SITE AND GRADING PLAN

OF PART OF

LOTS 66 AND 67
NORTH SIDE OF FRONT STREET
CORPORATION PLAN 251

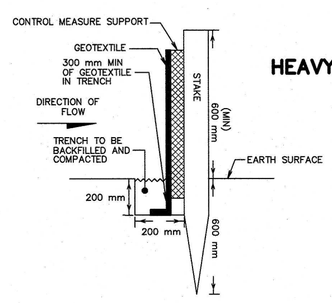
IN THE

CITY OF NIAGARA FALLS
REGIONAL MUNICIPALITY OF NIAGARA

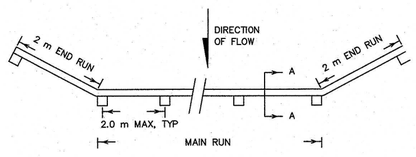
SCALE 1:100 METRIC

2 1 0 2 4 6 metres

R.A. McLAREN, O.L.S. – 2026



HEAVY DUTY SILT FENCE BARRIER
OPSD 219.130
NOT TO SCALE

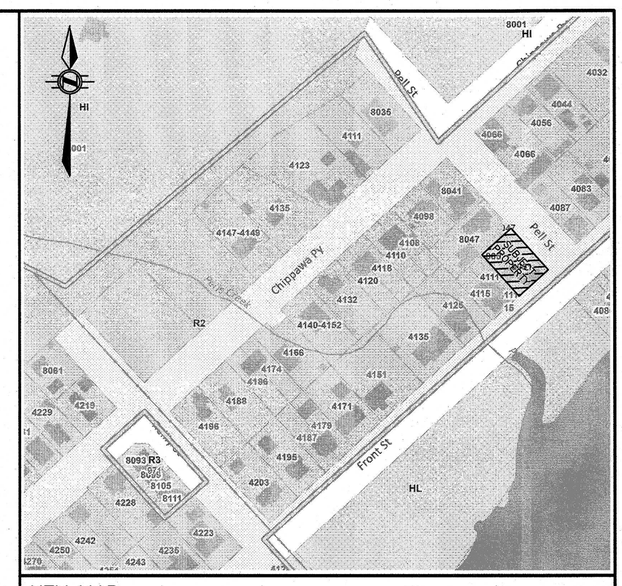


BENCHMARK:

