

August 5, 2025
Project No. 2401073/122025

VIA EMAIL: cpellizzari@centrewellington.ca

Ms. Chantalle Pellizzari
Township of Centre Wellington
1 MacDonald Square
Elora, ON NOB 1S0

**Re: Salt Management Plan
73/79 Sideroad 19
Fergus, Ontario**

Dear Ms. Pellizzari:

The following Salt Management Plan has been prepared for 73/79 Sideroad 19 in the Township of Centre Wellington (Fergus) as a part of the Zoning By-Law Amendment and the Site Plan application submission.

Introduction & Objectives

GEI Consultants Canada Ltd. has been retained by the Owner (Wrightaven Homes) to prepare a Salt Management Plan for the proposed residential development at 73/79 Sideroad 19 in the Township of Centre Wellington (Fergus).

The proposed site development consists of the following elements:

- A private road for site access, including parking spaces and a turnaround area at the end. The site access road features a 6.1m asphalt width, concrete curb and gutter along both sides and a 1.5m wide concrete sidewalk on one side.
- Ten (10) single-detached dwelling with associated yards and driveways fronting onto the north side of the site access road.
- Eight (8) bungalow units with associated yards and driveways fronting onto the south side of the site access road.
- One (1) single-detached dwelling with associated yard and driveway fronting onto Sideroad 19.
- Servicing and stormwater management infrastructure, including a stormwater management facility.

This Salt Management Plan will present an overview of the salt management practices that are to be implemented on site. The best management practices for salt management will include the consideration of alternative products, use of controlled application rates, and recommended operations.

In addition to the objectives of this Salt Management Plan, the attached Winter Maintenance (Chemical Management Plan) Measures provided by the Township of Centre Wellington describe additional objectives, where applicable, to salt management practices during the construction phase.

Supervision, implementation, and monitoring of the Salt Management Plan will be the responsibility of the general contractor during construction and the responsibility of the condominium corporation (i.e., the Owner) following its establishment.

Identification of Traffic Areas and Sensitive Features

Special precautions will be taken to protect any areas which will see vehicular or pedestrian traffic. Areas that will see high vehicular traffic include the entrance from Sideroad 19, internal roadways and parking areas.

The stormwater management facility has been designed to provide Enhanced water quality treatment, including the required permanent pool storage and extended detention storage volumes. The rear yards of the lots have been designed to include grass swales, which will convey and filter runoff. Swales in the rear yards north of the site access road will convey runoff to the proposed storm sewer network and stormwater management facility. Swales in the rear yards south of the site access road will convey runoff to the existing wetland.

Identification of Snow-Storage/Disposal Areas

There is a central snow storage location proposed on site in the stormwater management pond as illustrated on the Site Grading Plan. Additional snow storage for the single-detached unit driveway can be provided in the front yard of the unit, adjacent to the driveway. The snow storage areas that have been allocated are sufficient for storing the expected quantities of snow, and the runoff generated from snowmelt will drain to the proposed stormwater management facility.

Use of Alternative Products

The proposed use of alternative winter de-icing agents is limited to the use of sand, salt, and de-icer, to minimize the potential concentrations of sodium and chloride in meltwater. In order to employ the most effective method in salt reduction, it is recommended to utilize a variety of products consisting of sand, sand/salt mixture, and environmentally friendly de-icer (i.e., no salt) depending on site location, and site fractures (i.e., sidewalks). The use of alternative products is subject to authorization by the Owner.

Engineered Measures

In order to minimize the infiltration of runoff with high concentration of chloride and sodium, runoff from impervious surfaces has been diverted to the on-site storm sewer. "Clean" runoff from building downspouts has been diverted to swales located inside the north and south property lines.

Please see the attached Winter Maintenance (Chemical Management Plan) Measures for additional measures.

