GENERAL NOTES:

1. STANDARD DRAWINGS AND SPECIFICATIONS OF THE TOWN OF OAKVILLE AND THE REGION OF HALTON SHOULD BE READ IN CONJUNCTION WITH THE INFORMATION HEREIN.
2. MATERIAL SUBSTITUTIONS MUST HAVE PRIOR APPROVAL OF THE ENGINEER, TOWN OF OAKVILLE & REGION OF HALTON AND ANY OTHER REGULATORY AGENCIES HAVING JURISDICTION.
3. NO BLASTING IS REQUIRED OR ALLOWED.
4. COMPACTION OF GRANULAR BACKFILL AROUND CATCHBASINS AND MANHOLES TO BE 95% S.P.M.D.D. AND SHALL BE COMPACTED MECHANICALLY.
5. ROOF LEADERS TO DISCHARGE TO SPLASH PADS AS PER TOWN OF OAKVILLE STANDARD 10-1.
6. SEWER BEDDING TO BE AS PER TOWN OF OAKVILLE STANDARDS.
7. FILL AREAS GREATER THAN 0.3m WITHIN MUNICIPAL RIGHT-OF-WAY ARE SUBJECT TO COMPACTION TESTS TO ACHIEVE 100% S.P.M.D.D.
8. SET MANHOLE AND CATCHBASIN TOPS FLUSH WITH HL8 ASPHALT AND ARE TO BE ADJUSTED TO FINAL GRADE PRIOR TO PLACING FINAL LIFT OF ASPHALT.
9. TOWN OF OAKVILLE STANDARD 6-1 TO BE USED FOR CURB AND GUTTER UNLESS OTHERWISE NOTED.
10. TOWN OF OAKVILLE STANDARD 6-3 TO BE USED FOR ALL SIDEWALK. SIDEWALK DEPRESSIONS TO BE INSTALLED AT INTERSECTIONS. INTERSECTION RADII TO BE 7.50m UNLESS OTHERWISE NOTED.
11. PAVEMENT STRUCTURES ARE AS PER GEOTECHNICAL INVESTIGATION PREPARED BY SOIL-MAT ENGINEERS & CONSULTANTS LTD. DATED NOVEMBER 21, 2019:

    40mm HL3 ASPHALT SURFACE COURSE
    65mm HL8 ASPHALT BINDER COURSE
    150mm GRANULAR 'A' BASE
    300mm GRANULAR 'B' TYPE 2 - SUB-BASE

12. ANY ORGANIC MATERIAL OR TOPSOIL WITHIN FUTURE ROAD ALLOWANCES SHALL BE STRIPPED PRIOR TO CONSTRUCTION.
13. ALL TRENCHES WITHIN EXISTING R.O.W. TO BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED TO 95% S.P.M.D.D.
14. ALL TRENCHES WITHIN A REGIONAL R.O.W. TO BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED TO 98% S.P.M.D.D.
15. SUBDRAINS TO BE INSTALLED AS PER TOWN OF OAKVILLE STD. 6-2 UNLESS OTHERWISE NOTED.
16. A POURED CONCRETE PAD IS REQUIRED AT ALL COMMUNITY MAILBOX LOCATIONS AS PER CANADA POST STANDARDS.
17. THE ELEVATION AT STREET LINE FOR LOT DRAINAGE SHALL BE 150mm HIGHER THAN THE FINISHED ROAD CROWN.
18. ALL MATERIALS SHALL MEET OR EXCEED ONTARIO PROVINCIAL STANDARD AND TOWN STANDARD SPECIFICATIONS.
19. WATERMAINS AND SANITARY SEWERS TO CONFORM TO LATEST REGIONAL MUNICIPALITY OF HALTON SPECIFICATIONS AND REQUIREMENTS.
20. CONCRETE CURBS SHALL BE OPSD 600.060 AND 600.040 AS NOTED ON THE SITE GRADING PLAN 201.
21. SIDEWALKS SHALL CONFORM TO TOWN STD. 6-3.
22. SIDEWALK RAMPS AT INTERSECTIONS AND MID-BLOCK CROSSINGS SHALL CONFORM TO OPSD 310.033 (WITH TACTILE WALKING SURFACE INDICATOR COMPONENT PER OPSD 310.039) WITH THE REQUIREMENT THAT THE RAMP GRADIENT SHALL NOT EXCEED 5.0%.
23. REFER TO ONTARIO BUILDING CODE SECTION 7.2.4.4 REGARDING FITTINGS RESTRICTED IN USE.
24. REFER TO ONTARIO BUILDING CODE SECTION 7.2.10.5 REGARDING SADDLE HUBS.
25. REFER TO ONTARIO BUILDING CODE SECTION 7.3.5.4 REGARDING FROST PROTECTION OF SERVICES.
26. REFER TO ONTARIO BUILDING CODE SECTION 7.3.5.7 REGARDING SPATIAL SEPARATION OF SERVICES

