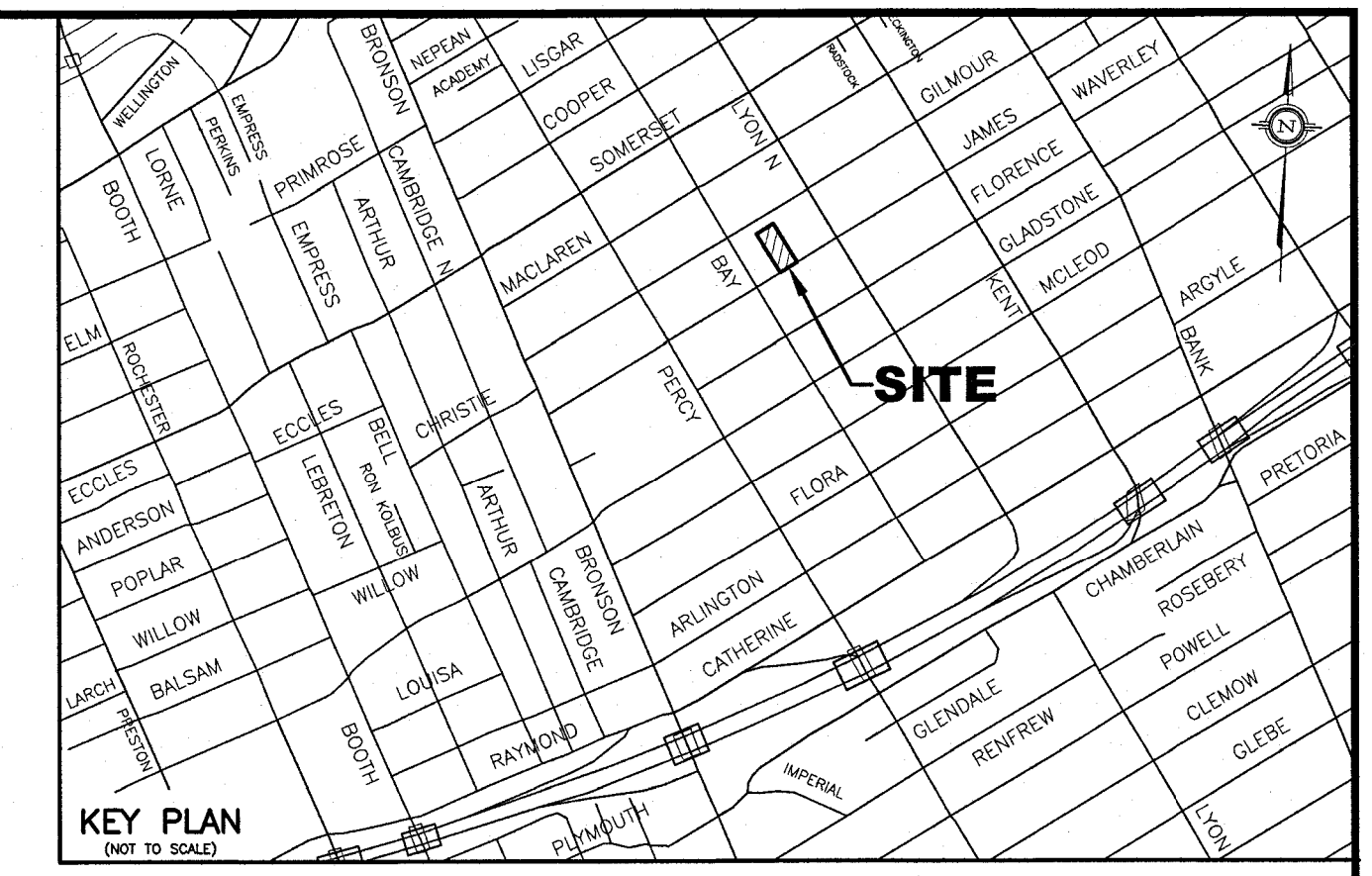


- LEGEND**
- PROPOSED ELEVATION
 - EXISTING ELEVATION
 - F.F. DENOTES TOP OF GROUND FLOOR ELEVATION
 - T.O.F. DENOTES TOP OF CONCRETE FOUNDATION ELEVATION
 - U.S.F. DENOTES UNDERSIDE OF CONCRETE FOOTING ELEVATION
 - EXISTING COMBINED SEWER
 - EXISTING WATERMAIN
 - PROPOSED 150mm PVC SANITARY LATERAL SERVICE @ 1% (MIN.) SLOPE
 - PROPOSED 150mm PVC STORM LATERAL SERVICE @ 1% (MIN.) SLOPE
 - PROPOSED 50mm WATER SERVICE (COPPER TYPE "K")
 - EXISTING COMBINED MANHOLE
 - EXISTING CATCH BASIN
 - EXISTING WATER VALVE
 - EXISTING FIRE HYDRANT
 - EXISTING UTILITY POLE
 - EXISTING OVERHEAD WIRES
 - PROPOSED VALVE AND VALVE BOX (V&VB)
 - DENOTES REMOTE WATER METER LOCATION
 - DENOTES WATER METER LOCATION
 - DENOTES PROPERTY LINE
 - DENOTES EXISTING BUILDING WALL/LINEWORK
 - DENOTES PROPOSED BUILDING WALL/LINEWORK
 - DENOTES PROPOSED ASPHALT AREA
 - DENOTES PROPOSED GRASSED AREA
 - DENOTES PROPOSED INTERLOCK AREA



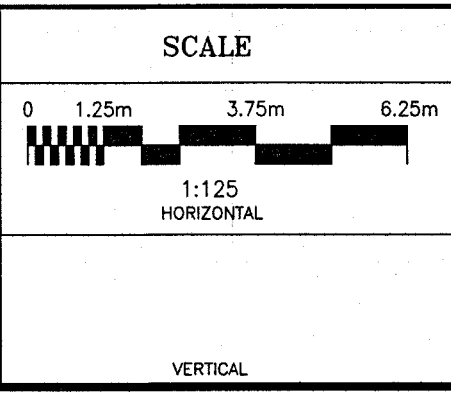
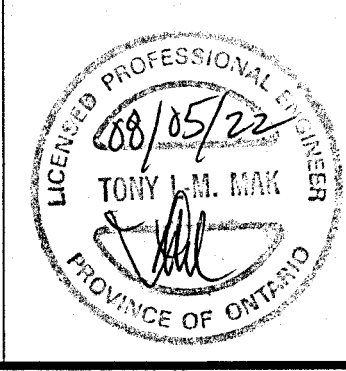
NOTES

- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES, AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
- CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY BEFORE POURING OF CONCRETE FOOTING AND FOUNDATION. THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SUBGRADE ON THIS LOT IS SUFFICIENT TO SUPPORT PROPOSED RESIDENTIAL BUILDINGS.
- SITING DETAILS SHOWN FOR THE EXISTING BUILDING, LANDSCAPING AND AMENITIES ON THIS LOT WERE PROVIDED BY THE OWNER'S HOUSE DESIGNER DAVID BEKKERS FROM THEIR SITE PLAN (DWG. NO. AD REV. 4 DATED JULY 26, 2022) AND RECEIVED ON JULY 26, 2022.
- EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATIONS, SEWER INVERT ELEVATIONS, SEWER LOCATIONS, AND TOPOGRAPHICAL INFORMATION OF THE LOT WERE PROVIDED BY FAIRHALL MOFFATT AND WOODLAND LIMITED AS DEPICTED ON THEIR TOPOGRAPHICAL SURVEY PLAN (REF. NO. 57-30671 - JOB NO. A814300 COMPLETED ON MARCH 25, 2021) RECEIVED ON JULY 16, 2021. T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HERE FOR INFORMATION ABOUT THE COMBINED SEWER INVERT ELEVATION AT MANHOLES AND WATERMAIN LOCATION AND SIZE. THE CONTRACTOR SHALL FIELD CHECK EXISTING COMBINED SEWER, AND WATERMAIN DEPTH TO THEIR SATISFACTION. CITY PLAN AND PROFILE DRAWING ENTITLED JAMES STREET FROM PLAN NO. 1677 SHEET 1 OF 3 AND 2 OF 3 (CONTRACT NO. 82-38) FOR ADDITIONAL DETAILS.
- ALL GRADES SHOWN ARE GEODETIC AND METRIC.
- SANITARY SERVICE BENDS AND RISERS USED MUST BE CONSTRUCTED TO CITY OF OTTAWA'S SATISFACTION.
- CONSTRUCT ALL SANITARY AND STORM PIPES IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARD, OTHERWISE AS PER OPS AND OPSD SPECIFICATIONS.
- ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERING STANDARDS AND AS PER CITY OF OTTAWA'S REQUIREMENTS.
- CONTRACTOR SHALL CONSTRUCT AND ENSURE THAT THE 50mm WATERMAIN SERVICE ON THIS LOT SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER, OTHERWISE INSULATE WITH RIGID S/M STYROFOAM IN ACCORDANCE WITH THE SOILS ENGINEER'S REQUIREMENTS AND AS PER CITY DETAIL W22. WATER SERVICE INSTALLATIONS SHALL BE COPPER TYPE "K" AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF OTTAWA STANDARDS.
- THIS SERVICING DESIGN PLAN WAS PREPARED FOR THE OWNERS FOR BUILDING PERMIT ISSUANCE. ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERING STANDARDS AND PER CITY OF OTTAWA'S REQUIREMENTS.
- ALL WATERMAIN SERVICE AND FITTINGS SHALL CONFORM TO APPROVED AWWA AND/OR CSA STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLETE THE WORKS.
- EXISTING LOCATION OF JAMES STREET WATERMAIN AND SANITARY AND STORM SEWER SHOWN ON THIS PLAN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY IN THE FIELD TO CONFIRM ITS EXACT LOCATION BEFORE EXCAVATION. (SEE ALSO NOTE#22).
- PROPOSED SURFACE GRADE SHALL BE 7% MAXIMUM WHERE THE GROUND DROPS OFF STEEPLY, TERRACE THE GROUND AT 3% MAXIMUM TO 1% AS NECESSARY TO MEET CITY OF OTTAWA'S GRADING REQUIREMENTS.
