

Memorandum

To: Chloe McGuire, Deputy Community Development Director

From: Megan Rogers; Breck School Development Team

Date: November 3, 2025

Re: Summary of Pre-Application Engagement

I. Overview

Breck School has engaged in a comprehensive, transparent, and proactive neighborhood and staff engagement process preceding the submission of its PUD and Preliminary Plat application. The goal of this process has been to ensure that the School's 25-year campus plan reflects meaningful community input and City collaboration from the earliest stages of project development.

II. City Staff Coordination

Prior to application submittal, Breck School through its consultant team met with City staff to discuss process expectations, timelines, and initial conceptual proposals. These early meetings established a shared understanding of procedural requirements, key policy considerations, and community priorities that informed the design and phasing of the proposed comprehensive site plan.

III. Neighborhood Engagement

- a. **Neighborhood Meeting #1 – Project Introduction.** In May 2025, Breck hosted an introductory neighborhood meeting to present the preliminary comprehensive site plan to residents. Outreach methods included:

- Mailed invitations to all property owners within 1,000 feet of campus
- Development page established on Breck's website:
<https://www.breckschool.org/about-breck/neighborhood-updates>
- Email notifications to prior community participants and Tyrol Hills listserve.

During this meeting, attendees were introduced to Breck's dedicated development website for ongoing updates and feedback opportunities. A neighborhood mailing list was also created to facilitate direct communication and meeting follow-ups.

- b. **Topic-Specific Follow-Up Meetings:** Feedback from the May meeting identified two key areas of community interest: Natchez Park and traffic circulation. Breck responded by organizing separate, focused meetings on each topic.

- *Natchez Park Meetings (June/July 2025)*

The preliminary plan proposed Breck-funded improvements to Natchez Park and expansion of environmental learning trails extending throughout the Highway 100 field. Through two community meetings, advertised via the development website, neighborhood listserv, and email list, the School heard clear feedback that neighbors value the existing character of Natchez Park and were not supportive of increased Breck programming or usage in that space. As a direct result, Breck redesigned its plans to remove the proposed park improvements.

- *Traffic Meetings (October 2025)*

Breck held two additional public meetings focused solely on traffic impacts, inviting City staff and elected officials to participate. These sessions were also advertised through the same outreach channels and helped refine circulation planning and coordination with the City's long-term transportation goals. The draft traffic study prepared by SEH was provided to attendees. Neighbors requested ongoing engagement on the proposed plans and referenced their support

III. Ongoing Communication

At each meeting, Breck updated and expanded its mailing list to ensure comprehensive notice and continued transparency. Meeting summaries, plan revisions, and schedule updates have been regularly posted on the School's public engagement webpage and shared with attendees by email. In compliance with City requirements, Breck will hold a formal neighborhood meeting at Golden Valley City Hall, currently proposed for November 20th, following submission of its application, with mailed and electronic notice provided consistent with the City's neighborhood meeting and public notice guidelines.

Breck School has undertaken a sustained, good-faith effort to engage neighbors and City representatives well in advance of formal applications. The School's design evolution reflects direct community input, particularly regarding Natchez Park preservation and traffic management, demonstrating Breck's continued commitment to thoughtful, collaborative campus planning that balances institutional needs with neighborhood interests.

4904-4457-3559, v. 1

Breck School Comprehensive Site Plan Traffic Study

Golden Valley, MN

BRSCH 184195 | October 3, 2025



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Breck School Comprehensive Site Plan Traffic Study

Prepared for Breck School

1 Introduction

This traffic study provides the findings related to the Breck School site as part of the school's Comprehensive Site Plan update, analyzing potential improvements both on-site and on the adjacent roadway network. Breck School is located on the north side of Glenwood Avenue, also known as County State Aid Highway (CSAH) 40, just east of Trunk Highway (TH) 100. Recently, the school purchased the Golden Valley American Legion site, located adjacent to the school site on Lilac Drive. With the purchase of the property, the school is looking to update their comprehensive site plan, which includes a new athletics building, improvements to the existing school buildings, and improvements to the outdoor spaces on campus. As part of the comprehensive site plan, Breck is not planning to increase school enrollment above the existing approximately 1,200 students.

It is Breck's goal to plan for the future as well as be good neighbors for their North Tyrol neighborhood. The purpose of this traffic study is to better understand the existing issues and then analyze potential improvements to safety and traffic operations both on-site and on the adjacent roadway network of Glenwood Avenue, Natchez Avenue, and Chatelain Terrace.

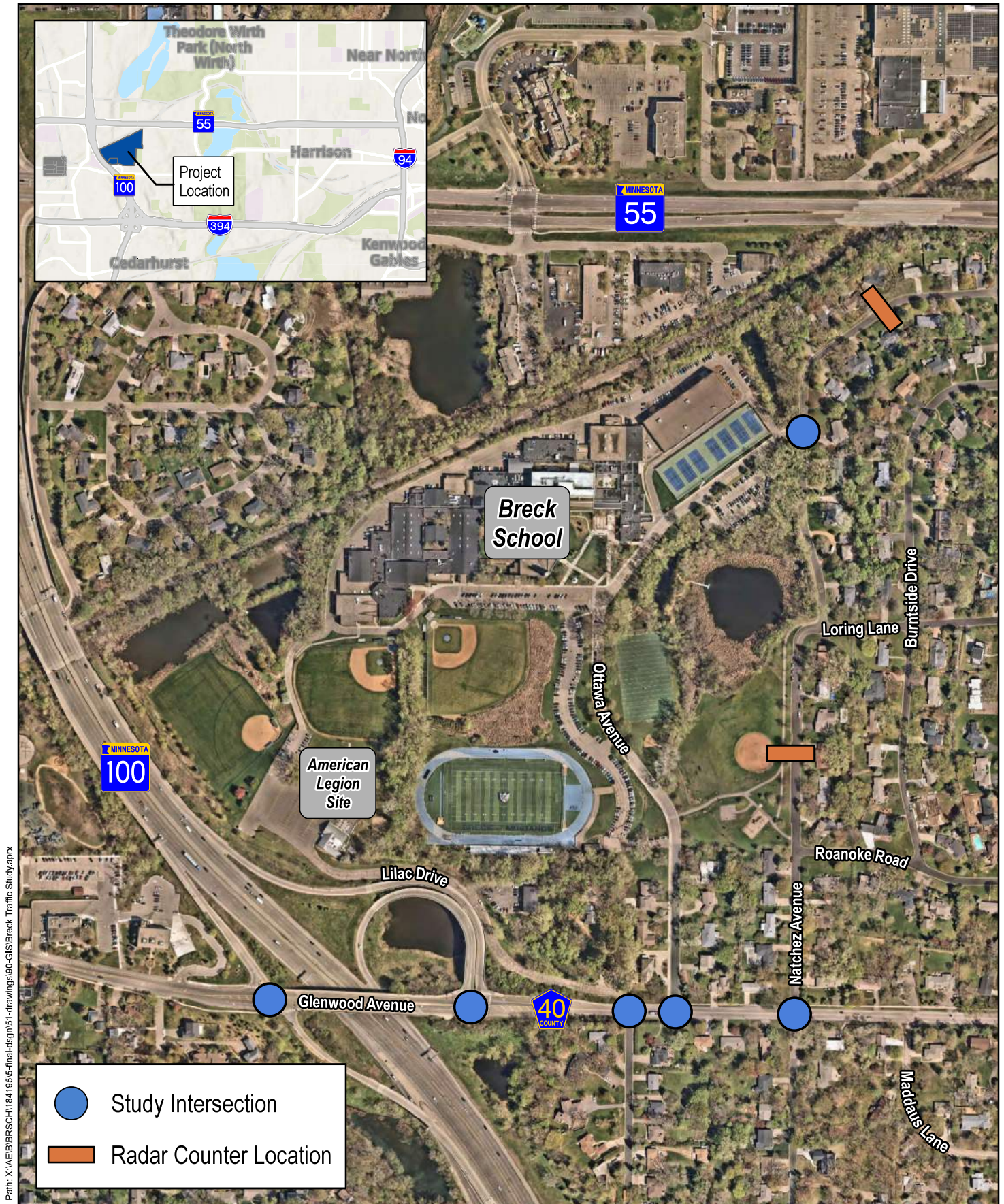
With no increase in school enrollment and limited growth expected in the area, traffic operations were only analyzed under existing 2025 conditions, looking at the AM (school arrival), school dismissal, and PM peak hours. In addition, this study observed and analyzed both weekday events and Sunday events at the school.

Speed and volume data was collected at two locations within the residential neighborhood to the east of the school campus, where there has been concerns from neighbors with vehicle volumes and speeds on the neighborhood roadways.

This study analyzed six intersections adjacent to the site, including the three existing school accesses, two along Glenwood Avenue and one to Natchez Avenue/Chatelain Terrace in the residential neighborhood on the east side of the campus.

- Glenwood Avenue at the Southbound TH 100 Ramps Traffic Signal
- Glenwood Avenue at the Northbound TH 100 Ramps Traffic Signal
- Glenwood Avenue at Lilac Drive/Ottawa Avenue S..... Minor Stop Control
- Glenwood Avenue at Ottawa Avenue N Minor Stop Control
- Glenwood Avenue at Natchez Avenue Minor Stop Control
- Ottawa Avenue N at Natchez Avenue/Chatelain Terrace..... Minor Stop Control

Figure 1 shows the project location, study intersections, and radar count locations.



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 Study Intersection

 Radar Counter Location

		Project: BRSCH 184195 Print Date: 9/25/2025 Map by: jdanibas Projection: Washington Co Coord Source:	Project Location Breck School Master Plan Traffic Study Golden Valley, MN	Figure 1
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This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

2 Existing Conditions

2.1 Breck School Site

The existing Breck School site serves students from pre-school through 12th grade, with approximately 1,200 students currently enrolled. The school has three parts, the lower school (pre-school to 4th grade), middle school (5th to 8th grade), and upper school (9th to 12th grade).

Breck School has three access points, with Glenwood Avenue at Ottawa Avenue N being the primary access for buses, parking, and parent pick-up/drop-off. The access on the east side of the site to Natchez Avenue also provides access to parking lots and the parent pick-up/drop-off area. The Glenwood Avenue at Lilac Drive access serves as the access to a student/staff parking lot, former Golden Valley American Legion site, and other businesses/homes along Lilac Drive. There is a one-way exit roadway on the west side of the school site that connects to Lilac Drive, which serves as another exit point for vehicles on site, especially those using the parent pick-up/drop-off.

Currently, all school buses enter the site on Ottawa Avenue N, loading and unloading students on the north side of the building, and then exiting the site on Ottawa Avenue N. Athletic charters for after school sports often enter the school site via Natchez Avenue.

On-site, there is student/staff parking located throughout the campus, with a single parent pick-up/drop-off location on the south side of the school. Visitor parking on-site is provided in the northernmost parking spaces of the parking lot on the west side of Ottawa Avenue N. Additional visitor parking occurs on-street on Ottawa Avenue N.

Figure 2 shows the existing school site, noting major parking, pick-up/drop-off, and bus loading/unloading areas.

2.2 Roadway Network

Glenwood Avenue (CSAH 40) is an east-west, minor arterial roadway that runs along the south side of the Breck School site. Glenwood Avenue provides access to TH 100, just west of the school site, as well as TH 55, I-394 (via Xenia Avenue), Theo Wirth Park, downtown Minneapolis to the east, and many residential and commercial land uses. In the study area, Glenwood Avenue is a 2-lane undivided roadway with turn lanes only at the TH 100 ramp intersections. At both school access points (Lilac Drive and Ottawa Avenue N), Glenwood Avenue does not have any existing turn lanes. The latest annual average daily traffic (AADT) for Glenwood Avenue east of TH 100 is 7,765 vehicles per day. The posted speed limit on Glenwood Avenue is 35 mph.

Ottawa Avenue N serves as the main access point to Breck School and is a city roadway for approximately 500 feet north of Glenwood Avenue before entering the school site. Other than Breck School, Ottawa Avenue serves several residential properties located between Glenwood Avenue and the school site. Ottawa Avenue N is a two-lane, undivided roadway with a speed limit of 30 mph and a school zone speed limit of 20 mph.

Lilac Drive is a two-lane, local roadway that provides access to Breck student/staff parking, the former American Legion site, Civil Site Group PC, and a single-family residence. The speed limit on Lilac Drive is 30 mph.

Natchez Avenue is a two-lane, local roadway that runs north-south through the residential neighborhood on the east side of the Breck School site. The roadway provides access to many single-family homes as well as Natchez Park and the Breck School site. The speed limit on Natchez Avenue is 30 mph.

Chatelain Terrace extends north from Natchez Avenue on the northeast side of the Breck School site. The roadway provides access to single family homes as well as providing access to the Breck School site. Chatelain Terrace provides a connection to the Olson Highway Service Road, which provides access to/from TH 55. The speed limit on Chatelain Terrace is 30 mph.

2.3 Site Observations

As part of this study, the school site was observed during the AM (school arrival) peak hour, school dismissal peak hour, and during two different event days on site to understand how the campus currently operates to better analyze potential safety and operational improvements on site and on the surrounding roadway network.

2.3.1 AM (Arrival) Peak Hour

During the AM peak hour, there is a significant amount of traffic entering the site between 8:00 and 8:30 AM to park or drop-off children. The significant traffic demands, especially in the 15-minute just before school starts, result in congestion in and around the Breck School site. To improve traffic flow and manage vehicle queues, there are three staff-controlled intersections and one police controlled intersection in the school area, which are listed below:

Breck Staff Controlled (8:00 to 8:30 AM)

- ***The west end of the parent drop-off area*** – staff member keeps drop-off traffic moving and manages conflicts between pedestrians, buses, drop-off vehicles, and parking vehicles in the drop-off area.
- ***Ottawa Avenue N at the Pick-up/Drop-off Plaza*** – staff member manages conflicts between pedestrians crossing the west side of the intersection, buses, drop-off vehicles, and vehicles exiting the drop-off area.
- ***Glenwood Avenue at Ottawa Avenue N*** – staff member facilitates the heavy traffic flow into the school site on Ottawa Avenue, working to keep traffic moving while reducing eastbound queues on Glenwood Avenue. From 8:00 to 8:30 AM, southbound left turns onto Glenwood Avenue are prohibited.

Police Officer Controlled (8:10 to 8:30 AM)

- ***Glenwood Avenue at the Northbound TH 100 Ramps*** – officer controls traffic at the intersection, working to manage queuing at the intersection, especially on the TH 100 exit ramp. With eastbound queues from Ottawa Avenue N reaching the intersection, the officer keeps vehicles from blocking the intersection and creating gridlock.

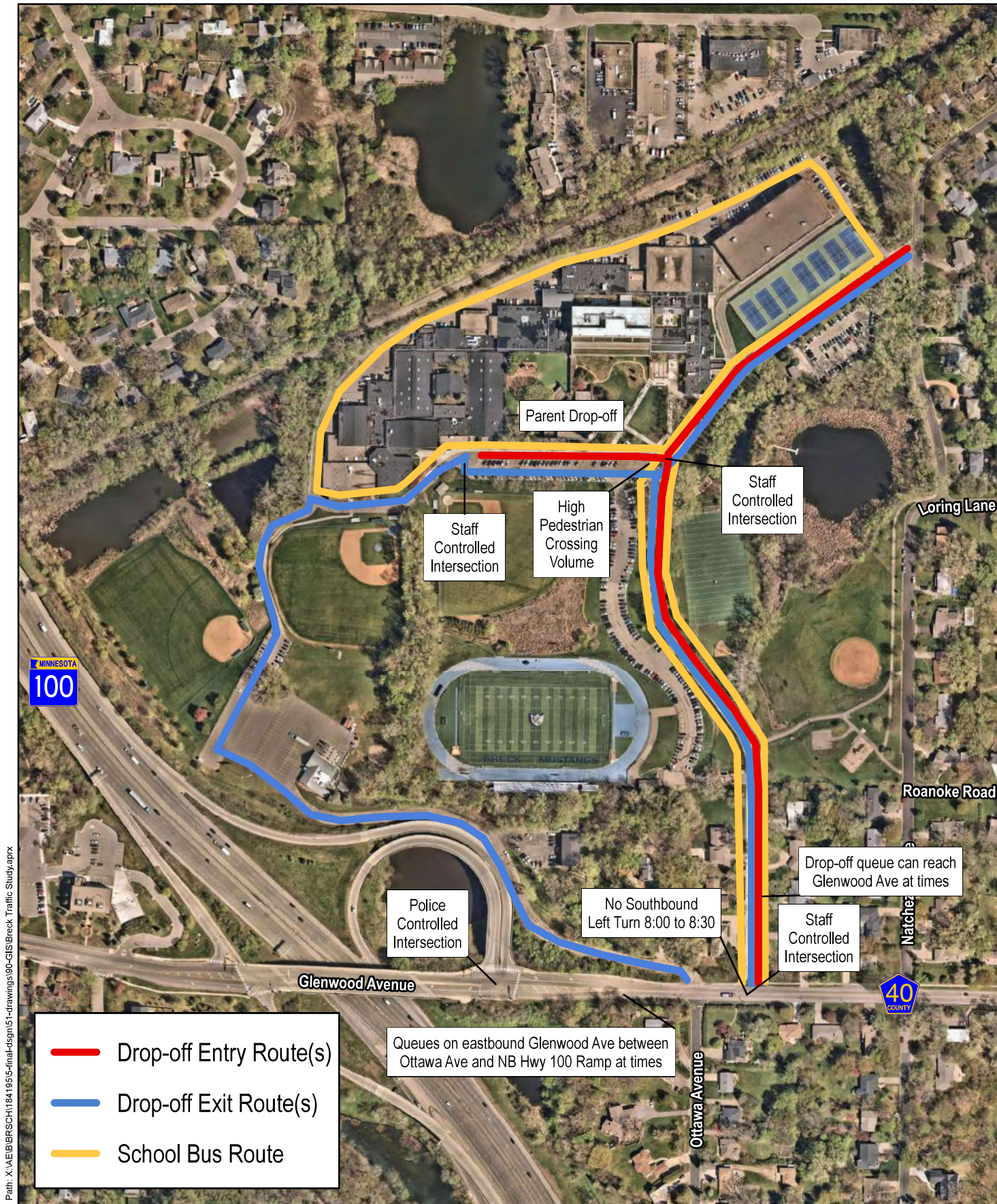
Figure 3 shows school arrival traffic conditions, including intersections that are controlled during peak arrival periods as well as bus and drop-off vehicle routes. Below are additional observations both on-site and on the surrounding roadway networks.



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		Project: BRSCH 184195 Print Date: 9/25/2025 Map by: jdanibas Projection: Washington Co Coord Source:	School Site Map Breck School Master Plan Traffic Study Golden Valley, MN	Figure 2
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Project: BRSCH 184195
Print Date: 9/25/2025

Map by: jdanibas
Projection: Washington Co Coord
Source:

School Arrival Traffic Patterns

Breck School Master Plan Traffic Study
Golden Valley, MN

Figure
3

2.3.1.1 Internal Site – Arrival

- Congestion on-site arises from the conflicts between left turns from Ottawa Avenue N into the drop-off area, pedestrians in the crosswalk on the west side of the intersection, and vehicles exiting the site to Glenwood Avenue from the tennis court area.
 - The high number of vehicles and pedestrians going through a single intersection, especially during the 15-minute peak right before school starts, results in long queues on Ottawa Avenue, which reach Glenwood Avenue at times.
 - When the school buses exit during the 15-minute peak period, often several in quick succession, it increases congestion at this intersection.
- There are vehicles dropping off, trying to park, and buses all in the drop-off area at the same time, which increases congestion within the drop-off area.
- Some drivers drop-off their students immediately after entering the drop-off area, without pulling forward to the back of the line, which increases congestion.



- It should be noted that there are signs instructing parents dropping off to pull forward.
- Parked vehicles on Ottawa Avenue N, south of the drop-off area, cause some vehicles, especially buses, to hesitate when exiting the site because the roadway space gets narrow. This increases congestion and reduces the efficiency of traffic flow for vehicles going into the drop-off area and exiting the site on Ottawa Avenue N.

2.3.1.2 Glenwood Avenue at Ottawa Avenue – Arrival

- Staff member controls the intersection from 8:00 to 8:30 AM, no southbound left turns during that same time period.
 - The person mostly controls conflicts between the heavy eastbound left turn movement and westbound vehicles.
 - Eastbound through and southbound right operate as normal, although eastbound throughs get stuck in queues behind eastbound left turning vehicles.
 - The only time the staff member stopped traffic to allow for southbound vehicles to enter Glenwood Avenue was when the school buses exited the site.
 - In general, the staff member does a good job managing queues on Glenwood Avenue to reduce impacts as much as possible given the high volume of traffic entering the site during the 15-minutes prior to the start of school.