Operational Measures

The following operational measures are recommended to minimize the use and application of road salt:

- Plowing of snow as required on driveways, parking areas, sidewalks and internal roads following snowfall events or as required to ensure safe passage for motorists and pedestrians.
- Application of sand/salt mixture (hand application) immediately following plowing if required. The application of a sand/salt mixture is not mandatory after each snow clearing operation.
- A sand/salt mixture will not be applied unless ice conditions develop.
- Monitoring and documenting the application of a sand/salt mixture (i.e., frequency, concentration, etc.).
- Storage of all plowed snow is to be in an area appropriately designed for snow storage to minimize the impact of salt on environmental features, to a height which will not block the view of motorists and pedestrians and will not impede surface drainage.
- Snow will be removed typically with mechanical methods and only by a Contractor. The winter maintenance Contractor will be retained for this work.
- Equipment for snow removal will be stored off site and only brought to site during a snow event.
- No liquid materials are to be stored on site.
- No snow removal equipment washing is to occur on site.
- Site inspections by the winter maintenance Contractor will be conducted regularly.
- Snow will be hauled to a properly designed offsite snow disposal facility/site.
- Snowdrifts will be controlled by frequent plowing as needed.
- The winter maintenance Contractor will be required to monitor local weather forecasts and be prepared before an event occurs.
- The winter maintenance Contractor is to be trained in winter maintenance practices.
- The winter maintenance Contractor will be trained to handle a salt spill.
- Both the site and the winter maintenance Contractor are to be Smart about Salt certified.
- The winter maintenance contractor must be trained in the Transportation Association of Canada's Syntheses of Best Practices Road Salt Management.

Adaptive Monitoring/Management

An annual review of the Salt Management Plan for 73/79 Sideroad 19 is recommended to be completed by the Owner on an annual basis to identify the effectiveness of the Salt Management Plan and mitigate/adjust any components of the Plan (i.e., a change in application area).

Summary

GEI Consultants Canada Ltd. has prepared this Salt Management Report for the proposed development at 73/79 Sideroad 19. This Salt Management Plan has identified high traffic areas, and existing natural features and has developed a number of precautions including snow-storage/disposal, alternative products, engineered measures, and operational measures in order to mitigate the negative effects associated with winter salt application. This Salt Management Plan will be implemented by the Owner.

Grading Plan Drawing

The Site Grading Plan prepared by GEI Consultants Canada Ltd. (dated August 5, 2025) illustrates the following:

- North arrow and scale
- Buildings including driveways
- Site entrances
- Snow storage areas

This is the recommended salt management plan for the development. This salt management plan is to be used as a guide along with the attached Winter Maintenance (Chemical Management Plan) Measures.

Sincerely,

GEI Consultants Canada Ltd.



Sarah Primmer, P.Eng.
Senior Project Manager



Parth Lad, E.I.T.
Technical Specialist

Appendices

- Appendix A Winter Maintenance (Chemical Management Plan) Measures
- Appendix B Site Grading Plan

cc: Steven Wright, Wriighthaven Homes Ltd.

SP/PL

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Appendix A Winter Maintenance (Chemical Management Plan) Measures

Winter Maintenance (Chemical Management Plan) Measures

1. If the property ownership changes, the responsible party shall provide written notice to the Risk Management Official (RMO) within 30 days of the ownership transfer.
2. The owner shall inform the RMO in writing of the name and contact information for the person responsible for the maintenance of the property (e.g. operations manager, building manager, superintendant, contractor) within 30 days of the person being hired.
3. Introductory training sessions for new employees/contractors shall include an overview of Source Water Protection, why it is important, the location of the local drinking water source and vulnerable areas, and information about activities or products at the facility that may pose a significant threat to the drinking water source. The measures in the winter maintenance chemical management plan will be reviewed and staff responsibilities will be explained.
4. Employees/contractors responsible for spill response shall be trained to understand the contents of the Spill Response Plan and know the location and proper use of spill response supplies and personal protective equipment. Employee training shall be refreshed periodically as set out in the Spill Response Plan.
5. Employees shall be trained whenever new equipment is installed, new procedures are implemented, or new products are introduced. They should be familiar with the hazards associated with the material they are using and be aware of potential sources of contamination.
6. Monthly inspections of all winter maintenance chemical storage areas shall be conducted on the schedule set out in this plan. A checklist log shall be maintained that includes the following:
 - the date and person(s) responsible for the inspections
 - condition of all items inspected
 - condition of leak detection and spills prevention systems (valves, overfill protection, secondary containment, etc.) where applicable.
7. Checklist logs from periodic inspections shall be kept on site and made available to the RMO/RMI upon request.
8. All records required as part of this winter maintenance chemical management plan shall be kept on site for a period of five (5) years from date of creation and made available to Risk Management Official and/or Risk Management Inspector (RMO/RMI) upon request.

