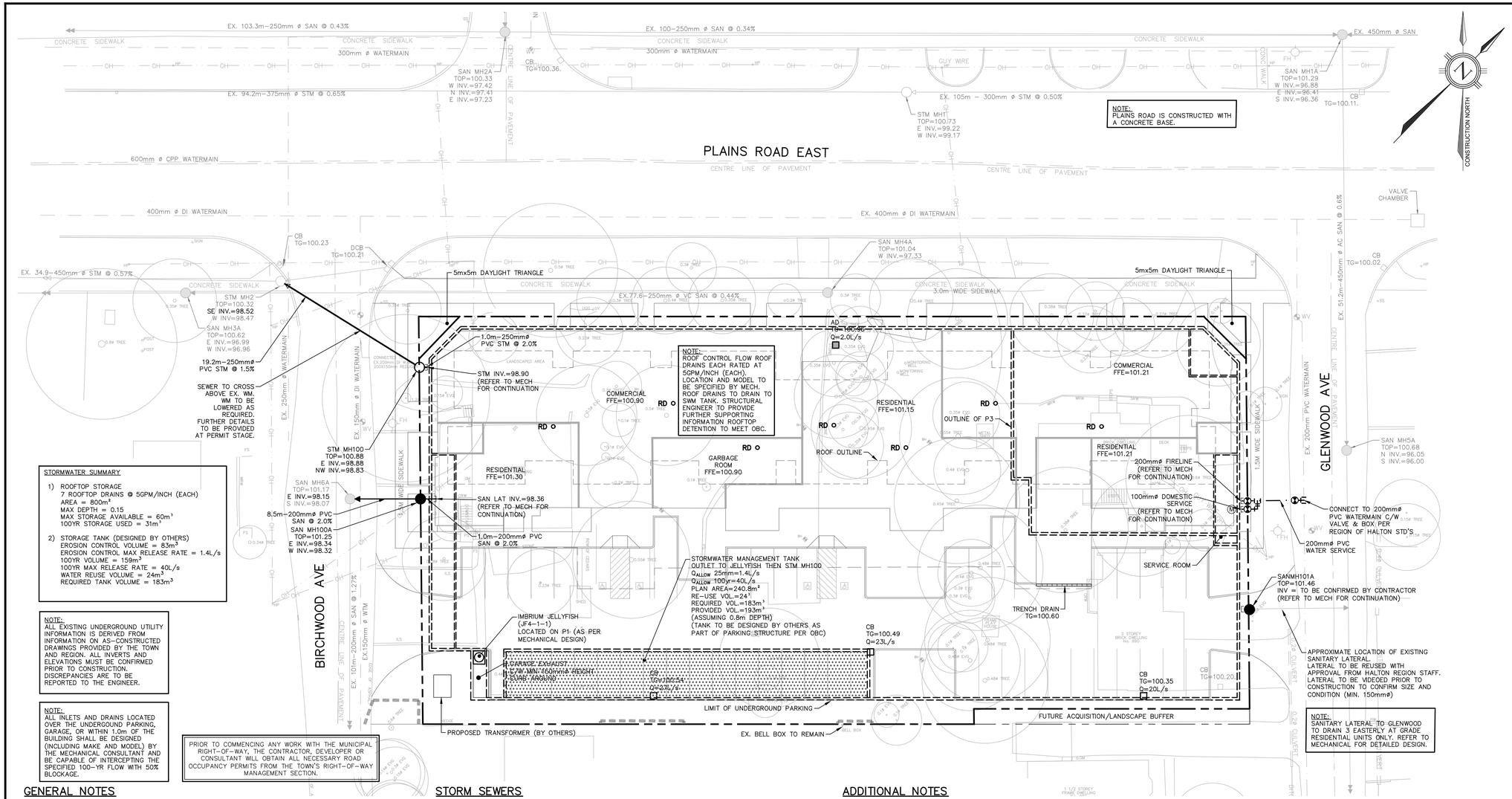
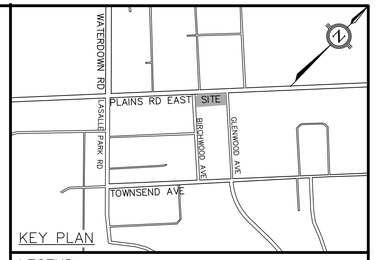




