



STAFF REPORT

DATE: 9/9/2024

ITEM #:

PUBLIC HEARING

TO: Planning Commission
FROM: Nathan Fuerst, AICP, Consulting Planner
AGENDA ITEM: **Oak Land Middle School Improvements - Conditional Use Permit, Minor Subdivision, and Variance**
REVIEWED BY: Jason Stopa, Community Development Director
Sophia Jensen, City Planner

BACKGROUND:

The City of Lake Elmo received a request from the Stillwater Area Public School District, ISD 834, to expand the existing Oak Land Middle School building. Enrollment is projected to increase from 1040 students to 1250 students. In a 2023 special election, the Stillwater Area School District successfully received approval of a bond request to finance this expansion. The improvement proposed to the Oak Land Middle School building includes 8 new classrooms and a new gymnasium that will also serve as a storm shelter for the building. Other site improvements include more parking space and a service road behind the building to meet emergency service access requirements.

The following applications were required for this project:

1. **Conditional Use Permit (CUP)** – The Stillwater Area School District does not have a conditional use permit for this site. The Public Facilities zoning district requires a CUP for this use, a public school, and the requirement is triggered by an expansion of the existing use. The CUP will cover the entire site.
2. **Minor Subdivision** – The School District's use of the Oak Land middle school site spans across two parcels. The unaddressed western parcel is landlocked, and has a track and other sports fields. For the entire site to meet impervious surface requirements, the two parcels need to be combined. Some right-of-way (ROW) is also needed for this site to conform with the County comprehensive plan for the two abutting county road corridors. ROW can be dedicated through the minor subdivision process.
3. **Variance** – A variance to the maximum lot area in the PF District of 20 acres is required. The lots will be combined through the minor subdivision process, requiring a variance to this standard.

ISSUE BEFORE THE PLANNING COMMISSION:

The Planning Commission is being asked to review the conditional use permit, minor subdivision, and variance requests to make a recommendation to the City Council.

REQUEST DETAILS:

Applicant/Owner: Stillwater Public Schools (ISD 834)
Location: 820 Manning Avenue N (PID 36.029.21.11.0002 and 36.029.21.11.0003)
Zoning District: Public Facilities
Future Land Use: Institutional
Deadline for Action: Application Complete: 8/12/2024
60 Day Deadline: 10/11/2024
Extension Letter Mailed: TBD
120 Day Deadline: N/A

PROPOSAL DETAILS/ANALYSIS:**Site Data.**

Total Site Area	37.19 acres
School building parcel	22.19 acres
Track & field parcel	15.00 acres

Environmental Review. This project does not trigger a mandatory Environmental Assessment Worksheet under Minnesota Rules 4410.4300. No further environmental review is required.

Bulk Standards.

Standards 105.12.970(f)(1)	Requirement (with structure):	As Proposed
Maximum Lot Area	20 acres	37.19 acres
Minimum Lot Width	100'	~1250'
Minimum Lot Depth	150	~1575'
Max Impervious Cover	32%	29.71%
Max Impervious Cover in Shoreland Area	15%	14.03%
Minimum Setback - Front	50 feet	206 feet
Minimum Setback - Side	50 feet	50 feet
Minimum Setback - Corner	50 feet	~785' feet
Minimum Setback - Rear	50 feet	~785' feet
Maximum Height	50 feet	36.5'
Driveway Setback from intersection	50 feet from r-o-w	No change proposed
Driveway setback from side lot line	5 feet	No change proposed
Driveway Width	12-26 feet	No change proposed

Minimum Lot Area. The Oak-Land Middle School site is comprised of two parcels that total 37.19 acres. This is above the City's maximum lot area of 20 acres. Because the school is expanding its use of the site and required to combine parcels and dedicate right of way through the minor subdivision process, the City has required a variance be approved. Staff support a variance to the City's maximum lot size due to the fact that the Public School land use is already established on this site and that a minor

subdivision will provide necessary public right of way, clean up lot lines and legal descriptions, and allow the School site to meet applicable requirements for impervious surface.

Tree Preservation. Limited tree removals are proposed on the site primarily to allow required public sewer connection, and to allow installation of storm sewer south of the building. There are 2994 significant inches indicated by the Applicant to be currently on site. The allowable removal at 30% is 898 inches. As proposed, the School District will only remove 402 inches, not triggering a need for mitigation. The City's Landscape Architect has required a revision to the calculation in order to remove Siberian Elm, Box Elder, and Eastern Cottonwood trees from the table as they are not considered significant. Revisions are also required to details provided the plans. The Applicant will be required to revise and resubmit accordingly.

Shoreland Standards. Together, the two parcels comprising the Oak Land Middle School site abut Rose Lake which is classified as a natural environment lake by the City's Shoreland Ordinance. The City's ordinance permits this use in the shoreland overlay and establishes several performance standards for existing and future development. First, the site is subject to a 15% impervious surface maximum. The site will meet that standard with the new expansion bringing total lot coverage to 14.03% within the shoreland area. The School District's proposed improvements will also stay outside of the 150' setback from Rose Lake and will result in modification of no riparian vegetation.

Landscaping. The City's Landscape Architect has reviewed the planting plan for conformance with the City's ordinance. The Applicant will need to recalculate the total number of trees that are required for the site. It is anticipated that additional trees will be required, and plantings in parking areas or along the southern lot line (as discussed in the section below) would satisfy overall tree planting requirements. Other details will be required to plans revised and resubmitted by the Applicant.

Buffering and Screening. This property is abutting one existing single family residential property to the north and several larger parcels to the west and south that are undeveloped but guided for residential development. A majority of tree removals proposed on this parcel are coming from the southern lot line which abuts a parcel anticipated to have future residential development. Staff suggest that additional tree plantings be required in the area between the structure and the southern property line in order to replace the screening that will be lost. A mix of evergreen and deciduous trees of varying species should be provided to allow year-round screening.

Building Design. Elevations submitted with the site plans indicate two different treatments for the building. The exterior of all new classroom areas would be constructed with the same materials currently on the principal structure; however, the two-story gymnasium area would be constructed with precast concrete panels and surfaced with exposed aggregate. The building materials and façade elevations proposed are consistent with the City's design standards manual and are therefore found acceptable.

Parking. City code requires three spaces per classroom. There are 58 rooms that are classrooms or an equivalent learning space. Therefore, a minimum of 174 parking spaces are required. There are a total of 172 parking spaces supplied in areas not used by buses, and a total of 295 on site if the bus turnaround area is included. The back row of the bus turnaround area appears to not impede bus operations, which could add an additional 30 parking stalls if fully utilized. This site meets the parking minimum established by code.

Traffic and Access. A traffic study was required and supplied by the Applicant. Both the study and site plans have been reviewed by the City Engineer and Washington County for issues related to traffic and access.

Washington County staff have indicated the following comment regarding concern for exacerbating the existing conditions:

Despite recent investments in a traffic signal and additional length on the exit lanes, the school currently has issues with vehicles queuing along CSAH 15 and delays in exiting the site during peak times. Queuing on highway shoulders or turn lanes causes obstructed sight lines for drivers, the denial of left-in access during peak times, and incentivizes drivers to make U-turns to join the queue. Washington County is concerned that expanding the school enrollment will exacerbate the queuing, delay, and safety issues if additional improvements are not made to provide more internal vehicle stacking space

Washington County will ultimately require an access permit for the use to be intensified in a manner that would impact or adversely affect the safety or operations of the county road as determined by the County Engineer. Washington County engineering staff's have provided the following recommendations which are paraphrased for brevity:

1. Provide two internal circulation lanes to allow leapfrogging.
2. Increase inbound capacity modifying the inbound lanes to wrap around parallel to the exit lanes.
3. Construct pedestrian infrastructure, particularly connecting to the existing neighborhoods located along Palmer Drive and a connection to the Cimarron development.
4. Create bike and pedestrian connections to and through the south growth area as it develops to reduce vehicle dependency.

The City Engineer has provided the following comments in their memo related to Transportation Improvements and Access:

1. Access Management. The CUP/Minor Subdivision approval should be contingent upon the District agreeing to allow the southern secondary school access to Manning Avenue to be relocated further south when the future neighborhood collector roadway is needed to serve this future development area.
2. Plan Sheet AP 5 should be revised to remove the Future Development Access proof of concept. The exhibit shows that the future development access does not work as intended to serve as a neighborhood collector roadway for the future development area. The southern school access to Manning Avenue will be required to be relocated further south of the existing signalized intersection and the school will be required to reconnect to the new access location at its sole cost.
3. The City supports the County's request for the District to make internal site and operational improvements as necessary to mitigate the peak traffic queuing onto Manning Avenue (CSAH 15) by parent drop-offs and pickups.

Suggested conditions of approval have been added to address the concerns of both Washington County and City Engineering staff.

CONDITIONAL USE PERMIT FINDINGS: City Code Section 105.12.290(a) provides findings required for Conditional Use Permit approval. Staff recommends the following findings:

1. The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city. ***Approval of a conditional use permit should not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or City.***
2. The use or development conforms to the City of Lake Elmo Comprehensive Plan. ***This use is consistent with the Comprehensive Plan as amended by Resolution 2024-029.***
3. The use or development is compatible with the existing neighborhood. ***The proposed expansion is to a middle school that has been in operation for over two decades. The land use is permitted as a conditional use, and is compatible with surrounding residential development.***
4. The proposed use meets all specific development standards for such use listed in Article 15 of this Chapter. ***The conditional use permit amendment meets all specific development standards of Article 15.***
5. If the proposed use is in a flood plain management or shoreland area, the proposed use meets all the specific standards for such use listed in Chapter 105.12.1260 (Shoreland Regulations) and Title 100 (Flood Plain Management). ***Part of the property falls within the shoreland area of Rose Lake. The use is consistent with requirements found in the City's Shoreland Regulations.***
6. The proposed use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of that area. ***The proposed addition and new building are designed to be compatible with the existing structure character. The character of the general vicinity should not be changed.***
7. The proposed use will not be hazardous or create a nuisance as defined under this Chapter to existing or future neighboring structures. ***The Applicant is not requesting a variance to performance standards other than to have a larger parcel than that required by City Ordinance. It is not anticipated for the use to become a nuisance as the site will meet applicable performance standards.***
8. The proposed use will be served adequately by essential public facilities and services. ***The Applicant has requested a utility feasibility study and intends to connect the parcel to the public sewer system as required under the City's ordinance. Washington County and City engineering staff have suggested conditions of approval that would mitigate impacts expected to county roadways.***
9. The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community. ***The use should not create additional requirements at public cost, and will provide an expanded capacity to serve area residents with educational services. Future relocation of access may be required by the City to mitigate concerns with impacts to Manning Avenue from this use.***
10. The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors. ***The use will not produce excessive noise, smoke, fumes, glare or odors. Washington County and City engineering staff have suggested conditions of approval that would mitigate impacts expected to county roadways.***

11. Vehicular approaches to the property, where present, will not create traffic congestion or interfere with traffic on surrounding public thoroughfares. ***Washington County and City engineering staff have suggested conditions of approval that would mitigate impacts expected to county roadways.***
12. The proposed use will not result in the destruction, loss or damage of a natural or scenic feature of major importance. ***The proposed expansion will not result in the destruction, loss or damage of the natural environment, and will meet applicable performance standards.***

RECOMMENDED MINOR SUBDIVISION FINDINGS.

The process for review of subdivisions is established in City Code Section 103.00.070. While specific findings are not established in that ordinance, staff recommends the following findings:

- That the Oak-Land Middle School Addition minor subdivision is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.
- That the Oak-Land Middle School Addition minor subdivisions is consistent with the future development plans of the area and with the standards of the City's Public Facilities zoning district.
- That the Oak-Land Middle School Addition minor subdivision meets the requirements of the City's minor subdivision regulations and specifically the requirements concerning exceptions to platting.

RECOMMENDED VARIANCE FINDINGS.

An applicant must establish and demonstrate compliance with the variance criteria set forth in Lake Elmo City Code Section 105.12.320 before the City may grant an exception or modification to city code requirements. These criteria are listed below, along with comments from Staff about the applicability of these criteria to the applicant's request. Staff recommends the following findings:

- 1) Practical Difficulties. A variance to the provision of this chapter may be granted by the Board of Adjustment upon the application by the owner of the affected property where the strict enforcement of this chapter would cause practical difficulties because of circumstances unique to the individual property under consideration and then only when it is demonstrated that such actions will be in keeping with the spirit and intent of this chapter. Definition of practical difficulties - "Practical difficulties" as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by an official control.
The use proposed by the Applicant is already established on the entire site which will be 37.04 acres as combined after required right of way dedication is removed. Combining the two parcels through a minor subdivision will provide necessary public right of way, clean up lot lines and legal descriptions, and allow the School site to meet applicable requirements for impervious surface and setbacks.
- 2) Unique Circumstances. The plight of the landowner is due to circumstances unique to the property not created by the landowner.
The Applicant is not proposing to expand the school's building or site improvements beyond the existing boundaries of the Oak Land Middle School property.
- 3) Character of Locality. The proposed variance will not alter the essential character of the locality in which the property in question is located.

*The variance should not impact essential character; the use of the facilities is to remain the same.
The request meets the overall design intent of this area.
The variance request should not impact essential character.*

- 4) Adjacent Properties and Traffic. The proposed variance will not impair an adequate supply of light and air to properties adjacent to the property in question or substantially increase the congestion of the public streets or substantially diminish or impair property values within the neighborhood.
The variance should not impair adjacent properties. Washington County and City engineering staff have suggested conditions of approval that would mitigate impacts expected to county roadways.

AGENCY REVIEW:

This request was distributed to several departments and agencies for review on Wednesday, August 7th, 2024. The following review comments are noted:

- Fire Department Memo (8/26/2024) Provided comments regarding drive lanes, fire detection and suppression, building addressing, and gates/locks/access.
- City Engineer Memo (8/26/2024) Provided comments regarding impervious surface, water connection, grading, and stormwater. Engineering requested more detailed plans.
- City Landscape Architect Memo (8/27/2024) Provided comments on revisions need to the tree mitigation and landscaping plans.
- Washington County DOT Email (8/28/2024) Provided comments regarding future intersection improvements and City cost share.
- Valley Branch Watershed District – Did not provide comments.
- MN DNR – Did not provide comments.
- West Lakeland Township – Did not provide comments.

Conditions of approval have been included to address agency review comments where applicable.

RECOMMENDED CONDITIONS OF APPROVAL:

1. The Applicant must enter into a Site Improvement Agreement, in the City's Standard Form, prior to issuance of a notice to proceed or any building permit for work on site.
2. Prior to the City signing or approving recording of the Final Plat or Site Improvement Agreement, the Applicant shall fully address all comments in the following review memos, or any subsequently revised memo, to the satisfaction of the City:
 - a. City Engineer's memo dated August 26, 2024,
 - b. City Landscape Architect's memo dated August 27, 2024,
 - c. City Fire Chief's memo dated August 26, 2024.
 - d. City Attorney's Plat Opinion.
3. The Applicant must incorporate operational improvements on site to eliminate queuing of traffic accessing the site from Manning Avenue.
4. The Conditional Use Permit approval is contingent upon the Applicant agreeing to allow the southern secondary school access to Manning Avenue to be relocated further south when the future neighborhood collector roadway is needed to serve this future development area.
5. The School Building must connect to City Water and Sewer systems prior to the issuance of a Certificate of Occupancy for the additions.

6. The applicant must provide plans for the water and sewer connection to the satisfaction of the City Engineer, Public Works Director, and Fire Chief prior to the release of the building permit.
7. Water and Sewer Area Charges, and other fees as applicable, must be paid prior to issuance of a building permit.
8. All city, state, or other necessary permits must be obtained prior to the release of the building permit.
9. Tree plantings required for the site, and additional plantings as directed by the City's Community Development Director, shall be located along the southern property boundary to replace the existing vegetated buffer that will be removed as part of the proposed site improvements.
10. Substantial construction must take place within 12 months of the date on which the conditional use permit was granted, and the Applicant must otherwise comply with provisions of Section 105.12.290 Conditional Use Permits.

PUBLIC COMMENT:

A public hearing was sent to surrounding property owners on August 30, 2024, and published in the Stillwater Gazette on August 27, 2024. At this time no public comments have been received.

OPTIONS:

The Planning Commission may:

- Recommend approval of the request;
- Recommend approval of the request with conditions;
- Recommend denial of the request. Citing findings of fact for denial.

RECCOMENDATION:

Staff recommend the Planning Commission consider a recommendation of approval for the conditional use permit, minor subdivision, and variance requests. Below is the recommended motion:

“Move to recommend approval of the conditional use permit, minor subdivision, and variance for the Oak-Land Middle School expansion proposed by Stillwater Area Public Schools, ISD 834, with the conditions and findings listed in the staff report.”

ATTACHMENTS:

1. Submittal Package
2. City Engineer Memo (8/26/2024)
3. City Fire Dept Memo (8/26/2024)
4. City Landscape Architect Memo (8/27/2024)
5. Washington County DOT Comments (8/28/2024)



MEMORANDUM

To: Nicole Miller, City Administrator, Lake Elmo

From: Paul Aplikowski | PA

Date: August 2, 2024

Comm. No: 232260

Subject: Independent School District #834
Oak-Land Middle School Addition and Renovation
Submittal to City of Lake Elmo on behalf of Stillwater Area Public Schools, for the proposed additions to Oak-Land Middle School, located at 820 Manning Avenue, Lake Elmo, Minnesota 55042 (Property ID #3602921110002, #3602921110003)

Conditional Use Permit, Minor Subdivision, and Variance Submittal Narrative:

On behalf of Stillwater Area Public Schools, we are submitting for City staff review a Conditional Use Permit, Minor Subdivision, and Variance application for the proposed additions to Oak-Land Middle School. The additions are in response to a projected increase in student enrollment from 1,040 students to 1,250 students, and will include two new science classrooms, six general education classrooms, and a two-station gymnasium that will also serve as a storm shelter for the entire facility. Associated staffing needs are anticipated to increase from 102 existing, to 125. The existing building is 134,880 square feet, the additions will be approximately 29,000 square feet cumulatively, for a total of 163,880 square feet. The classroom additions will be single story, with exterior materials and design aesthetics to match the existing building. The gymnasium addition will include a small single-story portion between the gymnasium and the remaining building, with the gymnasium being a two-story structure comprised of precast concrete. The anticipated school day schedule is currently planned to be from 8:35am to 3:05pm.

Site improvements include increasing the parking stall count by 35 stalls for a total of 174, to accommodate staffing increases and abide by City ordinance requirements, and the introduction of a hard-surface emergency vehicle access route extending from the north parking lot to the west of the facility. All stormwater control is designed to address needs onsite. Additionally, the District is considering connections to public water and sewer utilities and working with the City and County to determine the necessary scope requirements to transition the school to public utilities, from existing well-water and a below-grade septic system. The City is currently facilitating a feasibility study to determine overall scope and cost implications. It is anticipated that the study will indicate a new gravity-fed sanitary line will replace the septic system, extend north to connect to a lift station that currently serves Royal Oaks Golf Course to the north of 10th Street North.

Wold Architects and Engineers
332 Minnesota Street, Suite W2000
Saint Paul, MN 55101
woldae.com | 651 227 7773

**PLANNERS
ARCHITECTS
ENGINEERS**



A forced main routed from that lift station to the west will connect to another forced main below Lake Elmo Avenue North, which connects to the proposed new Lake Elmo Elementary School. Also included in this submittal is the completed traffic study, which reviewed existing vehicular and pedestrian traffic on and around the site; and a conceptual diagram showing a potential access road to a possible future residential development to the south of Oak-Land Middle School.

Anticipated mobilization, ground-breaking and building shell construction of the additions is planned to occur in Spring 2025. Construction of the two classrooms additions is expected to be completed by August 2025, with the gymnasium addition concluding in the winter of 2025-2026.

Item A. A listing of contact information including name(s), address(es), and phone number(s) of the: owner of record, authorized agents or representatives, engineer, surveyor, and any other relevant associates.

Response:

Independent School District #834 Staff:

Maria Schrul, Executive Director of Finance
1875 South Greeley Street, Stillwater, Minnesota 55082
651-351-8321

Mark Drommerhausen, Executive Director of Operations
1875 South Greeley Street, Stillwater, Minnesota 55082
651-351-8379

Anthony Willger, Manager of Facilities and Site Operations
1875 South Greeley Street, Stillwater, Minnesota 55082
651-351-8374

Design and Construction

Paul Aplikowski, Wold Architects and Engineers
332 Minnesota Street, Saint Paul, Minnesota 55101
651-227-7773

Valerie Peterson, Wold Architects and Engineers
332 Minnesota Street, Saint Paul, Minnesota 55101
651-227-7773

Greg Buchal, Larson Engineering (Civil Engineer)
3524 Labore Road, White Bear Lake, Minnesota 55110
651-481-9120



Gary Zifko, Kraus-Anderson
501 South Eighth Street, Minneapolis, Minnesota 55404
612-332-8940

Cornerstone Land Surveying
1970 Northwestern Avenue, Suite 200, Stillwater, Minnesota 55082
651-275-8969

Item B. A listing of the following site data: address, current zoning, parcel size in acres and square feet, property identification number(s), and current legal description(s).

Response:

Address: 820 Manning Avenue, Lake Elmo, Minnesota 55042

Zoning: PF – Public Facilities

Property Identification Numbers: #3602921110002, #3602921110003

Parcel size:

East Parcel: 1,088,398sf 25.0 acres

West Parcel: 653,397sf 15.0 acres

Total: 1,741,795sf 40.0 acres

Current Legal Description:

East Parcel: PT N1/2 OF NE1/4 BEING E 665 FT OF SD N1/2 OF NE1/4 & W
234.9 FT OF E 900.9 FT OF S 891.8 FT and SUBJECT TO
EASEMENTS SECTION 36 TOWNSHIP 029 RANGE 021

West Parcel: PT N1/2 OF NE1/4 BEING W 732.68 FT OF E 1633.58 FT OF S 891.8
FT SECTION 36 TOWNSHIP 029 RANGE 021

Item C. A narrative regarding the history of the property (current and past used) and any pre-application discussions with staff.

Response:

Please refer to the above narrative.

Item D. A specific written description of the proposed use(s).

- A. Incorporate information describing how the use will work on the proposed site including proposed site changes, existing open spaces, landscaping, traffic circulation, transition areas to adjacent properties, individual uses for existing and proposed structures, and effects on natural areas (wetlands, forests, etc.) both on-site and in the general vicinity of the project.



- B. Provide specific details about the use including the number of employees, hours of operation, maximum number of animals (if applicable), proposed development schedule, etc.

Response:

Please refer to the above narrative.

Item E. Provide justification that the proposed use meets the following findings:

- A. The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or City.
- B. The use or development conforms to the City of Lake Elmo Comprehensive Plan.
- C. The use or development is compatible with the existing neighborhood.

Response:

Please refer to the above narrative.

Feel free to contact Wold Architects and Engineers or the District with any questions or concerns you may have.

LEGAL DESCRIPTION:

PARCEL A:
The following parts of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West described as follows: The East 666 feet of the said North Half of the Northeast Quarter and the West 234.9 feet of the East 900.0 feet of the South 891.8 feet, subject to public roadways along the North and East side thereof and containing 25 acres more or less together with a perpetual easement for utility purposes including but not limited to underground gas lines, electrical transmission lines, and drainage, said easement tract being the south 50 feet of the West 1,571.1 feet of the East 2,472.5 feet of the said North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36). (Description per Warranty Deed Doc. No. 212313)

PARCEL B:
All that part of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West, described as follows: The West 732.68 feet of the East 1633.58 feet of the South 891.8 feet containing 15 acres more or less. (Description per Warranty Deed Doc. No. 218479)

AREA:

EXISTING AREAS:	PROPOSED AREAS:	
TOTAL PARCEL AREA: 40.00 ACRES	TOTAL PARCEL AREA: 40.00 ACRES	
PARCEL A AREA: 25.00 ACRES (incl R.O.W.)	LOT 1, BLOCK 1: 37.04 ACRES	
PARCEL B AREA: 15.00 ACRES	ROW DEDICATION: 2.96 ACRES	

EASEMENT NOTES:

No titlework was provided for our review. No temporary easement have been shown. There may be additional easements of which we are unaware.

It is unclear whether fee title has been taken under the area covered by Right of Way plats to the East and North side of the school property. We have shown the boundary to the extent of the section lines. Proposed right of way shown incorporates existing right of way plats and dedication of additional right of way per Washington County.

- SURVEY NOTES:**
- PROJECT COORDINATES ARE BASED ON COORDINATES SUPPLIED BY THE WASHINGTON COUNTY SURVEYORS OFFICE.
 - UNDERGROUND UTILITIES SHOWN PER GOPHER STATE ONE CALL LOCATES AND AS-BUILTS PLANS PROVIDED BY THE CITY OF LAKE ELMO PUBLIC WORKS DEPARTMENT.
 - THERE MAY BE SOME UNDERGROUND UTILITIES: GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
 - DATE OF FIELD WORK JUNE 10 - JULY 5, 2024.

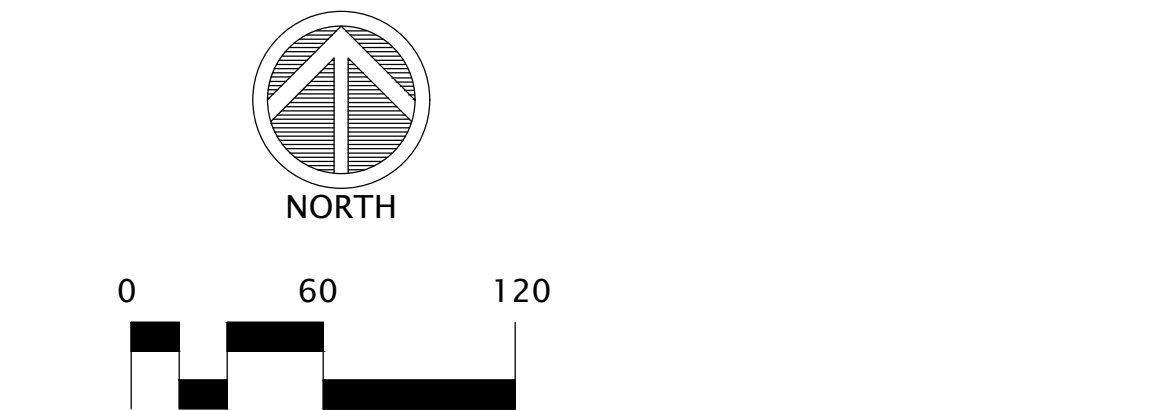
FLOOD INFORMATION:

THIS PROPERTY LIES WITHIN THE UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27163C0355E HAVING AN EFFECTIVE DATE OF 02/03/2010.

FLOOD INFORMATION:

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN AS THUS: (NOT TO SCALE)

BEING 10 FEET IN WIDTH AND ADJOINING PLAT BOUNDARIES UNLESS OTHERWISE SHOWN ON THE PLAT.

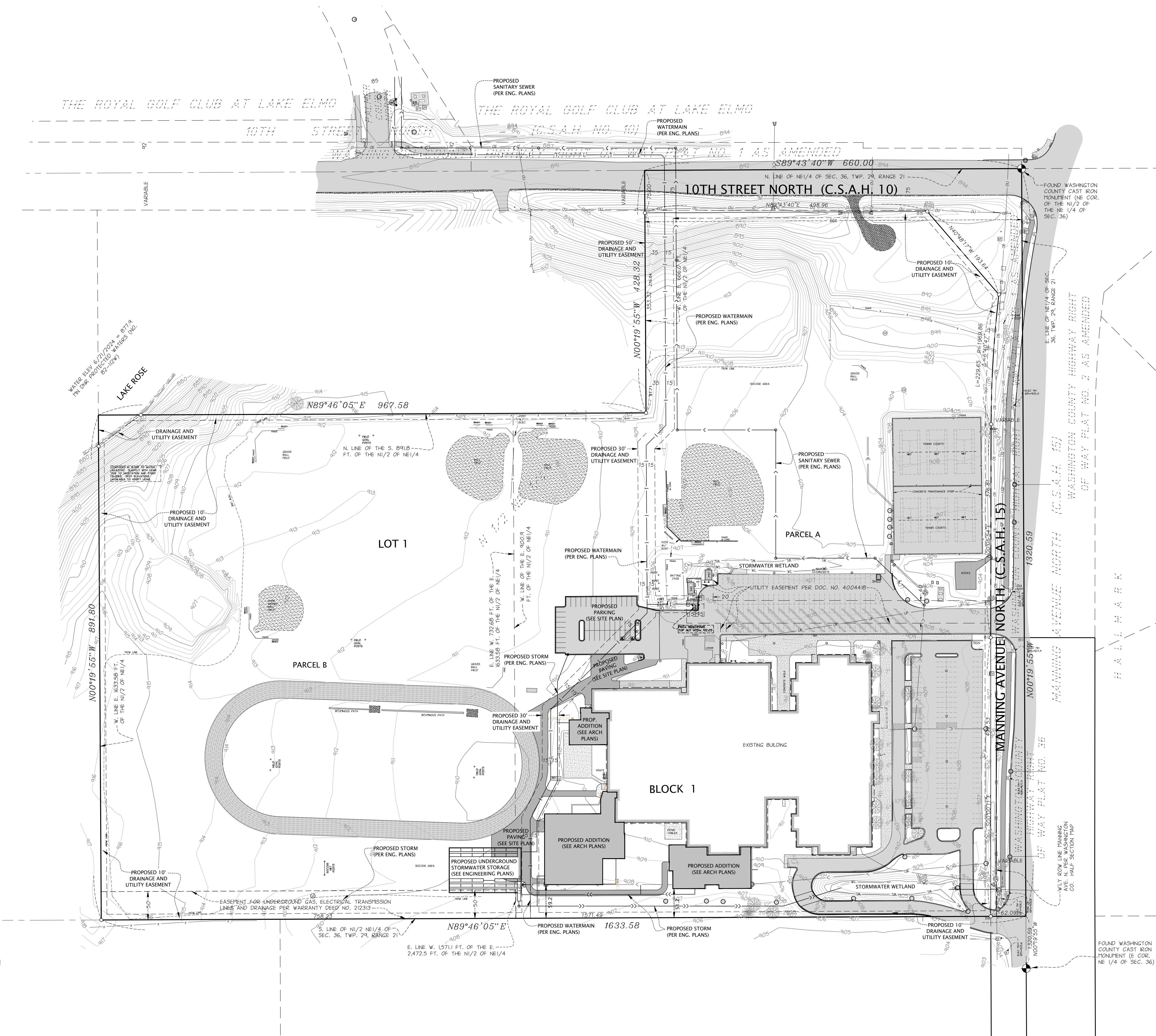


LEGEND

	FOUND MONUMENT		FIRE DEPT. CONNECTION		UNDERGROUND ELECTRIC
	SET 1/2" IRON PIPE MARKED RLS NO. 25718		HYDRANT		UNDERGROUND CABLE TV
	CABLE TV PEDESTAL		CURB STOP		UNDERGROUND FIBER OPTIC
	AIR CONDITIONER		WATER MANHOLE		UNDERGROUND TELEPHONE
	ELECTRIC MANHOLE		WATER METER		OVERHEAD UTILITY
	ELECTRIC METER		POST INDICATOR VALVE		UNDERGROUND GAS
	ELECTRIC PEDESTAL		WATER VALVE		SANITARY SEWER
	ELECTRIC TRANSFORMER		BOLLARD		STORM SEWER
	LIGHT POLE		FLAG POLE		WATERMAIN
	POWER POLE		MAIL BOX		FENCE
	GAS MANHOLE		TRAFFIC SIGN		TREE LINE
	GAS METER		UNKNOWN MANHOLE		RETAINING WALL (BLOCK)
	TELEPHONE MANHOLE		SPOT ELEVATION		CURB (TYPICAL)
	TELEPHONE PEDESTAL		TRAFFIC SIGNAL		CONTOURS
	SANITARY CLEANOUT				BUILDING LINE
	SANITARY MANHOLE		CONFEDEROUS TREE		BITUMINOUS SURFACE
	CATCH BASIN		DECIDUOUS TREE		CONCRETE SURFACE
	STORM DRAIN				GRAVEL SURFACE
	FLARED END SECTION				RIP RAP
	STORM MANHOLE				PAVER SURFACE

UNDERGROUND UTILITIES NOTES:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. GOPHER STATE ONE CALL LOCATE TICKET NUMBER(S) 241600316. SOME MAPS WERE RECEIVED, WHILE OTHER UTILITIES DID NOT RESPOND TO THE LOCATE REQUEST. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST. OTHER UTILITIES MAY EXIST ON THIS SITE THAT WERE NOT MARKED UP.



