

PLAN OF SURVEY OF
LOT 4, BLOCK 'B'
REGISTERED PLAN 514
 CITY OF WATERLOO
 REGIONAL MUNICIPALITY OF WATERLOO
 SCALE 1 : 250

J.D. BARNES LIMITED
METRIC DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES
 BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0).
 DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999571.
 FOR BEARING COMPARISONS, APPLY A ROTATION OF 1'00'59" COUNTER-CLOCKWISE TO PLAN P1.
 ORIGIN OF FOUND BARS UNKNOWN, UNLESS NOTED OTHERWISE.
 LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE AND WERE COMPILED AVAILABLE ENGINEERING DRAWINGS FROM THE CITY OF WATERLOO.
 REFER TO DRAWINGS (G.C.T. No. 13-4) FOR THE FOLLOWING INFORMATION:
 WATERMAIN: LAST REVISED APRIL 22, 2021.
 SANITARY: LAST REVISED AUGUST 16, 2021.
 STORM: LAST REVISED AUGUST 16, 2021.
 REFER TO DRAWING (15-146) CENTRAL ST. TO BRICKER AVE.
 GAS & BELL: DATED DECEMBER 1997.
 REFER TO DRAWING (15-302) ALBERT ST. TO ST.1+40 ON BRICKER AVE.
 GAS & BELL: DATED MAY 20, 1982.

INTEGRATION DATA			
OBSERVED REFERENCE POINTS (ORPs)- UTM ZONE 17, NAD83 (CSRS) (2010.0).			
COORDINATES TO URBAN ACCURACY PER SECTION 14 (2) OF O.REG 216/10.			
POINT ID	EASTING	NORTHING	
ORP (A)	538 237.46	4 813 346.32	
ORP (B)	538 054.26	4 813 302.58	
COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.			
THE RESULTANT TIE BETWEEN ORP (A) AND ORP (B) IS 188.44m N76°34'20"E.			

ELEVATION NOTE
 ELEVATIONS, SHOWN HEREON, ARE OF GEODETIC ORIGIN (CGVD-1928-1978), AND ARE DERIVED FROM GNSS OBSERVATIONS AND NATURAL RESOURCES CANADA'S GEOD MODEL HT2.0.

LOCAL BENCHMARK
 CUT CROSS ON THE NORTHEASTERLY EDGE OF THE CONCRETE SIDEWALK AT THE JUNCTION OF ALBERT STREET AND BRICKER AVENUE, APPROXIMATELY 2.1m SOUTH FROM THE CENTER OF THE FIBRE-OPTICS VAULT, AND 1.13m SOUTHERLY FROM A CUT CROSS MARKING THE NORTHWEST ANGLE OF LOT 4, REGISTERED PLAN 514, AS SHOWN ON THE FACE OF THE PLAN.
 ELEVATION: 336.89m

LEGEND	
▲	DENOTES J.D. BARNES CONTROL MONUMENT
■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT SET
SIB	DENOTES STANDARD IRON BAR
SSIB	DENOTES SHORT STANDARD IRON BAR
IT	DENOTES IRON TUBE
IB	DENOTES IRON BAR
CC	DENOTES CUT CROSS
(1114)	DENOTES JOHN METZ, O.L.S.
(1186)	DENOTES MARTINUS VORSTEVELD, O.L.S.
(MTE-1)	DENOTES M.T.E. O.L.S. LTD.
P1	DENOTES REGISTERED PLAN 514
P2	DENOTES PLAN 588-19770
P3	DENOTES REGISTERED PLAN 507
F1	DENOTES J. METZ LTD. REFERENCE FILE: W4-190-02. DATED: DECEMBER 10, 1971.
F2	DENOTES QUENTHER RUES SURVEYING LIMITED. REFERENCE FILE: 68-44(9), DATED: OCTOBER 17, 2000.
F3	DENOTES MARSHALL MACKLIN MONAGHAN LTD. REFERENCE FILE: 41-75-157, DATED: AUGUST 25, 1975.
F4	DENOTES D.J. HOWE. REFERENCE FILE: W4-98-3, DATED: 1963.
D1	DENOTES INSTRUMENT NUMBER 396023
CP	DENOTES COVERED PORCH
CONC	DENOTES CONCRETE
DIA	DENOTES DIAMETER OF TREE TRUNK IN METERS
ENCL	DENOTES ENCLOSED
F.O.V.	DENOTES FIBRE-OPTICS VAULT
□ CB	DENOTES CATCH BASIN
GM	DENOTES GAS METER
○ MH	DENOTES MANHOLE
● BOL	DENOTES BOLLARD
UP	DENOTES UTILITY POLE
■ PED	DENOTES TELEPHONE PEDESTAL
■ H	DENOTES FIRE HYDRANT
■ WV	DENOTES WATER VALVE
■ G	DENOTES GAS LINE
■ SAN	DENOTES SANITARY LINE
■ STM	DENOTES STORM LINE
■ UT	DENOTES UTILITY LINE
■ G	DENOTES WATER LINE
○	DENOTES DECIDUOUS TREE