- Queues on Ottawa Avenue N would back onto Glenwood Avenue very briefly at times.

2.3.1.3 Glenwood Avenue at Lilac Drive – Arrival

- Queues on Lilac Drive are generally short (2 or 3 vehicles) unless a vehicle tries to take a left turn from Lilac Drive onto Glenwood Avenue.
- At times, vehicles create two lanes on Lilac Drive exiting the school.
- The eastbound queue on Glenwood Avenue blocks traffic from making a turn from Ottawa Avenue S at times.

2.3.1.4 Glenwood Avenue at the Northbound TH 100 Ramps – Arrival

- The signal is put into flashing red mode and controlled by a police officer from approximately 8:10 to 8:30 AM. The exact time the officer begins controlling the intersection depends on when eastbound queues start to reach the intersection.
 - The officer controls the intersection to manage queueing and gridlock at the intersection during the school arrival peak, primarily for eastbound traffic and southbound lefts turns from the TH 100 ramp entering the back of the queue from the Ottawa Avenue N access.
- The eastbound queue on Glenwood Avenue reaches the Northbound TH 100 Ramp intersection regularly between approximately 8:10 and 8:25 due to the peak school arrival traffic demands.
 - The queues would typically reach the intersection, move forward, and then fill again regularly, resulting in more of a rolling queue rather than significant or persistent gridlock/queueing.



2.3.1.5 Glenwood Avenue at the Southbound TH 100 Ramps – Arrival

- This signal continues to operate normally during school arrival.
- Eastbound queues on Glenwood Avenue from the Northbound TH 100 Ramp intersection can reach the intersection at times, but vehicles do not block the intersection, and it does not cause significant issues at the intersection.
 - The queues occur between 8:15 and 8:20 when traffic demands are at their highest and reach the intersection for very short periods of time (10 to 30 seconds).

2.3.1.6 Ottawa Avenue N at Natchez Avenue/Chatelain Terrace – Arrival

- Many vehicles drive over the double white lines painted on the west side of Chatelain Terrace north of Ottawa Avenue N, which is supposed to be designated for pedestrians walking along the roadway.
- No school buses exiting to Natchez Avenue during school arrival.
- Most vehicles exiting the school to Natchez Avenue/Chatelain Terrace come from behind the school, perhaps an alternate route when exiting the drop-off area to avoid trying to take a left turn onto Glenwood Avenue at the Lilac Drive access.

2.3.2 School Dismissal Peak Hour

During school dismissal, there is a significant amount of traffic entering and exiting the site between 3:00 and 3:45 PM, especially in the 10 minutes on either side of the 3:20 PM dismissal time. Within the school dismissal peak, there are two miniature peaks of traffic. The first is an increase in traffic demands entering the site to pick up students, which occurs prior to school ending. The second is the rush of traffic to leave the site after school dismisses at 3:20 PM. In general, congestion on the site is lower during school dismissal because there are lower overall traffic demands, however, there are still areas with congestion. To manage congestion and keep traffic flowing during school dismissal, there are four staff-controlled intersections and one police controlled intersection in the school area, which are listed below:

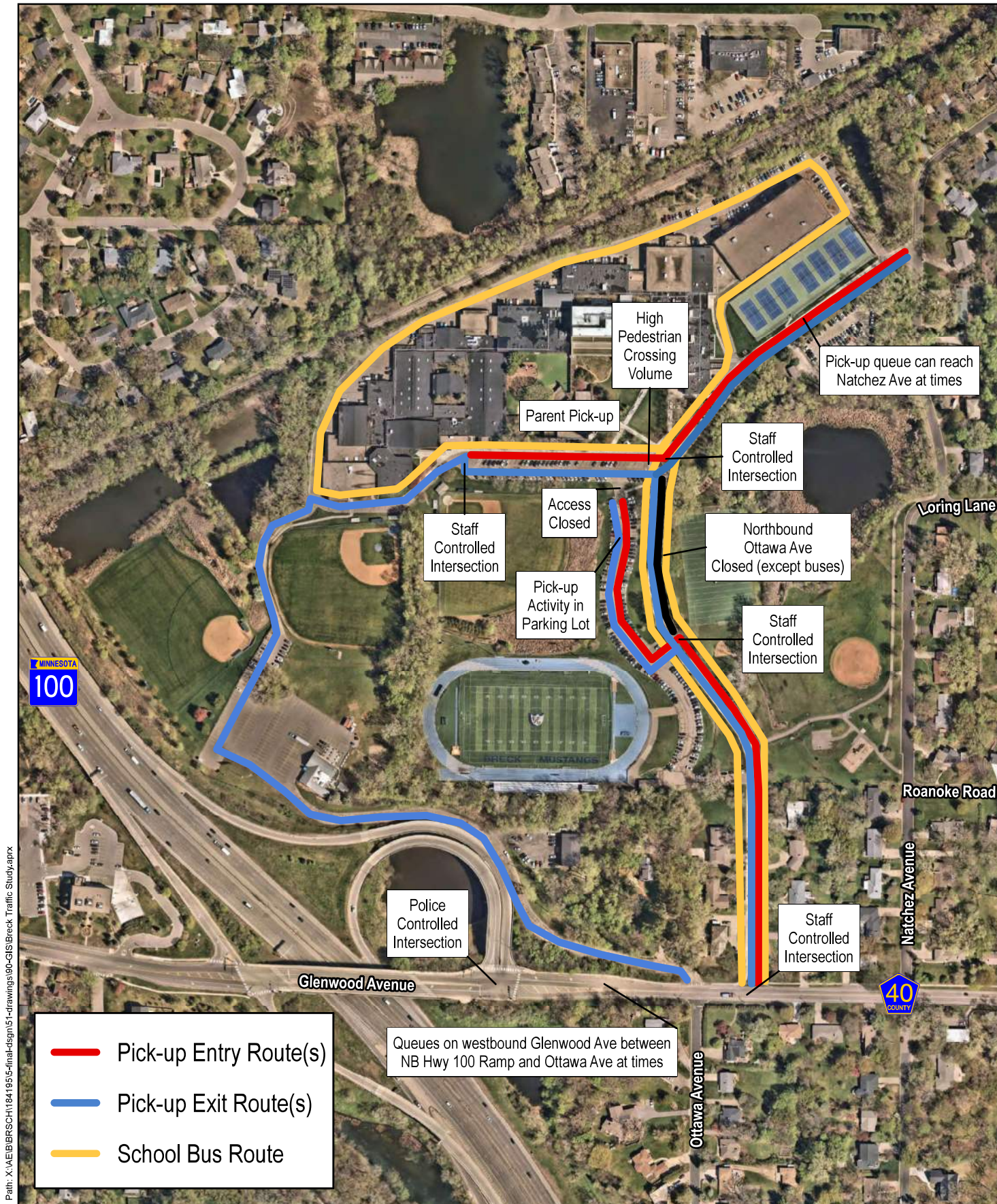
Breck Staff Controlled (3:00 to 3:40 PM)

- ***The west end of the parent pick-up area*** – staff member keeps pick-up traffic moving and manages conflicts between pedestrians, buses, pick-up vehicles, and other vehicles in the pick-up area.
- ***Ottawa Avenue N at the Pick-up/Drop-off Plaza*** – staff member manages conflicts between pedestrians crossing the west side of the intersection, buses, pick-up vehicles coming from the east, and vehicles exiting the pick-up area.
- ***Ottawa Avenue N at the Visitor Parking Entrance*** – staff member closes northbound Ottawa Avenue N to everyone except school buses between visitor parking entrance and the pick-up area from 3:00 to 3:35 PM. This staff member then facilitates vehicles in and out of the parking lot, either for pick-up or for vehicles exiting the parking lot.
- ***Glenwood Avenue at Ottawa Avenue N*** – staff member facilitates the heavy traffic flow out of the school site on Ottawa Avenue, working to keep traffic moving while managing westbound queues on Glenwood Avenue. The staff member helps create gaps in Glenwood Avenue traffic for southbound left and right turning traffic exiting the school.

Police Officer Controlled (3:10 to 3:40 PM)

- ***Glenwood Avenue at the Northbound TH 100 Ramps*** – officer controls traffic at the intersection, working to manage queuing at the intersection, especially on westbound Glenwood Avenue. With westbound queues on Glenwood Avenue reaching Ottawa Avenue N, the officer keeps westbound traffic moving to avoid gridlock at the Ottawa Avenue intersection.

Figure 4 shows school dismissal traffic conditions, including intersections that are controlled during peak dismissal periods as well as bus and pick-up vehicle routes. Below are additional observations both on-site and on the surrounding roadway networks.



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Pick-up Entry Route(s)

Pick-up Exit Route(s)

School Bus Route

Queues on westbound Glenwood Ave between NB Hwy 100 Ramp and Ottawa Ave at times

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2.3.2.1 Internal Site – Dismissal

- With northbound Ottawa Avenue N closed to everyone except school buses between the parking lot access and pick-up area from 3:00 and 3:35 PM, pick-up activity occurs within the visitor lot.
 - Just before school ends, the visitor parking lot is full, and parents are waiting in the driving aisle for their children or for a parking space to open.



- To keep vehicles from exiting the north side of the visitor lot, the access is closed during school dismissal.
- With northbound Ottawa Avenue N to everyone except school buses, all vehicles using the main pick-up area must enter the school site using Natchez Avenue/Chatelain Terrace.
 - At times, queues on Ottawa Avenue by the tennis courts backs onto Natchez Avenue



- There is also some pick-up activity for the upper school that occurs near the tennis courts to avoid the main pick-up area.
- Westbound Ottawa Avenue (by the tennis courts) uses all three lanes during dismissal, with vehicles looking to exit the site driving westbound in the eastbound travel lane. Lane uses are as follows (from north to south):
 - Upper school pick-up
 - Lower and middle school pick-up queue (going to the main pick-up area)
 - Existing vehicles using the eastbound lane to go westbound, mostly vehicles exiting the senior lot or who have picked up their child.
 - At the pick-up area intersection, vehicles from all three lanes turn into the main pick-up area, which causes confusion at times.



- When picking up in the main pick-up area, some vehicles do not move up as the queue moves, which leaves a gap and increases overall queuing.



- It should be noted that there are signs instructing parents picking up to pull forward.
- Buses arrive between 3:10 and 3:20 PM, as school pick-up traffic demands increase, which leads to increased congestion.
- All buses load in a line behind the school, with only buses allowed on the north side of the school from 3:00 to 3:30 PM.



- All buses exit at the same time while pick-up activity is still happening on site, which causes increased congestion at the Ottawa Avenue N/pick-up intersection.



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- The queue of just buses exiting the site can extend up Ottawa Avenue N and reach close to the pick-up area.
- If buses waited approximately 5 minutes, the site would be almost totally cleared.

2.3.2.2 Glenwood Avenue at Ottawa Avenue – Dismissal

- Staff member controls the intersection from 3:05 to 3:40 PM
 - The person mostly controls conflicts between all movements, helping to facilitate gaps in traffic for southbound left and right turning traffic exiting the school.
 - With westbound queues backing from the Northbound TH 100 Ramp intersection and briefly reaching Ottawa Avenue at times, the staff members works to control westbound queuing while maintaining traffic flow for all movements.
 - Queues on southbound Ottawa Avenue tend to get longer when a vehicle wants to make a southbound left turn because the staff person must stop both directions of Glenwood Avenue traffic.



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- When all of the buses exit the site, the staff member stops all traffic at the intersection to allow the buses to exit, which lasts approximately 2 minutes. To bypass the southbound queue on Ottawa Avenue, school buses drive down the wrong side of Ottawa Avenue N when exiting.



- From 3:00 to 3:20 PM, before school ends, there is increased traffic demands entering the school site. After 3:20, the primary movement then shifts to vehicles exiting the site.

2.3.2.3 Glenwood Avenue at Lilac Drive – Dismissal

- Queues on Lilac Drive are generally short (2 or 3 vehicles) unless a vehicle tries to take a left turn from Lilac Drive onto Glenwood Avenue.
- At times, vehicles create two lanes on Lilac Drive exiting the school.
- Queues westbound on Glenwood Avenue block the intersection at times, which contributes to some longer queues (5 or 6 vehicles)

2.3.2.4 Glenwood Avenue at the Northbound TH 100 Ramps – Dismissal

- The signal is put into flashing red mode and controlled by a police officer from approximately 3:05 to 3:40 PM. The exact time the officer begins controlling the intersection depends on when traffic demands and queueing starts to increase.
 - The officer controls the intersection to manage queueing and gridlock at the intersection during the school dismissal peak, primarily for westbound traffic exiting the school site.
- Eastbound Glenwood Avenue queues do not reach the Northbound TH 100 Ramp intersection during school dismissal, except briefly during the time when school buses are exiting the site and all other traffic is stopped at the Ottawa Avenue intersection.

2.3.2.5 Glenwood Avenue at the Southbound TH 100 Ramps – Dismissal

- This signal continues to operate normally during school dismissal.
- Eastbound queues on Glenwood Avenue from the Northbound TH 100 Ramp intersection can reach the intersection at times between 3:15 and 3:20 PM during the peak of pick-up traffic arriving at the school.
- No westbound Glenwood Avenue queueing issues, except briefly when all of the buses are leaving the school site.

2.3.2.6 Ottawa Avenue N at Natchez Avenue/Chatelain Terrace – Dismissal

- Vehicles drive over the double white lines painted on the west side of Chatelain Terrace north of Ottawa Avenue N, which is supposed to be designated for pedestrians walking along the roadway.
- No school buses entering or exiting using Natchez Avenue or Chatelain Terrace. Athletic charters for after school sports often enter the school site via Natchez Avenue.

- Westbound queues on Ottawa Avenue N can reach Natchez Avenue at times, resulting 3 to 6 vehicles waiting on Natchez Avenue to enter the school area.
- A few parents pick up their children directly on Chatelain Terrace or Natchez Avenue to avoid entering the school site.



- Some exiting vehicles come from behind the school, likely either staff or parents after the school buses clear out from the north side of the building.

2.3.3 Weekday Events

Weekday event site operations were observed on Tuesday, April 22, 2025. On that evening, there were several events on the school campus, with different start times. Events on campus included a middle school track meet, varsity boys' tennis match, JV and varsity baseball, and indoor rentals of all 6 of Brecks basketball courts. As a result of the multiple overlapping events, there was traffic entering and exiting the site throughout the evening.

During typical weekday events, all intersections operate as normal with no additional traffic control or turning restrictions. Below are the observations from the weekday evening events.

- Despite the many events occurring on the campus, there is plenty of parking on-site to accommodate event traffic.
- Drivers tend to park in the parking lot closest to the area of their event, with minimal walking across the school site.
 - There was some pedestrian crossing activity on the east end of the drop-off/pick-up plaza for people using the indoor gyms. Generally, they would cross in larger groups going to/from the gym.
- There was some level of parking activity in all of the parking lots on the site, including on-street parking on Ottawa Avenue.
- For the track and field meet, there was some activity on the field on the east side of Ottawa Avenue, so there were athletes/parents crossing Ottawa Avenue.
 - There is no marked crosswalk to the field so people tended to cross wherever they could between parked vehicles.
 - At times, the parked vehicles on Ottawa Avenue made it difficult for vehicles driving through the site to see pedestrians that were going to cross.
- Overall, there was no significant congestion for vehicles entering or exiting the site. There would be spot congestion as an event would end and everyone would attempt to leave the site at the same time, but no major queuing or delay issues.

2.3.4 Sunday Events

Sunday event operations were observed on Sunday, April 13, 2025. On that day, the Breck School site hosted NFL flag football as well as a group renting the fieldhouse. Flag football runs from 9 AM to 5 PM, with players, coaches, and parents coming in and out of the school site throughout the day as each game starts and ends.

During Sunday events, all intersections operate as normal with no additional traffic control or turning restrictions. Below are the observations from the Sunday events.

- Flag football took place in McKnight Stadium, with teams practicing on the field and in the park on the east side of Ottawa Avenue. As a result, most of the parking occurred in the lot on the west side of Ottawa Avenue and on-street along Ottawa Avenue N.
 - At peak times, during the overlap between teams arriving and leaving, vehicles were parked all along both sides of Ottawa Avenue near the practice field and on just the west side of Ottawa Avenue all the way to the single-family homes south of the school site.
- With flag football activity taking place on both sides of Ottawa Avenue, there was significant pedestrian crossing activity along Ottawa Avenue, with most children and parents crossing at a convenient location between parked cars rather than a marked crosswalk.
 - At times, the parked vehicles on Ottawa Avenue made it difficult for vehicles driving through the site to see pedestrians that were going to cross. This was especially difficult during the times between games when traffic volumes were highest.
- Overall, there was no significant congestion for vehicles entering or exiting the site. There would be spot congestion between games as teams would be arriving and leaving at the same time, but no major queuing or delay issues.

