

GENERAL NOTES:

1. READ ALL CIVIL DRAWINGS IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS, INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, LANDSCAPE AND VENDOR DRAWINGS, AS APPLICABLE.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, EXISTING UTILITIES AND SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
3. THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE OF CONSTRUCTION DEBRIS THROUGHOUT CONSTRUCTION AND SHALL LEAVE THE SITE CLEAN UPON COMPLETION.
4. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST APPLICABLE EDITIONS OF:

• OCCUPATIONAL HEALTH AND SAFETY ACT;

• ONTARIO REGULATION 213/91 FOR CONSTRUCTION PROJECTS;

• ONTARIO BUILDING CODE;

• ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS (OPSS/OPSD); AND

• APPLICABLE MUNICIPAL REQUIREMENTS.
5. PROVIDE APPROPRIATE SHORING AND TRENCH PROTECTION IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND APPLICABLE REGULATIONS.
6. ALL BUILDING ELEVATIONS, INCLUDING FINISHED FLOOR ELEVATIONS, TOP OF FOUNDATION AND BASEMENT FLOOR ELEVATIONS, SHALL BE COORDINATED WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
7. A MINIMUM HORIZONTAL SEPARATION OF 2.5 m SHALL BE MAINTAINED BETWEEN WATERMAINS AND SEWERS. A MINIMUM VERTICAL CLEARANCE OF 0.5 m SHALL BE PROVIDED AT WATERMAIN AND SEWER CROSSINGS, UNLESS OTHERWISE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
8. PIPE TRENCH EXCAVATION AND BEDDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE OPSD DETAILS FOR FLEXIBLE OR RIGID PIPE AND FOR EARTH OR ROCK EXCAVATION, AS APPLICABLE.
9. BUILDING SERVICES SHALL TERMINATE APPROXIMATELY 1.5 m FROM THE FACE OF THE BUILDING UNLESS OTHERWISE SHOWN. THE SITE SERVICING CONTRACTOR SHALL COORDINATE CONNECTIONS TO INTERNAL BUILDING SERVICES WITH THE MECHANICAL CONTRACTOR.
10. SITE GRADING SHALL NOT ADVERSELY AFFECT ADJACENT PROPERTIES.
11. ALL WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY SHALL BE SUBJECT TO THE REQUIRED MUNICIPAL ROAD OCCUPANCY / ROAD CUT PERMITS.
12. ALL EXISTING AND PROPOSED MAINTENANCE HOLES, CATCH BASINS, VALVES AND OTHER APPURTENANCES WITHIN THE WORK AREA SHALL BE ADJUSTED TO MATCH THE FINAL FINISHED GRADE.
13. REMOVAL OF EXISTING SITE FEATURES SHALL BE CARRIED OUT IN ACCORDANCE WITH APPLICABLE OPSS REQUIREMENTS.
14. EXISTING ROADS, PAVED AREAS, BOULEVARDS AND GRASSED AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION.
15. COMPACTION TESTING SHALL BE COMPLETED BY A QUALIFIED THIRD-PARTY TESTING AGENCY WHERE REQUIRED.
16. APPROPRIATE SEDIMENT CONTROL DEVICES SHALL BE PROVIDED FOR EXISTING AND PROPOSED DRAINAGE STRUCTURES DURING CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREAS HAVE BEEN STABILIZED.