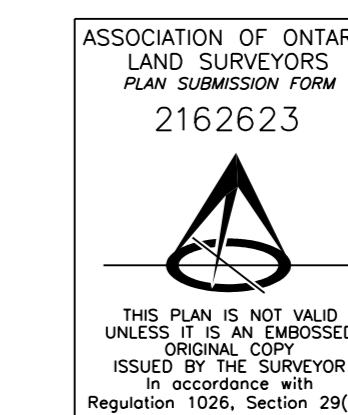
ALL SET SSIB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11 (4) OF O.REG. 525/91.

BEFORE DIGGING, UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY THE RESPECTIVE AGENCIES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE LOCAL BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED, AND THAT THE RELATIVE ELEVATIONS AGREE WITH THE INFORMATION SHOWN ON THIS PLAN.

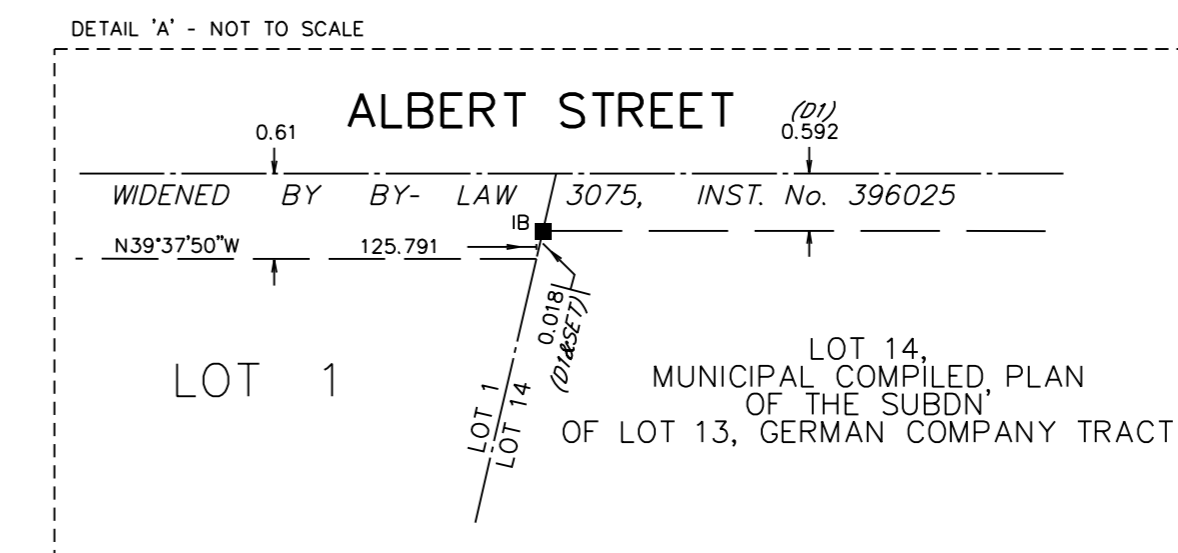
SURVEYOR'S CERTIFICATE
 I CERTIFY THAT:
 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
 2. THE SURVEY WAS COMPLETED ON THE 20th DAY OF DECEMBER, 2021.

DECEMBER 23, 2021 DATE
 GERHARD AUER ONTARIO LAND SURVEYOR



J.D. BARNES LIMITED SURVEYING MAPPING GIS
 LAND INFORMATION SPECIALISTS
 4273 KING ST. E., #100, KITCHENER, ON, N2P 2E9
 T: (519) 578-2220 F: (519) 650-5625 www.jdbarnes.com

DRAWN BY: CB	CHECKED BY: GA	REFERENCE NO.: 21-40-456-00
PLOTTED: 1/10/2022	DATED: 12/23/2021	



REVISED
 JANUARY 7, 2022: APPROXIMATE LOCATION OF UNDERGROUND SERVICES ADDED.