STORM SEWERS:

1. MANHOLES TO BE AS PER O.P.S.D. 701.010 - 701.015 WITH COVER AND FRAME AS PER O.P.S.D.
2. CONCRETE PIPE TO BE CLASS 65-D AS PER CSA A257.2, PVC SDR 35 OR RIBBED PVC CONFORMING TO CSA B.182.2 (MAX PVC = 600mm DIA).
3. SERVICE CONNECTIONS TO BE 150mm DIA. WHITE PVC SDR-28 PIPE. MINIMUM COVER TO BE 2.0m AND MAXIMUM COVER TO BE 3.0m AT STREETLINE.
4. CATCHBASINS TO BE AS PER O.P.S.D. 705.010 FOR SINGLES AND 705.020 FOR DOUBLES. GRATES TO BE AS PER O.P.S.D. 400.110. CATCHBASINS LEADS TO BE 250mm DIA. FOR SINGLES AND 300mm DIA FOR DOUBLES AS PER CSA B182.2 SDR-35.
5. ROAD CATCHBASINS SHALL BE INSTALLED CATCHBASIN SHIELD AS PER CB SHIELD OPERATIONS MANUAL ON DWG. 501.
6. NO SUMP REQUIRED ON REAR LOT CATCHBASINS AS PER TOWN OF OAKVILLE STD. 3-1 WITH BEEHIVE GRATE AS PER STD. 5-2 INCLUDING A 100mm CONCRETE CAP FROM CATCHBASIN TO STREETLINE.
7. SILT TRAPS WITH FILTER FABRIC TO BE INSTALLED ON ALL CATCHBASINS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN 601. TRAPS TO BE CLEANED REGULARLY BY THE CONTRACTOR. TRAPS ARE NOT TO BE REMOVED UNTIL CURBS ARE CONSTRUCTED AND BOULEVARDS ARE SODDED AND BACKYARDS ARE GRADED AND SODDED.
8. RUBBER GASKETED JOINTS ARE TO BE USED ON ALL STORM SEWER.
9. CONNECTIONS TO MAIN SEWERS SHALL BE ACHIEVED USING 'Y' FITTINGS ONLY.

SANITARY SEWERS:

1. MANHOLES AS PER O.P.S.D. 701.010 WITH FRAME AND COVER AS PER O.P.S.D. 401.01 TYPE 'B'.
2. SEWER PIPE TO BE PVC SDR 35 OR RIBBED CONFORMING TO CSA B.182.2 OPSS 1841, O.P.S.D. 806.040 AND 806.06.
3. SERVICE CONNECTIONS TO BE 125mm DIA. FOR SINGLE LOT CONNECTIONS (DUAL SANITARY CONNECTIONS ARE NOT PERMITTED, EXCEPT VERTICAL DUAL SANITARY CONNECTIONS). MINIMUM AND MAXIMUM COVER AT STREETLINE OF 2.15m & 2.75m, RESPECTIVELY, IS REQUIRED.
4. SERVICE CONNECTIONS EXCEEDING 4.50m REQUIRE RISERS AS PER REGION OF HALTON STANDARDS.
5. SAFETY PLATFORMS ARE NOT PERMITTED IN HALTON REGION.
6. CONNECTIONS TO MAIN SEWERS SHALL BE ACHIEVED USING 'Y' FITTINGS ONLY.

