

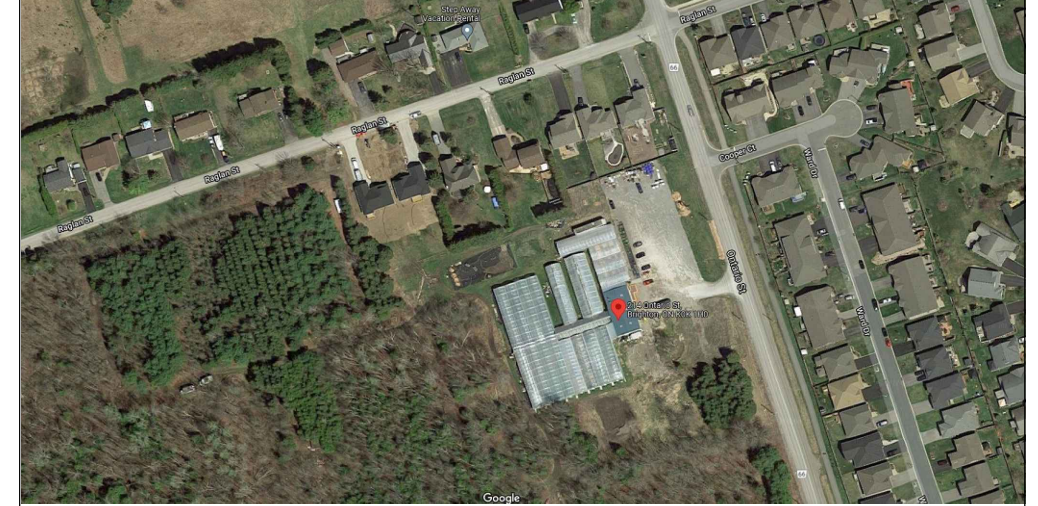
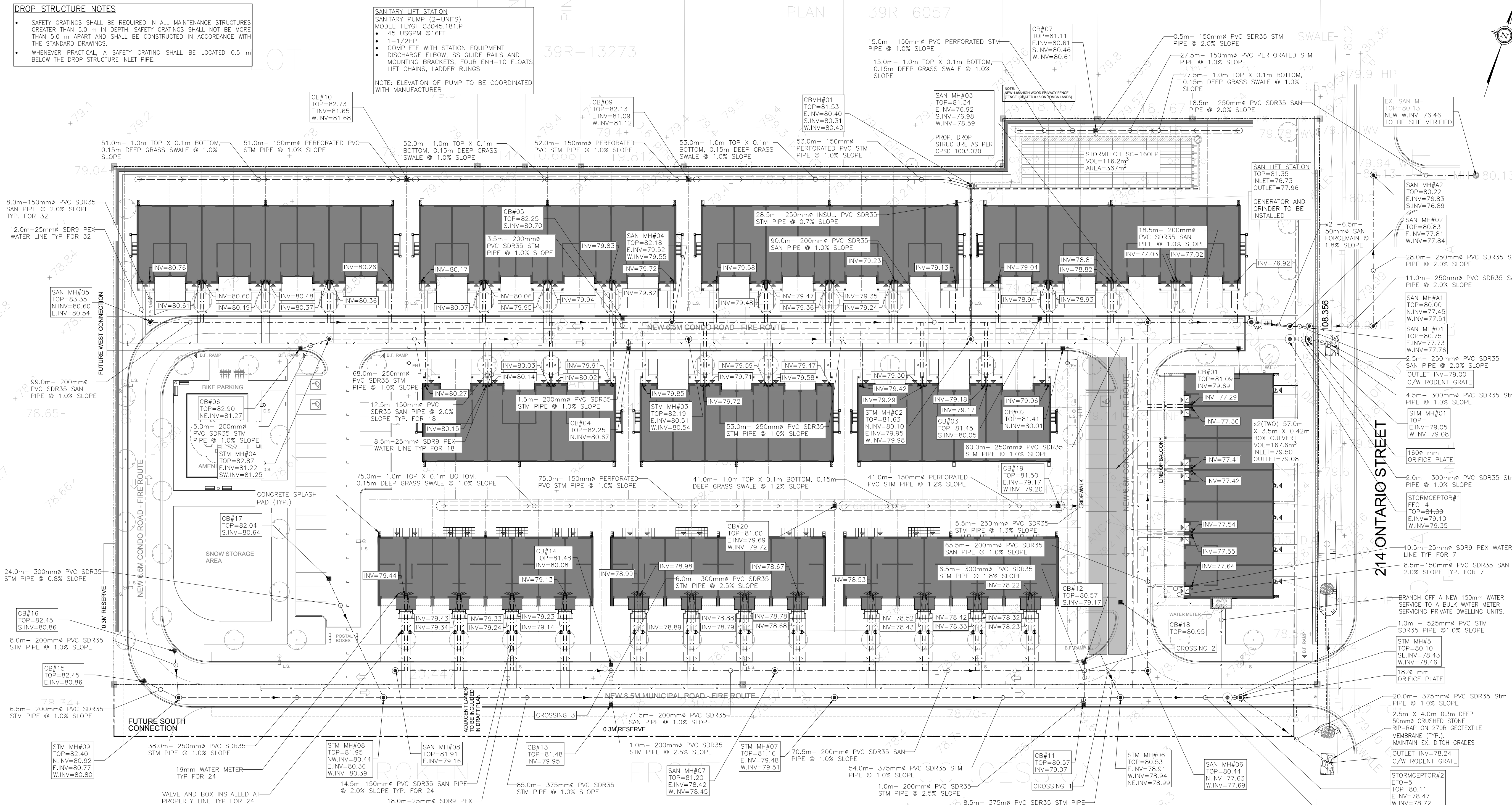
DROP STRUCTURE NOTES