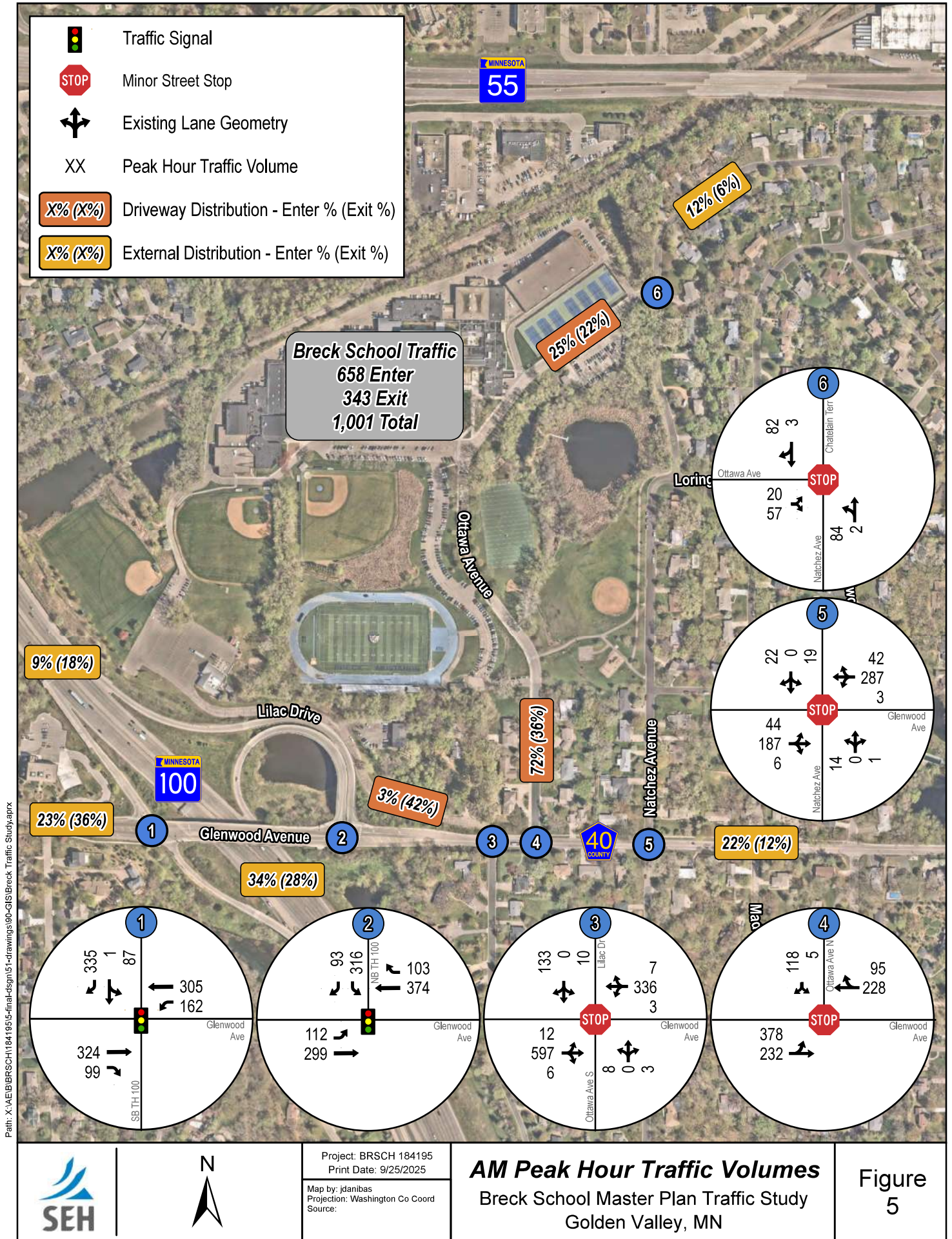
2.4 Traffic Volumes

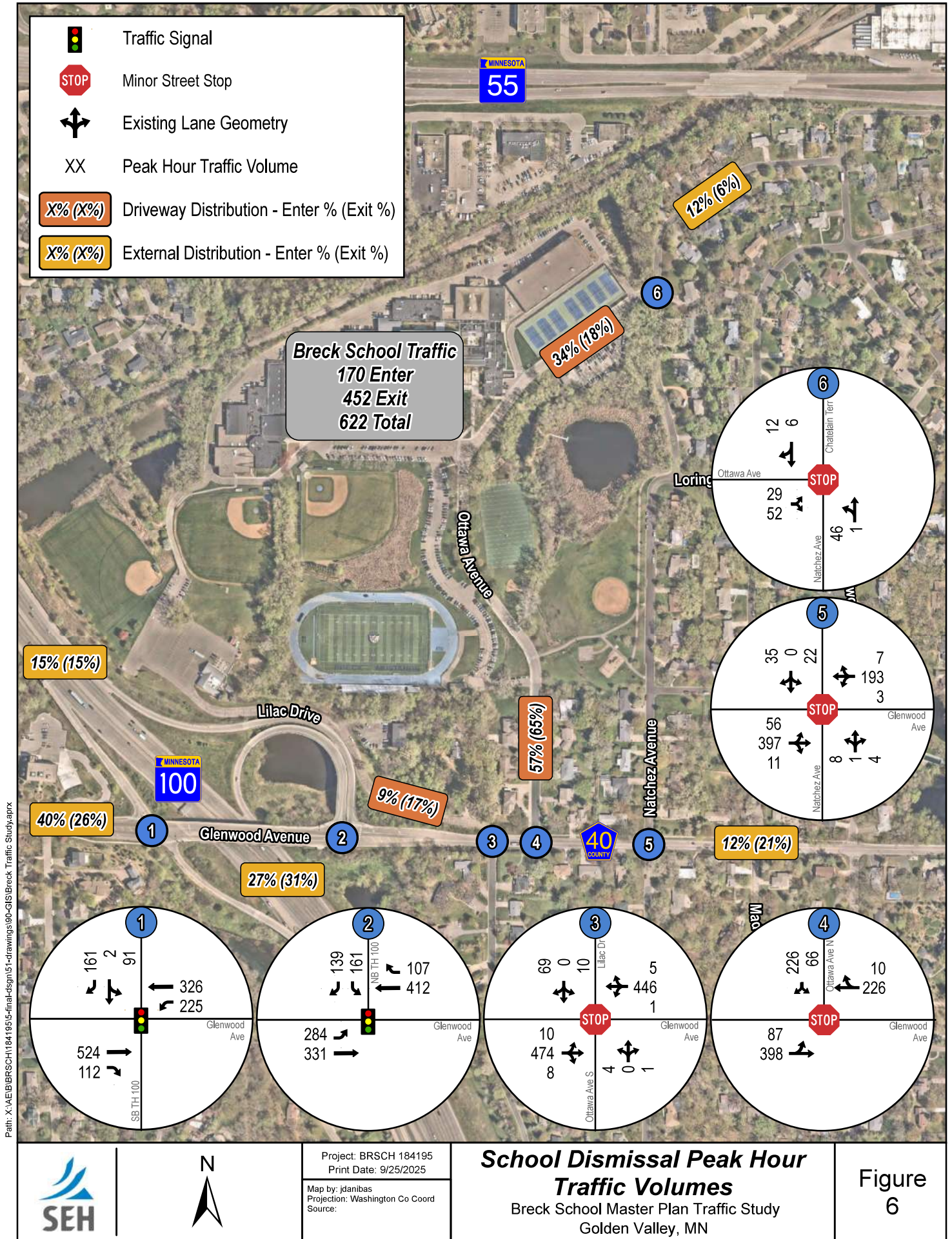
Turning movement counts were collected at the six study intersection during three separate time periods to capture typical weekday, weekday event, and Sunday event conditions. As part of the counts, passenger vehicles, heavy vehicles, pedestrians, and bicyclists were separated. Below is a summary of the time periods traffic turning movement data was collected. The full traffic counts can be found in **Appendix A**.

- Typical Weekday – Tuesday, March 11, 2025 – 6 AM to 7 PM
- Weekday Events – Tuesday, April 22, 2025 – 2 PM to 9 PM
- Sunday Events – Sunday, April 13, 2025 – 8 AM to 6 PM

Based on the traffic volumes, three typical peak hours and two event peak hours were identified for analysis, which are shown below. **Figures 5 through 9** show the peak hour traffic demands as well as the distribution of traffic between the school driveways and external routes for each peak hour.

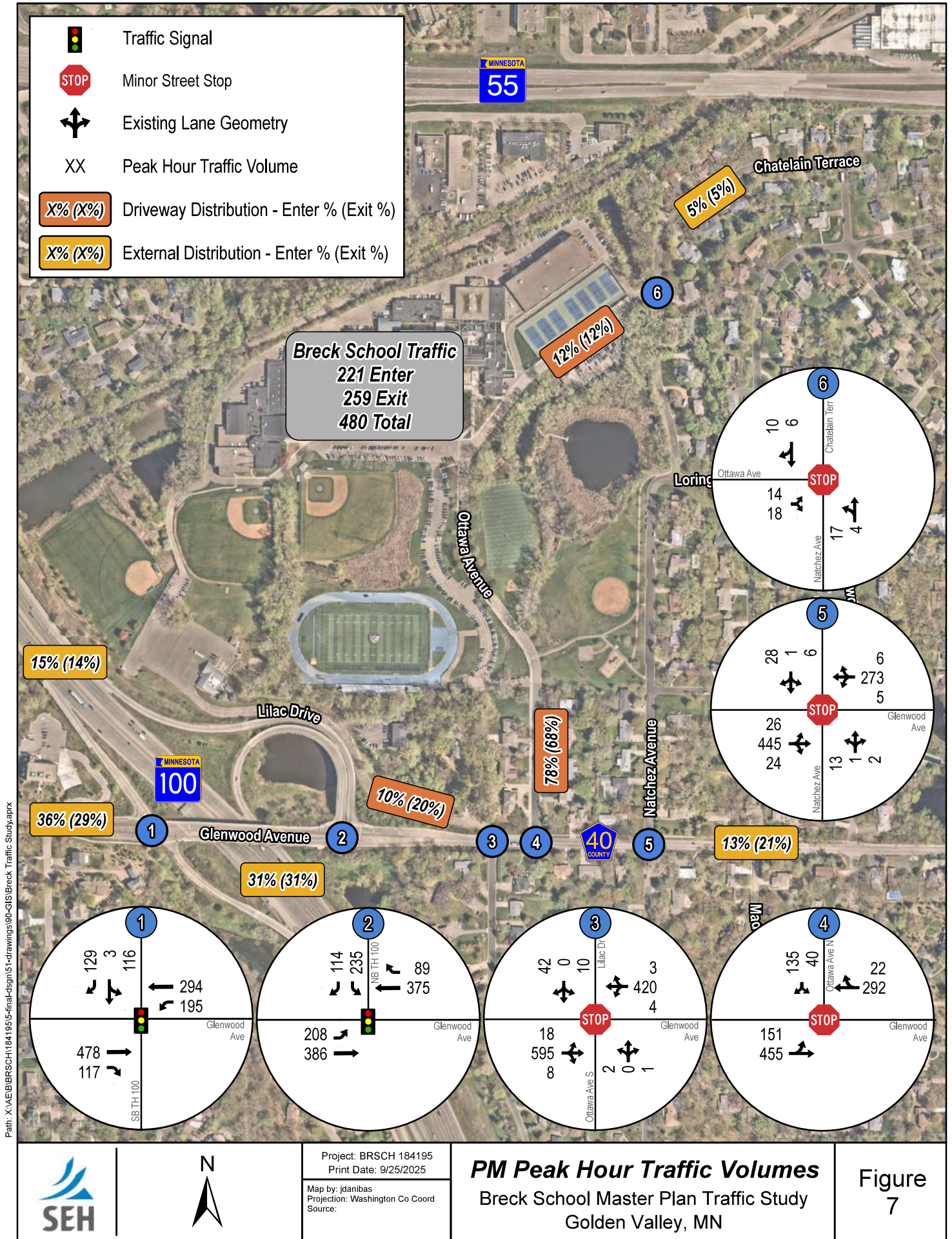
- AM Peak Hour – 7:45 to 8:45 AM
- School Dismissal Peak Hour – 3:15 to 4:15 PM
- PM Peak Hour – 5:00 to 6:00 PM
- Weekday Event Peak Hour – 4:30 to 5:30 PM
- Sunday Event Peak Hour – 11:15 AM to 12:15 PM





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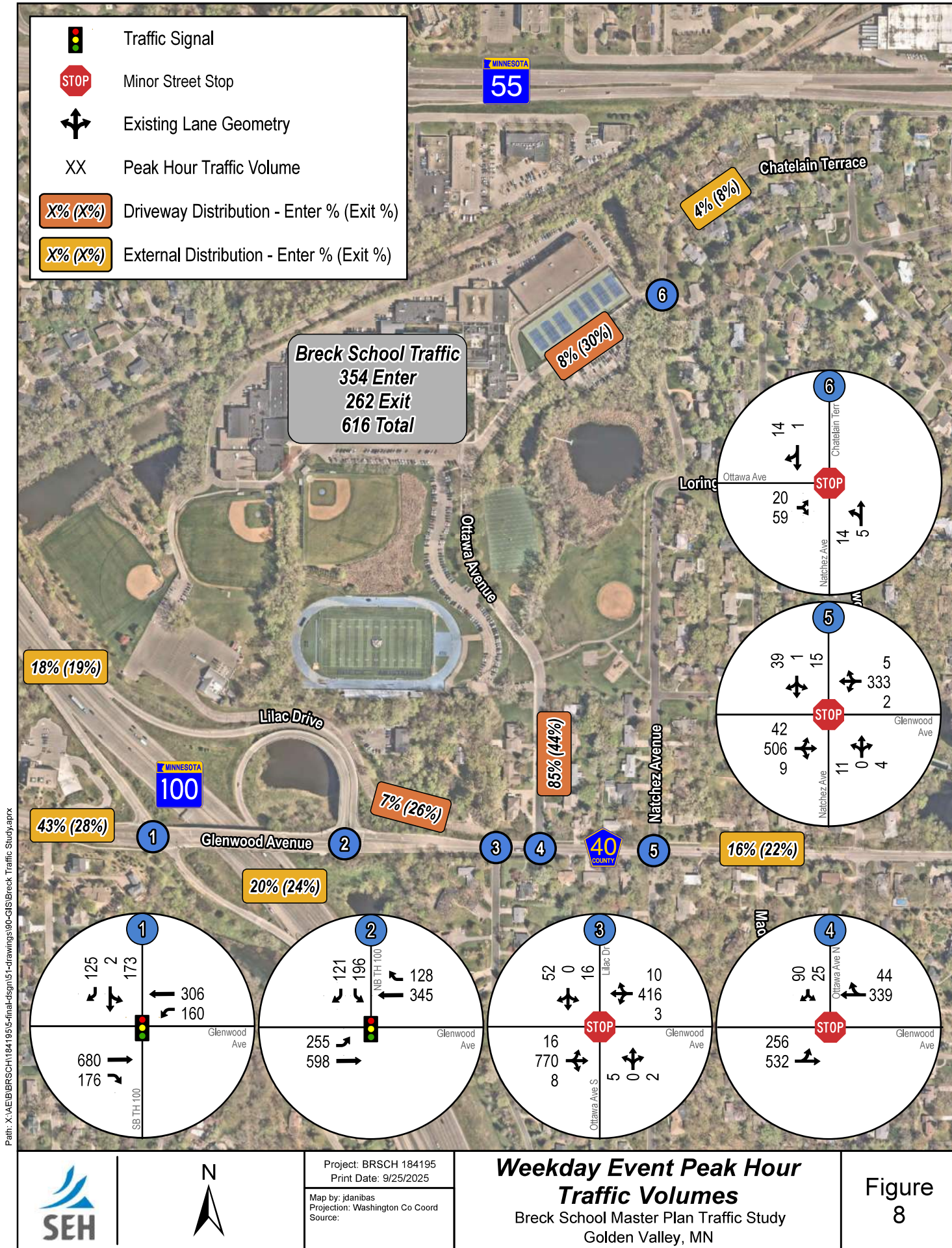
This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



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		Project: BRSC 184195 Print Date: 9/25/2025	PM Peak Hour Traffic Volumes Breck School Master Plan Traffic Study Golden Valley, MN	Figure 7
		Map by: jdanibas Projection: Washington Co Coord Source:		

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



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Project: BRCH 184195
Print Date: 9/25/2025

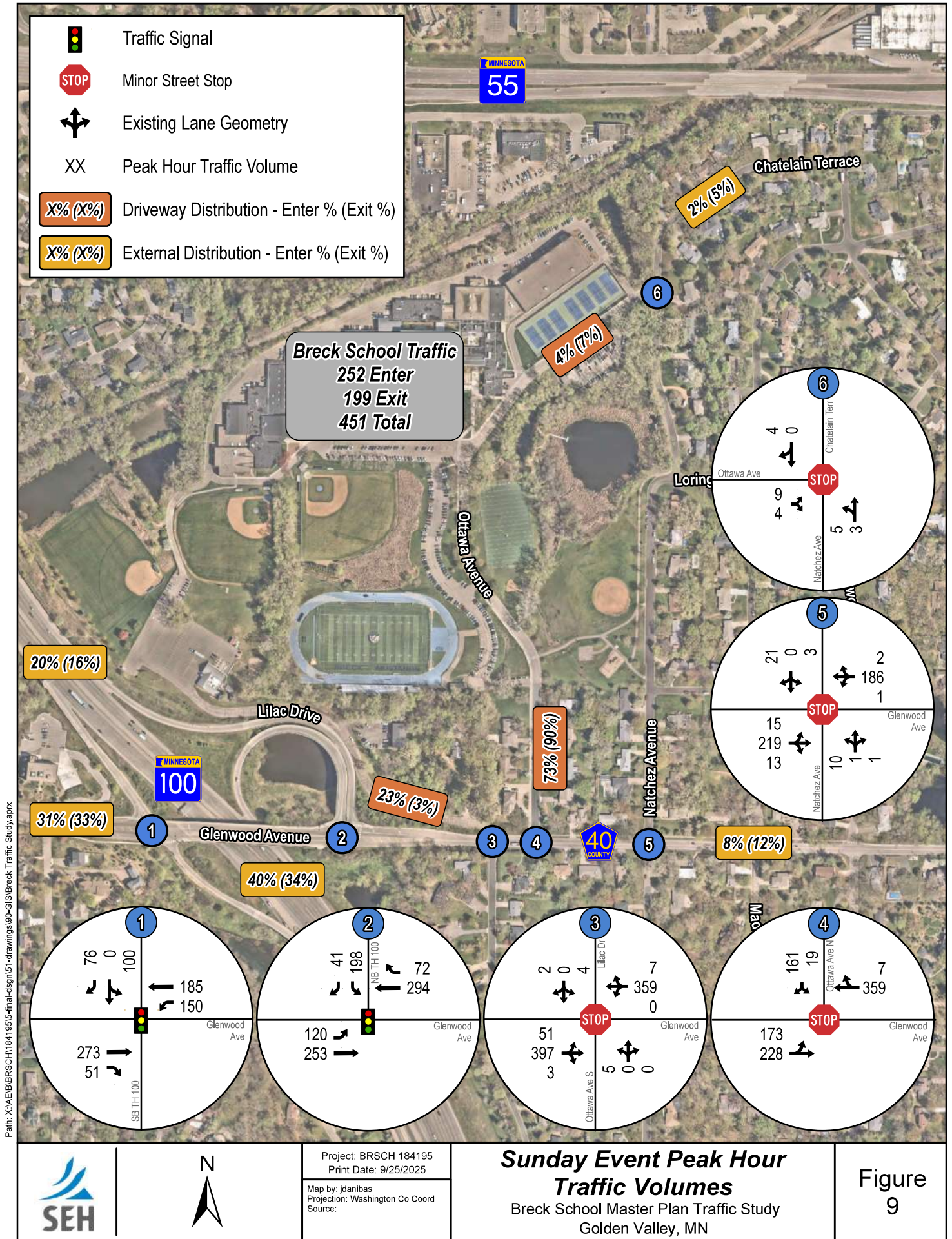
Map by: jdanibas
Projection: Washington Co Coord
Source:

Weekday Event Peak Hour Traffic Volumes

Breck School Master Plan Traffic Study
Golden Valley, MN

Figure
8

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



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Project: BRCH 184195
 Print Date: 9/25/2025
 Map by: jdanibas
 Projection: Washington Co Coord
 Source:

Sunday Event Peak Hour Traffic Volumes

Breck School Master Plan Traffic Study
 Golden Valley, MN

Figure
 9

Similar to all schools, Breck School has significant peak traffic demands during the 30-minute periods before and after school, with limited traffic volumes outside of the arrival and dismissal peaks. As a result, there is often congestion around schools for 30 minutes before and after school, which was seen during the observations of the site. During the remaining 23 hours of the day, there is minimal congestion related to school traffic in the area. **Figure 10** shows the 15-minute volumes entering and exiting the school site during a typical day through the 13-hour count period. Looking at the Breck School 15-minute traffic volumes, there are two significant 30-minute peaks, 8:00 to 8:30 AM (arrival) and 3:15 to 3:45 PM (dismissal), with significantly higher traffic demands during the AM peak hour. During the rest of the school day, there are less than 50 trips in and out of the school site during each 15-minute period. After school hours, there is increased traffic demand in the evenings, with events happening within the Breck School site.

Figure 10 – 15-Minute Traffic Volumes – Typical Day

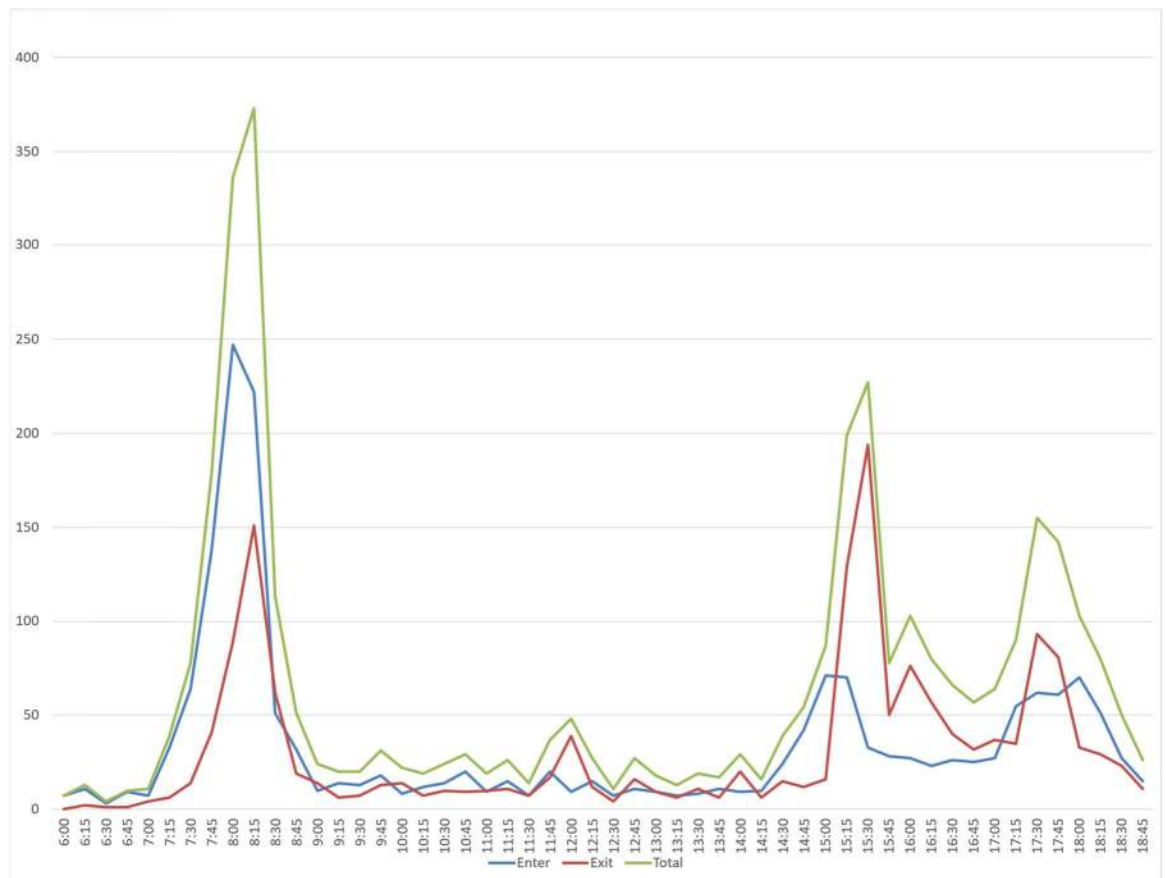


Figure 11 compares the 15-minute traffic volumes for Breck School with all non-Breck trips in the study area. Based on the traffic counts, Breck School traffic outnumbers non-school traffic during the AM peak hour. In addition, the AM peak hour of the roadway overlaps with the school arrival peak period, resulting in higher overall traffic demands and increased congestion seen on-site and on Glenwood Avenue. In comparison, the school dismissal peak for the school occurs before the typical PM peak of the adjacent roadways, which results in lower overall traffic demands and less congestion.

