

STAFF REPORT

Title: Letter - Crosswalk Lights at North Star Elementary School Service Road

Meeting Date: November 26, 2024

Executive Summary:

The Parent Advisory Committee of Northern Lights Public Schools - North Star Elementary School has requested for the installation of crosswalk signalisations along 50 Avenue service road and 57 Street. A review by the City's Engineering Department found:

- Low usage of the 50 Avenue crosswalk.
- Safety concerns due to parking violations and pedestrian behavior.
- No history of accidents at these locations.

It has been requested, that this issue be addressed by City Council for consideration.

With that, administration has a cursory review of the intersection being raised in effort to provide some data for Council in its deliberations.

In summary, the "service road" has low traffic volumes (exempt during school drop off and pick times) of which does not warrant additional signals. Unlike, other schools in the being located along either local, collectors, and arterials roads, this school is located on a "service road" of which service this purpose.

At this time, is not being recommended to install crosswalk signalization devices at this location.

Instead, Administration recommends:

- 1. Expanding no-parking zones and enforcing regulations.
- 2. Adopting the AMA School Safety Patrol program.
- 3. Improving the 57 Street and 50 Avenue intersection.

These measures address safety concerns effectively without direct significant costs.

Background:

The Parent Advisory Committee of North Star School has requested the installation of crosswalk signals at two locations:

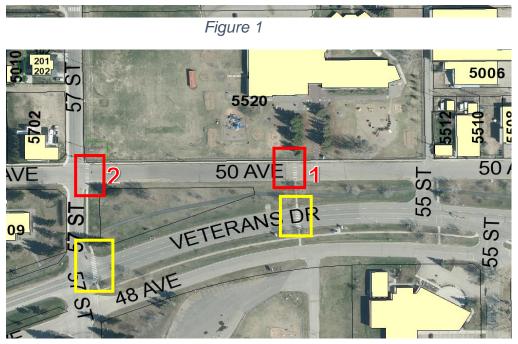


- Location 1: 50 Avenue Service Road adjacent to the school (marked in red, Fig. 1).
- Location 2: Intersection of 57 Street and 50 Avenue (marked in red, Fig. 1).

Currently, two flashing crosswalk signals are operational on Veteran Drive, the main road adjacent to the school (shown as yellow boxes in Fig. 1).

The City's standard practice is to install traffic management infrastructure, such as crosswalk signals, on main thoroughfares rather than side streets. This approach balances pedestrian safety and traffic flow while adhering to traffic management best practices. Similar setups can be observed in other areas, such as Main Street (right-turn lanes) and intersections like 54 Avenue (Lakeland Inn) and 43 Avenue (Walmart).

Additionally, crosswalks at other schools, such as St. Dominic, Nelson Heights, Cold Lake Elementary, and Holy Cross, are located on main corridors, aligning with this policy.



Field Observations and Analysis:

The City's Engineering Department conducted a preliminary review of the request and observed pedestrian and traffic patterns on November 19, 20, and 21, 2024, during school drop-off and pick-up times. Key findings include:

1. Crosswalk Visibility:

 Location 1 (50 Avenue Service Road) has visibility issues due to vehicles parked within the crosswalk zone (5m on each side), contrary to traffic regulations.



Parked vehicles obscure shorter pedestrians, increasing the risk of accidents.

2. Crosswalk Usage:

- Location 1 is underutilized, with most pedestrians only using it to cross Veteran Drive.
- Parents frequently park along the service road, and parents/children cross mid-block rather than using designated crosswalks.

3. Pedestrian Activity at Location 1

- On November 21, approximately 30 pedestrians used the crosswalk in the afternoon. Of these:
 - 15 were parents/kids' jay walking towards the crosswalk from the south side of the roadway. This means that they walked on the road towards the crosswalk, catching it in the middle and then turning towards the school or their car.
 - The rest of 14 were students, half of which crossed the Veteran Drive towards the Library or Middle School. Please note that there is no marked crosswalk on the service road adjacent to City Hall/Middle School.
 - The other 7 students came from the Middle School and used the school grounds to go across. It was not notable as to why they did not use the 57 Street intersection.

4. Pedestrian Activity at Location 2 (57 Street):

- On November 20, approximately 130 pedestrians used this area in the afternoon. Of these:
 - 45 crossed 50 Ave to go south
 - 85 crossed 57 Street to go either west or north.

5. Driver and Pedestrian Interactions:

 At Location 2, drivers exhibited frustration due to delays caused by high pedestrian traffic, with incidents of honking and unsafe movements noted.

6. Enforcement and Compliance Issues:

Non-compliance with parking restrictions was observed at both locations.

7. Safety Record:

 There is no documented history of accidents or injuries at these locations, indicating that the risk may be perceived rather than substantiated by evidence.