9. Records of employee training regarding the winter maintenance chemical management plan and Spill Response Plan shall be maintained and provided to the RMO/RMI upon request.
10. An up-to-date Safety Data Sheet (SDS) and/or Safety Data Sheet (SDS), available from the product's supplier, should be available on-site for each product stored.
11. The responsible party shall maintain and implement the spill prevention and response plan.
12. The facility shall have a Spill Prevention and Response Plan that specifies
 - a) the contents and location of the on-site spill response kit(s),
 - b) the specific procedures to be followed by the operator and/or staff in the event of any spill, reportable and non-reportable
 - c) Definition of reportable & non-reportable spills
 - d) contact information and protocol for reporting a reportable spill events to the SAC as well as the RMO/RMI,
 - e) procedures and forms for recording and reporting details about a reportable and non-reportable spill event,
 - f) the frequency of spill response training to be completed by staff,
 - g) procedure for receiving reportable and non-reportable spill events and recommending corrective actions to prevent a spill reoccurrence. The corrective actions and record of reportable and/or non-reportable spills shall be maintained.
13. The facility shall have a site plan that includes the locations of winter maintenance chemical storage and handling areas (including loading/unloading), location of spill kits/spill containment trays, location of drains within the building, direction of flow of the drains (using arrows), location of on-site well and septic system and any ditches or depressions present where drainage may flow. The site plan should also indicate the floor covering (ie concrete) and the outside covering (ie asphalt and gravel). This site plan should be posted in an accessible location with the spill response procedure and emergency contact numbers.
14. Spill response procedures, including the Spills Action Centre number (1-800-268-6060), shall be posted in an easy to find and read location for staff to use in the event of a spill.
15. Absorbent and/or containment materials, as specified in the Spill Response Plan for the facility, shall be on hand at all times for responding to spills of any reasonable size. The property shall have a Winter Maintenance Site Map that outlines the locations of:
 - winter maintenance chemical application areas
 - product storage areas
 - snow storage areas
 - drains, downspouts, and potential migratory pathways (i.e. wells, ditches,

depressions, storm sewers, etc.)

- areas to be closed off during winter maintenance season

A copy of the Winter Maintenance Site Map shall be posted in an accessible location with the spill prevention and response plan and, once completed, shall form part of this winter maintenance chemical management plan. The Winter Maintenance Site Map shall be reviewed annually and updated whenever any of the information pertaining to the content of the Winter Maintenance Site Map has changed. The Winter Maintenance Site Map shall include a version number and date. The Winter Maintenance Site Map shall be submitted to the Risk Management Official within sixty (60) days of the first date of occupancy. Subsequent updates of the Winter Maintenance Site Map shall be maintained on site and made available upon request.

16. Roof gutters and downspouts shall be directed away from or under paved or impermeable areas. If runoff to paved surfaces cannot be mitigated in this manner, directing roof runoff directly into storm sewers shall be considered.
17. All pavement on the subject property shall be maintained to prevent areas of ponding water, and allow for complete snow removal. Newly paved areas on the subject property shall be graded to prevent ponding.
18. Low traffic, under used, or high risk areas, walkways, and entrances shall be closed during the winter maintenance season. Examples include, but are not limited to, overflow parking areas, seasonal walkways, or redundant stairways.
19. Remove areas of drifting snow to ensure that reapplication of winter maintenance chemicals does not become necessary.
20. Clean up excess applied winter maintenance chemical prior to each precipitation event and at the end of the winter maintenance season.
21. Prepare and implement a winter maintenance strategy for temperatures below -10°C, when salt is less effective.
22. The owner shall notify the RMO of whether winter maintenance is to be dealt with in-house, or if a contractor will be hired within 30 days of date of signing the contract, if applicable. If a contract is to be negotiated with a contractor, clauses 3.2 and 3.3 will be required.
23. When a new winter maintenance contract is negotiated, a written agreement stating that the contractor understands, and will implement, the terms of the winter maintenance chemical management plan will be signed by the contractor and property owner/manager at the time of contractor hire. A copy of the agreement shall be made available upon request by RMO/RMI.

