

GENERAL NOTES

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM INFORMATION PROVIDED BY (OR SHOWN ON) ANNS, O'SULLIVAN, VOLLEBEK LTD JOB # 19966-19 AND CANNOT BE RELIED 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.
3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
5. 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.
6. 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.
7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. 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.
11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
12. 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.
13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DISCREPANCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOIL.
14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY.
 - ELECTRICAL SERVICE - HYDRO ONE,
 - GAS SERVICE - ENBRIDGE,
 - TELEPHONE SERVICE - BELL CANADA,
 - TELEVISION SERVICE - ROGERS.
16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE CITY.
17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.
18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.

WATERMAIN NOTES

1. CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
2. INDUSTRIAL/COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM 888 TYPE 'K' SOFT.
3. 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.
4. 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.
5. THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
6. VALVES TO BE OPERATED BY CITY STAFF ONLY.
7. 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.
8. 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.
9. ALL WATERMANS SHALL BE EQUIPPED WITH BUTTERFLY AND GATE VALVES AS PER OPSD 1100.011.
10. ALL FIRE HYDRANTS, VALVE AND VALVE BOX SHALL CONFORM TO OPSD 1103.020.
11. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
12. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
13. ALL WATERMAIN TO BE EQUIPPED WITH TRACKER WIRE.

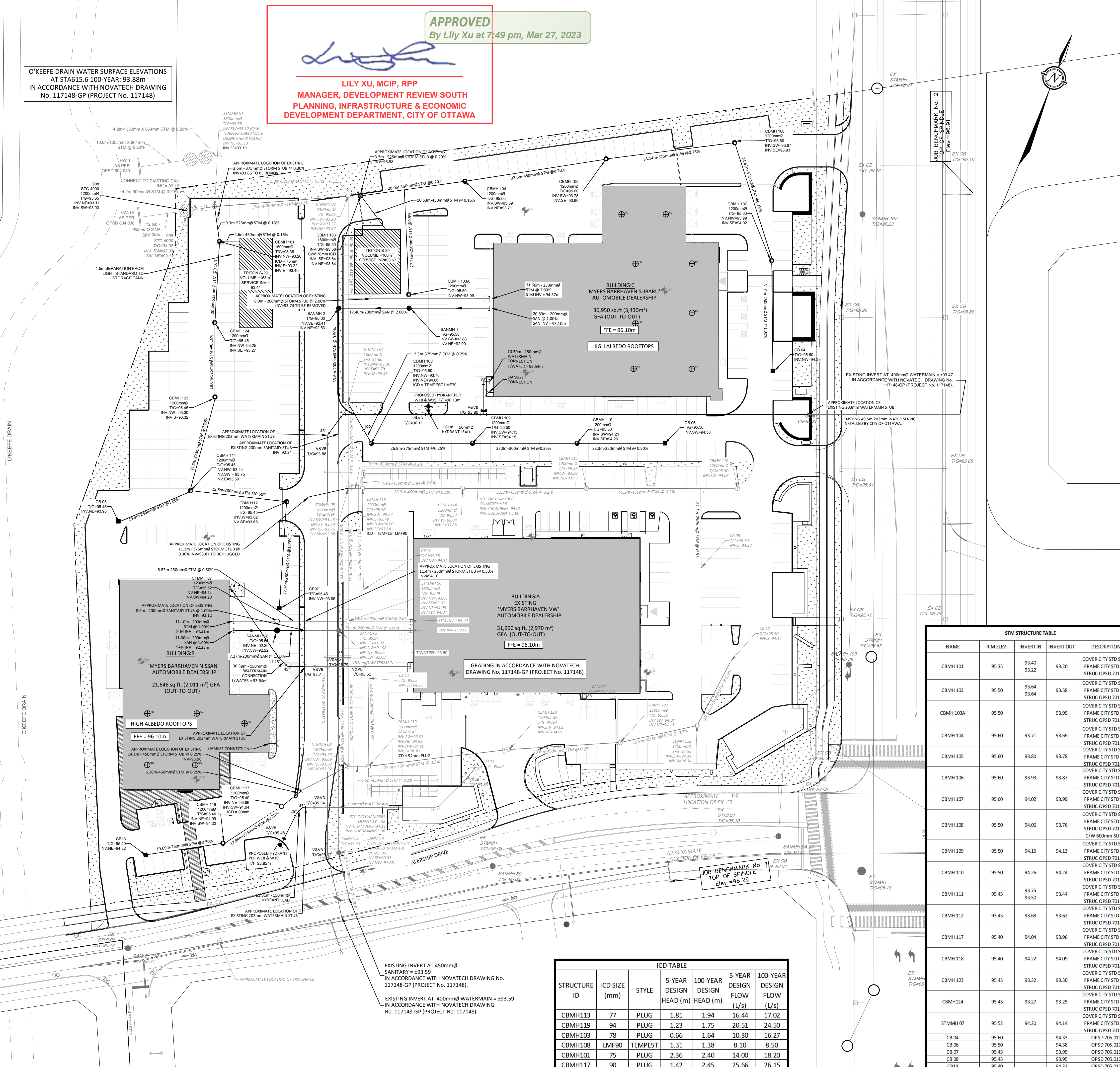
SEWER NOTES:

1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
 - 2.1. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
 - 2.2. SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
 - 2.3. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
 - 2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
3. SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
4. SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
5. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 1.5m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
6. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
7. 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" LUMBER MARKER.
8. CONTRACTOR TO TELETYPE (CCTV) 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 FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
9. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

SAN STRUCTURE TABLE

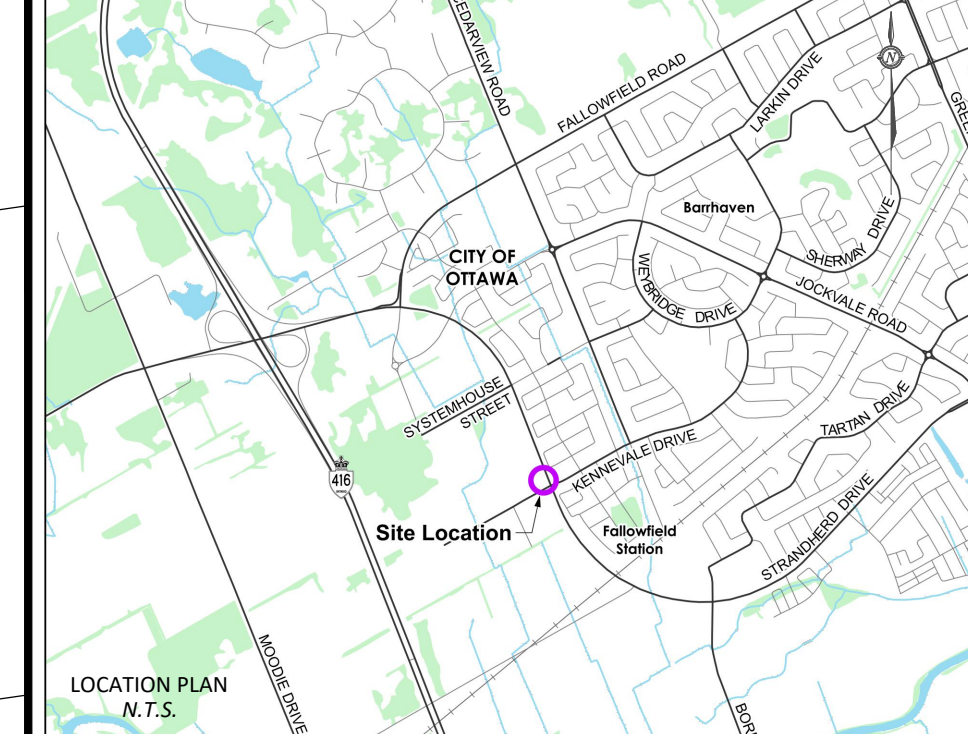
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
SANMH 1	95.58	NE92.90	SW92.88	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010
SANMH 2	96.00	NE92.53	SE92.41	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010
EX. SANMH 3	95.94	NW91.98 NE92.55	SE91.97 SW92.03	
EX. SANMH 4	95.90	NW91.68	SE90.33	DROP STRUCTURE PER OPSD 1003.010
SANMH 128	95.56	SW92.22	NE92.20	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010

STAMP: 11/20/2022, 11:20 AM, Professional Engineer, A. J. Gosling, License No. 10026726, Province of Ontario



