

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. 4500 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.

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)
1.5 YR	115.3	99.5	6.1	23.5	24.7	28.1
1:100 YR	247.0	99.5	12.4	24.1	33.5	29.1

* REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS

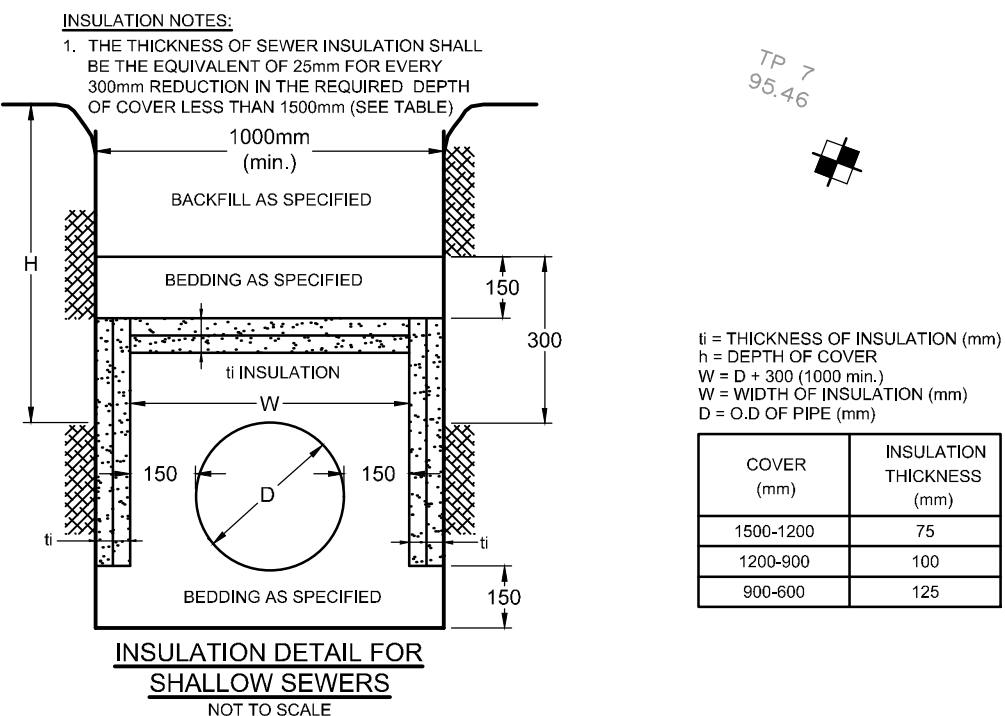
ROOF DRAIN TABLE: AREA A-2 (ROOF DRAINS 1 to 10)						
AREA ID*	ROOF DRAIN No. (ZURN MODEL)	NUMBER OF ROOF DRAIN NOTCHES	5-YEAR RELEASE RATE	APPROX. 5-YR PONDING DEPTH	100-YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
A-2	RD 1 (Z-105)	2 NOTCHES**	2.52 L/s	10 cm	3.16 L/s	13 cm
A-2	RD 2 (Z-105)	2 NOTCHES**	2.52 L/s	10 cm	3.16 L/s	13 cm
A-2	RD 3 (Z-105)	3 NOTCHES**	4.02 L/s	11 cm	5.67 L/s	14 cm
A-2	RD 4 (Z-105)	3 NOTCHES**	4.02 L/s	11 cm	5.67 L/s	14 cm
A-2	RD 5 (Z-105)	3 NOTCHES**	3.30 L/s	09 cm	4.74 L/s	13 cm
A-2	RD 6 (Z-105)	3 NOTCHES**	3.30 L/s	09 cm	4.74 L/s	13 cm
A-2	RD 7 (Z-105)	1 NOTCH**	1.26 L/s	10 cm	1.58 L/s	13 cm
A-2	RD 8 (Z-105)	1 NOTCH**	1.26 L/s	10 cm	1.58 L/s	13 cm
A-2	RD 9 (Z-105)	1 NOTCH**	1.26 L/s	10 cm	1.58 L/s	13 cm
A-2	RD 10 (Z-105)	1 NOTCH**	1.26 L/s	10 cm	1.58 L/s	13 cm

* REFER TO THE DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT (R-2018-011) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

**ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDING TO BE ZURN CONTROL-FLO ROOF DRAINS WITH THE SPECIFIED NUMBER OF NOTCHES AS INDICATED ABOVE.

AREA A-1: INLET CONTROL DEVICE DATA - CBMH 1					
DESIGN EVENT	ICD TYPE (CIRCULAR PLUG)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	VOLUME (m³)
1.5 YR	88mmØ ORIFCE	375	23.5	1.98	94.91
1:100 YR	88mmØ ORIFCE	375	24.1	2.08	95.01

AREA A-3: INLET CONTROL DEVICE DATA - CBMH 12					
DESIGN EVENT	ICD TYPE (CIRCULAR PLUG)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	VOLUME (m³)
1.5 YR	100mmØ ORIFCE	375	28.1	1.70	94.90
1:100 YR	100mmØ ORIFCE	375	29.1	1.82	95.02



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.

APPROVED ☐ REFUSED ☐
THIS ____ DAY OF ____, 20__
DERICK MOODIE
MANAGER, DEVELOPMENT REVIEW - WEST
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

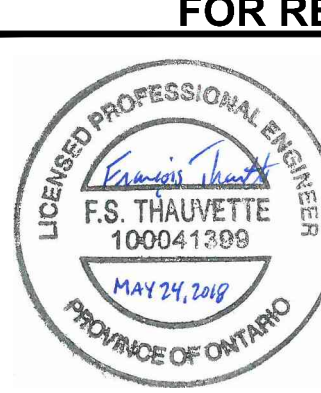
OWNER INFORMATION
20 FRANK NIGHBOR INC.
11266 FIFTH LINE
HALTON HILLS, ON, L7G 4S6
SUNNY BAINS
PHONE: 1-877-401-3423
sbains35@gmail.com

No.	REVISION	DATE	BY
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	SM
CHECKED	SM / FST
APPROVED	FST



FOR REVIEW ONLY

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

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

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No.
117193
REV #3
DRAWING No.
117193-GP1