

LEGEND

COMP	EXISTING COMBINED MANHOLE	HT	EXISTING HYDRO TRANSFORMER	— G —	EXISTING GAS LINE	MH 101	PROPOSED SANITARY MANHOLE	WV	PROPOSED VALVE LOCATION	— X —	ABANDONED	⊕	PROPOSED REMOTE WATER METER
MS-S	EXISTING SANITARY MANHOLE	HTM	EXISTING HYDRO MANHOLE	— T —	EXISTING TRAFFIC SIGNAL	MH 100	PROPOSED STORM MANHOLE	— D.C. —	PROPOSED DEPRESSED CURB	— X —	REMOVAL	⊕	PROPOSED WATER METER
MS-ST	EXISTING STORM MANHOLE	HTM	EXISTING TRAFFIC MANHOLE	— F.O. —	EXISTING FIBER OPTIC LINE	CB	PROPOSED CATCHBASIN	— B.C. —	PROPOSED BARRIER CURB	— X —	ADJUSTED	⊕	INTERNAL MONITORING TEST PORTS
CP	EXISTING CATCH BASIN	UP	EXISTING UTILITY POLE	— ST —	EXISTING STORM SEWER	VVB	DIRECTION OF FLOW	— I.B. —	IRON BAR @ PROPERTY LINE	— X —	PROPOSED SOFT LANDSCAPING	⊕	
FH	EXISTING FIRE HYDRANT	GM	EXISTING GAS METRE	— SA —	EXISTING SANITARY SEWER	⊕	PROPOSED VALVE & VALVE BOX	— L.A. —	LEGAL ADJACENT	⊕	PROPOSED GAS METER	⊕	PROPOSED PODIUM DRAIN
VC	EXISTING VALVE CHAMBER	TRAFF. LT	EXISTING TRAFFIC LIGHT	— B —	EXISTING BELL LINE	⊕	PROPOSED BELL PEDESTAL	— P.D. —	PROPOSED STORM SEWER	⊕	PROPOSED GAS METER	⊕	PROPOSED SIAMESE CONNECTION
	EXISTING BELL PEDESTAL	LS	EXISTING LAMP STANDARD	— H —	EXISTING HYDRO LINE	⊕	PROPOSED CABLE PEDESTAL	— Y —	PROPOSED SANITARY SEWER				