- WATER SERVICE CONNECTION ON JAMES STREET SHALL BE DONE BY THE CITY OF OTTAWA. CONNECTION OF THE 50mm WATER SERVICE TO THE EXISTING 200mm WATERMAIN ON JAMES STREET SHALL USE SADDLE CONNECTION WITH CURB STOP AS REQUIRED BY THE CITY OF OTTAWA. ALL CONNECTIONS AND OTHER RELATED WORKS TO WATERMAIN SHALL BE MADE BY THE CITY. EXCAVATION, BACKFILLING, AND REINSTATEMENTS BY CONTRACTOR. ALL WATERWORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION.
- IF WATER SERVICE IS LESS THAN 2.4m FROM SEWER, MANHOLE, OR CATCHBASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH S/M RIGID INSULATION (AS PER CITY DETAIL W22 AND W23).
- PIPE SIZES SHOWN ON THIS PLAN ARE METRIC.
- WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY W17 DETAIL.
- PROPOSED SANITARY AND STORM SERVICE LATERALS SHALL BE PVC DR-28 OR EQUIVALENT.
- IT IS REQUIRED THAT A FULL PORT BACKWATER VALVE BE INSTALLED FOR THE NEW SANITARY LATERAL SERVICE AND A BACKWATER VALVE BE INSTALLED FOR THE NEW STORM LATERAL SERVICE UNDER THE CURRENT REGULATION OF THE ONTARIO PLUMBING CODE, AND AS PER CITY DETAIL S14, S14.1 & S14.2.
- BEDDING FOR SEWERS AND WATERMAIN INSTALLATION SHALL BE TYPE "B" COMPACTED TO 95% DRY PROCTOR DENSITY. FOR THE SEWER LATERALS USE 300mm THICK APPROVED GRANULAR COVER MATERIAL COMPACT TO 95% DRY PROCTOR DENSITY. TRENCH BACKFILL WITH NATIVE MATERIAL AND COMPACT TO 95% DRY PROCTOR DENSITY MINIMUM. NO FROZEN MATERIALS ARE TO BE USED AS BACKFILL IN THE SERVICING TRENCHES.
- DETAILS OF EXISTING SEWERS AND WATERMAIN SHOWN ON JAMES STREET FROM THE CITY OF OTTAWA MAY NOT BE CURRENT. CONTRACTOR SHALL REFER TO THE CITY OF OTTAWA'S SEWER AND WATERMAIN DRAWINGS FOR DETAILS BEFORE DIGGING. THE CONTRACTOR IS ADVISED TO EXCAVATE AND INVESTIGATE THE SEWER ELEVATIONS IN FRONT OF THIS PROPERTY FIRST TO ENSURE THAT 1.0% (MIN.) PIPE SLOPE OF THE SANITARY AND STORM LATERALS CAN BE ACHIEVED USING THE PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION. IF THIS IS FOUND NOT POSSIBLE FROM THE BUILDING TO THE SEWER, THEN THE CONTRACTOR SHOULD INFORM THE OWNER'S PROJECT MANAGER AND THE CITY ACCORDINGLY FOR FURTHER DIRECTION.
- FOR DEVELOPMENT OF THIS SITE, THE CONTRACTOR MUST FIRST CONSTRUCT THE UNDERGROUND SANITARY AND STORM SEWER SYSTEM AND THE RECEIVING WATERCOURSE. DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR ACKNOWLEDGES THAT THE RECEIVING WATERCOURSE SHALL BE BLANKED AT THE MAIN AS PER CITY'S REQUIREMENTS. SERVICE LATERAL SHALL BE CAPPED AT THE FRONT PROPERTY LINE. ALL WATER AND SEWER LATERAL WORKS SHALL BE CARRIED OUT TO CITY'S SATISFACTION AND AS PER CITY DETAIL S11.4. ALL ROAD TRENCHING AND REINSTATEMENTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- NO EXCESS DRAINAGE, DURING AND AFTER CONSTRUCTION, WILL BE DIRECTED TOWARDS NEIGHBOUR'S PROPERTIES.
- ALL TREES ON THE RIGHT OF WAY ARE TO BE MAINTAINED BEFORE AND AFTER CONSTRUCTION. ALL TREES WITHIN THE PROPERTY SHALL BE PROTECTED AS PER THE "MUNICIPAL TREES AND NATURAL AREAS PROTECTION BYLAWS" AND THE "URBAN TREES CONSERVATION BYLAW" AS AMENDED FROM TIME TO TIME.
- THERE WILL BE NO ALTERATION OF EXISTING GRADE AND DRAINAGE PATTERNS ON THE PROPERTY LINES.

