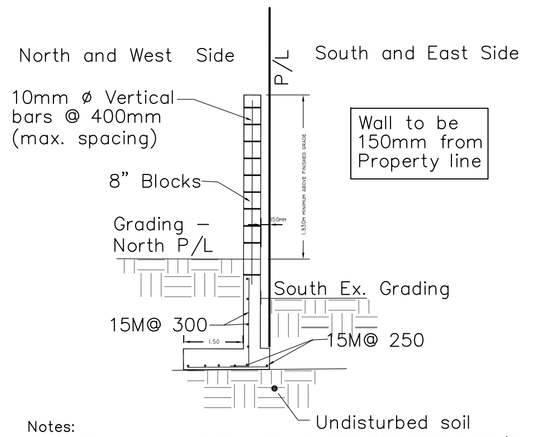
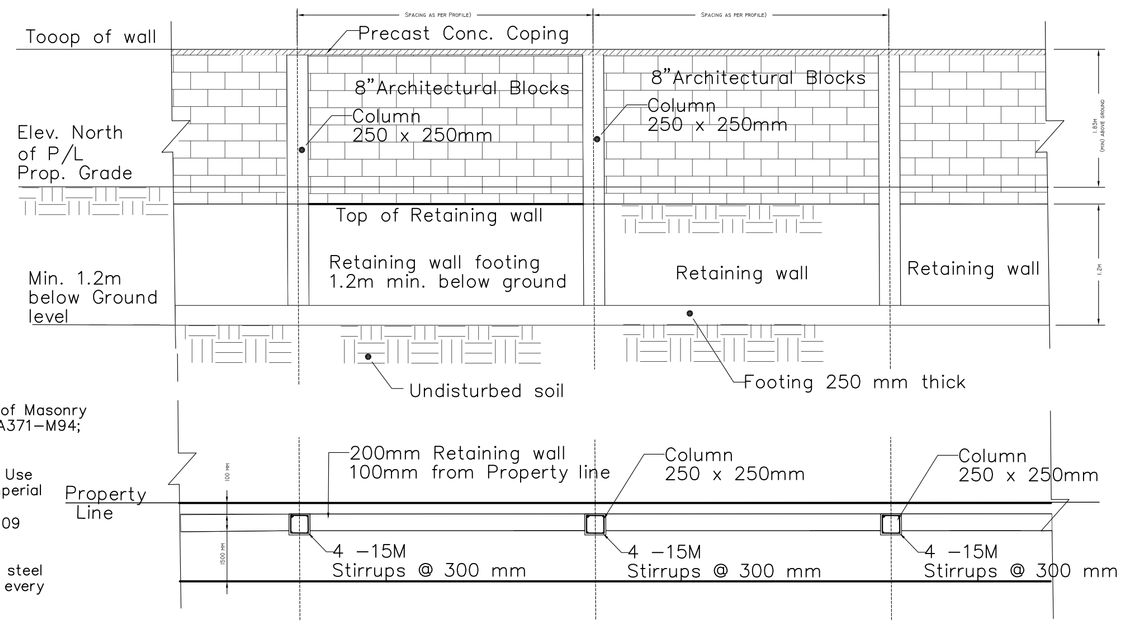
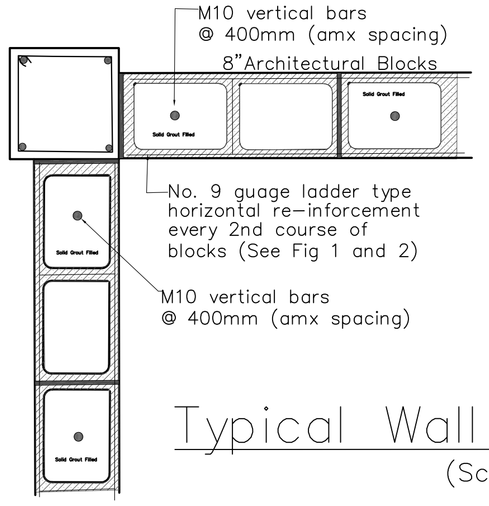
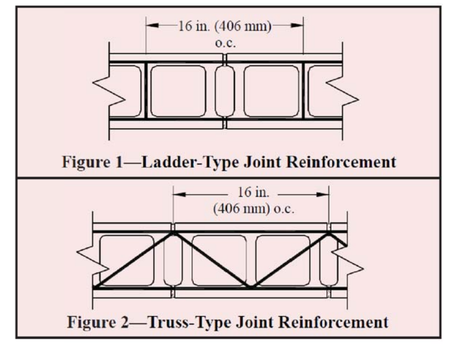