24. New winter maintenance contracts shall ensure that payment for road salt application services on the subject property is not based upon on the total amount of salt used. To encourage contractors to use less salt, the basis of payment for new contracts can be unit price per event or lump sum per season.
25. Any person responsible for winter maintenance chemical application to the parking lot shall complete the Smart About Salt™ training or equivalent and renew every 5 years. In addition, winter maintenance contractors will be required to maintain Smart About Salt™ certification or equivalent. In lieu of Smart About Salt™ training or certification, the responsible party is required to obtain agreement in writing from the RMO on an equivalent training or certification.
26. All onsite staff applying winter maintenance chemicals to areas other than the parking lot shall be provided with annual orientation training based on practices outlined in Transportation Association of Canada's entitled: Syntheses of Best Practices Road Salt Management (specifically Chapter 10 - Salt Use on Private Roads, Parking Lots and Walkways).
- <https://www.tac-atc.ca/sites/tac-atc.ca/files/site/doc/resources/roadsalt-10.pdf>
27. Snow shall be cleared prior to winter maintenance chemical application in order to maximize the effectiveness and minimize the quantity of product that needs to be applied.
28. The required and recommended measures outlined in Smart About Salt™ training and certification or equivalent shall be completed for the site. This includes, but is not limited to:
- Weather and site condition logs
 - Application records
 - Inspection and training records
 - Spreader calibration logs
29. Product application practices and rates shall be adjusted to suit current and forecasted conditions for each product application event. The amount of residual road salt on the impervious areas will be assessed prior to product application and removed where excessive application has occurred.
30. Use an alternative to dry sodium chloride (rock salt) when current and forecasted temperatures is lower than -10 degrees Celsius (alternatives include Magnesium Chloride, Calcium Chloride, Calcium Magnesium Acetate, Potassium Acetate, plant-based additives, or abrasives).
31. Product application practices shall be annually reviewed to identify potential reductions in material use.

32. An accurate inventory shall be maintained that identifies all winter maintenance products stored onsite, including:
- Amount
 - State (dry/solid or liquid)
 - Storage locations
 - Amount/state of product retained after the winter maintenance season
 - This inventory shall be updated on an annual basis.
33. Winter maintenance chemical containers shall be stored in a location that minimizes risk of spills due to collisions with vehicles, equipment, or other hazards and located away from floor drains, cracks, catch basins, ditches or any other potential pathways to groundwater or surface water.
34. Winter maintenance chemical storage containers shall be inspected at the beginning of the winter maintenance season and then on the schedule laid out in this plan. If a container is damaged in such a way as to cause a spill, it shall be replaced immediately.
35. The measures related to containers shall also apply to winter maintenance chemical storage in a shed, lean to, tarp structure and/or covered piles.
36. Uncovered, outside storage of winter maintenance chemicals is prohibited.
37. Snow storage areas shall not be located on top of catch basins, in ditches, etc. so as to not obstruct drainage at the site.
38. Snow storage area(s) shall be located on the low side of paved areas to alleviate the formation of ice as a result of meltwater, if possible.
39. Where possible, snow storage area shall be located directly up-gradient and in the immediate vicinity of a catch basin to minimize the area subject to meltwater runoff.
40. Litter, debris, salt and sediment from snow storage areas and site shall be collected and disposed of at the end of every winter maintenance season to prevent these materials from being released into the environment through precipitation, runoff, and snowmelt.
41. Snow shall not be stored in areas where it will impede the operations associated with Emergency Services (i.e. in front of fire hydrants, in fire lanes, etc.).
42. Record and retain documentation related to winter maintenance chemical and snow management by contractor and/or property management office for the calendar year, plus an additional five years, including:
- Weather and site condition logs
 - Application records
 - Inspection and training records

