PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY OF BLOCK II REGISTERED PLAN M-247 CITY OF MISSISSAUGA REGIONAL MUNICIPALITY OF PEEL

SCALE 1 : 300

5 0 5 10 20 metres

J.D. BARNES LIMITED
© COPYRIGHT

METRIC DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

ELEVATION NOTE

ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM THE CITY OF MISSISSAUGA BENCHMARKS:

No. 729
ON THE NORTH FACE FAIR NORTH CORNER OF SOLEL CONGREGATION SYNAGOGUES ON THE NORTH-WEST CORNER OF ERIN MILLS PARKWAY AND FOLKWAY DRIVE.

ELEVATION = 160.866 m

No. 30
ON THE SOUTH FACE AT THE WEST CORNER OF A STONE HOUSE #2700 ON THE NORTH SIDE OF BURNHAM DRIVE, WEST OF SAWMILL VALLEY DRIVE.

ELEVATION = 150.781 m

LOCAL BENCHMARK #1

A CUT CROSS ETCHED IN A CONCRETE WALK ON FOLKWAY DRIVE LOCATED APPROXIMATELY 14.8 METERS NORTHWEST FROM A SANITARY MANHOLE, 4.5 METERS NORTHEAST FROM A CATCH BASIN AND 0.4 METERS WEST FROM THE BACK OF CURB, AS SHOWN ON THE FACE OF PLAN.

ELEVATION = 159.60 m

LOCAL BENCHMARK #2

A CUT CROSS ETCHED IN A CONCRETE CURB LOCATED APPROXIMATELY 21.4 METERS SOUTH WEST FROM A CATCH BASIN, 11.5 METERS SOUTH OF A MONITORING WELL, 22.4 METERS WEST FROM THE SOUTHEASTERLY CORNER OF THE SUBJECT BOUNDARY, AS SHOWN ON THE FACE OF PLAN.

ELEVATION = 156.33 m

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 0.9997595.

FOR BEARING COMPARISONS, A ROTATION OF 0°04'05" COUNTER-CLOCKWISE WAS APPLIED TO BEARINGS ON P1.

FOR BEARING COMPARISONS, A ROTATION OF 00°52'10" COUNTER-CLOCKWISE WAS APPLIED TO BEARINGS ON P2

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	605 990.31	4 822 719.88
ORP B	605 865.67	4 822 823.71

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 162.27 N 50°12'20" W

LEGEND

- ■ DENOTES SURVEY MONUMENT FOUND
- □ DENOTES SURVEY MONUMENT SET
- SIB DENOTES STANDARD IRON BAR
- SSIB DENOTES SHORT STANDARD IRON BAR
- MEAS DENOTES MEASURED
- WIT DENOTES WITNESS
- PT DENOTES BUILDING LOCATION SURVEY BY DONALD E.ROBERTS LTD O.L.S. DATED DECEMBER 13th, 1984
- P2 DENOTES PLAN 43R-33287
- MMM DENOTES MARSHALL MACKLIN MONAGHAN LIMITED, O.L.S
- WIT DENOTES WITNESS
- NI DENOTES NOT IDENTIFIABLE
- CLF DENOTES CHAIN LINK FENCE
- BF DENOTES BOARD FENCE

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

TOPOGRAPHIC LEGEND

- HPED DENOTES HYDRO PEDESTAL
- GM DENOTES GAS METER
- FH DENOTES FIRE HYDRANT
- PLUG DENOTES PLUG
- P A/R DENOTES POSSIBLE ABANDONED/REMOVED
- BOL DENOTES BOLLARD
- TSC DENOTES TRAFFIC SIGNAL CONTROL
- TS DENOTES TRAFFIC SIGNAL
- HH DENOTES HYDRO HOLE
- WK DENOTES WATER KEY
- BSP DENOTES BURIED SPRINKLER
- SV DENOTES SPRINKLER VALVE
- MW DENOTES MONITORING WELL
- DENOTES CONIFEROUS TREE
- DIA=DIAMETER OF TRUNK IN METRES
- DENOTES DECIDUOUS TREE
- DIA=DIAMETER OF TRUNK IN METRES
- SAN — DENOTES UNDERGROUND SANITARY SEWER
- STM — DENOTES UNDERGROUND STORM SEWER
- GAS — DENOTES UNDERGROUND GAS LINE
- W — DENOTES UNDERGROUND WATER LINE
- FO — DENOTES UNDERGROUND FIBRE LINE
- CATV — DENOTES UNDERGROUND CABLE LINE
- UT — DENOTES UNDERGROUND TELEPHONE LINE
- UE — DENOTES UNDERGROUND HYDRO ELECTRIC LINE
- SAN MH — DENOTES SANITARY MANHOLE
- STM MH — DENOTES STORM MANHOLE
- CB — DENOTES CATCH BASIN
- DCB — DENOTES DITCH INLET CATCH BASIN
- DCB(2) — DENOTES DOUBLE CATCH BASIN
- GAS VLV — DENOTES GAS VALVE
- WV — DENOTES WATER MANHOLE
- HMH — DENOTES HYDRO MANHOLE
- TMH — DENOTES HYDRO MANHOLE
- LS — DENOTES LIGHTING STANDARD
- TF — DENOTES HYDRO TRANSFORMER
- TMH — DENOTES TELEPHONE MANHOLE
- CB(FD) — DENOTES CB FOUND
- CBMH — DENOTES COMBINATION CATCH BASIN MANHOLE
- CJB — DENOTES COMMUNICATION JUNCTION BOX
- HW — DENOTES HANDWELL
- SIGN — DENOTES SIGN
- PLUG — DENOTES PLUG
- P A/R — DENOTES POSSIBLE ABANDONED/REMOVED