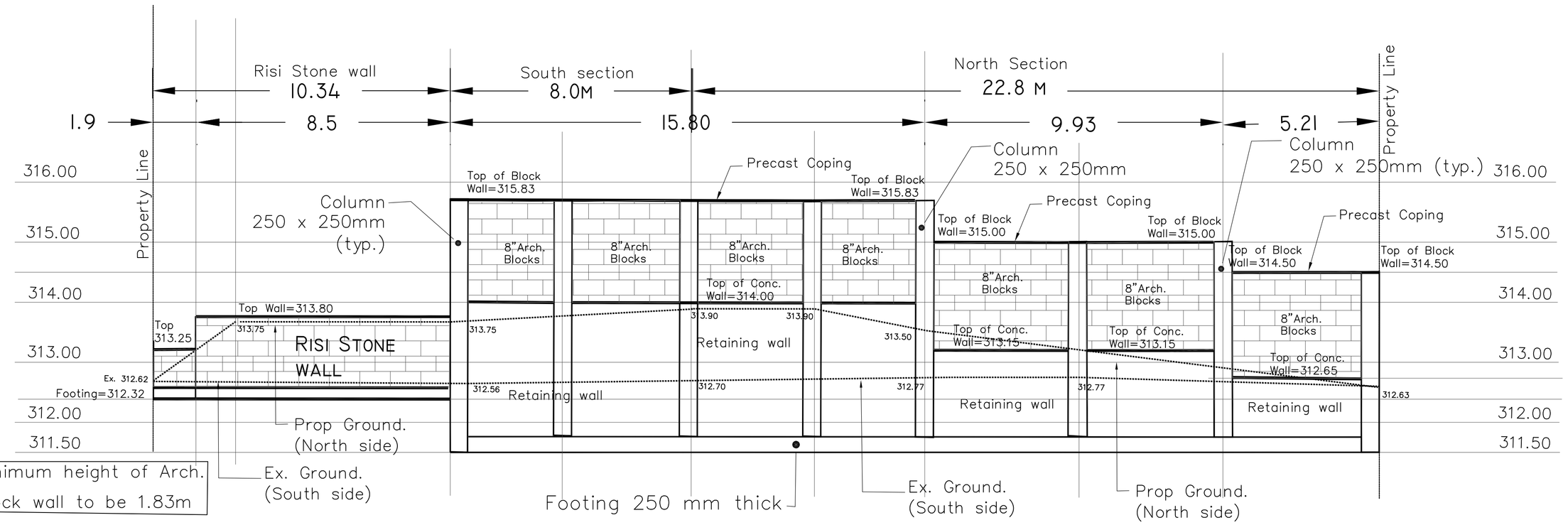


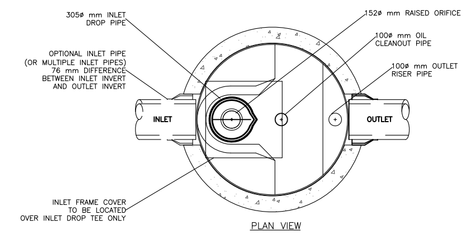
A Geo–technical Report is required to establish the bearing capacity of the soil along the retaining wall. The design of the footing should be checked/ modified based on teh findings of the report.

