GENERAL NOTES AND SPECIFICATIONS

1. ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH OPS AND CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS AND OPSD SUPPLEMENT. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
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. SERVICE AND UTILITY LOCATIONS ARE APPROXIMATE, CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REINSTATEMENT.
5. ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE ENGINEER & THE CITY. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSD 509.010 AND OPSS 310.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
7. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH WILL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION FOR RECEIVING STORM SEWERS OR DRAINAGE DURING CONSTRUCTION ACTIVITIES. THIS PLAN SHALL INCLUDE BUT NOT LIMITED TO FILTER CLOTH ON CATCH BASINS, STRAW BALE CHECK DAMS AND SEDIMENT CONTROLS AROUND ALL DISTURBED AREAS, DEWATERING SHALL BE PUMPED INTO SEDIMENT TRAPS.
8. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO ENGINEER.
9. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CONTRACT ADMINISTRATOR AND DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
10. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT IT'S RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON DRAWING GP-1.
11. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT.
12. HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE TO BE NOTIFIED IF DEEPLY BURRIED ARCHEOLOGICAL REMAINS ARE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES.
13. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING, GRADING, AND SITE ELECTRICAL DWGS.
14. SITE SIGNAGE TO BE INSTALLED AS PER ARCHITECTURAL SITE PLAN.

WATER SUPPLY SERVICING

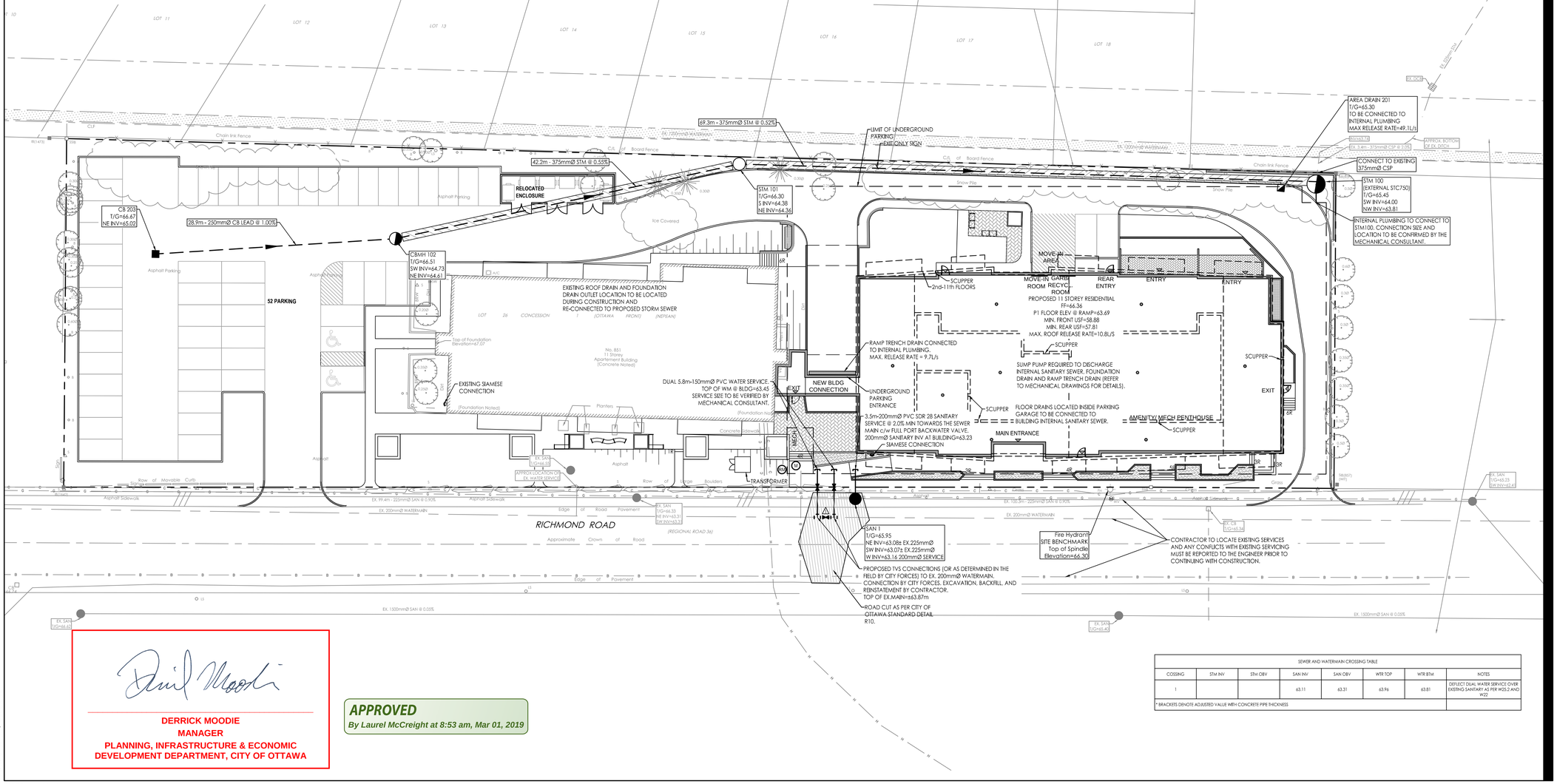
1. THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION & DISINFECTION BY CITY PERSONNEL.
2. WATER SERVICE TO BE INSTALLED 1.0M OFF BUILDING FACE. STAND POST TO BE INSTALLED AT PROPERTY LINE AS SHOWN ON DRAWING.
3. WATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W24.
4. 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.
5. 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 CB'S ON THE W/M STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED.(AS PER CITY OF OTTAWA W22 & W23)
6. CATHODIC PROTECTION TO BE SUPPLIED ON METALIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.
7. ALL WATERMAIN BENDS, JOINTS, TEES AND PLUGS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
8. 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.
9. 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 MAINTAINED.
10. 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.
11. SERVICE CONNECTION TO EXISTING WATERMAIN SHALL BE IN ACCORDANCE WITH CITY STANDARDS W25.1 AND W50. CITY FORCES TO SUPPLY AND INSTALL THE SERVICE LATERAL UP TO AND INCLUDING THE CURB STOP. CONTRACTOR TO SUPPLY 6.0m OF WATERMAIN BEYOND CURB STOP FOR CITY FORCES TO INSTALL, CONTRACTOR TO INSTALL, SWAB, AND HYDROSTATIC TEST PRIVATE WATERMAIN, CITY FORCES TO COMPLETE FLUSHING, DISINFECTION, AND BACTI TESTING OF PRIVATE WATERMAIN.