OAK-LAND MIDDLE SCHOOL ADDITION

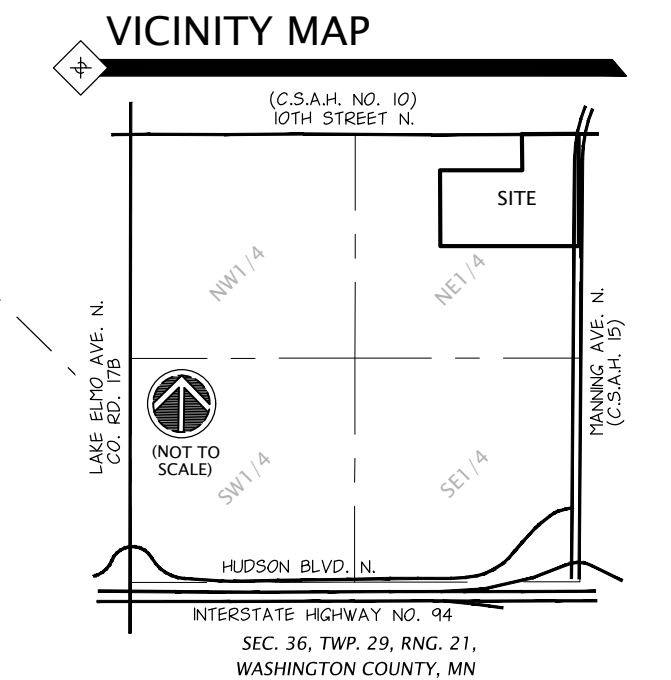
CONTACT:

TONY WILLGER
Manager of Facility and Site Operations
Stillwater Area Public Schools
1875 South Greely Street
Stillwater, MN 55082
651-351-8374

COUNTY/CITY:

WASHINGTON
COUNTY

CITY OF
LAKE ELMO



REVISIONS:

DATE	REVISION
08-12-2024	INITIAL ISSUE

CERTIFICATION:

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

Daniel L. Thurmes
Daniel L. Thurmes Registration Number: 25718
Date: 08-12-2024

PROJECT LOCATION:

820
MANNING AVE. N.
PID#3602921110002
PID#36029211100032

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

**CORNERSTONE
LAND SURVEYING, INC.**

FILE NAME: SURVLE27E
PROJECT NO.: LE07037E

PRELIMINARY
PLAT

OAK-LAND MIDDLE SCHOOL ADDITION

KNOW ALL PERSONS BY THESE PRESENTS: That independent School District No. 834, a Minnesota body corporate and politic, fee owner of the following described property situated in the County of Washington, State of Minnesota, to wit:

The following parts of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West described as follows: The East 666 feet of the said North Half of the Northeast Quarter and the West 234.9 feet of the East 900.9 feet of the South 891.8 feet.

And, all that part of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West, described as follows: The West 732.68 feet of the East 1633.58 feet of the South 891.8 feet containing 15 acres more or less.

Has caused the same to be surveyed and platted as OAK-LAND MIDDLE SCHOOL and does hereby dedicate to the public for public use the public way and the drainage and utility easements as created by this plat.

In witness whereof said Independent School District No. 834, a Minnesota body corporate and politic, has caused these presents to be signed by its proper officer this _____ day of _____, 20____.

SIGNED: Independent School District No. 834

By _____, Its Chief Financial Officer
Marie Schrul

STATE OF MINNESOTA
COUNTY OF WASHINGTON

This instrument was acknowledged before me this _____ day of _____, 20____, by Marie Schrul, the Chief Financial Officer of Independent School District No. 834, a Minnesota body corporate and politic.

_____ (SIGNATURE)

_____ (PRINTED)

Notary Public, Minnesota
My Commission Expires _____

I, Daniel L. Thurmes, do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on the plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 2024.

Daniel L. Thurmes, Licensed Land Surveyor, Minnesota License No. 25718

STATE OF MINNESOTA
COUNTY OF WASHINGTON

This instrument was acknowledged before me on this _____ day of _____, 2023, by Daniel L. Thurmes, Licensed Land Surveyor, Minnesota License No. 25718

_____ (signature)

_____ (print)

Notary Public,
Dakota County, Minnesota
My Commission Expires January 31, 2030

AKE ELMO PLANNING COMMISSION

Approved by the Planning Commission of the City of Lake Elmo, Minnesota, this _____day of _____, 2024.

By _____, Chairperson

By _____, Secretary

CITY COUNCIL OF THE CITY OF LAKE ELMO

This plat was approved by the City Council of the City of Lake Elmo, Minnesota, this _____day of _____, 2024 and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subd. 2.

By _____, Mayor

By _____, Clerk

LAKE ELMO PLANNING COMMISSION

Approved by the Planning Commission of the City of Lake Elmo, Minnesota, this _____day of _____, 2024.

By _____, Chairperson

By _____, Secretary

CITY COUNCIL OF THE CITY OF LAKE ELMO

This plat was approved by the City Council of the City of Lake Elmo, Minnesota, this _____day of _____, 2024 and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subd. 2.

By _____, Mayor

By _____, Clerk

WASHINGTON COUNTY SURVEYOR

Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 2024.

By _____

Washington County Surveyor

By _____

WASHINGTON COUNTY AUDITOR/TREASURER

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9 and Section 272.12, taxes payable in the year 202____, on real estate hereinbefore described, have been paid; and there are no delinquent taxes, and transfer has been entered, on this _____ day of _____ 2024.

By _____ Washington County Auditor/Treasurer

By _____ Deputy

WASHINGTON COUNTY RECORDER

Document Number _____

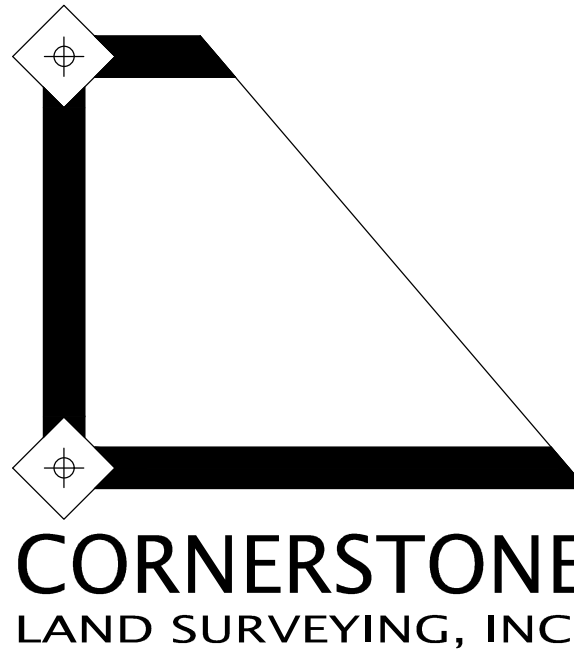
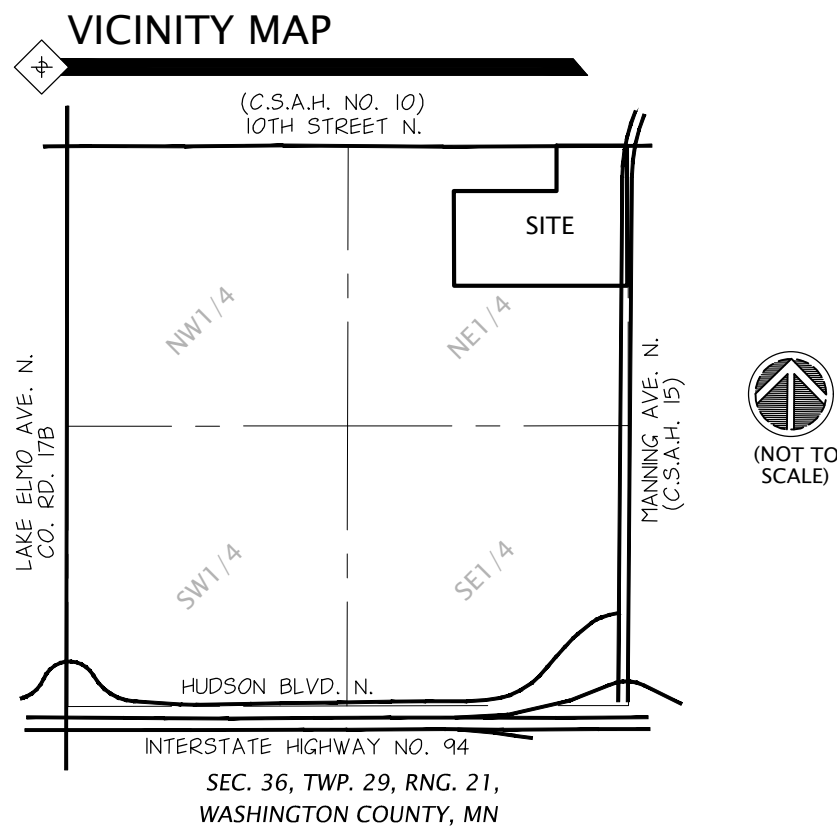
I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 2024, at _____ o'clock ____ M., and was duly recorded in Washington County Records.

By _____

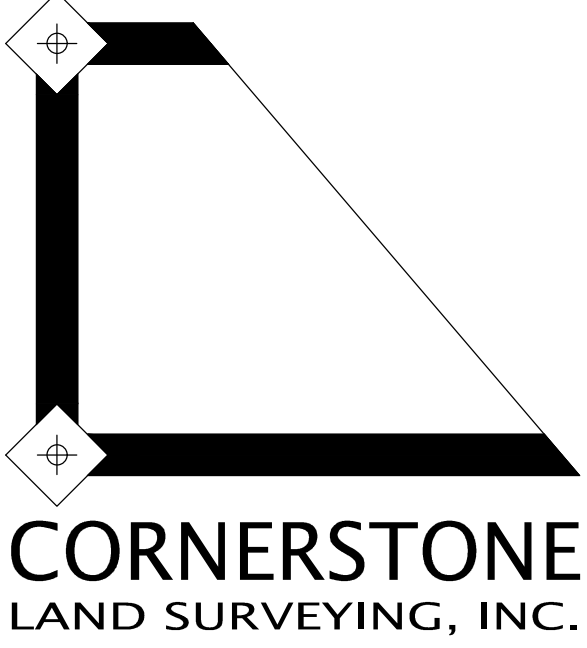
Washington County Recorder

By _____

Deputy



C.S.A.H. NO. 101



LEGAL DESCRIPTION:

PARCEL A:
The following parts of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West described as follows: The East 666 feet of the said North Half of the Northeast Quarter and the West 234.9 feet of the East 900.0 feet of the South 891.8 feet, subject to public roadways along the North and East side thereof and containing 25 acres more or less together with a perpetual easement for utility purposes including but not limited to underground gas lines, electrical transmission lines, and drainage, said easement tract being the south 50 feet of the West 1,571.1 feet of the East 2,472.5 feet of the said North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36). (Description per Warranty Deed Doc. No. 212313)

PARCEL B:
All that part of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West, described as follows: The West 732.68 feet of the East 1633.58 feet of the South 891.8 feet containing 15 acres more or less. (Description per Warranty Deed Doc. No. 218479)

AREA:

TOTAL PARCEL AREA: 37.19 ACRES
PARCEL A AREA: 22.19 ACRES (LESS R.O.W.)
PARCEL B AREA: 15.00 ACRES

EASEMENT NOTES:

No titlework was provided for our review. No temporary easement have been shown. There may be additional easements of which we are unaware.

It is unclear whether fee title has been taken under the area covered by Right of Way plats to the East and North side of the school property. We have shown the boundary to the edge of the respective easements per boundary mapping on County half section maps.

SURVEY NOTES:

1. PROJECT COORDINATES ARE BASED ON COORDINATES SUPPLIED BY THE WASHINGTON COUNTY SURVEYORS OFFICE.
2. UNDERGROUND UTILITIES SHOWN PER GOPHER STATE ONE CALL LOCATES AND AS-BUILTS PLANS PROVIDED BY THE CITY OF MINNEAPOLIS PUBLIC WORKS DEPARTMENT.
3. THERE MAY BE SOME UNDERGROUND UTILITIES; GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
4. DATE OF FIELD WORK JUNE 10 - JULY 5, 2024.

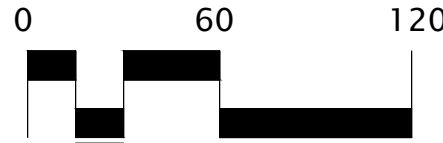
FLOOD INFORMATION:

THIS PROPERTY LIES WITHIN THE UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27163C0355E HAVING AN EFFECTIVE DATE OF 02/03/2010.

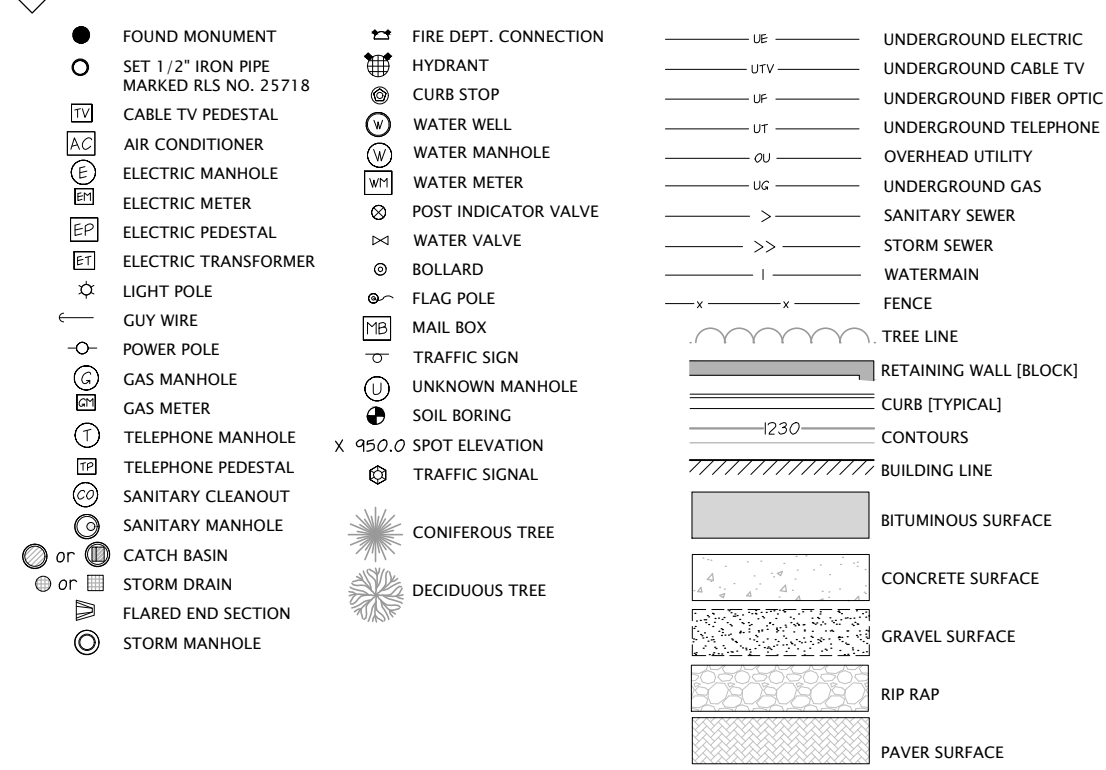
BENCHMARKS:

ELEVATIONS ARE BASED MN/DOT GEODETIC DATABASE STATION# 33601 (KRAFTHEFER MN 163) WHICH IS LOCATED 3 MILES SOUTH OF LAKE ELMO AND NEAR THE INTERSECTION OF INTERSTATE 94 AND COUNTY ROAD 15. ELEVATION=912.41 (NGVD 29)

PROJECT BENCHMARK SHOWN GRAPHICALLY

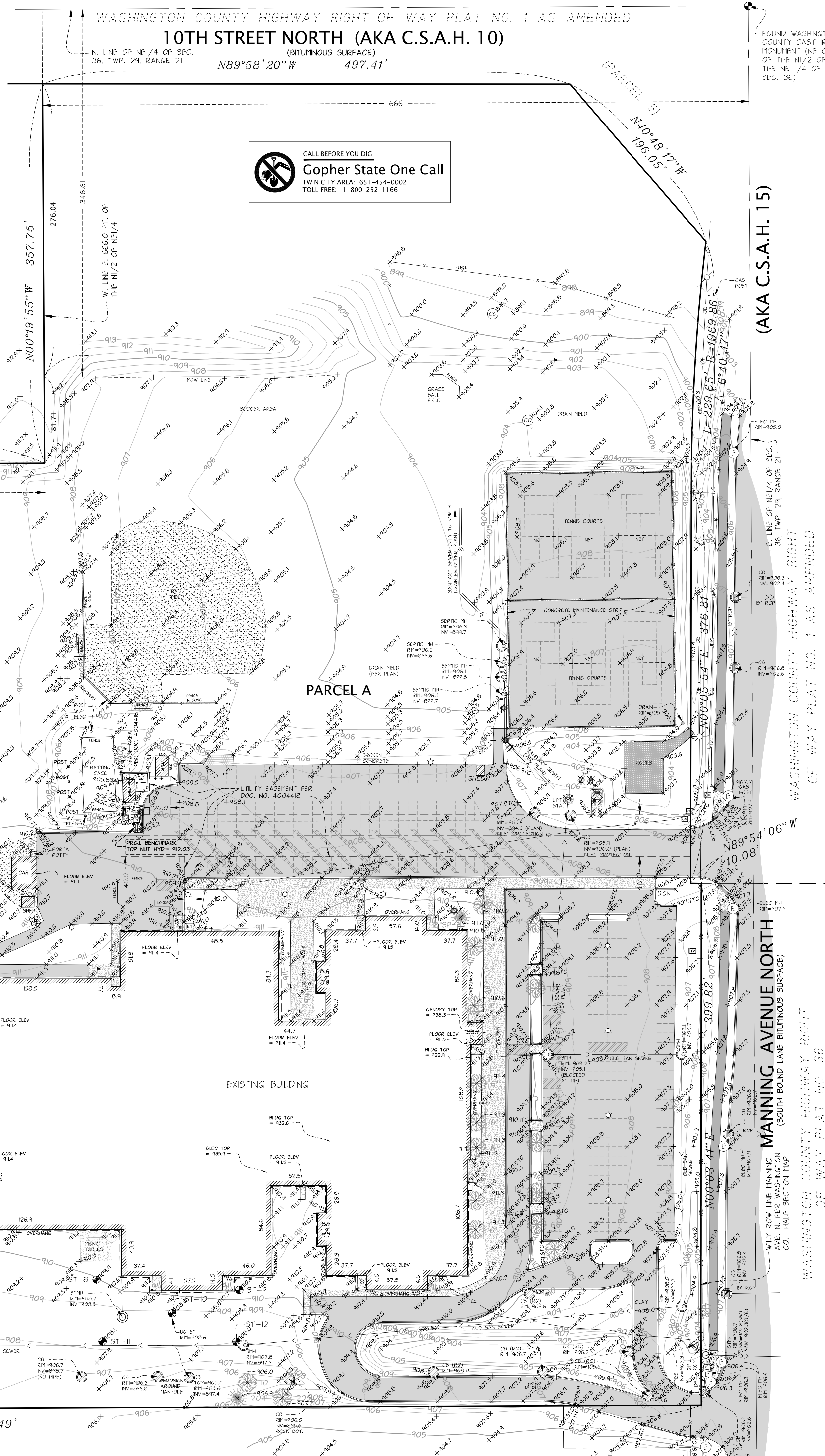


LEGEND



UNDERGROUND UTILITIES NOTES:

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OAK-LAND
MIDDLE SCHOOL

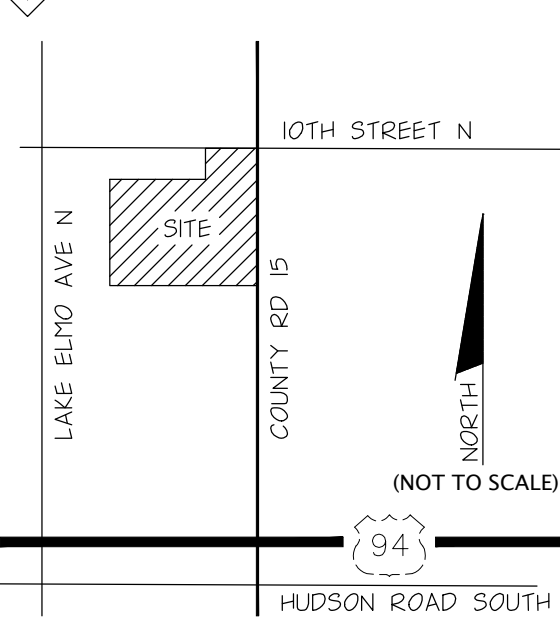
CONTACT:

TONY WILLGER
Manager of Facility and Site Operations
Stillwater Area Public Schools
1875 South Greely Street
Stillwater, MN 55082
651-351-8374

COUNTY/CITY:

WASHINGTON COUNTY
CITY OF LAKE ELMO

VICINITY MAP



REVISIONS:

DATE	REVISION
07-08-2024	INITIAL ISSUE
08-01-2024	SHEET SIZE

CERTIFICATION:

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

Daniel L. Thurnes
Daniel L. Thurnes Registration Number: 25718
Date: 07-08-2024

PROJECT LOCATION:

820
MANNING AVE N
PID#3602921110002

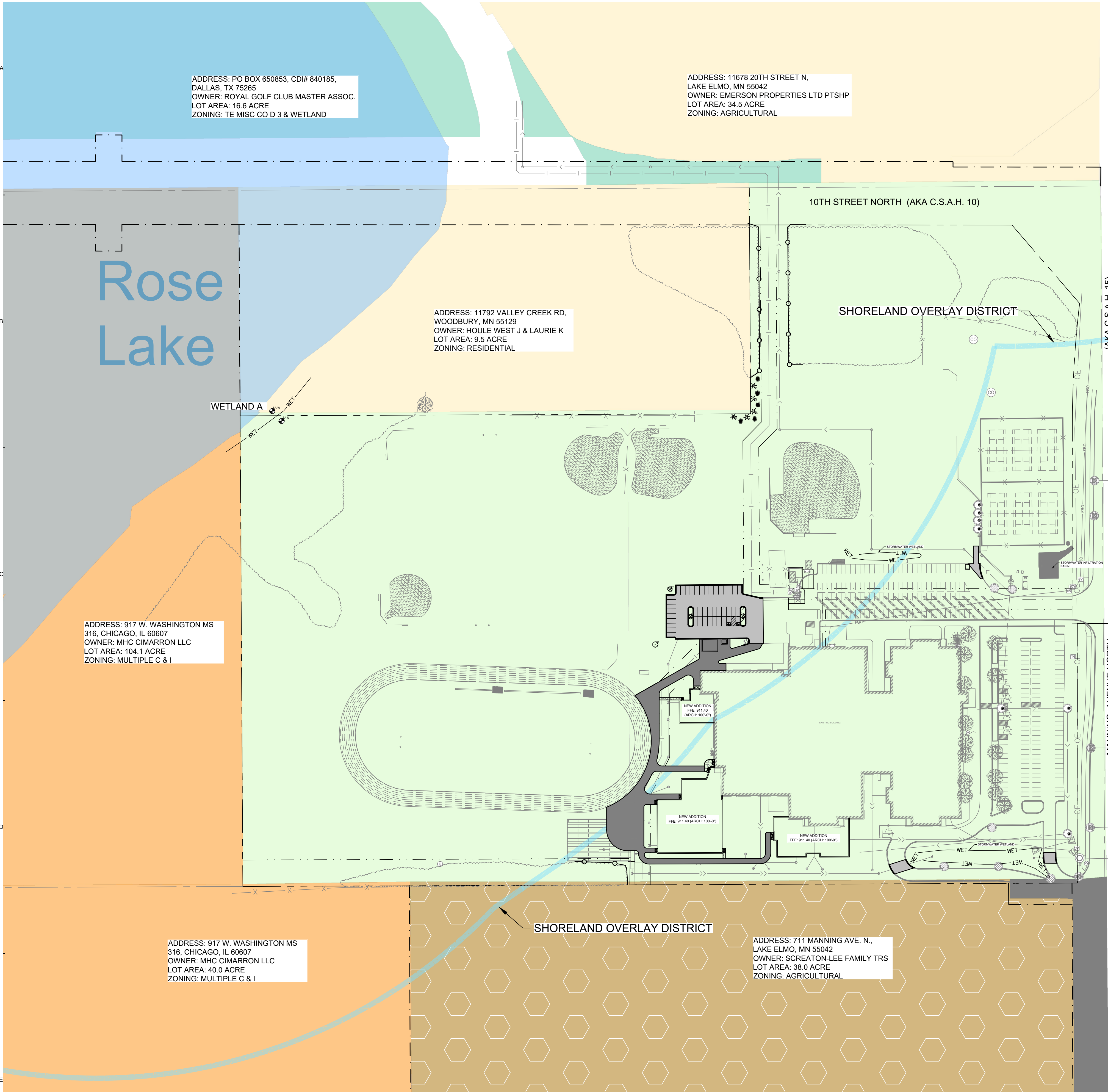
Suite #200
1970 Northwestern Ave
Stillwater, MN 55082
Phone 651.275.8969
Fax 651.275.8976
dan@cssurvey.net

CORNERSTONE
LAND SURVEYING, INC.

FILE NAME: SURVLE37E
PROJECT NO: LE07037E

TOPOGRAPHIC
SURVEY

MN



SYMBOL LEGEND

- PROPOSED ROADWAY/TRAILS BITUMINOUS PAVEMENT
- PROPOSED HEAVY-DUTY BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

PARCEL INFO

EAST PARCEL:
PID: 36.029.21.11.0002
LOT SIZE: 24.99 ACRES
ZONING: PUBLIC FACILITIES (PF)
LEGAL DESCRIPTION: PT N1/2 OF NE1/4 BEING E 665 FT OF SD N1/2 OF NE1/4 & W 234.9 FT OF E 900.9 FT OF S 891.8 FT & SUBJECT TO EASEMENTS SECTION 36 TOWNSHIP 029 RANGE 021
WEST PARCEL:
PID: 36.029.21.11.0003
LOT SIZE: 15.00 ACRES
ZONING: PUBLIC FACILITIES (PF)
LEGAL DESCRIPTION: PT N1/2 OF NE1/4 BEING W 732.68 FT OF E 1633.58 FT OF S 891.8 FT SECTION 36 TOWNSHIP 029 RANGE 021

ZONING LEGEND

- GCC - Golf Course Community
- PF - Public Facilities
- RR - Rural Residential
- MDR - Medium Density Residential
- RT - Rural Transitional
- Hatching Represents Planned Unit Developments (PUD)

ADDRESS: 910 MARK AVE. N., LAKE ELMO, MN 55042
OWNER: BAERTLEIN MEGAN M & DANIEL L
LOT AREA: 2.6 ACRE
ZONING: RESIDENTIAL

ADDRESS: 860 MARK AVE. N., LAKE ELMO, MN 55042
OWNER: TALBOT FLOYD J
LOT AREA: 2.5 ACRE
ZONING: RESIDENTIAL

ADDRESS: 820 MARK AVE. N., LAKE ELMO, MN 55042
OWNER: WHELAN ERAN & CYNT
LOT AREA: 3.0 ACRE
ZONING: RESIDENTIAL

ADDRESS: 711 MANNING AVE. N., LAKE ELMO, MN 55042
OWNER: SCREATOR DAVID R &
LOT AREA: 61.5 ACRE
ZONING: AGRICULTURAL

ADDRESS: PO BOX 650853, CD# 840185, DALLAS, TX 75265
OWNER: ROYAL GOLF CLUB MASTER ASSOC.
LOT AREA: 16.6 ACRE
ZONING: TE MISC CO D 3 & WETLAND

ADDRESS: 11678 20TH STREET N, LAKE ELMO, MN 55042
OWNER: EMERSON PROPERTIES LTD PTSHP
LOT AREA: 34.5 ACRE
ZONING: AGRICULTURAL

ADDRESS: 11792 VALLEY CREEK RD, WOODBURY, MN 55129
OWNER: HOULE WEST J & LAURIE K
LOT AREA: 9.5 ACRE
ZONING: RESIDENTIAL

ADDRESS: 917 W. WASHINGTON MS 316, CHICAGO, IL 60607
OWNER: MHC CIMARRON LLC
LOT AREA: 104.1 ACRE
ZONING: MULTIPLE C & I

ADDRESS: 917 W. WASHINGTON MS 316, CHICAGO, IL 60607
OWNER: MHC CIMARRON LLC
LOT AREA: 40.0 ACRE
ZONING: MULTIPLE C & I

ADDRESS: 711 MANNING AVE. N., LAKE ELMO, MN 55042
OWNER: SCREATOR-LEE FAMILY TRS
LOT AREA: 38.0 ACRE
ZONING: AGRICULTURAL

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

Independent School District #834

1875 Greeley Street South
Stillwater, MN 55082

Wold

WOLD ARCHITECTS AND ENGINEERS

332 Minnesota Street, Suite W2000
St. Paul, Minnesota 55101
woldaec.com | 651 227 7773



Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

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I hereby certify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.