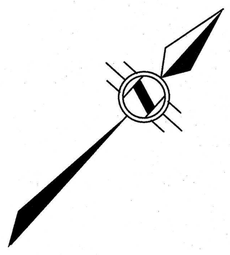
MONUMENT 00119673614

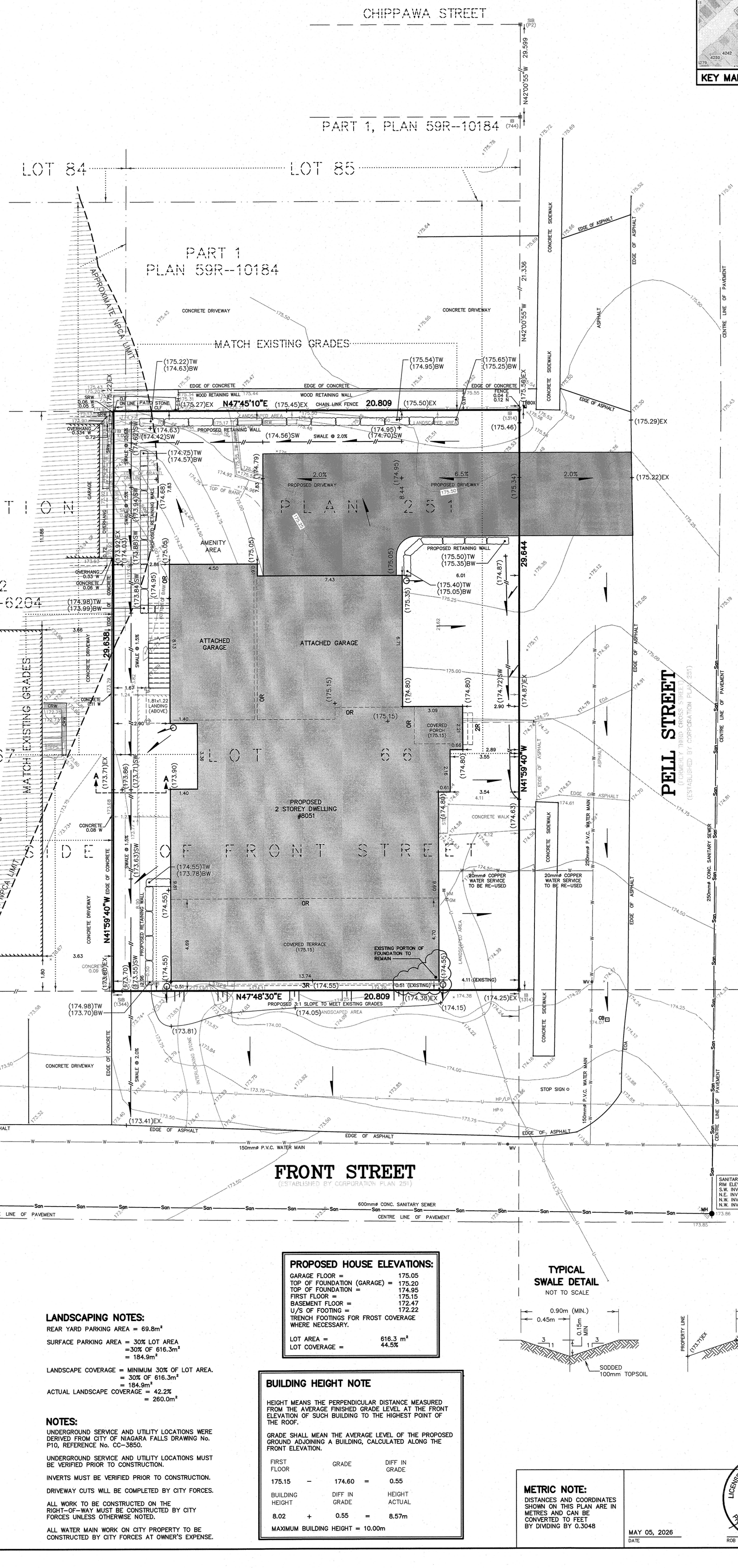
TABLET IN CONCRETE PLATFORM
NIAGARA FALLS AREA CONCRETE PLATFORM AT WEST SIDE OF RAILWAY TRACKS AT NORTH END OF RAILWAY BRIDGE ACROSS WELLAND RIVER AT CHIPPAWA,
TABLET IN TOP, 39 cm FROM NORTH END OF PLATFORM, 24 cm FROM WEST SIDE ESTABLISHED BY TOPOGRAPHICAL SURVEY.

ELEVATION: 174.430 metres CGVD–1928:1978



KEY MAP NOT TO SCALE





GENERAL GRADING NOTES:

A) "REQUIRED BACKYARD" SHALL MEAN THE LESSER OF THE DISTANCE REGULATED BY THE ZONING BY–LAW OR 6.0 METRES.

B) THE MAXIMUM SLOPE IN THE BACKYARD ADJACENT TO THE BUILDING FOR A DISTANCE EQUAL TO THE REQUIRED BACKYARD SHALL BE 5% EXCEPT AS SET OUT IN ITEMS (C), (D), (F) AND (G).

C) THE 5% RESTRICTION SHALL NOT APPLY TO THE SIDES OF A SWALE ALONG THE SIDES OR BACK OF A LOT, PROVIDING THE TOTAL WIDTH OF A SWALE DOES NOT EXCEED ONE (1) METRE ON EACH LOT.

