

**LEGEND**

---	SITE BOUNDARY	- - - - -	EXISTING ADJACENT PROPERTY LINE
---	PROPOSED STORM SEWER AND DIRECTION OF FLOW	---	EXISTING STORM MANHOLE AND SEWER
---	PROPOSED SANITARY SEWER AND DIRECTION OF FLOW	---	EXISTING SANITARY MANHOLE AND SEWER
---	PROPOSED AREA DRAIN	---	EXISTING WATERMAIN
---	PROPOSED VALVE AND VALVE BOX	---	EXISTING VALVE AND VALVE BOX
---	PROPOSED WATER METER LOCATION	---	EXISTING FIRE HYDRANT
---	PROPOSED REMOTE METER LOCATION	---	EXISTING CATCHBASIN
---	PROPOSED SANITARY / STORM MONITORING TEST PORT	---	EXISTING TOP OF GRADE
---	PROPOSED TRENCH DRAIN	---	EXISTING UTILITY POLE CIV GUY WIRES
---	PROPOSED SIAMISE CONNECTION	---	EXISTING ROGERS NETWORK ACCESS POINT
---	PROPOSED AREA DRAIN	---	EXISTING BELL GRADE LEVEL BOX
---	PROPOSED LIMITS OF UNDERGROUND PARKING	---	EXISTING UNDERGROUND CABLE (BELL, ROGERS, GAS, STREETLIGHT)
---	PROPOSED BARRIER CURB	---	EXISTING UNDERGROUND MANHOLE
---	PROPOSED DEPRESSIONED CURB	---	EXISTING COMMUNITY MAIL BOX
---	PROPOSED DEPRESSIONED MOUNTABLE CURB (50mm)	---	EXISTING HYDRO MANHOLE
---	PROPOSED UNDERGROUND HYDRO	---	PROPOSED HYDRO MANHOLE
---	PROPOSED RETAINING WALL AND ACOUSTIC FENCE	---	EXISTING LIMITS OF CONCRETE
---	PROPOSED ACOUSTIC FENCE	---	PROPOSED TREES / SHRUBS
---	PROPOSED LIMITS OF CONCRETE	---	
---	PROPOSED METAL GRATE / FOOTBRIDGE	---	

- 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.
  - REMOVE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ADJACENT 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 ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
  - REFER TO SERVISING DESIGN BRIEF 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 GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.
  - REFER TO GEOTECHNICAL REPORT (PG5383-1, DATED AUGUST 11, 2020) 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 AND SPECIFICATIONS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
  - ALL PRIVATE APPROACHES MUST BE CONSTRUCTED AS PER CITY SPECIFICATION SC13.

**SEWER NOTES:**

1) SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
SEWER SERVICE CONNECTION - RIGID PIPE	S11, S11.1	CITY OF OTTAWA
SEWER SERVICE ABANDONMENT	S11.4	CITY OF OTTAWA
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)	S6, S7, W17	CITY OF OTTAWA / OPSD
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
WASTEWATER SAMPLING/INSPECTION CHAMBER	S18.1	CITY OF OTTAWA

2) INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 2.0m COVER FROM STORM AND 2.5m FOR SANITARY SEWER WITH 50mm X 1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.

3) SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.

4) 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.

5) 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.

6) THE OWNER SHALL REQUIRE THAT THE SITE SERVISING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 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.

7) 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.

8) CONTRACTOR TO TELETYPE (CCTV) ALL PROPOSED SEWERS/LATERALS.

9) REINSTATE ALL EXISTING PAVEMENT, CURBS AND BOULEVARDS AS PER CITY OF OTTAWA R10.

10) ALL EXISTING SANITARY AND STORM SERVICES ARE TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER OPERATION.

11) MONITORING TEST PORTS FOR BUILDING SERVICES TO BE INSTALLED IN PARKING GARAGE.

12) ANY SERVICES THAT REQUIRE ENTRY TO THE BUILDING THROUGH A FOUNDATION WALL ARE TO BE SLEEVED AND SEALED TO PREVENT INFILTRATION.

**WATERMAIN NOTES:**

1) SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W21	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
CONNECTION DETAIL FROM EXISTING TO NEW W/M	W25	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25	CITY OF OTTAWA
WATERMAIN (150mm)	PVC DR 18	CITY OF OTTAWA
WATERMAIN (50mm)	TYPE 'K' COPPER	CITY OF OTTAWA
THERMAL INSULATED AT OPEN STRUCTURE	W38	CITY OF OTTAWA
WATER SERVICE INSTALLATION AT SEWER CROSSING	W38	CITY OF OTTAWA

2) SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD 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.

3) WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD. DWG W21, W22 AND W23.

