

**WATERMAIN NOTES**

- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- VALVES TO BE OPERATED BY CITY STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION. CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION.
- CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
- ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.

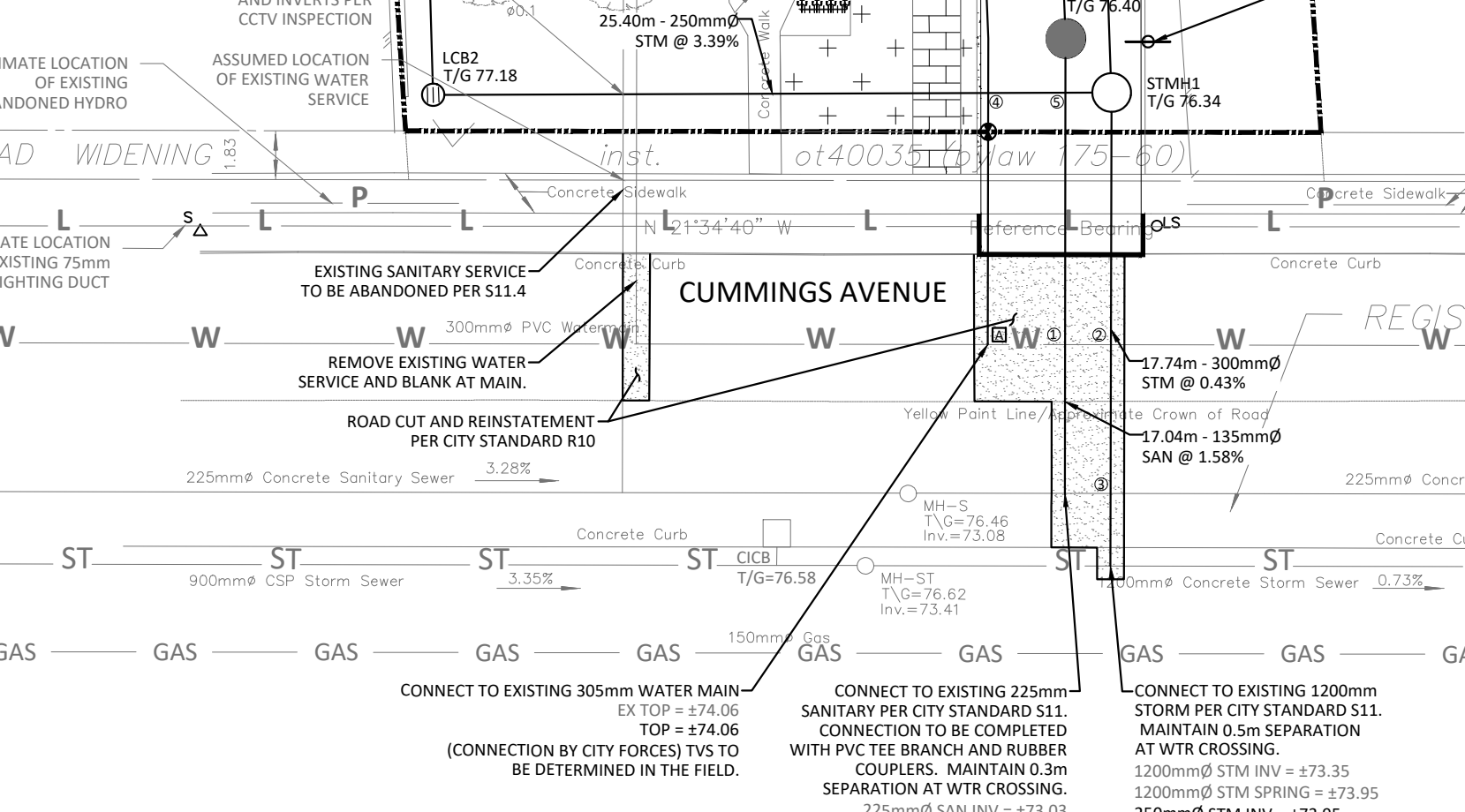
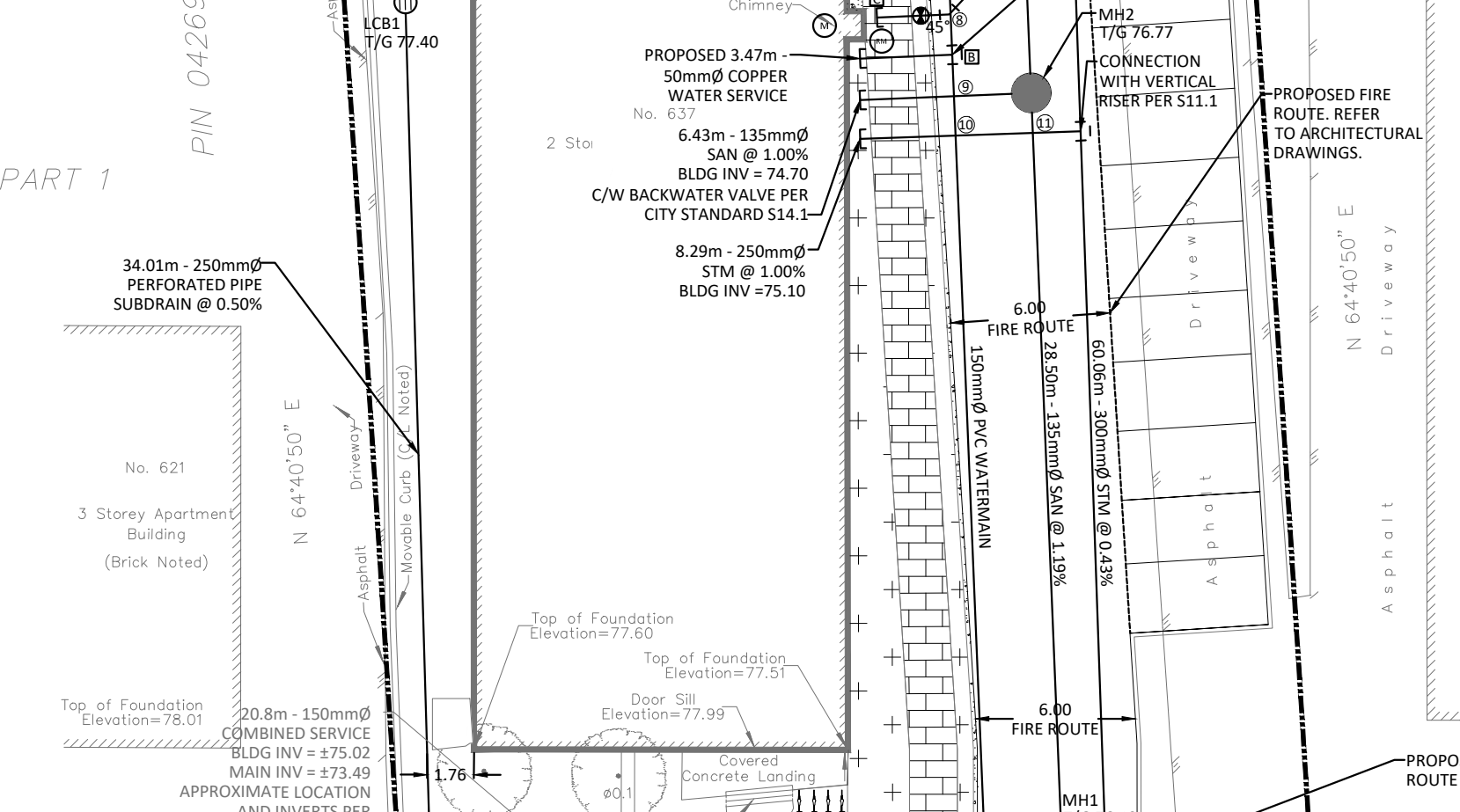
