



- GENERAL NOTES:
1. ALL DIMENSIONS ARE IN METRES (m) AND ALL PIPE SIZES ARE IN MILLIMETERS (mm), UNLESS OTHERWISE SPECIFIED.
  2. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE PLAN AND PROFILE DRAWINGS AND/OR SPECIFIC DETAIL DRAWINGS.
  3. THE STANDARD DRAWINGS OF THE TOWN, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS PROJECT.
  4. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOWN OF NEWMARKET STANDARD DRAWINGS, AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
  5. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT OR PROJECT.
  6. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
  7. ALL SITE CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE TOWN'S ENGINEER.
  8. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY. FOR BACKFILLING WITHIN THE ROADWAY, NATIVE MATERIAL SHALL BE BACKFILLED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY. FOR BACKFILLING WITHIN 150 mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
  9. MATERIAL SPECIFICATION FOR ALL FRAMES, GRATES, COVERS AND GRATINGS SHALL BE AS PER OPSS 1850. FINISH ON ALL SURFACES SHALL BE PAINTED.

- STORM SEWER NOTES:
1. ALL STORM SEWER MAINS OVER 450 mm DIAMETER SHALL BE CONSTRUCTED WITH REINFORCED CONCRETE OR CAST IN PLACE CONCRETE. PVC PIPE SHALL NOT BE PERMITTED.
  2. CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD A257-1 1982 FOR THE CLASSES SHOWN BELOW:  
a) NON-REINFORCED CONCRETE PIPE, CSA STANDARD A257.1 CLASS 1, 2 AND 3  
b) REINFORCED CONCRETE PIPE, CSA STANDARD A257.2 STRENGTH CLASS 50-D, 65-D, 100-D AND 140-D
  3. PVC PIPE SHALL CONFORM TO CSA SPECIFICATION B182.1 OR B182.2 OR LATEST REVISION THEREOF. RIBBED PVC PIPE WILL NOT BE PERMITTED. SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010, UNLESS APPROVED OTHERWISE BY THE TOWN.
  4. MANHOLE TOPS ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE. FRAME AND COVER TO BE PER OPSD 401.010, TYPE 'B'. ADJUSTMENTS SHALL BE AS PER NMSD 210.00.
  5. SINGLE CATCHBASIN LEADS TO BE 250 mm DIAMETER MINIMUM. DOUBLE CATCHBASIN LEADS SHALL BE A MINIMUM DIAMETER OF 250 mm AND SHALL BE ENCASED IN CONCRETE FROM CATCHBASIN TO STORM SEWER.
  6. REAR LOT CATCHBASINS TO HAVE TOPS AS PER TOWN OF NEWMARKET STANDARD DRAWING NMSD-400.00.
  7. CATCHBASIN GRATES ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE. ADJUSTMENTS SHALL BE AS PER NMSD-211.00.
  8. WHERE CATCHBASINS ARE CONNECTED DIRECTLY TO SEWERS, PRE-MANUFACTURED TEES SHALL BE USED.
  9. SAFETY CHAINS ARE TO BE INSTALLED ON THE DOWNSTREAM SIDE OF ALL MANHOLES ON PIPES 1200 mm AND LARGER AS PER TOWN OF NEWMARKET STANDARD DRAWING NMSD-400.00.
  10. STORM SERVICES SHALL BE 150 mm DIAMETER PVC DR 28, WHITE IN COLOR AND ARE TO EXTEND 1.5 m BEYOND ROAD ALLOWANCE LIMIT ONTO PRIVATE PROPERTY AND CAPPED.
