

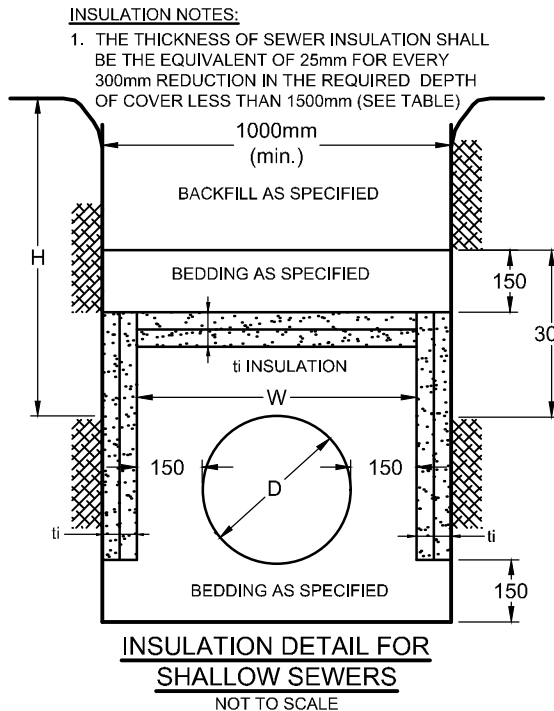
PROPOSED WATER SERVICE TABLE				
STATION	SURFACE ELEVATION	T/W/M ELEVATION	COMMENTS	
0+000	95.35	92.35*	TEE CONNECTION TO EX. 300mmØ WM	
0+001	95.32	92.35*	200mmØ VALVE AND VALVE BOX	
0+004.7	95.23	92.53	CROSS ABOVE EX. 450Ø SAN (±0.85m CLEARANCE)	
0+006	95.20	92.53	11.25° HORIZONTAL BEND	
0+022	94.93	92.53	CROSS BELOW 250mmØ STM (±0.63m CLEARANCE)	
0+025	95.00	92.53	-	
0+050	94.98	92.53	-	
0+058.2	94.93	92.53	CROSS BELOW 300mmØ STM (±0.75m CLEARANCE)	
0+075	95.14	92.53	-	
0+092.7	94.93	92.53	22.5° HORIZONTAL BEND	
0+094.4	94.92	92.52	CROSS BELOW 375mmØ STM (±0.77m CLEARANCE)	
0+098.1	94.90	92.50	22.5° HORIZONTAL BEND	
0+100.9	94.97	92.57	200 x 200 x 150 HYDRANT TEE	
0+102.9	94.98	92.58	200 x 150 REDUCER	
0+103.9	94.99	92.59	45° HORIZONTAL BEND	
0+106.0	95.01	92.61	150mmØ VALVE AND VALVE BOX	
0+015.2	95.10	92.70	45° HORIZONTAL BEND	
0+119.5	95.33	92.75	CAP 1.0m FROM BUILDING FACE	
1+000	94.97	92.57	200 x 200 x 150 HYDRANT TEE	
1+005	94.97	92.57	150mmØ VALVE AND VALVE BOX	
1+007.5	95.15	92.57	FIRE HYDRANT	

\* 300mm x 300mm x 200mm TEE CONNECTION TO EXISTING 300mmØ WATERMAIN. EXACT ELEVATION TO BE FIELD DETERMINED.

### WATERMAIN NOTES:

- SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA FORCES.
- SPECIFICATIONS:
 

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN	PVC DR 18	
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.



COVER (mm)	INSULATION THICKNESS (mm)
1500-1200	75
1200-900	100
900-600	125

CAMP MART SITE FLOWS & STORMWATER MANAGEMENT TABLE							
DESIGN EVENT	PRE-DEVELOPMENT CONDITIONS		POST-DEVELOPMENT CONDITIONS				
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)	A-0 FLOW (L/s)	A-1 FLOW (L/s)	A-2 FLOW (L/s)	TOTAL FLOW (L/s)	REDUCTION IN FLOW (L/s or %)
1.5 YR	115.3	99.5	6.1	30.3	51.9	88.3	27.0 or 23%
1.100 YR	247.0	99.5	12.4	31.1	53.6	97.1	149.9 or 61%

\* REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS

AREA A-1: RESTRICTOR PIPE DATA - CBMH 1						
DESIGN EVENT	DIAMETER OF RESTRICTOR PIPE (mm)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m³)
1.5 YR	101mmØ RINGTIGHT	375	30.3	1.96	94.89	173.1
1.100 YR	101mmØ RINGTIGHT	375	31.1	2.07	95.00	414.4

\* RESTRICTOR PIPE TO BE IPEX RING TIGHT PVC DR35 PIPE ONLY - SIZE = 4" NOMINAL DIAMETER FOR RESTRICTOR PIPE AT CBMH 1. REFER TO RESTRICTOR PIPE DETAIL FOR INSTALLATION OF RESTRICTOR PIPE IN 375mmØ OUTLET PIPE.

AREA A-2: RESTRICTOR PIPE DATA - CBMH 12						
DESIGN EVENT	DIAMETER OF RESTRICTOR PIPE (mm)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER DEPTH (m)	VOLUME (m³)
1.5 YR	135mmØ RINGTIGHT	375	51.9	1.80	95.00	53.6
1.100 YR	135mmØ RINGTIGHT	375	53.6	1.92	95.12	153.4

\* RESTRICTOR PIPE TO BE IPEX RING TIGHT PVC DR35 PIPE ONLY - SIZE = 6" NOMINAL DIAMETER FOR RESTRICTOR PIPE AT CBMH 12. REFER TO RESTRICTOR PIPE DETAIL FOR INSTALLATION OF RESTRICTOR PIPE IN 375mmØ OUTLET PIPE.

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NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION  
20 FRANK NIGHBOR PLACE  
11266 FIFTH LINE  
HALTON HILLS, ON, L7G 4S6  
SUNNY BAINS  
PHONE: 1-877-401-3423  
sbains35@gmail.com

No.	REVISION	DATE	BY
7	REVISED PER CITY COMMENTS	JUL 27/18	FST
6	REVISED PER MTO COMMENTS	JUN 29/18	FST
5	ISSUED FOR TENDER	JUN 1/18	FST
4	ISSUED FOR BUILDING PERMIT	JUN 1/18	FST
3	REVISED PER CITY COMMENTS	MAY 24/18	FST
2	REVISED PER CITY COMMENTS	APR 23/18	FST
1	ISSUED FOR SITE PLAN APPROVAL	FEB 9/18	FST

SCALE	
1:250	
0 2 4 6 8 10	

DESIGN	SM / FST
CHECKED	FST
DRAWN	
CHECKED	SM
APPROVED	SM / FST
	FST

### FOR REVIEW ONLY



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LOCATION  
CITY OF OTTAWA  
20 FRANK NIGHBOR PLACE - CAMP MART SITE

DRAWING NAME  
GENERAL PLAN OF SERVICES

PROJECT No.  
117193  
REV  
REV #7  
DRAWING No.  
117193-GP2