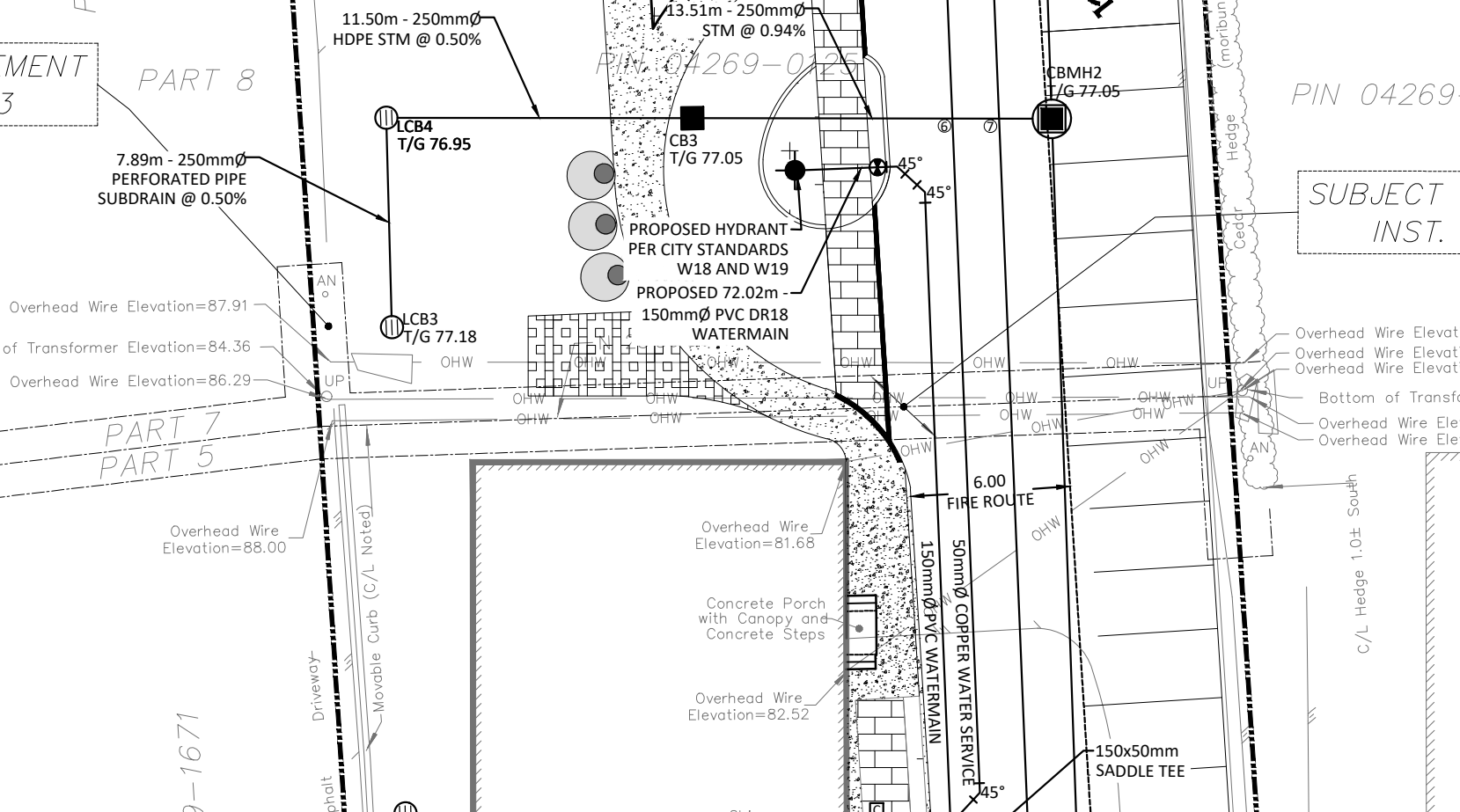
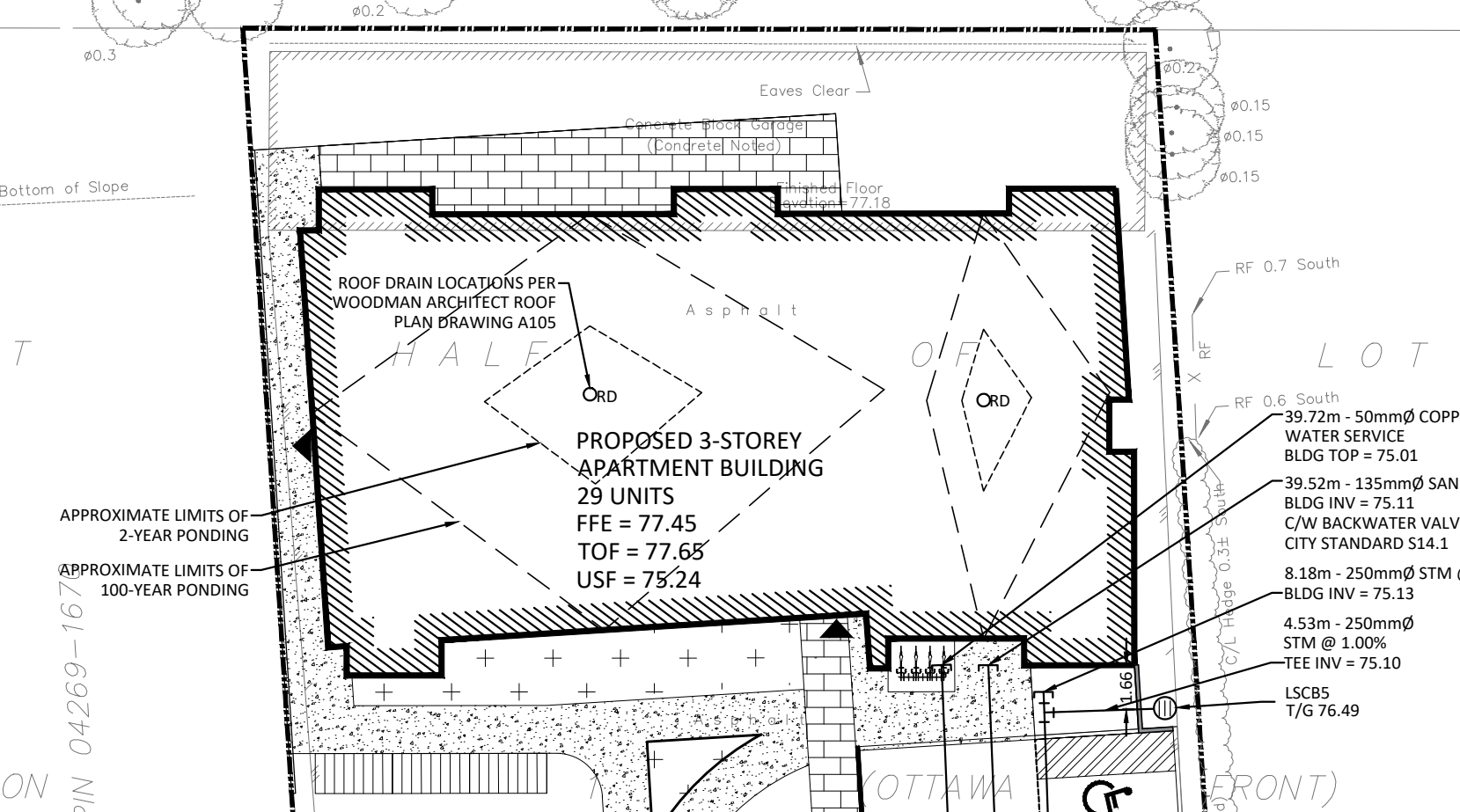
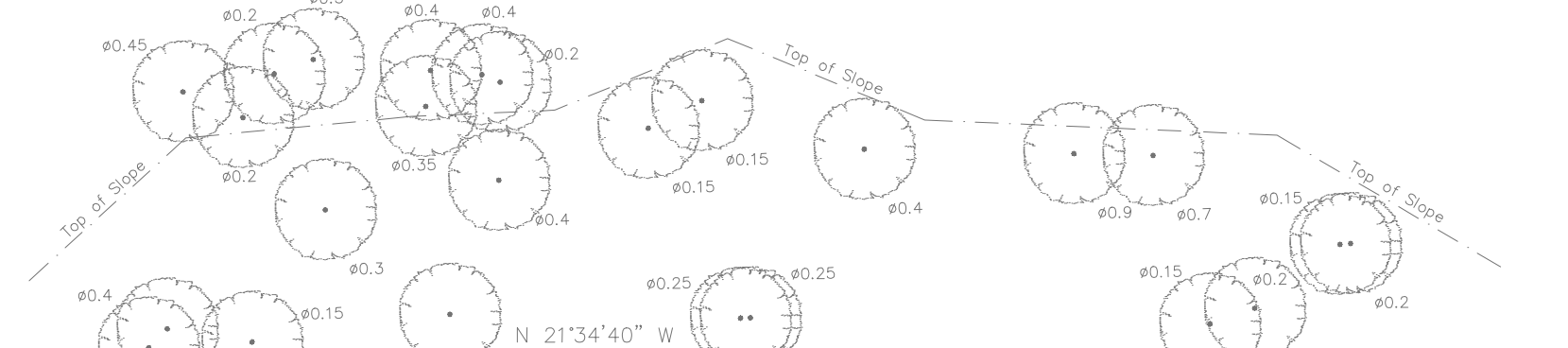
**GENERAL NOTES**

- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREIN HAVE BEEN DERIVED FROM INFORMATION SUPPLIED BY ANNIS O'SULLIVAN VOLLEBEK LTD (OR SHOWN ON) DRAWING V-22629 AND CANNOT BE RELED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL LAAYOUT.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
- TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER, UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
- ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
  - ELECTRICAL SERVICE - HYDRIO ONE,
  - GAS SERVICE - ENBRIDGE,
  - TELEPHONE SERVICE - BELL CANADA,
  - TELEVISION SERVICE - ROGERS.
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRIO ONE, BELL AND THE CITY.
- CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
- ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
- THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY PATERSON GROUP, DATED JULY 20, 2022.

**SEWER NOTES:**

- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
  - BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
  - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
  - BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
  - TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"x8" LONG MARKER.
- CONTRACTOR TO TELEVIEW (CTTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLSH AND CLEAN ALL SEWERS & APPURTENANCES.
- DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

EAST HALF OF LOT 25  
PIN 04269 - 0787  
part 1 plan 5r - 252



**WATER COVER TABLE**

LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
A - 300 X 150 TEE	0+100.00	76.45	74.06	2.39
150mmØ VALVE	0+107.97	76.44	74.04	2.40
CROSSING #4	0+109.43	76.45	74.05	2.40
*CROSSING #10	0+138.36	76.89	75.39	1.50
*CROSSING #9	0+139.84	76.92	75.25	1.67
*150 X 50mm TEE	0+141.40	76.95	75.06	1.89
*CROSSING #8	0+142.97	76.97	74.90	2.07
45° BEND	0+166.76	77.10	74.70	2.40
45° BEND	0+168.17	77.09	74.69	2.40
150mmØ VALVE	0+168.91	77.16	74.76	2.40
HYDRANT PER W18 & W19	0+172.02	77.21	74.81	2.40
*B - 150 X 50mm TEE	0+200.00	76.95	75.06	1.89
CONNECTION TO EX. BLDG	0+203.47	77.37	±74.97	±2.40
C - CONNECTION TO EX. BLDG	0+300.00	77.37	±74.97	±2.40
50mmØ VALVE	0+301.54	77.18	74.78	2.40
45° BEND	0+302.72	76.97	74.45	2.52
CROSSING #8	0+302.80	76.97	74.45	2.52
45° BEND	0+304.41	76.94	74.54	2.40
CROSSING #6	0+329.77	77.10	74.70	2.40
CONNECTION TO PROP. BLDG	0+339.72	77.41	75.01	2.40