SANITARY NOTES

17. ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO CSA B182.2, SDR35, UNLESS OTHERWISE NOTED. ALL SANITARY SEWERS SHALL HAVE WATERTIGHT JOINTS AND GASKETED FITTINGS.
18. SANITARY SEWER BEDDING AND TRENCH CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE OPSD DETAILS UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL CONSULTANT OR APPROVED BY THE MUNICIPALITY.
19. SANITARY SERVICE CONNECTIONS SHALL BE CONSTRUCTED USING PRE-MANUFACTURED TEES OR APPROVED CONNECTIONS AND SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2.0%, UNLESS OTHERWISE SHOWN.
20. WHERE CONNECTION TO AN EXISTING MUNICIPAL SANITARY SEWER IS REQUIRED, CCTV INSPECTION SHALL BE COMPLETED BEFORE AND/OR AFTER CONSTRUCTION IF REQUIRED BY THE MUNICIPALITY.
21. MAINTENANCE HOLE FRAMES AND COVERS SHALL CONFORM TO OPSD 401.010, TYPE 'A', UNLESS OTHERWISE SPECIFIED.
22. NEW PRECAST CONCRETE MAINTENANCE HOLES SHALL CONFORM TO THE APPLICABLE OPSD 701 SERIES DETAILS. BENCHING SHALL CONFORM TO OPSD 701.021.
23. MAINTENANCE HOLES SHALL BE WATERTIGHT. JOINTS AND ADJUSTMENT RINGS SHALL BE SEALED AND WATERPROOFED IN ACCORDANCE WITH APPLICABLE OPSS/OPSD REQUIREMENTS.
24. DROP CONNECTIONS TO MAINTENANCE HOLES, WHERE REQUIRED, SHALL BE IN ACCORDANCE WITH OPSD 1003.010 AND OPSD 1003.020.
25. WHERE REQUIRED BY THE GEOTECHNICAL ENGINEER, CLAY PLUGS OR APPROVED TRENCH DAMS SHALL BE INSTALLED TO REDUCE GROUNDWATER MIGRATION ALONG THE PIPE TRENCH.
26. MAINTENANCE HOLE FRAMES LOCATED WITHIN PAVED AREAS SHALL INITIALLY BE SET TO BASE COURSE ASPHALT GRADE AND ADJUSTED TO FINAL GRADE WITH APPROVED ADJUSTMENT RINGS PRIOR TO PLACEMENT OF THE FINAL ASPHALT LIFT.
27. SANITARY SEWERS SHALL BE PROVIDED WITH SUFFICIENT COVER FOR FROST PROTECTION AND TO SERVE THE PROPOSED BUILDING, AS SHOWN ON THE APPROVED DRAWINGS.
28. ALL SANITARY SEWER INSTALLATION, INSPECTION AND TESTING SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE MUNICIPAL, OPSS AND CSA REQUIREMENTS.
29. MAINTENANCE HOLE STEPS, WHERE REQUIRED, SHALL CONFORM TO OPSD 405.020.

WATERMAIN

30. ALL WATERMAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH OPSS 441 AND APPLICABLE AWWA AND CSA STANDARDS.
31. PVC WATERMAIN SHALL BE DR18, CLASS 150, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
32. WATERMAIN AND WATER SERVICE BEDDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE OPSD DETAILS.
33. WATERMAINS AND WATER SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 1.8 m, UNLESS OTHERWISE APPROVED.
34. THE CONTRACTOR SHALL MAINTAIN THE REQUIRED MINIMUM CLEARANCES BETWEEN WATERMAINS, SEWERS AND OTHER UTILITIES.
35. DOMESTIC WATER SERVICES SHALL BE TYPE 'K' COPPER OR OTHER APPROVED MATERIAL AND SIZE AS SHOWN ON THE SERVICING PLAN.
36. ALL WATERMAIN FITTINGS, TEES, BENDS, VALVES, HYDRANTS AND TERMINATIONS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH THE PIPE AND FITTING MANUFACTURER'S REQUIREMENTS.
37. WATERMAIN FITTINGS, VALVES AND HYDRANT CONNECTIONS SHALL BE PROVIDED WITH CORROSION PROTECTION AS REQUIRED BY APPLICABLE MUNICIPAL AND OPSD REQUIREMENTS.
38. PVC WATERMAIN SHALL BE PROVIDED WITH TRACER WIRE. TRACER WIRE SHALL BE SECURED TO THE PIPE AND ACCESSIBLE AT APPROPRIATE TERMINATION POINTS.
39. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES WITH VALVE BOXES, UNLESS OTHERWISE APPROVED.
40. HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH OPSD 1105.010 AND APPLICABLE MUNICIPAL REQUIREMENTS.
41. HYDRANT FLANGE ELEVATIONS SHALL BE SET APPROXIMATELY 50 mm TO 100 mm ABOVE FINAL FINISHED GRADE, UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY.
42. HYDRANTS SHALL BE LOCATED TO PROVIDE ADEQUATE CLEARANCE FROM DRIVEWAYS, BUILDINGS, LANDSCAPING AND OTHER ABOVE-GROUND UTILITIES.
43. PIPE DEFLECTION SHALL BE USED WHERE PRACTICAL TO MINIMIZE THE NUMBER OF FITTINGS. PIPE DEFLECTION SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDED LIMITS.

