

SEWER AND WATERMAIN CROSSING TABLE STM INV SAN INV WTR BTM WTR TOP CROSSING STM OBV SAN OBV NOTES FLECT WATER OVER 69.10 70.10 70.25 DRM (AS PER W25 69.11 70.10 STORM (AS PER W25.2 69.12 69.72 70.10 67.52 67.77 69.15 69.15 67.53 67.78 67.54 69.15 67.79 67.34 67.59 69.55 69.85 BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS

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Legend

PROPOSED WATERMAIN PROPOSED VALVE AND VALVE BOX PROPOSED FIRE HYDRANT

PROPOSED SANITARY SEWER PROPOSED STORM SEWER PROPOSED CATCHBASIN

PROPOSED FIRE DEPARTMENT CONNECTION EXISTING WATERMAIN

EXISTING VALVE AND VALVE BOX EXISTING FIRE HYDRANT EXISTING SANITARY SEWER

EXISTING STORM SEWER

EXISTING CATCHBASIN PROPOSED DEPRESSED CURB LOCATIONS PROPOSED BARRIER CURB PROPOSED RETAINING WALL THERMAL INSULATION ON STORM SEWER WHERE COVER

IS LESS THAN 1.5m. THERMAL INSULATION ON WATERMAIN

WHERE COVER IS LESS THAN 2.4m AS PER W22. SC I PROPOSED SCUPPER LOCATIONS

PROPOSED ROOF DRAINS

ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA DETAIL R10. ASPHALT MIX LEVEL B PG58-34 40mm SUPERPAVE 12.5mm SURFACE COURSE 50mm SUPERPAVE 19.0mm BASE COURSE

FOR TREE REMOVALS AND PROTECTION SEE LANDSCAPE PLAN L.1 DATED 03/05/2024 PREPARED BY JAMES B. LENNOX AND ASSOCIATES INC.

DT 24.02.29 REVISED PER CITY COMMENTS MJS REVISED PER CITY COMMENTS DT 24.01.10 PM 23.08.30 SITE CONTROL PM 23.04.25 23.04.04 ISSUED FOR COORDINATION Revision Appd. YY.MM.DD

TM 23.04.04

PLAN # 19081

Dwn. Chkd. Dsgn.

CUMMINGS

File Name: 160401787

Permit-Seal

Client/Project

PROJECT1 STUDIO

1184 CUMMINGS AVENUE

GLOUCESTER, ON

SITE SERVICING PLAN

Project No. 160401787 Sheet Drawing No. Revision

CUMMINGS TVS CONNECTIONS TO EXISTING 300mmØ WATERMAIN. EX. 600mmØ CONC. STM CONNECTION BY CITY FORCES, **AVENUE** EX. INV=68.91 **CUMMINGS AVENUE** EXCAVATION, BACKFILL, AND REINSTATEMENT BY CONTRACTOR. X. SPRINGLINE=69.21 ROAD CUT AS PER CITY OF ONNECTION TOP OF MAIN=±69.35 W INV=69.51 Ottawa standard detail R10. APPROX. ROAD CUT=±885m² 'VS CONNECTIONS TO EXISTING 300mmØ WATERMAIN. CONNECTION BY CITY FORCES, EXCAVATION, BACKFILL, AND REINSTATEMENT BY APPROXIMATE LOCATION OF EX. SERVICE LATERALS. TO BE CONFIRMED PRIOR TO CONSTRUCTION, STORM AND CONTRACTOR. VS CONNECTIONS TO EXISTING 300mmØ WATERMAIN. CONNECTION BY CONFIRMED PRIOR TO CONSTRUCTION. STORM AND SANITARY SANITARY SERVICE LATERALS TO BE ABANDONED PER \$11.4. 14.0m-150mmØ PVC DR 18 WATER SERVICE TO BLDG. CITY FORCES, EXCAVATION, BACKFILL, AND REINSTATEMENT BY SERVICE LATERALS TO BE ABANDONED PER \$11.4. EXISTING EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN (TYP.). T/W @ BLDG=69.50 CONTRACTOR WATER SERVICE TO BE BLANKED AT THE MAIN (TYP.). ALL AREAS ALL AREAS TO BE REINSTATED TO EQUAL OR BETTER THAN CONNECTION TOP OF MAIN=±69.3 14.0m-150mmØ PVC DR 18 WATER SERVICE TO BLDG. TO BE REINSTATED TO EQUAL OR BETTER THAN ORIGINAL ORIGINAL CONDITION. SUBJECT TO CITY APPROVAL. T/W @ BLDG=69.50 NEW 300mmØ VALVE AND VALVE BOX. <u>CONDITION. SUBJECT TO CITY APPROVAL.</u> CONNECTION TOP OF MAIN=±69.30 EX. $T/WM = \pm 69.30$ STORM AND SANITARY SEWERS SEWER TRENCH SHALL CONSIST OF CLASS 'B' BEDDING PER CITY OF OTTAWA STANDARDS S6 AND S7. COMPACTION SHALL BE A MINIMUM OF 98% STANDARD 1. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE ONTARIO OCCUPATIONAL HEALTH AND . THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. PROCTOR DENSITY. SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION &

T/G=71.30

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FFE=71.80

P1 PARKING=68.45

USF=67.60±

OF FOUNDATION (TOF) ELEVATIONS.

STORAGE AVAILABLE = 66.0m³

CISTERN VOLUME = 30.0m³

CONTROLLED ROOF RELEASE RATE = 20.3 L/sec CISTERN MAX RELEASE RATE = 8.3 L/sec

2.0m-250mmØ PVC SDR 28 SAN SERVICE @ 6.0%. c/w FULL PORT

BACKWATER VALVE AS PER \$14.1. PARKADE FLOOR DRAINS TO

BE PUMPED TO BLDG. SERVICE. BUILDING SERVICE TO BE

SLEEVED THROUGH FOUNDATION WALL.

ORDINATE WITH UTILITY CO

GAS LINE CROSSING,

SE INV=69.41

2. FOR CONSTRUCTION DETAILS NOT SHOWN ON PLANS, REFERENCE SHALL BE MADE TO THE ONTARIO PROVINCIAL STANDARDS DRAWINGS AND CITY OF

EXTENT OF PARKADE

FOUNDATION

C/W FULL PORT BACKWATER VALVE

CONNECTED DIRECTLY TO SERVICE

FORMCEPTOR EF04 (1200

AND MONITOR MH

V INV=69.64

AND NOT ROUTED THROUGH CISTERN. CONNECTION =69.65

AS PER \$14. FOR CISTERN, FOUNDATION DRAIN AND INTERNAL STORM SEWER, SERVICE

TO BE SLEEVED THROUGH FOUNDATION WALL. ROOF LEAD TO BE

- 3. SERVICES TO BUILDINGS TO BE TERMINATED 1.0m FROM THE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- 4. THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL SANITARY AND STORM SEWERS, INCLUDING PICTORIAL REPORT, ONE (1) CD COPY AND TWO (2) VIDEO TAPES IN A FORMAT SATISFACTORY TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTION. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT.
- 5. LASER ALIGNMENT CONTROL TO BE UTILIZED ON ALL SEWER INSTALLATIONS.
- 6. FROST PROTECTION PER CITY OF OTTAWA STANDARD DRAWING W22 WHERE THERE IS LESS THAN 2.1m OF COVER ABOVE THE SEWER SERVICES.
- 7. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. A COPY OF THE INSPECTION REPORT SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW.
- 8. STORM SERVICE CONNECTION AS PER CITY STD DWG \$11; SANITARY SERVICE CONNECTION AS PER CITY STD DWG \$11. SERVICES TO CONNECT TO THE OBVERT OF THE MAIN UNLESS OTHERWISE NOTED.
- 9. CONTRACTOR TO VERIFY EXISTING SEWERS AND INVERTS, AND REPORT ANY DISCREPANCIES TO SITE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
- 10. STORM AND SANITARY MANHOLES SHALL BE 1200mm DIAMETER IN ACCORDANCE WITH OPSD-701.01 (UNLESS OTHERWISE NOTED) c/w FRAME AND COVER AS PER CITY OF OTTAWA \$24, \$24.1, AND \$25. STORM MANHOLES SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS. SANITARY MANHOLES SHALL NOT HAVE SUMPS.

- 2. WATER SERVICE TO BE INSTALLED 1.0m OFF BUILDING FACE. STAND POST TO BE INSTALLED AT PROPERTY LINE AS SHOWN ON
- 3. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL TO BE SPECIFIED BY PROJECT GEOTECHNICAL CONSULTANT.
- 4. SERVICE CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 2400mm FROM ANY CATCHBASIN, MANHOLE, OR OBJECT THAT MAY CONTRIBUTE TO FREEZING. THERMAL INSULATION SHALL BE INSTALLED ON ALL PROPOSED STRUCTURES AND WATER SERVICES ON THE W/M STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED.(AS PER CITY OF OTTAWA W22 & W23)