\*INSULATE PROPOSED WATER SERVICE PER W22

**CROSSING CONFLICT TABLE**

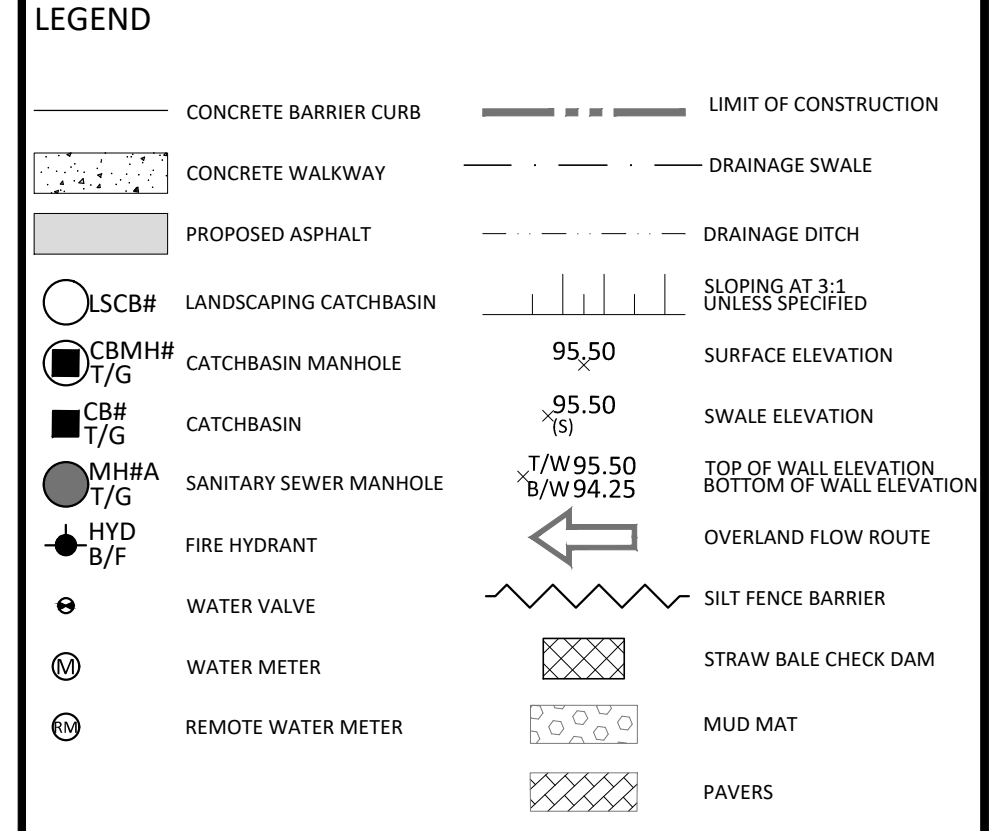
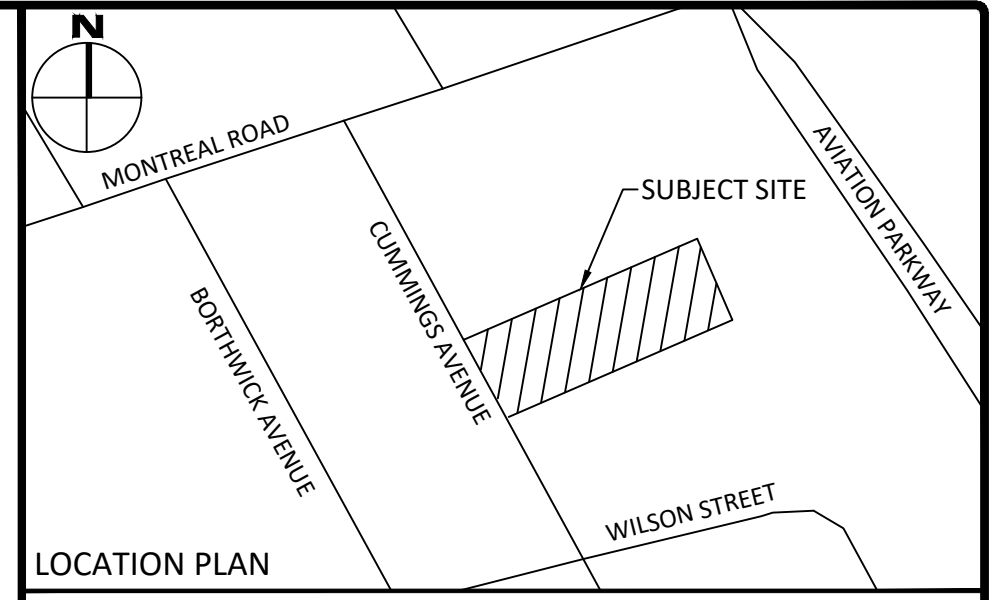
LOCATION	DESCRIPTION	SEPARATION
1	135mmØ SAN SERVICE OBV 73.36	0.30
2	305mmØ WTR MAIN INV 73.66	0.50
3	305mmØ WTR MAIN OBV 73.95	1.19
4	250mmØ STM SERVICE INV 74.43	1.40
5	275mmØ SAN MAIN OBV 73.24	1.88
6	150mmØ WTR MAIN OBV 74.05	0.75
7	250mmØ SAN SERVICE OBV 73.52	0.30
8	135mmØ SAN SERVICE OBV 75.13	0.30
9	50mmØ WTR SERVICE OBV 74.45	0.30
10	150mmØ WTR SERVICE INV 74.75	0.30
11	150mmØ WTR SERVICE OBV 74.80	0.30
	150mmØ WTR SERVICE OBV 74.80	0.30
	250mmØ STM SERVICE INV 75.10	0.30
	250mmØ WTR SERVICE OBV 74.94	0.30
	150mmØ WTR SERVICE INV 75.24	0.30
	250mmØ WTR SERVICE INV 75.02	0.30
	135mmØ SAN SERVICE OBV 74.72	0.30