44. WATERMAIN PRESSURE TESTING, LEAKAGE TESTING, FLUSHING, DISINFECTION AND COMMISSIONING SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE MUNICIPAL REQUIREMENTS, OPSS 441 AND AWWA STANDARDS.
45. CONNECTIONS TO THE EXISTING MUNICIPAL WATERMAIN SHALL BE COMPLETED IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS AND SHALL BE COORDINATED WITH THE MUNICIPALITY PRIOR TO CONSTRUCTION.

AS-BUILT INFORMATION

THE FOLLOWING AVAILABLE AS-BUILT DRAWINGS WERE REFERENCED IN THE PREPARATION OF THE CIVIL DESIGN:

• GARDEN STREET PLAN & PROFILE BY MAKSYMEC & ASSOCIATES LTD., DATED JANUARY 1974.

• SANITARY SEWER GENERAL PLAN, DATED JANUARY 12, 1977.

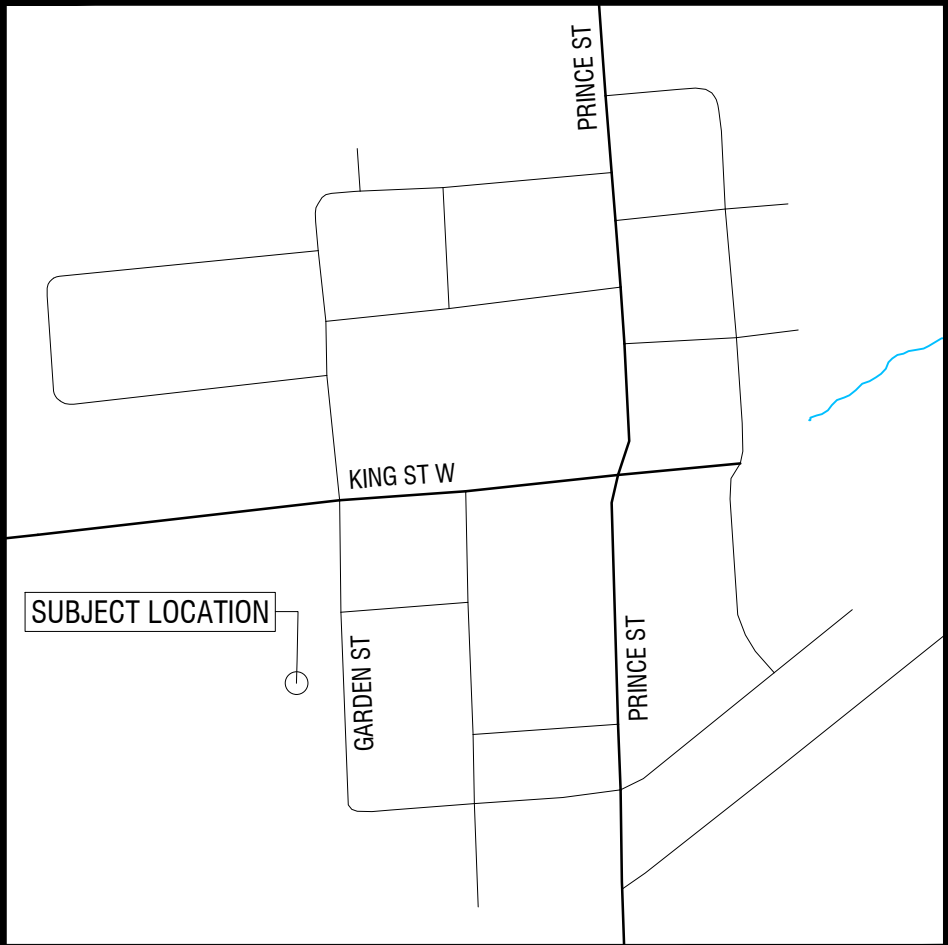
• WATERMAINS GENERAL PLAN, DATED JANUARY 18, 1977.