Figure 11 – 15-Minute Traffic Volumes – School vs. Non-School Traffic

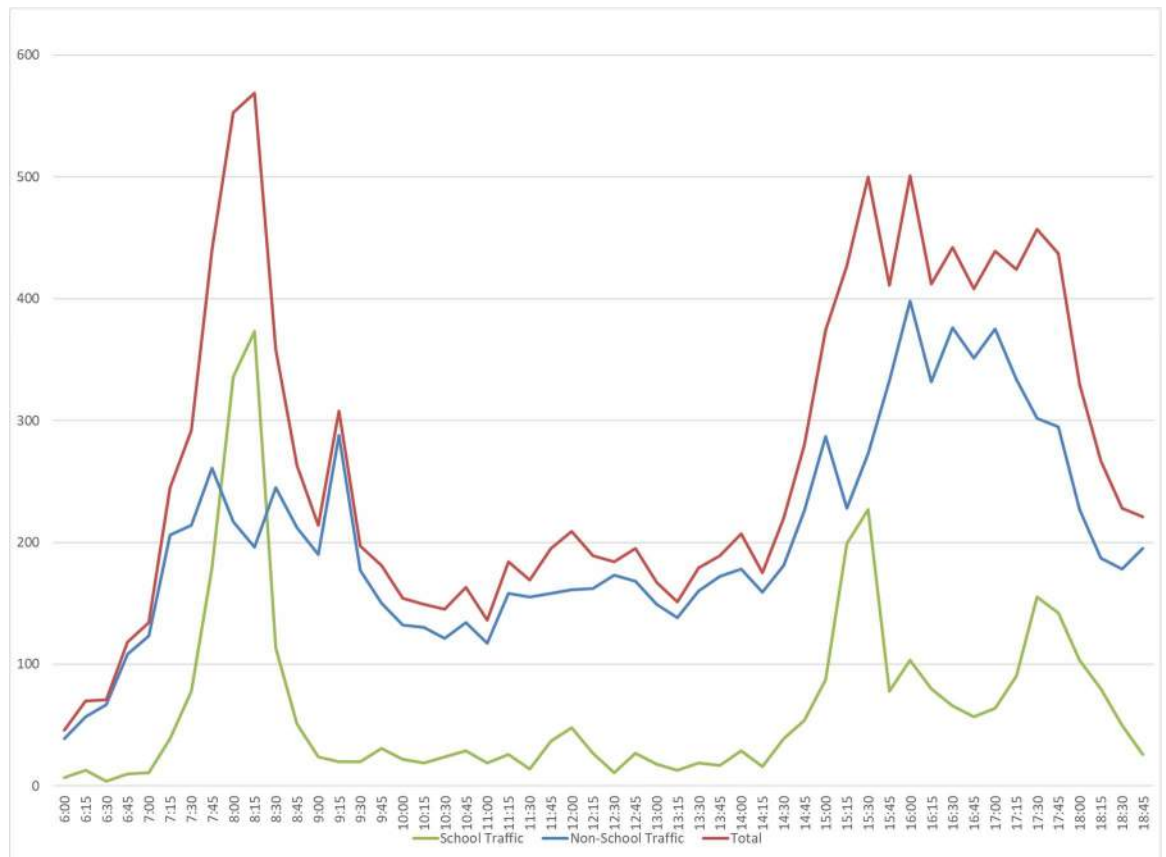


Figure 12 compares the 15-minute traffic volumes for Breck School on a typical weekday evening with an event. The traffic counts show that on days with a larger number of events on site, there are lower traffic demands during the school dismissal peak period, as more students stay on site for after school activities. Then, as events begin and end, there are peaks in traffic demands in and out of the school site, which are spread throughout the evening. Weekday event peak traffic never reaches the level of a typical school arrival or dismissal peak period, which is why there is minimal congestion on site and no significant impacts to surrounding roadways.

Figure 13 shows the 15-minute traffic volumes during the Sunday Flag Football event on the Breck School site. The traffic counts show that there are short peaks approximately each hour as traffic circulates in and out of the site between each game. Sunday event peak traffic never reaches the level of a typical school arrival or dismissal peak period, which is why there is minimal congestion on site and no significant impacts to surrounding roadways.

Figure 12 – 15-Minute Traffic Volumes – Typical vs. Event Weekday Evenings

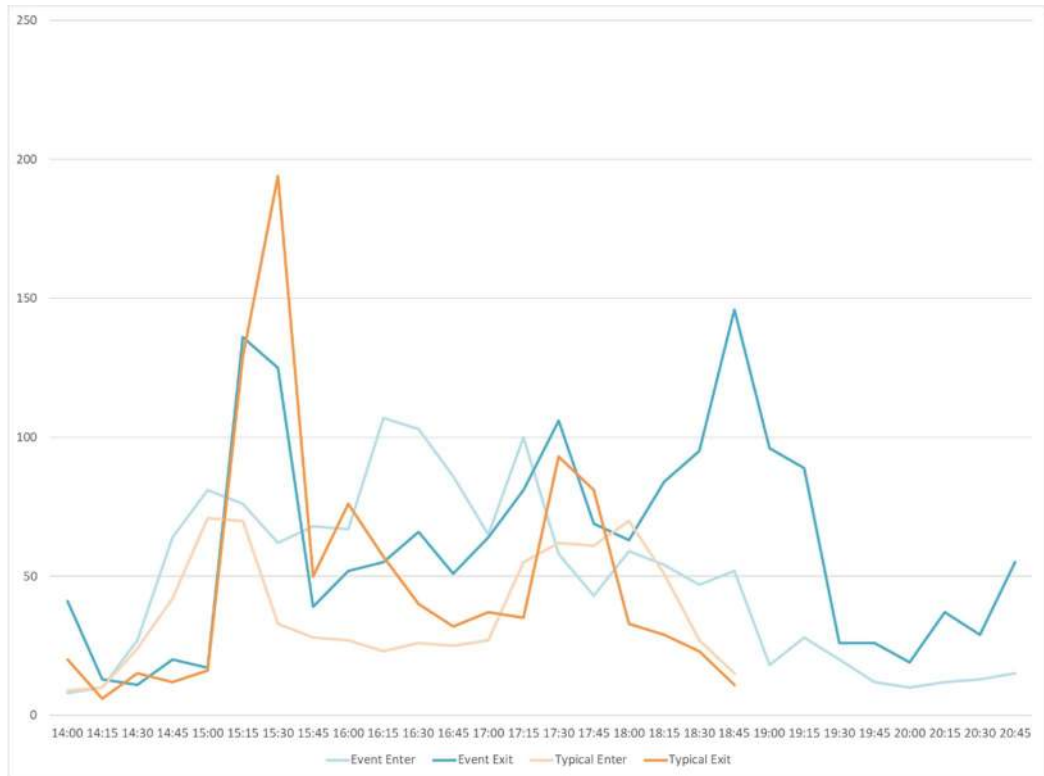
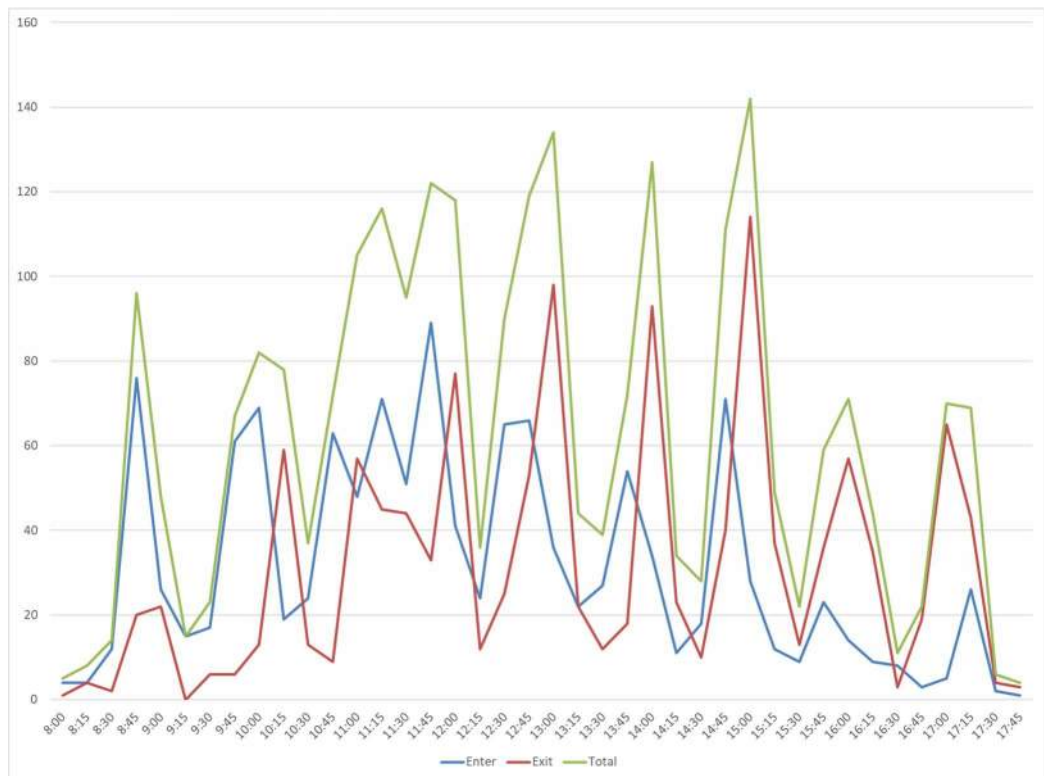


Figure 13 – 15-Minute Traffic Volumes – Sunday Event



2.5 Residential Neighborhood Traffic Volumes and Speeds

There have been concerns from neighbors about vehicle volumes and speeds on the neighborhood roadways directly east of the Breck School site. To better understand the potential issues, volume and speed data was collected on both Natchez Avenue and Chatelain Terrace from Saturday, April 12, 2025, through Friday, April 18, 2025. Volume data was compared to a count from a 2012 study within the neighborhood, which counted when school was and was not in session to understand the impact of Breck School on neighborhood traffic volumes. The speed data was analyzed, and school peak speeds were compared to other times of the day. The location of the two radar counters used to collect volume and speed data are shown in **Figure 1** and described below. The locations for the radar were chosen to avoid lower vehicle speeds near intersections. Full volume and speed data for each location can be found in **Appendix B**.

- Natchez Avenue near Natchez Park
- Chatelain Terrace between Ottawa Avenue N and Westwood Drive

2.5.1 Volume Data

Daily traffic volumes on Natchez Avenue and Chatelain Terrace for the weekdays were compared to counts completed in 2012 as part of a previous study looking at traffic volumes on neighborhood roadways with and without Breck School traffic. **Table 1** shows a comparison of the 2025 daily traffic volumes to the 2012 daily traffic volumes with and without Breck School traffic.

Based on the traffic data, traffic volumes on Natchez Avenue have not changed significantly since 2012 and traffic volumes are approximately 300 vehicles per day higher when school is in session. On Chatelain Terrace, traffic volumes have increased since 2012 by approximately 60 vehicles per day, with 40-100 more vehicles per day on Chatelain Terrace when school is in session.

Table 1 – Residential Neighborhood Daily Traffic Volumes

Roadway	April 2025	April/May 2012	June/July 2012
	School in Session	School in Session	Summer Break (no School)
Natchez Avenue	640	630	350
Chatelain Terrace	340	280	240

Figures 14 and 15 show the typical hourly weekday traffic volumes on Natchez Avenue and Chatelain Terrace. For both roadways, there are peaks in traffic volumes in the 8 AM and 3 PM hours, during school arrival and dismissal. During dismissal, there is a higher peak on Natchez Avenue, which is likely due to parents picking up needing to use Natchez Avenue to access the school due to northbound Ottawa Avenue being closed for vehicles wanting to use the main school pick-up area. During arrival, there is also a peak in Natchez Avenue traffic, despite all drop-off traffic being allowed to enter/exit the site on Ottawa Avenue, this could be due to drivers preferring the Natchez Avenue access to avoid the congestion on Glenwood Avenue and Ottawa Avenue. Chatelain Terrace provides a route that is likely preferred over other routes to access the school from TH 55, which is why there are peaks in traffic volumes around school arrival and dismissal.

Figure 14 – Natchez Avenue Hourly Traffic Volumes

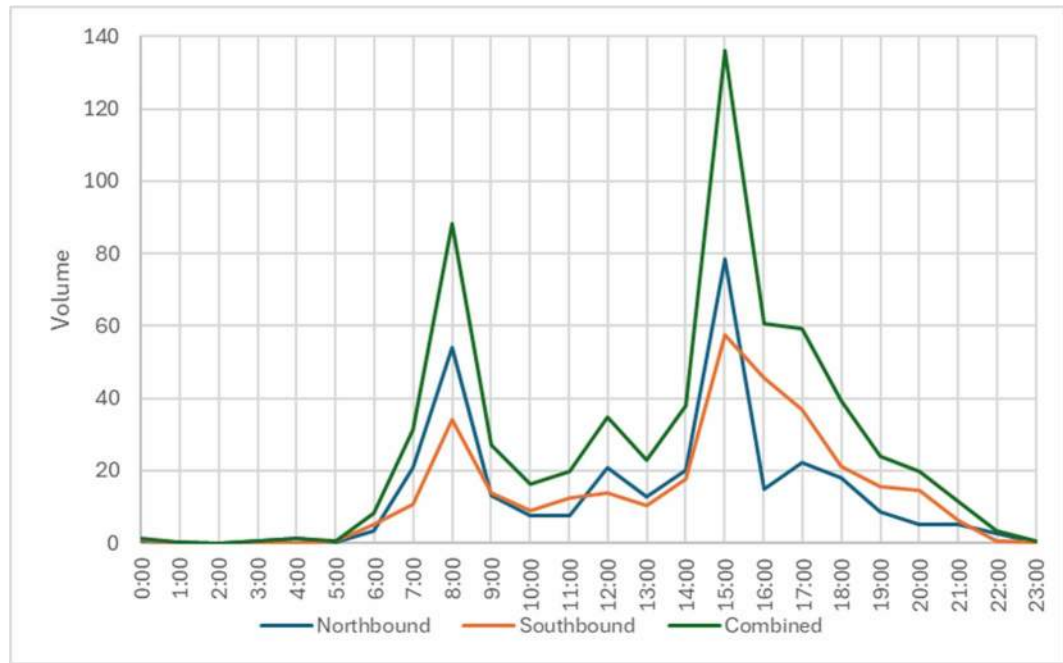
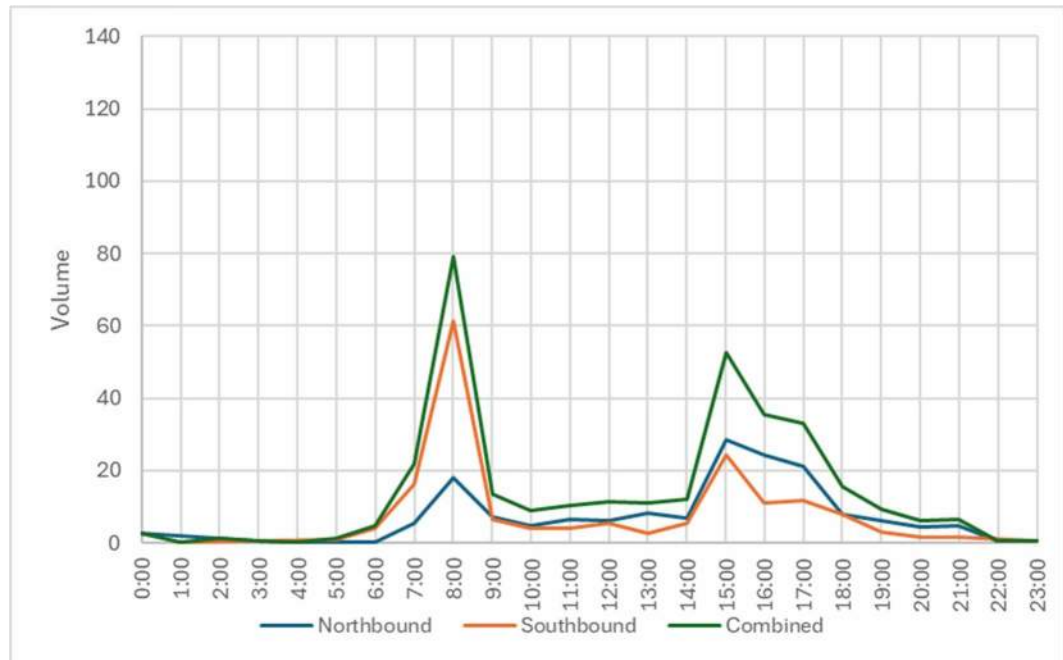


Figure 15 – Chatelain Terrace Hourly Traffic Volumes



2.5.2 Speed Data

Speed data was reviewed for both Natchez Avenue for both school peak periods and non-peak periods to determine if there was a change in overall speed on the neighborhood roadways related to school traffic. Based on the traffic data, there is less than a 1 mph difference between average and 85th percentile speeds during school peaks and the rest of the day, so there is no major change in vehicle speeds related to school traffic.

Table 2 summarizes the average and 85th percentile speeds on both Natchez Avenue and Chatelain Terrace.

Based on the speed data, the average speed on Natchez Avenue is 29 mph, with an 85th percentile speed of 33 mph. Approximately 37% of all vehicles exceed the 30 mph speed limit, with approximately 8% exceeding 35 mph. While the speeds on Natchez Avenue are not excessive, it would be beneficial to lower speeds on the roadway, especially with the adjacent park and single-family residences.

Based on the speed data, traffic speeds on Chatelain Terrace are within normal operating speeds for a 30 mph roadway, with both the average and 85th percentile speeds being under 30 mph. Speeds are likely lower on Chatelain Terrace due to the two curves in the roadway.

Table 2 – Residential Neighborhood Daily Traffic Volumes

Roadway	Measure	Northbound	Southbound	Combined
Natchez Avenue	Average Speed	29 mph	28 mph	29 mph
	85 th Percentile Speed	34 mph	33 mph	33 mph
	% > 30 MPH	44%	30%	37%
	% > 35 MPH	9%	6%	8%
Chatelain Terrace	Average Speed	23 mph	23 mph	23 mph
	85 th Percentile Speed	27 mph	27 mph	27 mph
	% > 30 MPH	7%	2%	5%
	% > 35 MPH	1%	0%	1%

3 Proposed Conditions

As mentioned previously, Breck recently purchased the former American Legion site located on the south side of the existing school site. With the purchase of the additional parcel, Breck is updating their Comprehensive Site Plan, looking at improvements on their site, including improvements to the existing school building, a new athletics building, an improved drop-off plaza, and outdoor environmental classrooms. **Figure 16** shows the latest site plan with the site improvements included in the Comprehensive Site Plan.

Figure 16 – Breck Site Plan



With the improvements to the Breck site, the school does not plan to increase school enrollment above the existing approximately 1,200 students. With no increase in school enrollment and limited growth expected in the area, traffic operations were only analyzed under existing 2025 conditions and no future traffic forecasts were developed as part of this study.

4 Traffic Operations Analysis

Traffic operations analyses were conducted to determine the level of service (LOS), delay, and queueing information for the AM, school dismissal, PM, weekday event, and Sunday event peak hour conditions.

LOS is a qualitative rating system used to describe the efficiency of traffic operations at an intersection. Six LOS are defined, designated by letters A through F. LOS A represents the best operating conditions (no congestion), and LOS F represents the worst operating conditions (severe congestion). For the study intersections, it was assumed that a LOS D or better, for all approaches and the overall intersection, represents acceptable operating conditions.