WATERMAIN TABLE

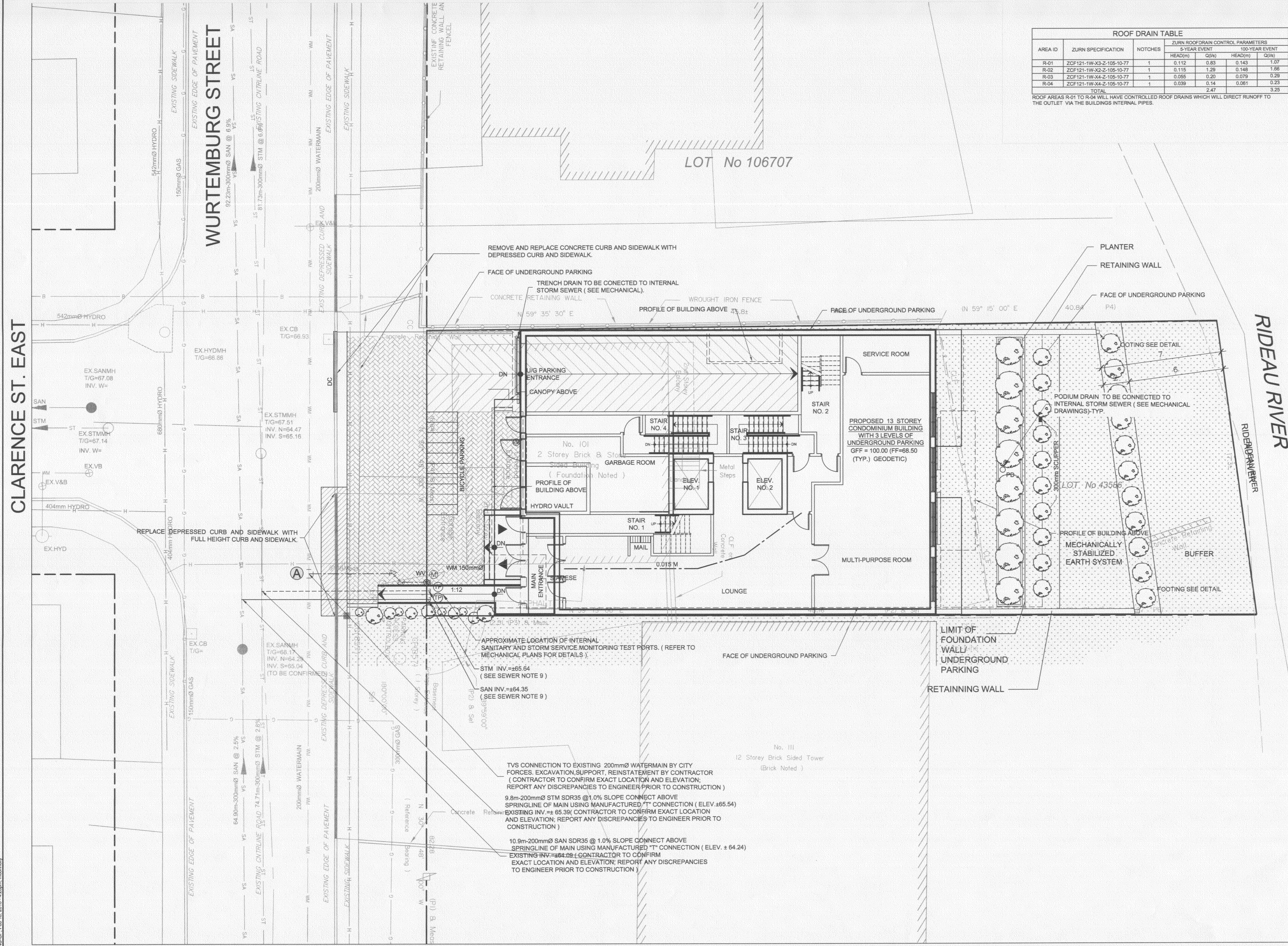
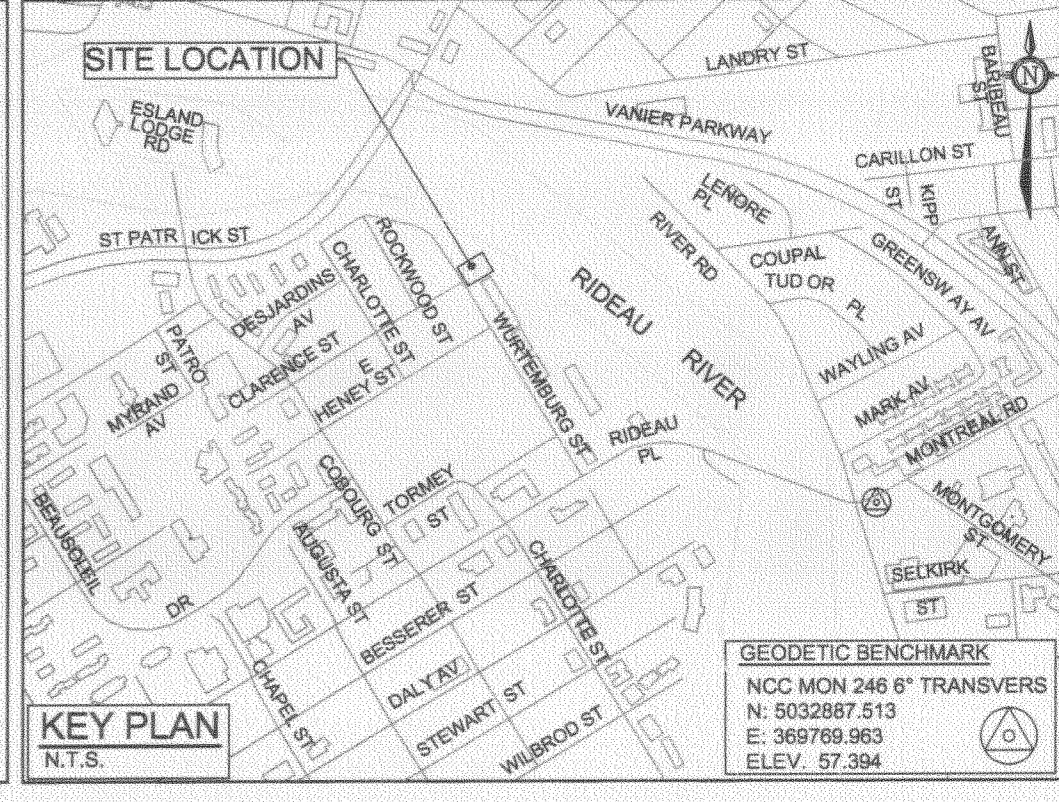
STATION	SURFACE ELEVATION	TOP OF WM ELEVATION	DESCRIPTION
0+000.0	87.90	66.50	CONNECT TO EXISTING CURB FACE
0+015.0	87.96	66.48	
0+024.2	68.01	66.81	HYDRO DUCT
0+044.9	68.06	66.86	WM BEND 45°
0+055.8	68.08	66.86	
0+072.0	68.08	66.86	STANDPOST R
0+077.0	68.08	66.86	BLDG FACE

* EXACT DEPTH OF EXISTING WATERMAIN TO BE DETERMINED AT TIME OF EXCAVATION. CONTRACTOR TO CONFIRM TOP OF WATERMAIN. PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W23 WHERE COVER IS LESS THAN 2.4m