GEOTECHNICAL REPORT

GEOTECHNICAL DESIGN INFORMATION SHALL BE READ IN CONJUNCTION WITH:
GEOTECHNICAL INVESTIGATION, REFERENCE NO. 02630979.000, PREPARED BY CAMBIUM INC., DATED JULY 30, 2026.

STANDARD DRAWING REFERENCE

1. DRIVEWAY ENTRANCE – OPSD 303.020.
2. DRIVEWAY CULVERT HEADWALL – OPSD 804.030.
3. CULVERT OUTLET RIPRAP TREATMENT – OPSD 810.010.
4. CONCRETE BARRIER CURB – OPSD 600.110.
5. FIRE HYDRANT INSTALLATION – OPSD 1105.010.
6. FLEXIBLE PIPE EMBEDMENT AND TRENCH – OPSD 802.010 / OPSD 802.013, AS APPLICABLE.
7. RIGID PIPE EMBEDMENT AND TRENCH – OPSD 802.030 / OPSD 802.033, AS APPLICABLE.
8. MAINTENANCE HOLE BENCHING – OPSD 701.021.
9. SEWER DROP CONNECTIONS – OPSD 1003.010 / OPSD 1003.020, AS APPLICABLE.



KEYPLAN

ELEVATION NOTE

- ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE HTZ_0 GEOD MODEL BEING A PRODUCT OF THE GEODETIC SURVEY DIVISION (GSD) OF NATURAL RESOURCES CANADA, DERIVED FROM RTN OBSERVATIONS. THE ELEVATIONS ARE REFERRED TO A SITE BENCHMARK BEING THE TOP OF SSIB (1249) AT THE SOUTHEAST CORNER OF PART 1, 2BR-7277 HAVING AN ELEVATION OF 113.27m.

BEARING NOTE:

- BEARINGS ARE UTM GRID, DERIVED FROM A PORTION OF THE SOUTHERLY LIMIT OF PARTS 1 & 2, (P2) HAVING A BEARING OF N84°50'35"E UTM ZONE 18 (75° WEST LONGITUDE) NAD83 (CSRS) (2010) AND BEING DESIGNATED HEREON AS "REFERENCE BEARING".
- FOR BEARING COMPARISONS, A ROTATION OF 0°43'05" CLOCKWISE WAS APPLIED TO BEARINGS ON (P1) & (P1).
- FOR BEARING COMPARISONS, A ROTATION OF 0°44'50" CLOCKWISE WAS APPLIED TO BEARINGS ON PLAN (P2).
- DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996688
- DISTANCES AND ELEVATIONS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

6			
5			
4			
3			
2			
1			
0	2026/08/10	FOR BUILDING PERMIT	FS
REV.	DATE	DESCRIPTION	BY

MUNICIPALITY:



Township of
**Leeds and the
Thousand Islands**

ENGINEER'S STAMP



CIVIL ENGINEER:



7373 LONGHEAD AVENUE, NIAGARA FALLS, ONTARIO, L2G7S4
TEL: 226-588-7928, EMAIL: FENG.SH@LUBAN.CA

CLIENT:	ARCHITECT:
NORTHBRIDGE HOMES LTD.	

NOTES

RESIDENTIAL DEVELOPMENT

12 GARDEN ST, LANSDOWNE, ON K0E 1L0

DESIGNED BY:	MG	SCALE:	CONTRACT No.
CHECKED BY:	FS	HORIZONTAL: 1:250	SHEET
DRAWN BY:	MG	VERTICAL:	No 1 OF 6
DATE:	2026/08/10		C1 DRAWING No.