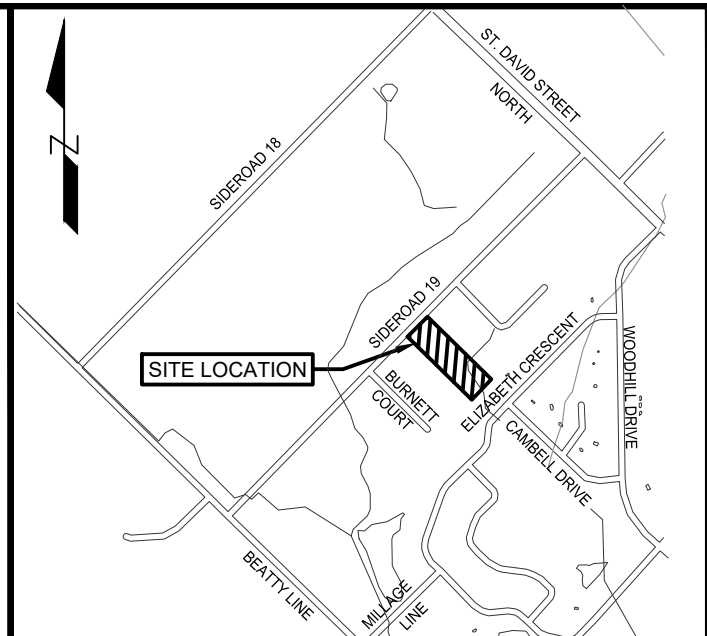
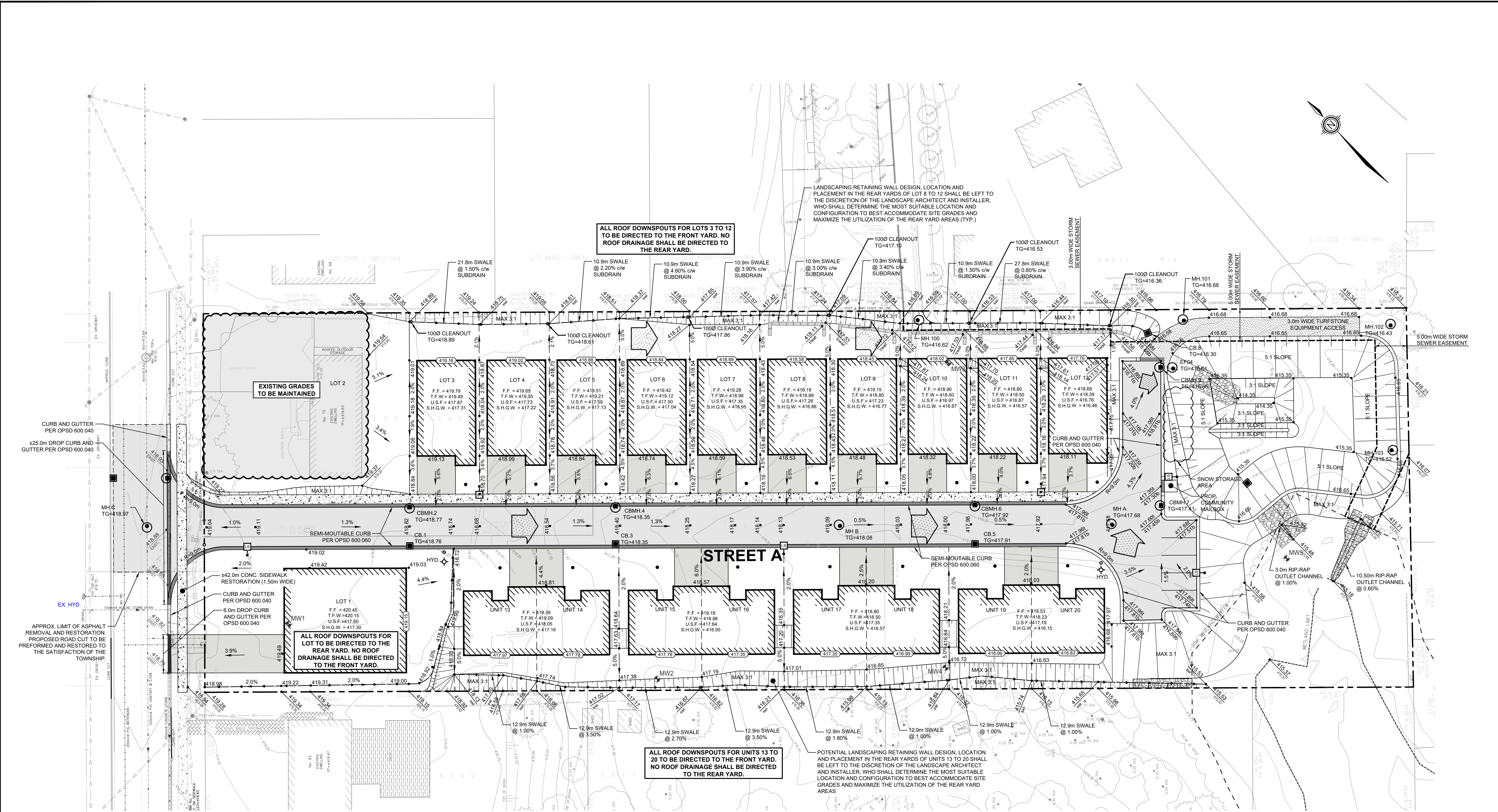
- Spreader calibration logs, if applicable