Greg A. Buchal, P.E.
Date: 08.02.24 Reg. No.:

PRELIMINARY PLANS - NOT FOR CONSTRUCTION

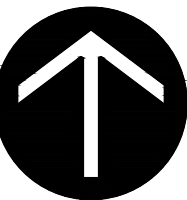
Revisions		
Description	Date	Num

Comm: 12236128
Date: 08-02-2024
Drawn: MTH
Check:

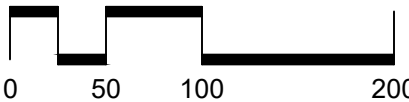
ZONING AND PROPERTY INFO PLAN

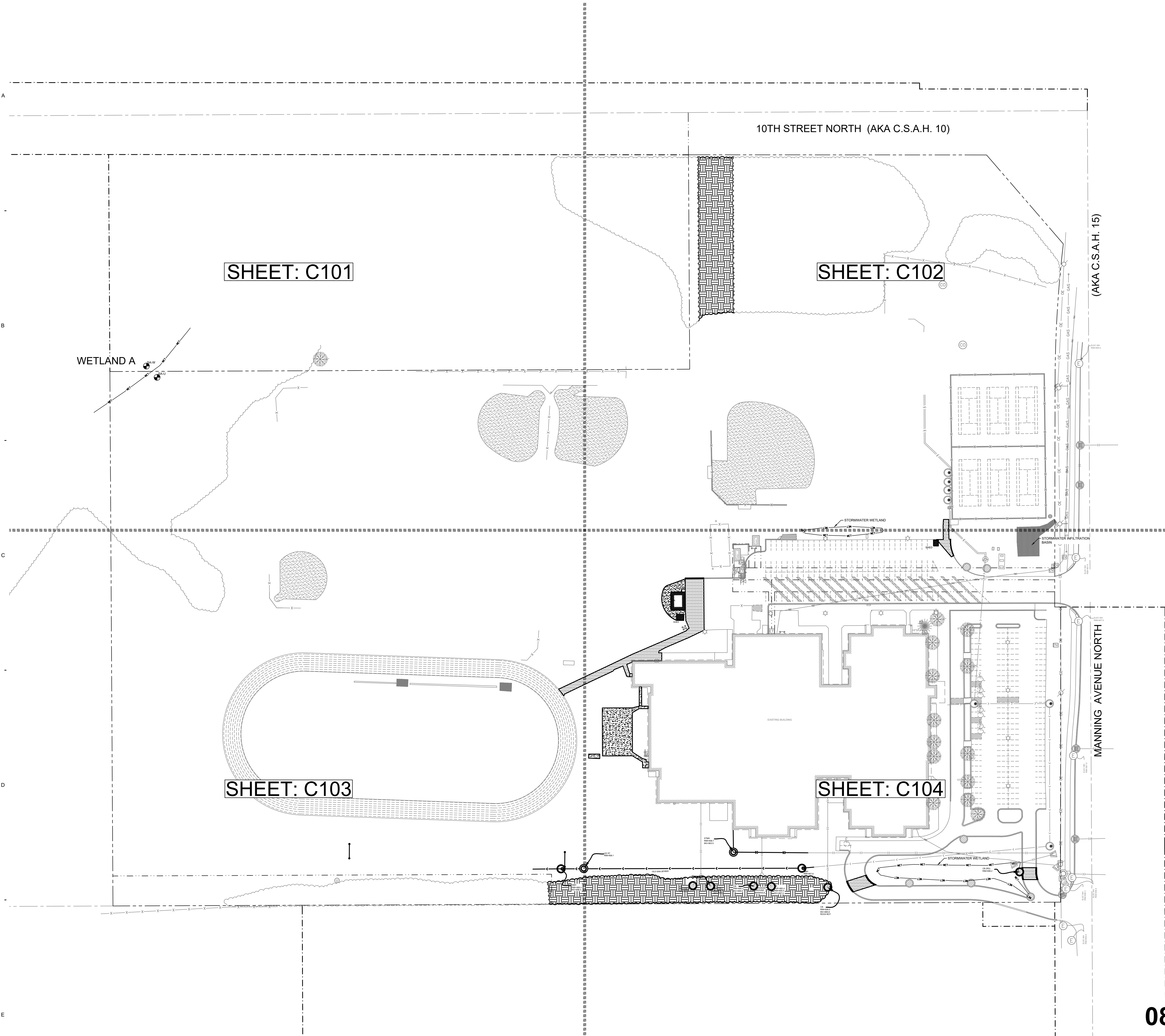
C000

08-02-2024
CUP SUBMITTAL



NORTH





SYMBOL LEGEND

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING TREES, STUMPS, AND UNDERBRUSH
- TREE PROTECTION
- PROPERTY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- WETLAND
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- WATERMAIN PIPE
- COMMUNICATIONS UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- GAS UNDERGROUND LINE
- FENCE

DEMOLITION NOTES

- Verify all existing utility locations.
- It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
- Prior to beginning work, contact Gopher State Onecall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
- Sawcut along edges of pavements, sidewalks, and curbs to remain.
- All construction shall be performed in accordance with state and local standard specifications for construction.

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

Independent School District #834

1875 Greeley Street South
Stillwater, MN 55082



WOLD ARCHITECTS AND ENGINEERS

332 Minnesota Street, Suite W2000
St. Paul, Minnesota 55101
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White Bear Lake, MN 55110
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www.larsonengr.com

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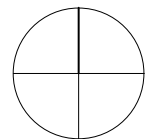
I hereby certify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.

Greg A. Buchal, P.E.
Date: 08.02.24 Reg. No.:

PRELIMINARY PLANS - NOT FOR CONSTRUCTION

Description	Revisions		Num
	Date		

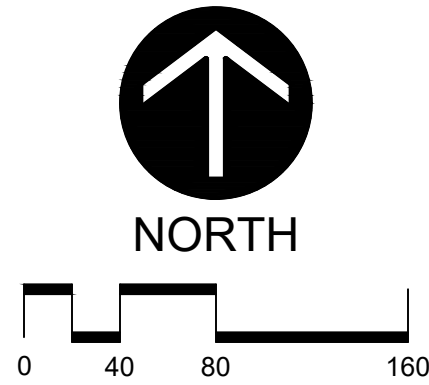
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Date: 08-02-2024
Drawn: MTH
Check:



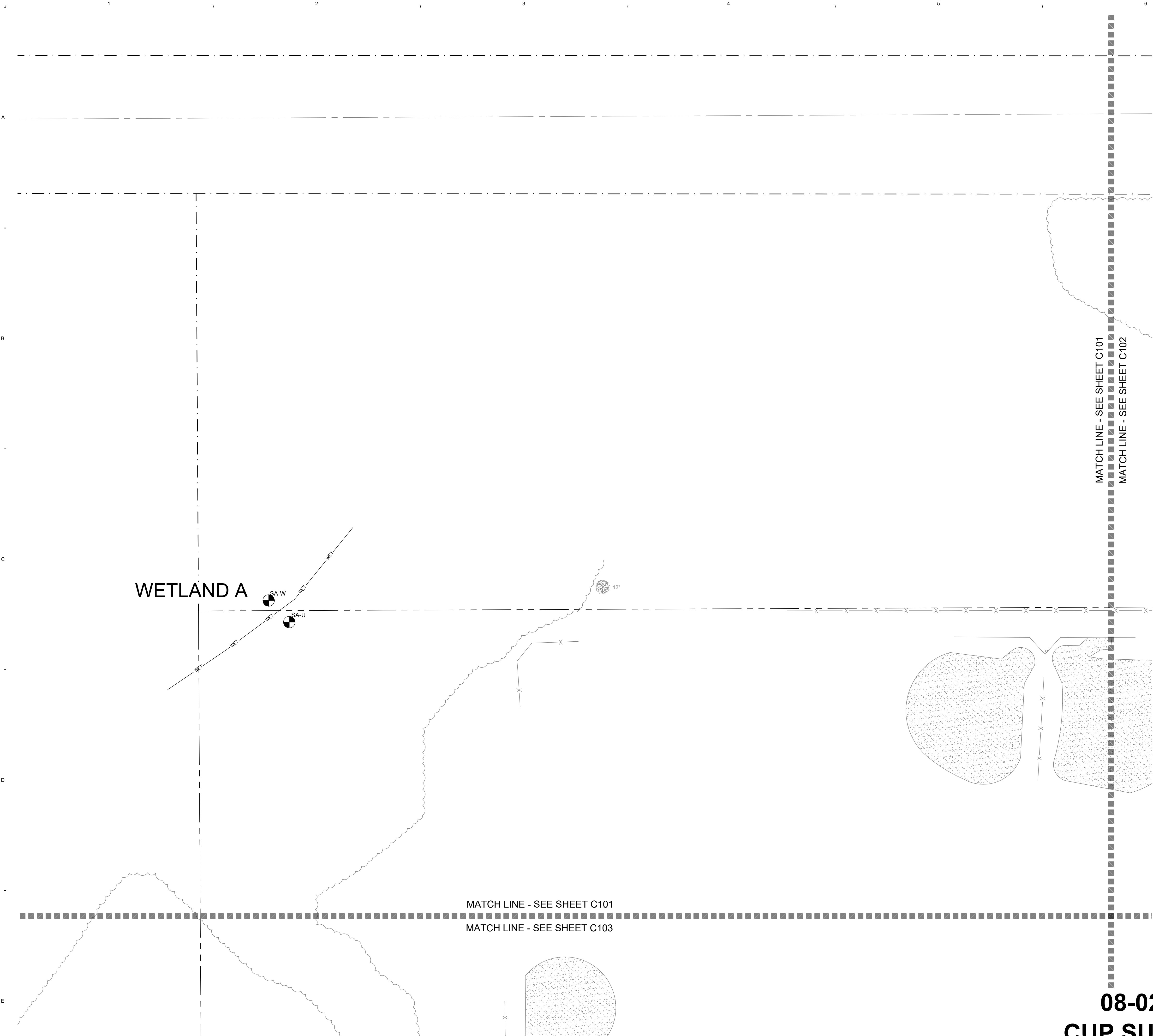
OVERALL: EXISTING CONDITIONS AND DEMOLITION PLAN

C100

08-02-2024
CUP SUBMITTAL



MN



SYMBOL LEGEND

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING TREES, STUMPS, AND UNDERBRUSH
- TREE PROTECTION
- PROPERTY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- WETLAND
- SANITARY SEWER PIPE
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- WATERMAIN PIPE
- COMMUNICATIONS UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- GAS UNDERGROUND LINE
- FENCE

KEY NOTES

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT.
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT.
- REMOVE AND DISPOSE OF EXISTING CONCRETE CURB AND GUTTER.
- RELOCATE EXISTING SHED, SEE SHEET C204 FOR REVISED LOCATION.
- REMOVE AND DISPOSE OF EXISTING STORM UTILITY.
- REMOVE AND DISPOSE OF EXISTING RAIN GUARDIAN STRUCTURE.
- REMOVE AND DISPOSE OF EXISTING CASTING ASSEMBLY AND ANY ADJUSTMENT RINGS.
- REMOVE AND DISPOSE OF EXISTING GRAVEL SECTION.
- REMOVE AND DISPOSE OF EXISTING SANITARY UTILITY.
- CAP SANITARY SEWER DEAD END.
- ABANDON IN PLACE REMAINING SANITARY SEWER UTILITY THAT IS NOT TO BE DEMOLISHED. SANITARY SEWER THAT IS NOT IN SERVICE AND SET TO BE ABANDONED SHALL BE ABANDONED IN ACCORDANCE WITH THE CITY OF LAKE ELMO'S REQUIREMENTS.
- REMOVE AND DISPOSE OF EXISTING FIELD GOAL POSTS AND ANY FOOTING.
- DEMOLISH EXISTING SHED AND ANY RELATED FOUNDATION/FOOTINGS.

DEMOLITION NOTES

- Verify all existing utility locations.
- It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
- Prior to beginning work, contact Gopher State Onecall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
- Sawcut along edges of pavements, sidewalks, and curbs to remain.
- All construction shall be performed in accordance with state and local standard specifications for construction.

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

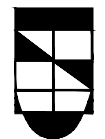
Independent School District #834

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www.larsonengr.com

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Greg A. Buchal, P.E.

Date: 08.02.24

Reg. No.:

PRELIMINARY PLANS - NOT FOR CONSTRUCTION

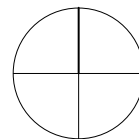
Description	Revisions	
	Date	Num

Comm: 12236128

Date: 08-02-2024

Drawn: MTH

Check:

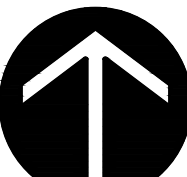


NORTHWEST: EXISTING CONDITIONS AND DEMOLITION PLAN

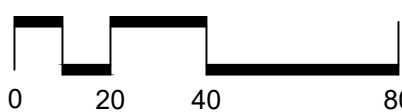
C101

08-02-2024

CUP SUBMITTAL

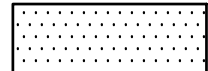



NORTH




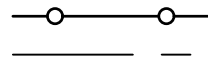
MN

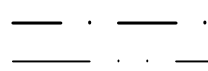
SYMBOL LEGEND

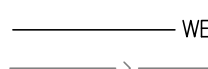
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REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- 


REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- 


REMOVE AND DISPOSE OF EXISTING TREES, STUMPS, AND UNDERBRUSH
- 


TREE PROTECTION
- 

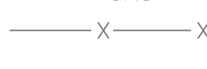
PROPERTY LINE
- 


RIGHT OF WAY LINE
- 


EASEMENT LINE
- 

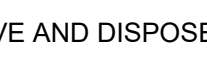
WETLAND
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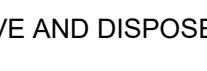
SANITARY SEWER PIPE
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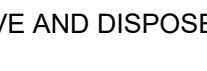
STORM SEWER PIPE
- 


WATERMAIN PIPE
- 

COMMUNICATIONS UNDERGROUND LINE
- 

ELECTRIC OVERHEAD LINE
- 

ELECTRIC UNDERGROUND LINE
- 

FIBER OPTIC UNDERGROUND LINE
- 

GAS UNDERGROUND LINE
- 

FENCE

KEY NOTES

- 1 REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT.
- 2 REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT.
- 3 REMOVE AND DISPOSE OF EXISTING CONCRETE CURB AND GUTTER.
- 4 RELOCATE EXISTING SHED, SEE SHEET C204 FOR REVISED LOCATION.
- 5 REMOVE AND DISPOSE OF EXISTING STORM UTILITY.
- 6 REMOVE AND DISPOSE OF EXISTING RAIN GUARDIAN STRUCTURE.
- 7 REMOVE AND DISPOSE OF EXISTING CASTING ASSEMBLY AND ANY ADJUSTMENT RINGS.
- 8 REMOVE AND DISPOSE OF EXISTING GRAVEL SECTION.
- 9 REMOVE AND DISPOSE OF EXISTING SANITARY UTILITY.
- 10 CAP SANITARY SEWER DEAD END.
- 11 ABANDON IN PLACE REMAINING SANITARY SEWER UTILITY THAT IS NOT TO BE DEMOLISHED. SANITARY SEWER THAT IS NOT IN SERVICE AND SET TO BE ABANDONED SHALL BE ABANDONED IN ACCORDANCE WITH THE CITY OF LAKE ELMO'S REQUIREMENTS.
- 12 REMOVE AND DISPOSE OF EXISTING FIELD GOAL POSTS AND ANY FOOTING.
- 13 DEMOLISH EXISTING SHED AND ANY RELATED FOUNDATION/FOOTINGS.

DEMOLITION NOTES

1. Verify all existing utility locations.
2. It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
3. Prior to beginning work, contact Gopher State Onecall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
4. Sawcut along edges of pavements, sidewalks, and curbs to remain.
5. All construction shall be performed in accordance with state and local standard specifications for construction.

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

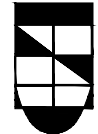
Independent School District #834

1875 Greeley Street South
Stillwater, MN 55082

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Greg A. Buchal, P.E.

Date: 08.02.24

Reg. No.:

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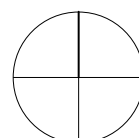
Description	Revisions		Num
	Date		

Comm: 12236128

Date: 08-02-2024

Drawn: MTH

Check:



NORTHEAST: EXISTING CONDITIONS AND DEMOLITION PLAN

C102

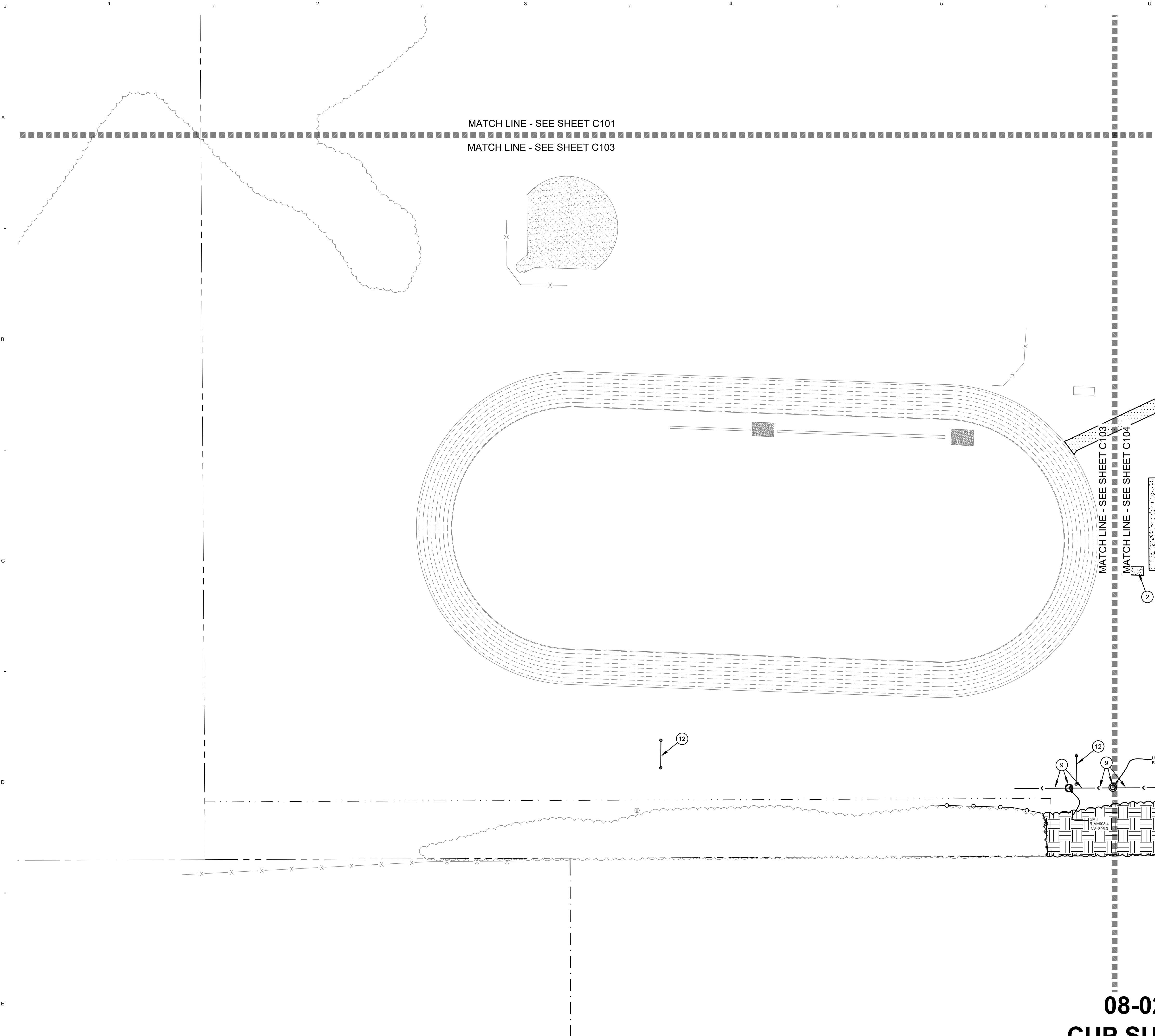
08-02-2024
CUP SUBMITTAL



NORTH

0 20 40 80

MN



SYMBOL LEGEND

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING TREES, STUMPS, AND UNDERBRUSH
- TREE PROTECTION
- PROPERTY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- WETLAND
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- WATERMAIN PIPE
- COMMUNICATIONS UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
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KEY NOTES

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DEMOLITION NOTES

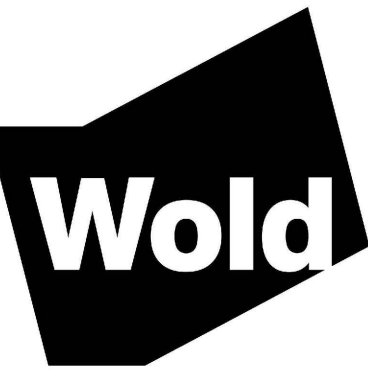
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OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

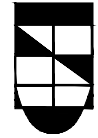
Independent School District #834

1875 Greeley Street South
Stillwater, MN 55082



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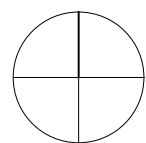
Revisions		
Description	Date	Num

Comm: 12236128

Date: 08-02-2024

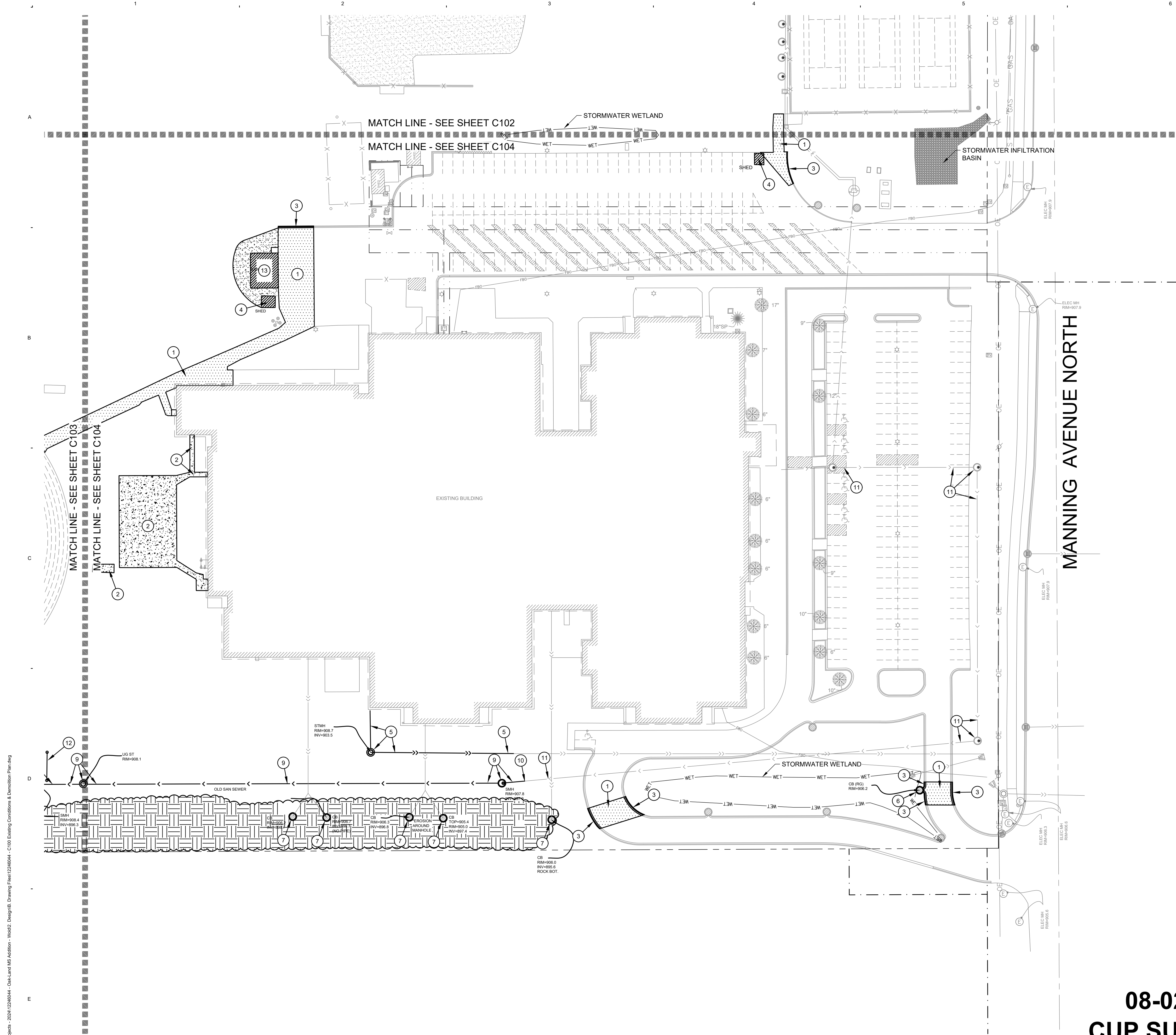
Drawn: MTH

Check:



SOUTHWEST: EXISTING CONDITIONS AND DEMOLITION PLAN

C103



SYMBOL LEGEND

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING TREES, STUMPS, AND UNDERBRUSH
- TREE PROTECTION
- PROPERTY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- WETLAND
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- WATERMAIN PIPE
- COMMUNICATIONS UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- GAS UNDERGROUND LINE
- FENCE

KEY NOTES

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OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

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Independent School District #834

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Revisions		
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Comm: 12236128

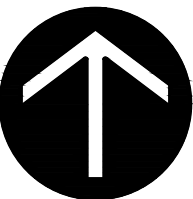
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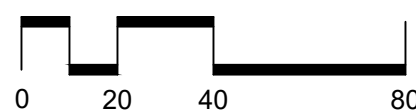
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SOUTHEAST: EXISTING CONDITIONS AND DEMOLITION PLAN

08-02-2024
CUP SUBMITTAL

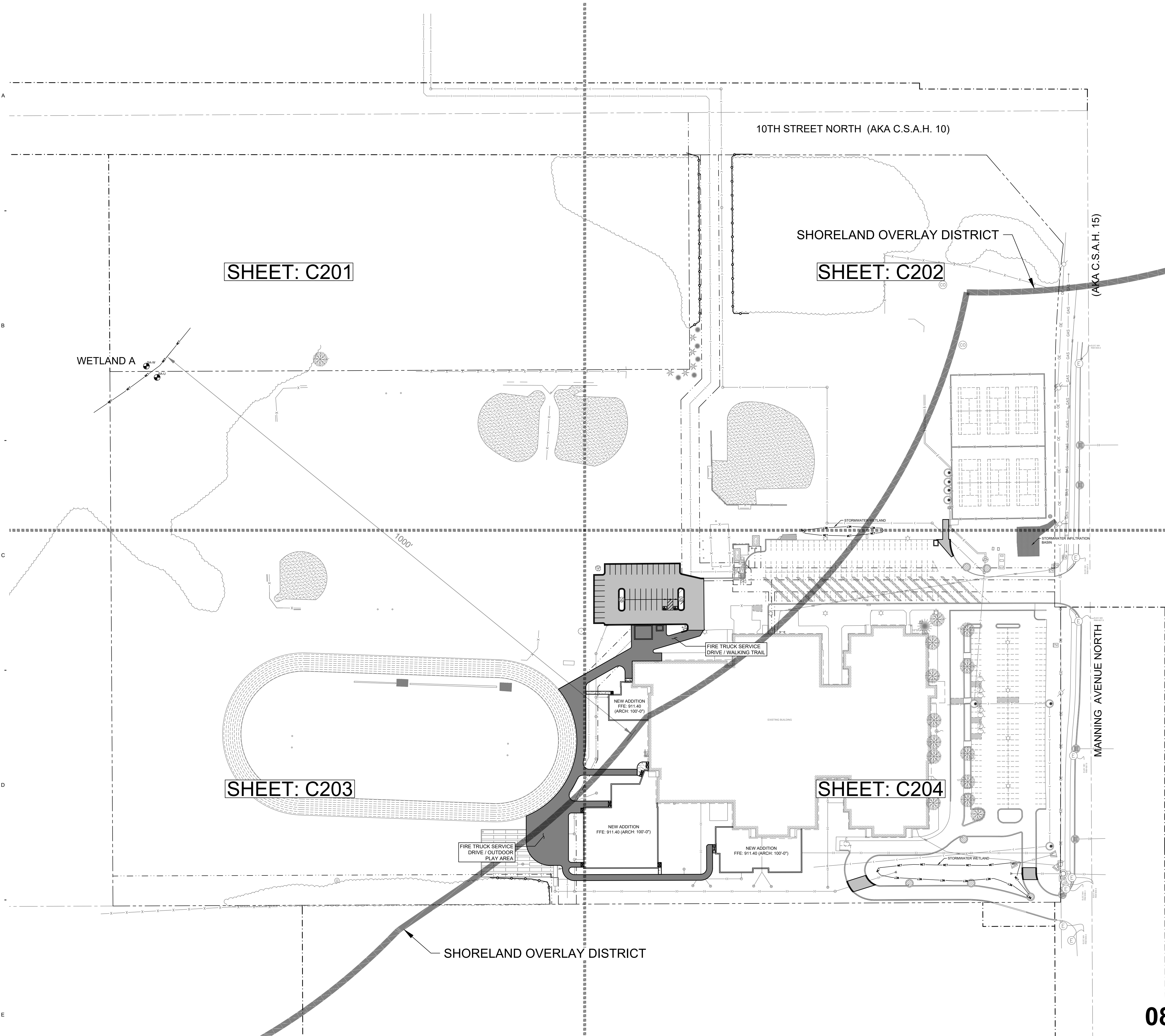


NORTH



C104

MN



SYMBOL LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED TRAILS/FIRE ACCESS BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- NEW STOOP, SEE STRUCTURAL
- SOIL BORING MARKER
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

PROJECT AREA CALCULATIONS

TOTAL SITE AREA:	1,619,971 SF	(37.19 AC)	100%
IMPERVIOUS AREAS:			
PROPOSED IMPERVIOUS AREAS:			
SCHOOL ADDITIONS	30,342 SF	(0.70 AC)	1.87%
SIDEWALK/BIT. TRAILS	22,131 SF	(0.51 AC)	1.37%
PARKING/ROADWAYS	17,572 SF	(0.40 AC)	1.09%
EXISTING IMPERVIOUS AREAS:			
SCHOOL	135,372 SF	(3.11 AC)	8.35%
SIDEWALK/BIT. TRAILS	23,807 SF	(0.55 AC)	1.47%
PARKING/ROADWAYS	126,787 SF	(2.91 AC)	7.83%
SPORTFIELDS/TENNIS COURTS/TRACK	125,289 SF	(2.88 AC)	7.73%
TOTAL SITE IMPERVIOUS	481,300 SF	(11.05 AC)	29.71%
OPEN SPACE:			
REMAINING OPEN SPACE	1,138,671 SF	(26.14 AC)	70.29%
IMPERVIOUS WITHIN SHORELAND OVERLAY ZONE:			
SHORELAND OVERLAY AREA	1,122,127 SF	(25.76 AC)	100.00%
IMPERVIOUS AREA WITHIN SHORELAND OVERLAY			
	157,438 SF	(3.61 AC)	14.03%

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

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Date: 08.02.24

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PRELIMINARY PLANS - NOT FOR CONSTRUCTION

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Date: 08-02-2024

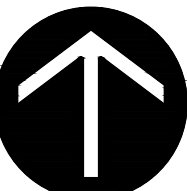
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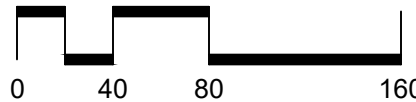
OVERALL: SITE PLAN