Notes:
1. All Masonry work shall confirm to CAN CSA S304.1–04 (Design of Masonry structures. Other standards include: CAN3–S304–M84; CAN3–A371–M94; CAN3–A165 Series–M94; CSA A179–M94
2. Vertical bars shall be 10M at 400mm spacing (max.).
3. Horizontal re–inforcement must be provided every 2nd course. Use continuous welded truss or ladder type, constructed of No 9 imperial guage (Galvanized)..
4. Cast in place concrete must be in compliance with CSA A23.1–09
5. Use 30 MPa for cast in place concrete.
6. Use Type S Mortar with a minimum of 15 MPa.
7. Masonry walls at columns to be re–inforced with 12–guage flat steel plate secured to column and 4.76 mm galvanized steel wire at every second block course.

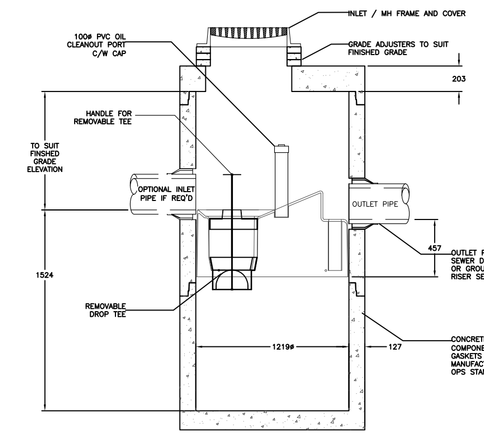
Typical Wall Section & Design

(Scale 1:50)



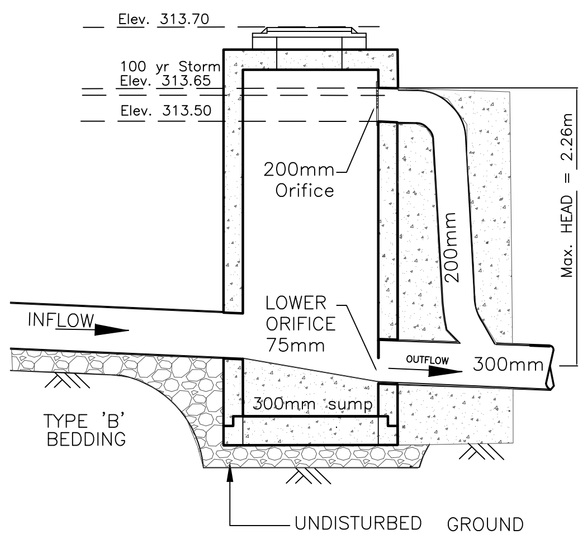


PLAN VIEW



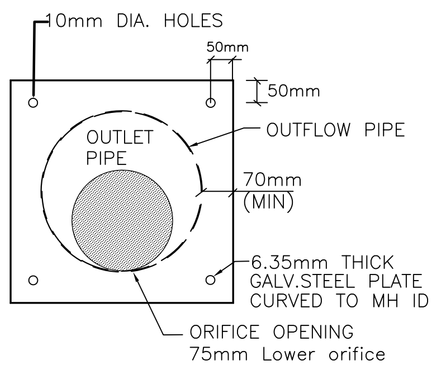
SECTION VIEW

STC 300



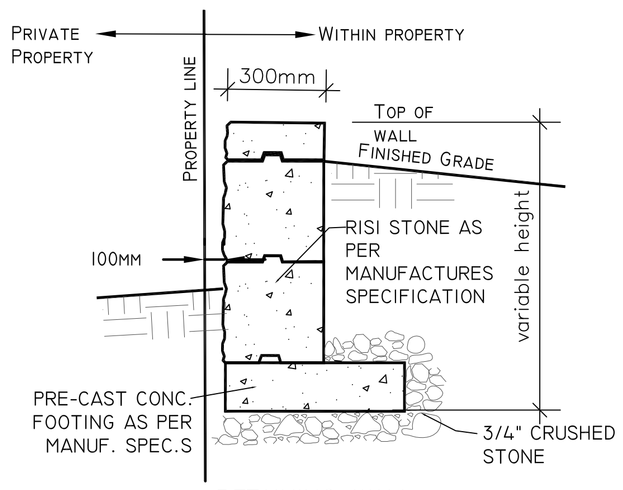
ORIFICE PLATE

MH 3 (NTS)



