

maintenance hole, but there shall be a minimum of 150mm of 15MPa

13mm diameter threaded rods and drilled expansion anchors down either

Nov 2016 | Rev | 3 |

OPSD 1003.020

2 Concrete shall be secured to the maintenance hole with 450mm long,

concrete around the drop pipe.

side of the drop pipe at 300mm centres.

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

CAST-IN-PLACE

MAINTENANCE HOLE DROP STRUCTURE WYE

| WAT | ER COVER | ΓABLE | | |
|-------------------|----------|-------------------|----------------|-------|
| LOCATION | STATION | FINISHED GRADE | TOP OF PIPE | COVER |
| A - 400 X 150 TEE | 0+100.00 | 63.72 | 61.32 | 2.40 |
| 11.25° BEND | 0+104.19 | 63.77 | 61.37 | 2.40 |
| DMA CHAMBER | 0+109.35 | 63.70 | 61.30 | 2.40 |
| 45° BEND | 0+133.67 | 63.57 | 61.17 | 2.40 |
| 45° BEND | 0+134.32 | 63.56 | 61.16 | 2.40 |
| WATER ENTRY | 0+136.10 | 63.60 | 61.20 | 2.40 |
| B - 400 X 150 TEE | 0+200.00 | 63.80 | 61.40 | 2.40 |
| VALVE | 0+201.00 | 63.79 | 61.39 | 2.40 |
| HYDRANT | 0+205.00 | 63.70 | 61.30 | 2.40 |

| | CROSSING CONFLICT TABLE | |
|----------|--|------------|
| LOCATION | DESCRIPTION | SEPARATION |
| 1 | PROP. 250mmØ STM SERVICE INV 58.21 EX. 300mmØ STM SERVICE OBV 57.90 | 0.31 |
| 2 | PROP. 250mmØ STM SERVICE INV 58.20 EX. 135mmØ SAN SERVICE OBV 57.82 | 0.38 |
| 3 | PROP. 250mmØ STM SERVICE INV 57.75 EX. 250mmØ SAN MAIN OBV 55.77 | 1.98 |
| 4 | PROP. 250mmØ SUBDRAIN INV 58.43 EX. 250mmØ SAN MAIN OBV 55.32 | 3.11 |

| | SAN STRUCTURE TABLE | | | |
|------|---------------------|-----------|------------|--|
| NAME | RIM ELEV. | INVERT IN | INVERT OUT | DESCRIPTION |
| MH1A | 60.44 | S57.636 | NE57.610 | COVER TPYE A FRAME OPSD 401.010 STRUCT. OPSD 701.010 |

| | STORM STRUCTURE TABLE | | | |
|-------|-----------------------|---------------------|------------|---|
| NAME | RIM ELEV. | INVERT IN | INVERT OUT | DESCRIPTION |
| CB1 | 60.37 | E58.294 | \$58.250 | STRUC: OPSD 705.010 FRAME: CITY S19 COVER: CITY S19 |
| LSCB2 | 59.44 | | W58.440 | PER CITY STANDARD S31 |
| OGS3 | 60.40 | SW57.963 W58.514 | E57.930 | HYDRO-INTERNATIONAL FD-4HC (OR APPROVED EQUIVALENT) |

| | 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.

SITE SERVICING PLAN

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND

2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL

BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED

INFORMATION SUPPLIED BY (OR SHOWN ON) ANNIS,

AND EASEMENTS CAN ONLY BE DETERMINED BY AN

UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT

CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN

3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY

PERMITS AND APPROVALS FROM THE CITY BEFORE

5 THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION.

SIZE. MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES

ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER

DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER

ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY

REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND

PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND

OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY

6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD

ALLOWANCES TO CONDITION EQUAL OR BETTER THAN

7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL,

SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS

COMPACTED TO 95% STANDARD PROCTOR DENSITY.

9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL

DIRECTED BY THE ENGINEER AND THE CITY.

8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR

4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.

O'SULLIVAN, VOLLEBEKK LTD, DRAWING E-2505-22 AND

CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE

PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES

PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY

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

GENERAL NOTES

ALL INFORMATION SHOWN.

ONTARIO LAND SURVEYOR.

COMMENCING CONSTRUCTION.

No. 530 LaColle Way (Foundation Noted)

W INV±57.83-

E INV±57.82

S INV±57.89

E INV±57.78

S INV±57.80

CATCH BASIN TO OUTLET

INTO INTERNAL CISTERN.

Concrete Sidewalk.

STM @ 1.00%

UNDERGROUND

□PARKING GARAGE

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.

EXISTING HYDRANT TO BE RELOCATED AS SHOWN. EXISTING LEAD TO BE

BEMOVED AND CAPPED AT EXISTING

CONNECT TO EXISTING

400mm WATERMAIN

EX.INV±61.30 /HE KING,

- 13. 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.
- 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: FLECTRICAL SERVICE - HYDRO ONE, TELEPHONE SERVICE - BELL CANADA.
- 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.
- 19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY PATERSON GROUP, DATED AUGUST 10TH, 2018

WATERMAIN NOTES

5. VALVES TO BE OPERATED BY CITY STAFF ONLY.

MANUFACTURER.

400mm WATERMAIN

- 1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN
- ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS. 2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM
- AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030. 3. 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

COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED

- 4. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- 6. 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. 7. 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.
- 8. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- 9. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED
- 10. ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.