C200

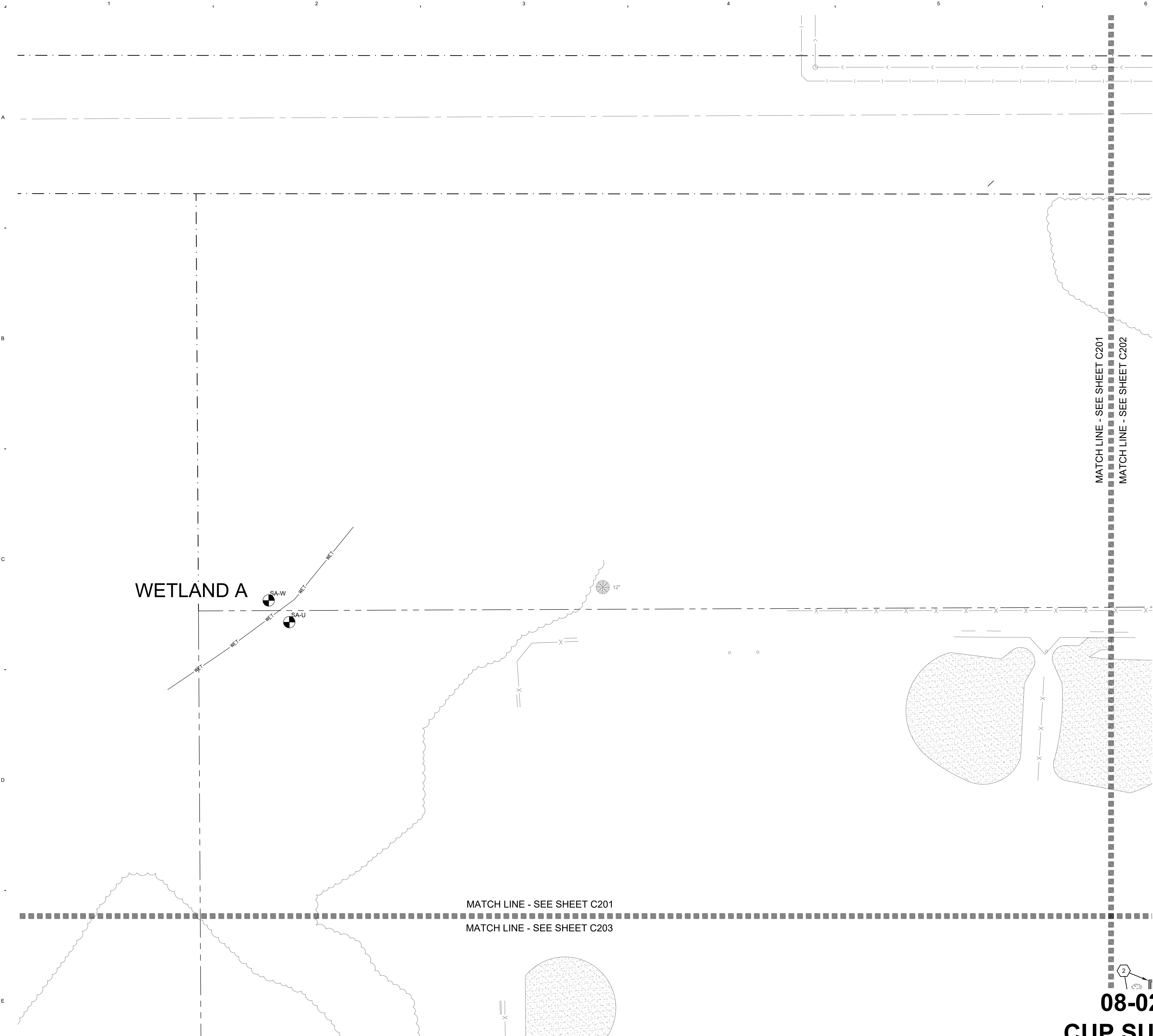
08-02-2024
CUP SUBMITTAL



NORTH



MN



SYMBOL LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED TRAILS/FIRE ACCESS BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- NEW STOOP, SEE STRUCTURAL
- SOIL BORING MARKER
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

KEY NOTES

- B612 CONCRETE CURB AND GUTTER, SEE DETAIL
- SURMOUNTABLE CONCRETE CURB AND GUTTER, SEE DETAIL
- PARKING SIGN, POST, AND BOLLARD, SEE DETAIL
A: ADA PARKING
B: ADA ACCESS AISLE
- RELOCATED SHED
- TRANSITION CURB
- NEW SHED (BY OWNER)

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

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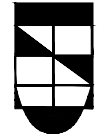
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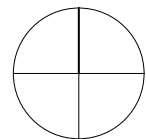
Revisions		
Description	Date	Num

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Date: 08-02-2024

Drawn: MTH

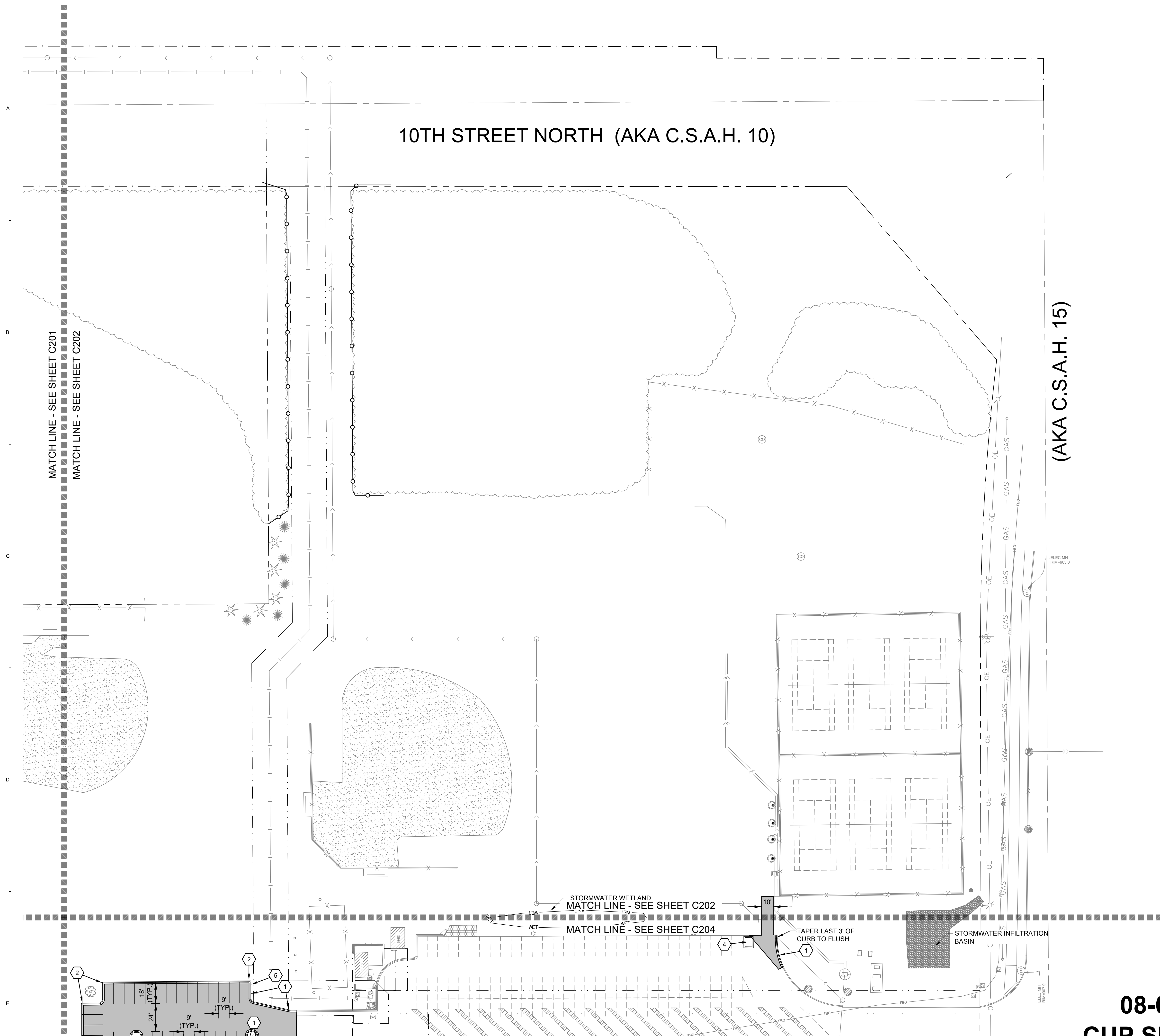
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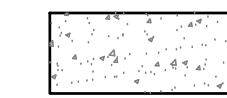
NORTHWEST: SITE PLAN

C201

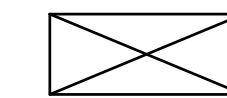
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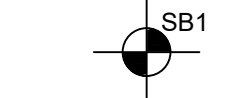
SYMBOL LEGEND

PROPOSED
BITUMINOUS PAVEMENTPROPOSED TRAILS/FIRE ACCESS
BITUMINOUS PAVEMENT

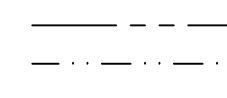
PROPOSED CONCRETE PAVEMENT



NEW STOOP, SEE STRUCTURAL



SOIL BORING MARKER



PROPERTY LINE
EASEMENT LINE
RIGHT-OF-WAY LINE

KEY NOTES

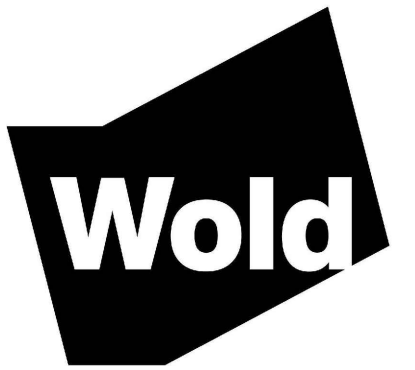
- 1 B612 CONCRETE CURB AND GUTTER, SEE DETAIL
- 2 SURMOUNTABLE CONCRETE CURB AND GUTTER
SEE DETAIL
- 3 PARKING SIGN, POST, AND BOLLARD, SEE DETAIL
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- 4 RELOCATED SHED
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OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

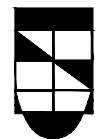
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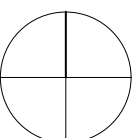
Reg. No.:

**PRELIMINARY
PLANS - NOT FOR
CONSTRUCTION**

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Drawn: MTH

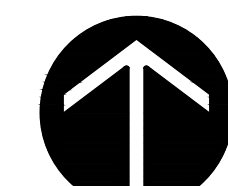
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NORTHEAST: SITE PLAN

08-02-2024

CUP SUBMITTAL

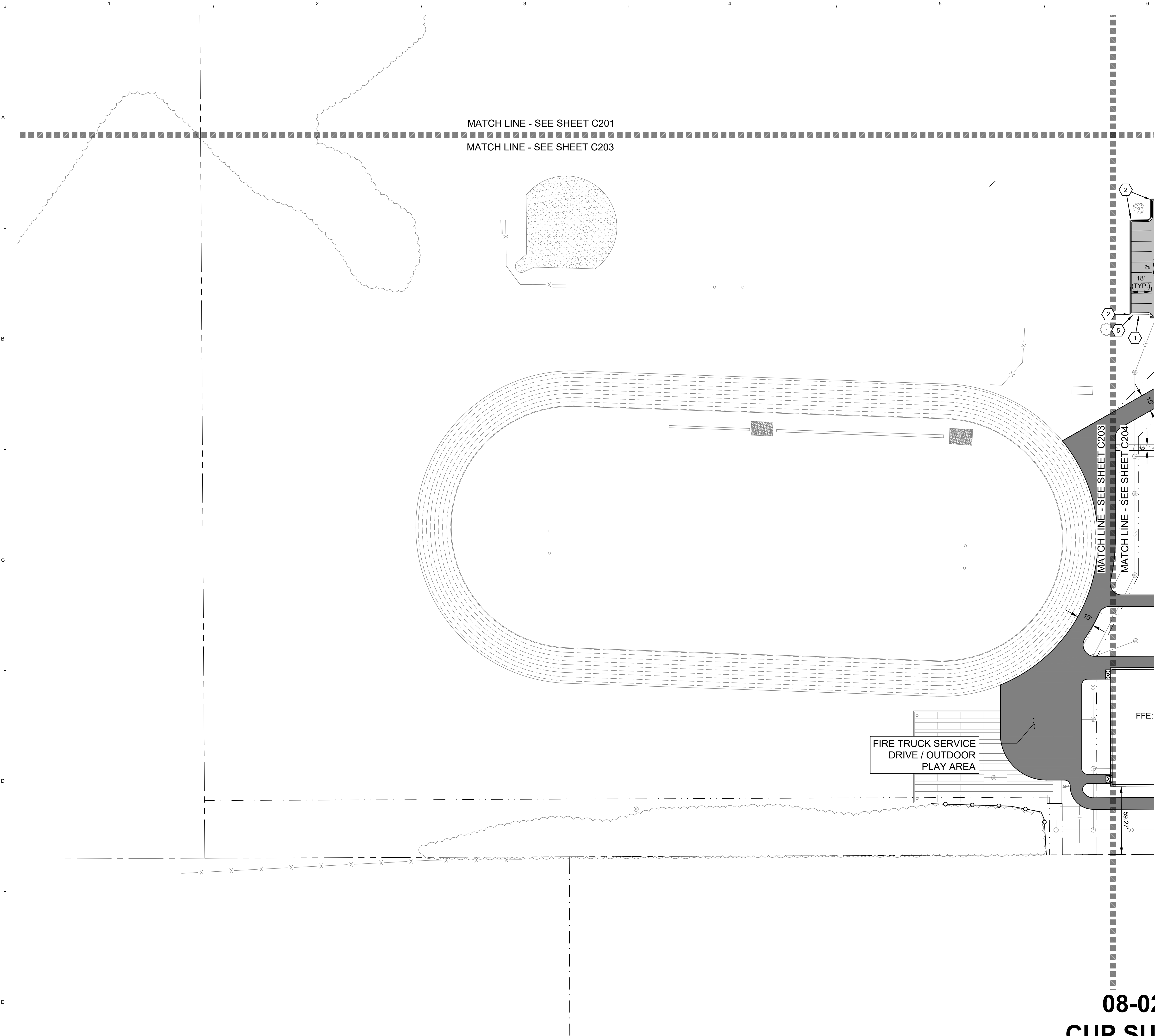


NORTH



C202

MN



SYMBOL LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED TRAILS/FIRE ACCESS BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- NEW STOOP, SEE STRUCTURAL
- SOIL BORING MARKER
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

KEY NOTES

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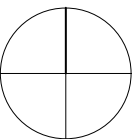
Revisions		
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Date: 08-02-2024

Drawn: MTH

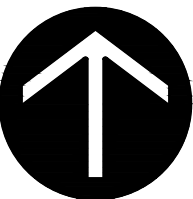
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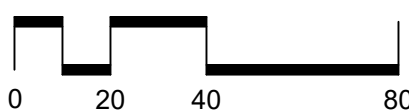
SOUTHWEST: SITE PLAN

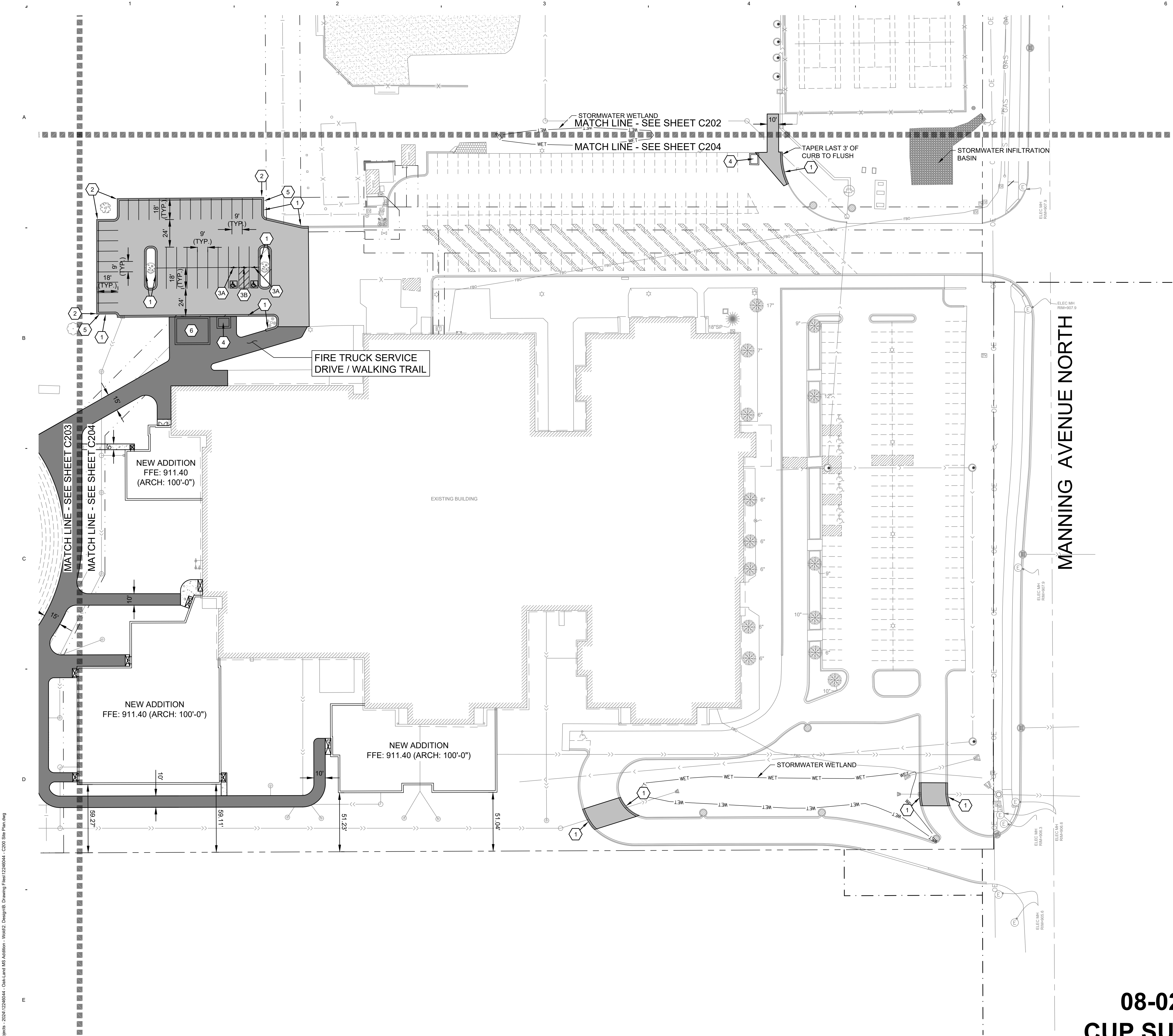
C203

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NORTH





SYMBOL LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED TRAILS/FIRE ACCESS BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- NEW STOOP, SEE STRUCTURAL
- SOIL BORING MARKER
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

KEY NOTES

- 1 B612 CONCRETE CURB AND GUTTER, SEE DETAIL
- 2 SURMOUNTABLE CONCRETE CURB AND GUTTER, SEE DETAIL
- 3 PARKING SIGN, POST, AND BOLLARD, SEE DETAIL
 - A: ADA PARKING
 - B: ADA ACCESS AISLE
- 4 RELOCATED SHED
- 5 TRANSITION CURB
- 6 NEW SHED (BY OWNER)

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

Independent School District #834

1875 Greeley Street South
Stillwater, MN 55082

Wold

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I hereby certify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.

Greg A. Buchal, P.E.

Date: 08.02.24

Reg. No.:

PRELIMINARY PLANS - NOT FOR CONSTRUCTION

Revisions		
Description	Date	Num

Comm: 12236128

Date: 08-02-2024

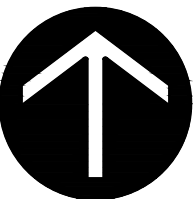
Drawn: MTH

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SOUTHEAST: SITE PLAN

C204

08-02-2024
CUP SUBMITTAL



NORTH



BENCHMARK

ELEVATIONS ARE BASED MN/DOT GEODETIC DATABASE STATION# 33601 (KRAFTHEFER MN 163) WHICH IS LOCATED 3 MILES SOUTH OF LAKE ELMO AND NEAR THE INTERSECTION OF INTERSTATE 94 AND COUNTY ROAD 1 S. ELEVATION=912.41 (NGVD 29)

SYMBOL LEGEND

- 950

950

949

2.0%

950.00 TC

949.50 GL

EO - EMERGENCY OVERFLOW

TW - TOP OF WALL

BW - BOTTOM OF WALL (F/G)

(*) - EXISTING TO BE VERIFIED

SPOT ABBREVIATIONS:

TC - TOP OF CURB

GL - GUTTER LINE

B - BITUMUNOUS

C - CONCRETE

TREE PROTECTION

PROPERTY LINE

RIGHT OF WAY LINE

EASEMENT LINE

WETLAND

SILT FENCE

RIP-RAP / ROCK CONST. ENTRANCE

INLET PROTECTION

GRADING NOTES

- Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
 - All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
 - Grades shown in paved areas represent finish elevation.
 - All construction shall be performed in accordance with state and local standard specifications for construction.
 - Permittees must not excavate infiltration systems to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area.

CITY OF LAKE ELMO
SITE RESTORATION PLAN NOTES

- RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
 - PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
 - MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
 - RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
 - BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

CITY OF LAKE ELMO GRADING AND
EROSION STANDARD PLAN NOTES

- THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
 - SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS. EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
 - SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM BUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
 - STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.
 - INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
 - TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
 - ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
 - STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.
 - DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING. TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
 - POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (13 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.
 - DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.
 - TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
 - REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.
 - FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
 - DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.
 - FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
 - CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUNDWATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

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Greg A. Buchal, P.E.

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OVERALL:
GRADING AND
EROSION
CONTROL
PLAN

C300

08-02-2024
CUP SUBMITTAL

NORTH

P:\Projects\Projects - 2024\12246004 - Oak-Land MS Addition - Wold\2 - Design\8 - Drawing\Plan\12246004 - C300 Grading & Erosion Control Plan.dwg

SYMBOL LEGEND

- STORM MANHOLE
- CATCH BASIN
- ▣ CURB INLET
- ⚠ FLARED END
- SANITARY MANHOLE

- ⚡ HYDRANT
- ⊗ GATE VALVE & BOX
- ⊗ WATER SHUTOFF
- ☀ LIGHT POLE

- CTV
- OE
- UE
- FO
- G
- >
- >>
- WET

- CABLE UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- NATURAL GAS UNDERGROUND LINE
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- WETLAND

- TELEPHONE UNDERGROUND LINE
- WATERMAIN PIPE
- DRAIN TILE PIPE
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

CITY OF LAKE ELMO'S STANDARD PLAN
NOTES FOR SANITARY SEWER PLANS

- ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
- ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED IN ACCORDING TO CITY OF STANDARD DRAWING 103 "GRANULAR MATERIAL BEDDING METHOD" (FOR PVC SANITARY SEWER PIPE).
- UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMETRIC GASKETED JOINTS.
- ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40.
- SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATION (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
- REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF M-dot SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
- JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
- SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALL DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE.
- A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
- ALL SERVICE LINE STUBS MUST HAVE 2" x 2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
- UPON MARKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.
- ALL MAINLINE SANITARY SEWER AND SERVICES SHALL HAVE TRACER WIRE PER CITY SPECIFICATIONS AND DETAILS.

CITY OF LAKE ELMO'S STANDARD PLAN
NOTES FOR STORM SEWER PLANS

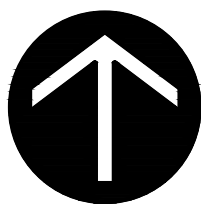
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- PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-477.
- A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
- JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES.
- RIP--RAP SHALL BE HAND--PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO M-dot SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
- THE GEOTEXTILE FABRIC USED UNDER RIP--RAP SHALL EXTEND 3-FT UNDER THE APRON.
- FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
- ALL SILT SHALL BE CLEANED OUT FROM THE RIP - RAP AT THE END OF THE PROJECT.
- STORM SEWER STRUCTURES WITHIN 10 FT OF WATERMAIN ARE TO HAVE WATER TIGHT CONNECTIONS PER MDH REQUIREMENTS.
- ALL NEW STORM SEWER PIPE SHALL BE FLUSHED AND TELEVISED PRIOR TO SUBSTANTIAL COMPLETION -SEE SPECIFICATION SECTION 700 - CLOSEOUT REQUIREMENTS

CITY OF LAKE ELMO'S STANDARD PLAN
NOTES FOR WATERMAIN PLANS

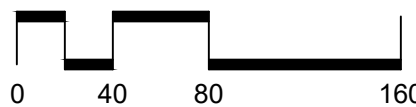
- ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
- MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
- WATERMAIN SHALL BE DUCTILE IRON PIPE, ENCASED IN POLYETHYLENE, CLASS--52.
- ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR--BLUE NUTS & BOLTS.
- USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
- GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2.C.2.
- USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
- BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 26 11.2.CA.
- BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAIN LESS STEEL.
- ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
- HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
- HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2- $\frac{1}{2}$ " (1. D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE (MODEL WB-67) AND PENTAGON NUT END CAP.
- THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-- FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.

08-02-2024

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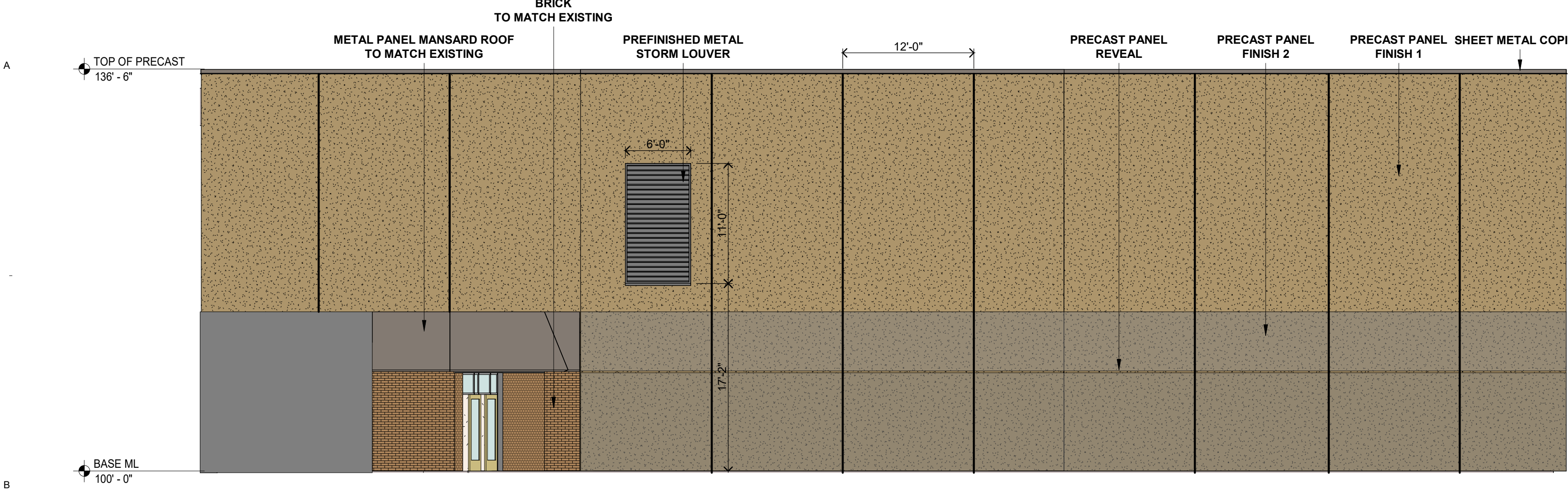
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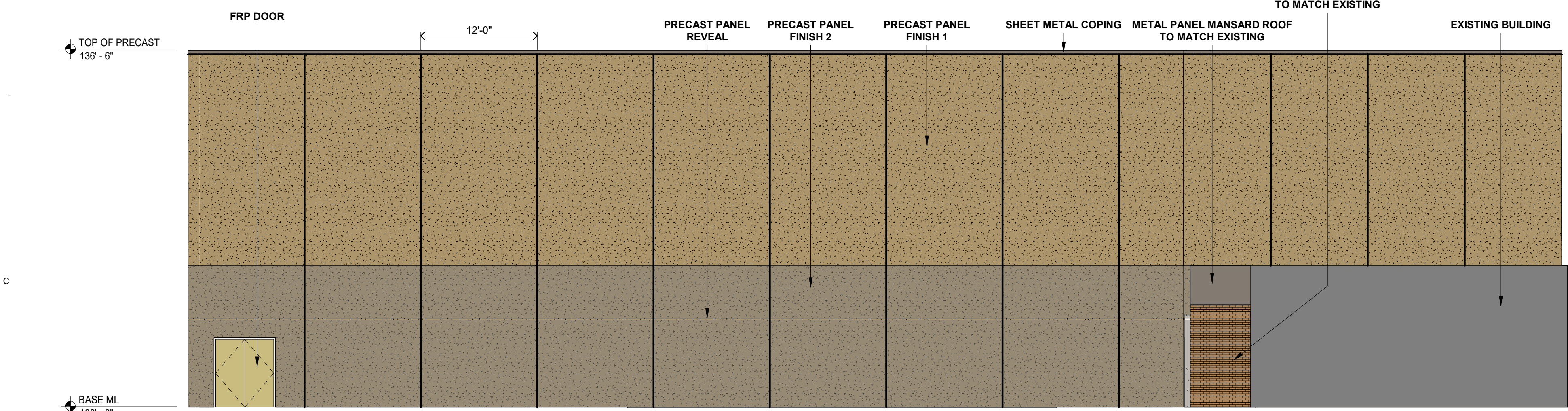
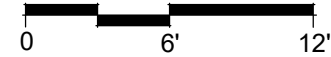
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OVERALL:
UTILITY PLAN

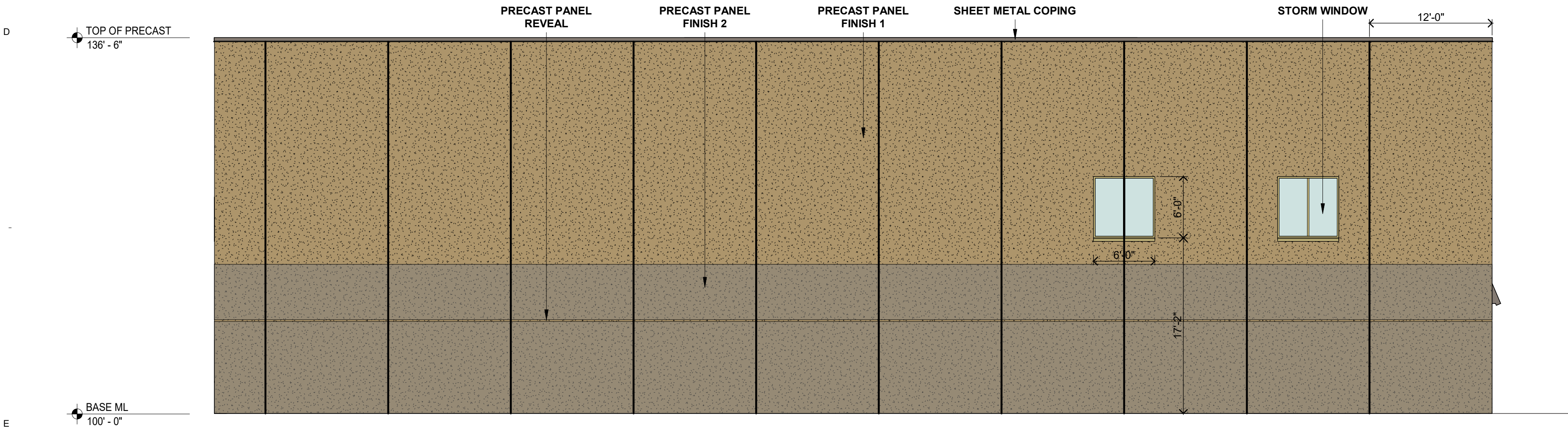
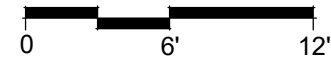
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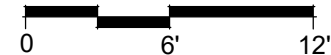
C1 NORTH - GYM ADDITION
1/8" = 1'-0"



E1 EAST - GYM ADDITION
1/8" = 1'-0"



F1 SOUTH - GYM ADDITION
1/8" = 1'-0"



PRECAST SAMPLE

CITY OF LAKE ELMO SUBMITTAL
NOT FOR CONSTRUCTION

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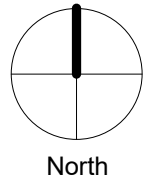


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Revisions		
Description	Date	Num

Comm: 232260
Date: 8.2.2024
Drawn: AJM
Check: JK



EXTERIOR
ELEVATIONS

Scale: 1/8" = 1'-0"

