

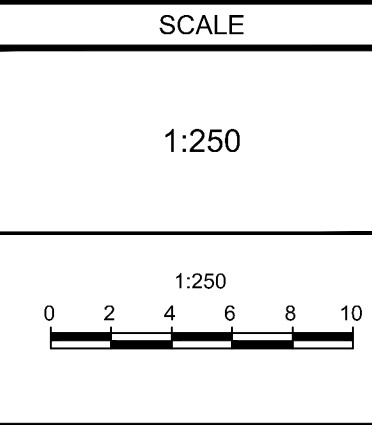
M:\2017\117193\CD\Design\117193-GP.dwg, GP3, May 28, 2018 - 4:46pm, smathews

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  
764703 ONTARIO INC.  
16 CONCORSE GATE, SUITE 200  
OTTAWA, ON, K2E 7S8  
CAL KIRKPATRICK  
PHONE: 1-613-225-8118  
ckirkpatrick@colonnade.ca

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



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



LOCATION CITY OF OTTAWA 30 FRANK NIGHBOR PLACE - PRIVATE ACCESS ROAD
DRAWING NAME GENERAL PLAN OF SERVICES
PROJECT No. 117193
REV REV # 3
DRAWING No. 117193-GP3

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

PROJECT No. 117193
REV REV # 3
DRAWING No. 117193-GP3

PLAN2406R.DWG - 314 48mmx58mm

#17579

SITE ACCESS ROAD FLOWS & SWM TABLE					
DESIGN EVENT	PRE-DEVELOPMENT CONDITIONS		POST-DEVELOPMENT CONDITIONS		
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)	A-O FLOW (L/s)	TOTAL FLOW (L/s)	REDUCTION IN FLOW (L/s OR %)**
1:5 YR	5.2	4.5	4.3	4.3	0.9 OR 17%
1:100 YR	11.2	4.5	4.4	4.4	6.8 OR 61%

\*REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2018-011) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.  
\*\*REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS.

AREA A-4: INLET CONTROL DEVICE DATA - CB 1A					
DESIGN EVENT	ICD TYPE (TEMPEST VORTEX)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)
1:5 YR	Tempest LMF Model 60	200	4.3	1.75	94.95
1:100 YR	Tempest LMF Model 60	200	4.4	1.81	95.01

REFER TO PLANS 117193-GP1 AND 117193-GP2 FOR PROPOSED SERVICING ON LOT # 1

## LEGEND

SAN MH 1	PROPOSED SANITARY MH & SEWER	PROPERTY LINE	PROPERTY LINE
CBMH 3	PROPOSED CATCHBASIN MANHOLE c/w 3.0m RADIAL SUBDRAINS PER GETOTECH & SEWER	EXISTING CONCRETE CURB	EXISTING SANITARY MANHOLE AND SEWER
STM MH 1	PROPOSED STORM MANHOLE c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD	EXISTING CATCHBASIN MANHOLE	EXISTING STORM MANHOLE AND SEWER
CB 2	PROPOSED CATCHBASIN c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD	EXISTING CATCHBASIN C/W CATCHBASIN LEAD	EXISTING CATCHBASIN C/W CATCHBASIN LEAD
HYD	PROPOSED HYDRANT AND VALVE	EXISTING HYDRANT	EXISTING HYDRANT
DC	PROPOSED DEPRESSED CURB	EXISTING UTILITY POLE C/W GUY WIRES	EXISTING WATERMAIN
200mmØ	PROPOSED WATERMAIN AND DIAMETER	EXISTING HYDRANT C/W VALVE & LEAD	EXISTING LIGHT STANDARD
VB	PROPOSED VALVE AND VALVEBOX	EXISTING FENCE	EXISTING OVERHEAD UTILITY WIRES
BEND	PROPOSED BEND AND THRUSTBLOCK 11.25', 22.5', 45° or TEE	PROPOSED WATER METER AND REMOTE METER	PROPOSED LIGHT STANDARD
C	PROPOSED CAP	PROPOSED CLAY SEAL, SEEPAE BARRIER (PER GEOTECHNICAL REPORT)	PROPOSED TRANSFORMER
ICD	PROPOSED INLET CONTROL DEVICE	AREA UNDER SITE PLAN DEVELOPMENT APPLICATION FOR THE CAMP MART SITE	
RD	CONTROLLED FLOW ROOF DRAIN		
	THERMAL INSULATION FOR SHALLOW SEWERS		
	PROPOSED BUILDING ENTRANCE		
C.S.	PROPOSED CLAY SEAL, SEEPAE BARRIER (PER GEOTECHNICAL REPORT)		
	PROPOSED RETAINING WALL		

## GENERAL NOTES:

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00, INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT (NO. PG4409-1, DATED FEBRUARY 9, 2018), PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO DSS & SWM REPORT (R-2018-011) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE/PARKING PAINTING.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN, AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIE ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T&M ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

## SEWER NOTES:

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200mmØ)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
WATERTIGHT MH FRAME AND COVER	401.030	OPSD
SEWER TRENCH	S6	CITY OF OTTAWA
- ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
- INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH HI-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX; POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPS6 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS UNLESS OTHERWISE INDICATED.
- ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600mm SUMPS.
- ALL WEEPING TILE CONNECTIONS ARE TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET CONTROL DEVICES.
- CONTRACTOR TO TELEVISION (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

D07-12-18-0017