AREA = 26405 Sq m.

SEWER INVERT DATA TABLE

MH/CB	DIRECTION	DIAMETER	INVERT	COMMENTS
STM MH@1	E	525	5.58	
	S	825	5.09	
	W	825	5.04	
	N	825	5.83	
STM MH@2	SE	825	4.94	
	W	825	4.90	
STM MH@3	SW	825	2.94	
	NW	825	2.90	
STM MH@4	NW	450/ 600	5.24	DROP/ RECESSED
	SW	450/ 675	5.20	
	SE	675	5.50	
STM MH@5	NE	525	4.66	
	SW	525	4.62	
STM MH@6	W/C	525	5.30	
	SW	525	5.22	
STM MH@7	NW	450	3.55	
	SW	450	3.56	
STM MH@8	NW	450	3.84	RECESSED
	SW	450	3.80	
STM MH@9	NW	450	2.78	
	SE	525	2.83	
STM MH@10	NW	300	3.13	
	SW	300	3.13	
	S	300	3.02	
	SE	300	3.13	
STM MH@11	SE	200	2.08	
	SW	200	2.07	
STM MH@12	NW	200	1.35	
	SW	200	1.30	
STM MH@13	NW	750	1.80	
	SW	300	2.40	
	SE	300	2.39	
STM MH@14	NW	300	3.40	
	NE	300	3.35	
STM MH@15	NW	450	3.13	DROP
	SW	450	3.13	
	SE	450	3.14	
	NE	450	3.10	
	W	350	5.10	
STM MH@16	NW	600	3.24	
	SW	600	3.15	
	W	300	3.10	
STM MH@17	E	600	3.68	
	W	600	3.57	
STM MH@18	SE	300	2.40	
	SW	250	2.39	
STM MH@19	NW	300	3.82	
	SW	300	3.77	
STM MH@20	NW	300	3.02	
	SW	300	3.03	
	SE	450	3.12	
SAN MH@1	W	250	5.97	
	S	250	5.94	
	E	250	5.86	
SAN MH@2	SE	250	4.93	
	W	250	4.87	
SAN MH@3	NW	250	5.95	
	SW	250	5.88	
SAN MH@4	NW	250	6.18	DROP
	SW	250	6.14	
	SE	250	6.14	
SAN MH@5	NW	250	4.97	DROP
	SW	250	4.92	
	SE	250	4.92	
SAN MH@6	W	250	3.50	
	S	250	3.44	
SAN MH@7	E	250	3.70	
	W	250	3.68	
SAN MH@8	E	250	3.64	
	SW	250	3.59	
SAN MH@9	NW	200	1.40	DROP
	SE	200	1.35	
SAN MH@10	NW	250	3.56	
	E	250	3.56	
SAN MH@11	E	250	3.70	
	SW	250	3.66	
CB@1	E	250	1.30	
CB@2	E	250	1.30	
CB@3	NE	250	1.35	
CB@4	SW	250	1.50	
CB@5	NE	250	1.41	
CB@6	SW	250	1.46	
CB@7	NE	250	1.74	
CB@8	SE	200	1.40	
CB@9	SE	300	1.40	
CB@10	NE	200	1.65	
DCB@1	SE	250	1.22	
DCB@2	NW	250	1.38	
CB@13	S	200	1.22	
CB@14	N SW	200 ≤ 300	2.04 2.16	
CB@15	SE	≤200	1.14	
DCB@15	SE	≤300	1.54	
DCB@17	SE	≤300	1.64	
CB@18	N SW	250 150	1.50 1.00	
CB@19	SW	300	1.34	
CB@20	NE	250	1.52	
CB@21	N/A	N/A	N/A	DEBRIS PRESENT NO VISIBLE LEADS
CB@22	N	250	1.24	
CB@23	SW	250	1.16	
DCB@24	SE	≤300	1.40	RECESSED
DCB@25	SW	300	1.18	
CB@26	SW	250	1.27	
CB@27	NE	250	1.23	
CB@28	SW	300	1.27	
CB@29	NE	≤300	1.37	RECESSED
CB@30	SW	250	1.11	
DCB@31	NE	250	1.18	
CB@32	SW	250	1.30	
CB@33	N	≤250	1.28	

INFORMATION OBTAINED FROM RECORDS PROVIDED BY: THE CITY OF MISSISSAUGA AND PEEL REGION. NOT FIELD VERIFIED BY ONSITE LOCATES INC.