**STM STRUCTURE TABLE**

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CB3	77.05	N76.009	S75.550	STRUC: OPSD 705.010 FRAME: CITY S19 COVER: CITY S19
CBMH2	77.05	NE74.800 N75.422	SW74.770	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S25.1
LCB1	77.40		SW76.400	PER CITY STANDARD S31
LCB2	77.18	NE76.230	S76.200	PER CITY STANDARD S30
LCB3	77.18	NE76.180		PER CITY STANDARD S31
LCB4	76.95	SW76.141	S76.067	PER CITY STANDARD S30
LCBS5	76.49	NW75.145		PER CITY STANDARD S31
STMH1	76.34	NE74.510 N75.340	W74.490	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24.1

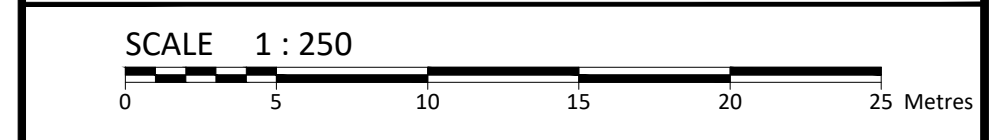
**SAN STRUCTURE TABLE**

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1	76.40	NE74.260	W73.410	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24
MH2	76.77	NE74.630 NW74.640	SW74.600	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24



No.	Revisions	Date
3	ISSUED FOR MUNICIPAL REVIEW	MAR. 30, 2023
2	ISSUED FOR MUNICIPAL REVIEW	FEB. 17, 2023
1	ISSUED FOR MUNICIPAL REVIEW	AUG. 29, 2022

Check and verify all dimensions before proceeding with the work. Do not scale drawings.



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Stamp:

Client: **JAWAN PROPERTIES INC.**  
 200 SKIPPER DRIVE  
 MANOTICK, ON K4M 0M5

Project: **637 CUMMINGS AVE**

Drawing Title: **SITE SERVICING PLAN**

Scale: 1:250	Project Number: CCO-23-0018
Drawn By: FV	Checked By: CH
Designed By: AG	Drawing Number: C102

FILENAME: C:\Drawings\01\Projects - Residential\2023\0018\Main\Project - Apartments - 637 Cummings\_01.dwg  
 USER: FV  
 DATE: 2023-03-30 10:00:00  
 LAST SAVER: FV  
 LAST DATE: 2023-03-30 10:00:00  
 PLOT DATE: 2023-03-30 10:00:00

D07-12-22-0129