STORM AND SANITARY SEWERS

1. STORM AND SANITARY SEWERS 375mm DIA. OR SMALLER SHALL BE PVC SDR35. SANITARY SEWERS LARGER THAN 375mm SHALL BE CONCRETE CSA A 257.2 CLASS 100-D AS PER OPSD 807.010.
2. ALL STORM AND SANITARY SEWER BEDDING SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S6 AND S7, CLASS "B" BEDDING, UNLESS OTHERWISE NOTED. BEDDING SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
3. 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 S24 AND S25. ALL STORM MANHOLES WITH SEWERS 900mm DIA SEWERS AND OVER IN SIZE SHALL BE BENCHED. ALL OTHERS SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS.
4. ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, TO BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
5. FOR STORM SEWER INSTALLATION (EXCLUDING CB LEADS) THE MINIMUM DEPTH OF COVER OVER THE CROWN OF THE SEWER IS 2.0m. FOR SANITARY SEWERS THE MINIMUM DEPTH OF COVER IS 2.5m OVER PIPE OBVERT.
6. ALL STORM AND SANITARY SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
7. STORM AND SANITARY SERVICE LATERALS TO BE SDR 28 INSTALLED AT MIN. 2.0% SLOPE AS PER CITY STD S11.1 SINGLE STORM SERVICES TO BE 150mmØ. SINGLE SANITARY SERVICES TO BE 200mmØ. SERVICES TO BE INSTALLED 1.0m OFF BUILDING FACE.
8. CATCH BASINS SHALL BE IN ACCORDANCE WITH CITY STANDARDS c/w FRAME AND GRATE AS PER S19.1 FOR REAR YARDS, AND S2 FOR STREET CB'S. PROVIDE 150mm ADJUSTED SPACERS. ALL CATCH BASINS SHALL HAVE SUMPS (600mm DEEP). STREET CATCH BASIN LEADS SHALL BE 200mm DIA.(MIN) PVC SDR 35 AT 1.0% GRADE WHERE NOT OTHERWISE SHOWN ON PLAN. CATCH BASINS WILL BE INSTALLED WITH INLET CONTROL DEVICES (ICD) AS PER ICD SCHEDULE ON STORM DRAINAGE PLAN.
9. STREET CATCH BASINS TO BE INSTALLED c/w 150mmØ SUBDRAINS 3m LONG IN FOUR ORTHOGONAL DIRECTIONS OR LONGITUDINALLY WHEN PLACED ALONG A CURB, AND AT AN ELEVATION OF 300mm BELOW SUBGRADE LEVEL.
10. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300 mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
11. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW.