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

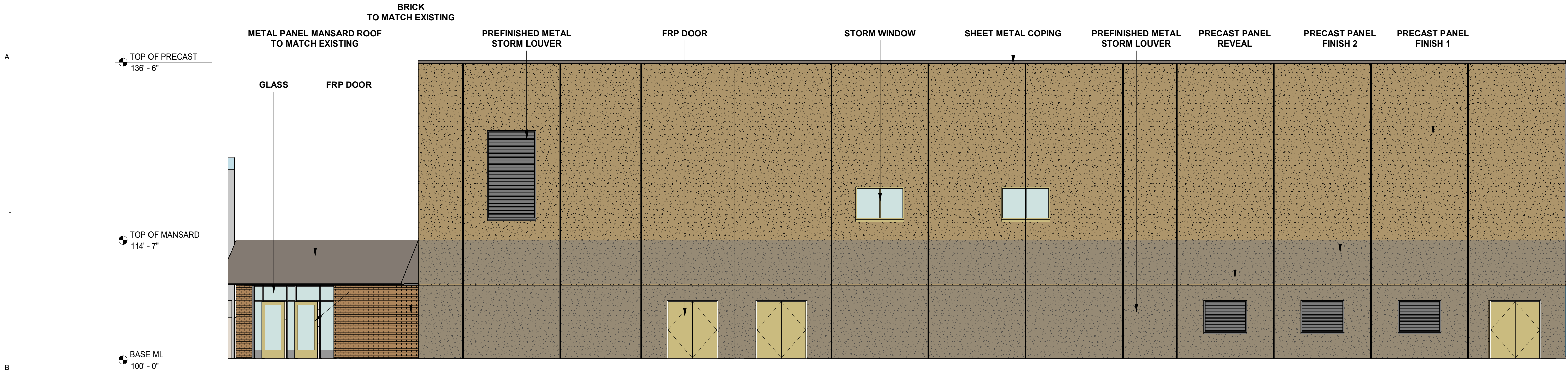
820 Manning Ave N,
Lake Elmo, MN 55042

Independent School
District #834
1875 Greeley St S,
Stillwater, MN 55082

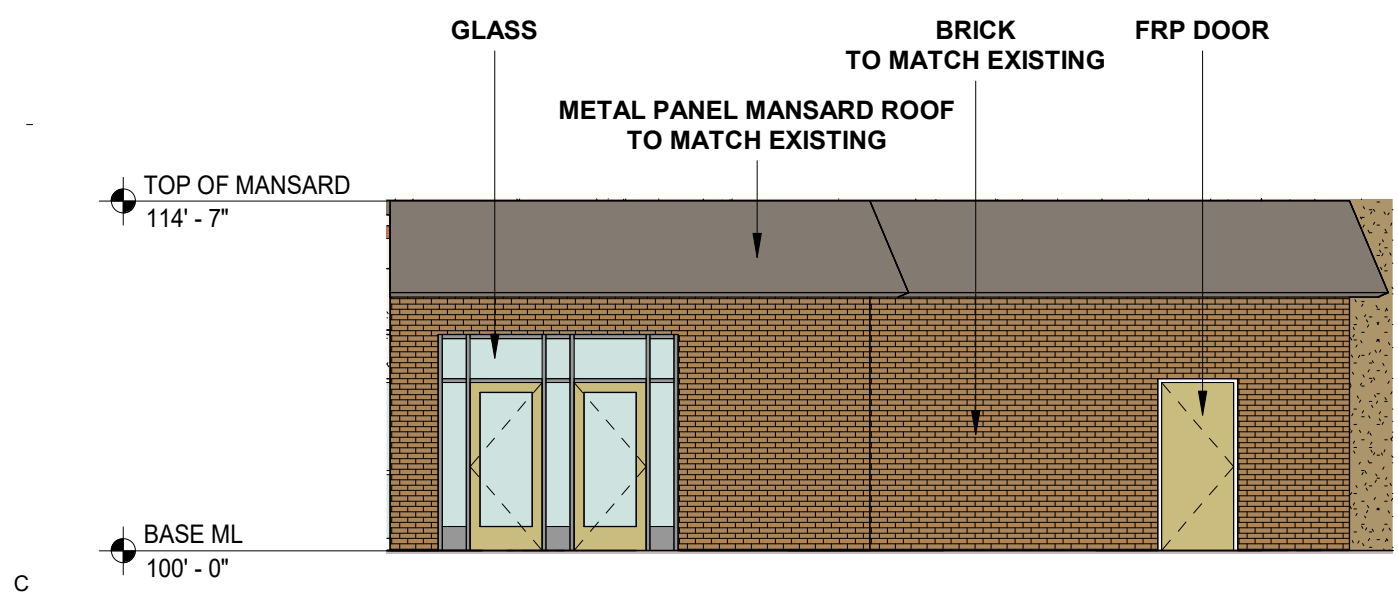


WOLD ARCHITECTS AND ENGINEERS

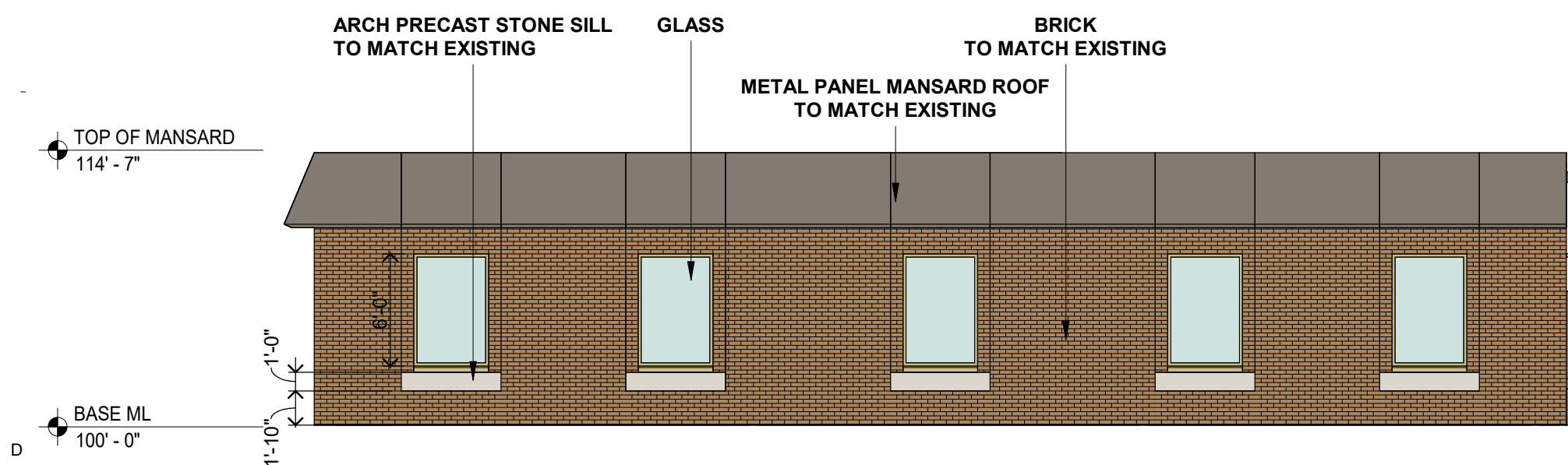
332 Minnesota Street, Suite W2000
St. Paul, Minnesota 55101
wolda.com | 651 227 7773



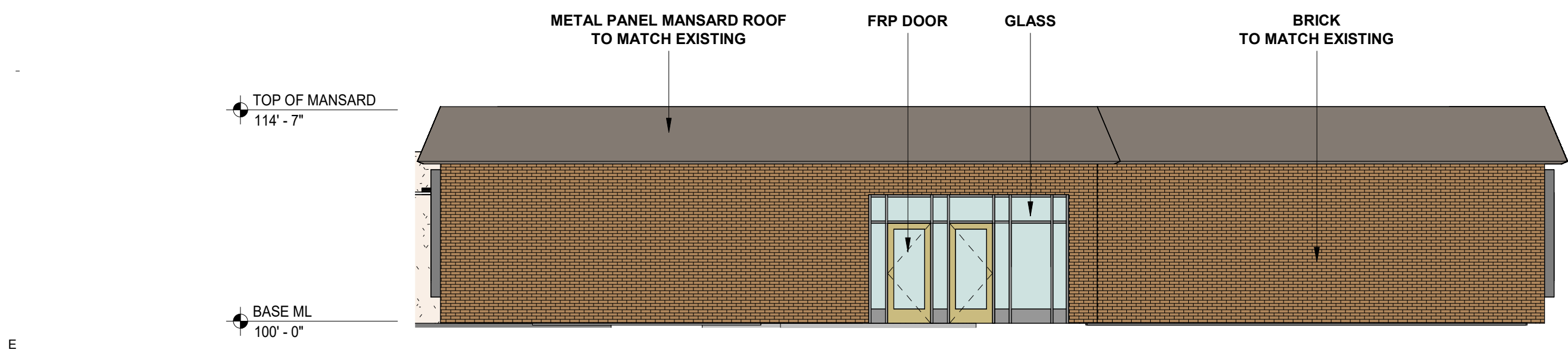
C1 WEST - SCIENCE AND GYM ADDITION
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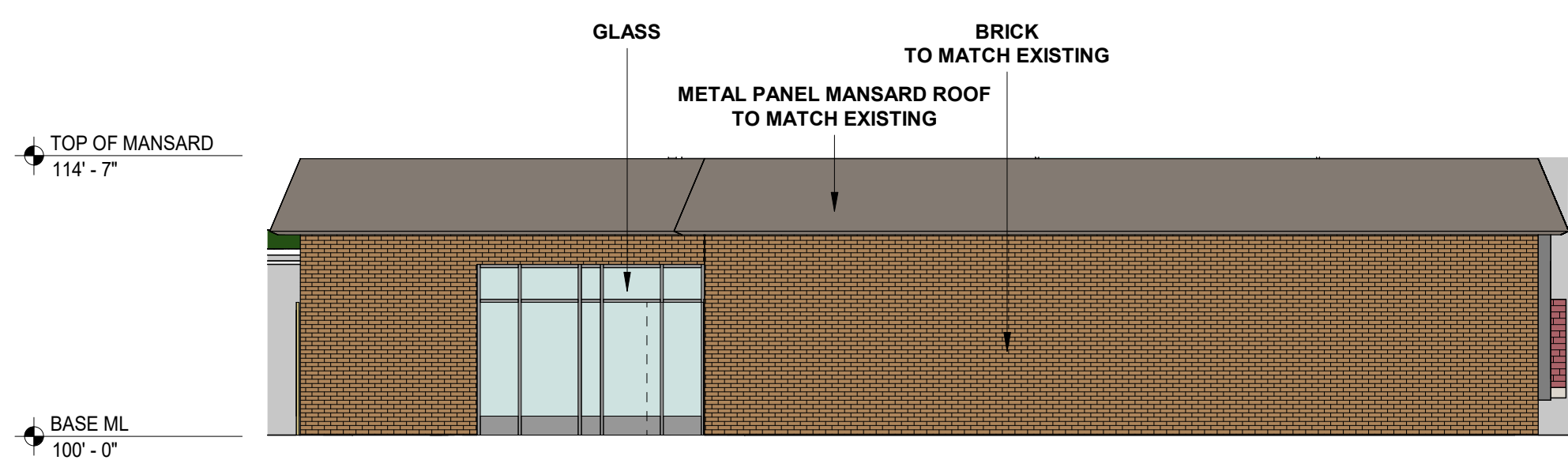
D1 NORTH - SCIENCE ADDITION
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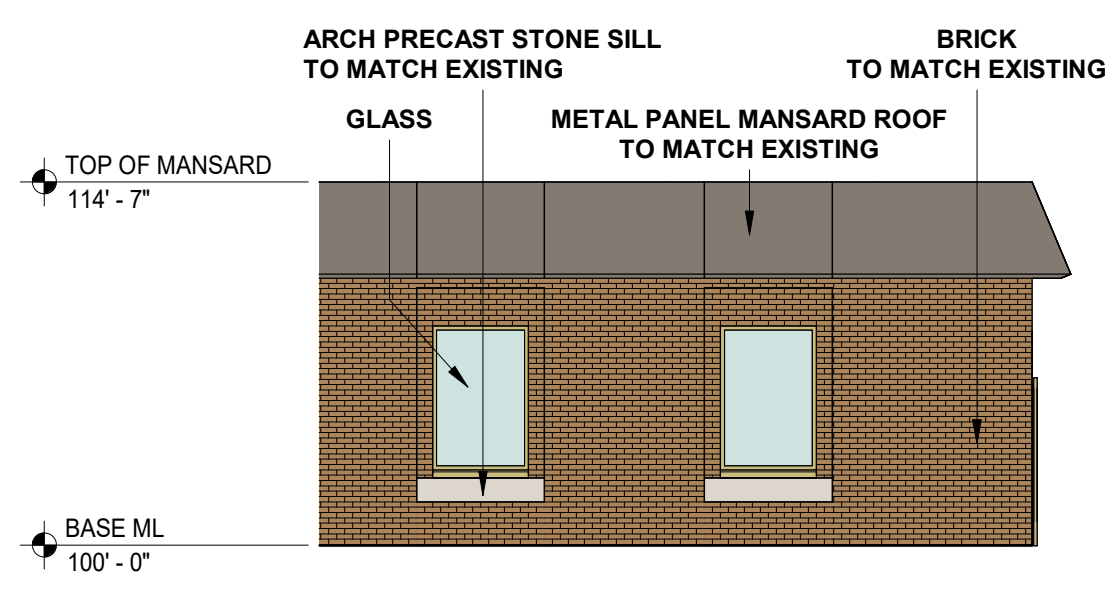
E1 SOUTH - SCIENCE ADDITION
1/8" = 1'-0"



F1 WEST - CLASSROOM ADDITION
1/8" = 1'-0"



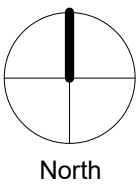
D4 WEST - SCIENCE ADDITION
1/8" = 1'-0"



E4 NORTH - CLASSROOM ADDITION
1/8" = 1'-0"

Revisions		
Description	Date	Num

Comm: 232260
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EXTERIOR ELEVATIONS

Scale: 1/8" = 1'-0"

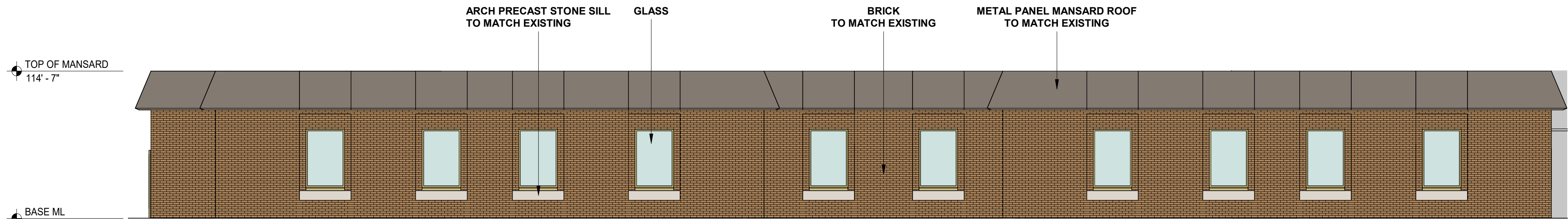
OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,
Lake Elmo, MN 55042

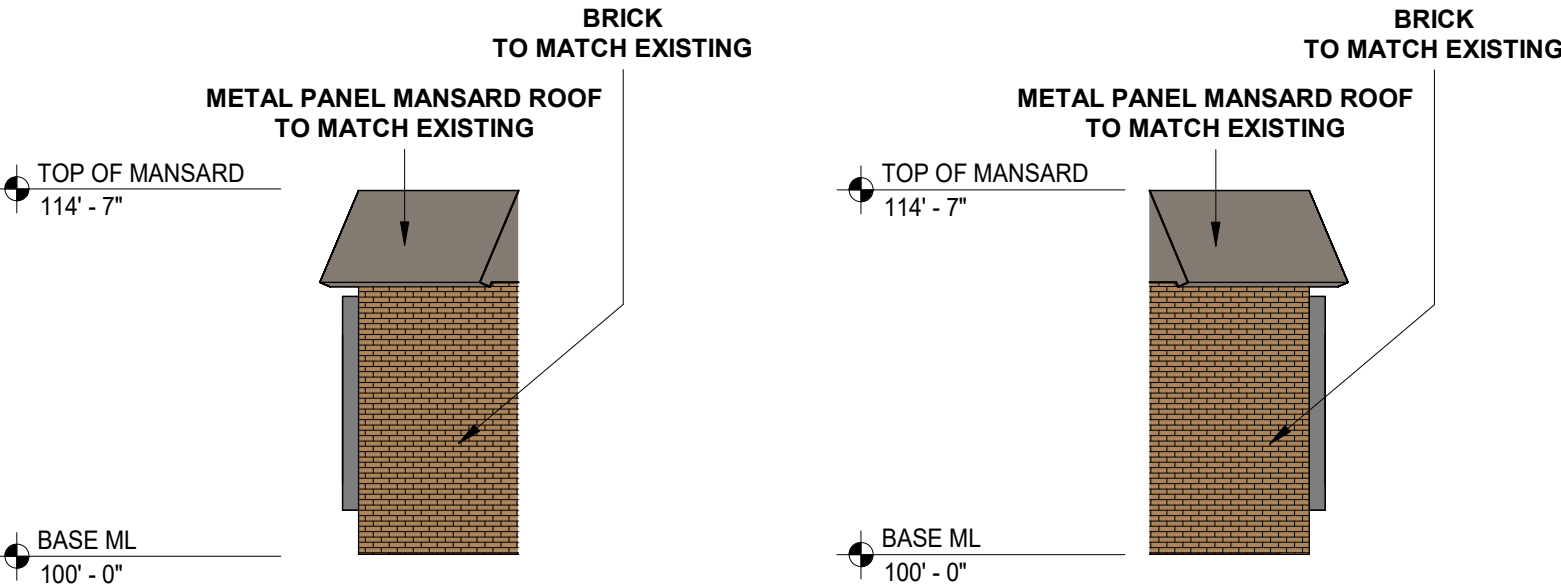
Independent School District #834
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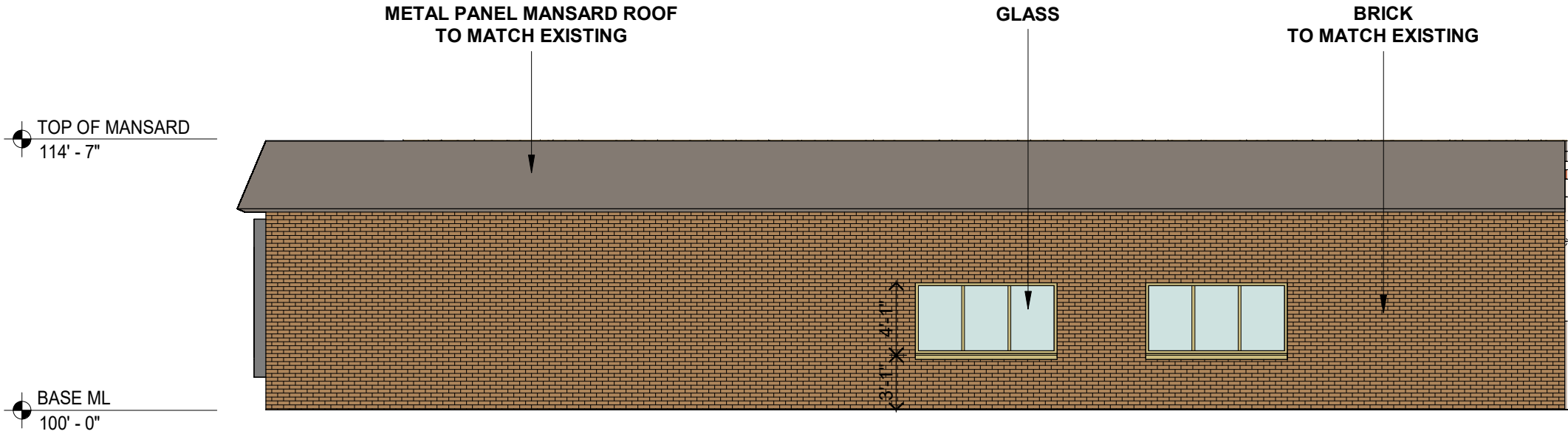


C1 SOUTH - CLASSROOM ADDITION
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D1 WEST - CLASSROOM ADDITION ALCOVE
1/8" = 1'-0"

D2 EAST - CLASSROOM ADDITION ALCOVE
1/8" = 1'-0"



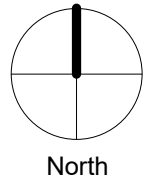
D3 EAST - CLASSROOM ADDITION
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EXISTING TYPICAL BUILDING ELEVATION FOR REFERENCE

Revisions		
Description	Date	Num

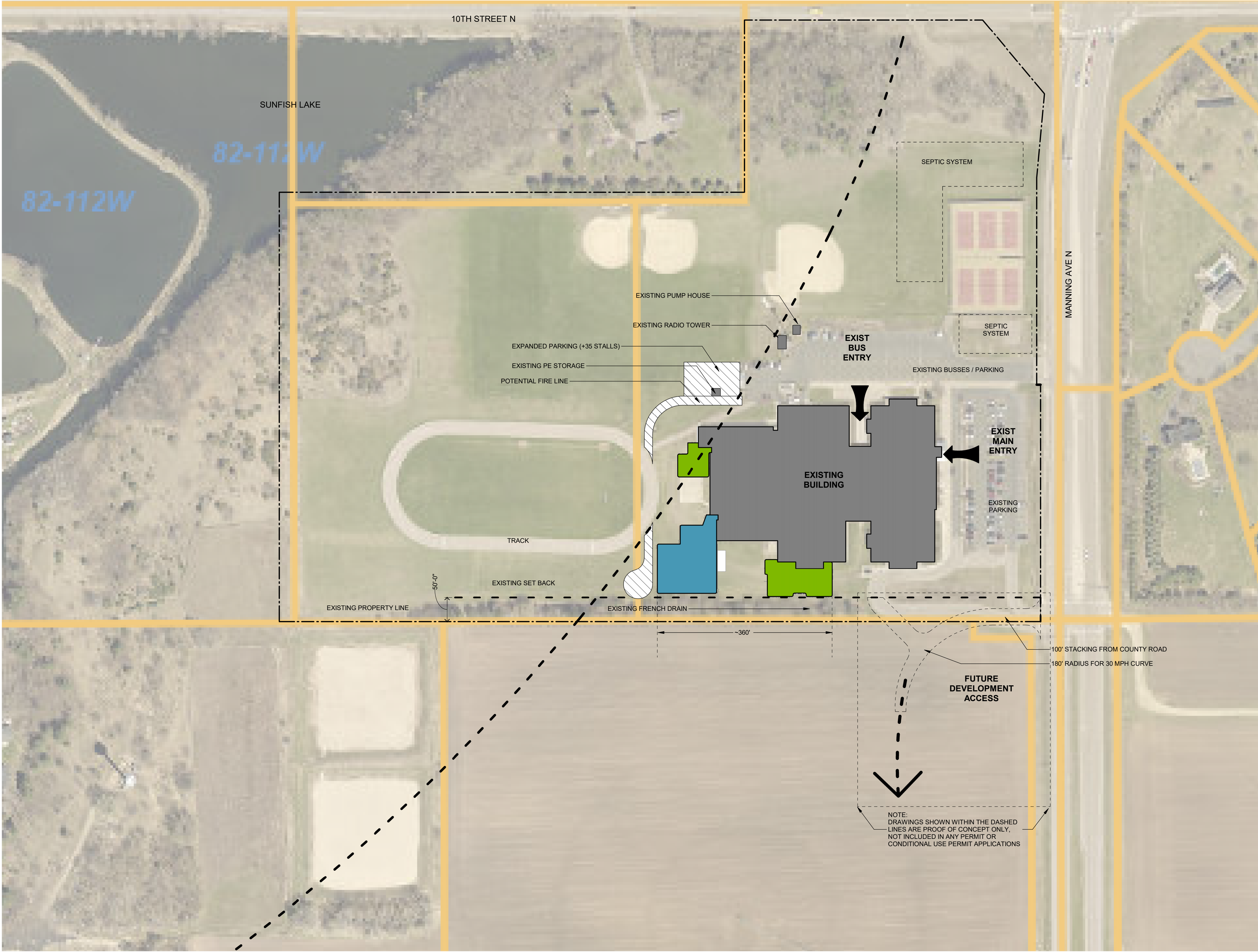
Comm: 232260
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EXTERIOR ELEVATIONS

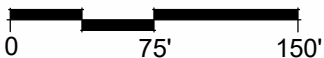
Scale: 1/8" = 1'-0"

MN



A

F1 CORE PLANNING - CITY DIAGRAM 1 -SITE PLAN
1" = 100'-0"



CITY OF LAKE ELMO SUBMITTAL
NOT FOR CONSTRUCTION

OAK-LAND MIDDLE
SCHOOL

820 Manning Ave N,
Lake Elmo, MN 55042

Independent School
District #834
1875 Greeley St S,
Stillwater, MN 55082



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AND ENGINEERS
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Saint Paul, MN 55101

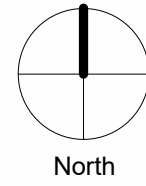
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I hereby certify that this plan, specification or report was prepared
by me or under my direct supervision and that I am a duly Licensed
ARCHITECT
under the laws of the State of **Reg State**

Arch Name
License Number: **Arch Num** Date **Issue Date**

Revisions		
Description	Date	Num

Comm: **232260**
Date: **8.2.2024**
Drawn: **AJM**
Check: **JK**



SITE DIAGRAM

Scale: 1" = 100'-0"

AP 5



Memorandum

SRF No. 17789

To: Stillwater Area Public Schools
From: Brent Clark, PE, Project Manager
Eric Wurst, EIT, Traffic Engineer I
Date: August 1, 2024
Subject: New Lake Elmo Elementary School & Oak-Land Middle School Transportation Study

Introduction

SRF has completed a transportation study for the new proposed Lake Elmo Elementary School and additions to the existing Oak-Land Middle School (see Figure 1: Project Location). The proposed Elementary School, which is expected to replace the existing Lake Elmo Elementary School, is located in the northwest quadrant of the Lake Elmo Avenue North (CSAH 17) and 10th Street North (CSAH 10) intersection in the City of Lake Elmo, MN. The new elementary school, which is expected to open in Fall of 2026, is anticipated to have approximately 1,100 students and 130 staff members. The existing Oak-Land Middle School is located in the southwest quadrant of the Manning Avenue North (CSAH 15) and 10th Street North (CSAH 10) intersection. Planned renovations include a proposed 16,000 square foot gymnasium and a 29,500 square foot classroom addition. The capacity of the school is expected to increase from 950 to 1,250 students with 125 total staff.

Therefore, the main objectives of the transportation study are to review existing operations within the study area, evaluate transportation impacts to the adjacent roadway network based on the new elementary school and additions to the middle school, and recommend any necessary improvements to provide safe and efficient operations for all modes of transportation. The following information provides the assumptions, analysis, and recommendations offered for consideration.

Existing Conditions

Existing conditions were reviewed to identify any existing operational and/or safety issues within the study area. The evaluation of existing conditions included various data collection efforts, including traffic data, roadway characteristics, pedestrian/bicycle facilities, crash history, school observations, and an intersection capacity analysis, which are summarized in the following sections.



Study Intersections

The following study intersections represent the primary focus of the transportation study. These intersections, categorized for each respective school, were identified through discussions with the project team as they relate to potential school impacts, as well as future area infrastructure needs.

Lake Elmo Elementary School:

- 10th Street North (CSAH 10)/Keats Avenue North (CSAH 19)
- 10th Street North (CSAH 10)/Lake Elmo Avenue North (CSAH 17)
- Lake Elmo Avenue North (CSAH 17)/Hudson Boulevard

Oak-Land Middle School:

- Manning Avenue North (CSAH 15)/10th Street North (CSAH 10)
- Manning Avenue North (CSAH 15)/Oak-Land Middle School North Access
- Manning Avenue North (CSAH 15)/Oak-Land Middle School South Access

Traffic Data

SRF collected 24-hour vehicular and pedestrian/bicyclist turning movement counts at the study intersections on Thursday, May 23, 2024, while area schools were in session. The existing Oak-Land Middle School hours are currently between 7:50 a.m. and 2:20 p.m., and the peak hours of the study area are summarized below. Note that the school arrival peak hour coincides with the a.m. peak hour of the adjacent roadway, which is 7:00 a.m. to 8:00 a.m.

- **AM Peak Hour:** 7:00 a.m. to 8:00 a.m.
- **School Departure Peak Hour:** 2:00 p.m. to 3:00 p.m.
- **PM Peak Hour:** 4:00 p.m. to 5:00 p.m.

It should be noted that crack sealing construction was occurring along Manning Avenue during data collection efforts. While the construction resulted in sporadic lane/shoulder closures throughout the day, Manning Avenue remained open, and travel patterns were not expected to be impacted as a result of the construction. In addition, on-going construction along I-94 may be causing various regional traffic impacts between Oakdale and the St. Croix River, however, based on discussions with the county staff, the traffic volumes collected were considered representative of the study area.

Roadway Characteristics

A field assessment was completed to identify various roadway characteristics within the transportation system study area, such as functional classification, general configuration, and posted speed limit. A summary of these roadway characteristics is shown in Table 1. Note that these are general characteristics and that there are some deviations within the area or segments of the roadways. For example, Keats Avenue transitions from a 4-lane divided A-Minor Expander to a 2-lane divided local street north of 10th Avenue.

Table 1. Existing Roadway Characteristics

Roadway	Functional Classification ⁽¹⁾	General Configuration	Posted Speed Limit (mph)
10th Street (CSAH 10)	A Minor Reliever ⁽²⁾	2-lane undivided	55
Manning Avenue (CSAH 15)	A Minor Expander	4-lane divided	55
Lake Elmo Avenue (CSAH 17)	Major Collector ⁽³⁾	2-lane undivided	50/55 ⁽⁵⁾
Keats Avenue (CSAH 19)	A Minor Expander ⁽⁴⁾	4-lane divided ⁽⁴⁾	55 ⁽⁴⁾
Hudson Boulevard	Major Collector	2-lane undivided	50

(1) Functional Classification based on the *City of Lake Elmo's 2040 Comprehensive Plan*.

(2) Functional classification transitions from an A-Minor Reliever to a Minor Collector east of Manning Avenue.

(3) Functional classification transitions from a Major Collector to an 'Other Arterial' north of 10th Street.

(4) Keats Avenue transitions from 4-lane divided A Minor Expander with a speed limit of 55-mph to a 2-lane divided local street with a speed limit of 35-mph north of 10th Street.

(5) Speed limit change occurs north of Hudson Boulevard, with a posted speed limit of 55-mph to the north, and 50-mph to the south.