ROOF DRAIN TABLE

AREA ID	ZURN SPECIFICATION	NOTCHES	ZURN ROOF DRAIN CONTROL PARAMETERS	
			5-YEAR EVENT	100-YEAR EVENT
			HEADQ (Q20)	Q200
R-01	ZCF121-WX3-Z-105-10-77	1	0.112	0.83
R-02	ZCF121-WX2-Z-105-10-77	1	0.115	1.29
R-03	ZCF121-WX4-Z-105-10-77	1	0.055	0.20
R-04	ZCF121-WX4-Z-105-10-77	1	0.039	0.14
TOTAL			2.47	3.29

ROOF AREAS R-01 TO R-04 WILL HAVE CONTROLLED ROOF DRAINS WHICH WILL DIRECT RUNOFF TO THE OUTLET VIA THE BUILDING'S INTERNAL PIPES.



NORTH

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 ALL ADVANCES 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 ARCHITECTS AND LANDSCAPE ARCHITECTS DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO STORMWATER MANAGEMENT REPORT (R-2011-034) 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 SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/O ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TBM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- REFER TO GEOTECHNICAL REPORT No. P06000-1, DATED xxx, 2011, PREPARED BY PATERSON GROUP 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.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- ALL PRIVATE APPROACHES MUST BE CONSTRUCTED AS PER CITY SPECIFICATION 8C13.

SEWER NOTES:

- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (800x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200B)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SEWER TRENCH - BEDDING (GRANULAR A) COVER (GRANULAR A) OR GRANULAR B TYPE I WITH MAXIMUM PARTICLE SIZE=25mm)		OPSD
- STORM SEWER: PVC DR 35
- SANITARY SEWER: PVC DR 35
- CATCHBASIN LEAD: PVC DR 35
- INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 1.5m COVER WITH 50mm/100mm H=40 INSULATION. 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-SEAL, PFK, POSITIVE SEAL AND CURSEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSIS 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.
- STORM MANHOLES AND CBMS ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED.
- CONTRACTOR TO TELEVISION (CCTV) ALL PROPOSED SEWERS.
- FULL PORT BACKWATER VALVES ARE REQUIRED ON THE SANITARY SERVICES, INSTALLED AS PER THE MANUFACTURERS RECOMMENDATIONS AND A BACKWATER VALVE IS REQUIRED ON THE STORM SERVICES FOUNDATION DRAINS FOR EACH BUILDING; INSTALLED AS PER STD. DWG S14.
- REINSTATE ALL EXISTING PAVEMENT CURB AND BOULEVARDS.
- ALL EXISTING SANITARY AND STORM SERVICES TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA.

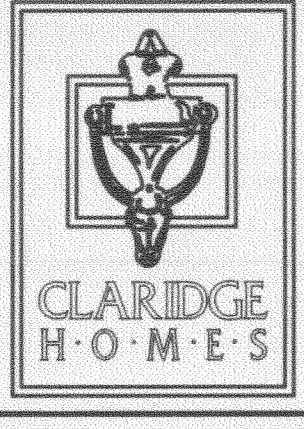
WATERMAIN NOTES:

- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W27	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN (150mm)	PVC DR 18	
WATERMAIN (150mm)	TYPE K COPPER	
THERMAL INSULATED AT OPEN STRUCTURE	W23	CITY OF OTTAWA
19mm WATER SERVICE CONNECTIONS	W26	CITY OF OTTAWA
50mm WATER SERVICE CONNECTIONS	W33	CITY OF OTTAWA
WATER SERVICE INSTALLATION AT SEWER CROSSING	W36	CITY OF OTTAWA
- SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFICIALS.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD. DWG W22.
- PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
- WATER DEMAND = TBD
- ALL EXISTING WATER SERVICES TO BE BLANKED AT MAIN.

NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

CLARIDGE HOMES
CLARIDGE HOMES SUITE 2001,
210 GLADSTONE AVENUE,
OTTAWA, ONTARIO
K2P 0Y6.



NOTE: CONTRACTOR TO CONFIRM ELEVATIONS OF INFRASTRUCTURE IN THE STREET PRIOR TO EXTENDING SERVICES INTO THE SITE AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.

No.	REVISION	mm/dd/yy	BY
01	ISSUED IN SUPPORT OF ZONING APPLICATION	02/22/2016	GJM

SCALE: 1:100

DESIGN: JAG
CHECKED: GJM
DRAWN: MAY
CHECKED: JAG
APPROVED: GJM

FOR REVIEW ONLY

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LOCATION: CITY OF OTTAWA, 101 WURTEMBERG STREET

DRAWING NAME: GENERAL PLAN AND SERVICES

PROJECT No: 111013-00
REV: REV 001
DRAWING No: 111013-GP