January 31, 2022

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Development Planning, Heritage and Design – Urban Team
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Maureen Wilson Councillor Ward 1 71 Main Street West, 2<sup>nd</sup> Floor Hamilton, ON L8P 4Y5

Dear Mr. Barnett and Ms. Wilson

RE: UHOPA-20-012 and ZAC20-016
1107 Main Street West, Hamilton (Ward) 1
Detrimental Impact on Tree Management Plan and Pedestrian Safety
As a Result of Applicant reducing required setback by 3 metres

The failure of the Applicant to adhere to the 6-metre setback on Dow Avenue and Cline Avenue South has resulted in two additional impacts that detrimentally affect the neighbourhood, and which deserve consideration by the Planning Department. These impacts relate to the Tree Protection Plan and the Vehicle Circulation Review which were both submitted by the Applicant. In my opinion the deficiencies arising in both documents as a result of the reduced setback, clearly demonstrate that the proposed development cannot be supported as being consistent with the PPS.

#### Tree Management Plan

It is well established that a precedent in the City of Hamilton for a "good and modern intensification along a higher-order traffic corridor" is Good Shepherd Square. In reviewing this redevelopment, it becomes readily apparent that the Good Shepherd's compliance with the street setback allowed the mature municipal trees on both Ray Street North and Pearl Street North to remain intact and that the buildings were erected without disruption to the urban forest in the neighbourhood. The municipal trees therefore continued to serve as a benefit to the all the residents who moved into Good Shepherd Square, and to all the residents in the neighbourhood along Ray and Pearl Streets.

Due to the Applicant's reduction of the required minimum setback from 6 metres to 3 metres, and its request for relief from the TOC1 zoning by-law, the municipal trees on Dow Avenue and Cline Avenue South are not being saved or preserved, unlike the municipal trees at Good Shepherd Square, whose structural roots and feeder roots were largely preserved and not cut back.

## Norway Maple

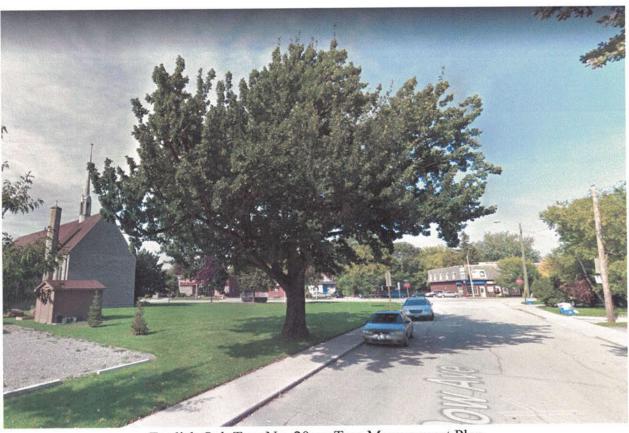
On Cline Avenue South there is a large Norway Maple with a well-developed crown diameter of 14 metres and with an excellent structural condition. This municipal tree is marked to be removed as it is in the building footprint. If, however, the building footprint were to be pushed back a further 3 metres to meet the zoning by-law requirement, the Norway Maple could have remained intact and thereby be included as a municipal tree marked for protection under the Tree Management Plan.



Norway Maple Tree No. 1 on Tree Management Plan

## English Oak

The English Oak is a municipal tree located on Dow Avenue and it has a crown diameter of 20 metres and this tree is being identified for protection under the Tree Management Plan. It is subject to conditions set by the Applicant, one of which reads that "if a critical number of structural roots or feeder roots are proposed to be removed" it is to be recommended that the tree be removed.