WATERMAIN:

1. 150mm DIA. TO 300mm DIA. WATERMAIN TO BE PVC CL.235 (DR-18) WITH GASKETED JOINTS PER AWWA C-900, C-905 & C-907..
2. SERVICE CONNECTIONS TO BE 25mm DIA. AND PER O.P.S.D. 1104.01. THE USE OF SADDLES IS NOT PERMITTED. PIPE FOR ALL SERVICE CONNECTIONS SHALL BE TYPE 'K' SOFT COPPER TUBING.
3. MINIMUM HORIZONTAL SEPARATION OF 2.5m BETWEEN WATERMAINS AND SEWERS. A 0.5m SEPARATION BETWEEN WATERMAINS AND SEWERS MUST BE MAINTAINED AT ALL CROSSING LOCATIONS.
4. BEDDING TO BE SUITABLE GRANULAR 'A' MATERIAL WITH MINIMUM 150mm DEPTH AND SHALL CONFORM TO OPSS 514
5. ALL WATERMAIN WILL BE SUBJECT TO PRESSURE TESTING AND FIRE FLOW TESTING AS DIRECTED BY HALTON REGION
6. SACRIFICIAL ANODES SHALL CONFORM TO ASTM B-418 TYPE II AND SHALL BE MADE OF HIGH GRADE ELECTROLYTIC ZINC, 99.99% PURE.
7. ALL METALLIC WATERMAINS, FITTING, HYDRANTS AND RESTRAINERS TO HAVE ONE ZINC ANODE PER LENGTH OF PIPE IN SIZES ACCORDING TO THE FOLLOWING TABLE AND INSTALLED IN ACCORDANCE WITH REGION OF HALTON STANDARD DRAWING RH 420.01 AND RH 420.02.

PIPE / FITTING SIZE (mm)	ZINC ANODE SIZE (KG)
150	2.7
200	5.5
300	11
400	11
450	11
HYDRANT	11

COPPER SERVICE (mm)	ZINC ANODE SIZE (KG)
20	2.7 (< 13m IN LENGTH) 5.5 (< 26m IN LENGTH) 11 (> 26m IN LENGTH)
25	5.5 (< 26m IN LENGTH) 11 (> 26m IN LENGTH)
32, 38, 50	5.5