LOS for intersections is determined by the average control delay per vehicle. The range of control delay for each LOS is different for signalized and unsignalized intersections. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will experience greater delays than an unsignalized intersection. Driver tolerance for delay is greater at a signal than at a stop sign; therefore, the LOS thresholds for each LOS category are lower for unsignalized intersections than for signalized intersections. **Table 3** shows the LOS thresholds for signalized and unsignalized intersections.

Table 3 – Level of Service Thresholds

Level of Service	Average Vehicle Delay (sec/veh)	
	Signalized Intersection	Unsignalized (Stop or Roundabout) Intersection
A	0 to 10	0 to 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

All traffic operations analysis was performed using the Synchro/SimTraffic (version 11) software package. The results reported in this analysis are an average of 10 simulation runs in SimTraffic. For the AM and school dismissal peak hours, the intersections of Glenwood Avenue at the Northbound TH 100 Ramps and Glenwood Avenue at Ottawa Avenue N were modified to attempt to replicate the staff and police control at those intersections, using traffic signals in Synchro/SimTraffic. For the signals used to replicate human traffic control, phasing and splits were developed based on video observations of the intersection and were adjusted to replicate the delay/queueing seen in the observations. All relevant traffic operations results tables can be found in **Appendix C**.

Signal timing information for the two TH 100 Ramp intersections was provided by MnDOT.

As was mentioned previously, only the 2025 traffic demands were analyzed as Breck does not plan to increase enrollment and limited growth is expected in the area surrounding the school.

4.1 2025 Existing Conditions

Under existing AM peak hour conditions, each intersection operates acceptably overall at LOS C or better over the whole peak hour. As was discussed under the site observations section, there are higher delays and queues during the 30-minute school peak from 8:00 to 8:30 AM before school starts, specifically during the 15-minutes right before school starts. During the peak school arrival peak, queues on eastbound Glenwood Avenue can back up from the Ottawa Avenue N intersection to the TH 100 Northbound Ramp intersection. Both of these intersections are controlled by school staff/police, who can react in real time to reduce queueing issues, avoid gridlock, and facilitate the movement of traffic along Glenwood Avenue as efficiently as possible given the significant traffic demand during the 15-30 minutes before school starts.

During the AM peak hour, there are delay issues for vehicles turning left onto Glenwood Avenue from Lilac Drive or Ottawa Avenue S, which was seen during the site observations. The delay issues are primarily due to queues on eastbound Glenwood Avenue blocking the intersection.

During the school dismissal peak hour, each intersection operates acceptably overall at LOS B or better over the whole peak hour. As was discussed under the site observations section, there are higher delays and queues during the 15-minutes immediately before and after school ends. While the queueing and delay issues during the school dismissal peak hour are generally contained to the school site, there are westbound queues on Glenwood Avenue that extend between the TH 100 Northbound Ramp intersection and Ottawa Avenue N. Similar to the AM peak hour, both intersections are controlled by school staff/police, who can react in real time to reduce queueing issues and facilitate the movement of traffic out of the school site and along Glenwood Avenue as efficiently as possible, avoiding gridlock along the roadway network.

During the PM, weekday event, and Sunday peak hours, traffic volumes in and out of the school site are significantly lower, and each of the six study intersections operates normally without additional traffic control, operating at LOS B or better, with each approach operating at LOS D or better. There are no significant delay or queueing concerns during the PM, weekday event, or Sunday event peak hours.

Table 4 shows a summary of the 2025 existing traffic operations during the typical AM, school dismissal, and PM peak hours. **Table 5** shows a summary of the 2025 existing traffic operations during the weekday and Sunday event peak hours.

Table 4 – 2025 Existing Traffic Operations – Typical Day

Intersection	Approach	AM Peak Hour		School Dismissal Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
Glenwood Ave at TH 100 SB Ramps (Traffic Signal)	SB	11.9 / B	7.7 / A	18.7 / B	10.2 / B	20.4 / C	9.8 / A
	EB	3.7 / A		6.6 / A		7.1 / A	
	WB	7.5 / A		10.5 / B		7.8 / A	
Glenwood Ave at TH 100 NB Ramps (Traffic Signal)	SB	10.7 / B	12.6 / B	10.6 / B	13.0 / B	29.9 / C	15.8 / B
	EB	11.0 / B		10.7 / B		11.9 / B	
	WB	15.7 / B		17.2 / B		10.6 / B	
Glenwood Ave at Lilac Dr (Minor Stop)	NB	141.2 / F	5.9 / A	21.9 / C	1.9 / A	16.6 / C	1.0 / A
	SB	29.3 / D		16.6 / C		7.7 / A	
	EB	0.6 / A		0.6 / A		0.6 / A	
	WB	0.6 / A		0.5 / A		0.5 / A	
Glenwood Ave at Ottawa Avenue (Minor Stop)	SB	5.5 / A	19.3 / C	10.1 / B	13.6 / B	14.0 / B	5.9 / A
	EB	19.2 / C		13.5 / B		6.2 / A	
	WB	24.5 / C		18.0 / C		0.9 / A	
Glenwood Ave at Natchez Ave (Minor Stop)	NB	7.8 / A	2.5 / A	8.6 / A	2.6 / A	9.2 / A	1.7 / A
	SB	7.1 / A		6.5 / A		4.6 / A	
	EB	3.3 / A		2.9 / A		1.9 / A	
	WB	1.2 / A		0.5 / A		0.5 / A	
Ottawa Ave at Natchez Ave/Chatelain Terr (Minor Stop)	NB	3.2 / A	2.6 / A	2.2 / A	2.7 / A	1.8 / A	2.0 / A
	SB	0.5 / A		0.1 / A		0.1 / A	
	EB	4.1 / A		3.7 / A		3.2 / A	

Table 5 – 2025 Existing Traffic Operations – Weekday and Sunday Events

Intersection	Approach	Weekday Event Peak Hour		Sunday Event Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
Glenwood Ave at TH 100 SB Ramps (Traffic Signal)	SB	26.6 / C	13.6 / B	9.3 / A	7.3 / A
	EB	7.8 / A		5.6 / A	
	WB	15.8 / B		8.0 / A	
Glenwood Ave at TH 100 NB Ramps (Traffic Signal)	SB	26.4 / C	14.0 / B	11.2 / B	8.2 / A
	EB	11.8 / B		9.0 / A	
	WB	9.4 / A		5.4 / A	
Glenwood Ave at Lilac Dr (Minor Stop)	NB	25.7 / D	1.4 / A	13.5 / B	0.8 / A
	SB	14.3 / B		8.8 / A	
	EB	0.6 / A		0.9 / A	
	WB	0.6 / A		0.5 / A	
Glenwood Ave at Ottawa Avenue (Minor Stop)	SB	16.6 / C	6.6 / A	6.1 / A	4.0 / A
	EB	7.8 / A		4.9 / A	
	WB	1.2 / A		0.7 / A	
Glenwood Ave at Natchez Ave (Minor Stop)	NB	8.6 / A	1.8 / A	5.9 / A	1.0 / A
	SB	5.7 / A		3.6 / A	
	EB	2.1 / A		1.0 / A	
	WB	0.5 / A		0.3 / A	
Ottawa Ave at Natchez Ave/Chatelain Terr (Minor Stop)	NB	1.3 / A	2.4 / A	1.1 / A	2.3 / A
	SB	0.1 / A		0.0 / A	
	EB	3.2 / A		3.8 / A	

4.2 2025 Build Conditions

To improve traffic operations and safety along Glenwood Avenue, a build scenario with a dedicated eastbound left turn lane at Ottawa Avenue N was analyzed. The eastbound left turn lane would serve the heavy eastbound left turn into the school site, provide additional storage for eastbound traffic between Ottawa Avenue and the Northbound TH 100 Ramp intersection, and allow for eastbound Glenwood Avenue traffic to continue through the intersection without getting stuck behind eastbound left turning traffic.

During the AM peak hour, with the addition of an eastbound left turn lane, delay and queueing at the intersection of Glenwood Avenue at Ottawa Avenue N are improved, with eastbound queues being reduced by approximately 50% and overall delay improving by approximately 10 seconds per vehicle.

During the school dismissal peak hour, there the eastbound left turn has lower volumes compared to other times of the day, however, the eastbound left turn lane would still provide an operational and safety benefit. The queues on westbound Glenwood Avenue would continue to exist but can still be managed by the staff/police controlling the intersections along Glenwood Avenue.

During the PM, weekday event, and Sunday peak hours, there are no significant queueing or delay issues under existing conditions, but an eastbound left turn lane would provide a safety and operation benefit, with eastbound left turning traffic volumes expected to be high during any time there is significant traffic entering the school site, during school arrival or events.

Table 6 shows a summary of the 2025 Build traffic operations during the typical AM, school dismissal, and PM peak hours. **Table 7** shows a summary of the 2025 Build traffic operations during the weekday and Sunday event peak hours.

Table 6 – 2025 Build Traffic Operations – Typical Day

Intersection	Approach	AM Peak Hour		School Dismissal Peak Hour		PM Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
Glenwood Ave at TH 100 SB Ramps (Traffic Signal)	SB	11.8 / B	7.7 / A	18.0 / B	9.9 / A	20.4 / C	9.9 / A
	EB	3.7 / A		6.4 / A		7.1 / A	
	WB	7.4 / A		10.1 / B		8.0 / A	
Glenwood Ave at TH 100 NB Ramps (Traffic Signal)	SB	10.4 / B	12.1 / B	10.8 / B	13.0 / B	29.9 / C	15.8 / B
	EB	10.8 / B		10.7 / B		11.9 / B	
	WB	14.6 / B		17.2 / B		10.5 / B	
Glenwood Ave at Lilac Dr (Minor Stop)	NB	47.7 / E	2.1 / A	14.5 / B	1.4 / A	14.4 / B	0.9 / A
	SB	8.2 / A		10.4 / B		6.6 / A	
	EB	0.6 / A		0.6 / A		0.6 / A	
	WB	0.5 / A		0.5 / A		0.5 / A	
Glenwood Ave at Ottawa Avenue (Minor Stop)	SB	4.7 / A	9.8 / A	8.5 / A	6.8 / A	11.3 / B	3.7 / A
	EB	8.7 / A		4.6 / A		3.1 / A	
	WB	13.8 / B		9.3 / A		0.9 / A	
Glenwood Ave at Natchez Ave (Minor Stop)	NB	7.5 / A	1.7 / A	6.8 / A	1.8 / A	9.1 / A	1.3 / A
	SB	6.5 / A		5.8 / A		4.6 / A	
	EB	1.5 / A		1.7 / A		1.2 / A	
	WB	1.1 / A		0.5 / A		0.5 / A	
Ottawa Ave at Natchez Ave/Chatelain Terr (Minor Stop)	NB	3.2 / A	2.6 / A	2.2 / A	2.7 / A	1.8 / A	2.0 / A
	SB	0.5 / A		0.1 / A		0.1 / A	
	EB	4.1 / A		3.7 / A		3.2 / A	

Table 7 – 2025 Build Traffic Operations – Weekday and Sunday Events

Intersection	Approach	Weekday Event Peak Hour		Sunday Event Peak Hour	
		Approach (delay / LOS)	Intersection (delay / LOS)	Approach (delay / LOS)	Intersection (delay / LOS)
Glenwood Ave at TH 100 SB Ramps (Traffic Signal)	SB	26.6 / C	13.6 / B	9.1 / A	7.3 / A
	EB	7.7 / A		5.5 / A	
	WB	16.0 / B		8.0 / A	
Glenwood Ave at TH 100 NB Ramps (Traffic Signal)	SB	26.4 / C	13.9 / B	11.1 / B	8.1 / A
	EB	11.8 / B		8.9 / A	
	WB	9.3 / A		5.4 / A	
Glenwood Ave at Lilac Dr (Minor Stop)	NB	13.9 / B	1.0 / A	12.5 / B	0.8 / A
	SB	8.3 / A		7.0 / A	
	EB	0.6 / A		0.9 / A	
	WB	0.5 / A		0.5 / A	
Glenwood Ave at Ottawa Avenue (Minor Stop)	SB	9.7 / A	3.3 / A	6.0 / A	3.1 / A
	EB	3.5 / A		3.1 / A	
	WB	1.1 / A		0.7 / A	
Glenwood Ave at Natchez Ave (Minor Stop)	NB	9.2 / A	1.3 / A	6.1 / A	0.8 / A
	SB	5.7 / A		3.6 / A	
	EB	1.1 / A		0.6 / A	
	WB	0.5 / A		0.3 / A	
Ottawa Ave at Natchez Ave/Chatelain Terr (Minor Stop)	NB	1.3 / A	2.4 / A	1.1 / A	2.3 / A
	SB	0.1 / A		0.0 / A	
	EB	3.2 / A		3.8 / A	

5 Conclusion

Breck School recently purchased the former site of the Golden Valley American Legion, located on the south side of the school site. With the purchase of the property, the school is looking to update their comprehensive site plan looking at improvements on their site, including improvements to the existing school building, a new athletics building, an improved drop-off plaza, and outdoor environmental classrooms. As part of the mast plan, Breck is not planning to increase school enrollment above the existing approximately 1,200 students.

It is Breck's goal to plan for the future as well as be good neighbors for their North Tyrol neighborhood. As part of the comprehensive site plan, a traffic study was completed to better understand the existing issues and then analyze potential improvements to safety and traffic operations both on-site and on the adjacent roadway network of Glenwood Avenue, Natchez Avenue, and Chatelain Terrace.

Based on site observations and traffic operations analysis, the following issues currently exist on and around the Breck School site.

Internal School Site

- During the school arrival peak, there is bottleneck on site due to conflicts between left turns from Ottawa Avenue N into the drop-off area, pedestrians in the crosswalk on the west side of the intersection, and vehicles exiting the site to Glenwood Avenue from the tennis court area.
 - The high number of vehicles and pedestrians going through a single intersection, especially during the 15-minute peak right before school starts, results in long queues on Ottawa Avenue, which reach Glenwood Avenue at times.
- During the school dismissal peak, northbound Ottawa Avenue N between the parking lot access and the pick-up plaza is closed to all traffic except buses, therefore, all vehicles using the main pick-up area must enter the school site using Natchez Avenue/Chatelain Terrace
 - At times, queues on Ottawa Avenue by the tennis courts backs onto Natchez Avenue
- During both school arrival and dismissal, most of the buses exit the site at the same time, which temporarily increases delay and queueing on site.
- Currently, all buses must drive through the drop-off/pick-up area when entering the school site, which increases congestion with buses disrupting drop-off/pick-up activity.
- During events, when there is significant parking demand on-street on Ottawa Avenue N, there are times when parked vehicles make it difficult for vehicles driving through the site to see pedestrians crossing the roadway, especially as pedestrians tend to cross the roadway at whatever location is convenient for them along the roadway, often crossing between parked cars.

Adjacent Roadway Network

- During the AM peak hour, there are a significant number of eastbound left turns onto Ottawa Avenue from Glenwood Avenue. To better facilitate traffic at the intersection, a staff member controls the intersection, working to manage conflicts between eastbound left turns and westbound vehicles. During the peak 15-minute school peak, there are eastbound queues on Glenwood Avenue from the Ottawa Avenue N intersection to the Northbound TH 100 Ramp intersection.

- To avoid gridlock at the Northbound TH 100 Ramp intersection, a police officer controls the intersection, managing queuing and avoiding gridlock at the intersection, primarily for eastbound Glenwood Avenue and southbound lefts turns from the TH 100 ramp entering the back of the queue from the Ottawa Avenue N access.
- There is currently no eastbound left turn lane on Glenwood Avenue at Ottawa Avenue N, as a result, eastbound through vehicles often get stuck in the eastbound queue behind the heavy eastbound left turning traffic demands.
- During the school dismissal peak hour, there are westbound queues on Glenwood Avenue between the Northbound TH 100 Ramps and Ottawa Avenue N. To address the queuing, both intersections are staff/police controlled to reduce queueing, avoid gridlock, and facilitate the movement of traffic along Glenwood Avenue during the 30-minute school dismissal peak.
- There have been concerns from neighbors about vehicle volumes and speeds on the neighborhood roadways directly east of the Breck School site. While speeds on Natchez Avenue and Chatelain Terrace are not excessive, it would be beneficial to lower speeds in the neighborhood, especially with the adjacent park and single-family residences.

5.1 Recommendation

Based on observations and analysis of the Breck School site, the following improvements to the site and surrounding roadway network are recommended

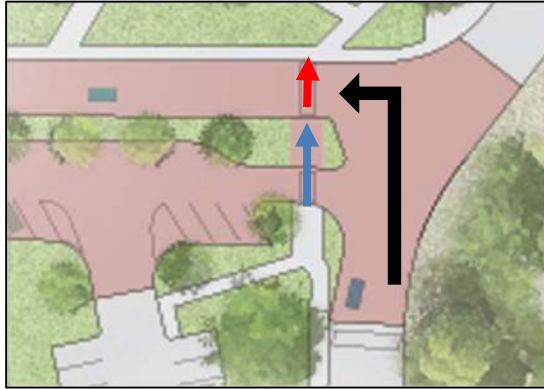
Current Traffic Conditions that Should Continue

- Community police officers and staff controlling the below intersections to facilitate safe traffic flow, manage queueing, and avoid gridlock during the school arrival and dismissal peaks.
 - Glenwood Avenue at the Northbound TH 100 Ramps
 - Glenwood Avenue at Ottawa Avenue N
 - Ottawa Avenue N at the drop-off/pick-up plaza
 - The west end of the drop-off/pick-up plaza
 - Ottawa Avenue at the Visitor/Student Parking Lot driveway (school dismissal only)
- Closing Ottawa Avenue northbound between 3:00 and 3:35 north of the visitor/student parking lot driveway
 - If in the future buses are routes to enter the site via Lilac Drive, this could be opened. However, it would be important to still encourage some pick-up activity in the Mustang parking lot to avoid long pick-up queues.
- Prohibiting southbound left turns off of Ottawa Avenue N at Glenwood Avenue from 8:00 to 8:30 AM

On-site Improvements Already Included in the Site Plan

- Improved pick-up/drop-off plaza area creates better separation for pick-up/drop-off traffic and parking vehicles.
- Median refuge island for the crosswalk on the east end of the pick-up/drop-off plaza will allow pedestrians to cross one direction of traffic at a time.
 - During the school arrival period, pedestrians could cross the eastbound lane, then wait in the refuge area for the staff member to stop northbound left turning traffic. By

making this crossing shorter, northbound left turning traffic will be stopped for a shorter period of time, improving operational efficiency and reducing queue lengths.



- Future two-way connection from the Lilac Drive access to the school could provide an alternate route for buses to enter the school site in the future, separating them from parent pick-up/drop-off and parking traffic. In order to accommodate buses turning into Lilac Drive, a larger turn radius would be needed at Glenwood Avenue.
 - Parent pick-up/drop-off traffic should still use the Ottawa Avenue access even with a two Lilac Drive connection.
- Keeping the roadway west of the pick-up/drop-off plaza as one-way westbound to keep parents from entering at Lilac Drive to try to pick-up/drop-off their children.

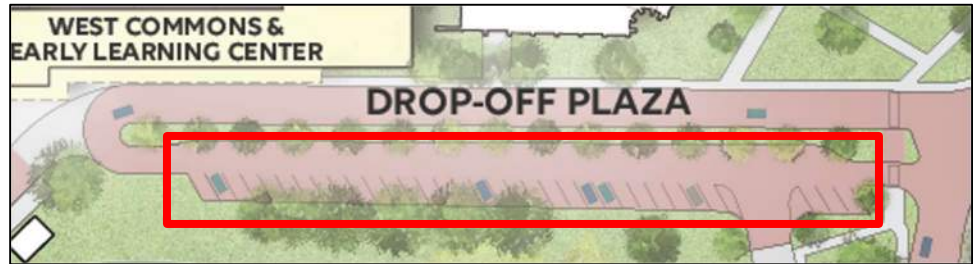


- Gate on the east side of the school at the Natchez Avenue/Chatelain Terrace access, which could be closed during non-peak school traffic times to force all traffic to enter and exit the site via the Glenwood Avenue accesses. This access is still needed during peak arrival and dismissal periods to maintain acceptable traffic flow and circulation on the school site.
 - By closing the gate during non-peak times, it would reduce the overall traffic volumes in the neighborhood throughout the day.
 - During non-peak times, there is less congestion on Glenwood Avenue and Ottawa Avenue N, so all traffic can be handled with only the Glenwood Avenue accesses.