  11. THE LOCATION OF THE END OF EACH LATERAL IS TO BE MARKED WITH A 50 mm x 100 mm WOOD MARKER PAINTED BLACK.
  12. CULVERT SPECIFICATION AS PER OPSD 1810. TO BE ALUMINIZED TYPE 2 AND TO BE CONFIRMED ON SITE BY ENGINEER.
- WATERMAIN NOTES:
1. WATERMAIN MATERIAL TO BE PVC C-900, CLASS 150 (DR 18). PVC WATERMAIN SHALL INCLUDE #12 TRACER WIRE.
  2. CAST IRON MECHANICAL JOINT FITTINGS MEETING AWWA SPECIFICATIONS C-907 AND CSI 3138.2 SHALL BE USED ON PVC WATERMAIN 150 mm TO 300 mm IN DIAMETER.
  3. ALL DOMESTIC WATER SERVICES SHALL BE 25 mm DIAMETER TYPE 'K' COPPER OR POLYETHYLENE MEETING THE REQUIREMENTS OF CSA 13.1.1. A MINIMUM OF 0.5m VERTICAL CLEARANCE BETWEEN THE WATERMAIN AND ALL UTILITIES MUST BE KEPT, WHILE STILL MAINTAINING A MINIMUM DEPTH OF COVER AT ALL TIMES.
  4. WATERMAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 1.8 m.
  5. PVC WATERMAIN BEDDING SHALL CONSIST OF CLEAR SAND, 150 mm BELOW AND 300 mm ABOVE THE WATERMAIN (REFER TO OPSD 802.010).
  6. MECHANICAL JOINTS, RESTRAINTS ARE TO BE INSTALLED ON BELL AND SPIGOT JOINTS FOR ALL WATERMAINS CONSTRUCTED IN FILL MATERIAL AND AT ALL TEES, HORIZONTAL BENDS, VERTICAL BENDS, HYDRANTS, END OF MAINS AND CONCRETE THRUST BLOCKS ARE NOT PERMITTED UNLESS EXPRESSLY APPROVED BY THE TOWN.
  7. HYDRANTS SHALL BE MUELLER CENTURY, AVK, CLOW MCWATY OR APPROVED EQUIVALENT COMPRESSION TYPE COMPLETE THREE PORT HYDRANTS WITH 100 mm 1/2 TURN STORZ NOZZLE FACING THE STREET. THE SIDE PORTS SHALL BE 65 mm DIAMETER THREADED. HYDRANT TEES TO BE ANCHOR STYLE. ALL HYDRANTS TO BE EQUIPPED WITH ANTI-TAMPERING DEVICES.
  8. HYDRANTS ARE TO BE PAINTED FIRE ENGINE RED. THE STORZ CAP IS TO BE STEAMER OR PUMPER PORT THREADED CONNECTIONS ARE TO BE PAINTED RED (SAME AS BARREL).
  9. REFLECTIVE RINGS COLOUR CODED TO THE HYDRANT FLOW CLASSIFICATION WILL BE INSTALLED ON THE 65 mm PORTS BY THE TOWN.
  10. HYDRANT FLANGE ELEVATIONS SHALL BE SET AT A GRADE OF 50 mm TO 150 mm ABOVE THE FINISHED GROUND ELEVATION.
  11. A MINIMUM HORIZONTAL SEPARATION OF 2.5 m SHALL BE MAINTAINED BETWEEN THE WATERMAIN AND ANY SEWER.
  12. UNLESS SPECIFIED OR APPROVED BY THE TOWN, ALL VALVES SHALL BE MUELLER RESILIENT WEDGE GATE VALVES OR APPROVED EQUIVALENT. VALVES SHALL HAVE A NON-RISING STEM AND A 50 mm SQUARE OPERATING NUT, OPENING COUNTER-CLOCKWISE.
  13. ALL VALVES 300 mm IN DIAMETER AND LARGER SHALL BE INSTALLED INSIDE VALVE CHAMBERS. THESE VALVES SHALL HAVE FLANGED ENDS. A FLANGED TO PLAIN END SPACER AND A VICTALUCE COUPLER SHALL BE INSTALLED INSIDE THE CHAMBER TO PERMIT REMOVAL OF THE VALVE IF NECESSARY. VALVES IN EXCESS OF 2.4 m IN DEPTH SHALL REQUIRE A VALVE STEM EXTENSION.
  14. THE CONTRACTOR SHALL INFORM THE TOWN 48 HOURS IN ADVANCE PRIOR TO COMMENCING WORK ON ANY PART OF THE WATER SYSTEM.
  15. ALL MECHANICAL FITTINGS SHALL HAVE ZINC ANODES AS PER TOWN STANDARDS.

