



- EXISTING LEGEND**
- OH OH OVERHEAD WIRES
  - UP UTILITY POLE
  - LS LIGHT STANDARD
  - CB CATCHBASIN
  - CBE CATCHBASIN ELBOW
  - CBT CATCHBASIN TEE
  - AD AREA DRAIN
  - T/G TOP OF GRATE
  - GM GAS METER
  - MH MANHOLE (SANITARY OR STORM)
  - G GAS MAIN
  - V&VB VALVE AND VALVE BOX
  - V&VC VALVE AND VALVE CHAMBER
  - FH FIRE HYDRANT
  - EX 250mm SAN STORM SEWER
  - EX 300mm STM SANITARY SEWER
  - EX 200mm WM WATERMAIN
  - TREES
  - FENCE
  - ORIGINAL GROUND ELEVATION
  - EXISTING CONTOUR
  - OVERLAND FLOW ROUTE
- PROPOSED LEGEND**
- PROPERTY LINE
  - 200mm SAN SANITARY SEWER
  - 200mm STM STORM SEWER
  - 200mm WM WATERMAIN
  - CLAY SEAL
  - STM MH 211 STORM MANHOLE
  - SAN MH 104 SANITARY MANHOLE
  - CB1 CATCHBASIN
  - CBE CATCHBASIN ELBOW
  - CBT CATCHBASIN TEE
  - AD AREA DRAIN AND DECK DRAIN
  - RD ROOF DRAIN
  - V&VB VALVE AND VALVE BOX
  - V&VC VALVE AND VALVE CHAMBER (W3)
  - FH FIRE HYDRANT
  - 45° 45° WATERMAIN BEND
  - 22° 22.5° WATERMAIN BEND
  - 11.25° 11.25° WATERMAIN BEND
  - 200x150 WATERMAIN CROSS
  - 200x200x200 WATERMAIN REDUCER
  - 200x150 WATER METER
  - WM WATER METER
  - SC REMOTE WATER METER READER
  - FF SIAMISE CONNECTION
  - GRS FLOOR ELEVATION
  - P1 GARAGE FLOOR SLAB ELEVATION
  - 3.0% SLOPE AND DIRECTION OF FLOW
  - 5.5% FINAL GRADE
  - H.P. HIGH POINT
  - TERRACING
  - T/G TOP OF GRATE ELEVATION
  - T/F TOP OF FLANGE
  - OVERLAND FLOW ROUTE
  - PHASING LIMITS
  - SILT FENCE
  - BARRIER CURB (SC.1.1)
  - DEPRESSED BARRIER CURB LOCATION
  - SWALE AND DIRECTION OF FLOW
  - RETAINING WALL
  - BUILDING ENTRY LOCATION
  - STRUCTURE TO BE ADJUSTED
  - STRUCTURE TO BE RELOCATED

**WATERMAIN / SEWER CROSSING TABLE (PHASE 5)**

LOCATION	SANITARY SEWER			STORM SEWER			WATERMAIN			CLEARANCES (mm)
	INVERT (m)	DIA (mm)	OBV (m)	INVERT (m)	DIA (mm)	OBV (m)	INVERT (m)	DIA (mm)	OBV (m)	
F2	47.82	250	47.87	52.7	200	52.9	50.65	200	50.85	4830
F3	47.83	250	48.08				50.69	200	50.89	2570
F4	47.87	250	48.12				51.9	200	52.1	3450
F5	48.19	250	48.45				50.74	300	51.04	860
F6				50.74	300	51.04	51.9	200	52.1	860
F7	47.85	250	47.9	53.13	200	53.33				5230

**WATERMAIN TABLE - PHASE 5 (TOWER 6)**

STATION	DESCRIPTION	GROUND ELEVATION	DESIGN TOP OF WATERMAIN	AS-BUILT TOP OF WATERMAIN
1+000	CONNECTION TO EXISTING 200 WM	53.45	50.80	
1+001	TWO (2) 200 VALVE & VALVE BOXES	53.48	50.80	
1+003.9	11.25-DEG BEND	53.58	51.19	
1+005.1	200 VALVE & VALVE CHAMBER (W3)	53.57	51.37	
1+008.1	TEMP 200 CAP & THRUST BLOCK	54.58	51.30	

**WATERMAIN TABLE - PHASE 5 (TOWER 5)**

STATION	DESCRIPTION	GROUND ELEVATION	DESIGN TOP OF WATERMAIN	AS-BUILT TOP OF WATERMAIN
2+000	CONNECTION TO EXISTING 200 WM	54.10	51.70	
2+000.5	200 VALVE AND VALVE BOX	54.09	51.69	
2+001	200 x 200 CROSS	54.09	51.69	
2+002.5	200 VALVE & VALVE CHAMBER (W3)	54.07	51.67	
2+002.9	45-DEG BEND	53.97	51.57	
2+010	45-DEG BEND	53.92	51.52	
2+019.66	45-DEG BEND	54.15	51.75	
2+020	TEMP 200 CAP & THRUST BLOCK	54.15	51.75	
2+021.8	TEMP 200 CAP & THRUST BLOCK	54.15	51.75	