Additional Improvements that Could be Added to the Site Plan

- Limit parking on Ottawa Avenue N within the school site during school arrival and dismissal peak hours. The current on-street parking creates additional congestion during school arrival and dismissal with limited space on Ottawa Avenue N.

- On-street parking could be prohibited during school arrival and dismissal peaks but allowed throughout the rest of the day and during events.
- Consider using the parking lot within the pick-up/drop-off plaza for visitor parking instead of staff parking. These spaces could then be used for parent pick-up/drop-off for the early learning center and be visitor parking during the school day.
 - In addition, consider adding a parking aisle on the north side of the parking lot if feasible without impacting the buffer area between the pick-up/drop-off plaza and the parking area.
 - Consider adding a sidewalk connection to the pedestrian crossing locations on either side of the pick-up/drop-off plaza.



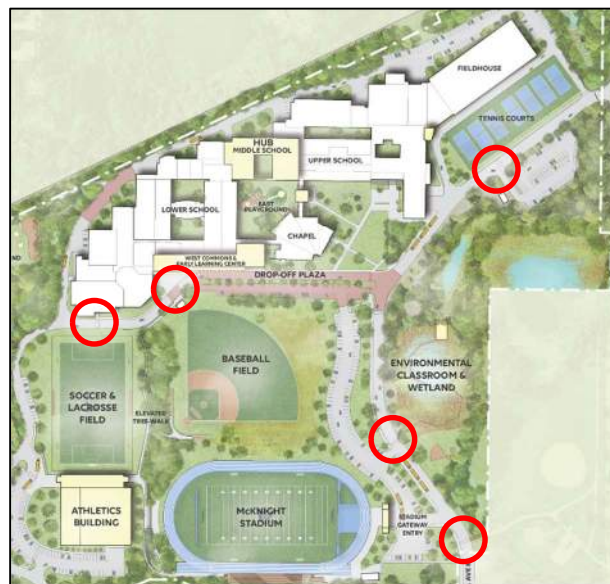
- Add pedestrian crossing signage (S1-1 and W16-7P) at all marked pedestrian crossing locations on site that are not controlled by stop signs. These signs will bring attention to the pedestrian crossing and increase pedestrian visibility and stop compliance. See map of locations and example of signal below.



S1-1



W16-7p
(old W16-7mP)



- During the arrival peak hour, it would reduce congestion on site if the school buses did not exit the school site between 8:15 and 8:30 AM. This would mean some buses waiting an extra 5 to 10 minutes on the north side of the school before exiting the site. Currently, most of the buses exit at once during the 15-minute school arrival peak, which results in increased congestion on-site during the busiest 15-minute period.
 - If possible, buses could try to exit before 8:15 AM to avoid the arrival congestion on site. Currently, some buses do leave before the peak 15-minute arrival period.

Improvements Requiring City Approval (Breck to Partner)

- Consider adding sidewalk on the west side of Natchez Avenue and Chatelain Terrace in the areas adjacent to the school site to provide a separation between vehicle and pedestrian traffic.
- Add a 20-mph school zone speed limit along Natchez Avenue and Chatelain Terrace. Due to limits with school zone speed limits, the school zone limit could only be placed approximately 200 to 300 feet north and south of the Natchez Avenue school access because Natchez Park is not school property, thus there is no school zone.
 - If a school zone speed limit, it would be recommended that the signs either be “when flashing” or during specific times of the day, rather than “when children present”.
- Add speed feedback signs on Natchez Avenue and Chatelain Terrace to alert drivers that they are speeding.
- Consider reducing the speed limit on Natchez Avenue and Chatelain Terrace. At one point, the City of Golden Valley was exploring lowering the statutory speed limit on most City streets to 25 mph.
- Other traffic calming measures like curb bump outs could be considered by the city to reduce speeds on Natchez Avenue and Chatelain Terrace.
- Some of the site and operational improvements at Breck School will hopefully result in more people using the Glenwood Avenue accesses and result in less traffic in the neighborhood, such as:
 - Natchez Avenue school access gate
 - Added turn lane on Glenwood Avenue to improve safety, queuing, and traffic operations at the Ottawa Avenue N intersection.

Improvements Requiring County Approval (Breck to Partner)

- Add an eastbound left turn lane on Glenwood Avenue at Ottawa Avenue N to improve safety, queuing, and traffic operations at the intersection during all times of the day.
 - Given the existing bike lanes on Glenwood Avenue, the roadway would likely need to be widened between the Northbound TH 100 Ramp intersection and just west of Ottawa Avenue to accommodate the turn lane. The roadway could be widened to the north side of the roadway, which is primarily on parcels that are owned by Breck School.
- Consider adding a marked pedestrian crossing on Glenwood Avenue at either Natchez Avenue or Ottawa Avenue to improve safety for pedestrians crossing Glenwood Avenue to access Breck School, Natchez Park, or Meadowbrook Elementary School.

STORMWATER MANAGEMENT NARRRRATIVE

BRECK

SITE MASTERPLAN

HGA

SECTION 1.0 – Site Background and Areas

Breck proposes to construct a series of site improvements as part of their campus Masterplan located on their property at 123 Ottawa Avenue. These improvements will be constructed in phases and each series of projects will include new stormwater Best Management Practices (BMPs) that will meet or exceed the stormwater management requirements of the City of Golden Valley (City) and those of the Bassett Creek Watershed Management Commission (BCWMC).

A Breck Preliminary PUD and Plat application narrative is submitted under separate cover for additional site background and proposed Masterplan information.

Much of the site is located within the FEMA floodplain elevation of 840.0 feet (MSL). The City and BCWMC have also modeled the watershed with current precipitation information and have established a floodplain elevation of 842.4 feet (MSL) on site, which encompasses an even greater portion of the campus property. For purposes of analyzing the floodplain impacts on site, the City and BCWMC floodplain elevation will be used in this submittal.

The site areas for the preliminary PUD (See Appendix A) are:

- Total site area - 401,185 s.f. (9.209 Acres).
- Existing Impervious Area – 846,306 s.f. (19.429 Acres)
- Proposed Impervious Area – 898,988 s.f. (20.638 Acres)
- New and/or Disturbed Impervious Area – 218,073 s.f. (5.006 Acres)

SECTION 2.0 – Existing Conditions

The existing conditions are shown on the site survey.

The existing site contains three stormwater basins that were constructed as part of the Breck School Remodel and Expansion project in 2000 (See Appendix D). It's anticipated that the stormwater ponds from that project met the stormwater management requirements at that time.

A Wetland Delineation Report was prepared by Kjolhaug Environmental Services Company, Inc. (Kjolhaug) dated May 2, 2025 (See Appendix B). This report identified the current wetland edges along with the jurisdictional and incidental wetland areas.

A Geotechnical Evaluation will be prepared and provided as part of future development on site when individual projects are submitted for City and BCWMC approval. However, preliminary soil borings and the associated report were prepared by Braun Intertec Corporation, dated November 19, 2024(See Appendix C).

- The soil borings identified a surficial layer of fill with varying layers of Silty Sand (SM) or Poorly Graded Sand with Silt (SP-SM). However, Organic and Clayey soils were found in the soil borings to depth. Thus, it is not anticipated that stormwater infiltration on site will be possible. Alternative stormwater BMPs are planned to be used to meet BCWMC stormwater management requirements.

SECTION 3.0 – Proposed Conditions

The proposed conditions are noted in the Site Background and Areas section of this report and shown in the preliminary PUD plans.

The Masterplan projects will include (in no specific order of construction) the following items:

- Relocation and of the existing baseball and softball fields
- Construction of a new multi-purpose field for soccer and lacrosse
- Construction of a new Athletic Building and associated parking lot
- Construction of a new Stadium Gateway building and surrounding parking lot expansion
- Construction of new building additions to the main building
- Roadway improvements to the main vehicle drop-off and parking area

Throughout the course of these projects there will be impacts to the wetlands and floodplain on site. These impacts will require mitigation and approval from the appropriate authorities. In this case, the Technical Evaluation Panel (TEP) for the wetland impacts and BCWMC for impacts to the floodplain.

Wetland Impacts

The Masterplan includes the reorientation of the baseball field which will impact the adjacent wetland. Kjolhaug has been retained by Breck to lead the wetland permitting process and is proceeding with the necessary submittals for this work.

Floodplain Impacts

The new fields will be raised from their current elevations to approximately 840.0 feet (MSL) to improve their playability and minimize disruption of team activities during large rainfall and snowmelt precipitation events. Raising the elevation of the fields will impact the flood storage volume on site. To mitigate the loss of flood storage volume, the new fields will include a subgrade comprised of coarse aggregate and pipe distribution systems. (See sheet C512)

SECTION 4.0 – Stormwater Management

This site is in the City of Golden Valley and within the boundaries of Bassett Creek Watershed Management Commission (BCWMC). BCWMC has permitting authority for the stormwater

discharge from this site as the project will exceed the site disturbance thresholds identified in BCWMC rules for project review. This project is considered a redevelopment project as defined by BCWMC rules.

A Hydrologic model (HydroCAD) of the site (existing and proposed conditions) will be prepared and submitted as part of the formal submittal process for individual projects.

Below is a description of the proposed stormwater management concept for the site. Each individual project proposed for construction will be submitted for permitting separately prior to construction.

Athletics Building and adjacent parking lot

A new filtration basin is planned to be constructed between the access drive and the softball field that will meet the stormwater management requirements for the tributary impervious area.

Stadium Gateway Building and adjacent parking lot revisions

A new filtration basin is planned to be constructed between Ottawa Ave and the existing parking lot that will meet the stormwater management requirements for the tributary impervious areas on site. In addition, new pretreatment structures (Rain Guardian) will be added to the existing parking lot curb cuts.

Athletic Fields and Main Vehicle Drop-Off

A central part of the Masterplan is the construction of new baseball, softball and multi-purpose fields. The new athletic fields are planned to be constructed of artificial turf. While it is understood that the City identifies the artificial turf fields to be pervious surfaces, the BCWMC identifies these surfaces as impervious for purposes of meeting their water quality requirements. As previously noted, the new fields are planned to be raised from their existing grades to minimize disruption from spring flooding on campus. With this grade change, the proposed field subgrades will be replaced with a coarse aggregate layer that will provide 40% void space to mitigate the floodplain volume lost by raising the fields.

One option for the coarse aggregate being explored is the use of Tire Derived Aggregate (TDA) that can provide the necessary void space and may also provide water quality benefits.

The existing stormwater basin to the east of the softball field, identified as Wetland 5 in the Wetland Delineation Report, will be expanded to meet the current stormwater management requirements of the tributary site areas. A bathymetric survey of the existing basin is being prepared and will then be used for the design of the expanded basin.

ZONING INFORMATION

EXISTING ZONING: PUD 88
PROPOSED ZONING: NO CHANGE
ADJACENT ZONING: (I-A) ASSEMBLY
(I-P) PARKS & NATURAL AREAS
(O) OFFICE
(R-1) RESIDENTIAL SINGLE FAMILY

SETBACK SUMMARY:
BUILDING: 25.8' FROM NORTH PROPERTY LINE
PARKING: 8' MINIMUM SETBACK FROM DRIVE AISLES

PARKING REQUIREMENTS PER SEC 115.11(1)-OFF-STREET PARKING
AND LOADING
ELEMENTARY AND JUNIOR HIGH SCHOOL:
2 STALLS PER CLASSROOM
HIGH SCHOOL:
2 STALLS PER CLASSROOM PLUS 1 SPACE
PER 6 STUDENTS

SITE AREAS		
	AREA (SF)	AREA (AC)
TOTAL SITE	2,448,259	56.204
WETLAND	310,180	7.121
UPLAND	2,138,079	49.084
EXISTING IMPERVIOUS	846,306	19.429
EXISTING IMPERVIOUS SITE COVERAGE		34.6%
PROPOSED IMPERVIOUS	898,988	20.638
PROPOSED IMPERVIOUS SITE COVERAGE		36.7%
MAXIMUM IMPERVIOUS SITE COVERAGE		45%

NOT FOR
CONSTRUCTION

[illegible]

ISSUANCE HISTORY - THIS SHEET

A NO: 1449-005-00

PRELIMINARY PUD SITE SUMMARY PLAN

TE: NOVEMBER 3, 2025

**PRELIMINARY PUD
SUBMITTAL**

C002

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Proposed Stadium Gateway
1-story | Approx. **15'** to roof line

PUD AGREEMENT SUMMARY

ZONING INFORMATION

SITE ADDRESS: 123 OTTAWA AVENUE NORTH

EXISTING ZONING: PUD 88
PROPOSED ZONING: NO CHANGE
ADJACENT ZONING: (I-A) ASSEMBLY
(I-P) PARKS & NATURAL AREAS
(O) OFFICE
(R-1) RESIDENTIAL SINGLE FAMILY

THIS SITE IS LOCATED WITHIN THE SHORELAND DISTRICT
SUBDISTRICT 27-32: BASSETT CREEK

SETBACK SUMMARY:
BUILDING: 25.8' FROM NORTH PROPERTY LINE
PARKING: 8' MINIMUM SETBACK FROM DRIVE AISLES

PARKING SUMMARY
PARKING REQUIREMENTS PER SEC 113-151 - OFF-STREET PARKING
AND LOADING
ELEMENTARY AND JUNIOR HIGH SCHOOL:
2 STALLS PER CLASSROOM
HIGH SCHOOL:
2 STALLS PER CLASSROOM PLUS 1 SPACE
PER 6 STUDENTS

PARKING COUNTS

PARKING LOT #	EXISTING	PROPOSED
1 - NORTH OF BUILDING	149	97
2 - SENIOR STUDENT	75	75
3 - DROP-OFF AREA	73	36
4 - MAIN LOT	164	186
5 - OTTAWA AVE	28	28
6 - MULTI-PURPOSE FIELD	-	14
7 - AMERICAN LEGION PROPERTY	167	-
8 - ATHLETICS BUILDING	-	107
TOTAL	656	543

SITE AREAS

	AREA (SF)	AREA (AC)
TOTAL SITE	2,448,259	56.204
WETLAND	310,180	7.121
UPLAND	2,138,079	49.084
EXISTING IMPERVIOUS	846,306	19.429
EXISTING IMPERVIOUS SITE COVERAGE		34.6%
PROPOSED IMPERVIOUS	898,988	20.638
PROPOSED IMPERVIOUS SITE COVERAGE		36.7%
MAXIMUM IMPERVIOUS SITE COVERAGE		45%

BUILDING AREAS

	AREA (GSF)	AREA (AC)
EXISTING BUILDING FOOTPRINT AREA	292,404	6.713
PROPOSED BUILDING FOOTPRINT AREA	336,116	7.716

NOT FOR
CONSTRUCTION

[illegible]

ISSUANCE HISTORY - THIS SHEET

A NO: 1449-005-00

PRELIMINARY PUD SITE SUMMARY PLAN

TE: NOVEMBER 3,2025

**PRELIMINARY PUD
SUBMITTAL**

C002

NOT FOR
CONSTRUCTION

[illegible]

A NO: 1449-005-00

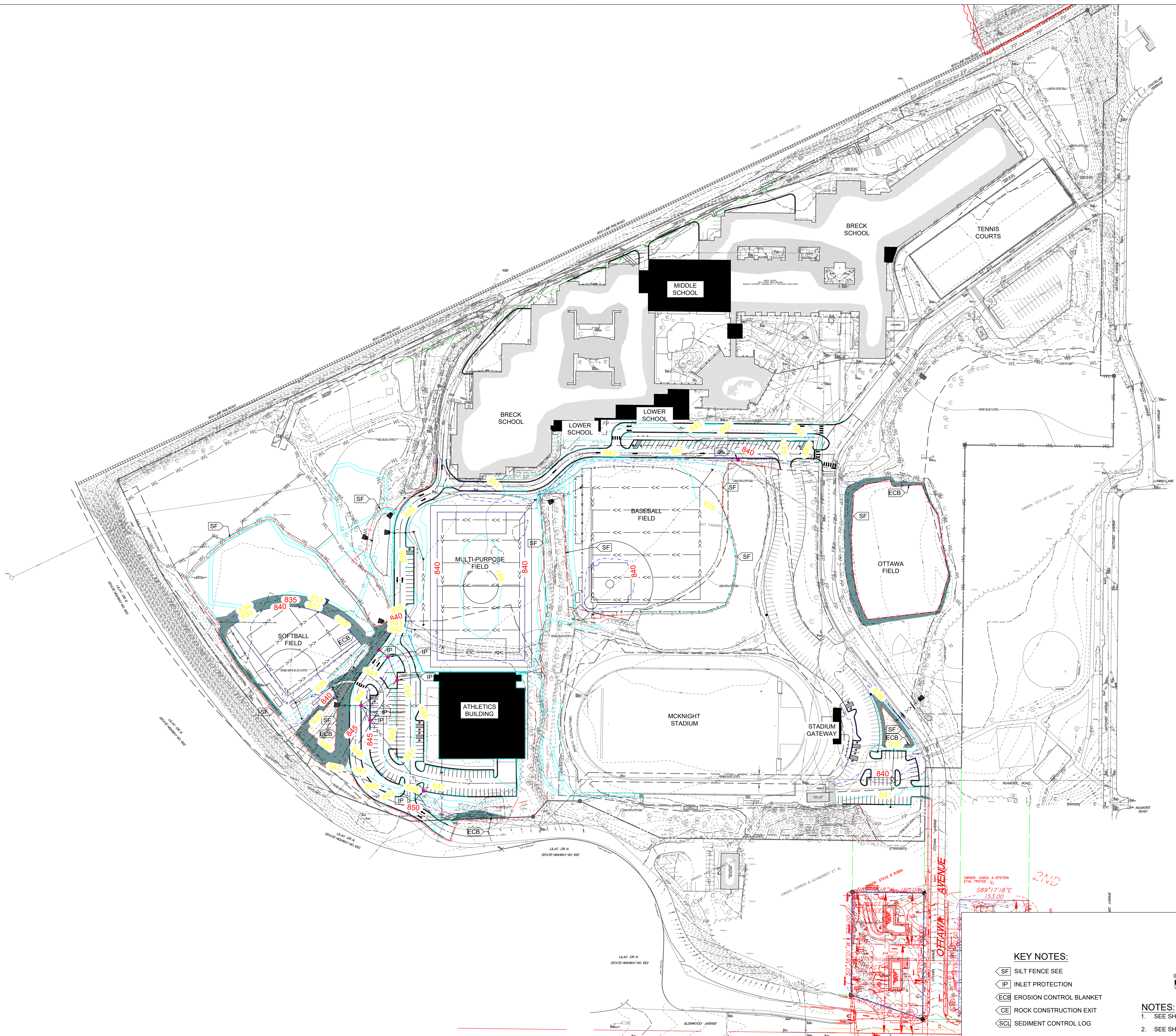
EROSION AND SEDIMENT CONTROL PLAN

TE: NOVEMBER 3,2025

PRELIMINARY PUD
SUBMITTAL

C101

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KEY NOTES:

- **SF** SILT FENCE SEE
- **IP** INLET PROTECTION
- **ECB** EROSION CONTROL BLANKET
- **CE** ROCK CONSTRUCTION EXIT
- **SCL** SEDIMENT CONTROL LOG

NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGEND
2. SEE SHEET C101 FOR EROSION CONTROL DETAILS

[illegible]

