



SCALE: 1:50,000±

LEGEND:

LANDS DEALT WITH BY THIS SURVEY

BUILDING FOOTPRINT

SURVEY MARKER

ROCK POST

IRON BAR

IRON PIPE

FOUND, WITNESS, NOT TO SCALE

PLAN, DEED

CALCULATED FROM FIELD MEASUREMENTS

ORDINARY HIGH WATER MARK

TIE LINE, TOTAL

BEGINNING OF CURVE, END OF CURVE

POINT OF COMMON CURVATURE, POINT OF REVERSE CURVATURE

RADIUS, ARC, CHORD

SANITARY MH, STORM MH

POWER POLE

FIRE HYDRANT, CATCH BASIN

WATERMAIN

SANITARY MAIN

STORM MAIN

GATE VALVE

CURB STOP

CORP STOP

PRE DRAINAGE FLOW PATTERN

POST DRAINAGE FLOW PATTERN

PROPOSED GRADE ELEV

EXISTING GRADE ELEVATION

S.M.

R.P.

I.B.

I.P.

Fd., Wt. (N.T.S.)

(P), (D)

calc.

O.H.W.M.

(7/4) (1)

B.C., E.C.

P.C.C., P.R.C.

R, A, C

SAN ST

P.P.

F.H.

C.B.

GV

CC

CS

35.60

35.60

GNSS SURVEY TYPE: NRTK

SOURCE: CanNet

COORDINATE SYSTEM INFORMATION

NOTES:

1. PRELIMINARY DESIGN SCHEMATIC FOR SERVING AND GRADING

PROPOSED BUILDING BEING 50 UNITS.

PROPOSED BUILDING FOOTPRINT BEING 1,106 sq.m.

2. ALL INFORMATION SUPPLIED BY HWWC VIA GIS PLOT OF PLEASANT STREET AND CHADWICK STREET, AS WELL AS DETAILED TOPOGRAPHIC SURVEY RELATED TO NSCM 228452

3. SEE PRELIMINARY PLAN OF SURVEY OF LOT 89-3839, BEING A CONSOLIDATION OF LOTS 8, 9 & 3839, LANDS CONVEYED TO M & K GOLDEN INC. PREPARED BY CIVTECH ENGINEERING, DATED DECEMBER 17, 2018

4. ALL SERVICES SIZE AND LOCATION SUBJECT TO FINAL DESIGN.

5. FINAL BUILDING FOOTPRINT TO FOLLOW STREETLINE. (MODIFICATION REQUIRED-PRELIMINARY NOT EXACT)

PROJECT

PRELIMINARY
SERVICING & GRADING
SCHEMATIC

247 PLEASANT STREET
3 & 5 CHADWICK STREET
LANDS CONVEYED TO
M & K GOLDEN INC.

CLIENT

JOE SADEK
M & K GOLDEN INC.

No.	REVISION	DATE	INIT.

GRAPHIC SCALE

(IN METERS)

1 : 200

PRELIMINARY ONLY
NOT FOR CONSTRUCTION

CivTECH
ENGINEERING AND SURVEYING LIMITED
DARTMOUTH - TRURO - TATAMAGOUCHE
902-434-4600

SCALE: 1 : 200	DATE: DEC 17, 2018	DWG. NO.: 1816M172
DRAWN BY: A K S	APPROVED:	JOB NO.: 18168

WASTEWATER HYDRAULIC DESIGN FLOWS

50 MULTI RESIDENTIAL UNITS @ 2.25 PEOPLE/UNIT = 112.5 PEOPLE, 0.12 HECTARES

$$M = 1 + 14/4 + p \cdot E \cdot 0.5 = 4.2; B = 3.07/d$$
$$a = 112.5 \times 3000/d = 33,750 \text{ L/d}$$

$$\text{PEAK DESIGN FLOW } q = (1.25 \times (\alpha \times M)) + B/86400$$
$$\text{PEAK DESIGN FLOW } q = (1.25 \times (33750 \times 4.2)) + 3.07/86400 = 2.05 \text{ L/SEC}$$

SANITARY SEWER SIZING PEAK FOR DESIGN FLOW

n = 0.010 PVC DR 35, Min grade 2%, Q MAX 2.05L/sec

DIAMETER = 150mm PVC DR 35 @ 2% 18% full peak design flow @ 0.9m/sec

PRELIMINARY STORMWATER CALCULATIONS – SCS METHOD

24 HOUR MODIFIED CHICAGO STORM DISTRIBUTION

PRE-DEVELOPEMNT CONDITIONS

DRAINAGE AREA = 1281 sq.m

ROOF & PAVEMENT 372 sq.m + 909 sq.m LAWN

COMPOSITE CN-PRE = 84.5

Q 1:5 YR = 84.5 cubic m

Q 1:100 YR = 165.7 cubic m

POST-DEVELOPEMNT CONDITIONS

DRAINAGE AREA = 1281 sq.m

ROOF & PAVEMENT 1105.5sq.m + 175 sq.m LAWN

COMPOSITE CN-POST = 95.4

Q 1:5 YR = 119.9 cubic m

Q 1:100 YR = 206.4 cubic m

STORMWATER DETENTION (UNDERGROUND, ROOF & PARKING LOT) ONE SHOWN ONLY SLOW RELEASE I.C.D.

STORMWATER LATERAL SIZING n = 0.010 PVC DR 35, Min grade 2% ASSUME NO I.C.D. WORST CASE

DIAMETER = 200mm PVC DR 35 @ 2% 78% full peak design flow NO ABSTRACTION OR SURFACE STORAGE Q = 58L/sec 1:100 yr

DIAMETER = 200mm PVC DR 35 @ 2% 53% full peak design flow NO ABSTRACTION OR SURFACE STORAGE Q = 34L/sec 1:5 yr