LEGEND

- PROPERTY BOUNDARY
- EXISTING FIRE HYDRANT
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING CATCHBASIN
- EXISTING DOUBLE CATCHBASIN
- EXISTING VALVE AND BOX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- PROPOSED ENTRANCE ARROW
- PROPOSED OVERHEAD ENTRANCE ARROW
- RD PROPOSED ROOF DRAIN
- PROPOSED CATCHBASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED VALVE & BOX
- AD PROPOSED AREA DRAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED WATERMAIN
- PROPOSED WATER METER
- TREE HOARDING

0 2.5 5 7.5 10 12.5

NO.	DATE	BY/DRAWN	REVISIONS
2	25/05/12	NAS/ZI	ISSUED FOR OPA/ZBA APPLICATION
1	25/01/17	NAS/ZI	ISSUED FOR TECHNICAL REVIEW

CAD FILE: 1861GS.dwg | PLOT SCALE: 1:1 | PLOT DATE: May 12, 2025

ELEVATION NOTE:

BEARINGS ARE UTM GRID, DEVIRED FROM OBSERVED REFERENCE POINTS A & B, BY REAL TIME NETWORK OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0)

LOCAL BENCHMARK:

MONUMENT 44 – MAPLEHURST SCHOOL, 481 PLAINS ROAD EAST (HIGHWAY NO. 2) 1.92 KM NORTHEAST OF WATERDOWN ROAD: TABLET IN THE FRONT OF THE SOUTHEAST CONCRETE FOUNDATION WALL, 1.5m SOUTHWEST OF THE MOST EASTERLY OF TWO ENTRANCES, 1.04m BELOW RED BRICK SIDING. NO. 3488.
ELEVATION: 98.754 METRES

THE TOPOGRAPHIC DETAIL SHOWN HERON WAS AQUIRED ON JANUARY 17, 2024 BY A.T. MCLAREN LIMITED (DWG NO. 37632).

LICENSED PROFESSIONAL ENGINEER
N. A. SYLVESTER
100199487
MAY 12, 2025
PROVINCE OF ONTARIO

DESIGNED BY | APPROVED BY

CONSULTANT
TRAFALGAR ENGINEERING
#1-481 MORDEN ROAD, OAKVILLE, ON, L6K 3W6
www.trafalgareng.com

PROJECT TITLE
ONE HUNDRED ON PLAINS

LOCATION
84–104 PLAINS ROAD EAST & 990 GLENWOOD AVENUE
BURLINGTON, ONTARIO

DRAWING TITLE
SERVICING PLAN

SCALE	1:250	DESIGN BY	NAS	PROJECT No.	1861
DRAWN BY	ZI	CHECKED BY	NAS	PLAN No.	S1
DATE	2024/10/01	SHEET	1 OF 1		

STORMWATER SUMMARY

1) ROOFTOP STORAGE
7 ROOFTOP DRAINS @ 5GPM/INCH (EACH)
AREA = 800m²
MAX DEPTH = 0.15
MAX STORAGE AVAILABLE = 60m³
100YR STORAGE USED = 31m³

2) STORAGE TANK (DESIGNED BY OTHERS)
EROSION CONTROL VOLUME = 83m³
EROSION CONTROL MAX RELEASE RATE = 1.4L/s
100YR VOLUME = 159m³
100YR MAX RELEASE RATE = 40L/s
WATER REUSE VOLUME = 24m³
REQUIRED TANK VOLUME = 183m³

NOTE:
ALL EXISTING UNDERGROUND UTILITY INFORMATION IS DERIVED FROM INFORMATION ON AS–CONSTRUCTED DRAWINGS PROVIDED BY THE TOWN AND REGION. ALL INVERTS AND ELEVATIONS MUST BE CONFIRMED PRIOR TO CONSTRUCTION. DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.

NOTE:
ALL INLETS AND DRAINS LOCATED OVER THE UNDERGROUND PARKING, GARAGE, OR WITHIN 1.0m OF THE BUILDING SHALL BE DESIGNED (INCLUDING MAKE AND MODEL) BY THE MECHANICAL CONSULTANT AND BE CAPABLE OF INTERCEPTING THE SPECIFIED 100–YR FLOW WITH 50% BLOCKAGE.

PRIOR TO COMMENCING ANY WORK WITH THE MUNICIPAL RIGHT–OF–WAY, THE CONTRACTOR, DEVELOPER OR CONSULTANT WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE TOWN'S RIGHT–OF–WAY MANAGEMENT SECTION.

NOTE:
ALL EXISTING SANITARY AND WATER SERVICES TO BE DECOMMISSIONED PER HALTON STANDARDS UNLESS OTHERWISE NOTED.