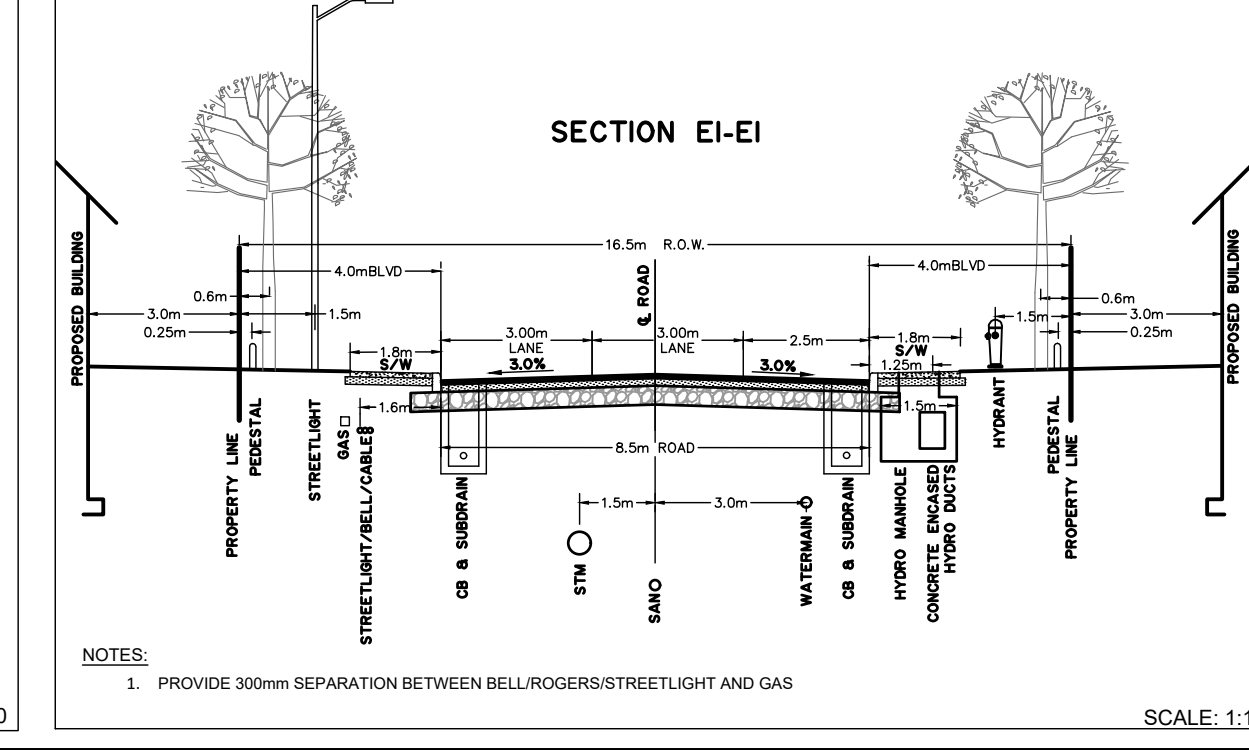
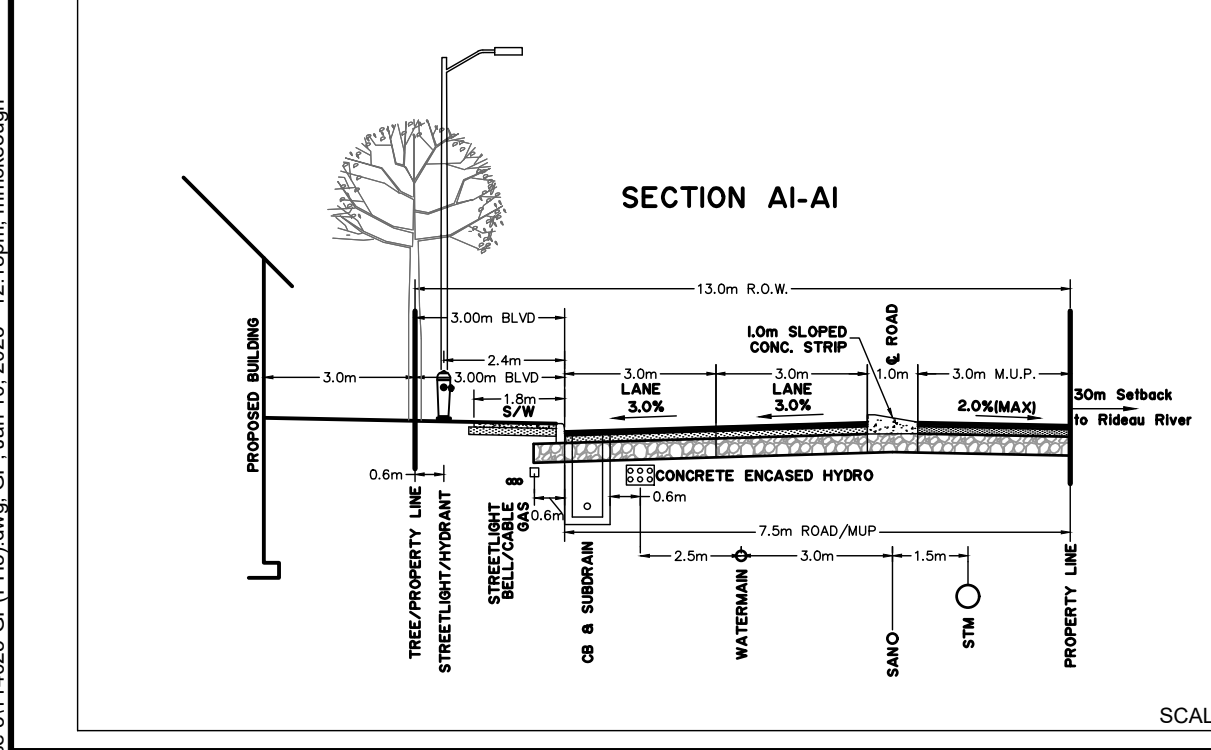
4) PROVIDE MINIMUM 0.50m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS WHEN WATERMANS IS BELOW AND MINIMUM 0.25m CLEARANCE WHEN WATERMAIN IS ABOVE.

5) WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

6) ALL EXISTING WATER SERVICES TO BE BLANKED AT MAIN BY CITY FORCES. EXCAVATION AND REINSTATEMENT BY CONTRACTOR.

7) VALVES TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA (COO). COA FORCES TO COMPLETE WATERMAIN CONNECTIONS. EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.

8) WATERMANS TO BE INTERCONNECTED FOR REDUNDANCY.



**PAVEMENT STRUCTURE DETAILS:**

**LOCAL ROADWAYS**

- 40mm Superpave 12.5mm PG 58-34
- 50mm Superpave 19.0mm PG 58-34
- 150mm GRANULAR 'A' BASE
- 375mm GRANULAR 'B' TYPE II SUBBASE
- OPSS SELECT SUBGRADE MATERIAL (SSM)

**COLLECTOR ROADWAYS / BUS LOOP**

- 50mm Superpave 12.5mm PG58-34
- 60mm Superpave 19.0mm PG 58-34
- 150mm GRANULAR 'A' BASE
- 450mm GRANULAR 'B' TYPE II SUBBASE
- OPSS SELECT SUBGRADE MATERIAL (SSM)

**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.

**PRELIMINARY NOT FOR CONSTRUCTION**

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
8.	REVISED AS PER CITY OF OTTAWA COMMENTS	JUN 3/22	SAZ	8.	REVISED AS PER CITY OF OTTAWA COMMENTS	JUN 3/22	SAZ
7.	ISSUED FOR COORDINATION	MAY 24/22	SAZ	7.	ISSUED FOR COORDINATION	MAY 24/22	SAZ
6.	ISSUED FOR COORDINATION	MAR 4/22	JAG	6.	ISSUED FOR COORDINATION	MAR 4/22	JAG
5.	ISSUED WITH SITE PLAN APPLICATION	JUL 22/21	JAG	5.	ISSUED WITH SITE PLAN APPLICATION	JUL 22/21	JAG
4.	ISSUED FOR INFORMATION	MAR 19/21	JAG	4.	ISSUED FOR INFORMATION	MAR 19/21	JAG
3.	RE-ISSUED FOR COORDINATION	FEB 17/21	JAG	3.	RE-ISSUED FOR COORDINATION	FEB 17/21	JAG
2.	ISSUED FOR COORDINATION	DEC 4/20	JAG	2.	ISSUED FOR COORDINATION	DEC 4/20	JAG
1.	ISSUED FOR DISCUSSION PURPOSES	DEC 2/20	JAG	1.	ISSUED FOR DISCUSSION PURPOSES	DEC 2/20	JAG

**FOR REVIEW ONLY**

SCALE: 1:250

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SAZ  
MSP  
MTM  
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MSP

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**CITY OF OTTAWA**  
375 DESCHÂTELETS AVENUE  
GREYSTONE VILLAGE PHASE 3  
DRAWING NAME: GENERAL PLAN OF SERVICING  
PROJECT No.: 114025-PH3  
REV #12  
DRAWING No.: 114025-GP(PH3)

#17640