English Oak Tree No, 20 on Tree Management Plan

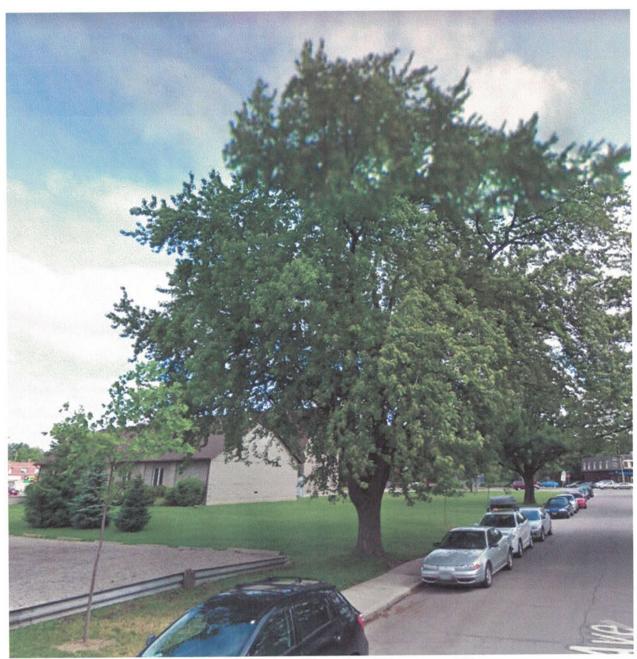
- CONSIDERATION TO PRESERVE TREE #20 WILL BE MADE IF THE FOLLOWING CONDITIONS ARE SATISFIED AND EACH TREE IS DEEMED SAFE TO PRESERVE.
- 12.1. TREE TO BE PRUNED PRIOR TO CONSTRUCTION BY A QUALIFIED PROFESSIONAL
- 12.2. SOIL WITHIN THE TREE PROTECTION ZONE TO BE REMOVED USING A SUPERSONIC AIR TOOL OR HYDRO VACUUM UNIT. SOIL REMOVAL TO OCCUR ONE DORMANCY PERIOD OR ONE GROWING SEASON AFTER MAJOR PRUNING HAS OCCURRED.
- 12.3. STRUCTURAL ROOTS SHOULD BE EVALUATED BY A QUALIFIED PROFESSIONAL WITH EXPERIENCE IN ROOT EXCAVATION AND PRUNING.
- 12.4. IF A CRITICAL NUMBER OF STRUCTURAL ROOTS OR FEEDER ROOTS ARE PROPOSED TO BE REMOVED, IT IS RECOMMENDED THAT THE TREE IS REMOVED AND COMPENSATED FOR ACCORDINGLY.
- 12.5. IF IT IS DEEMED THAT ROOTS IN THE TREE PROTECTION ZONE MAY BE PRUNED WITHOUT MORTALITY OR RISK OF STRUCTURAL FAILURE THEN ROOT PRUNING SHOULD OCCUR AS FOLLOWS:
- 12.5.1. RETENTION OF AS MUCH ROOT AS POSSIBLE, ROOTS MUST BE PRUNED WITH SHARP TOOLS, AND EXPOSED ROOTS MUST BE KEPT MOIST/DAMP WITH MULCHING MATERIALS, IRRIGATION OR WRAPPING IN BURLAP. MONITOR ROOT MOISTURE EVERY 4
- 12.5.2. POROUS PAVING, OR INTERLOCKING PAVERS, INSTALLED ON SUPPORTING MATERIAL TO REDUCE COMPACTION.

Again, if the building footprint were to have been pushed back another 3 metres in order to be in compliance with the zoning by-law, an additional 3 metres of structural roots and feeder roots of the English Oak could have been saved. This additional 3 metres of roots are critically important and make the vital difference as to whether this municipal tree is destroyed, or whether it can remain intact, and continue to grow on Dow Avenue for the benefit of all the neighbourhood residents and future residents.

## Silver Maple

The Silver Maple is a municipal tree also located on Dow Avenue and it currently has a crown diameter of 21 metres, but it is identified in the report as having minor defects or symptoms of disease. It is to be noted that five other silver maples on municipal lands have been cut down by

the City of Hamilton on Cline Avenue South, but it is important to know why the other trees were cut down, and whether this minor symptom of disease was due to air pollution and the high levels of nitrogen dioxide in this vicinity.