- SANITARY SEWER NOTES:
1. FLEXIBLE PIPE SHALL BE POLYVINYL CHLORIDE (PVC) DR35 OR APPROVED EQUIVALENT, WITH RUBBER GASKET TYPE JOINTS AND SHALL CONFORM TO CSA B182.1 and CSA B182.2. RIGID PIPE SHALL BE REINFORCED CONCRETE CONFORMING TO CSA A257.2. PIPE JOINTS TO BE RUBBER GASKET AS PER CSA STANDARD A257.3.
  2. MAXIMUM PIPE DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY CSA, OPS OR MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
  3. FLEXIBLE SEWERS SHALL BE CONSTRUCTED WITH BEDDING AND BACKFILL AS PER OPSD 802.010 (GRANULAR "A" FOR BEDDING AND COVER MATERIAL). RIGID SEWERS SHALL BE CONSTRUCTED WITH CLASS "B" BEDDING (GRANULAR "A" MATERIAL) AS PER OPSD 802.030, 802.031 AND 802.032 AS APPLICABLE. MATERIAL MAY BE REPLACED ONLY BY APPROVAL OF THE ENGINEER.
  4. PRECAST MAINTENANCE HOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010 (1200 mm DIAMETER). PRECAST MAINTENANCE HOLES GREATER THAN 5 m DEEP SHALL BE CONSTRUCTED WITH A SAFETY PLATFORM IN ACCORDANCE WITH OPSD 404.020. FRAME AND COVER SHALL BE IN ACCORDANCE WITH OPSD 401.010, TYPE 'A'.
  5. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE, AND THEN ADJUSTED TO FINAL GRADE WHEN TOP LIFT OF ASPHALT IS PLACED. GRADE AND CROSSFALL ADJUSTMENT SHALL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE. ADJUSTMENTS SHALL BE AS PER NMSD-210.00.
  6. ALL CONNECTIONS TO THE SANITARY MAIN SHALL BE MADE WITH PRE-MANUFACTURED APPROVED TEES.
  7. MAINTENANCE HOLE BENCHING SHALL CONFORM WITH OPSD 701.021 WITH BENCHING TO THE OVERT.
  8. DROP STRUCTURES SHALL CONFORM WITH OPSD 1003.020.
  9. ALL MAINTENANCE HOLES CONSTRUCTED IN VICINITY OF LOW POINTS IN ROADS OR OUTSIDE OF THE PAVED ROADWAY SHALL HAVE WATERTIGHT LIDS.

KEY PLAN

N.T.S.

LEGEND:

- PROPOSED STORM MANHOLE
- PROPOSED STORM CATCHBASIN
- ✕ VALVE
- ◆ HYDRANT AND VALVE
- EXISTING STORM CATCHBASIN
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- ✕ EXISTING VALVE
- ◆ EXISTING HYDRANT
- ⬇️ DOWNSPOUT
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- ▭ STORMBRIXX CHAMBER
- PROPOSED 150mm PVC STORM SERVICE
- PROPOSED 125mm PVC SANITARY SERVICE
- PROPOSED 25mm TYPE K WATER SERVICE CONNECTION WITH CURB STOP
- TREE PROTECTION FENCING

BENCHMARK:

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO YORK REGION BM NO.8

ELEVATION: 262.50m

DESCRIPTION: NO.826 DAVIS DRIVE, TABLET SET HORIZONTALLY IN EAST WALL, 7.3m S OF NE CORNER AND 0.3m ABOVE GROUND LEVEL.

REV. NO.	REVISION NOTE	DATE
5	ISSUED FOR SPA	23-06-12
4	ISSUED FOR SCOPED ORA/2BA	22-11-11
3	ISSUED FOR SITE PLAN APPLICATION	21-11-26
2	ISSUED FOR REZONING	20-08-21
1	ISSUED FOR SITE PLAN APPLICATION	18-10-05

**HOSSON**

ENGINEERING • MANAGEMENT

P. 904.700.0880

100157765

1015, 1025, 1029 DAVIS DRIVE, 22 HAMILTON DRIVE

TOWN OF NEWMARKET

APPLICATION FOR OFFICIAL PLAN AMENDMENT & ZONING BY-LAW AMENDMENT

1015, 1025, 1029 DAVIS DRIVE, 22 HAMILTON DRIVE

TOWN OF NEWMARKET

LICENSED PROFESSIONAL ENGINEER

C.H. GROEN

100157765

23-06-12

PROVINCE OF ONTARIO

SCALE

1:200

OWNER NAME

LULU HOLDINGS INC.

DATE

JUNE 12, 2023

SHEET NAME

SERVICING PLAN

PROJECT NO.

17832

SHEET NO.

SW2