**WATERMAIN TABLE - AT SITE ENTRANCE**

STATION	DESCRIPTION	GROUND ELEVATION	TOP OF WATERMAIN	AS-BUILT TOP OF WATERMAIN
3+000	CONNECTION TO EXISTING WITH 400x200 TVS	53.10	50.36	
3+001	45-DEG BEND	53.10	50.36	
3+002.8	22.5-DEG BEND	53.10	50.23	
3+009.5	22.5-DEG BEND CONNECTION TO EXISTING	53.10	50.23	

TOWER #	LOCATION	TYPE	FLOW CONTROL	FLOW CONTROL METHOD	WEIR POSITION	COMMENT
Tower 5	HIGH ROOF(s)	WATTS RD-100	YES	ACCUTROL ADJ.	50% Open	MAX 20 GPM AT 150mm DEPTH (50% Position)
	AMMENTITRES ROOF - Terrace	WATTS RD-CP-85	None	None		
	AMMENTITRES ROOF	WATTS RD-CP-85	YES	ACCUTROL ADJ.	50% Open	MAX 20 GPM AT 150mm DEPTH (50% Position)
	PARKING DECK - Hard Surfaces	WATTS FD-460-AF	YES			FLOW CONTROL BASED ON ORIFICE SIZE (75mm)
Tower 6	HIGH ROOF(s)	WATTS RD-100	YES	ACCUTROL ADJ.	50% Open	MAX 20 GPM AT 150mm DEPTH (50% Position)
	AMMENTITRES ROOF - Terrace	WATTS RD-CP-85	None	None		
	AMMENTITRES ROOF	WATTS RD-CP-85	YES	ACCUTROL ADJ.	50% Open	MAX 20 GPM AT 150mm DEPTH (50% Position)
	PARKING DECK - Hard Surfaces	WATTS FD-460-AF	YES			FLOW CONTROL BASED ON ORIFICE SIZE (75mm)
Tower 5/6 Podium	Green Roof	WATTS RD-CP-85	YES	ACCUTROL ADJ.	CLOSED	MAX 5 GPM AT 150mm DEPTH (Closed Position)
	Commercial Roof - Ballast	WATTS RD-CP-85	YES	ACCUTROL ADJ.	50% Open	MAX 20 GPM AT 150mm DEPTH (50% Position)
	PARKING DECK - Landscaping	WATTS FD-460-AF	YES			FLOW CONTROL BASED ON ORIFICE SIZE (75mm)

**TOPOGRAPHIC INFORMATION**  
 PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.  
 DATED JULY 20, 2018

**JOB BENCHMARK**  
 PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.  
 NCC MONUMENT 01919680184  
 NTM-NAD83 ZONE 9  
 NORTHING=5040610.15  
 EASTING=384736.57  
 ELEVATION=52.68

CIVIL Civil  
**exp SERVICES INC.**  
 2650 Queenview Drive, Unit 100, Ottawa, ON, K2B 8H6  
 T 613 688 1999 F 613 225 7330 www.exp.com

ARCHITECTES Architect  
**NEUF architect(e)s** BENCORL  
 630, rue Notre-Dame O. 3<sup>e</sup> étage, Montréal, QC H3B 1S6  
 T 514 847 1117 NEUFArchitectes.com



**exp Services Inc.**  
 1-613-688-1999 | F-1-613-225-7337  
 2650 Queenview Drive, Suite 100  
 Ottawa, ON K2B 8H6  
 Canada  
 www.exp.com



- BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

CLIENT Client  
**BRIGIL**  
 98 Rue Leli, Gatineau QC J8Y 3R7  
 T 819 243 7392 www.brigil.com  
 Ouvrage Project

**PETRIE'S LANDING I - PHASES 3-5**  
 EMPACEMENT Location NO PROJECT NO  
 OTTAWA, ON. OTT-00247308-A0

NO	REVISION	DATE (aa.mm.jj)
1	ISSUED FOR REVIEW	18.08.03
2	ISSUED FOR SITE PLAN APPROVAL	18.09.14
3	ISSUED FOR CLIENT REVIEW	19.04.05
4	ISSUED FOR SITE PLAN APPROVAL	19.05.10
5	ISSUED FOR SITE PLAN APPROVAL	19.05.22
6	ISSUED FOR SPA-CITY COMMENTS	19.07.22
7	REVISED PER CITY COMMENTS	19.07.30
8	UPDATED TOWER 4	20.02.12
9	PRE-IFC FOR BRIGIL REVIEW	20.09.14
10	ISSUED FOR CONSTRUCTION	20.11.10
11	ISSUED FOR TOWER 4 BUILDING PERMIT	21.12.10
12	ISSUED FOR PERMIT UPDATE	22.03.14
13	ISSUED FOR 80% REVIEW	22.04.21
14	ISSUED FOR PERMIT	22.07.15
15	ADDITIONAL WATER SERVICE TOWER 6	22.10.18
16	ISSUED FOR TENDER	22.12.05
17	ISSUED FOR RE-TENDER	23.03.10
18	ISSUED FOR COORDINATION	23.11.08
19	ISSUED FOR APPROVAL	24.06.24
20	UPDATED CITY NUMBER	25.02.10
21	ISSUED FOR SITE PLAN APPROVAL	25.11.17

DESIGNER PAR Drawn by S.BUTLER  
 VERIFY PAR Checked by B.THOMAS  
 DATE (aa.mm.jj) 18.07.18  
 ECHELLE Scale 1:400

**SITE SERVICING PLAN TOWERS 5 & 6**