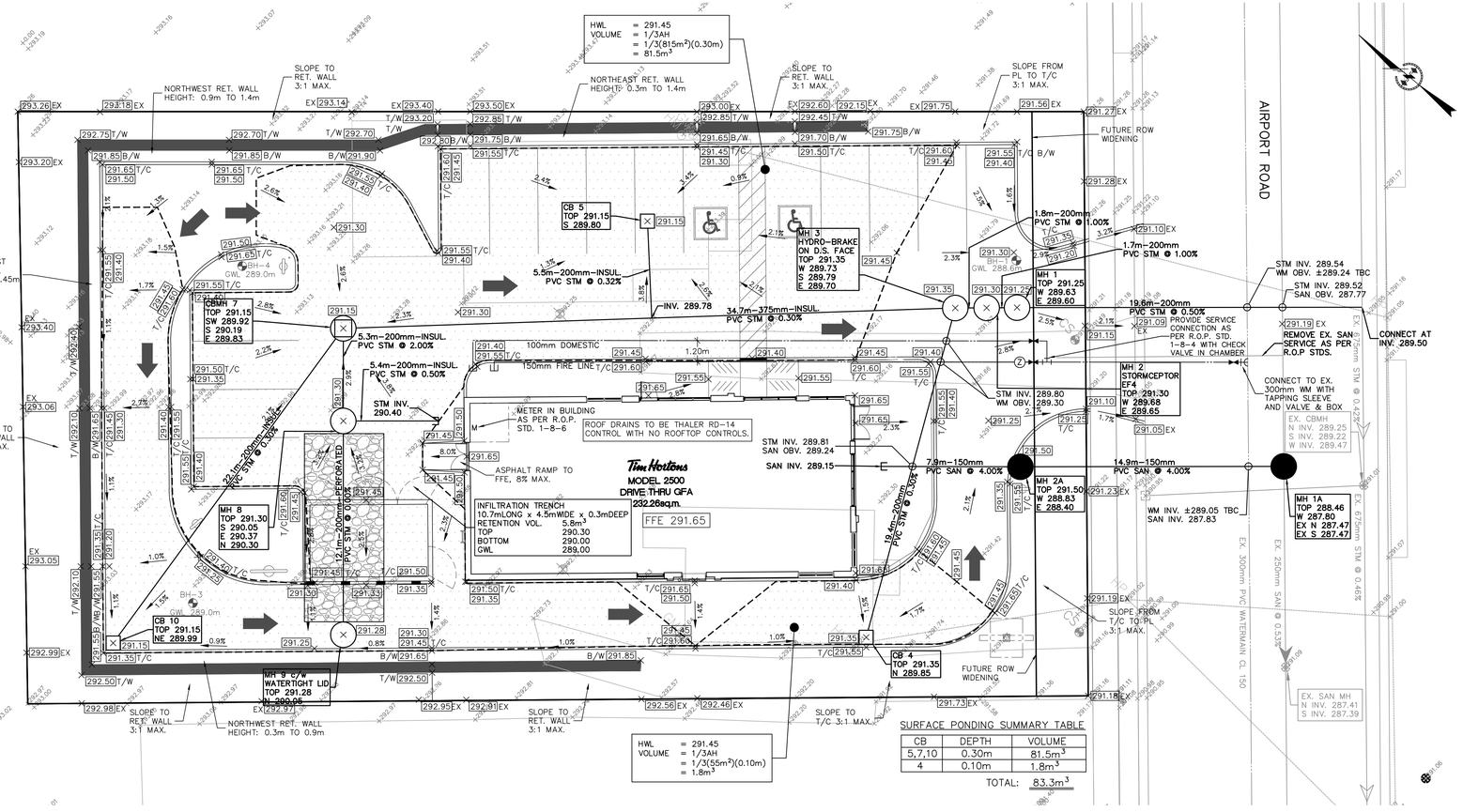
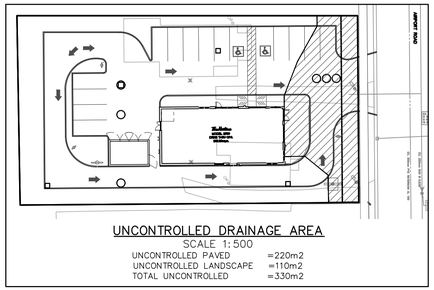
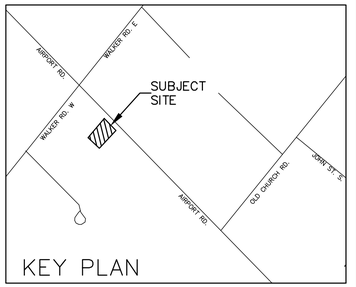