Recommendations:

- 1. Enhanced Crosswalk Visibility:
 - o Increase the no-parking zone around crosswalks to 10m on each side.
 - Install additional "No Parking" signage and enforce regulations to improve visibility and safety.
- 2. Alberta Motor Association (AMA) School Safety Patrol Program:
 - Encourage the school to adopt the AMA School Safety Patrol program, which trains student volunteers to assist pedestrians during high-traffic periods. This initiative has been successfully implemented across Alberta and fosters shared responsibility for safety.
 - o AMA School Safety Patrol Program
 - The AMA School Safety Patrol marked its 85th year
 - o Join the AMA School Safety Patrol

3. Intersection Improvements:

 Focus on enhancing the 57 Street and 50 Avenue intersection by considering a 4-way stop to manage pedestrian and vehicle interactions more effectively.

4. Community Education and Enforcement:

- Educate parents and students about the importance of using designated crosswalks.
- Collaborate with enforcement agencies to address parking violations and ensure compliance.

Summary of elements that don't support the Installation of a signalized, as requested:

- 1. Traffic Volume Does Not Warrant Signals:
 - The low traffic volume on a road this is a "service road" does not meet the criteria for installing crosswalk signals and is operating as an intended service road.

2. Existing Safety Measures:

 The existing flashing signals on Veteran Drive adequately address school zone safety.

3. Cost Implications:

 Installing and maintaining additional signals would result in maintenance expenditures as the infrastructure ages.

4. Behavioral Issues:



- Installing signals may not resolve the underlying issue of parents and children bypassing designated crosswalks.
- 5. Consistency Across the City:
 - The City must ensure uniformity in applying traffic control measures across all school zones.

Understanding that Council can provide direction to administration to proceed with installation of such infrastructure, it will highly be advisable to install stall a minimum of four (4) signalized cross walks in ensure uniformity in policy application along the service roads with a school frontage.



The budgetary cost for solar powered signalized crosswalks is \$10,000 each for the equipment. This is the supply cost, plus some installation fees are realized and thermoplastic markings are required in some instances.

It should also be noted that further sidewalk connect will need to be considered. These would be in the order of magnitude of \$100,000.

Conclusion:

Based on current observations and the effectiveness of existing infrastructure, it is recommended that the request to install crosswalk signals at Locations 1 and 2 not be approved. Instead, efforts should focus on enhancing visibility, enforcing parking



regulations, and exploring cost-effective alternatives such as the AMA School Safety Patrol program.

Further to the above, City has received several other requests for pedestrian signalizations throughout the community. They primary exists in residential roads that are used by school buses (this is another concern raised by residents, the volume of school buses on roadways).

We've attached a set of pictures articulating requests that have been made by residents and parents of which administratively have been denied. The purpose of adding these to this report is that it is understood that Council may want to weigh in on administrations perspective of the issue of installing signalized cross walks and warrants/standards that are used in this regard.

Alternatives:

Council may consider the following options:

- 1. Refer the request to Council's Corporate Priorities Committee for review and recommendation.
- 2. Direct administration to retain and transportation engineer to review administration recommendations and traffic warrants for the installation of signalized crosswalks at Northstar Elementary School and Cold Lake Middle School based on industry standards.
- 3. Direct administration to install crosswalk signalizations at one crosswalk on 50 Ave. directly in front of the North Star Elementary School with a budget of \$10,000 funded from the 2025 Council Contingency.
- 4. Direct administration to install crosswalk signalizations at two crosswalks on 50 Ave. along the North Star Elementary School frontage with a budget of \$20,000 funded from the 2025 Council Contingency.
- Direct administration to install crosswalk signals at two crosswalks on 50 Ave. directly in front of both North Star Elementary School and Cold Lake Middle School frontage with a budget of \$70,000 funded from the 2025 Council Contingency.
- 6. Direct administration to install crosswalk signals at four crosswalks on 50 Ave. along the frontage of both North Star Elementary School and Cold Lake Middle School with a budget of \$140,000 funded from the 2025 Council Contingency.



7. Direct administration to provide a response to the Northern Light Public School Division and the Parent Advisory Committee of Northern Lights Public Schools - North Star Elementary School that acknowledging the concerns raised, will continue to monitor vehicle and pedestrian traffic in the area and encourage the School Division to also review opportunities and consider traffic safety initiatives.

Recommended Action:

That Council Direct administration to provide a response to the Northern Lights School Division and the Parent Advisory Committee of Northern Lights Public Schools - North Star Elementary School acknowledging the concerns raised, and that the City will continue to monitor vehicle and pedestrian traffic in the area and encourage the Northern Lights School Division to also review opportunities and consider safety initiatives.

Budget Implications (Yes or No):

Yes

Submitted by:

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