- SAFETY GRATINGS SHALL BE REQUIRED IN ALL MAINTENANCE STRUCTURES GREATER THAN 5.0 m IN DEPTH. SAFETY GRATINGS SHALL NOT BE MORE THAN 5.0 m APART AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
- WHENEVER PRACTICAL, A SAFETY GRATING SHALL BE LOCATED 0.5 m BELOW THE DROP STRUCTURE INLET PIPE.

SANITARY LIFT STATION
 SANITARY PUMP (2-UNITS)
 MODEL=FLYGT C3045.181.P
 • 45 USGPM @ 16FT
 • 1-1/2HP
 • COMPLETE WITH STATION EQUIPMENT
 • DISCHARGE ELBOW, SS GUIDE RAILS AND MOUNTING BRACKETS, FOUR ENH-10 FLOATS, LIFT CHAINS, LADDER RUNGS

NOTE: ELEVATION OF PUMP TO BE COORDINATED WITH MANUFACTURER

PLAN 39R-6057



KEY PLAN
SCALE: NTS

GENERAL NOTES

- VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- DO NOT SCALE DRAWINGS.
- REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE DESIGN ENGINEER AS APPLICABLE.
- USE ONLY LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
- DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE PROVINCIAL AND LOCAL BUILDING CODES LATEST EDITION.
- ALL WORKS AND MATERIALS USED SHALL COMPLY AS REQUIRED BY THE BUILDING CODE LATEST EDITION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS & SPECIFICATIONS.
- EVERYTHING IS TO BE CONSIDERED NEW UNLESS SPECIFIED EXISTING OTHERWISE.

LEGEND

- +100.00 EXISTING ELEVATION
- EXISTING CATCHBASIN
- EXISTING C.B./M.H.
- EXISTING MANHOLE
- PROPERTY LINE
- EXISTING SANITARY LINE
- NEW SANITARY LINE
- NEW STORM LINE
- NEW SANITARY FORCEMAIN
- NEW BOX CULVERT
- NEW CATCHBASIN
- NEW C.B./M.H.
- NEW MANHOLE
- RETAINING WALL
- RETAINING WALL
- CONCRETE SPLASH PAD
- RAINWATER LEADER



1 SITE SERVICING PLAN
1:400

Storm Sewer Hydraulic Design Sheet (from the Ontario Ministry of Environment, Conservation and Parks)

Site Location (City): **214 Ontario St, Brighton, ON**

Design Storm: The 5100 Year Storm Event $a=46.03=0.699$

Rational Formula: $Q = 2.78 \cdot C \cdot I \cdot A$

Where: C: Runoff coefficient (previous 0.20, impervious 0.95)
 I: Rainfall intensity (mm/h) = $a \cdot (tc/60)^b$
 A: area (ha)
 Peak flow to be the minimum between the rational formula and the controlled flow when ICD are present

Concentration time: $tc = 0.013$ minutes
 Manning Equation: $Q_{cap} = (1/n) \cdot A \cdot R^{2/3} \cdot S^{1/2} \cdot 1000 (L/s)$
 D: pipe size (mm)
 S: slope (grade) of pipe (%)
 n: roughness coefficient

Checking Date (yyyy/mm/dd): **2025-06-17**

UTILITY CROSSING TABLE

CROSSING	ELEVATION (m)	VERTICAL CLEARANCE (m)
#1 STM INV (375mm)	79.04	2.72
SAN OBV (200mm)	76.32	
#2 STM INV (200mm)	79.14	2.73
SAN OBV (200mm)	76.41	
#3 STM INV (200mm)	80.06	1.82
SAN OBV (200mm)	78.24	

