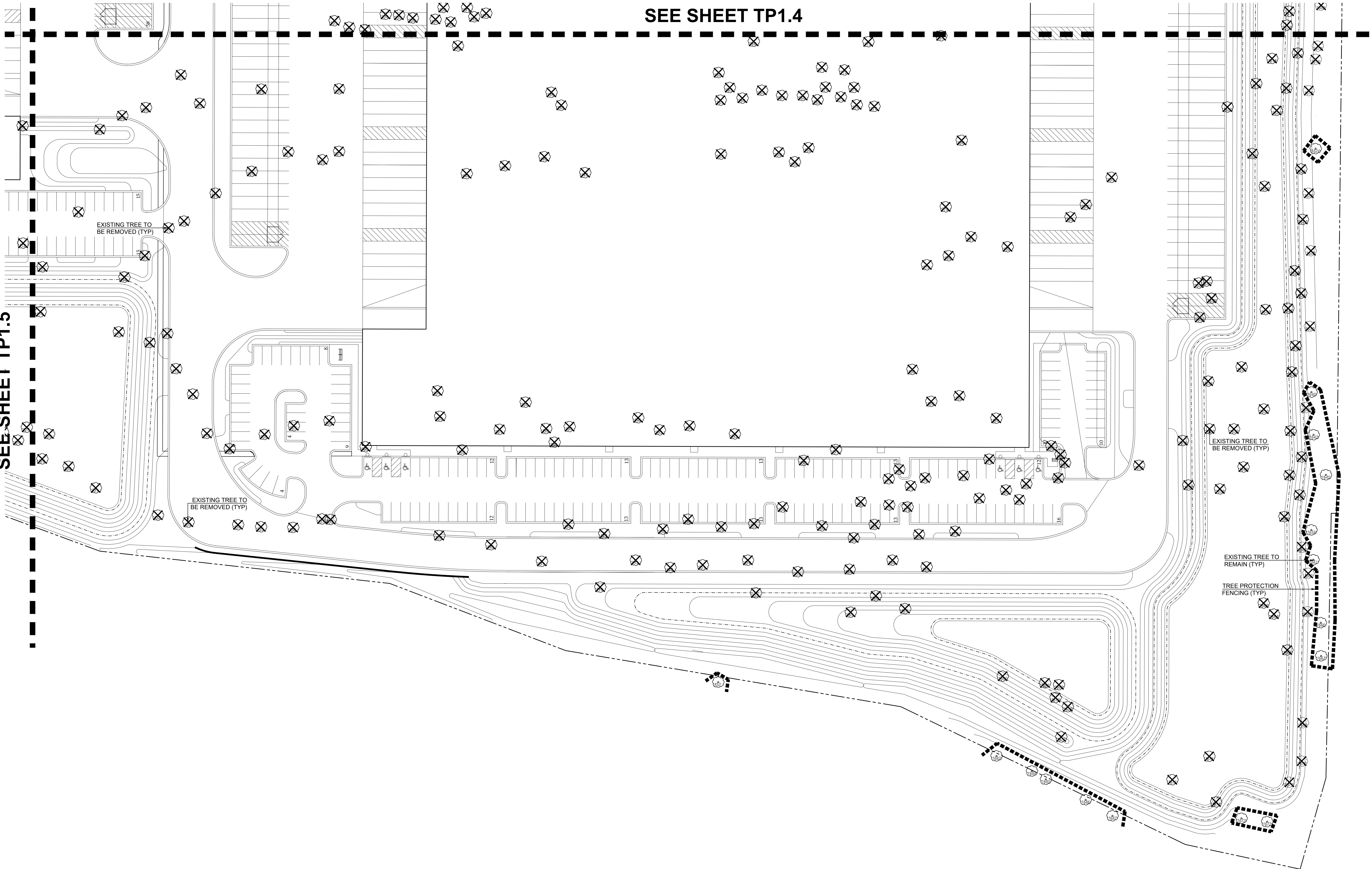
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847.612.5154  
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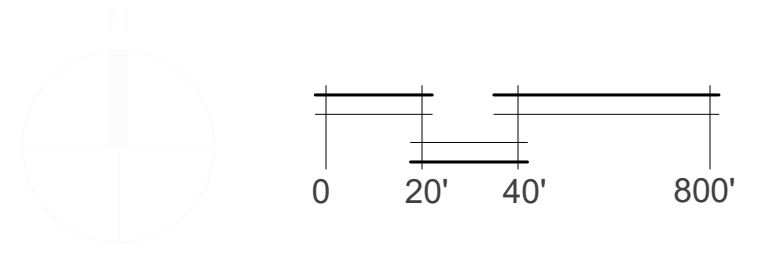
SEE SHEET TP1.4

SEE SHEET TP1.5



TREE PRESERVATION PLAN

SCALE: 1" = 40'-0"