Silver Maple Tree No. 23 on Tree Management Plan

The Silver Maple on Dow Avenue is in relatively good condition and is not nearly as sickly or in as poor health as were the silver maples on Cline Avenue that were cut down by the City. At a time when the neighbourhood needs more trees, not less, every effort should be taken to protect this Silver Maple. If the setback requirement of 6 metres were to have been adhered to by the Applicant, this Silver Maple could have been protected under the Tree Management Plan.

Wooded Slope of the Chedoke Creek Valley

If the Silver Maple is suffering from the effects of air pollution it is critical that all the trees on the municipal lands that compose the Wooded Slope of the Chedoke Creek Valley, and lying between the houses on Dow Avenue, Southview Place and Cline Avenue South, and the Chedoke Creek, should be inspected by the Forestry and Horticulture Department of the City of Hamilton to determine the health of these municipal trees.

The urban forest on this slope is critically important as the trees act as an air pollution barrier, a noise barrier from traffic on Highway 403, and a vital slope stabilizer. If these trees on the wooded slope of the Chedoke Creek Valley are in poor health or dying, it would be a catastrophic loss for the entire neighbourhood.

## **Pedestrian Safety**

The primary function and rationale of a 6-metre setback for a building that has driveway access to and from a street, is that the vehicles going into and out of the driveway access pose a danger to pedestrians walking on the sidewalk and to other vehicles, and that in order to prevent queuing of cars on the street and the blocking of a sidewalk a larger distance of 6 metres from the lot line should be provided by the developer. Accordingly, the full 6-metre setback is required for the safety of both pedestrians and motorists whenever there is an access driveway.

In addition to the full 6 metre setback, the developer is also required to provide a visibility triangle to ensure that pedestrians can see the motor vehicle, and that the driver can see the pedestrians. The reduction of the 6-metre setback to the Applicant's proposed 3 metre setback is therefore alarming given the composition of the projected pedestrians who are and will be walking or cycling on the neighbourhood sidewalks and streets.

The proposed development is adjacent to a City of Hamilton parkette with a playground built for pre-schoolers and young children. It is also adjacent to a day school with an enrollment from nursery to grade 8, and it is adjacent to a synagogue with congregants and their families walking on the neighbourhood sidewalks and streets. Studies by the City of Ottawa School Board and the consulting firm of Morrison Hershfield examined the issue of road traffic and pedestrian safety for school children and the following are factors and conclusions which are excerpted from their report:

### 6.2 Child Pedestrians

Evaluating traffic safety around schools requires an understanding of how children view their surroundings and interact with traffic. Child pedestrians have unique perceptions of the world around them as they mature, and developmental factors play an important role in influencing their abilities to safely navigate the demands of intersections and roads.

According to the SafeKids Canada Child Pedestrian Injuries Report 2007-2008, child pedestrian injuries are a leading cause of injury-related death for Canadian children aged

14 years and younger. There are a wide range of physical, psychological, and behavioural characteristics of children which tend to increase their risk for pedestrian injury and contribute to collisions.

The following summary of "human factors" related to children has been extracted and compiled from a variety of sources, including Jacobsen et al. (2000), Aoki and Moore (1996), Reiss (1977), TAC (1998b), ITE (1999), the National Safe Kids Campaign (2002), and Safe Kids Canada (2008).