D) WHERE THE 5% RESTRICTION ON THE BACKYARD'S GRADES RESULTS IN ELEVATION DIFFERENCES BETWEEN ADJACENT PROPERTIES; RETAINING WALL SHALL BE CONSTRUCTED ALONG THE SIDES AND BACK OF THE LOT.

E) GENERALLY, SLOPES SHALL BE PLACED ON THE LOWER LOT, WHEREAS RETAINING WALLS SHALL BE PLACED ON THE HIGHER LANDS.

F) THE 5% RESTRICTION DOES NOT PRECLUDE RETAINING WALLS IN THE REQUIRED BACKYARDS PROVIDING THE TERRACES ARE MAINTAINED TO THE 5% GRADE AS SET OUT IN ITEM (B). THE INTENTION OF THIS PROVISION IS TO PROVIDE FOR FLEXIBILITY OF HOUSE CONSTRUCTION.

G) GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE.

H) SLOPES OF SWALES FOR BOTH "BACK TO FRONT" AND "SPLIT" DRAINAGE SHALL BE NO LESS THAN 1.0% GRADE AND NO GREATER THAT 33% GRADE (3:1 SLOPE).

I) BACK TO FRONT DRAINAGE SHALL ONLY BE PERMITTED WHERE THE COMBINED SIDE YARD SETBACK IS 2.0M OR MORE, PROVIDING A MINIMUM OF 2.0M BETWEEN FOUNDATION WALLS FOR DRAINAGE SWALES. A 1.2M SETBACK IS REQUIRED ON THE GARAGE SIDE OF THE LOT.

J) WHEN MATCHING TO EXISTING PROPERTIES WHERE 2% SLOPE CANNOT BE ACHIEVED, THEN A 1.5% SLOPE IS PERMITTED PROVIDED A 150 MM SUB–DRAIN IS INSTALLED BELOW THE BOTTOM OF THE SWALE AND DRAINED TO A SUITABLE OUTLET, WITH A MINIMUM OF 0.30 METRE COVER OVER THE SUB–DRAIN OR OTHER MITIGATION MEASURES.

K) MINIMUM SLOPES FOR A "WRAP AROUND" SWALE IN THE BACK YARD SHALL BE 1,0%.

L) DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2.0% AND NOT MORE THAN 7% REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED.

M)EACH LOT IS TO BE INDEPENDENTLY DRAINED, DRAINAGE TO A NEARBY STREET THROUGH THE REAR OF AN ADJACENT LOT IS NOT PERMITTED, UNLESS THE ADJACENT LOT IS PART OF THE SAME DEVELOPMENT. IN AREAS WHERE "ZERO LOT LINE" ZONING IS PERMITTED DRAINAGE TO A NEARBY STREET THROUGH THE REAR OF AN ADJACENT LOT IS NOT ALLOWED. SEE SECTIONS 2.5.2.1 AND 2,5.2.2 REGARDING INFILL AND RURAL LOT GRADING.

N) CATCH BASINS IN REAR YARD SWALES SHALL BE DESIGNATED AS "PRIVATE" AND SHALL DRAIN NOT MORE THAN:
I) A MAXIMUM 50M OF A SWALE MEASURED ALONG THE REAR PROPERTY LINES, AND
II) A MAXIMUM OF FOUR (4) LOTS ON EITHER SIDE OF A CATCHBASIN ON ANY SIDE OF THE CATCHBASIN. COLLECTION FROM BOTH SIDES OF THE REAR LOT LINE IS ACCEPTABLE, AND
III) A MAXIMUM RESIDENTIAL AREA OF 3600 M².

O) ALL SLOPES SHALL BE 3:1 OR FLATTER.

P) PROVISIONS SHALL BE MADE TO PREVENT DISRUPTION OF THE NATURAL SURFACE DRAINAGE PATTERN ON LANDS BORDERING THE DEVELOPMENT BOTH DURING AND AFTER CONSTRUCTION.