<p>Kathryn Talty landscape architecture</p> <p>Winnetka, Illinois 60093 847.612.5154 www.kmtaltydesign.com</p>			
no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	05-23-23
<p><b>PROPOSED BUSINESS CENTER DEERFIELD, IL</b></p>			
<p>TREE PRESERVATION PLAN</p>			
date	drawn	checked	job no.
01-26-23	DW	KMT	23060
			sheet no.
			TP1.6

# TREE INVENTORY

Tree No.	Species	DBH (in)	Condition rating	Special	Root	Action	Tree No.	Species	DBH (in)	Condition rating	Special	Root	Action	Tree No.	Species	DBH (in)	Condition rating	Special	Root	Action	Tree No.	Species	DBH (in)	Condition rating	Special	Root	Action	
1	American elm	27.0	Good to fair	A	27	Remove	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree	199	Tree

## TREE REMOVAL MITIGATION TOTALS

TREE CATEGORY	CALIPER INCHES TO BE REMOVED	REQUIRED REPLACEMENT VALUE
HERITAGE (1:1)	214"	214"
A (1:1)	8,932"	8,932"
B (0.6:1)	1,008"	604"
C (0.3:1)	1,289"	386"

TOTAL REQUIRED CALIPER INCHES FOR REPLACEMENT: 10,137"

TOTAL PROPOSED CALIPER INCHES: 3,195"

PROPOSED SHADE TREES: 775  
 PROPOSED EVERGREENS: 208  
 PROPOSED ORNAMENTAL TREES: 140

TOTAL PROPOSED CALIPER INCHES: 3,195"

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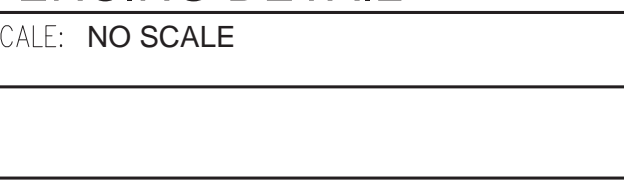
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## TREE PROTECTION FENCING DETAIL