APPROVED
By Lily Xu at 7:49 pm, Mar 27, 2023

LILY XU, MCIP, RPP
MANAGER, DEVELOPMENT REVIEW SOUTH
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

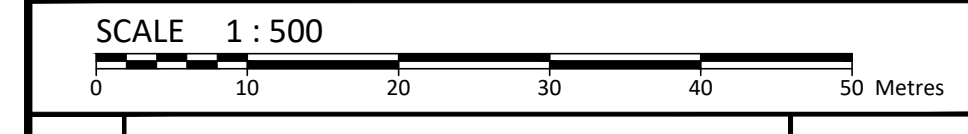


LEGEND

LEGAL BOUNDARY	---
EXISTING DITCH	---
PROPOSED ASPHALT	---
PROPOSED FENCE	---
BUILDING ENTRANCE	---
PROPOSED BUILDING OUTLINE	---
EXISTING STORM PIPE	XX.Xxm - XXXmmØ STM @ X.XXX%
EXISTING SANITARY PIPE	XX.Xxm - XXXmmØ SAN @ X.XXX%
EXISTING WATERMAIN PIPE	XX.Xxm - XXXmmØ WTR @ X.XXX%
PROPOSED STORM PIPE	XX.Xxm - XXXmmØ STM @ X.XXX%
PROPOSED SANITARY PIPE	XX.Xxm - XXXmmØ SAN @ X.XXX%
PROPOSED WATERMAIN PIPE	XX.Xxm - XXXmmØ WTR @ X.XXX%
PROPOSED SANITARY MANHOLE	●
PROPOSED STORM MANHOLE CATCHBASIN	○
PROPOSED STORM CATCHBASIN	○
PROPOSED FIRE HYDRANT	+
EXISTING SANITARY MANHOLE	○
EXISTING STORM MANHOLE	○
EXISTING FIRE HYDRANT	+
EXISTING STORM CATCHBASIN	○

BENCHMARKS:

No.	DESCRIPTION	ELEVATION
1	TOP OF SPINDLE	96.26m
2	TOP OF SPINDLE	96.91m



No.	Revision/Issue	Date
03	ISSUED FOR APPROVAL	11/04/2022
02	ISSUED FOR COORDINATION	10/20/2022
01	ISSUED FOR REVIEW	08/23/2022
00	ISSUED FOR REVIEW	03/02/2022

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

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(FOR REVIEW ONLY)
NOT FOR CONSTRUCTION

Stamp:

Client:
ZENA INVESTMENTS CORPORATION
1200 BASELINE ROAD, OTTAWA, ON K2C 0A6

Project:
4149 STANDHERD DRIVE
MYERS NISSAN & SUBARU

NEPEAN ONTARIO

Drawing Title:
SERVICING PLAN

Scale: 1:500	Project Number: CCO-22-2933
Drawn by: M.M.	Checked by: A.G.
Designed by: M.M.	Drawing Number: C102

STM STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CBMH 101	95.35	93.40	93.20	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.011
CBMH 103	95.50	93.64	93.58	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.012
CBMH 103A	95.50	93.99		COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 104	95.60	93.71	93.69	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 105	95.60	93.80	93.78	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 106	95.60	93.93	93.87	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 107	95.60	94.02	93.99	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 108	95.50	94.06	93.76	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 109	95.50	94.15	94.13	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 110	95.50	94.26	94.24	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 111	95.45	93.75	93.44	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 112	93.45	93.68	93.62	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 117	95.40	94.04	93.96	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 118	95.40	94.22	94.09	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH 123	95.45	93.32	93.30	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
CBMH124	95.45	93.27	93.25	COVER CITY STD S28.1 FRAME CITY STD S25 STRUC OPSD 701.010
STMVH 07	95.52	94.20	94.14	COVER CITY STD S24.1 FRAME CITY STD S25 STRUC OPSD 701.010
CB 04	95.60	94.33	94.33	OPSD 705.010
CB 06	95.50	94.38	94.38	OPSD 705.010
CB 07	95.45	93.95	93.95	OPSD 705.010
CB 08	95.45	93.95	93.95	OPSD 705.010
CB13	95.40	94.32	94.32	OPSD 705.010

ICD TABLE

STRUCTURE ID	ICD SIZE (mm)	STYLE	5-YEAR DESIGN HEAD (m)	100-YEAR DESIGN HEAD (m)	5-YEAR DESIGN FLOW (L/s)	100-YEAR DESIGN FLOW (L/s)
CBMH113	77	PLUG	1.81	1.94	16.44	17.02
CBMH119	94	PLUG	1.23	1.75	20.51	24.50
CBMH103	78	PLUG	0.66	1.64	10.30	16.27
CBMH108	LMF90	TEMPEST	1.31	1.38	8.10	8.50
CBMH101	75	PLUG	2.36	2.40	14.00	18.20
CBMH117	90	PLUG	1.42	2.45	25.66	26.15

EXISTING INVERT AT 450mmØ SANITARY = +93.59 IN ACCORDANCE WITH NOVATECH DRAWING No. 117148-GP (PROJECT No. 117148).

EXISTING INVERT AT 400mmØ WATERMAIN = +93.59 IN ACCORDANCE WITH NOVATECH DRAWING No. 117148-GP (PROJECT No. 117148).

DRAWING: 11/20/2022, 11:20 AM, Professional Engineer, A. J. Gosling, License No. 10026726, Province of Ontario
 LAST SAVED: Friday, November 04, 2022, 1:57:45 PM
 LAST PLOTTED: Friday, November 04, 2022, 7:18:15 PM