Q) IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT, WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED.

R) WHERE A LOT IS LOWER IN THE REAR THAN IN THE FRONT, A SPLIT DRAINAGE GRADING DESIGN WILL BE USED IN ORDER TO DRAIN A PORTION OF THE LOT TO STREET CATCH BASINS. NO FRONT TO REAR DRAINAGE WILL BE PERMITTED.

ROOFWATER LEADERS:

ALL ROOFWATER LEADERS SHALL DISCHARGE ONTO SPLASH PADS AND THEN TO GRASSED OR LANDSCAPED AREAS A MIN. OF 0.6m FROM THE BUILDING FACE.

SUMP PUMP NOTE:

SUMP PUMPS WITH CHECK VALVES ARE TO BE INSTALLED IN EACH DWELLING TO PUMP THE WEEPING TILES TO THE SPLASH PADS. THE SUMP OUTLET SHALL EXTEND A MINIMUM OF 150mm ABOVE THE PROPOSED GRADE AT THE DWELLING (BASEMENT CEILING) PRIOR TO DISCHARGING TO THE SPLASH PADS.

SITE BENCH MARK:
CP IN ASPHALT
ELEV.=174.03 m

LEGEND:

□	DENOTES	MONUMENT SET
■	"	MONUMENT FOUND
IB	"	IRON BAR
CP	"	CONCRETE PIN
SIB	"	STANDARD IRON BAR
SSIB	"	SHORT STANDARD IRON BAR
824	"	A.T. McLAREN, O.L.S.
744	"	MATTHEWS, CAMERON, HEYWOOD–KERRY T. HOWE SURVEYING LTD.
1314	"	A. CAMERON, O.L.S
OU	"	ORIGIN UNKNOWN
WIT	"	WITNESS
P1	"	PLAN 59R–4100
P2	"	PLAN 59R–10184
P3	"	PLAN 59R–6204
Msd	"	MEASURED
BB	"	BOTTOM OF BANK
CB	"	CATCH BASIN
CONC	"	CONCRETE
CRW	"	CONCRETE RETAINING WALL
CLF	"	CHAIN LINK FENCE
DS	"	DOOR SILL
EOA	"	EDGE OF ASPHALT
EOG	"	EDGE OF GRAVEL
FH	"	FIRE HYDRANT
GF	"	GARAGE FLOOR
GM	"	GAS METER
HP	"	HYDRO POLE
HM	"	HYDRO METER
ILS	"	INTERLOCKING STONE
LP	"	LAMP POST
LSA	"	LANDSCAPED AREA
MH	"	MANHOLE
OH	"	OVERHANG
PS	"	PATIO STONE
SRW	"	STONE RETAINING WALL
TB	"	TOP OF BANK
WRW	"	WOOD RETAINING WALL
WV	"	WATER VALVE
ø	"	DIAMETER
—U—	"	OVERHEAD UTILITIES
//	"	NOT TO SCALE
000.00	"	EXISTING ELEVATION
(000.00)	"	PROPOSED ELEVATION
	"	DIRECTION OF FLOW
	"	PROPOSED SWALE
SW	"	SWALE
OB	"	OBVERT
INV	"	INVERT
R	"	RISER
	"	EXISTING DOWNSPOUT DISCHARGE
	"	PROPOSED DOWNSPOUT DISCHARGE
Ⓢ	"	SUMP PUMP
Ⓦ	"	WATER METER

LANDSCAPING NOTES:

REAR YARD PARKING AREA = 69.8m²

SURFACE PARKING AREA = 30% LOT AREA
=30% OF 616.3m²
= 184.9m²

LANDSCAPE COVERAGE = MINIMUM 30% OF LOT AREA.
= 30% OF 616.3m²
= 184.9m²
ACTUAL LANDSCAPE COVERAGE = 42.2%
= 260.0m²

NOTES:

UNDERGROUND SERVICE AND UTILITY LOCATIONS WERE DERIVED FROM CITY OF NIAGARA FALLS DRAWING No. P10, REFERENCE No. CC–3850.