- Children have difficulty detecting traffic. Their small size not only makes them less visible to drivers but also less able to see oncoming vehicles, especially when parked cars impede their vision. In addition, the field of vision of children is one-third narrower than that of adults. As a result, young children are not able to see out of the corner of their eyes as well as adults and have a restricted capacity for using information in their peripheral field of vision. Children under the age of 8 also have difficulty judging the direction and importance of various traffic sounds, such as sirens. Consequently, they may turn the wrong way searching for a sound, missing important information necessary to react safely.
- Children have difficulty judging safe gaps in traffic and safe places to cross the road. This complex task requires assessments of speed, distance and time that are beyond a child's capabilities. In general, **children up to approximately 8 years of age have difficulty conceptualizing speed and distance**. Consequently, children may have trouble judging how fast a vehicle is coming towards them or how far away a vehicle is, limiting their ability to choose safe gaps in traffic or recognize situations where a driver is likely to hit them even though the pedestrian has the right-of-way (i.e. failure to stop at a crosswalk or stop sign).
- Children have trouble detecting movement. Because their sense of perception is different from that of adults, children may think large cars move more quickly than small cars, or that narrow streets are less dangerous than wide streets. A child may also perceive a small vehicle as being further away than an equidistant truck and may tend to judge noisy cars as going faster than quiet cars. This distorted view of traffic motion is particularly dangerous in light of children's limited understanding of the physics of a moving vehicle, and the time and distance required to stop. Furthermore, children frequently base their decision to cross the road on the visible presence of vehicles without regard to sight distance or possible visual obscurement.
- Although children may have been taught to cross the street safely, **they can be easily distracted and may respond impulsively**. Moreover, children tend to focus only on the things that interest them most and more readily attend to new or emotionally engaging information than to information relevant to traffic. **Children also tend to mix**

fantasy with reality, and are often impatient. As a result, they have trouble waiting for stoplights to change or for cars to stop at a crosswalk before they step out onto the road.

- Children need more time to process information and react than adults.
  Children also have difficulty processing several items of information at the same time and may be overwhelmed by the complexity of traffic. Indeed, young children are unable to synthesize all of the pieces of information that they need to act appropriately in an emergency situation. Even if children have been taught the rules of the road, their brains are unable to process multiple pieces of information or a complex chain of events. Lacking the fully developed ability to evaluate complex and potentially hazardous situations, they fall back on prescriptive rules, easily remembered but not always appropriate. Children's rigid adherence to rules combined with their way of thinking may cause a child to conclude that a pedestrian crosswalk or sign renders them safe without properly evaluating the traffic situation. Since children tend to concentrate on one thing at a time and are incapable of distributing their attention, they may have only a vague overall impression of their surroundings despite the complexity of the traffic situation they are encountering.
- Children cannot understand the driver's point of view and expect adults to look out for them. They believe that others see what they see and do not realize that drivers may be unaware of their presence. Young children often have mistaken beliefs about cars, trusting cars to stop instantly. Many children believe that the safest way to cross a street is to run. Children also lack a sense of vulnerability, and do not understand that a car can seriously hurt or kill them. This lack of understanding may translate into unsafe behaviour as children travel within their neighbourhood.

While younger children have certain limitations that hinder their ability to safely react to traffic situations, older children generally have sufficient ability to cope with the dangers of traffic. According to Safe Kids Canada, children older than nine have generally matured sufficiently to be able to walk and cycle safely near traffic, and can therefore be permitted greater independence.

By age eight, children's brains have reached a stage of development that allows them to be more responsible and to make good judgement. As a child's thinking becomes increasingly more sophisticated, the brain develops the ability to process multiple pieces of information at the same time. This allows a child to properly assess a chain of events and respond appropriately – a very important skill when cycling or walking near traffic. As a child ages, he/she begins to develop feelings of vulnerability and therefore is more conscious of the risks and consequences of his/her activities. Reality-based fears begin to surface around age nine [such as the fear of someone dying]. As physical coordination develops, children become more suited to dealing with the hazards of traffic. At the same time, children become less impulsive and are more likely to think before darting out into the street.