43. Records of employee training regarding the winter maintenance chemical management plan, including winter maintenance chemical best management practices, and Spill Response Plan shall be maintained.

44. Inspections of all winter maintenance chemical storage areas shall be conducted monthly during the winter maintenance season. A checklist log shall be maintained that includes the following:

- Date and person(s) responsible for the inspections
- Condition of all items inspected
- Condition of secondary containment, traffic calming measures where applicable.

Appendix B Site Grading Plan



- NOTES:**
- TOPOGRAPHIC AND EXISTING FEATURES SURVEY ON-SITE COMPLETED BY VAN HARTEN SURVEYING INC., RECEIVED 2022-08-29 AND 2024-03-18. TOPOGRAPHIC SURVEY OF THE WETLAND AREA WAS ALSO COMPLETED BY VAN HARTEN SURVEYING INC., RECEIVED 2025-05-23.
 - SITE PLAN PREPARED BY GSP GROUP, DATED 2025-05-21.
 - BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (GSR-2010) ADJUSTMENT (PROVIDED BY VAN HARTEN SURVEYING INC.).
 - DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGED COMBINED SCALE FACTOR OF 0.999575. (PROVIDED BY VAN HARTEN SURVEYING INC.).
 - COORDINATES ON THIS PLAN ARE UTM, ZONE 17, NAD83 (GSR-2010) ADJUSTMENT AND ARE BASED ON GPS OBSERVATIONS FROM A NETWORK OF PERMANENT GPS REFERENCE STATIONS. (PROVIDED BY VAN HARTEN SURVEYING INC.).
 - PROPOSED STREETLIGHT LOCATIONS PER STREET LIGHTING DRAWING PREPARED BY MIGHTON ENGINEERING (PROJECT No. 45173).

SITE PLAN INFORMATION		SURVEYOR INFORMATION	
GSP GROUP 72 VICTORIA STREET SOUTH, SUITE 201 KITCHENER, ON N2G 4Y9 PHONE: (519) 500-8883 WEBSITE: www.gspgroup.ca		VAN HARTEN SURVEYING INC. 2106 GORDON STREET GUELPH, ON, N1L 1G6 PHONE: (519) 821-2763 WEBSITE: www.vanharten.com	

BENCHMARKS		(PROVIDED BY VAN HARTEN SURVEYING INC.):	
		SITE BENCHMARK #1 CUT CROSS ON SIDEWALK NEAR NORTHWEST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 416.69m.	
		SITE BENCHMARK #2 CUT CROSS ON SIDEWALK NEAR NORTHEAST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 419.10m.	

