

—	PROPOSED PROPERTY LINE	VC	EXISTING WATERMAIN VALVE CHAMBER
—	PROPOSED WATERMAIN	VB	EXISTING WATERMAIN SHUT-OFF VALVE BOX
—	PROPOSED VALVE BOX	—	EXISTING WATERMAIN
—	PROPOSED STORM MANHOLE	VB	EXISTING HYDRANT C/W LEAD & SHUT OFF VALVE BOX
—	PROPOSED SANITARY SEWER	—	EXISTING GAS VALVE
—	PROPOSED FOUNDATION DRAIN	—	EXISTING GAS MAIN
—	UNDERGROUND PARKING LIMITS	—	EXISTING ABANDONED GAS MAIN
—	PROPOSED STORM SEWER	—	EXISTING BELL CONDUIT
—	PROPOSED STORM TRENCH DRAIN	—	EXISTING OVER HEAD WIRE
—	PROPOSED BACKWATER VALVE	—	EXISTING HYDRO UTILITY POLE
—	PROPOSED LEGAL ADJACENT LINE	—	EXISTING GUY WIRE
—	EXISTING STANDARD IRON BAR / CONTROL POINT	—	EXISTING TRAFFIC MANHOLE
—	EXISTING FLOW DIRECTION OF SEWERS	—	EXISTING JOINT USE STREET LIGHT
—	EXISTING SANITARY MANHOLE & SEWER	—	EXISTING STREET LIGHT
—	EXISTING STORM MANHOLE & SEWER	—	EXISTING TRAFFIC HAND HOLE
—	EXISTING CATCH BASIN	—	EXISTING TRAFFIC SIGN
—	EXISTING BUILDING ENVELOPE	—	EXISTING DITCH INLET CATCH BASIN
—		—	EXISTING HYDRANT
—		—	PROPOSED HYDRANT
—		—	PROPOSED SIAMESE CONNECTION

- 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. P85281-1, DATED JULY 16TH, 2020), PREPARED BY PATerson, 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 ARCHITECTS AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
  - REFER TO STORMWATER MANAGEMENT REPORT 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, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

- SEWER NOTES:**
- SPECIFICATIONS:
 

ITEM	SPEC. No.	REFERENCE
CATCH BASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200x)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SEWER TRENCH - BEDDING (GRANULAR A)	S6, S7, W17	CITY OF OTTAWA / OPSD
COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)		
STORM SEWER	PVC DR 35	CITY OF OTTAWA
SANITARY SEWER	PVC DR 35	CITY OF OTTAWA
CATCH BASIN LEAD	PVC DR 35	CITY OF OTTAWA
SEWER SERVICE CONNECTION - RIGID PIPE	S11	CITY OF OTTAWA
SEWER SERVICE ABANDONMENT	S11.4	CITY OF OTTAWA
  - INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mmx1200mm 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 98% 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 KORAN-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 OPSD 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 CBMHs ARE TO HAVE 300mm SUMP UNLESS OTHERWISE INDICATED.
  - CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS, 200mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
  - FULL PORT BACKWATER VALVES ARE REQUIRED ON THE SANITARY SERVICES, INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND A BACKWATER VALVE IS REQUIRED ON THE STORM SERVICES / FOUNDATION DRAINS FOR EACH BUILDING, INSTALLED AS PER STD. DWG514
  - REINSTATE ALL EXISTING PAVEMENT, CURB AND BOULEVARDS AS PER CITY OF OTTAWA R10.
  - ALL EXISTING SANITARY AND STORM SERVICES ARE TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S PORTER OPERATION.
  - MONITORING TEST PORTS FOR BUILDING SERVICES TO BE INSTALLED IN PARKING GARAGE.

- WATERMAIN NOTES:**
- SPECIFICATIONS:
 

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W22	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W24	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W25	CITY OF OTTAWA
CONNECTION DETAIL FROM EXISTING TO NEW WM	W25.1	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25.2	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
THERMAL INSULATED AT OPEN STRUCTURE	W23	CITY OF OTTAWA
WATER SERVICE INSTALLATION AT SEWER	W38	CITY OF OTTAWA
  - CROSSING 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 OFFICIALS.
  - WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD. DWG22.
  - PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS WHEN WATERMAIN IS BELOW AND MINIMUM 0.25m CLEARANCE WHEN WATERMAIN IS ABOVE.
  - WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
  - ALL EXISTING WATER SERVICES TO BE BLANKED AT MAIN BY CITY FORCES. EXCAVATION AND REINSTATEMENT BY CONTRACTOR.
  - WATERMANS TO BE INTERCONNECTED FOR REDUNDANCY.

**PIPE CROSSING TABLE**

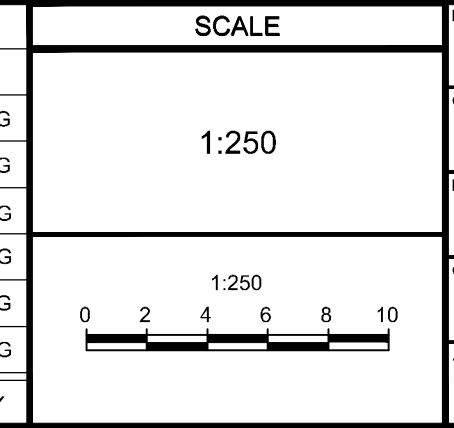
CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE
○	EX. WATERMAIN 150mm DA	PROP. SAN 375mm DA	0.50m
○	EX. WATERMAIN 150mm DA	EX. WATERMAIN 150mm DA	0.65m
○	EX. WATERMAIN 150mm DA	EX. WATERMAIN 150mm DA	0.25m
○	EX. WATERMAIN 150mm DA	PROP. SAN 375mm DA	0.25m
○	EX. SAN 150mm DA	PROP. SAN 375mm DA	1.30m
○	EX. SAN 150mm DA	PROP. WATER SERV 150mm DA	0.28m
○	EX. SAN 150mm DA	PROP. WATER SERV 150mm DA	0.29m
○	EX. SAN 150mm DA	PROP. WATER SERV 150mm DA	1.05m
○	EX. SAN 150mm DA	PROP. WATER SERV 150mm DA	1.05m

**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 201,  
210 GLADSTONE AVENUE,  
OTTAWA, ONTARIO  
K2P 0Y6.



No.	REVISION	DATE	BY
6.	ISSUED FOR CITY COMMENTS	JUL07/21	JAG
4.	ISSUED FOR COORDINATION	FEB17/21	JAG
3.	SUBMITTED WITH ZONING/SITE PLAN APPLICATIONS	JAN25/21	JAG
2.	RE-ISSUED FOR COORDINATION	JAN 22/21	JAG
1.	ISSUED FOR COORDINATION	JAN15/21	JAG



FOR REVIEW ONLY	DATE	BY
DESIGN	JAG	
CHECKED	GJM	
DRAWN	CJF	
CHECKED	JAG	
APPROVED	GJM	



LOCATION CITY OF OTTAWA 1200 MARITIME WAY	PROJECT No. 120144
DRAWING NAME GENERAL PLAN OF SERVICES	REV # 6
Telephone (613) 254-9543 Facsimile (613) 254-5867 Website www.novatech-eng.com	DRAWING No. 120144 - GP