Given these limitations, it is generally recognized that children younger than the ages nine to eleven require adult supervision when walking or cycling on community roads (Reiss 1977; National Safe Kids Campaign 2002; Safe Kids Canada 2008). The National Safe Kids Campaign (2002) recommends that children under the age of ten be accompanied by adults or older children when crossing the street. Likewise, Safe Kids Canada (2008) recommends the proper supervision of children under the age of eleven, since younger children generally do not have the ability to make safe decisions when dealing with complex traffic situations, regardless of their level of intelligence. Indeed, parents have a tendency to over-estimate their child's pedestrian skills, without recognizing that their child lacks the cognitive development, behavioural capacity, and physical coordination to safely walk and cycle in traffic, and react to dangerous situations which might arise.

As reported by Jacobsen et al. (2000), teaching children about traffic safety has only limited potential to reduce child pedestrian injuries:

While children as young as nine years may be able to learn the skills to cross the street, it is unlikely, because of their cognitive, perceptual and behavioral abilities, that they can be relied upon to use those skills, especially when they are engrossed in play. Interacting with traffic is complex, and the necessary abilities are not fully developed in children until age 11 to 12 years (pg. 71).

Based on these findings, an age of eleven was selected as the 'design age' for which hazards will be evaluated with the given methodology. While children of all ages are encouraged to walk to school within no transport zones, parental accompaniment/supervision is assumed for all children below the age of eleven.

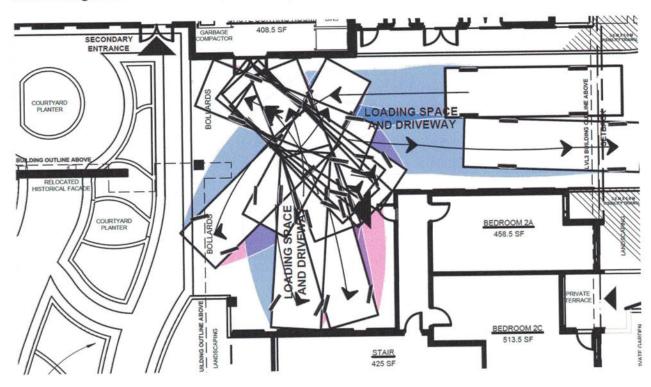
Although younger children may not have the ability to make safe decisions when walking or cycling unsupervised, it is still important to expose children to traffic, and to allow them to develop the skills required to safely navigate the road network once they are developmentally ready for the challenge.

Accordingly, the reduction of the distance between the sidewalk and the building portion of the access driveway by 3 metres on both Dow Avenue and Cline Avenue South, is a substantial reduction in the safety distance between child pedestrians and motor vehicles. With two access driveways in the building located on both Dow Avenue and Cline Avenue South and two busy sidewalks leading to a City of Hamilton parkette and a school playground which is adjacent to the proposed development, the 3 metre shortfall in the required setback constitutes a significant increased danger to child pedestrians.

## Vehicle Circulation Review

The Applicant has submitted the attached Vehicle Circulation Review which was Appendix B to the Parking Supply and Vehicle Circulation report prepared by GHD and dated June 12, 2021. (see pages 12 to 15)

Of particular concern is the Garbage Truck Circulation Review for a Garbage Truck entering the driveway access on Dow Avenue and then turning around within the proposed development and then exiting onto Dow Avenue. (see below)



Looking at the Applicant's Garbage Truck Circulation Review it appears that a Garbage Truck is required to complete a 7-point turn in an extremely narrow Loading Space before the vehicle is able to drive out of the building and onto Dow Avenue. It is my opinion that an experienced garbage truck driver would be able to successfully complete this turn around manoeuvre, but that a less skillful delivery driver, or an individual who is renting a truck for unloading or pickup, would not be prepared to negotiate a 7-point turn, and would elect to back out in reverse from the driveway and reverse back across the sidewalk onto Dow Avenue, or even back into the loading space driveway from Dow Avenue. Both options are extremely dangerous for pedestrian safety.