No.	DATE	ISSUE/REVISION	INITIAL
3	2025-08-05	ISSUED FOR SITE PLAN APPROVAL	S.P.
2	2024-10-01	ISSUED FOR APPROVAL	A.E.K.
1	2024-09-05	ISSUED FOR REVIEW	A.E.K.



TOWNSHIP OF CENTRE WELLINGTON

WRIGHTHAVEN HOMES
079 SIDEROAD 19 RESIDENTIAL DEVELOPMENT
FERGUS, ONTARIO

SITE GRADING PLAN

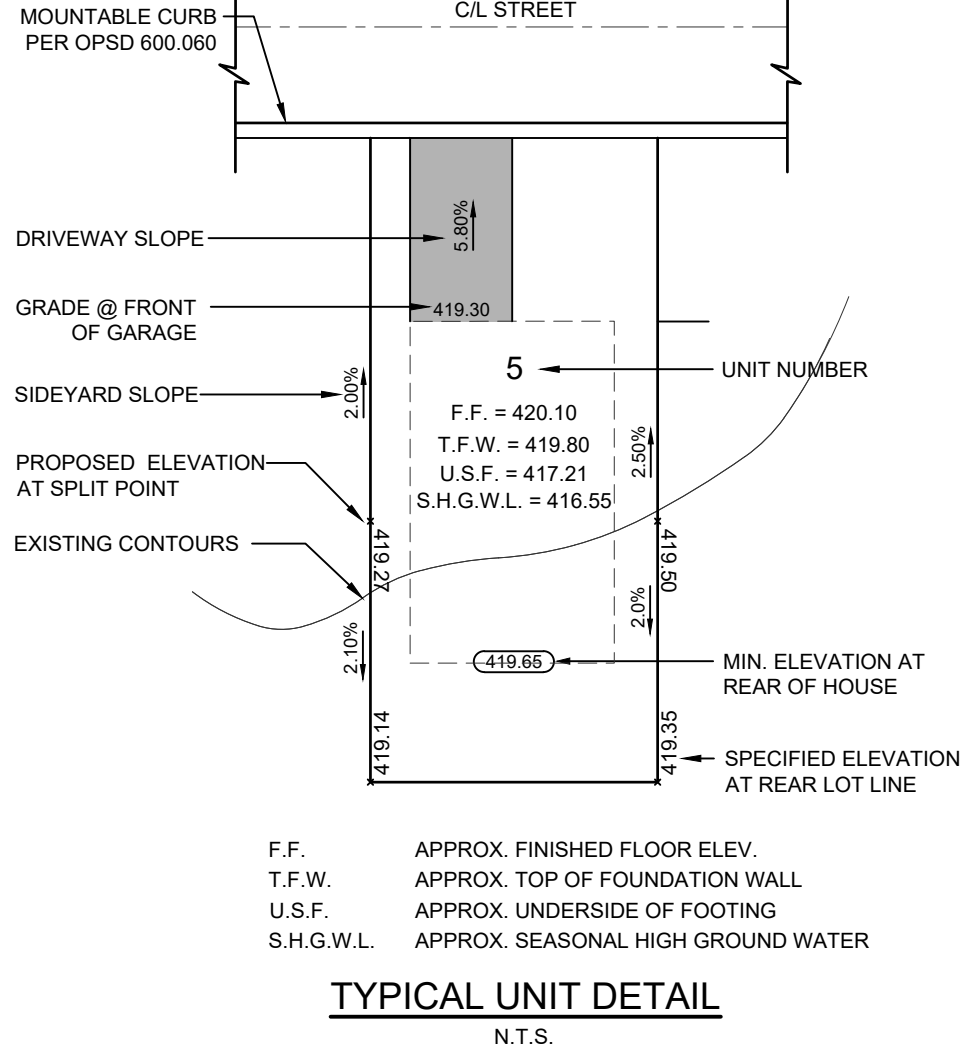
GEI Consultants Canada

DESIGNED BY: BLJPL	DATE: AUGUST 2025	CHECKED BY: SP
DRAWN BY: BL	PROJECT No. 2401073	DRAWING No. SGP-1
SCALE: 1:300		

5.0 5.0m 10.0m 15.0m 20.0m

GRADING

- THE GRADING PLAN IS TO BE READ WITH THE SITE SERVICES DRAWINGS.
- CONTRACTOR TO RESTORE AREAS ON PUBLIC R.O.W. OR ADJACENT LANDS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
- ALL DRIVEWAY AND GRADING MATERIAL AND CONSTRUCTION METHODS MUST CONFORM TO CURRENT TOWNSHIP STANDARDS AND SPECIFICATIONS.
- ALL FILL WITHIN THE SITE TO BE COMPACTED TO A MIN. OF 98% S_d PROCTOR DRY DENSITY. ALL FILL WITHIN THE SITE PARKING AREA TO BE COMPACTED TO A MIN. OF 95% S_d. THE SUITABILITY OF ALL FILL MATERIALS ARE TO BE CONFIRMED BY A RECOGNIZED SOILS CONSULTANT TO THE DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION OF ANY ROAD BASE MATERIALS.
- LANDSCAPING SHALL NOT ENCRoACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE ALTERED.