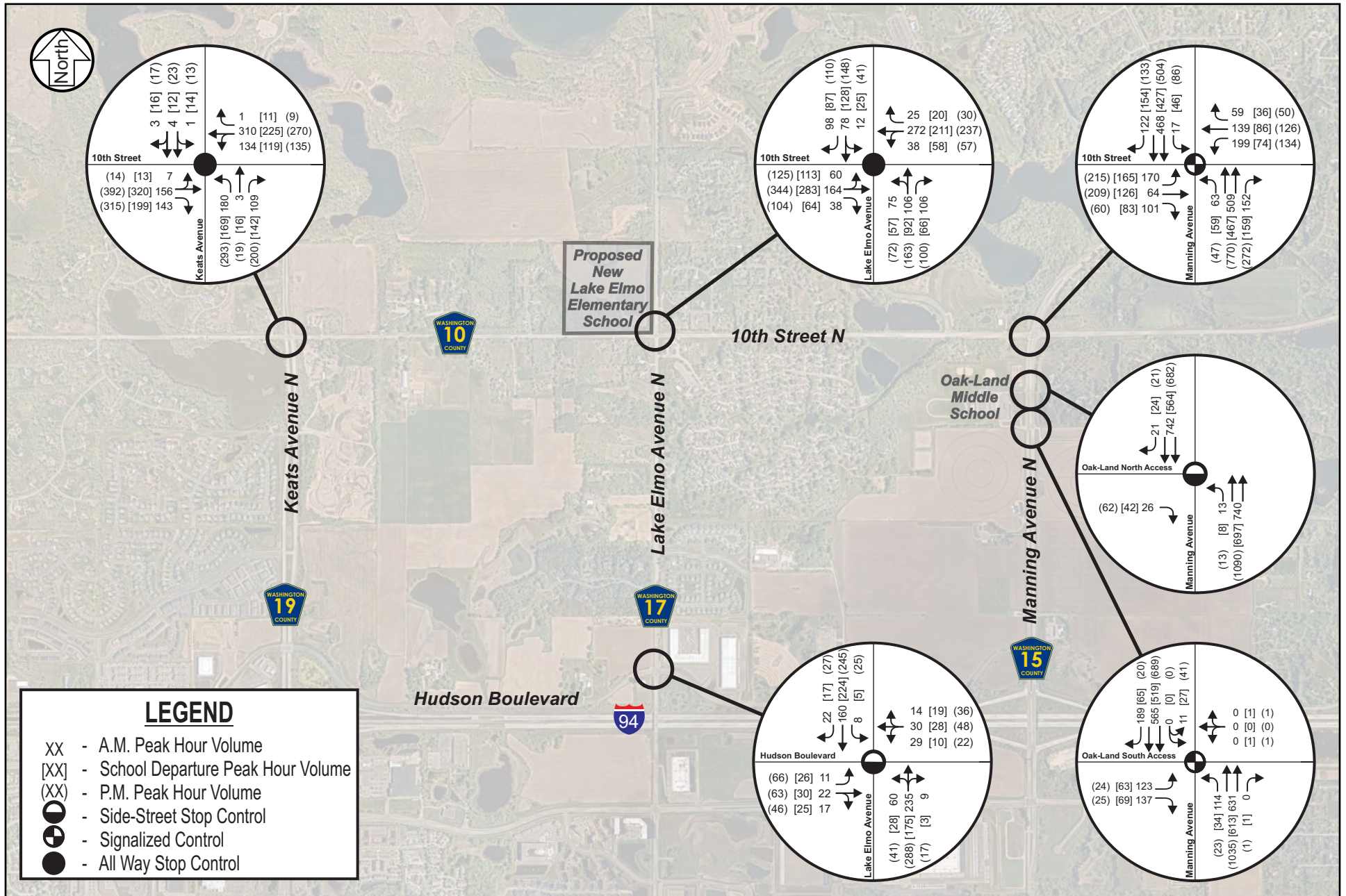
From a traffic control perspective, the Manning Avenue/10th Street and Manning Avenue/Oak-Land Middle School south access intersections are signalized, and the 10th Street/Keats Avenue and 10th Street/Lake Elmo Avenue intersections are unsignalized with all-way stop control. All other study intersections are unsignalized with side-street stop control. Existing geometrics, traffic controls, and traffic volumes in the study area are shown in Figure 2.

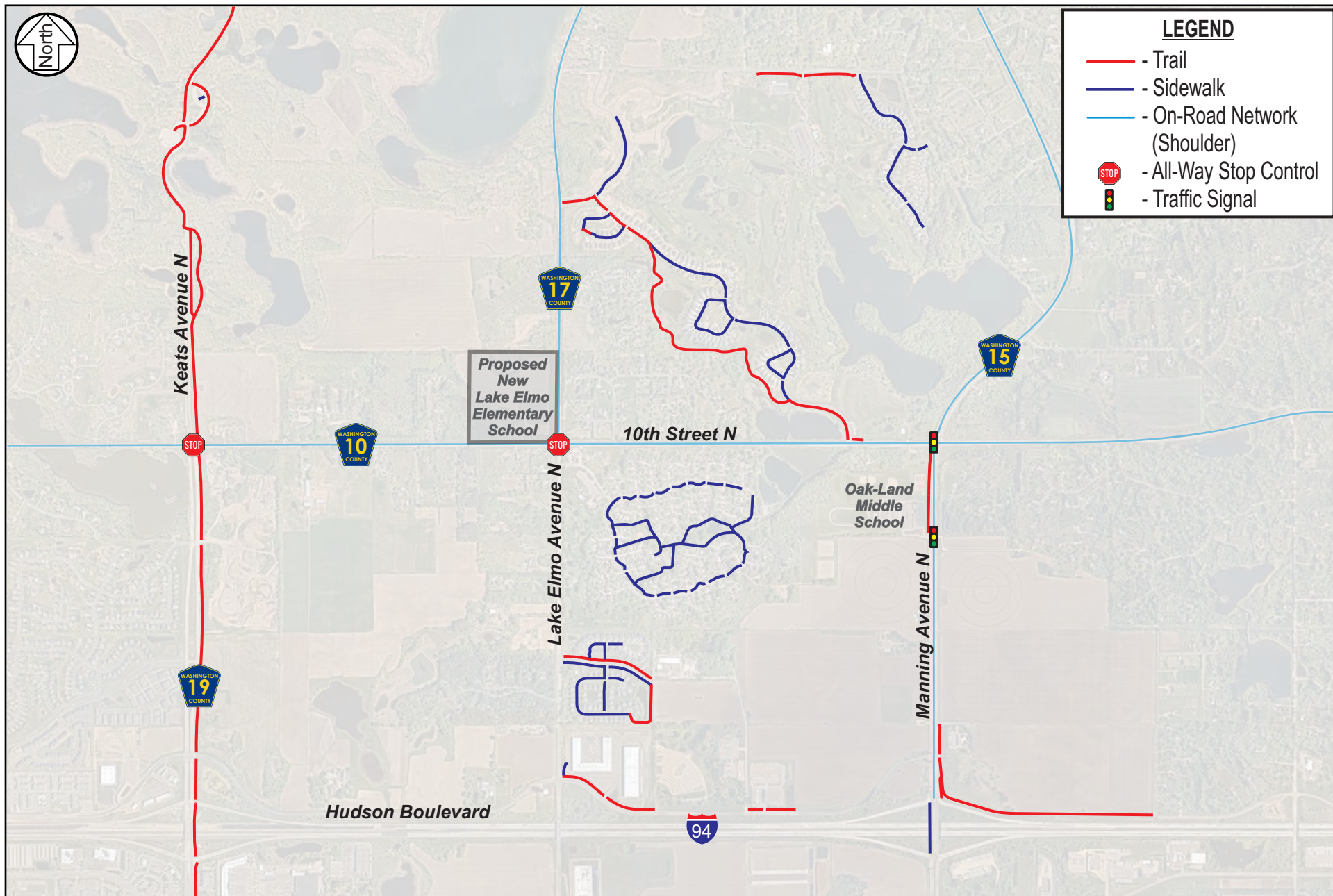
Pedestrian and Bicycle Facilities

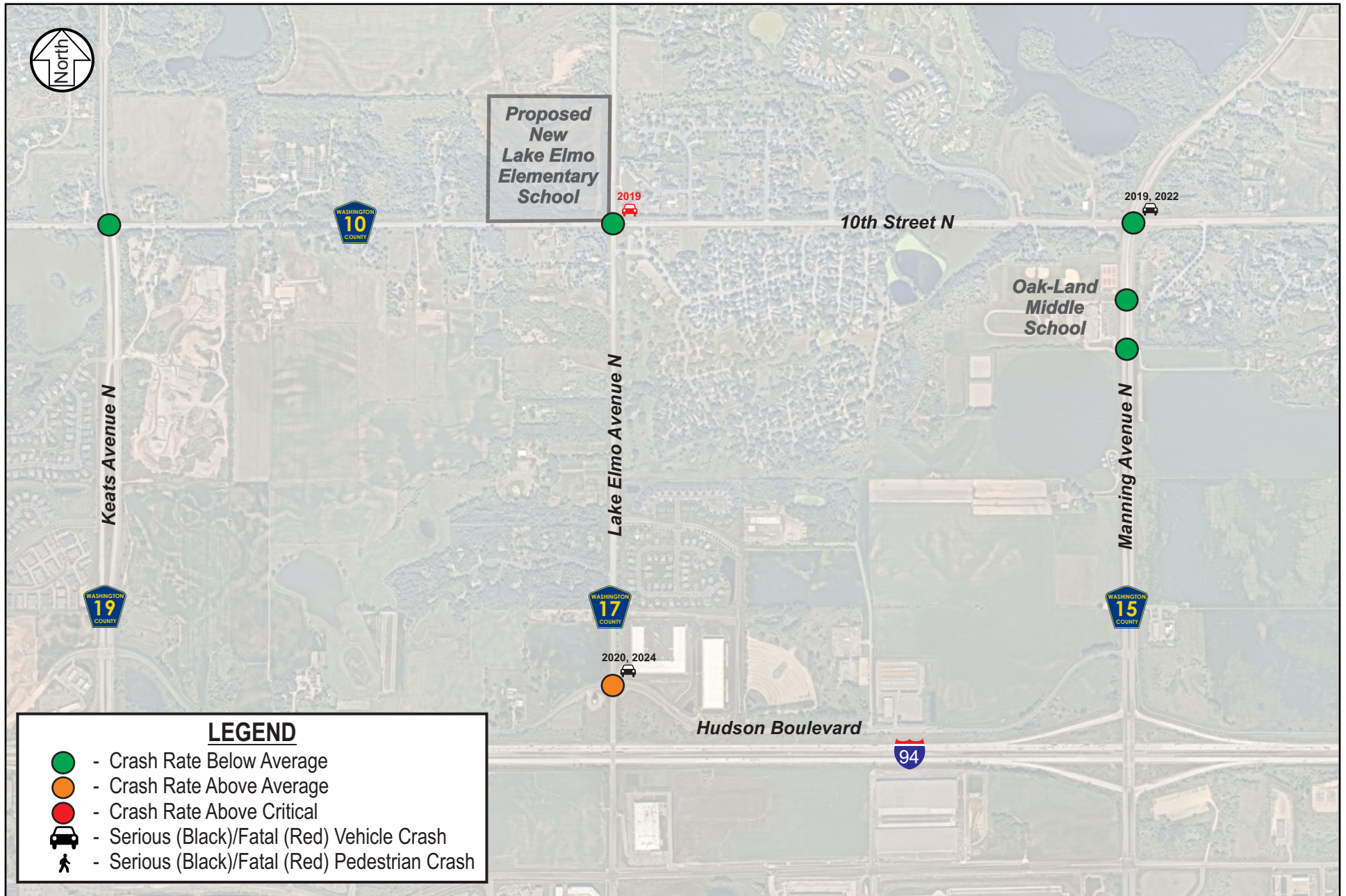
A field assessment was completed to identify the current local and regional pedestrian/bicycle facilities within the study area and is illustrated in Figure 3. While Keats Avenue (CSAH 19) has an off-street trail that provides connectivity from Woodbury to the Lake Elmo Park Reserve, the rest of the study roadways generally lack off-street pedestrian/bicycle facilities. It should be noted that the high speeds (i.e. 55-mph) along these roadways likely deter most pedestrians and bicyclists from using the shoulder. In general, the nearby local neighborhood developments include internal pedestrian/bicycle facility networks. Given the close proximity of these residential neighborhoods to the two school sites, it is important to consider pedestrian/bicycle connectivity within the project area. Further discussion regarding pedestrian/bicycle considerations is provided later in this document.

Safety Analysis

A safety analysis was completed to understand any crash trends or geometric issues at the study intersections. The safety analysis was based on reported crashes using MnDOT's Crash Mapping Analysis Tool (MnCMAT2) from April 1, 2019, to March 31, 2024, which represents the most recent five-year period available. Results of the safety analysis are summarized below and shown in Figure 4, while detailed crash type/rate information is included in the Appendix.







- There was a total of 24 crashes reported within the study area during the analysis period. The number of crashes ranged from a high of nine (9) crashes at the 10th Street/Lake Elmo Avenue intersection to a low of one (1) crash at the 10th Street/Keats Avenue and Manning Avenue/Oak-Land Middle School South Access intersections.
- In order to determine the significance of the crashes, crash rates were calculated for each intersection and compared to average crash rates published by MnDOT for intersections with similar characteristics (i.e., traffic control, traffic volumes, lighting, environment, etc.) A higher than average rate does not necessarily indicate a significant crash problem. Therefore, critical rates were calculated to determine the statistical significance. If the actual rates are below the critical rates, crashes that occurred may be due to the random nature of crashes and not necessarily a geometric design or traffic control issue. Based on the results of analysis, which is illustrated in Figure 4, no study intersections are above the critical crash rate, indicating that no study intersections have a statistically significant crash problem.
- It should be noted that one (1) fatal and four (4) serious injury crashes have occurred within the study area during the analysis period. Descriptions of the fatal/serious injury crashes, which are based on the police reports, are summarized below:
 - 10th Street/Lake Elmo Avenue – Fatal single vehicle run-off-road crash. Driver ran a stop sign at high speed, before exiting the roadway and hitting a tree. Based on the police report, the driver was intoxicated at the time of the crash.
 - Lake Elmo Avenue/Hudson Boulevard – Serious injury head-on crash. Driver crossed the centerline, colliding with oncoming traffic. Based on the police reports, drugs/alcohol may have played a role in the crash.
 - Lake Elmo Avenue/Hudson Boulevard – Serious injury angle crash. Side-street vehicle failed to observe right-of-way and pulled out into oncoming traffic.
 - 10th Street/Manning Avenue – Serious injury left-turn crash. Westbound left turning vehicle failed to yield to oncoming vehicle with green light.
 - 10th Street/Manning Avenue – Serious injury left-turn crash. Eastbound left turning vehicle failed to yield to oncoming vehicle with green light.
- All eight (8) of the multi-vehicle crashes that occurred at the 10th Street/Lake Elmo Avenue were the result of vehicles running the stop signs or failing to yield right-of-way.
- Six (6) of the seven (7) crashes at the Lake Elmo Avenue/Hudson Boulevard intersection were either minor injury or serious injury crashes, a majority of which were angle crashes.

Lake Elmo Elementary School Observations

SRF conducted observations of the parent pick-up/drop-off operations at the existing Lake Elmo Elementary School during the week of May 20th, 2024, to gather general trip rate information and assess potential storage needs for the new site. This data, along with queuing data from other schools and ITE trip generation standards, was important for estimating the operations expected at the relocated elementary school.

Oak-Land Middle School Observations

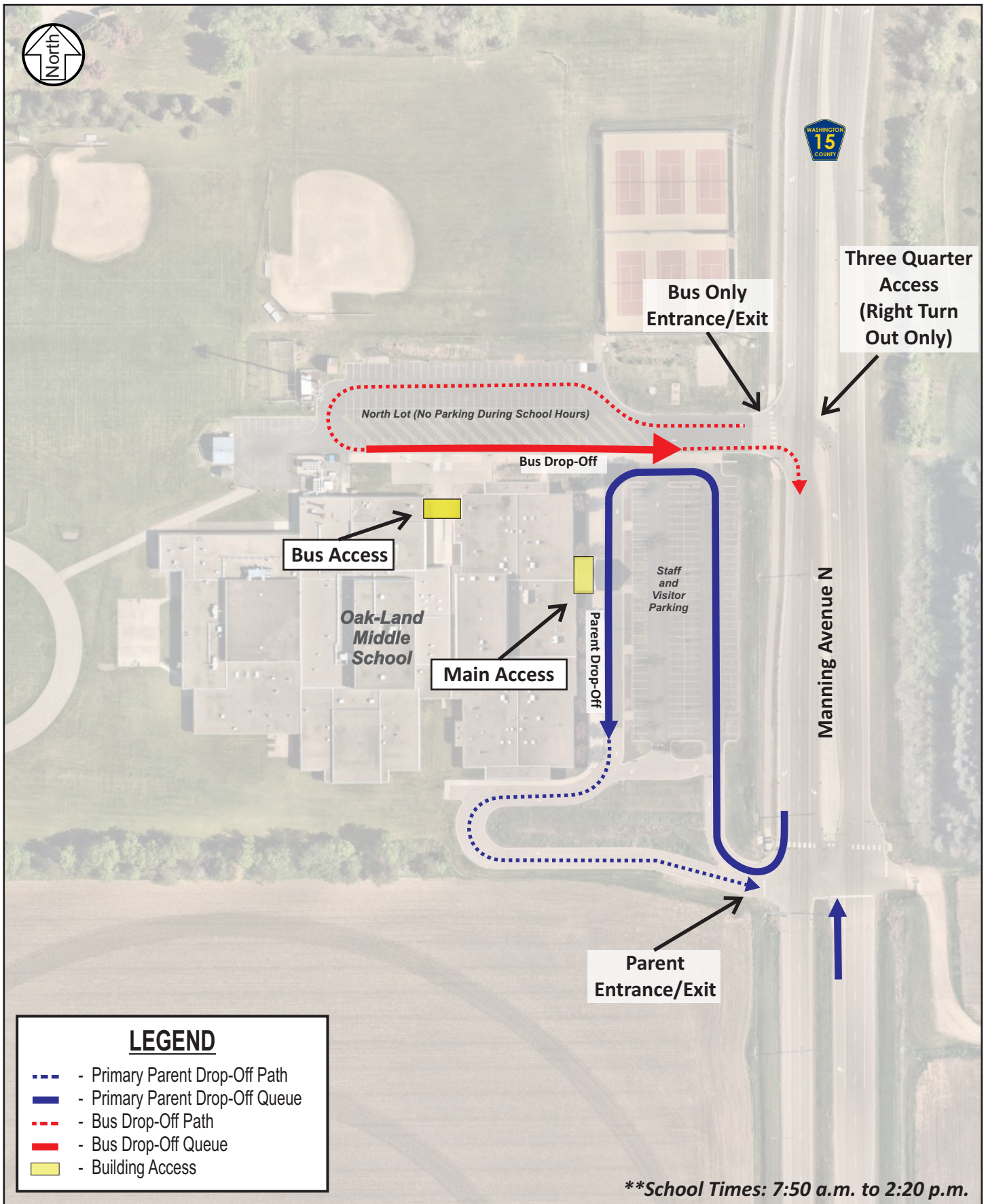
As mentioned previously, the Oak-Land Middle School hours of operations are currently between 7:50 a.m. and 2:20 p.m. The middle school, which serves grades 7-9, currently has an enrollment of approximately 950 students. In order to identify current travel patterns and any access, circulation, pick-up/drop-off, and/or pedestrian crossing issues, field observations were performed at the school. A summary of the middle school operations during the a.m. and school departure peak periods are shown in Figure 5 and 6, respectively. The trip generation for the school during the peak hours is summarized in Table 2.

Table 2. Oak-Land Middle School – Trip Generation (actual counts)

School	Students	School Arrival Peak Hour		School Departure Peak Hour		P.M. Peak Hour		Daily Trips
		In	Out	In	Out	In	Out	
Oak-Land MS	950	337	286	131	174	77	111	2,172

The middle school has two separate parking lot/vehicular access locations, each serving a different purpose for the school.

- The **North Access** is a three-quarter access designated for buses only from 7:00 a.m. to 3:00 p.m. The lot operates as a counterclockwise loop with buses entering from the access along Manning Avenue and looping around the lot to reach the bus pick-up/drop-off area, located on the north side of the school. Given the access restriction, approximately five (5) to 16 buses were observed to make U-turn movements at the Manning Avenue/South Access intersection during school peak hours.
- The **South Access** is the primary access for staff/visitor parking and parent pick-up/drop-off operations. Parents will queue in a counterclockwise one-way loop and pick-up/drop-off students in a designated area, immediately adjacent to the main building access. In addition to staff members, a school resource officer is positioned in the area during school dismissal to help facilitate the process and direct students from the building access.



During school arrivals, parents start arriving at the school around 7:05 a.m. and buses begin to arrive around 7:25 a.m., with the school starting at 7:50 a.m. Internal queueing was observed to extend onto Manning Avenue for approximately ten (10) minutes, however, the queues were maintained with the turn lane storage, and were not observed to affect mainline traffic. The school area was generally clear by 7:50 a.m.

During afternoon pick-ups, travel patterns were generally the same as the morning drop-off. Students were released at 2:20 p.m., and most students were picked up and the school area was cleared within 15 minutes. Parents were observed to arrive at the school early, with some parents arriving as early as 1:45 p.m. Internal queueing was observed to extend onto Manning Avenue starting at 2:10 p.m., and queues nearly maxed out the turn lane storage at the intersection. Despite guidance from staff, some students were observed to cut across the parking lot to get picked up from their parents.

In general, the overall operations during the school arrival and departure periods were observed to be safe and efficient. The only safety issues observed were when students would walk across the pick-up queue and parking lot to get to their parents' vehicle. Despite signage, parents often would not pull up past the main school entrance, leaving potential on-site queueing storage underutilized. While internal queues that extended onto Manning Avenue were observed to be maintained within the turn lane storage, there may be occurrences throughout the year where these queues extend beyond the turn lanes, causing friction and additional conflict points along Manning Avenue.

Intersection Capacity Analysis

An existing intersection capacity analysis was completed using Synchro/SimTraffic software to establish a baseline condition to which future traffic operations can be compared. The capacity analysis was completed for the weekday a.m., school departure, and p.m. peak hour of the adjacent roadway network. Capacity analysis results identify a Level of Service (LOS) which indicates how well an intersection is operating. Intersections are graded from LOS A through LOS F. The LOS results are based on average delay per vehicle results from SimTraffic, which correspond to the delay threshold values shown in Table 3. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through D is generally considered acceptable by drivers in the Twin Cities Metropolitan Area.

Table 3. Level of Service Criteria for Signalized and Unsignalized Intersections

LOS Designation	Signalized Intersection Average Delay/Vehicle (seconds)	Unsignalized Intersection Average Delay/Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

For side-street stop-controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes.

Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high-levels of delay (i.e., poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Schools generally have higher peaking characteristics as compared to the typical roadway network during the a.m. and p.m. peak hours (i.e., traffic on/near school grounds tend to be busy for a short period of time close to school start and end times). The study focused on analyzing and publishing findings for the 60-minute interval, which is the traffic industry standard. Additionally, peak 15-minute intervals were reviewed to provide context on any operational issues occurring immediately before or after school start and end times.

Results of the existing intersection capacity analysis, shown in Table 4, indicate that all study intersections, other than the 10th Street/Keats Avenue intersection, currently operate at an acceptable overall LOS D or better during the a.m., school departure, and p.m. peak hours.

Table 4. Existing Intersection Capacity Analysis

Intersection	A.M. Peak Hour ⁽³⁾		School Departure Peak Hour ⁽³⁾		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
10th Street/Keats Avenue ⁽¹⁾	B	14 sec.	C	17 sec.	F	63 sec.
10th Street/Lake Elmo Avenue ⁽¹⁾	B	14 sec.	C	16 sec.	D	27 sec.
Lake Elmo Avenue/Hudson Boulevard ⁽²⁾	A/A	7 sec.	A/A	7 sec.	A/A	10 sec.
10th Street/Manning Avenue	C	26 sec.	C	23 sec.	D	38 sec.
Manning Avenue/Oak-Land MS North Access ⁽²⁾	A/A	6 sec.	A/A	5 sec.	A/A	6 sec.
Manning Avenue/Oak-Land MS South Access	B	11 sec.	A	6 sec.	A	7 sec.

(1) Indicates an all-way stop control, where the overall LOS and delay are shown.

(2) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst side-street approach LOS. The delay shown represents the worst side-street approach delay.

(3) The school a.m. and p.m. peak hours are defined as 7:00 – 8:00 a.m. and 2:00 – 3:00 p.m. respectively. The school a.m. peak hour generally coincides with the a.m. peak hour of the adjacent roadway network.

The following information summarizes the operational and/or queuing issues identified as part of the existing conditions analysis:

10th Street/Keats Avenue:

- The overall intersection operates at a LOS F (63 seconds) during the p.m. peak hour, and the eastbound and westbound approaches (i.e., 10th Street) both have delays of 70 seconds or greater and 95th percentile queues of 600 feet or greater.
- The intersection is atypical for an all-way stop control, with multiple turn lanes and a wide center median along Keats Avenue. Drivers were observed to be confused on who had the right-of-way, and several turning movements occurred simultaneously mid-intersection.
- Note the intersection is ranked as the number 3 priority intersection within the *Washington County 2023 Intersection Control Ranking System (ICRS) Report* and is programmed within the *Washington County 2024-2028 Capital Improvement Plan* for roundabout evaluation/preliminary design in 2027.

10th Street/Lake Elmo Avenue:

- While the overall intersection operates at an acceptable LOS D (27 seconds), the eastbound approach operates at a LOS E (43 seconds) with 95th percentile queues of approximately 375 feet during the p.m. peak hour.
- While the intersection is below the average crash rate, there have been eight (8) crashes in the last five (5) years that involved vehicles running the stop sign or failing to yield right-of-way.

Manning Avenue/Oak-Land Middle School South Access:

- As mentioned previously, parent pick-up/drop-off queues were observed to extend onto Manning Avenue for short durations (i.e., 10-minutes) during both the school arrival and departure peak hours. During site observations these queues were observed to be maintained within turn lane storage, however, there may be occurrences throughout the year where these queues extend beyond the turn lanes, which may cause friction and additional conflict points along Manning Avenue.

Proposed School Projects

As mentioned previously, both the new Lake Elmo Elementary School and Oak-Land Middle School additions are expected to be completed and open in Fall of 2026.

Oak-Land Middle School

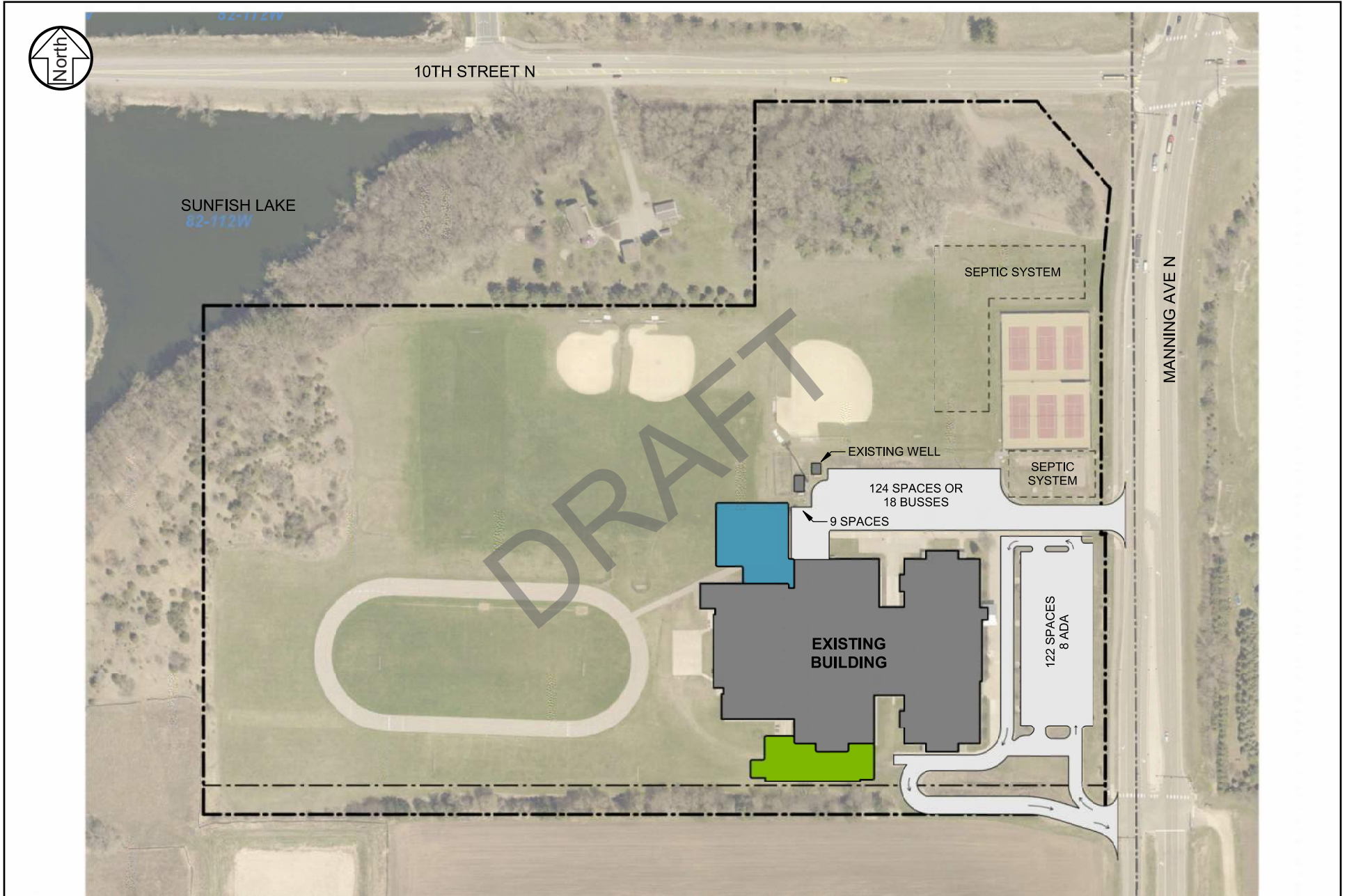
The existing Oak-Land Middle School is located in the southwest quadrant of the Manning Avenue (CSAH 15) and 10th Street (CSAH 10) intersection. Planned renovations, which are illustrated in Figure 7, include a proposed 16,000 square foot gymnasium and a 29,500 square foot classroom addition. The capacity of the school is expected to increase from 950 to 1,250 students with 125 total staff. No parking lot or vehicular access changes are planned as part of the renovation project. Note classes are scheduled to take place for approximately 172 days of the year.

Lake Elmo Elementary School

The new proposed Lake Elmo Elementary School, shown in Figure 8, is located in the northwest quadrant of the Lake Elmo Avenue (CSAH 17) and 10th Street (CSAH 10) intersection in the City of Lake Elmo. The new elementary school is expected to replace the existing Lake Elmo Elementary School, which is located in the northeast quadrant of the Lake Elmo Avenue/Stillwater Boulevard intersection. The new elementary school is anticipated to have a maximum enrollment of 1,100 students and 130 staff members. Note the current enrollment of Lake Elmo Elementary is approximately 650 students, however, for the purpose of this study the year of opening (2026) with the maximum enrollment was analyzed to provide a conservative estimate. Classes are scheduled to take place approximately 168 days of the year. Access to the elementary school is proposed at the following two (2) locations:

- **Main School Access:** Located along 10th Street, approximately 1,225 feet west of 10th Street/Lake Elmo Avenue intersection; this access would be the primary access for staff/visitor parking and will also serve parent pick-up/drop-off operations.
- **Bus Access:** Located along Lake Elmo Avenue, approximately 1,250 feet north of the 10th Street/Lake Elmo Avenue intersection; this access is intended for buses/utility vehicles only for the school.

Further discussion regarding the site plan is documented later in this study.



Traffic Forecasts

To evaluate traffic impacts associated with the two school projects, traffic forecasts were developed for the year 2026 build conditions. The following information summarizes the year 2026 traffic forecast development process.