SURFACE PONDING SUMMARY TABLE

CB	DEPTH	VOLUME
5,7,10	0.30m	81.5m³
4	0.10m	1.8m³
TOTAL:		83.3m³





LEGEND

- CATCHBASIN
- DOUBLE CATCHBASIN
- CATCHBASIN MANHOLE
- DOUBLE CATCHBASIN MANHOLE
- STORM MANHOLE
- BOX MANHOLE
- SANITARY MANHOLE
- VALVE AND BOX
- HYDRANT AND VALVE
- STORM
- SANITARY
- WATERMAIN
- +274.00 EXISTING ELEVATION
- ×274.00EX EXISTING ELEVATION
- ×274.00 PROPOSED ELEVATION
- ×274.00T/C PROPOSED TOP OF CURB ELEVATION
- ×274.00B/W PROPOSED BOTTOM OF WALL ELEVATION
- ×274.00SW PROPOSED SWALE ELEVATION
- EMERGENCY OVERLAND FLOW ROUTE
- PONDING AREA

TOWN OF CALEDON GENERAL NOTES (SITE PLANS 2019)

1. CONSTRUCTION FOR THIS PROJECT TO COMPLY WITH THE MOST CURRENT VERSION OF THE DEVELOPMENT STANDARDS, POLICIES AND GUIDELINES, PREPARED BY THE TOWN OF CALEDON AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
2. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
3. A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION WITHIN THE MUNICIPAL RIGHT OF WAY THE CONTRACTOR MUST CONTACT THE FOLLOWING:

   THE TOWN OF CALEDON
   905-584-2272

   THE REGION OF PEEL — ENBRIDGE CONSUMERS GAS
   HYDRO ONE — BELL CANADA
   ROGERS CABLE — FIRE AND EMERGENCY SERVICES

4. A RIGHT OF WAY OCCUPANCY PERMIT MUST BE OBTAINED FROM THE TOWN OF CALEDON A MINIMUM 48 HOURS PRIOR TO COMMENCING ANY WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE.
5. ALL DRAINAGE TO BE SELF-CONTAINED AND DISCHARGED TO A LOCATION APPROVED BY THE TOWN OF CALEDON AND CONSERVATION AUTHORITY PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
6. SEDIMENT CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO ANY CONSTRUCTION ON THE SITE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD TO THE SATISFACTION OF THE TOWN AND THE APPLICABLE CONSERVATION AUTHORITY.
7. ANY CHANGES TO GRADES OR SERVICING FROM THE ORIGINAL APPROVED SITE PLAN MUST BE SUBMITTED BY THE ENGINEER TO THE TOWN FOR APPROVAL PRIOR TO CONSTRUCTION.
8. A MINIMUM OF 1.5M CLEARANCE IS TO BE PROVIDED FROM THE LIMITS OF ALL SIDEWALKS AND DRIVEWAYS TO EXISTING UTILITY STRUCTURES WITHIN THE MUNICIPAL RIGHT OF WAY. IF THIS CLEARANCE IS NOT MAINTAINED, THEY SHALL BE RELOCATED AT THE APPLICANT'S EXPENSE.
9. STREET CURBS ARE TO BE CONTINUOUS THROUGH THE PROPOSED ENTRANCE.
10. MUNICIPAL SIDEWALKS SHALL BE CONTINUOUS THROUGH ALL ENTRANCES TO THE SITE AND THE CURB SHALL BE TAPERED BACK 600MM. SIDEWALKS SHALL BE COMPLETELY REMOVED AND REPLACED WITH A 200MM MINIMUM CONCRETE THICKNESS, 32MPA AND 5% TO 7% AIR ENTRAINMENT AT ALL PROPOSED INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL ENTRANCES.
11. ALL BOULEVARDS TO BE RESTORED WITH 300MM MINIMUM OF TOPSOIL AND SOD TO THE SATISFACTION OF THE TOWN.
12. THE MINIMUM PAVEMENT DESIGN FOR THE ASPHALT DRIVEWAY APRON WITHIN THE MUNICIPAL ROAD ALLOWANCE SHALL BE AS FOLLOWS:

    40mm HL3 ASPHALT
    50mm HL8 ASPHALT
    150mm GRANULAR 'A'
    300mm GRANULAR 'B'

   THE CONSULTANT SHOULD REVIEW THE ABOVE WITH RESPECT TO THE EXPECTED USAGE.

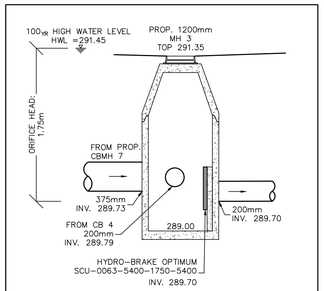
13. STRUCTURAL DESIGN OF THE FIRE ROUTE IS REQUIRED TO SUPPORT AN 18 TON VEHICLE.
14. SERVICE CONNECTION BACKFILL TO BE DISCUSSED WITH THE TOWN.