- SILT FENCE(S) TO BE INSTALLED AND MAINTAINED TO PREVENT SILT FLOWING ONTO ADJACENT LANDS. SILTATION CONTROL SHALL BE ERECTED PRIOR TO ANY GRADING OR CONSTRUCTION AND SHALL BE IN GOOD REPAIR THROUGHOUT THE CONSTRUCTION AND GRADING PHASES.
- ANY CHANGES IN GRADES, CATCH BASINS, SERVICES LATERALS, STORM AND SANITARY SEWERS REQUIRE THE APPROVAL OF THE ENGINEER.
- THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE ENGINEER.
- ALL LANDSCAPING TO BE INSTALLED AS SOON AS POSSIBLE OR PRIOR TO THE END OF THE FIRST GROWING SEASON. LANDSCAPING TO BE MAINTAINED UNTIL IT IS ESTABLISHED.
- ALL COMPACTION TO BE CERTIFIED BY A GEOTECHNICAL CONSULTANT.
- ALL CURBS ARE TO BE 150mm ABOVE THE PROPOSED GUTTER LINE (GL) UNLESS NOTED OTHERWISE.
- PAVEMENT GRADE SHALL BE MIN. 0.5%, MAX. 8%.
- DRAINAGE SWALE GRADE SHALL BE MIN. 2%, MAX. 6%.
- SLOPES IN LANDSCAPE AREAS AND ON BERMS SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL, UNLESS NOTED OTHERWISE.



LEGEND

PROPERTY LINE	EX. CONIFEROUS AND DECIDUOUS TREES	EX. HYDRO LIGHT POLE	WETLAND LIMIT
EX. SANITARY SEWER	EX. HYDRO POLE AND GUY WIRE	EX. FLAG POLE	10.0m WETLAND BUFFER
EX. STORM SEWER	EX. BOREHOLE & BOREHOLE / MONITORING WELL	PROP. STORM SEWER STRUCTURE	DRAINAGE FLOW
EX. CATCH BASIN	PROP. SANITARY SEWER STRUCTURE	PROP. FIRE HYDRANT	PROPOSED GRADE
EX. WATERMAIN	PROP. WATER VALVE		PROP. LIGHT STANDARD (SEE NOTE 6)
EX. FIRE HYDRANT			MAJOR OVERLAND FLOW ARROW
EX. DITCH			
EX. FENCE LINE			
EX. CONTOURS			
EX. HEDGE			