PROFILE TABLE FOR 50mm WATER SERVICE

STATION	ITEM DESCRIPTION	EXISTING/PROPOSED GROUND ELEVATION (m)	PROPOSED TOP OF WATER SERVICE (m)
0+00	CONNECTION TO EXISTING 200mm WATERMAIN	EX. C. ROAD ±72.29	EXISTING ±69.79
0+06	50mm WATER SERVICE	72.35	69.95
0+11.2	50mm V&VB AT PROPERTY LINE (V&VB)	72.89	70.49
0+15	50mm WATER SERVICE AT BUILDING LINE	72.97	70.57

REGISTERED



DESIGN	T.L.M.
CHECKED	T.L.M.
DRAWN BY	P.M.
CHECKED	T.L.M.
APPROVED	T.L.M.

PROJECT
157 JAMES STREET
LOT 21 AND PART OF LOT 20
(NORTH JAMES STREET)
REGISTERED PLAN 30671
CITY OF OTTAWA

OWNER:
ALIFEROUS PROPERTY MANAGEMENT INC. (613) 508-1248
590 QUEEN ELIZABETH DRIVE, OTTAWA, ON, K1S 3N6

DRAWING TITLE:
PROPOSED SERVICING PLAN

PROJECT No.	821-83	DATE	SEPTEMBER 2021	DRAWING No.	G-1
--------------------	--------	-------------	----------------	--------------------	-----

CONNECT NEW STORM LATERAL TO EXISTING COMBINED SEWER AT INV.=±69.42. EXISTING COMBINED SEWER SPRINGLINE ELEVATION=±69.42. ALL WORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION AND AS PER CITY DETAIL S11.2

CROSSING #1
-EX. WATERMAIN INV. ELEV.=±69.89
-PROP. SAN. AND STORM LATERAL O.B.V. ELEV.=±69.59

WATER SERVICE CONNECTION BY CITY OF OTTAWA (SEE NOTE #15)

CONNECT NEW SANITARY LATERAL TO EXISTING COMBINED SEWER AT INV.=±69.41. EXISTING COMBINED SEWER SPRINGLINE ELEVATION=±69.41. ALL WORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION AND AS PER CITY DETAIL S11.2

NO.	REVISION	DATE	BY
1	REVISIONS AS PER CITY'S REVIEW COMMENTS PROVIDED ON JUNE 30, 2022 AND LANDSCAPING REVISION PROVIDED ON JULY 26, 2022	08/05/22	TLM

D07-12-22-0029

#18707