GENERAL NOTES

1. ALL THE CONSTRUCTON WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF BURLINGTON AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
2. ALL SURFACE DRAINAGE SHALL BE COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. DRAINAGE OF ABUTTING PROPERTIES SHALL NOT BE ADVERSELY AFFECTED.
3. PROPOSED ELEVATIONS ALONG SITE PROPERTY LINES MUST MATCH EXISTING ELEVATIONS.
4. A SILT FENCE MUST BE PLACED AROUND THE PERIMETER OF THE SITE.
5. AT ALL ENTRANCES TO THE SITE, THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE DRIVEWAY. THE DRIVEWAY GRADE WILL BE COMPATIBLE WITH THE EXISTING SIDEWALK AND A CURB DEPRESSION WILL BE PROVIDED FOR AT EACH ENTRANCE.
6. SIDEWALK TO BE REMOVED AND REPLACED AS PER CITY STD. S–121.
7. THE PORTION OF THE DRIVEWAY WITHIN THE MUNICIPAL BOULEVARD MUST BE PAVED WITH 40mm HL3 AND 50mm HL8. BASE TO BE 150mm GRANULAR "A" (OR 130mm OF 20mm CRUSHER RUN LIMESTONE) AND 300mm GRANULAR "B" (OR 225mm OF 50mm CRUSHER RUN LIMESTONE) COMPACTED TO 100% STANDARD PROCTOR DENSITY.
8. A UTILITY CLEARANCE RADIUS OF 1.2 METRES BETWEEN THE PROPOSED DRIVEWAY ENTRANCE CURB RETURN AND ALL ABOVE GROUND UTILITIES MUST BE MAINTAINED.
9. ROAD OCCUPANCY / ACCESS PERMIT MUST BE OBTAINED 48 HOURS PRIOR TO COMMENCING ANY WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE.
10. THE SERVICE CONNECTION TRENCH WITHIN THE TRAVELED PORTION OF THE ROAD ALLOWANCE SHALL BE BACKFILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROAD OCCUPANCY / ACCESS PERMIT APPLICATION.
11. THE MINIMUM CATCHBASIN LEAD DIAMETER ALLOWED IS 250mm.
12. ALL CATCHBASIN MANHOLES AND MANHOLES WITH INLET CONTROL DEVICES MUST HAVE A MINIMUM 0.3 METRE SUMP AND TOP AS PER MUNICIPAL STANDARDS.
13. RESTORE ROAD AS PER THE CITY OF BURLINGTON ROAD CUT PERMIT.
14. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, MECHANICAL, AND LANDSCAPE DRAWINGS.

SANITARY SEWERS

1. ALL SANITARY SEWERS SHALL BE SDR–28 PVC PIPE.
2. ALL BEDDING FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH REGION OF HALTON STD. DWG. WITH GRANULAR COVER MATERIAL HAVING STONE SIZE NO GREATER THAN 25mm COMPACTED TO 95% SPMDD.
3. ALL MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010, OPSD 401.010 TYPE–A CLOSED COVER AND STAMPED "DANGER–SANITARY" AND BENCHING THROUGHOUT TO THE CROWN OF ALL PIPES ON A VERTICAL PROJECTION FROM SPRING LINE.

STORM SEWERS

1. SEWER BEDDING AS PER OPSD 802.010 OR 802.013 FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.013 FOR RIGID PIPES, CLASS 'B' BEDDING OR APPROVED BY CITY ENGINEER.
2. ALL MANHOLES AND CATCH BASINS SHALL BE:
   A. OPSD 701.010 (1200mmø)
3. MANHOLE AND CATCH BASIN (LANDSCAPE) COVER/ GRATING SHALL BE AS FOLLOWS:
   A. OPSD 401.010, TYPE 'A' – CLOSED COVER FOR MANHOLE AND STAMPED "DANGER–STORM"
   B. CITY STD. S–176 – BEEHIVE CATCH BASIN FRAME AND COVER FOR CB ON LANDSCAPE AREAS
4. ALL MANHOLES AND CATCHBASIN MANHOLES TO BE BENCHED THROUGHOUT THE SPRING LINE UNLESS NOTED OTHERWISE.
5. SURROUND ALL MANHOLES AND CATCHBASINS WITH A MINIMUM OF 1.0 METRE GRANULAR 'A' OR APPROVED EQUAL BY THE CITY ENGINEER COMPACTED TO 100% S.P.D.