5. CATHODIC PROTECTION TO BE SUPPLIED ON METALLIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.

6. ALL WATERMAIN BENDS, JOINTS, TEES AND PLUGS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH CITY OF OTTAWA

7. WATERMAIN TO HAVE MIN. 2.4m COVER. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN

- ACCORDANCE WITH CITY STANDARD W22. 8. WATERMAINS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES IN ACCORDANCE WITH LOCAL PROVINCIAL GUIDELINES AND THE APPLICABLE BUILDING AND PLUMBING CODE. WHERE HORIZONTAL SEPARATIONS CANNOT BE ACHIEVED, APPROVAL FROM THE ENGINEER MUST BE OBTAINED AND A MINIMUM 500mm VERTICAL SEPARATION MUST BE
- 9. ALL WATERMAINS SHALL BE BACTERIALOGICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES. ALL CHLORINATED WATER TO BE DISCHARGED AND PRETREATED TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE. ALL DISCHARGED WATER MUST BE CONTROLLED AND TREATED SO AS NOT TO ADVERSELY EFFECT THE ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MUNICIPAL AND/OR PROVINCIAL REQUIREMENTS ARE FOLLOWED.

2. ALL WORK AND MATERIALS TO CONFORM WITH CURRENT MINISTRY OF THE ENVIRONMENT & ENERGY OF ONTARIO, CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.

T/G=71.56

FIRE DEPARTMENT

CONNECTION

ENTRANCE

SAN MONITOR MH

SAN SERVICE @ 5.0%.

W. INV=68.28

3. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND COORDINATION WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.

4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS

- RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
- 5. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
- 7. ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION THE ENGINEER AND THE CITY, PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY STANDARD R10, OPSD 509.010 AND OPSS 310.
- 8. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON DRAWING GP-1.

- 9. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING, GRADING, AND SITE ELECTRICAL DWGS.
- 10. EXISTING STORM AND SANITARY SERVICE LATERALS TO BE ABANDONED PER \$11.4 .EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN (TYP.) 11. TOPOGRAPHIC SURVEY SUPPLIED BY STANTEC GEOMATICS LTD. DATED MARCH 16, 2023.
- BENCHMARK 1: TOP OF SPINDLE LOCATED EAST OF CUMMINGS AVE. AND NORTH OF THE PROPOSED DEVELOPMENT WITH AN ELEVATION OF 72.43.

ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA ELEVATION=95.230.

12. SITE PLAN PREPARED BY PROJECT1 STUDIO DATED MARCH 31, 2023 DRAWING No. SP-01.

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COORDINATE WITH UTILITY CO

REMOVE AND REPLACE FULL

HEIGHT CURB AS PER SC1.1 AS

SERVICE TO NEW HYDRANT.

AS PER CITY DETAIL W25.2

DEFLECT WATER OVER STORM

REQUIRED FOR UTILITY

- 13. GEOTECHNICAL INVESTIGATION PG6604-1 PREPARED BY PATERSON GROUP DATED MARCH 27, 2023. GEOTECHNICAL INFORMATION PRESENTED ON THESE DRAWINGS MAY BE INTERPOLATED FROM THE ORIGINAL REPORT. REFER TO ORIGINAL GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS AND TO VERIFY ASSUMPTIONS MADE HERE.
- 14. FINAL METER LOCATIONS TO BE CONFIRMED BY MECHANICAL CONSULTANT.
- 15. EXISTING AS-RECORDED SEWER AND WATER INFORMATION HAS BE DERIVED FROM AS-BUILT INFORMATION PROVIDED BY THE CITY OF OTTAWA.
- 16. CONTRACTOR TO VERIFY AS-RECORDED INFORMATION AND IMMEDIATELY REPORT ANY DISCREPANCIES OR CONFLICTS TO CIVIL ENGINEER PRIOR
- 17. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR THEIR PROTECTION AND THE IMPLEMENTATION OF ANY NECESSARY PROCEDURES CALLED FOR IN THE APPROPRIATE STANDARD AND REGULATIONS.
- 18. SERVICE SIZES AND ELEVATIONS TO BE CONFIRMED BY MECHANICAL ENGINEER.

TO PROCEEDING WITH CONSTRUCTION.

- 19. INTERNAL PLUMBING AND SUMP PUMPS TO BE DESIGNED BY THE MECHANICAL CONSULTANT.
- 20. UNDERGROUND PARKING STRUCTURE FLOOR DRAINS TO BE CONNECTED TO SANITARY SEWER SERVICE.

ORIGINAL SHEET - ARCH D