



**LEGEND**

CONCRETE BARRIER CURB	--- LIMIT OF CONSTRUCTION
CONCRETE WALKWAY	- - - DRAINAGE SWALE
PROPOSED ASPHALT	- - - DRAINAGE DITCH
LANDSCAPING CATCHBASIN	95.50 SURFACE ELEVATION
CATCHBASIN MANHOLE	95.50 SWALE ELEVATION
CATCHBASIN	T/W 95.50 TOP OF WALL ELEVATION
SANITARY SEWER MANHOLE	B/W 94.25 BOTTOM OF WALL ELEVATION
FIRE HYDRANT	← OVERLAND FLOW ROUTE
WATER VALVE	~ SILT FENCE BARRIER
WATER METER	▨ STRAW BALE CHECK DAM
REMOTE WATER METER	◻ MUD MAT
RETAINING WALL	○ AREA DRAIN TO BE SPECIFIED AND ACCOMMODATED BY MECHANICAL

**SUBJECT TO REVIEW**

No.	Revisions	Date
5	REISSUED FOR SITE PLAN CONTROL	APR. 14, 2025
4	ISSUED FOR PERMIT	MAR. 21, 2025
3	REISSUED FOR SITE PLAN CONTROL	DEC. 17, 2024
2	ISSUED FOR SITE PLAN CONTROL	AUG. 30, 2024
1	ISSUED FOR PRELIMINARY DISCUSSION	JULY 17, 2024

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



**egis** 115 Walgreen Road, R.R.3  
 Carp, ON K0A 1L0  
 Tel: 613-836-2184  
 Fax: 613-836-3742  
 www.egis-group.com

Stamp:

Client: **FENGATE ASSET MANAGEMENT**  
 2275 UPPER MIDDLE RD. E. SUITE 700  
 OAKVILLE ON L6H 0C3

Project: **MIXED-USE RESIDENTIAL DEVELOPMENT**  
 1047 RICHMOND ROAD

Drawing Title: **SITE SERVICING PLAN**

Scale: 1:250 Project Number: CCO-22-2242

Drawn By: FV Drawing Number: C102

Checked By: AG

Designed By: AG

**SAN STRUCTURE TABLE**

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1A	65.34		W61.708	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24
MH2A	64.02	S61.098 N661.892	N61.098	STRUC: OPSD 701.010 FRAME: CITY S24 C/W EXTERNAL DROP STRUCTURE
MH3A	66.17	N663.360 N663.361	SW63.360	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24

**STM STRUCTURE TABLE**

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
A02	66.19		E63.469	AREA DRAIN - REFER TO MECHANICAL SPECIFICATION
CBMH1	65.04		W63.110	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S26-1

**CROSSING CONFLICT TABLE**

LOCATION	DESCRIPTION	SEPARATION
1	300mmØ WATERMAIN INV ± 62.30	0.62
2	150mmØ SANITARY SERVICE OBV ± 61.68	0.50
3	300mmØ STORM SERVICE INV ± 62.93	1.27
4	300mmØ SANITARY SEWER OBV ± 61.60	0.50
5	300mmØ STORM SERVICE INV ± 62.87	0.33
6	200mmØ WATERMAIN OBV ± 61.42	0.33
7	300mmØ SANITARY SERVICE INV ± 61.92	0.26
8	250mmØ STORM SERVICE OBV ± 60.70	0.52
9	300mmØ SANITARY SEWER INV ± 63.12	0.50

- GENERAL NOTES**
- 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.
  - 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, VOLLEBAEK LTD. DRAWING 21985-21 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.
  - 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 LAYOUT.
  - 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.
  - CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATEMENT WORK NOT SHOWN ON THE CONTRACT DRAWING AS A DIRECT RESULT FROM CONSTRUCTION.
  - ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.

- SEWER NOTES:**
- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OTTAWA STANDARD DRAWINGS 311.311 & 311.2.
  - SEWER TRENCHING AND BEDDINGS 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.
  - SEWERS AND WATERMANS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES, WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MCEP STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 300 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPSS 701) OF THE OPS.
  - INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY DETAIL W35, OPTION A.
  - SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWINGS 311.311 & 311.2.
  - SURPLY 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 (CTV) ALL PROPOSED SEWERS ON SITE, UPON 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.
  - DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

- WATERMAIN NOTES**
- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
  - WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMANS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.
  - 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 AND CITY OF OTTAWA STANDARDS W25 AND W25.2.
  - THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
  - VALVES TO BE OPERATED BY CITY STAFF ONLY.
  - NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CONNECTIONS TO BE COMPLETED BY CITY FORCES, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY SITE SERVICING CONTRACTOR.
  - CONCRETE THRUST BLOCKS TO CONFORM TO CITY STANDARD W23.
  - WATERMAIN 100-300mmØ TO BE CLASS 150 DR-18 PVC OR APPROVED EQUIVALENT.
  - ALL PVC WATERMAIN SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY STANDARD W36.
  - FIRE HYDRANTS SHALL CONFORM TO CITY STANDARDS W18, W19, AND W20.
  - VALVE BOXES SHALL CONFORM TO CITY STANDARD W24.
  - 300mmØ VALVES AND SMALLER TO BE INSTALLED WITH VALVE BOXES AS PER CITY STANDARD W24. 400mmØ VALVES AND LARGER TO BE INSTALLED WITH BUTTERFLY VALVES AND VALVE CHAMBERS AS PER CITY STANDARD W22.
  - AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

ULMAMAR, U:\Drawing\01 - Projects\2022-2024\CCO-22-2242 - Fengate - 1047 Richmond Road\12 - Drawings\CCO-22-2242 - Preliminary.dwg  
 DATE PLOTTED: Monday, April 14, 2025 11:51:11 AM  
 USER: J. VALENTI  
 PLOT DEVICE: HP DesignJet 5000