## TREE PROTECTION NOTES

- BEFORE ANY EXCAVATION, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
- FOUR FOOT HIGH SNOW FENCING OR OTHER RIGID MATERIAL IS TO BE ERCTED AROUND THE DRIFLINE OF ALL TREES TO BE SAVED IN ACCORDANCE WITH THE DEERFIELD ZONING ORDINANCE.
- A TREE REMOVAL PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ALL TREE REMOVAL ACTIVITY INVOLVING TREES SIX (6) INCHES OR MORE D.B.H. IN ACCORDANCE WITH THE DEERFIELD ZONING ORDINANCE.
- TREES TO BE REMOVED MUST BE MARKED IN THE FIELD WITH RED PAINT OR FLAGS AND INSPECTED BY THE DEERFIELD FORESTRY OFFICE PRIOR TO ANY TREES BEING REMOVED.
- THE PERMITTED DISTANCE FROM THE TRUNK OF A TREE TO ANY PROPOSED EXCAVATION IS SIX (6) FEET OR MORE PER THE DEERFIELD ZONING ORDINANCE.
- IF THE PROPOSED IMPROVEMENT IS WITHIN SIX (6) FEET OR LESS OF THE TREE, THE TREE MAY BE REQUIRED TO BE REMOVED PER THE DEERFIELD ZONING ORDINANCE.
- IF NECESSARY TO CONDUCT WORK OR DIGGING WITHIN THE ROOT ZONE OF TREES TO REMAIN, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED AND ADDITIONAL PROTECTIVE MEASURES, SUCH AS ROOT PRUNING OR BRIDGING, MUST BE EMPLOYED BY A LICENSED TREE SERVICE.
- ROOT PRUNING EQUIPMENT MUST BE APPROVED BY THE VILLAGE FORESTER PRIOR TO USE. HAND ROOT PRUNING WILL NOT BE PERMITTED UNLESS APPROVED BY THE VILLAGE FORESTER. ALL HAND ROOT PRUNING WILL REQUIRE A CERTIFIED ARBORIST'S SUPERVISION IN ACCORDANCE WITH THE DEERFIELD ZONING ORDINANCE.
- PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CAUSED BY SITE IMPROVEMENT OPERATIONS.
- CAREFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN. PREVENT ANY DISTURBANCE OF EXISTING TREES INCLUDING ROOT ZONES. USE TREE PROTECTION BARRICADES WHERE INDICATED. PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, BRUISING OF BARK OR SMOTHERING OF TREES. DRIVING, PARKING, DUMPING, STOCKPILING AND/OR STORAGE OF VEHICLES, EQUIPMENT, SUPPLIES, MATERIALS OR DEBRIS ON TOP OF THE ROOT ZONES AND WITHIN THE DRIFLINE OF EXISTING TREES OR OTHER PLANT MATERIAL TO REMAIN IS STRICTLY PROHIBITED.
- TREE REMOVAL IS RECOMMENDED FOR TREES CLOSER THAN SIX (6) FEET TO A CONSTRUCTION ZONE. ALL TREE REMOVALS REQUIRE A WRITTEN PERMIT FROM THE VILLAGE FORESTER PRIOR TO REMOVAL IN ACCORDANCE WITH THE DEERFIELD ZONING ORDINANCE.
- THE USE OF STRUCTURAL SOIL AND BARRIER FABRIC WILL BE CONSIDERED AS AN ALTERNATIVE TO TREE REMOVAL PER THE DEERFIELD ZONING ORDINANCE.
- TREE BRANCHES HANGING INTO THE CONSTRUCTION ZONE MAY BE PRUNED BY A CERTIFIED TREE WORKER. ALL PRUNING CUTS MUST MEET ANSI A300-2001 STANDARDS IN ACCORDANCE WITH THE DEERFIELD ZONING ORDINANCE.
- PER THE DEERFIELD ZONING ORDINANCE, NO AMERICAN ELMS OR OAKS MAY BE PRUNED WITHOUT WRITTEN PERMISSION AND INSTRUCTIONS TO CERTIFIED ARBORIST FROM THE VILLAGE FORESTER BETWEEN APRIL 1ST AND OCTOBER 31ST.
- EXERCISE CAUTION WHEN WORKING AND DIGGING NEAR TREES LOCATED ON ADJACENT PROPERTY.
- FAILURE TO FOLLOW THESE SPECIFICATIONS WILL RESULT IN THE CONTRACTOR REQUIRING TO POST A CASH BOND, EQUIVALENT TO THE VALUE OF EACH DAMAGED TREE, FOR A PERIOD NOT TO EXCEED THREE (3) YEARS. BOND VALUE WILL BE DETERMINED BY THE VILLAGE FORESTER PER THE DEERFIELD ZONING ORDINANCE.
- THE VILLAGE FORESTER RESERVES THE RIGHT TO STOP THE JOB FOR UNSUPERVISED WORK THAT IS DETERMINED TO CAUSE IRREPARABLE DAMAGE TO ANY RIGHT-OF-WAY. STOP WORK ORDER WILL BE ENFORCED UNTIL THE CASH BOND IS PAID AS DETERMINED PER THE DEERFIELD ZONING ORDINANCE.
- THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS. ALL PAVEMENT AND DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF LEGALLY.
- ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
- TREE REMOVAL CONDUCTED BY SAVA-TREE LICENSED ARBORIST (914-241-4999)
- EXISTING TREES HAVE BEEN LOCATED WITH GIS COORDINATES. LOCATIONS ARE APPROXIMATE BUT ACCURATE. FIELD VERIFICATION IS RECOMMENDED PRIOR TO REMOVAL ACTIVITY.
- BUCKTHORN TO BE REMOVED IN NATURALIZED AREAS.

Kathryn Talty  
 landscape architecture  
 Winnetka, Illinois 60093  
 www.ktmtdesign.com

initial date  
 RMT 03-22-23  
 RMT 04-14-23

no. revision description  
 RMT 03-22-23  
 RMT 04-14-23

PROPOSED BUSINESS CAMPUS DEERFIELD, IL  
 TREE INVENTORY NOTES  
 TREE PROTECTION DETAIL  
 TP2.1

23060  
 sheet no.



**Deerfield-Bannockburn Fire Protection District**  
**Bureau of Fire Prevention**

500 Waukegan Road • Deerfield, Illinois 60015 • (847) 945-4088 • Fax (847) 945-8951

May 31, 2023

Jeff Ryckaert  
Village of Deerfield  
850 Waukegan Road  
Deerfield, IL 60015

RE: Preliminary site plan review for Bridge Industrial renovation, Deerfield, Illinois

Mr. Ryckaert,

The Deerfield-Bannockburn Fire Protection District has been made aware by the Village of Deerfield of proposed new buildings located on the property currently addressed as 1 Baxter Parkway. We were provided project description information as well as proposed exterior building and site plans.

The fire district requested a parking area site review to evaluate our emergency vehicles and their ability to maneuver in the parking and driving areas. This is a common and regular practice that we request for new building projects. Our third-party plan reviewer FSCI has reviewed the site plans, and the Deerfield-Bannockburn Fire Department has no other concerns or questions currently regarding this proposed project.

Should you have any questions please feel free to contact us.

Tom Gutknecht-Lieutenant  
Deerfield-Bannockburn Fire Department  
500 Waukegan Rd. Deerfield, IL 60015  
847-945-4066  
224-554-8371 Direct  
[www.deerfieldbannockburnfire.org](http://www.deerfieldbannockburnfire.org)