School Time Changes

Based on discussions with the school district, school times are expected to change prior to Year 2026 conditions and are summarized in Table 5. To account for the shift in travel patterns to/from Oak-Land Middle School, site trips were estimated throughout the network and modified to align with the new hours of operations. Given the staggered start/end times, four (4) separate peak hours were analyzed as part of this study to align with the new school times. It should be noted that these peak hours, which are also summarized in Table 5, slightly overlap with each other, however, in general the two (2) schools are staggered enough to minimize compounding impacts. Note the p.m. peak hour is based on the adjacent roadway network and is expected to remain from 4:00 to 5:00 p.m.

Table 5. School Time Changes

School	School Times		School Peak Hours Analyzed
	Current	Future (2026)	
Oak-Land Middle School	7:50 – 2:20 pm	8:35 – 3:05 pm	7:45 -8:45 am 2:30-3:30 pm
Lake Elmo Elementary	8:45 – 3:15 pm	7:45 – 2:15 pm	7:00 -8:00 am 1:45-2:45 pm

Background Traffic Growth

To account for general background growth in the area, a growth rate of one and three quarters (1.75) percent was applied to the existing peak hour traffic volumes to develop year 2026 background traffic forecasts. This growth rate was developed using a combination of historical average daily traffic (ADT) volumes from surrounding roadways publish by MnDOT, traffic forecasts from both the *City of Lake Elmo* and *Washington County Comprehensive Plans*, and engineering judgment. It should be noted that there are several development opportunities and potential roadway connections south of the school sites, however, based on discussions with the project team the general background growth rate is expected to account for this development potential from a traffic perspective.

Trip Generation – Oak-Land Middle School

To account for the traffic operations associated with the enrollment changes expected at Oak-Land Middle School, trip generation estimates were developed. The trip generation estimates, shown in Table 6, were developed using the existing trip rates based on the data collected at the site access locations (highlighted in gray).

Table 6. Oak-Land Middle School – Trip Generation

School	Students	School Arrival Peak Hour		School Departure Peak Hour		P.M. Peak Hour		Daily Trips
		In	Out	In	Out	In	Out	
Current Site Trips	950	337	286	131	174	77	111	2,172
Enrollment Increase	300	+106	+90	+41	+54	+24	+35	+685
Total Site Trips	1,250	443	376	172	228	101	146	2,857

Results of the trip generation estimate indicate that Oak-Land Middle School is expected to generate an additional 196 school arrival peak hour, 95 school departure peak hour, 59 p.m. peak hour, and 685 daily trips with the new enrollment. Therefore, the school site trips were proportionally increased to account for the change in trips associated with the proposed enrollment increases.

Trip Generation – Lake Elmo Elementary School

To identify the traffic operations with the proposed elementary school, trip generation estimates for the school arrival (7:00 to 8:00 a.m.), school departure (1:45 to 2:45 p.m.), and p.m. peak hours (4:00 to 5:00 p.m.), as well as a daily basis were developed. The trip generation estimates, shown in Table 7, were developed using the *ITE Trip Generation Manual, 11th Edition*. Note that the trip generation was developed for the maximum enrollment of the school to provide a conservative estimate.

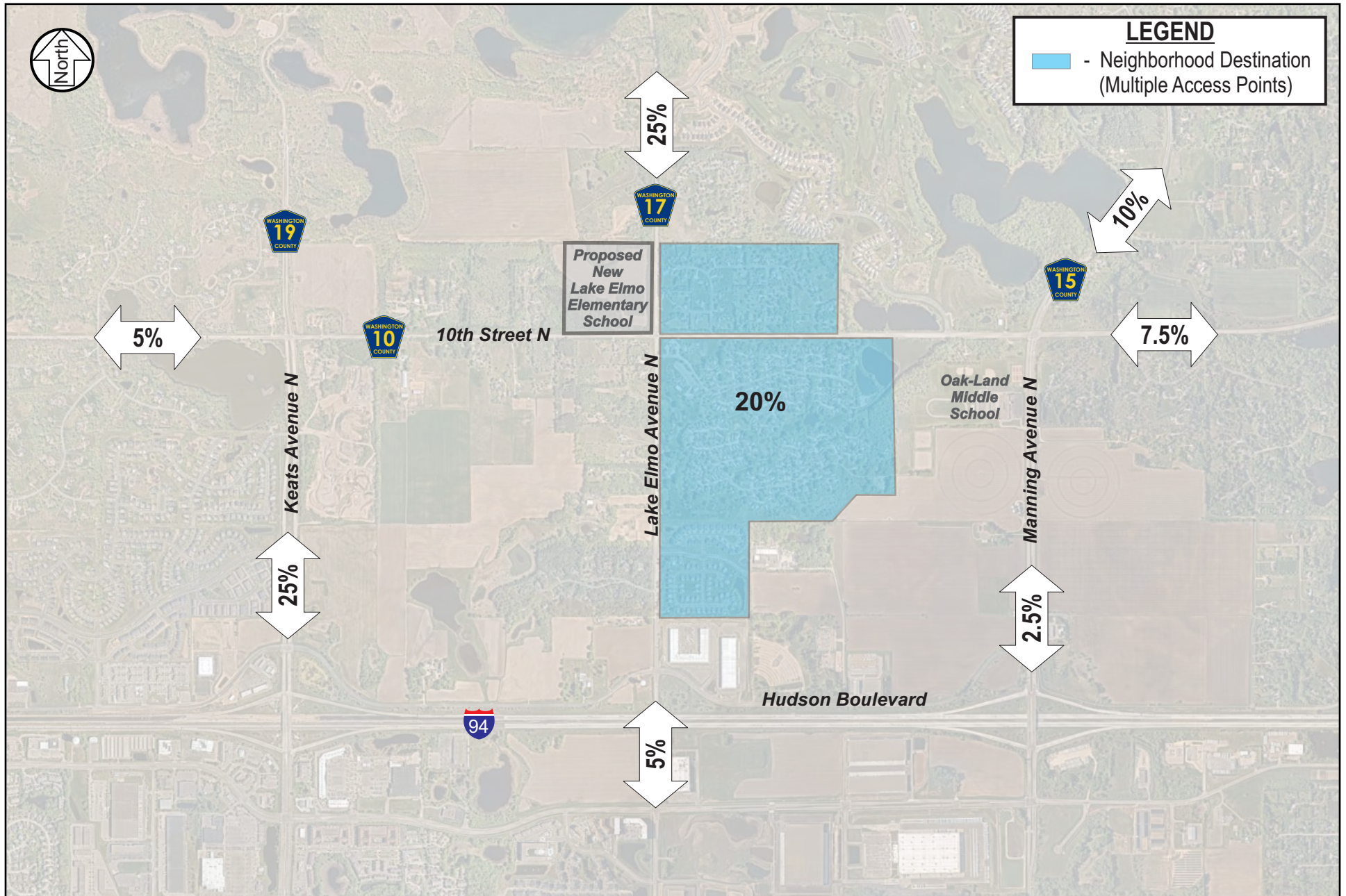
Table 7. Trip Generation Estimate

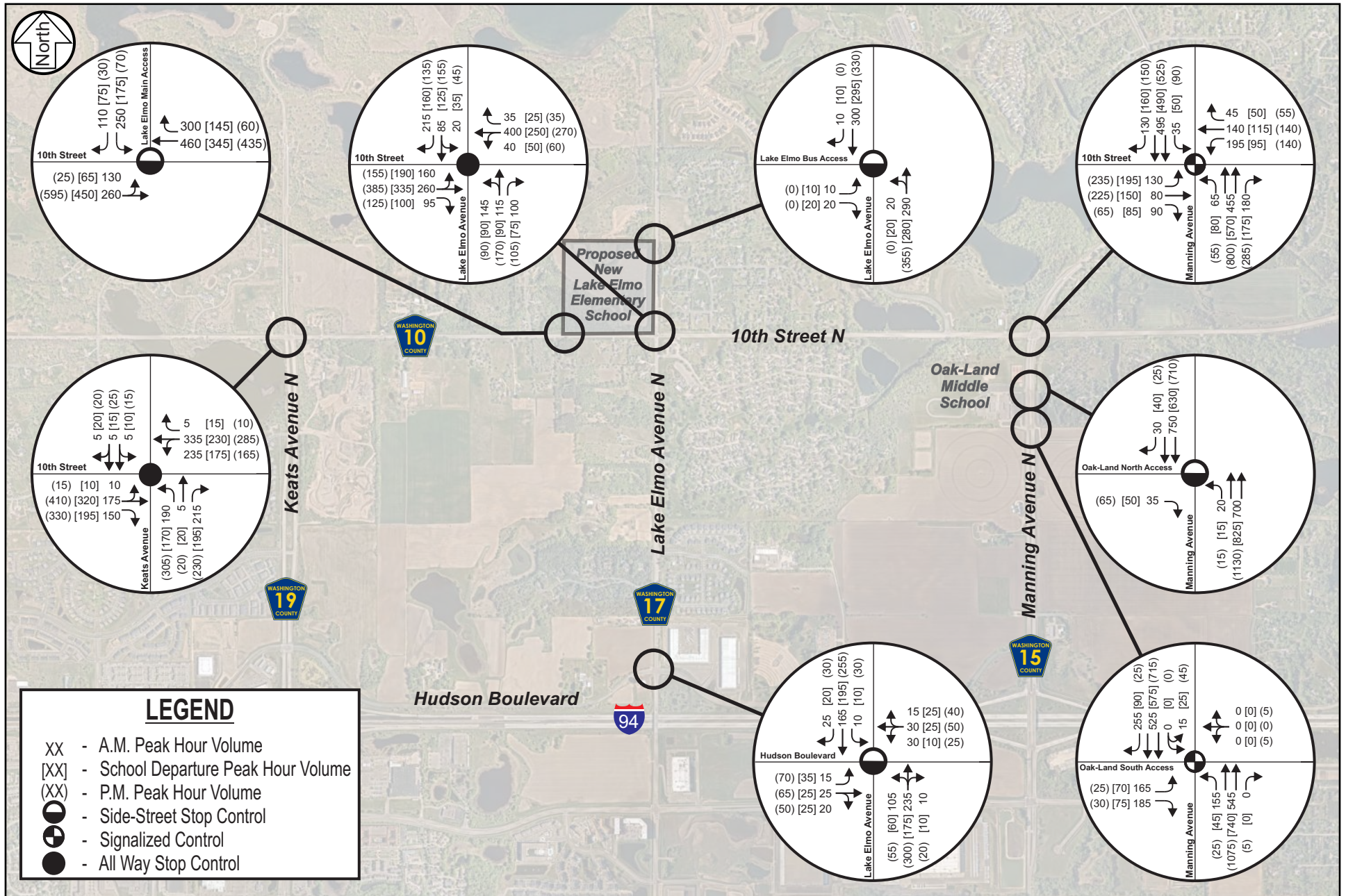
Land Use Type (<i>ITE Code</i>)	Students	School Arrival Peak Hour		School Departure Peak Hour		P.M. Peak Hour		Daily Trips
		In	Out	In	Out	In	Out	
Elementary School (520)	1,100	446	379	228	267	81	95	2,497

Results of the trip generation estimate indicate that the proposed new Lake Elmo Elementary School is expected to generate approximately 825 school arrival peak hour, 495 school departure peak hour, 176 p.m. peak hour, and 2,497 daily trips. Trips were distributed throughout the study area based on the directional distribution shown in Figure 9, which was developed based on enrollment information provided by the school district, existing travel patterns, and engineering judgement.

Traffic Forecast Summary

Based on the traffic forecast approach described within this study, peak hour traffic forecasts were developed for year 2026 build conditions, which is illustrated in Figures 10. The year 2026 build conditions incorporate adjustments for school hours at Oak-Land Middle School, general background growth, and additional trips generated by the new elementary school and middle school expansion. Figure 10 illustrates the peak volumes during the busiest periods, showing the peak hour volumes for each respective school at their primary study intersections. The year 2026 build traffic forecasts for all four (4) school peak periods are shown in the Appendix.





Year 2026 Build Conditions

To understand how the study intersections will accommodate the year 2026 build traffic forecasts, an intersection capacity analysis was completed using Synchro/SimTraffic software. The following information summarizes the year 2026 build conditions.

Assumptions

The following assumptions were included as part of the intersection capacity analysis:

- While operational issues were identified at the 10th Street/Keats Avenue intersection under existing conditions, the intersection was assumed to remain all-way stop control under the build conditions analysis. It should be noted that roundabout evaluation and preliminary design is programmed for 2027 based on the *Washington County 2024-2028 Capital Improvement Plan*.
- It should be noted that the analysis assumes there is adequate parent pick-up/drop-off storage provided on-site. The required storage for parent pick-up/drop-offs and potential impacts of inadequate storage are discussed within the site plan review section.
- While not shown in the preliminary site plan, an eastbound left-turn lane was assumed at the 10th Street/Main School Access for the new Lake Elmo Elementary School.
- The operations analysis represents the busiest hour for each respective school at their primary study intersections. Operations for all four (4) school peak periods are shown in the Appendix.

Year 2026 Build Conditions

Results of the year 2026 build conditions intersection capacity analysis are shown in Table 8.

Table 8. Year 2026 Build Intersection Capacity Analysis

Intersection	A.M. Peak Hour ⁽³⁾		School Departure Peak Hour ⁽³⁾		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Lake Elmo Elementary School						
10th Street/Keats Avenue ⁽¹⁾	C	19 sec.	D	26 sec.	F	> 3 min.
10th Street/Lake Elmo Avenue ⁽¹⁾	F	98 sec.	E	37 sec.	F	54 sec.
Lake Elmo Avenue/Hudson Boulevard ⁽²⁾	A/A	8 sec.	A/A	6 sec.	A/B	11 sec.
Lake Elmo Avenue/Bus Access ⁽²⁾	A/A	5 sec.	A/A	5 sec.	A/A	4 sec.
10th Street/Main School Access ⁽²⁾	F/F	> 2 min.	C/F	58 sec.	A/B	14 sec.
Oak-Land Middle School						
10th Street/Manning Avenue	C	26 sec.	C	26 sec.	D	38 sec.
Manning Avenue/Oak-Land MS North Access ⁽²⁾	A/A	10 sec.	A/A	5 sec.	A/A	6 sec.
Manning Avenue/Oak-Land MS South Access	B	14 sec.	A	7 sec.	A	6 sec.

(1) Indicates an all-way stop control, where the overall LOS and delay are shown.

(2) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst side-street approach LOS. The delay shown represents the worst side-street approach delay.

(3) The a.m. and school departure peak hour operations are summarized under each respective school peak period. Note the p.m. peak hour is based on the adjacent roadway network.

The following information summarizes the operational and/or queuing issues identified as part of the year of opening (i.e. 2026 build) intersection capacity analysis. Note the following section summarizes the percentage of trips contributed to the roadway network by the school developments.

10th Street/Keats Avenue:

- The intersection is expected to be overcapacity during the p.m. peak hour, with overall average delays of over three (3) minutes and maximum eastbound queues of 1/2-mile.
- As mentioned previously, this intersection is programmed within the *Washington County 2024-2028 Capital Improvement Plan* for roundabout evaluation/preliminary design in 2027.
- **Recommendation:** The County should execute their CIP and construct a roundabout at the intersection to improve operations and safety.

10th Street/Lake Elmo Avenue:

- The intersection is expected to operate at an unacceptable LOS E/F during the a.m., school departure, and p.m. peak hours. Eastbound queues are expected to be over 600 feet during all three peak hours, and westbound queues are expected to be over 1,500 feet during the a.m. peak hour.
- As mentioned previously, while the intersection is below the average crash rate, there have been eight (8) crashes in the last five (5) years that involved vehicles running the stop sign or failing to yield right-of-way.
- **Recommendation:** The County should consider constructing a traffic signal or roundabout at the intersection to improve operations and better delineate right-of-way.

10th Street/Lake Elmo Elementary Main School Access:

- The southbound approach (i.e. elementary school exit) operates at LOS F and is expected to have queues of 500 to 1,200 feet (25 to 60 vehicles) during the peak 30-minute windows before and after school start and end times.
- Approximately 250 vehicles are expected to make a southbound left-turn movement during the a.m. peak hour, which presents a safety concern given the peak characteristics associated with the school, and the high-speeds (i.e. 55-mph) of the adjacent roadway network. In addition, gaps along 10th Street are expected to be limited, and drivers may accept smaller gaps and make more aggressive movements, which could increase the risk of a potential crash.
- **Recommendation:** Construct a traffic signal or roundabout at the intersection to improve operations and safety.
 - Other options were considered, such as employing traffic control officers, restricting left-turns, or implementing staggered pick-up/drop-off schedules. However, high speeds on the roadway pose a safety concern for traffic control officers. Implementing access restrictions would force vehicles to travel three quarters of a mile to the 10th

Street/Keats Avenue intersection to reroute their travel patterns. Additionally, while staggered pick-up/drop-off schedules could help alleviate some operational challenges, they may inconvenience parents with multiple students and are unlikely to fully resolve the safety and operational concerns.

10th Street/Lake Elmo Elementary Bus Access:

- During school arrival and departure peak hours, an estimated 16 to 18 buses are anticipated to access the site from the south, likely within a similar time window.
- **Recommendation:** While not needed from an operations perspective, given the high speeds (i.e. 55-mph) of the roadway, a northbound left-turn lane is recommended at the school's bus access from a safety perspective.

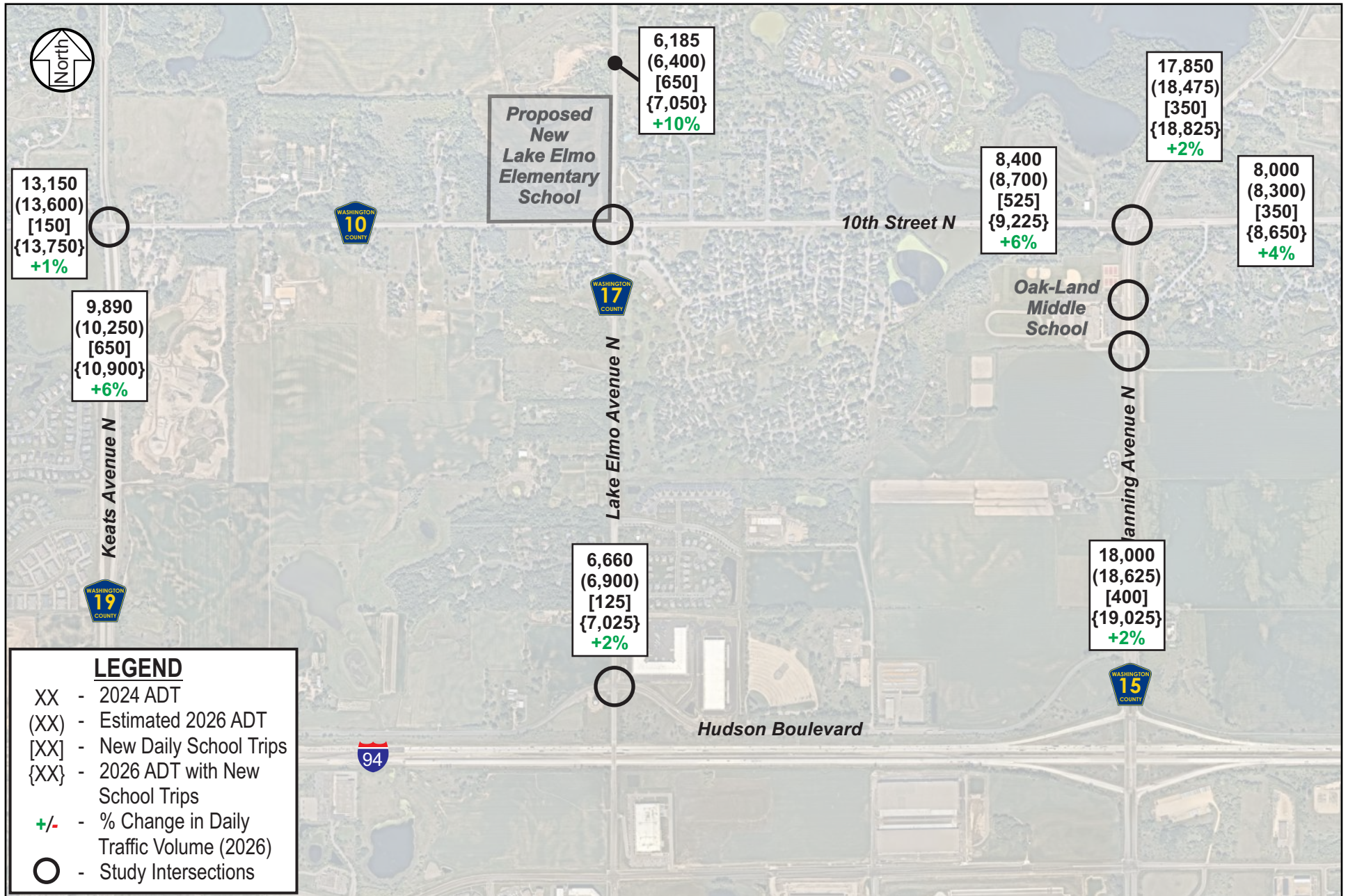
Trip Proportional Share

Based on the year 2026 build conditions analysis, intersection improvements were identified at the 10th Street/Lake Elmo Avenue intersection. The improvements are triggered based on a combination of background traffic and the maximum enrollment of the elementary school. It should be noted that operational issues were identified at the intersection during the p.m. peak hour under existing conditions. Therefore, to identify the number of trips the proposed elementary school contributes to the intersection, a trip proportional share analysis was conducted. The intersection is currently an all-way stop control, therefore, all movements conflict with each other and contribute to the overall operations of the intersection. The trip proportional share, which is shown in Table 9, was developed by taking the expected elementary site trips entering the intersection and dividing them by the total number of entering vehicles under the year 2026 build conditions. The review included daily trips as well as each of the three peak hours analyzed (i.e. a.m., school departure, and p.m. peak hour) given issues were identified under all peak hour scenarios. Note that the proportional share was primarily focused on the Lake Elmo Elementary School trips, as the school times are largely staggered from each other and the increase in trips from Oak-Land Middle School during the p.m. peak hour is expected to be minimal. The resultant proportional share of trips that the proposed elementary school contributes to the intersection ranges from seven (7) to 35 percent.

Table 9. 10th Street/Lake Elmo Avenue - Trip Proportional Share (2026 Build)

Entering Volumes	A.M. Peak Hour	School Departure Peak Hour	P.M. Peak Hour	Daily
Lake Elmo Elementary Site Trips	580	350	125	1,750
Year 2026 Build Total Volumes	1,645	1,490	1,710	18,120
Proportional Share	35%	23%	7%	10%

In addition to assessing the 10th Street/Lake Elmo Avenue intersection, daily volumes were also reviewed along the study roadways. A summary of the current background traffic and the traffic volume changes associated with the school developments is shown in Figure 11. Note the background traffic volumes are based on the 24-hour volumes collected as part of the study and adjusted using the general background growth rate. The ADT comparison indicates that most study roadways are only anticipated to increase by approximately one (1) to 10 percent as a result of the school developments.

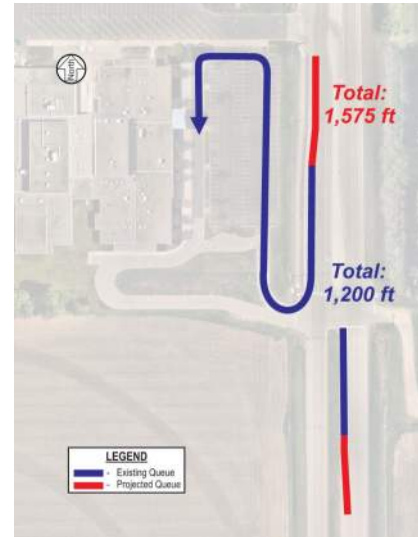


Parent Pick-up/Drop-off Storage

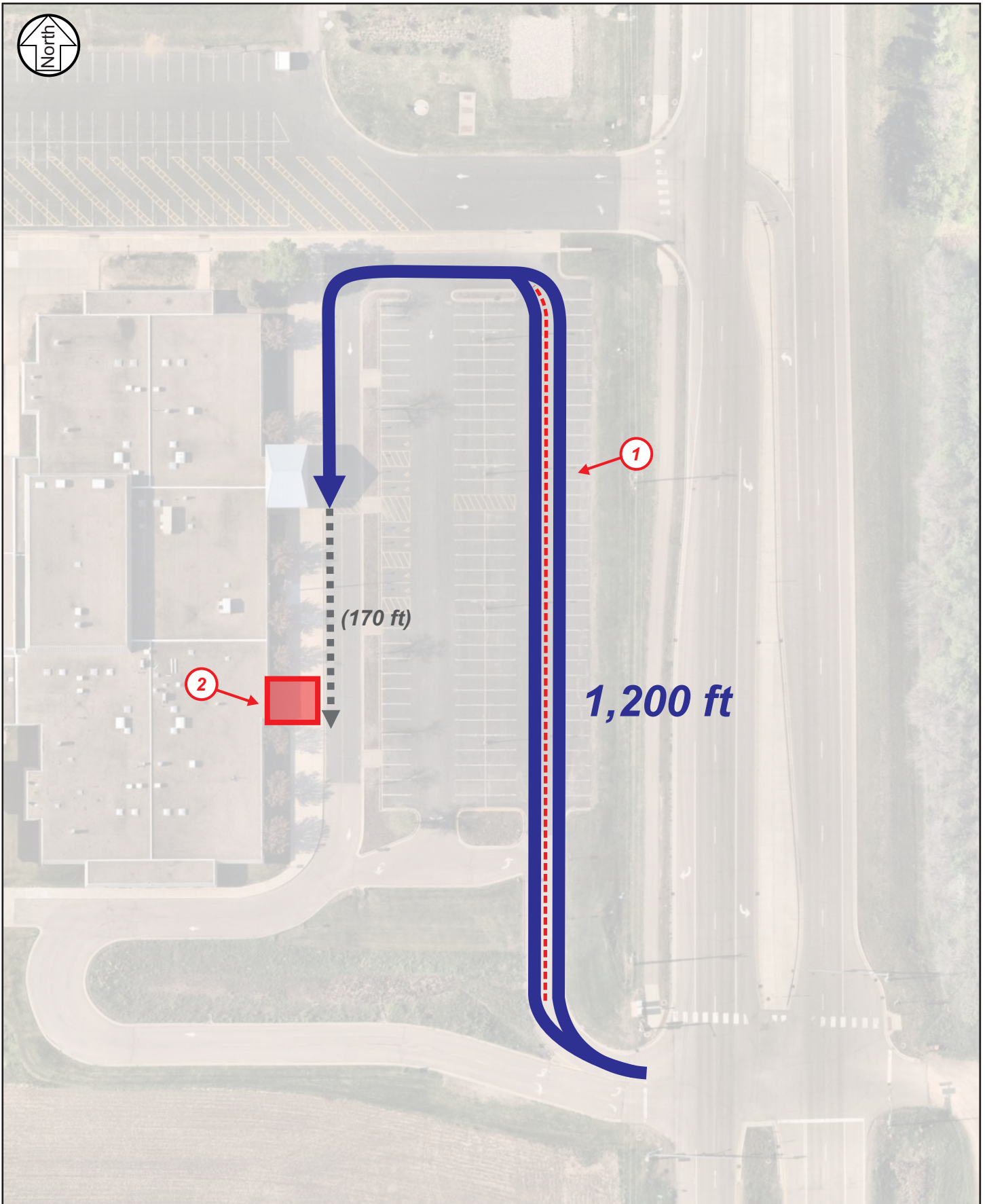
A review of the existing and proposed parent pick-up/drop-off storage was completed to identify any issues and recommend potential improvements to limit any impacts to the adjacent roadway network.

Oak-Land Middle School

As mentioned previously, field observations were performed at the Oak-Land Middle School to identify any access, circulation, and/or parent pick-up/drop-off issues. Observations indicated that internal queueing extended onto Manning Avenue but generally remained within the turn lane storage at the Manning Avenue/Oak-Land Middle School south access intersection. From the main building access, there is approximately 750 feet of single-lane internal queueing storage provided on-site, and approximately 1,200 feet of queues were observed. Projecting forward with the anticipated enrollment increases, approximately 375 feet of additional storage may be required in the future to accommodate increased demand. With the future enrollment, parent pick-up/drop-off queues are expected to extend beyond turn lanes, which may cause friction and additional conflict points along Manning Avenue. Therefore, the following considerations are provided to help increase vehicular storage on-site, which are summarized below and illustrated in Figure 12. It should be noted that there is limited flexibility to improve on-site storage for the site given the existing building footprint/access and the Manning Avenue intersection location.

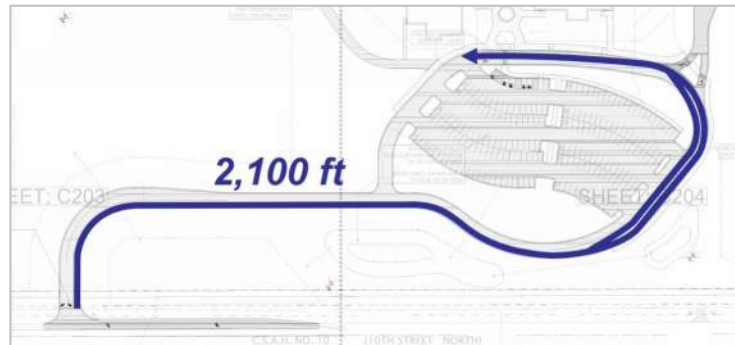


1. Consider implementing a dual-lane entry within the parking lot to provide an additional 500 feet of on-site storage. This configuration allows vehicles to queue in two lanes before merging into a single lane prior to the parent pick-up/drop-off area. The strategy could be accomplished through the use of daily cones, signage, pavement markings, and/or direct communication with parents. It is important to note that this strategy will utilize the full width of the drive isle, which may limit parking and/or maneuvering the parking lot for staff and other users. Additionally, the merge point may present a learning curve for some parents, and initial implementation may require support from the school resource officer. Note this strategy will not alleviate queueing onto Manning Avenue but is expected to maintain queueing within the turn lane storage, similar to what was observed under existing conditions.
2. If feasible, consider providing an additional building access for students on the south side of the building. During observations, it was noted that despite signage, parents did not pull up past the main school entrance, resulting in 170 feet of on-site queueing storage being underutilized. Introducing a south-side access point would encourage parents to utilize this additional storage effectively.
3. Other strategies, such as implementing staggered pick-up/drop-off times for different grades or classes could be considered if issues arise.