UNDERGROUND SERVICE AND UTILITY LOCATIONS MUST BE VERIFIED PRIOR TO CONSTRUCTION.

INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION.

DRIVEWAY CUTS WILL BE COMPLETED BY CITY FORCES.

ALL WORK TO BE CONSTRUCTED ON THE RIGHT–OF–WAY MUST BE CONSTRUCTED BY CITY FORCES UNLESS OTHERWISE NOTED.

ALL WATER MAIN WORK ON CITY PROPERTY TO BE CONSTRUCTED BY CITY FORCES AT OWNER'S EXPENSE.

PROPOSED HOUSE ELEVATIONS:

GARAGE FLOOR =	175.05
TOP OF FOUNDATION (GARAGE) =	175.20
TOP OF FOUNDATION =	174.95
FIRST FLOOR =	175.15
BASEMENT FLOOR =	172.47
U/S OF FOOTING =	172.22

TRENCH FOOTINGS FOR FROST COVERAGE WHERE NECESSARY.

LOT AREA = 616.3 m²
LOT COVERAGE = 44.5%

BUILDING HEIGHT NOTE

HEIGHT MEANS THE PERPENDICULAR DISTANCE MEASURED FROM THE AVERAGE FINISHED GRADE LEVEL AT THE FRONT ELEVATION OF SUCH BUILDING TO THE HIGHEST POINT OF THE ROOF.

GRADE SHALL MEAN THE AVERAGE LEVEL OF THE PROPOSED GROUND ADJOINING A BUILDING, CALCULATED ALONG THE FRONT ELEVATION.

FIRST FLOOR		GRADE		DIFF IN GRADE
175.15	–	174.60	=	0.55
BUILDING HEIGHT		**DIFF IN GRADE**		**HEIGHT ACTUAL**
8.02	+	0.55	=	8.57m

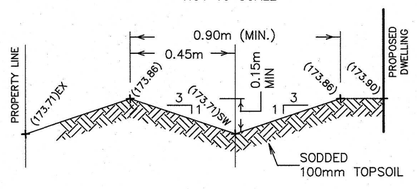
MAXIMUM BUILDING HEIGHT = 10.00m

TYPICAL SWALE DETAIL

NOT TO SCALE

SWALE DETAIL "A–A"

NOT TO SCALE



MH 173.75

METRIC NOTE:

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

MAY 05, 2026
DATE

LICENSED PROFESSIONAL ENGINEER
05 MAY 2026
R. A. MCLAREN
100530186
PROVINCE OF ONTARIO

ROB A. McLAREN, O.L.S., P.Eng.

8051 PELL STREET

No.	DESCRIPTION	DATE	BY
06	REVISED PER CITY'S COMMENTS	MAY 05, 2026	KB
05	REVISED PER CITY'S COMMENTS	MAY 04, 2026	KB
04	REVISED PER CLIENT'S COMMENTS	JANUARY 28, 2026	KB
03	REVISED PER CLIENT'S COMMENTS	JANUARY 20, 2026	KB
02	REVISED PER CLIENT'S COMMENTS	JANUARY 12, 2026	KB
01	REVISED PER CLIENT'S COMMENTS	JANUARY 09, 2026	KB
	INITIAL DRAWING	DECEMBER 16, 2025	KB

REVISIONS

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A.T. McLaren Limited
LEGAL AND ENGINEERING SURVEYS
69 JOHN STREET SOUTH, SUITE 230
HAMILTON, ONTARIO, L8N 2B9
PHONE (905) 527–8559

Drawn	Checked	Crew Chief	Scale	Dwg.No.
KB	RAM	MWJR	1:100	38209–S