WATERMAINS

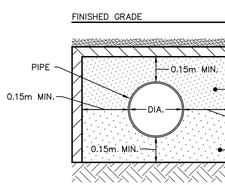
1. ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT REGION OF HALTON WORKS STANDARDS AND SPECIFICATIONS.
2. WATERMAIN AND / OR WATER SERVICE MATERIALS 100mm (4") AND LARGER MUST BE AWWA C–900–75 POLYVINYL CHLORIDE (PVC) DR18 INSTALLED WITH A 12 GAUGE TWH SOLID COPPER LIGHT COLOURED PLASTIC COATED TRACER WIRE BROUGHT TO THE SURFACE AT EACH VALVE BOX. SIZE 50mm (2") AND SMALLER COPPER TYPE "K" SOFT COPPER TUBING.
3. WATERMAINS AND / OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 1.7m (5'6") WITH A MINIMUM HORIZONTAL SPACING OF 1.2m (4") FROM THEMSELVES AND ALL OTHER UTILITIES.
4. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED WITH AT LEAST A 50mm (2") OUTLET ON 100mm (4") AND LARGER LINES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. THEY MUST ALSO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN ONTO THE PARKING LOT OR DOWN THE DRAIN. ON FIRE LINES, FLUSHING OUTLET TO BE 100mm (4") DIAMETER MINIMUM ON A HYDRANT.
5. ALL CURB STOPS TO BE 3.0m (10') OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.
6. WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED SITE PLAN. COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR.
7. WATERMAINS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.30m (12") OVER / 0.50m (20") UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
8. ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATING FROM EXISTING SYSTEMS.
9. ALL LIVE TAPPING AND OPERATION OF REGION OF WATER VALVES SHALL BE ARRANGED THROUGH THE REGIONAL INSPECTOR ASSIGNED OR BY CONTACTING THE OPERATIONS AND MAINTENCE DIVISION.
10. WATER SERVICES/MAINS SHALL BE TESTED & DISINFECTED AS PER AMSI/AWWA C651–99 AND REGION OF HALTON REQUIREMENTS.
11. CONNECTIONS TO EXISTING WATERMAIN SHALL BE PER REGION OF HALTON STD RH 409.01.
12. BEDDING ON WATER SERVICE SHALL BE PER OPSD 802.010.

ADDITIONAL NOTES

1. LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE CONTRACTOR.
2. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF HIS WORK. WHETHER SHOWN ON THE PLAN OR NOT, AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME.
3. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO UTILITIES PRIOR TO CROSSING SUCH UTILITIES, FOR THE PURPOSE OF INSPECTION BY THE CONCERNED UTILITY. THIS INSPECTION WILL BE FOR THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COST ARISING FROM SUCH INSPECTION.

SERVICING NOTES

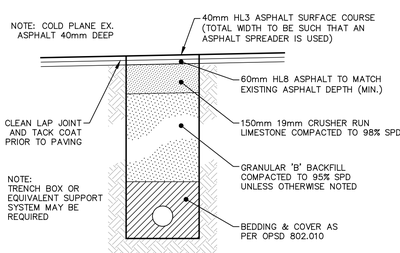
1. ALL UTILITIES SHALL BE BACKFILLED WITH GRANULAR BACKFILL COMPACTED TO 98% S.P.M.D.D. NATIVE BACKFILL MAY BE USED WITH THE PERMISSION OF THE GEOTECHNICAL CONSULTANT. BEDDING AND COVER MATERIAL SHALL BE PER THE GEOTECHNICAL CONSULTANT'S RECOMMENDATIONS.
2. BACKFILLING AND RESTORATION WITHIN THE PUBLIC ROW SHALL BE IN ACCORDANCE WITH THE CITY OF BURLINGTON ROAD CUT PERMIT AND TO THE SATISFACTION OF THE ENGINEERING & CONSTRUCTION DEPARTMENT.
3. SURROUND ALL MANHOLES WITH A MINIMUM OF 1.5m COMPACTED GRANULAR 'C' BACKFILL.



PIPE INSULATION DETAIL

N.T.S.

NOTE:
1. DETAIL TO BE READ IN CONJUNCTION WITH OPSD 1109.030
2. INSULATION REQUIRED WHERE DEPTH OF COVER IS <1.2m (SEWER) or <1.7m (WATER)



NOTE:

1. PLACE HL8 ASPHALT TO MATCH EX SURFACE.
2. IN FOLLOWING CONSTRUCTION SEASON GRIND ASPHALT 40mm DEEP AND PLACE 40mm HL3 ASPHALT

TYPICAL TRENCH RESTORATION

N.T.S.

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PLOTDATE: May 12, 2025 - 2:09pm