ISSUANCE HISTORY - THIS SHEET

GA NO: 1449-005-00

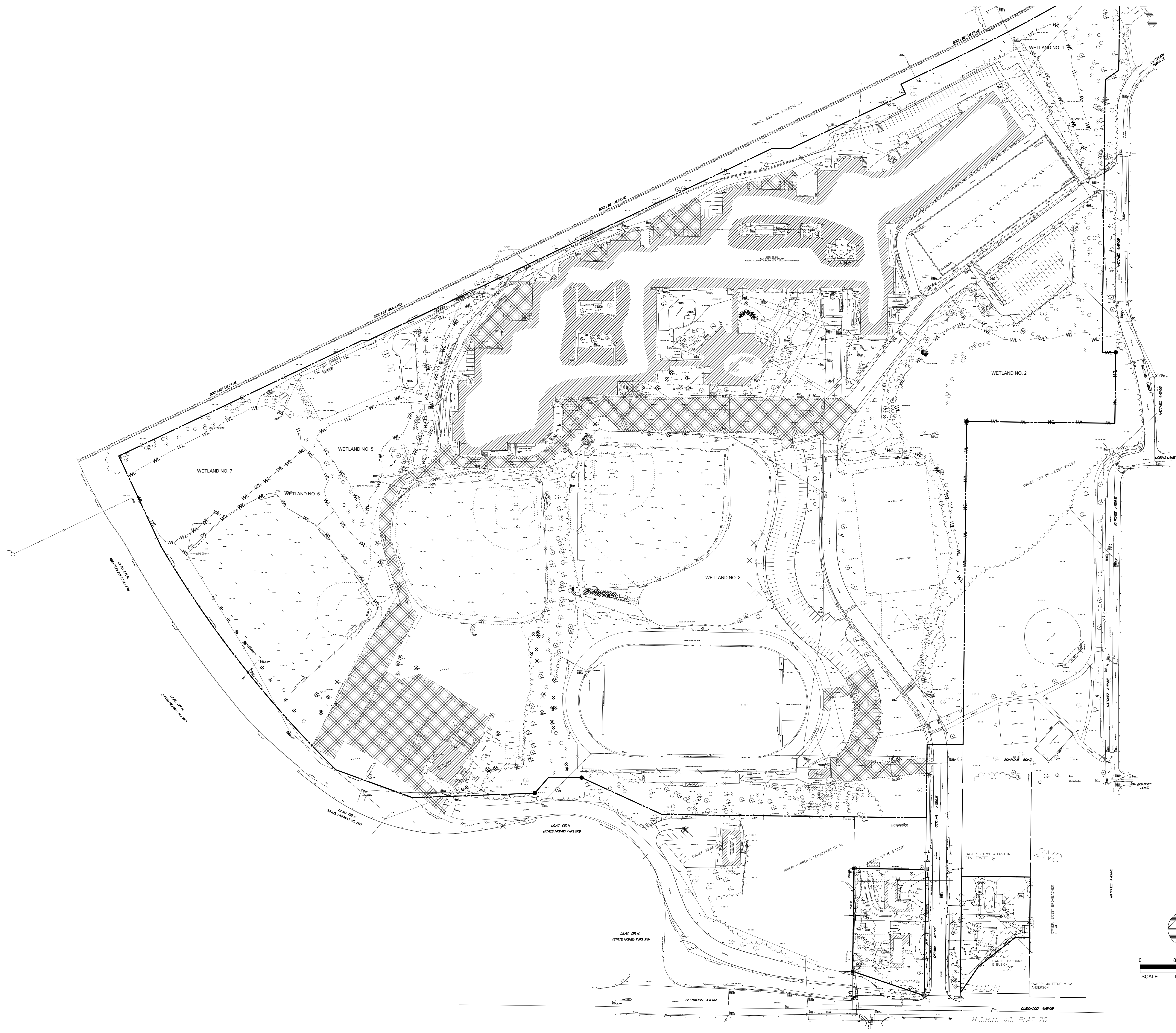
SITE DEMOLITION PLAN

DATE: NOVEMBER 3, 2025

**RELIMINARY PUD
SUBMITTAL**

C200

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Breck

Site Masterplan

123 Ottawa Ave N
Golden Valley, MN
55422

SURFACING LEGEND:

	BITUMINOUS PAVEMENT	2" BITUMINOUS WEAR (MnDOT 2360) 2.5" BITUMINOUS NON-WEAR (MnDOT 2360) 10" AGGREGATE BASE - (MnDOT 3138) - T.A. APPROVED SUBGRADE
	CONCRETE WALK	5" CONCRETE - REINFORCING - NONE 4" AGGREGATE BASE (MnDOT 3138) - T.A. APPROVED SUBGRADE
	CONSERVATION EASEMENT COMPLIANT WALKWAY MATERIAL	

NOT FOR
CONSTRUCTION

[illegible]

A NO: 1449-005-00

SITE LAYOUT AND SURFACING PLAN

TE: NOVEMBER 3, 2025

**PRELIMINARY PUD
SUBMITTAL**

C300

Breck

Site Masterplan

123 Ottawa Ave N
Golden Valley, MN
55422

[illegible]

A NO: 1449-005-00

CONSERVATION EASEMENT IMPACTS PLAN

TE: NOVEMBER 3,2025

**PRELIMINARY PUD
SUBMITTAL**

C310

[illegible]

GA NO: 1449-005-00

DATE: NOVEMBER 3, 2025

C400



[illegible]

A NO: 1449-005-00

EXISTING FLOODPLAIN HARTHWORK PLAN

TE: NOVEMBER 3,2025

**PRELIMINARY PUD
SUBMITTAL**

C410

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RANGE ID	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR
1	-5.0+	-5.0	
2	-5.0	-2.5	
3	-2.5	0.0	
4	0.0	2.5	
5	2.5	5.0	
6	5.0	7.5+	

[illegible]

A NO: 1449-005-00

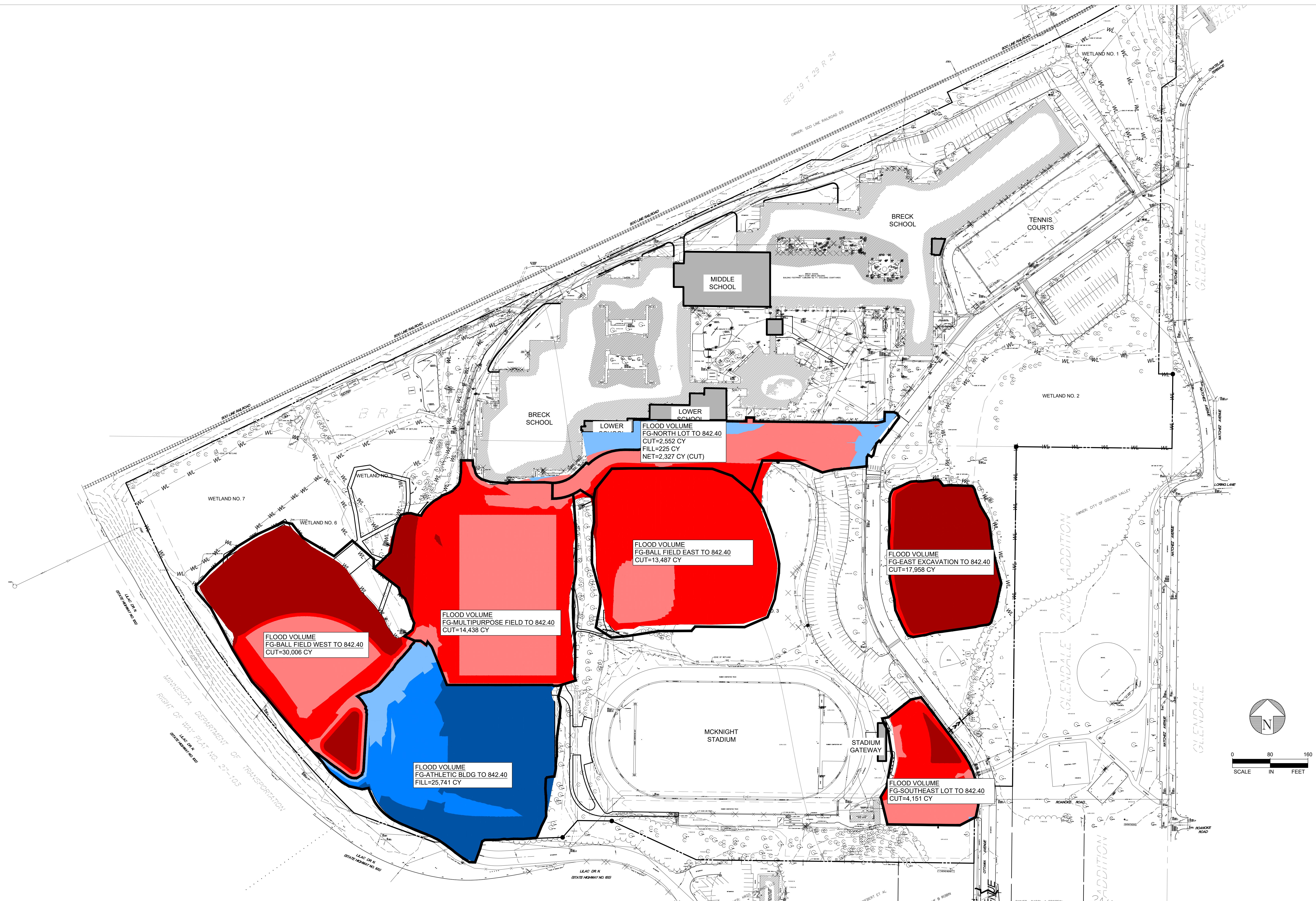
PROPOSED FLOODPLAIN EARTHWORK PLAN

TE: NOVEMBER 3, 2025

**PRELIMINARY PUD
SUBMITTAL**

C411

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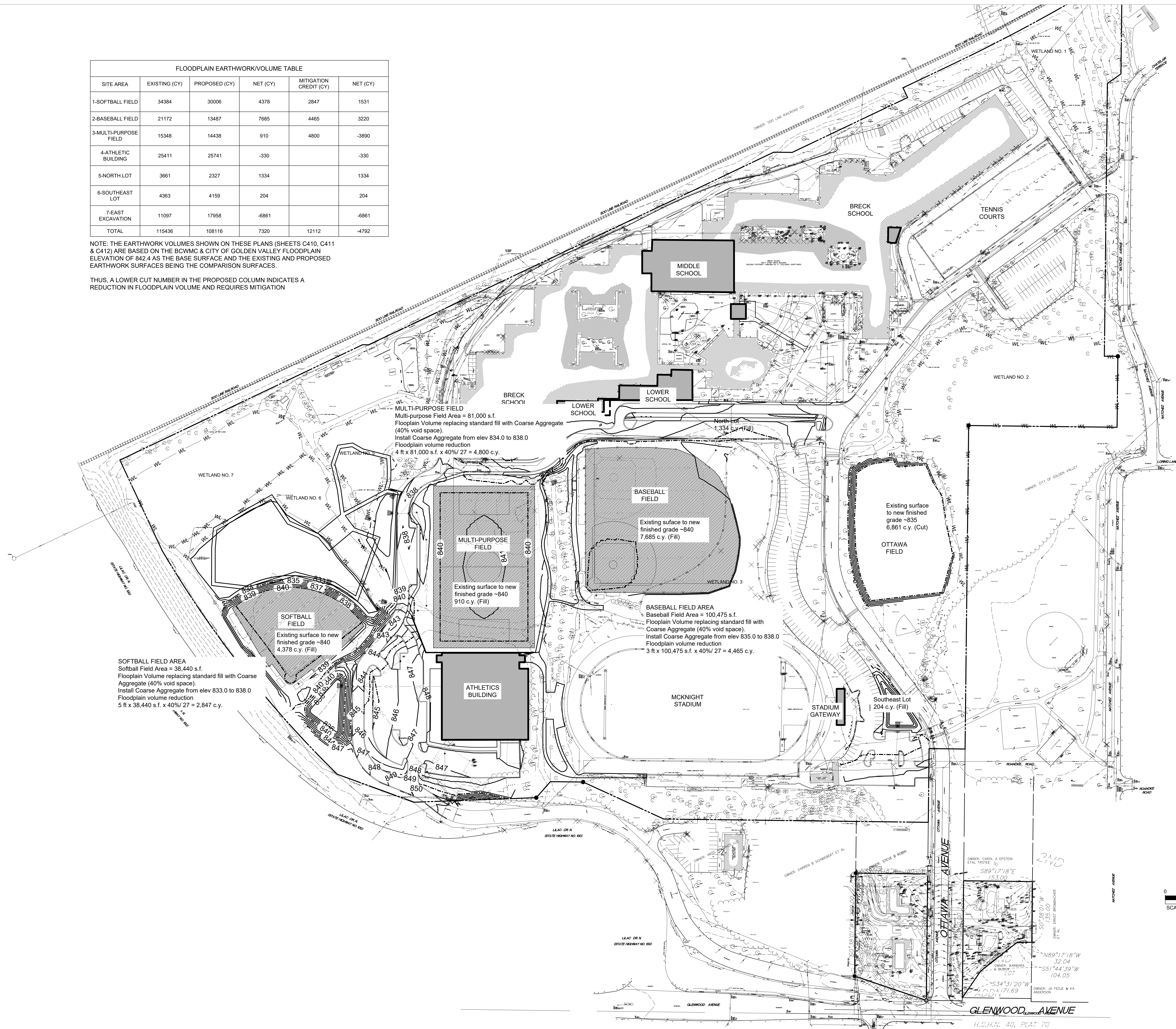


PROPOSED EARTHWORK VOLUMES BASED ON FLOODPLAIN ELEVATION OF 842.40			
RANGE ID	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR
1	-7.5+	-5.0	
2	-5.0	-2.5	
3	-2.5	0.0	
4	0.0	2.5	
5	2.5	5.0	
6	5.0	7.5+	

SITE AREA	EXISTING (CY)	PROPOSED (CY)	NET (CY)	MITIGATION CREDIT (CY)	NET (CY)
1-SOFTBALL FIELD	34384	30006	4378	2847	1531
2-BASEBALL FIELD	21172	13487	7685	4465	3220
3-MULTI-PURPOSE FIELD	15348	14438	910	4800	-3890
4-ATHLETIC BUILDING	25411	25741	-330		-330
5-NORTH LOT	3661	2327	1334		1334
6-SOUTHEAST LOT	4363	4159	204		204
7-EAST EXCAVATION	11097	17958	-6861		-6861
TOTAL	115436	108116	7320	12112	-4792

NOTE: THE EARTHWORK VOLUMES SHOWN ON THESE PLANS (SHEETS C410, C411 & C412) ARE BASED ON THE BCWMC & CITY OF GOLDEN VALLEY FLOODPLAIN ELEVATION OF 842.4 AS THE BASE SURFACE AND THE EXISTING AND PROPOSED EARTHWORK SURFACES BEING THE COMPARISON SURFACES.

THUS, A LOWER CUT NUMBER IN THE PROPOSED COLUMN INDICATES A REDUCTION IN FLOODPLAIN VOLUME AND REQUIRES MITIGATION



Breck

Site Masterplan

123 Ottawa Ave N
Golden Valley, MN
55422

NOT FOR
CONSTRUCTION

[illegible]

ISSUANCE HISTORY - THIS SHEET

HGA NO: 1449-005-00

PROPOSED FLOODPLAIN MITIGATION PLAN

DATE: NOVEMBER 3, 2025

PRELIMINARY PUD
SUBMITTAL

C412

[illegible]

ISSUANCE HISTORY - THIS SHEET

A NO: 1449-005-00

SITE UTILITY PLAN

TE: NOVEMBER 3, 2025

PRELIMINARY PUD SUBMITTAL

C500

NOT FOR
CONSTRUCTION

[illegible]

A NO: 1449-005-00

TREE PROTECTION AND REMOVAL PLAN

DATE: NOVEMBER 3, 2025

D SUBMITTAL

100

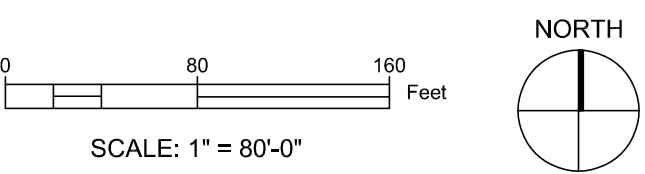
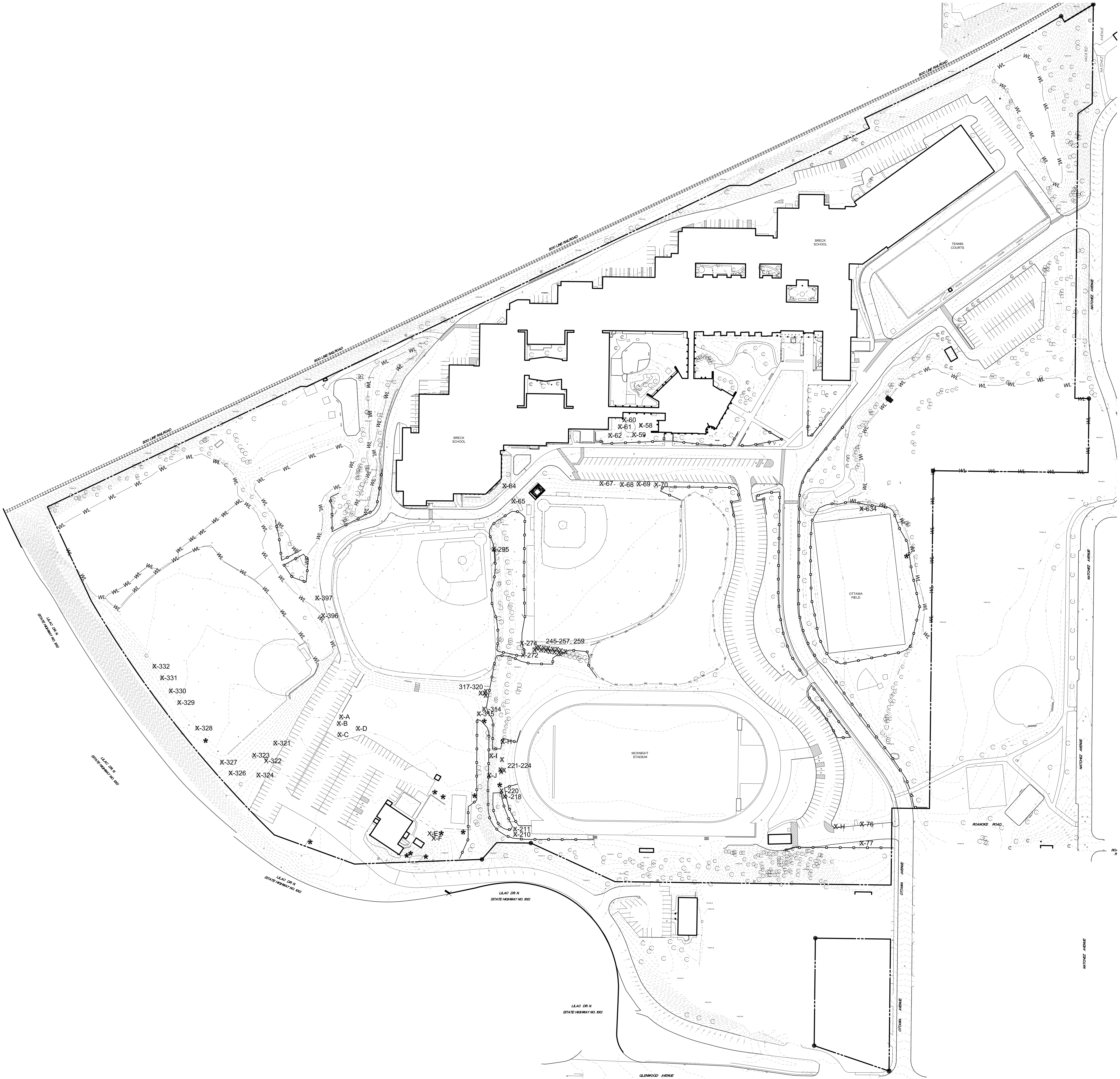
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LEGEND

-  EXISTING TREE TO REMAIN
-  EXISTING SIGNIFICANT OR LEGACY TREE TO BE REMOVED - TREES INCLUDED IN ORIGINAL TREE SURVEY NUMBERING
-  EXISTING SIGNIFICANT TREE TO BE REMOVED - TREES ADDED TO SURVEY TABLE
-  EXISTING NON-PROTECTED OR NUISANCE TREE TO BE REMOVED
-  TREE PROTECTION FENCE