SEWER NOTES:

- 1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND
- 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.
- (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
- 1109.030.
- PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER.
- PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.



PLAN_NE INV±54.99

EX CONNECTION TO 1050mm@

EX CONNECTION TO 250mm SAN 6236

SPRINGLINE WITH VERTICAL RISER PER S11.

CONNECTION INV±55.12 EASEMEN

1050mmØ STM INV = 55.54

1050mmØ STM SPRING = 56.07

CONNECT TO EXISTING 250mmØ

VERTICAL RISER PER CITY S11.1.

SANITARY SEWER, CONNECTION WITH

250mmø_SSTM INV = 56.07

EX. 250mmØ INV = 55.22

EX. 250mmØ SPRING = 55.34

PROP. 150mmØ INV = 55.34

CONNECTION INV±55.48

W INV±57.12

STM PER S11.1

PER S11.1

/ 50R-6232 S INV±55.01

MH-S T\G=59.50 / S INV±55.42

AHDPE PERFORATED PIPE

STM @ 2.00%

┌29.27m - 250mmØ

@ 3.50%

33.10m - 135mmØ-

PROPOSED CISTERN WITHIN P2 & P3 PARKING LEVE

INV. OUT = 58.01, BTM = 54.50

PROPOSED 300mmØ OVERFLOW ~

PIPE @ 2.00%. BLDG. INV = 58.56 2.37m - 250mmØ**-**

734.81m - 150mmØ WATER

STUB AT WATER SERVICE

PER CITY W3 C/W

150mmØ GATE VALVE.

STRUCTURE PER W5.

SERVICE.

STM @ 2.00%

3.22m - 150mmØ SAN SERVICE @2.00% —

C/W BACKWATER VALVE PER S14.1

10.79m - 150mmØ

SAN @ 2.00%

PROPOSED 6-STOREY MIXED USE BUILDING

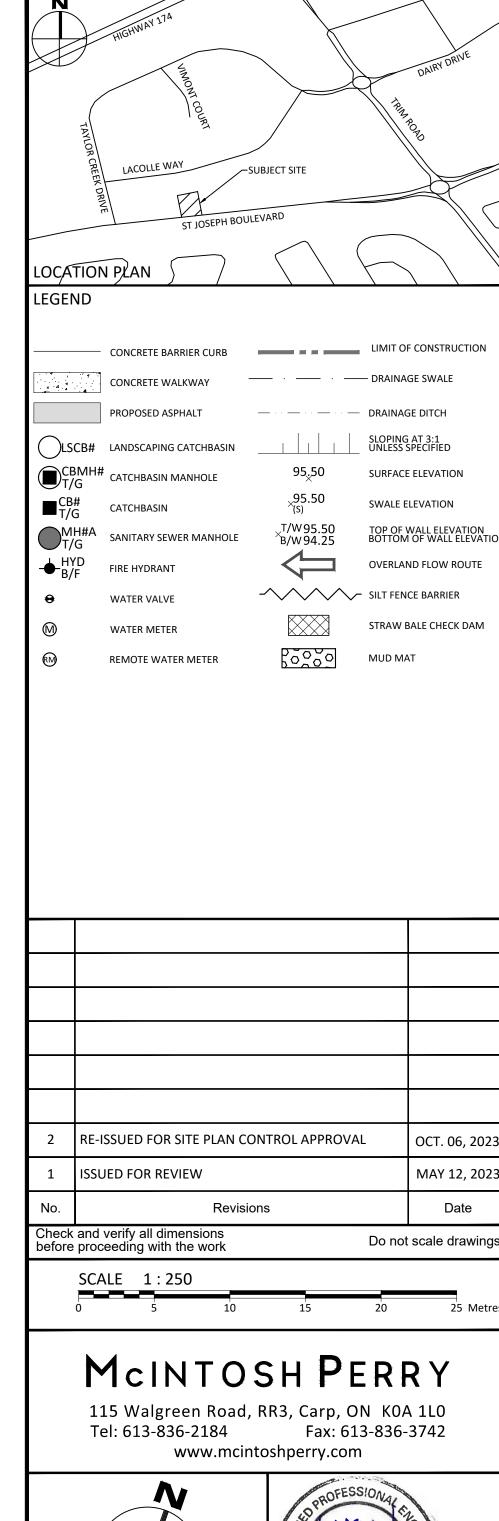
FFL = 63.80USF = REFER TO STRUCTURAL FOR DETAILS. 203 m3 INTERNAL CISTERN PER ARCHITECTURAL PLAN. ROOF DRAINAGE TO BE CONVEYED

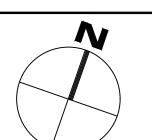
TO INTERNAL CISTERN WITHOUT

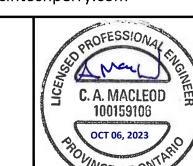
RESTRICTION.

SAN @ 2.00%

- SPECIFICATIONS, AS WELL AS CITY. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010
- CLEAR STONE BEDDING SHALL NOT BE PERMITTED. 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. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL
- 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 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD
- 6. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 &
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE
- 8. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER
- 9. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.







CSV ARCHITECTS 190 O'CONNOR STREET, SUITE 100 OTTAWA, ON K2P 2R3

MIXED USE BUILDING 3745 ST. JOSEPH BOULEVARD

Drawing Title:

1:250 CCO-23-3287 AM

SITE SERVICING PLAN