DRAWING NOTES:

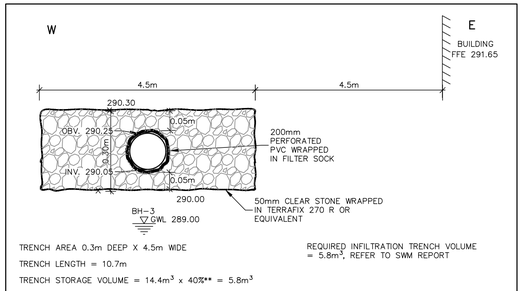
- SURVEY PROVIDED BY FIDDES CLIPSHAM INC., DATED APRIL 26, 2019 BENCHMARK: CIVIC #16054, HAVING AN ELEVATION OF 291.11m
- CONTRACTOR TO BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE UTILITIES AND SERVICES. THE CONTRACTOR SHALL ADVISE THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION. VARIOUS UTILITIES CONCERNED TO BE GIVEN REQUIRED ADVANCED NOTICE PRIOR TO ANY DIGGING, FOR STAKE OUT.

  A.M. CANDARAS ASSOCIATES INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
- PAVEMENT STRUCTURE DESIGN DETAILS, SPECIFICATIONS AND SUB-DRAINAGE DESIGN, IS NOT UNDER THE CIVIL DESIGN SCOPE. CONTRACTOR IS TO REFER TO GEOTECHNICAL REPORT RELATED SPECIFICATIONS. CONTRACTOR IS TO COORDINATE PAVEMENT MAKEUP AND SUB-DRAINAGE INSPECTION WITH GEOTECHNICAL CONSULTANT.

  A.M. CANDARAS ASSOCIATES INC. ASSUMES NO RESPONSIBILITY RELATING TO CONSTRUCTION AND INSPECTION OF THE PAVEMENT STRUCTURE.
- PROPOSED MANHOLE STRUCTURES TO BE 1200mm DIAMETER OPSD 701.010 UNLESS OTHERWISE NOTED.
- CATCH BASINS TO HAVE 0.30m SUMP, AS PER TOWN OF CALEDON STANDARDS.
- RETAINING WALLS TO BE RISI STONE – SONOMASTONE RETAINING WALLS. DETAILED DESIGN TBD BY RISI STONE.



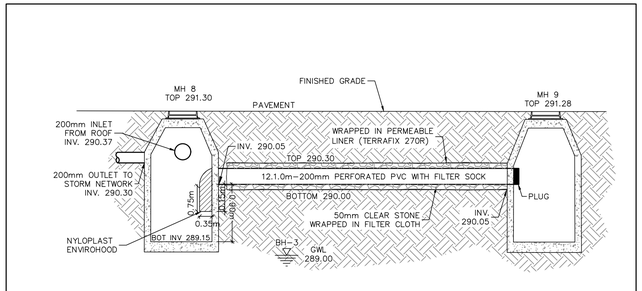
ORIFICE DETAIL
SCALE=N.T.S



TRENCH AREA 0.3m DEEP X 4.5m WIDE
TRENCH LENGTH = 10.7m
TRENCH STORAGE VOLUME = 14.4m³ x 40%** = 5.8m³
**50mm CLEAR STONE @ 40% VOID RATIO

REQUIRED INFILTRATION TRENCH VOLUME = 5.8m³, REFER TO SWM REPORT

INFILTRATION TRENCH CROSS-SECTION
SCALE=N.T.S



INFILTRATION TRENCH DETAIL
SCALE=N.T.S

PAVEMENT STRUCTURE (LIGHT DUTY)
- 40mm HL3
- 75mm HL8
- 150mm GRANULAR 'A'
- 300mm GRANULAR 'B'

PAVEMENT STRUCTURE (HEAVY DUTY)
- 40mm HL3
- 75mm HL8
- 150mm GRANULAR 'A'
- 400mm GRANULAR 'B'

NOTE: PAVEMENT DESIGN SPECIFIED BY AZURE GROUP, REFER TO GEOTECHNICAL REPORT FOR DETAILS.

LICENSED PROFESSIONAL ENGINEER
2019-12-06
A. M. CANDARAS
PROVINCE OF ONTARIO

No.	Date	By	REVISIONS
1	DEC.6/19	Z.S.S.	ISSUED FOR 1ST SPA SUBMISSION

a.m.candaras associates inc.
consulting engineers
8551 Weston rd., suite 203
Woodbridge ont. L4L 9R4
905-850-8020 Fax 905-850-8099
Email: civil@amcai.com

TIM HORTONS
16054 & 16060 AIRPORT ROAD

TOWN OF CALEDON
REGION OF PEEL

SITE GRADING, SERVICING AND STORMWATER MANAGEMENT PLAN

SCALE: 1:150	DATE: SEPTEMBER 2019	PROJ No.	1918
DRAWN: Z.S.S.	CHK'D: A.M.C.	PLAN No.	G1
DESIGNED: Z.S.S.	SHEET 1 OF 2		

FILENAME: O:\1918\1918-most.dwg
PLOTTED: Dec 06, 2019 - 4:47pm
PLOTTED BY: zsavary