Street name	From (MH/CB)	To (MH/CB)	Area (A) (ha)	Runoff Coefficient C	Section (AC) (ha)	Accum (CA) (ha)	Concentration time (tc) (min)	Rainfall Intensity (I) (mm/hr)	Peak Flow (Q) (L/s)	Length (L) (m)	Slope (S) (%)	N. D. (D) (mm)	Qcap (full) (L/s)	V (full) (m/s)	Time of flow in pipe (min.) (t)	(Q) / Qcap	
Proposed Main Alignment	CB#16	STMMH#09	0.018	0.90	0.016	0.016	10.00	160.95	7.30	8.0	1.0%	200	32.80	1.04	0.13	0.22	
	STMMH#15	STMMH#09	0.018	0.90	0.016	0.016	10.00	160.95	7.30	6.5	1.0%	200	32.80	1.04	0.10	0.22	
	STMMH#09	STMMH#08	0.000	0.00	0.000	0.033	10.10	159.79	14.50	38.0	1.0%	250	59.47	1.21	0.52	0.24	
	CB#17	STMMH#08	0.220	0.62	0.136	0.136	10.00	160.95	60.90	24.0	0.8%	300	86.49	1.22	0.33	0.70	
	CB#14	STMMH#08	0.154	0.85	0.131	0.131	10.00	160.95	58.65	6.0	1.0%	300	96.70	1.37	0.07	0.61	
	CB#13	STMMH#08	0.036	0.85	0.030	0.030	10.00	160.95	13.53	1.0	1.0%	200	32.80	1.04	0.02	0.41	
	STMMH#08	STMMH#07	0.000	0.00	0.000	0.330	10.02	160.77	98.24	85.0	1.0%	375	175.33	1.59	0.89	0.56	
	CB#12	STMMH#07	0.211	0.67	0.141	0.141	10.00	160.95	63.18	6.5	1.0%	300	96.70	1.37	0.08	0.65	
	CB#11	STMMH#07	0.039	0.90	0.035	0.035	10.00	160.95	15.69	1.0	1.0%	200	32.80	1.04	0.02	0.48	
	CB#19	TANK	0.450	0.25	0.113	0.113	10.00	160.95	50.34	5.5	1.3%	250	67.80	1.38	0.07	0.74	
	CB#18	TANK	0.160	0.75	0.120	0.120	10.00	160.95	53.69	0.0	0.0%	0	0.00	0.00	0.00	0.00	
	STMMH#07	STMMH#06	0.000	0.00	0.000	0.506	10.02	160.77	98.24	54.0	1.0%	375	175.33	1.59	0.57	0.56	
	TANK	STMMH#06	0.000	0.00	0.000	0.233	10.00	160.95	98.24	8.5	1.1%	375	183.89	1.66	0.09	0.53	
	STMMH#06	OGS#02	0.000	0.00	0.000	0.739	10.09	160.00	98.24	21.5	1.0%	375	175.33	1.59	0.23	0.56	
	OGS#02	STMMH#5	0.000	0.00	0.000	0.739	10.31	157.54	98.24	1.0	1.0%	375	175.33	1.59	0.01	0.56	
	Total			1.305					Total released	98.24							

No.	Date	Description	Drawn	Checked
5	27 AUG '25	ISSUED FOR SPA	BL	JS
4	27 JUN '22	ISSUED FOR SPA	MJ	BRS
3	17 JUN '22	ISSUED FOR SPA	MJ	BRS
2	25 MAY '22	FOR REVIEW		
1	03 MAY '22	FOR REVIEW		
0	18 MAR '22	FOR REVIEW		

REVISIONS

J+B ENGINEERING INC.
 TORONTO: 25 CANTERBURY DR. MARKHAM, ON L3R 9N8 416.293.8358
 CALGARY: 707.10TH AVE. SW. SUITE 101 CALGARY AB T2R 0B3 403.535.2295

OWNER/CLIENT: **TOMBA ENTERPRISE LTD.**

Project: **BRIGHTON FREEHOLD TOWNHOUSE DEVELOPMENT**

SITE SERVICING PLAN

214 ONTARIO STREET BRIGHTON, ON

File No: 220108 Date: 20 JAN '22 ACAD INFO
 Drawn By: EM Scale: AS SHOWN Dwg. File: 220108-P-301
 Checked By: JS Sheet 1 of 1 Plotting Scale: 1=1
 Drawing No: P-301 Drawing Size: D