NOTES

- REFER TO C-001 DEMOLITION PLAN AND CIVIL FOR ADDITIONAL SITE INFORMATION
- BEFORE BEGINNING ANY SITE REMOVALS OR CONSTRUCTION, TREE PROTECTION FENCING SHALL BE INSTALLED AS SHOWN AND DETAILED ON THE DRAWINGS AND/OR AS DIRECTED IN THE FIELD BY THE ENGINEER. FOLLOWING THE INSTALLATION OF TREE PROTECTION FENCING AND FOR THE ENTIRE CONSTRUCTION PERIOD THE FOLLOWING SHOULD APPLY:
- 2.A. NO MATERIALS, VEHICLES, OR EQUIPMENT MAY BE STORED OR STOCKPILED WITHIN THE AREAS ENCLOSED BY TREE PROTECTION FENCING
- 2.B. NO VEHICLES OR EQUIPMENT MAY BE DRIVEN, OPERATED, OR PARKED WITHIN AREAS ENCLOSED BY TREE PROTECTION
- 2.C. AREAS ENCLOSED BY TREE PROTECTION CAN NOT BE USED AS ROUTES FOR SITE TRAFFIC
- 2.D. FENCING SHALL BE RESECURED AS NECESSARY AND MAINTAINED TAUT. FENCING SHALL BE REPAIRED OR REPLACED WHEN DAMAGED AT NO ADDITIONAL COST
- 2.E. IN SPECIAL CASES WHERE CONSTRUCTION OPERATIONS ABSOLUTELY REQUIRE SOME TEMPORARY ENCRoACHMENT INTO THE TREE PROTECTION AREAS, THE CONTRACTOR SHALL PRESENT A WORK PLAN FOR TEMPORARY ENCRoACHMENT FOR THE ENGINEERS APPROVAL
3. ALL EXCAVATION OR TRENCHING WITHIN THE AREAS OF EXISTING TREE ROOTS SHALL BE CARRIED OUT BY HAND.
- 3.A. ROOTS IN TRENCH SHALL BE CUT SMOOTH AND CLEAN USING SHARP TOOLS. NO RIPPING OF TREE ROOTS BY MACHINES IS PERMITTED
- 3.B. DAMAGED EDGES OF ROOTS SHALL BE PERMITTED
- 3.C. SIDES OF EXCAVATIONS SHALL BE CLEAN AND STRAIGHT
- 3.D. IMMEDIATELY FOLLOWING TRENCHING OR EXCAVATION OPERATIONS, AREAS AT TREE ROOTS SHALL BE BACKFILLED
- 3.E. ROOTS SHALL NOT BE LEFT EXPOSED OVERNIGHT
- 3.F. BACKFILL SHALL BE A MIX OF 50% TOPSOIL AND 50% CLEAN SAND
- 3.G. BACKFILL SHALL BE HAND COMPACTED IN PLACE TO FILL ALL VOIDS
4. EXTREME CARE SHALL BE TAKEN TO AVOID ANY DAMAGE TO TRUNKS, BRANCHES, AND ROOTS. ANY DAMAGE CAUSED TO TREES SHALL BE IMMEDIATELY REMEDIED BY THE CONTRACTOR.
- 4.A. REMEDIAL WORK MAY INCLUDE PRUNING, WOUND TREATMENT, CABLING, OR ADDITIONAL MEASURES AS DETERMINED BY THE ENGINEER
- 4.B. CONTRACTOR SHALL ENGAGE A LICENSED ARBORIST TO PERFORM ALL WORK AT NO ADDITIONAL COST TO THE OWNER
5. THE CONTRACTOR SHALL REVIEW ALL PLANNED CONSTRUCTION OPERATIONS THAT MAY RESULT IN TREE DAMAGE FOR REVIEW AND APPROVAL BY THE ENGINEER
- 5.1. SPECIAL ATTENTION SHALL BE MADE TO THE PATH OF PLACING CONSTRUCTION MATERIAL ON SITE BY CRANE
- 5.2. THE CONTRACTOR SHALL PRESENT A WORK PLAN AND PROPOSED TREE PROTECTION MEASURES TO MINIMIZE DAMAGE



123 Ottawa Ave N
Golden Valley, MN
55422

123 Ottawa Ave N
Golden Valley, MN
55422

[illegible]

ISSUANCE HISTORY - THIS SHEET

A NO: 1449-005-00

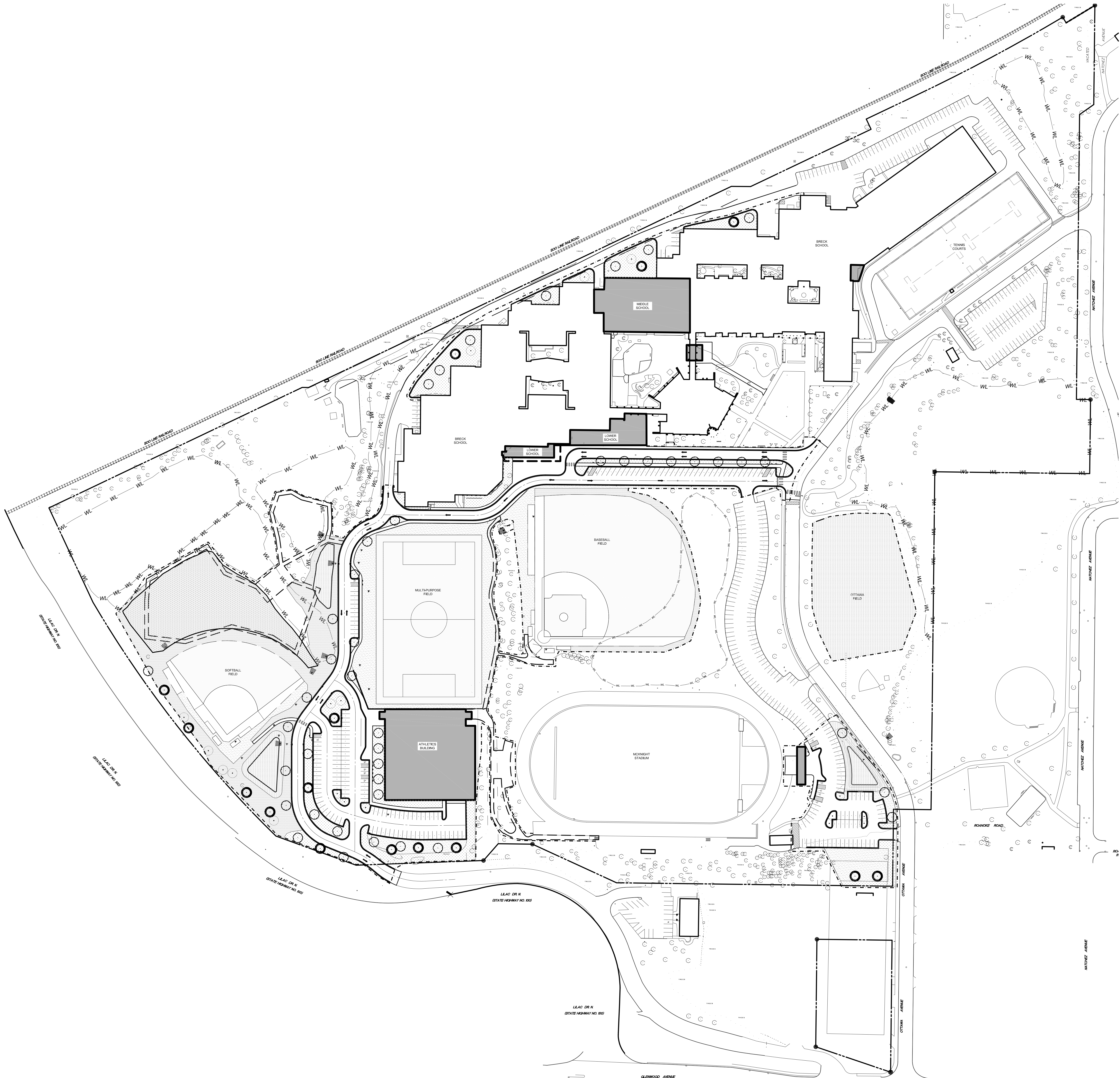
LANDSCAPE PLAN

TE: NOVEMBER 3, 202

D SUBMITTAL

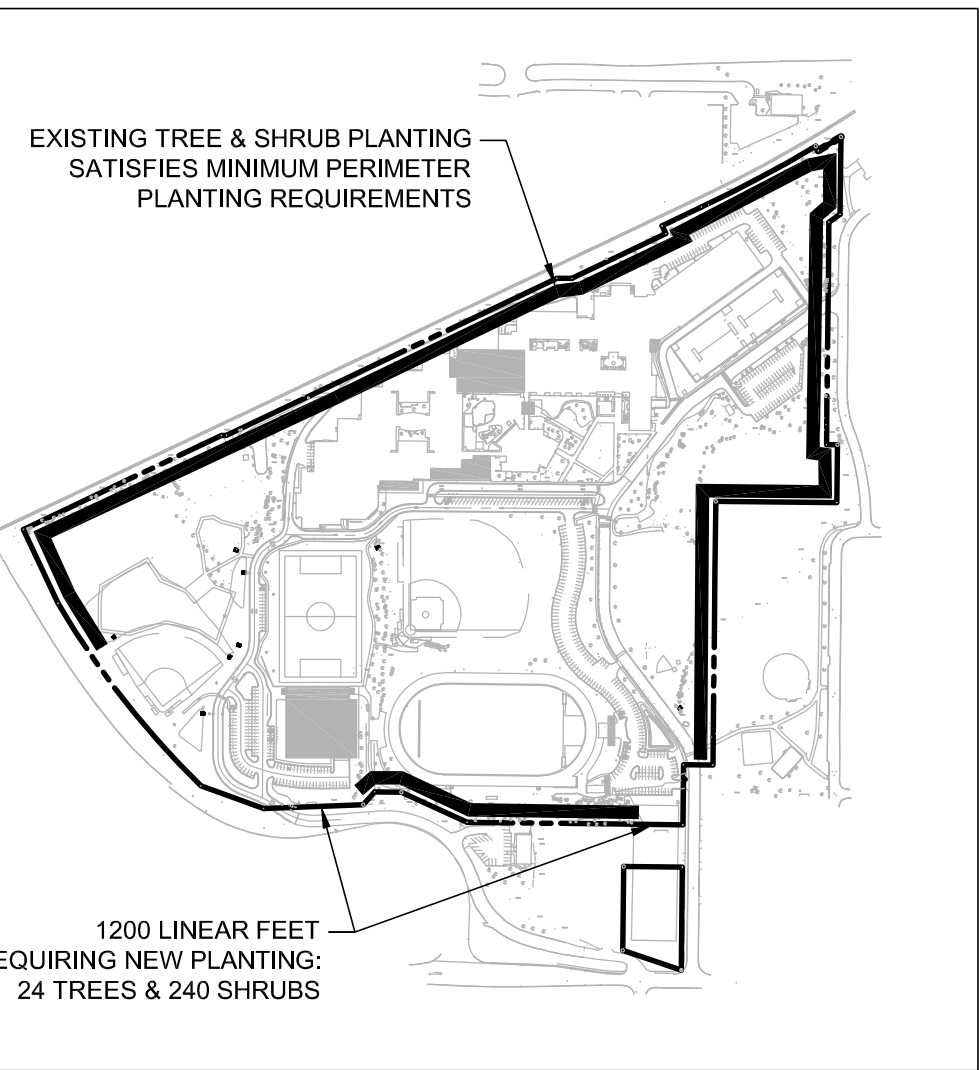
200

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LEGEND

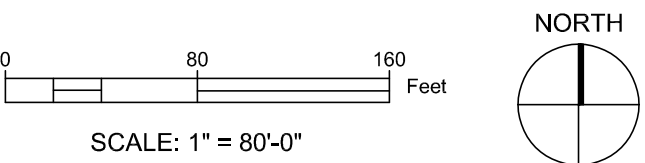
- | | |
|---|---|
|  | <u>LIMIT OF WORK</u> |
|  | <u>EXISTING TREE TO REMAIN</u>
REFER TO L100s |
|  | <u>PROPOSED DECIDUOUS TREE</u>
SIZE: 2" CAL.
QTY: 61 |
|  | <u>PROPOSED CONIFEROUS TREE</u>
SIZE: 10" HT.
QTY: 16 |
|  | <u>TURF GRASS</u> |
|  | <u>SHRUB, PERENNIAL & FORB PLANTING</u> |
|  | <u>WETLAND BUFFER PLANTING</u> |
|  | <u>STORMWATER BASIN / LOWLAND PLANTING</u> |
|  | <u>WETLAND PLANTING</u> |
|  | <u>SYNTHETIC TURF</u> |



PERIMETER PLANTING DIAGRAM - NTS

PERIMETER PLANTING NOTES:

- MINIMUM REQUIRED PLANTING:
- 1.1. ONE TREE PER 50 LINEAR FEET OF LOT PERIMETER.
 - 1.2. ONE SHRUB (#5 CONTAINER MIN.) OR PERENNIAL (#2 CONTAINER MIN.) PER FIVE LINEAR FEET OF LOT PERIMETER.



GENERAL NOTES

- 1.) Survey coordinate basis: Hennepin County Coordinate System NAD 83 1986 ADJ
- 2.) Hennepin County Tax Parcel ID Number: 19-029-24-34-0019
Address: 123 Ottawa Avenue North
Hennepin County Tax Parcel ID Number: 19-029-24-33-0017
Address: 200 Lilac Drive North
Hennepin County Tax Parcel ID Number: 19-029-24-34-0005
Address: 15 Ottawa Avenue North
Hennepin County Tax Parcel ID Number: 19-029-24-34-0006
Address: 5 Ottawa Avenue North
Hennepin County Tax Parcel ID Number: 19-029-24-34-0021
Address: 8 Ottawa Avenue North
Hennepin County Tax Parcel ID Number: 19-029-24-34-0013
Address: 18 Ottawa Avenue North
- 3.) Wetlands shown are per linework provided by Kjolhaug Environmental Services Company, Inc. and per their wetland delineation report prepared May 2, 2025.
- 4.) Proposed site plan features are per provided linework from HGA
- 5.) Easements shown are per ALTA survey prepared by Sunde Land Surveying, LLC. No proposed easements are shown.

UTILITY NOTES

- 1.) Utility information from plans and markings was combined with observed evidence of utilities to develop a view of the underground utilities shown hereon. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. In addition, Gopher State One Call locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, excavation and/or a private utility locate request may be necessary.
- 2.) Other underground utilities of which we are unaware may exist. Verify all utilities critical to construction or design.
- 3.) Some underground utility locations are shown marked onsite by those utility companies whose locators responded to our Gopher State One Call, ticket numbers 243504263, 243550379 and 243550394.
- 4.) Contact GOPHER STATE ONE CALL at 651-454-0002 (800-252-1166) for precise onsite location of utilities prior to any excavation.
- 5.) Private utilities are shown as marked by Hance Locating Services, Inc. on January 2, 2025. Private utilities are those utilities installed for the use of their owner, typically by someone other than a Gopher State One Call registered utility operator.

DESCRIPTION OF PROPERTY SURVEYED

(Per Guaranty Commercial Title, Inc. Commitment for Title Insurance File No. 68371, commitment date December 1, 2024)

Tract A
Parcel 1
Lot 1, Block 1, Breck Addition P.U.D. No. 88.
Parcel 2
That part of the Southwest Quarter of the Southwest Quarter of Section 19, Township 29, Range 24, shown as Parcel 6B of the Minnesota Department of Transportation Right of Way Plat No. 27-103.
(Being Registered Land as evidenced by Certificate of Title No. 1065484)

Tract B
Parcel 1
The North 115 feet of the South 314 feet of the West 160 feet of the East 570 feet of the Southeast 1/4 of the Southwest 1/4 of Section 19, Township 29, Range 24, according to the United States Government Survey thereof, County, Minnesota.
(Abstract Property)

Parcel 2
The South 199 feet of the West 160 feet of the East 570 feet of the Southeast 1/4 of Southwest 1/4 of Section 19, Township 29, North Range 24, West of the Fourth Principal Meridian, according to the U.S. Government Survey thereof, Hennepin County, Minnesota.
(Abstract Property)

Tract C
That portion of the following described land which lies South of the North 50 feet thereof;
That part of the Southwest Quarter of Section 19, Township 29, Range 24, described as follows:
Commencing at the Northeast corner of said Southwest Quarter; thence South 01 degrees 41 minutes 31 seconds West, assumed bearing, along the East line of said Southwest Quarter a distance of 315.58 feet to the Southeastly right of way line of the Soo Line Railroad Company, formerly the Minneapolis, Northfield and Southern Railroad; thence Southwesterly 71.69 feet along said right of way line on a non-tangential curve, concave to the Northwest having a radius of 3,859.50 feet, a central angle of 01 degrees 03 minutes 51 seconds and the chord of said curve bears South 59 degrees 49 minutes 54 seconds West; thence North 29 degrees 38 minutes 11 seconds West, continuing along said right of way line, 14 feet; thence Southwesterly 353.09 feet along a non-tangential curve, concave to the Northwest having a radius of 3,845.50 feet, a central angle of 5 degrees 15 minutes 39 seconds and the chord of said curve bears South 62 degrees 59 minutes 39 seconds West; thence South 65 degrees 37 minutes 28 seconds West 118.60 feet; thence South 24 degrees 22 minutes 32 seconds East 24 feet; thence South 65 degrees 37 minutes 28 seconds West 284.19 feet; thence North 88 degrees 18 minutes 32 seconds West, parallel with the North line of said Southwest Quarter, 40.97 feet; thence South 65 degrees 37 minutes 28 seconds West 997.25 feet; thence North 88 degrees 18 minutes 32 seconds West, parallel with the North line of said Southwest Quarter, 13.65 feet; thence South 65 degrees 37 minutes 28 seconds West 207.98 feet; thence Southeasterly at right angles from said right of way line 561.83 feet; thence South 29 degrees 21 minutes 15 seconds West 56.78 feet to the actual point of beginning of the land to be described; thence South 29 degrees 21 minutes 15 seconds West to the Northeastly right of way line of State Highway No. 100, as described in Registrar of Titles Doc. No. 818684; thence Southeasterly along said Northeastly right of way line to the Northerly right of way line of said State Highway, as described in CR Doc. No. 5362482; thence Easterly and Northeasterly along said Northerly right of way line to the East line of the West 1522.26 feet of said Southwest Quarter; thence Northerly parallel with the West line of said Southwest Quarter to a point 1789.95 feet Southerly from the North line of said Southwest Quarter; thence Westerly in a straight line to the point of beginning, according to the U.S. Government Survey thereof, Hennepin County, Minnesota.
Being Registered land as is evidenced by Certificate of Title No. 1456913.

(Per Burnet Title as Issuing Agent for Title Resources Guaranty Company, Commitment for Title Insurance File No. 2137025-012/3, commitment date April 02, 2025)

South 100 feet of Lot 6, Glendale 2nd Addition, Hennepin County, Minnesota.

(Per Guaranty Commercial Title, Inc. as Issuing Agent for Old Republic National Title Insurance Company, Commitment for Title Insurance File No. 0Y-08316938, commitment date August 15, 2024)

Lot 2, Block 1, Vogel Second Addition, according to the recorded plat thereof, Hennepin County, Minnesota.

(Abstract Property)

PLAT RECORDING INFORMATION

The plat of BRECK ADDITION P.U.D. NO. 88 was filed of record on June 6, 2001, as Document No. 3395490.

The plat of GLENDALE 2ND ADDITION was filed of record on October 31, 1952 in Book 121 of Plats, Page 4 as Document No. 2781298.

The plat of VOGEL SECOND ADDITION was filed of record on December 20, 2007, as Document No. 21228.

(P) Denotes bearings and/or dimensions per plat or recorded document.

AREAS

Tracts A (Excluding Tract A Parcel 2) and C = 2,380,348 sq. ft. or 54.645 acres
Tract B = 40,800 sq. ft. or 0.937 acres
South 100 feet of Lot 6, Glendale 2nd Addition = 15,300 square ft. or 0.351 acres
Lot 2, Block 1, Vogel Second Addition = 11,811 sq. ft. or 0.271 acres
Total area = 2,448,259 sq. ft. or 56.204 acres

Proposed Lot 1, Block 1 = 2,380,348 sq. ft. or 54.645 acres
Proposed Lot 1, Block 2 = 40,800 sq. ft. or 0.937 acres
Proposed Lot 1, Block 3 = 27,111 sq. ft. or 0.622 acres

LEGEND

- Denotes iron monument set marked with P.L.S. No. 44900 unless otherwise noted
- Denotes found iron monument
- ⊙ Denotes 1.17 inch diameter copper magnetized marker with disc cap affixed stamped LS-44900 set

EXISTING PARKING

624 Regular Spaces
10 Disabled Spaces
634 Total Spaces

I hereby certify that this survey, plan, or report 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.

Dated this 3rd day of November, 2025

SUNDE LAND SURVEYING, LLC.

By: *Arlee J. Carlson*
Arlee J. Carlson, P.L.S. Minn. Lic. No. 44900

Revision	By	Date
	NON	
Drawing Title:		
PRELIMINARY PLAT OF:		
BRECK SCHOOL		
GOLDEN VALLEY, MN		
SUNDE LAND SURVEYING www.sunde.com		
Main Office: 9001 East Bloomington Freeway (35W) • Suite 118 Bloomington, Minnesota 55420-3435 952-881-2455 (Fax: 952-888-9026)		
Project: 2008-222-H	By: Pg: 123/03 (8/13/15)	Date: 11/03/2025
Township: 29 Range: 24 Section: 19		Sheet: 1 of 1
File: 2008222H001-pre plat.dwg		