SEWER INVERT NOTE:

SEWER INVERT DEPTHS ARE MANUALLY MEASURED FROM THE LID/GRATE OF THE GIVEN FEATURE.

ANNOTATIONS DISPLAYED AS *(SAL/SOD)* WITH AN ASTERISK* HAVE BEEN INTERPOLATED FROM RECORDS AND WERE NOT FIELD VERIFIED BY ONSITE LOCATES LTD.

INVERT DEPTH MEASUREMENTS ARE FROM THE ASSUMED BOTTOM OF THE FACILITY STRUCTURE

DEPTHS ARE NOT SUITABLE FOR EXCAVATION PURPOSES. SEWER NETWORK CONNECTIONS WERE COMPILED WHERE FIELD EVIDENCE COINCIDED WITH AS-BUILT RECORDS

WHERE NO DEPTH INFORMATION COULD BE OBTAINED, UTILITIES ARE ASSUMED TO BE AT STANDARD INSTALLATION DEPTH FOR THE SPECIFIC TYPE OF UTILITY.

THE MOST RELIABLE WAY TO PRECISELY DETERMINE THE HORIZONTAL AND VERTICAL LOCATION OF AN UNDERGROUND UTILITY IS THROUGH PHYSICAL EXPOSURE USING SAFE DIGGING TECHNIQUES (COMMONLY PERFORMED WITH HYDRO VACUUM EXCAVATION)

INVERT DEPTH MEASUREMENTS HEREON ARE PROVIDED IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

WATERMAIN AND/OR WATER SERVICE MATERIALS TO BE PLASTIC PIPE PVC CLASS 150 MANUFACTURED TO A.W.W.A. SPECIFICATION C-900-75 C/W 14 GAUGE LIGHT PLASTIC COATED SOLID COPPER TRACER WIRE. WIRE TO RUN PARALLEL WITH PLASTIC PIPE AND TERMINATE AT EACH VALVE BOX.

UNDERGROUND UTILITY NOTES

THE UTILITY DATA DEPICTED ON THIS DRAWING WERE ACQUIRED IN ACCORDANCE WITH CI/ASCE 38-02 STANDARD. THE INFORMATION IS SHOWN BY ATTRIBUTED QUALITY LEVELS WHICH ARE DEFINED AS FOLLOWS:

DATA QUALITY LEVEL

HIGHEST QUALITY
- QUALITY LEVEL A
- QUALITY LEVEL B
- QUALITY LEVEL C
- QUALITY LEVEL D

LOWEST QUALITY

QUALITY LEVEL "A" - INFORMATION OBTAINED BY ACTUAL PHYSICAL EXPOSURE OF TARGETED UTILITIES AND SUBSEQUENT MEASUREMENT OF THE EXPOSED PRECISE HORIZONTAL AND VERTICAL POSITION.

QUALITY LEVEL "B" - INFORMATION OBTAINED, USING GEOPHYSICAL LOCATE EQUIPMENT, TO DETERMINE THE APPROXIMATE HORIZONTAL POSITION OF THE DESIGNATED UTILITIES.

QUALITY LEVEL "C" - INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE UTILITY FACILITIES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO THE QUALITY "D" INFORMATION OBTAINED.

QUALITY LEVEL "D" - INFORMATION DERIVED FROM UTILITY RECORDS OR VERBAL RECOLLECTIONS

ALL SERVICES ARE QUALITY "D" UNLESS NOTED OTHERWISE

ALL QUALITY "A" INFORMATION COMPILED FROM RECORDS HAVE BEEN PLOTTED APPROXIMATELY AS PER THE RECORDS FOUND AND COULD NOT BE FIELD VERIFIED WITHIN THE SCOPE OF THIS PROJECT. IF FURTHER VERIFICATION IS REQUIRED, IT IS SUGGESTED THAT "B" METHODOLOGIES BE EMPLOYED.

LOST SIGNAL - DENOTES/INDICATES A POINT WHERE QUALITY METHODS COULD NO LONGER ASCERTAIN THE HORIZONTAL POSITION OF A FACILITY.

QUALITY LEVEL "D" INFORMATION COMPILED FROM RECORDS PROVIDED BY: ALECTRA UTILITIES (FORMERLY PEC), BELL CANADA, ENBRIDGE GAS INC., ROGERS COMMUNICATIONS, TRANSCANADA PIPELINES, PLAN 43R-11454, PLAN 43R-33287, PLAN 43R-7351, PLAN 43R-33287, PLAN 43R-11454, PLAN 43R-33287, PLAN 43R-33287, PLAN 43R-33287