8. ANODES ARE NOT REQUIRED WITHIN VALVE-CHAMBERS, DRAIN CHAMBERS OR AIR RELEASE CHAMBER.
9. WELD CONNECTIONS TO BE COATED WITH "TC MASTIC" OR APPROVED EQUIVALENT.
10. FOR ALL ANODES CONNECTED TO NEW PIPE, FITTINGS OR TO EXISTING METALLIC WATERMAINS, A CADWELDER AND CA-15 OR EQUIVALENT CARTRIDGE SHALL BE USED. ANODE INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
11. WHERE NEW PIPE IS TO BE CONNECTED TO EXISTING DUCTILE IRON OR CAST IRON PIPE A 14.5 KG MAGNESIUM ANODE IS TO BE CONNECTED TO THE FIRST LENGTH OF EXISTING PIPE, AS PER REGION OF HALTON STANDARD DRAWING RH 420.01.
12. VALVES TO OPEN LEFT (COUNTER CLOCKWISE) AND HAVE A STANDARD 50mm SQUARE OPERATION NUT.
13. ALL PLUGS, CAPS, TEES & HYDRANTS AND BENDS WILL HAVE APPROVED MECHANICAL THRUST RESTRAINTS. CONCRETE THRUST BLOCKS SHALL ONLY BE USED IN SPECIAL CIRCUMSTANCES WITH THE APPROVAL OF THE REGION OF HALTON.
14. WATERMAIN INSTALLATION WITHIN EXISTING R.O.W. SHALL BE BACKFILLED WITH GRANULAR 'A'.
15. GATE VALVES CONFORMING TO AWWA C500 AND THE REGION OF HALTON SPECIFICATIONS SHALL BE PROVIDED ON WATERMAINS UP TO AND INCLUDING 300mm DIA.
16. WATERMAIN FITTINGS TO HAVE MECHANICAL JOINTS.
17. VERTICAL OR HORIZONTAL PIPE DEFLECTION TO BE IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS.
18. TRACER WIRE SHALL BE INSTALLED ON ALL NEW PVC AND POLYETHYLENE PIPE. A SOLID GAUGE TWU COPPER WIRE SHALL BE INSTALLED ALONG THE TOP OF THE PIPE STRAPPED TO THE PIPE AT 6m INTERVALS. THE WIRE SHALL BE INSTALLED BETWEEN EACH VALVE AND/OR THE END OF THE NEW PVC WATERMAIN. JOINTS IN THE WIRE ARE NOT PERMITTED. AT EACH VALVE, A LOOP OF WIRE IS TO BE BROUGHT UP INSIDE THE VALVE BOX TO THE TOP OF THE BOX AS PER HALTON STD DRAWING RH 4--4.04 OR RH 400.05
19. HYDRANTS TO BE INSTALLED SUCH THAT THE LOWER ROD STEM SHALL NOT EXCEED 1.7m MEASURED FROM THE BREAKOFF FLANGE.
20. ALL HYDRANTS AS PER O.P.S.D. 1105.010 AND RH400.02 TO HAVE STEAMER CONNECTIONS.
    STORZ PUMPER CONNECTIONS
    - TWO (2) 63.5mm (2 1/2") WITH CSA STANDARD THREAD, 63.5mm I.D., 79.4mm O.D., 5 THREADS PER 25mm, 31.75mm SQUARE OPERATING NUT; AND
    - ONE (1) 100mm (4") STORZ PUMPER CONNECTION AS PER CAN/ULC #S-520, 31.75mm SQUARE OPERATING UNIT, AND STORE CAP PAINTED GLOSS BLACK.
21. MINIMUM DEPTH OF COVER OVER WATERMAIN SHALL BE 1.70m MEASURED FROM THE ROAD CENTRELINE ELEVATION.
22. MINIMUM SEPARATION DISTANCE BETWEEN THE EDGE OF DRIVEWAY AND FACE OF FIRE HYDRANT IS 1.0m.
23. ALL UNITS ARE TO BE EQUIPPED WITH PRESSURE REDUCING VALVES.

BENCHMARK
ELEVATIONS ARE GEODETIC AND REFERRED TO THE TOWN OF OAKVILLE BENCHMARK HAVING AN ORTHOMETRIC ELEVATION OF 133.458 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, PRE-1978 ADJUSTMENT (CGVD-1928:PRE-1978). ELEVATION OF BENCHMARK ESTABLISHED AT THE CORNER OF THE WESTERLY EDGE OF CONCRETE GARAGE DOOR SILL AT #1351 GREENRIDGE CIRCLE.

BRANTHAVEN WEST OAK INC.
WESTOAK TRAILS BLOCK 107, PLAN 20M-696
TOWN FILE # Z.1427.13

OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

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REGISTERED PROFESSIONAL ENGINEER
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APR 09 2021
PROVINCE OF ONTARIO

GENERAL NOTES

DESIGNED:	J.B	CHECKED:	D.Z	PROJECT No.:	20-640
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SCALE:	AS SHOWN			DRAWING No.:	**100**

File: P:\Projects\20-640 Westoak Trails Block 107, Branthaven\Drawings\100 - Cover & General\100 GEN_NOTES.dwg - Revised by: JJMAN - - Tue, Apr 06 2021 - 2:31pm