100-YEAR ROOF DRAIN SCHEDULE

AREA ID	AREA (ha)	HEAD (m)	RELEASE RATE (L/s)	REQUIRED VOLUME (m3)	AVAILABLE VOLUME (m3)
BLDG1	0.019	0.148	1.25	6.3	6.5
BLDG2	0.013	0.140	1.20	3.7	4.5
BLDG3	0.013	0.140	1.20	3.7	4.4
BLDG4	0.015	0.144	1.22	4.7	5.2
BLDG5	0.017	0.146	1.24	5.4	5.8
BLDG6	0.020	0.150	1.26	7.2	7.2
BLDG7	0.009	0.131	1.14	2.0	3.0
BLDG8	0.009	0.131	1.14	2.0	3.0
BLDG9	0.004	0.111	1.01	0.6	1.4
TOTAL	0.12		10.66	35.60	41.00



SEWER AND WATERMAIN CROSSING TABLE							
CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM	NOTES
1			63.11	63.31	63.96	63.81	DEFLECT DUAL WATER SERVICE OVER EXISTING SANITARY AS PER W25.2 AND W22
* BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS							

KEY PLAN
N.T.S.

Stantec

Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

Legend

- PROPOSED WATERMAIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED WATER METER
- PROPOSED REMOTE WATER METER
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED CATCH BASIN
- PROPOSED AREA DRAIN
- EXISTING WATERMAIN
- EXISTING VALVE AND VALVE BOX
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING CATCHBASIN
- EXISTING BELL, CABLE, HAS, HYDRO
- PROPERTY LINE
- INSULATION AS PER CITY STD W22
- PROPOSED ROOF DRAINS, REFER TO ARCHITECTURAL PLANS FOR DETAILS.

Notes

1. INTERNAL PLUMBING AND SUMP PUMP TO BE DESIGNED BY THE MECHANICAL CONSULTANT.
2. ESTIMATED 100-YEAR DRAINAGE FROM EXISTING DEVELOPMENT (APPROX. 61 L/S) TO BE PUMPED TO OUTLET DURING CONSTRUCTION.
3. RUNOFF FROM PROPOSED DEVELOPMENT AREAS TO BE TREATED THROUGH AN OIL/GRIT SEPARATOR SIZED TO PROVIDE 80% TSS REMOVAL FOR A DRAINAGE AREA OF 0.48 HA AT 83% IMPERVIOUSNESS.
4. TARGET PEAK FLOWS OF 396.1L/s AS PER 40 CLEARY AVENUE STORMWATER MANAGEMENT REPORT DATED JANUARY 2007.

SITE PLAN
PREPARED BY: RODERICK LAHEY ARCHITECT INC.
DATED: AUGUST 13, 2018
DRAWING: A-SP

SITE BENCHMARK
PROVIDED BY: ANNIS, O'SULLIVAN, VOLLEBEKK LTD
DATED: APRIL 11, 2017
LOCATION / DESCRIPTION: EXISTING FIRE HYDRANT SOUTH OF PROPOSED SITE - TOP OF SPINDLE = 66.30

GEOTECHNICAL REPORT
PREPARED BY: THE PATTERSON GROUP INC.
REPORT NO.: PG4165-1
DATED: OCTOBER 3, 2017

6	REVISED AS PER CITY COMMENTS	WAJ	SGG	18.10.10
5	REVISED AS PER CITY COMMENTS	WAJ	SGG	18.08.28
4	ISSUE FOR FOUNDATION PERMIT	SL	SGG	18.07.13
3	REVISED AS PER CITY COMMENTS	WAJ	SGG	18.06.29
2	REVISED AS PER CITY COMMENTS	WAJ	SGG	18.03.29
1	ISSUED FOR FIRST SUBMISSION	WAJ	SGG	17.10.05
Revision		By	Appd.	YY.MM.DD
File Name: 160401329-08		WAJ	SGG	WAJ 17.06.14
		Dwn.	Chkd.	Dsgn. YY.MM.DD

Permit-Seal

LICENSED PROFESSIONAL ENGINEER
P.MOROZ
90493552
2018-10-10
PROVINCE OF ONTARIO

Client/Project
HOMESTEAD
HOMESTEAD LAND HOLDINGS LIMITED

THE KENSINGTON
851 RICHMOND ROAD
OTTAWA, ON

Title
SITE SERVICING PLAN

Project No. 160401329
Scale 1:250 (0, 2.5, 7.5, 12.5m)
Drawing No. SSP-1
Sheet 2of 6
Revision 6

D07-12-17-0135
17519

DERRICK MOODIE
MANAGER
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Laurel McCreight at 8:53 am, Mar 01, 2019

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2018/10/10 4:03 PM By: Gillis, Sheridan

ORIGINAL SHEET - ARCH D