To compound the matter, if another vehicle was to be parked or idling within the loading space, there may not even be an opportunity to negotiate the 7-point turn, and accordingly any truck driver, or van or delivery truck driver, would have no other alternative than to back the vehicle out of the loading space in reverse onto Dow Avenue.

#### Removable Bollards

The site plan and Level 1 Floor Plan submitted by the Applicant to the Planning Department, indicates that the outdoor amenity space courtyard is to be separated from the loading space by removable bollards. But with four proposed commercial stores and a café located in a 15-storey high-rise, it may not be realistic to expect that all delivery and commercial and moving van drivers will take the time to contact the property management company and have the bollards

temporarily removed in order to provide the driver with the required manoeuvring room to complete a turn around. Rather it appears more likely that after the completion of the project the bollards will be permanently removed, thereby allowing the outdoor amenity courtyard to be partly incorporated into the loading space driveway.

### Children on Municipal Sidewalks

It has already been stated that children are less visible to drivers, and that children have difficulty conceptualizing speed and distance, and the ability to evaluate complex and potentially hazardous situations. The greatest concern respecting the narrow loading space and access driveway off Dow Avenue is the fact that "children under the age of 8 also have difficulty judging the direction and importance of various traffic sounds, such as sirens. Consequently, they may turn the wrong way searching for a sound, missing important information necessary to react safely".

It is certainly reasonable to assume that if this proposed redevelopment were to be approved, many of the delivery trucks and vans using this loading access driveway will be backing up out of the driveway onto Dow Avenue, and therefore young children will be required to hear the "backup beeping" sound of a truck or van and be quickly required to process and appreciate the imminent danger if they are waling, cycling or running along the sidewalk. This mental processing, however, is not present in young children under 8, and consequently they will be exposed to dangerous situations just by being on the sidewalk.

If a delivery truck, or van, or other large commercial vehicle has already partially backed out of the driveway and is blocking the sidewalk when a young child approaches, will the child know the proper course of action to follow. Unfortunately, young children are "impatient" and they may believe that they have to enter the roadway and quickly run behind the truck or van, or they may believe that they have to enter the loading space area and quickly dart in front of the truck or van. Either scenario is extremely dangerous, and young children leaving or heading towards a playground or school should not have to be placed in this situation, due to a poorly designed access driveway and loading space, and due to proposed built form with an inadequate setback from the property line.

# Proposed Connection to Neighbouring School thereby avoiding use of sidewalk

The current site plan submitted by the Applicant indicates that there is a proposed connection from the development to the neighbouring school, which is the Hamilton Hebrew Academy. At the Design Review Panel meeting it was suggested that this connection might be a security gate with controlled access and a passcode only given to certain, exclusive residents, selected by the school or the synagogue. While this security access gate will avoid the necessity of the children of some of the future occupants from using the sidewalks, is it not more important to design a built form which establishes the safety of all pedestrians using municipal sidewalks as the top priority, rather than only the safety of the few children who will be able to use the security access gate?

### Conclusion

The Applicant's request to be relieved from adhering to the setback requirements as set out in the zoning by-law should be denied. The reduction of the setback of 3 metres is substantial, as it will result in the loss of three large municipal trees that would otherwise have survived with a 6-metre setback. These municipal trees are part of the urban forest, and the trees provide a vital role in mitigating from the harmful affects of traffic related air pollution and the high nitrogen dioxide levels which exist in this very neighbourhood. These municipal trees also provide the neighbourhood with its "sense of place" and character, and greatly add to the vitality of the street.

The request for a reduction from the setback requirement should also be denied to the Applicant in respect of the detrimental impact for child pedestrian safety on the sidewalks surrounding the proposed development, especially at the two access driveways. Based on the severe impact that will be created by the Applicant, I respectfully urge the Planning Department to exercise the mandate given to it under the Planning Act to protect the "public interest" and that there be no relief granted to the Applicant from the 6 metre setback that is required in the TOC1 Zoning Bylaw.