Lake Elmo Elementary School

The proposed elementary school layout includes a one-way parent pick-up/drop-off, with two lanes of queueing storage provided near the school's main entrance. Based on the preliminary site plan, there is expected to be approximately 2,100 feet of internal queueing storage provided



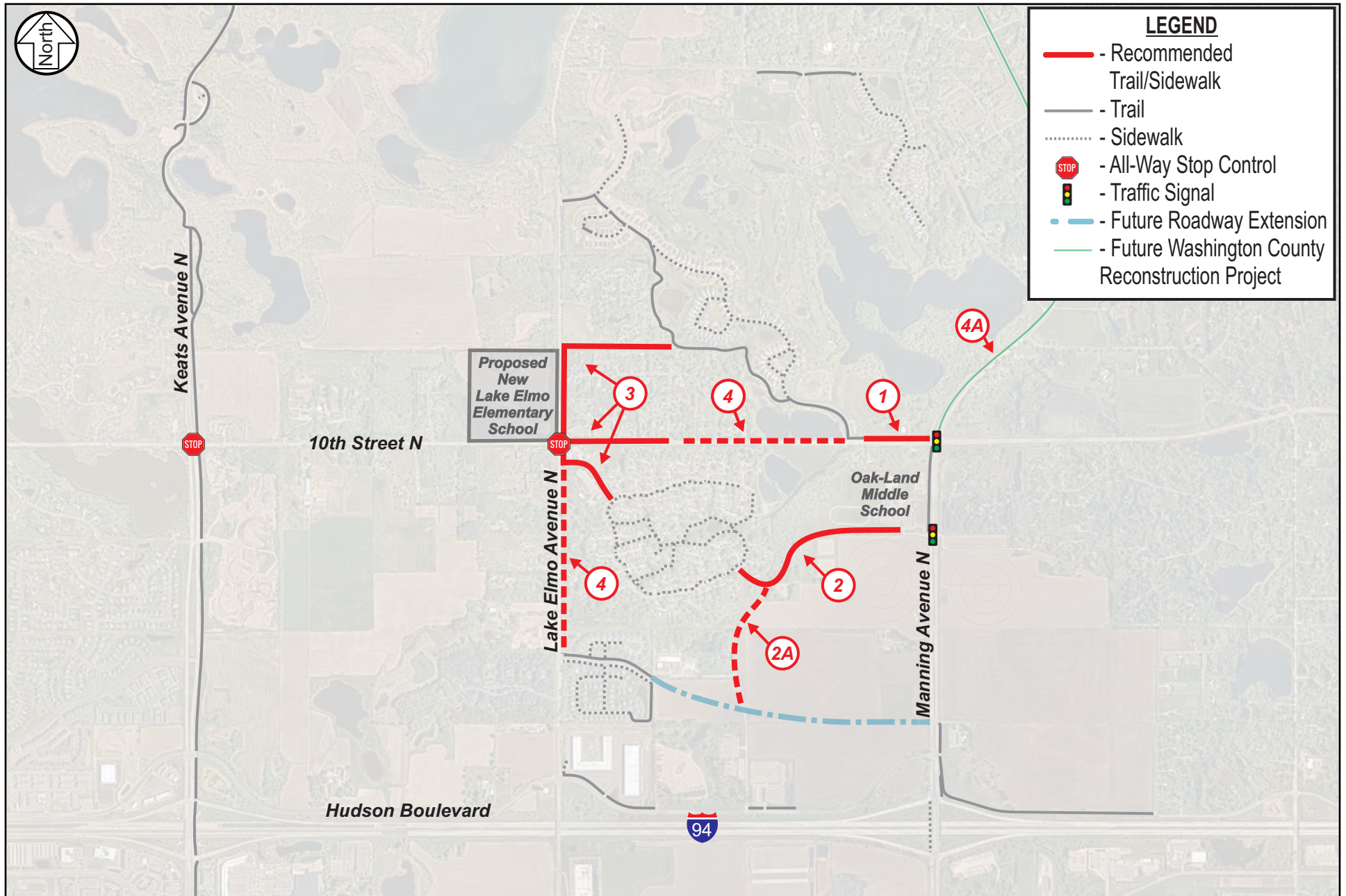
within the parent pick-up/drop-off lane. Based on recent (i.e. 2022 to 2024) queueing studies completed by SRF at multiple elementary schools in/around the metro (including the existing Lake Elmo Elementary School), the expected storage needed for an enrollment of 1,100 students is approximately 2,400 feet. Note this storage represents the school pick-up timeframe, which is often longer than the morning drop-off, as several parents often arrive early and wait for the school release. Comparing the expected storage needed at the proposed elementary school under the max enrollment with the preliminary site plan indicates that there is a potential deficit of approximately 300 feet of storage. This deficit may result in queues along 10th Street to block through traffic, which could cause safety and operational issues. Therefore, the following site plan considerations are provided to help increase vehicular storage on-site and improve internal operations/site circulation, which are summarized below and illustrated in Figure 13.

1. Consider extending the dual-lane storage to just east of the internal intersection to provide an additional 300 feet of on-site vehicular storage. While a dual-lane pick-up/drop-off operation could be considered, it requires significant staffing for successful implementation. The purpose of the dual-lanes in this configuration is to increase the capacity for stacking vehicles on-site before merging them into a standard single-lane pick-up/drop-off area.
 - a. Provide adequate signage and striping to inform parents to form two lanes during school pick-up/drop-offs and merge to one lane near the designated parent pick-up/drop-off area. Note that based on other school observations, this may only be needed during school pick-ups when parents arrive early and wait for the school release. As mentioned previously, the merge point may present a learning curve for some parents, and initial implementation may require support from school staff.
2. Consider reconfiguring or redesigning the parking lot to minimize access points near the parent pick-up/drop-off outlet. This adjustment aims to decrease conflict points, designate right-of-way to reduce driver confusion, and improve circulation.

Pedestrian/Bicycle Considerations

Note the existing pedestrian/bicycle facility network is discussed in the existing conditions section and previously shown in Figure 3. While nearby local neighborhood developments incorporate internal pedestrian/bicycle facilities, the adjacent highways generally lack off-street facilities and pedestrian crossings. The proximity of the two (2) schools to these high-speed county highways presents a challenge in balancing pedestrian connectivity with safety concerns. Enhancing pedestrian access is important for ensuring school accessibility, yet the high-speed nature of the adjacent roadways raises safety considerations. Therefore, the following pedestrian/bicycle considerations are offered, which are also illustrated in Figure 14. It should be noted that there may be several feasibility challenges with the provided considerations, therefore, further discussion should occur with area stakeholders to determine what pedestrian/bicycle facilities options could/should be implemented.

1. Extend the existing trail along 10th Street (trail starts at Palmer Drive but terminates approximately 150 feet to the east) to connect to the Manning Avenue/10th Street intersection. This connection provides Oak-Land Middle School users the ability to walk to/from the neighborhood development along Palmer Drive.
2. Guide future development to include a trail connection from Oak-Land Middle School to the neighborhood to the west. The neighborhood comprises of approximately five (5) percent of the middle school's current enrollment and is within a short walking distance, averaging less than 3/4 mile.
 - a. As mentioned previously, there are upcoming plans to extend 5th Street to Manning Avenue, with off-street trails along the roadway and anticipated residential developments nearby. Therefore, this trail connection could potentially facilitate a future trail connection to the extended 5th Street if/when it gets extended.
3. Similar to consideration #2, there are residential neighborhoods nearby where students could potentially walk or bike if safe facilities were provided. This consideration involves establishing a pedestrian/bicycle connection to/from the neighborhoods to the southeast, east, and northeast of the proposed elementary school. The proposed facilities would cross the adjacent highways at the current all-way stop controlled intersection of Lake Elmo Avenue/10th Street, with potential improvements to a traffic signal or roundabout. Given the roadway speeds, additional support from parents or staff may be desired at the crossing. Nevertheless, this offers another accessibility option that could help alleviate vehicular traffic.
4. The *Washington County Bicycle and Pedestrian Plan (2021)* identifies future off-road pedestrian/bicycle facilities along 10th Street (CSAH 10) and Manning Avenue (CSAH 15). Note both corridors are designated as "high priority" within the plan and would connect the proposed facilities outlined above. While not identified in the plan, an off-street facility could be considered along Lake Elmo Avenue could provide access to the residential development along 5th Street.
 - a. Note Washington County is planning to reconstruct Manning Avenue from 10th Street to 30th Street to provide center left-turn lanes at key locations. As part of the project, off-street pedestrian/bicycle facilities could be considered.



Summary and Conclusions

SRF has completed a transportation study for the new Lake Elmo Elementary School and the additions to Oak-Land Middle School in the City of Lake Elmo, MN. The main objectives of the transportation study were to review existing operations within the study area, evaluate transportation impacts to the adjacent roadway network based on the new elementary school and additions to the middle school, and recommend any necessary improvements to provide safe and efficient operations for all modes of transportation. Key findings of the transportation study are summarized below:

1) Existing Conditions:

- a. **Pedestrian/Bicycle Facilities:** Existing pedestrian/bicycle facilities were assessed, revealing gaps and safety challenges, particularly due to the high-speed roadways surrounding the schools.
- b. **Safety Analysis:** A review of crash data identified patterns and highlighted intersections with higher crash rates, however, none of the study intersections have a crash rate over the critical rate, indicating that no study intersections have a statistically significant crash problem.
- c. **School Observations:** Field observations were conducted at both the Oak-Land Middle School and former Lake Elmo Elementary School to identify travel patterns, pick-up/drop-off queues, and other site-specific issues.
 - i. Parent pick-up/drop-off queues were observed at Oak-Land Middle School to extend onto Manning Avenue for short durations (i.e. 10-minutes) during the school arrival and departure peak hours.
- d. **Traffic Operations:** Existing operational issues were identified at the following study intersections. All other study intersections are expected to operate at an acceptable LOS D or better during peak periods.
 - i. **10th Street/Keats Avenue:** Overall intersection operates at LOS F during the p.m. peak hour.
 - ii. **10th Street/Lake Elmo Avenue:** Eastbound approach operates at LOS E during p.m. peak hour.

2) Traffic Forecasts:

- a. **Background Growth:** A 1.75 percent annual growth rate was applied to existing peak hour traffic volumes to forecast 2026 background traffic.
- b. **Lake Elmo Elementary Trip Generation:** The new Lake Elmo Elementary School is expected to generate approximately 825 a.m. peak hour, 495 school departure peak hour, 176 p.m. peak hour, and 2,497 daily trips.

- c. **Oak-Land Middle School Trip Generation:** The expected enrollment changes at the Oak-Land Middle School are expected to generate an additional 196 a.m. peak hour, 95 school departure peak hour, 59 p.m. peak hour, and 685 daily trips.
- 3) **Future Operations:**
 - a. **Year 2026 Build Conditions:** The following study intersections were projected to experience unacceptable levels of service during peak hours:
 - i. 10th Street/Keats Avenue
 - ii. 10th Street/Lake Elmo Avenue
 - iii. 10th Street/Lake Elmo Elementary School Main Access
 - b. **Trip Proportional Share:** Existing issues were identified at the 10th Street/Lake Elmo Avenue intersection. Therefore, a trip generation analysis was conducted to determine the proportion of trips attributable to the proposed elementary school. It is anticipated that the elementary school will contribute seven (7) to 35 percent of the total traffic volume at this intersection.
 - c. **Parent Pick-up/Drop-off Storage:** Both schools are expected to have a deficit in on-site vehicular storage for parent pick-up/drop-off operations, which may cause impacts to the adjacent roadway network.
- 4) **Recommendations:**
 - a. **Intersection Improvements:** Traffic control improvements (i.e. traffic signal or roundabout) were recommended at the following study intersections to improve operations and safety. In addition, a northbound left-turn lane was recommended at the Lake Elmo Avenue/Lake Elmo Elementary School Bus Access intersection for safety purposes.
 - i. 10th Street/Keats Avenue
 - ii. 10th Street/Lake Elmo Avenue
 - iii. 10th Street/Lake Elmo Elementary School Main Access
 - b. **Site Plan Recommendations:** Recommendations were provided for both schools to improve internal circulation and expand on-site queuing storage to accommodate the increased vehicular demand expected during peak periods.
 - c. **Pedestrian/Bicycle Connectivity:** Enhancements were proposed to create safer connections for pedestrians and bicyclists, including trail extensions and new crossings, to promote active transportation.

MEMORANDUM



Date: August 26, 2024

To:	Nathan Fuerst, Planning Consultant	Re:	Oak-Land School CUP/Minor Subdivision
Cc:	Jason Stopa, Community Development Director		PID 36-029-21-11-0002
	Sophia Jensen, City Planner		PID 36-029-21-11-0003
	Marty Powers, Public Works Director		
	Chad Isakson, PE, Assistant City Engineer		
From:	Jack Griffin, PE, City Engineer		

Engineering has reviewed the ISD 834 Oak-Land Middle School CUP and Minor Subdivision site plans received on August 16, 2024. The review consisted of the following documentation:

- Application Narrative dated August 2, 2024.
 - Oak-Land Middle School Addition Civil Site Plans, Sheets C000 and C703, dated August 2, 2024.
-

PRELIMINARY AND FINAL PLAT

1. County Roadway Right-of-way Dedication. As part of the Minor Subdivision, right-of-way dedication must be provided along Manning Avenue (CSAH 15) and 10th Street (CSAH 10) in accordance with the Washington County Transportation Plan and as approved by both the City and the County. The Preliminary and Final Plat documents submitted as part of the application lack sufficient detail to allow for City review and approval. Revised Preliminary and Final Plats are needed to detail the right-of-way dedication requirements and to depict how those requirements are being met.
2. The extension of public watermain is proposed as part of the School Addition CUP/Minor Subdivision. Easements must be provided, minimum 30-foot-wide centered over all public watermain/hydrant(s) when not located within the public right-of-way. Easements must be free from all encroachments, including retaining walls, trees, fences, small/dry utilities, or storm water management BMPs. Easements have been shown on the Preliminary and Final Plats, however, extensive revisions will be required once the final utility layout is approved by the City.
3. The Preliminary Plat scale must be corrected to facilitate additional review.

TRANSPORTATION IMPROVEMENTS AND ACCESS

1. Access Management. The CUP/Minor Subdivision approval should be contingent upon the District agreeing to allow the southern secondary school access to Manning Avenue to be relocated further south when the future neighborhood collector roadway is needed to serve this future development area.
2. Plan Sheet AP 5 should be revised to remove the Future Development Access proof of concept. The exhibit shows that the future development access does not work as intended to serve as a neighborhood collector roadway for the future development area. The southern school access to Manning Avenue will be required to be relocated further south of the existing signalized intersection and the school will be required to reconnect to the new access location at its sole cost.
3. The City supports the County's request for the District to make internal site and operational improvements as necessary to mitigate the peak traffic cueing onto Manning Avenue (CSAH 15) by parent drop-offs and pickups.

STORMWATER MANAGEMENT

1. The site plan is subject to a storm water management plan (SWMP) meeting State, Valley Branch Watershed District (VBWD) and City rules. Storm water facilities proposed as part of the site plan to meet State and VBWD permitting requirements must be constructed in accordance to City Engineering Design Standards dated January 2022, even though the facilities will remain privately owned.
2. All stormwater facilities and BMPs will be privately owned and maintained by the school district. The school district will be required to provide a Stormwater Maintenance and Easement Agreement in accordance with the City's standard form of agreement.
3. All storm water basins must be placed in easements in accordance with the Stormwater Maintenance and Easement Agreement. The easements must fully incorporate the 100-year HWL, 10-foot maintenance bench and all maintenance access roads. Maintenance access roads meeting City standards must be provided for all storm water facilities and structures.
4. The SWMP will be required to verify that rate control and volume control requirements are met for all points of discharge from the site. The existing and proposed drainage exhibits must clearly show and label all points of discharge from the site, including any required public improvements and turn lanes. The SWMP rate control tables must reference each discharge location independently and combined.
5. Overland emergency overflows (EOF) or outlets will be required as part of the site plan and the EOFs and EOF flow routes must be protected by easement.
6. Minimum floor elevations must be at least 2 feet higher than the adjacent 100-year HWL elevation. Also, all low opening elevations for all buildings must be at least 1-ft higher than any adjacent emergency overflow elevation (EOF). All building low floor and low opening elevations must be listed on the site and grading plans.
7. All localized low points must be protected within a drainage easement.

MUNICIPAL WATER SUPPLY AND PUBLIC SANITARY SEWER

1. The proposed site is located within the City designated Municipal Urban Service Area (MUSA) for sanitary sewer service. Due to the plans to expand the school use, the extension of public watermain and sanitary sewer should be implemented as part of the improvements. A feasibility report has been authorized to identify the scope of improvements and costs necessary to connect the Oak-Land Middle School to City water and sewer.
2. Connection to City water and sewer would be made available by extending a 12-inch diameter trunk watermain and 8-inch diameter gravity sanitary sewer pipe from the intersection of Palmer Drive and 10th Street, and extend these utilities easterly along 10th Street to the northern District property line. For the sanitary sewer, additional lift station and forcemain improvements will need to be completed to accommodate the added sewer flow. The District would then be responsible for paying their prorated costs for these City installed improvements and then connecting to the City water and sewer stubs and to route additional infrastructure internal to the site.
3. The District's internal site improvements must include water and sewer connection to the Oak-Land Middle school, the placement of fire hydrants and water system valves internal to the site as determined by the Lake Elmo Public Works Director and Fire Department, and the extension of a 12-inch diameter trunk watermain from the District's northern property line and stubbed to the District's southern property line for future development to the south.
4. The internal site sanitary sewer would be a privately District owned sewer service. The internal watermain serving all hydrants and stubbing to the southerly property would remain City owned. Minimum 30-foot easements centered over the pipe/hydrant will be required when not located within the public right-of-way. Easements must be free from all encroachments, including retaining walls, trees, fences, small/dry utilities, or storm water management BMPs. Easements must be dedicated to the City as part of the project.
5. Watermain oversizing costs apply to watermain pipe sizes over and above the minimum 8-inch diameter design standard. Reimbursement of oversize costs are addressed as part of the site improvement agreement.

PRELIMINARY PLANS/CONSTRUCTION PLANS

1. Existing conditions plan sheets must be revised to include all required existing condition information as shown on the Topographic Survey plan sheet, including all easements and property lines being labeled and dimensioned.
2. Utility Plans must be revised to clearly depict public vs. private utility ownership. Watermain layout must be revised to provide additional and relocated hydrants as directed by the Lake Elmo Public Works Director and Fire Department. The watermain running north-south across the property from 10th Street to the southern school district property line shall be increased to a 12-inch DIP watermain.
3. The grading plans must be revised to include all design information required by the City design standards, including all basin and low area 100-year HWL elevations, all NWL elevations, all building low floor and low opening elevations, all low area EOF's, a clear depiction of the EOF flow route throughout the site, all storm water basin maintenance access roads, and all required stormwater easements.
4. Detail plan sheets must incorporate all City standard details for erosion control and watermain utilities and all conflicting details must be removed.

LAKE ELMO FIRE DEPARTMENT – OFFICE OF THE FIRE MARSHAL

Fire Prevention, Code Enforcement, and Public Education



August 26, 2024

Sophia Jensen, Planner
City of Lake Elmo

Re: Stillwater Schools Oak Land Middle School – CUP, Variance, Minor Subdivision

Prepared by: Anthony Svoboda, Fire Marshal

Approved by: Dustin Kalis, Fire Chief

Applicable Codes:

- 2020 Minnesota State Fire Code
- 2020 Minnesota State Building Code
- Lake Elmo Fire Department Fire Code Policies
- NFPA 13, 2016 edition

Fire Department Comments:

Roads, Drive Lanes, and Parking Areas

- All roads and drive lanes shall meet the Lake Elmo Fire Department requirements for widths and turning radiuses.
- Approved fire apparatus roads shall be provided and maintained throughout all development phases in coordination with engineering, public works, planning, and fire departments.
- An approved signage and marking plan shall be determined for all No Parking and Fire Lane access roads. On-street parking shall be provided in approved locations following review by Engineering and Public Works. Parking shall be prohibited on both sides of private drive lanes.
- All parking areas shall be capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds.

Emergency Responder Radio Coverage

- A site review, conducted by the Lake Elmo Fire Department, is required to determine the requirements for an Emergency Communications Bi-Directional Amplifier (BDA).

LAKE ELMO FIRE DEPARTMENT – OFFICE OF THE FIRE MARSHAL

Fire Prevention, Code Enforcement, and Public Education



Fire Detection and Suppression

- A fire sprinkler system, in compliance with applicable codes, shall be installed throughout the existing building (brought to current code standards) and future additions. Fire sprinkler system water supply shall be connected to city water, supplied through the appropriately sized water supply system. A fire sprinkler system engineer shall inspect the existing system and confirm, if any adjustments are needed when switching from the standby tank system to city water. A permit is required prior to any work.
- Fire hydrants shall be provided in approved locations following review by Engineering and Public works.
- A fire alarm system, in compliance with applicable codes, shall be installed throughout the existing building (brought to current code standards) and future additions. The fire alarm system shall be monitored by a qualified monitoring company and include an addressable dialer.

Gates, Locks, and Access

- Project construction phasing shall accommodate emergency access to the entire construction zone at all times, generally meaning two separate means of entrance/exit as defined in the code. Phasing plan to be approved by the fire department prior to construction.

Questions, clarifications, or the request to provide code documents can be made using the contact information listed below.

Respectfully,

Anthony Svoboda



Anthony Svoboda | Assistant Chief

Lake Elmo Fire Department

Fire Station #1 - 3510 Laverne Ave N. | Lake Elmo, MN | 55042

651-747-3907 office | www.lakeelmo.org

Memorandum

August 27, 2024

TO: SOPHIA JENSEN
FROM: SARAH EVENSON, PLA
RE: STILLWATER SCHOOLS: OAK-LAND MIDDLE SCHOOL LANDSCAPE PLAN REVIEW

SUBMITTALS

1. Concept Plan Submittal, dated 07/09/2024, received 07/23/2024.
2. CUP, Minor Subdivision, and Variance Submittal, dated 08/02/2024, received 08/07/2024.

REVIEW HISTORY

1. August 27th, 2024: CUP, Minor Subdivision, and Variance Submittal Landscape Plan Review

LOCATION: 820 Manning Avenue, Lake Elmo MN 55042

CURRENT LAND USE CATEGORY: Public Facilities (PF)

ADJACENT AND SURROUNDING LAND USE: Golf Course Community to the north, Rural Residential to the north and west, Medium Density Residential to the west and south, Rural Transitional to the south. West Lakeland Township is to the east.

SPECIAL LANDSCAPE PROVISIONS: Shoreland Overlay District for Rose Lake along the northwest 2/3 of the site

TREE PRESERVATION PLAN: [105.12.470](#)

- A tree preservation plan was submitted, but requires the following adjustments prior to approval:
 - Sheet C100 shows tree protection fencing in the legend, but not on the plans. Please include this fencing on the plans and add the City Standard Detail for tree protection to this sheet or refer to it if placed elsewhere within the set.
 - Rename sheet C500 with the title “Tree Preservation Plan” and revise the sheet callouts in each quadrant with the appropriate numbers (C501, C502, or L100, L101 etc.)
 - Revise the tree inventory on sheet C505 to remove the following species from the table, as they are not considered significant: Siberian elm, box elder, and Eastern cottonwood.
 - Revise the total significant inches number on sheets C500 and C505. Edit calculation of percent inches removed accordingly. No tree mitigation will be required if the total inches proposed to be removed still falls under 30% of the total, but this needs to be confirmed.

LANDSCAPE PLAN: [105.12.480](#)

- A landscape plan was submitted, but requires the following adjustments prior to approval:
 - Please provide calculations that confirm the number of trees required per the landscaping code: 5 trees per disturbed acre + interior parking lot landscaping trees (may be counted

toward the disturbed acre requirement). Also include any trees required by the revised tree preservation plan.

- Interior parking lot landscaping is required for the proposed parking expansion: 1 tree for every 10 parking lot spaces or fraction thereof. With more than 40 spaces, 5 trees will be required. Please add an additional tree within a planting island or along the border of the parking lot.
- Ground cover materials should be defined with their own separate hatches (seeded, sodded, and mulched areas) showing the extent of disturbed area restoration.
- Provisions for irrigation are required. Please include an irrigation plan or notes detailing how trees and planting materials will be watered through the warranty period.
- Include the City Standard Tree Planting Detail.
- Revise landscaping note #7 on sheet C600 to read “6’ diameter and 4” deep.”
- A Topsoil Preservation Plan is required per 105.12.480 (a) (9). I could not locate an area showing where site topsoil would be stored on the plans. Please ensure this is called out somewhere on the drawings (Sheet C300 would be a good place).

GENERAL NOTES:

- I have some concern about how well American Larch will do on the dry slope along the utility corridor that extends up to 10th street. They generally want more soil moisture. I would recommend selecting another species.
- Please select a Dutch Elm-resistant cultivar of Elm rather than specifying Ulmus Americana.

RECOMMENDATION:

The landscape and tree preservation plans must be revised and resubmitted to address the items in this memo.



Sarah Evenson, PLA (MN)

City of Lake Elmo Municipal Landscape Architect
P: (262) 391-7653 E: sarah@hkgi.com



PUBLIC WORKS

Wayne Sandberg, P.E., Director, County Engineer
Frank D. Ticknor, P.E., Deputy Director

August 28, 2024

Sophia Jensen
City Planner
City of Lake Elmo
3880 Laverne Avenue
Lake Elmo, MN 55042

Oak-Land Middle School – Conditional Use Permit, Minor Subdivision, and Variance Application

Dear Sophia,

Thank you for the opportunity to review and comment on the application for the Oak-Land Middle School expansion, located along County State Aid Highway (CSAH) 15 (Manning Avenue) and adjacent to the intersection of CSAH 15 & CSAH 10 (10th St). The county thanks the City of Lake Elmo and the Stillwater School District for meeting with the county to discuss the expansion of the school that meets the community's needs while also providing for safe transportation connections. The county will continue coordinating with the district and city on this expansion, but we have concerns with some of the design details.

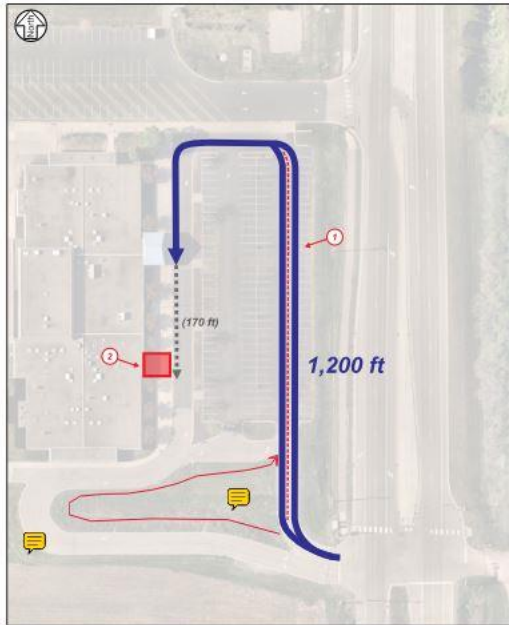
The plan proposes two new science classrooms, six general education classrooms, and a two-station gymnasium. According to the narrative, this would potentially increase the staff by 23 and add 210 students.

The school is heavily dependent on vehicular transportation as the area largely lacks pedestrian connections, and the school is located within walking distance of a few residences. Despite recent investments in a traffic signal and additional length on the exit lanes, the school currently has issues with vehicles queuing along CSAH 15 and delays in exiting the site during peak times. Queuing on highway shoulders or turn lanes causes obstructed sight lines for drivers, the denial of left-in access during peak times, and incentivizes drivers to make U-turns to join the queue. Washington County is concerned that expanding the school enrollment will exacerbate the queuing, delay, and safety issues if additional improvements are not made to provide more internal vehicle stacking space.

The traffic plan submitted with the application states, "With the future enrollment, parent pick-up/drop-off queues are expected to extend beyond turn lanes, which may cause friction and additional conflict points along Manning Avenue." **The county would not permit an access for which the plans indicated that queues extended into traffic** on any roadway, much less a 55-mph county highway. As such, the county offers the following recommendations regarding the queueing plan:

1. Providing two internal circulation lanes to allow leap-frogging may be beneficial, allowing parents to pull forward to reach any open curb gaps rather than proceeding single-file.

2. Another option would be to increase inbound capacity modifying the inbound lanes to wrap around parallel to the exit lanes, as shown in the image below. The outbound lane could possibly be able to be reduced to a single lane in this area, but two exiting lanes will still be needed for a sufficient distance on approach to the traffic signal.



3. The construction of pedestrian infrastructure, particularly connecting to the existing neighborhoods located along Palmer Drive and a connection to the Cimarron development will help reduce the need for vehicular trips to the school and is consistent with County long-term plans.
4. As the area to the south develops, the school, city, and county should work collaboratively to reduce vehicular dependency by constructing and integrating non-motorized connections to the surrounding community. The pedestrian routes should connect with nearby neighborhoods, both existing and planned, and provide safe and reasonable direct access into the school site itself.

Although not part of the current proposal, the district's drawing showing future additional expansion phases would require relocation of the current outbound traffic lanes, and likely necessitate future expansion of the school site southward into what is currently private property. Such expansion, along with a new east-west street serving new development, could provide valuable opportunities to improve internal stacking space and safer access to the county highway system. Any such improvements will necessitate careful coordination between the property owner, city, school, and county regarding relocation of the existing signalized intersection and future additional development of the property to the south. It would be advantageous to have preliminary discussions this year regarding those future phases to ensure that current proposals do not preclude such future improvements. Any reconstruction or relocation of the intersection would be subject to Washington County's Cost

Participation Policy #8001 for Cooperative Highway Improvement Projects, which can be found here: <https://www.co.washington.mn.us/DocumentCenter/View/54003/Cost-Policy>.

Utilities

In their 8/02/2024 Conditional Use Permit Variance Submittal to the City, Wold Architects and Engineers states that the District is considering connections to public water and sewer utilities. As stated the property is currently served by onsite well and septic system and these systems. Prior to approval of the proposed expansion, the wastewater treatment needs must be addressed. If onsite subsurface sewage treatment is necessary, the current system must either be inspected and found to be compliant and adequate or properly abandoned and replaced with an approved new installation. Because onsite sewage treatment systems require natural soil for placement and have setbacks to structures, property lines, and other infrastructure both on and off the site, it is important that these utilities and needs be addressed early in the planning process to avoid having to reconfigure site plans and improvements later in the process.

Permits, Requirements, and Submittals Required by the County

- The necessity of an access permit will depend on the final plans for the school design/addition. The district and city should continue to work with the county on plan development. Washington County Ordinance 188 indicates the following: “Permit Required. Except as otherwise provided in this Code, no person may access, landscape, place a service utility, excavate/grade, or obstruct any County Road right of way without first registering and having obtained the appropriate right of way permit from the County to do so. **Additionally, no person may substantially change the intensity of use of an existing access, in such a way that the County Engineer determines that such change in use will adversely affect the safety or operations of the County road, without first registering and having obtained the appropriate access permit from the County to do so.** Multiple permits may be required, as determined by the Engineer, for a single activity”.
- A Right-of-Way Permit will be required for any work within the county highway right-of-way as it relates to the expansion project. As the project progresses, a plan-set will be required with the application and include any grading, culvert installation, water and sewer services, parallel trail development, signage, landscaping and any other improvements within the county right-of-way.
- All utility connections to county highway right-of-way for the development will also require separate Washington County Right-of-Way permits.

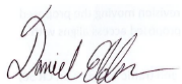
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P: 651-430-6001 | F: 651-430-6017 | TTY: 651-430-6246
www.co.washington.mn.us

Washington County is an equal opportunity organization and employer

Washington County looks forward to working with the City of Lake Elmo and the Stillwater School District to ensure that development in this area is successful and well-served by the transportation network. We look forward to meeting and continuing the discussion regarding the expansion of the school.

Sincerely,

A handwritten signature in dark ink, appearing to read "Daniel Elder".

Daniel Elder
Planner II
Washington County Public Works

Cc (email only):

Kevin Corbid, Washington County Administrator
Jennifer Wagenius, Washington County Deputy Administrator
Jan Lucke, Washington County Deputy Administrator
Wayne Sandberg, Public Works Director/County Engineer
Frank Ticknor, Deputy Director Public Works
Lyssa Leitner, Planning Manager
Joe Gustafson, Traffic Engineer
Kevin Peterson, Design Engineer
Mark Drommerhausen, Stillwater School District Director of Operations
Nicole Miller, City Administrator, City of Lake Elmo