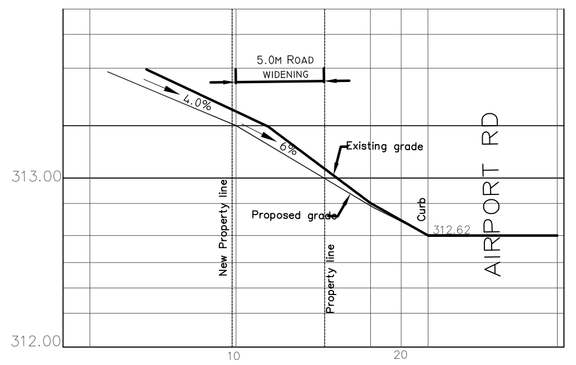
PROFILE OF WALL

H: 1:100
V: 1:50



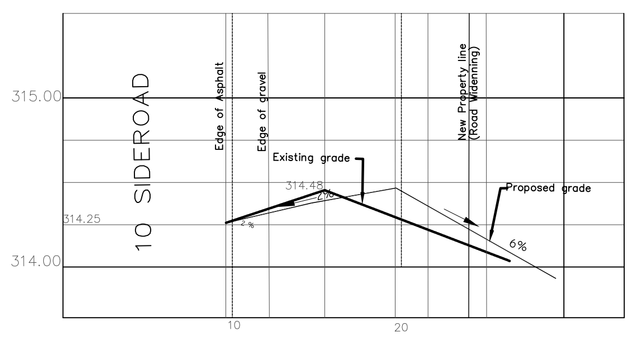
RETAINING WALL

Section 2



Cross Section at entrance on Airport Rd

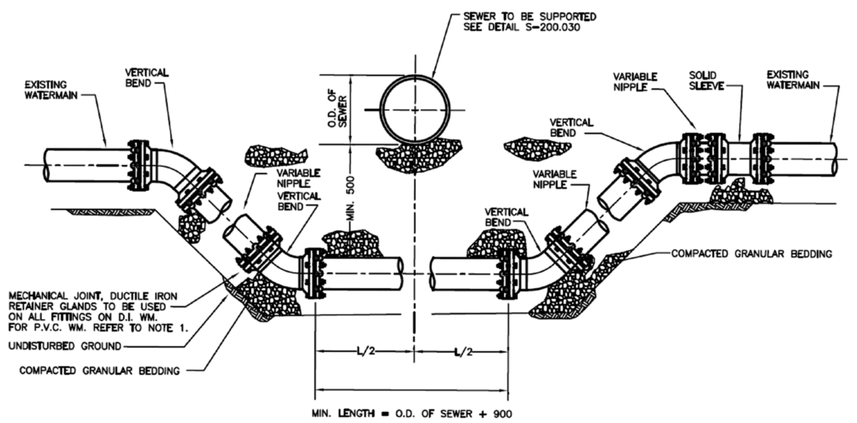
V: 1:25 H: 1:250



Cross Section at entrance on 10 Sideroad

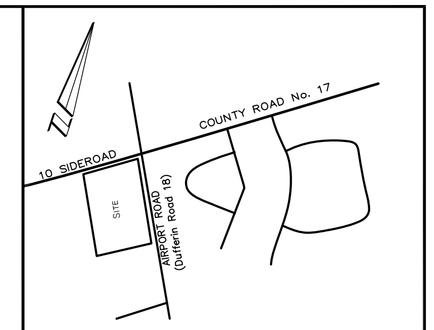
V: 1:25 H: 1:250

NOTE: THIS DESIGN DOES NOT APPLY TO DOMESTIC WATERMAIN CROSSINGS.



PLACE INSULATION OVER WM
75MM STYROGFOAM - 1.5 X 1.5M
MINIMUM OF 0.5 M CLEAR SEPARATION REQUIRED

DEFLECTION DESIGN FOR STORMSEWER CROSSING WATERMAIN



KEYPLAN

LEGEND

- 187.10 — PROPOSED ELEVATION
- DENOTES PROPOSED MANHOLE
- 185.00 — DENOTES EXISTING GRADE ELEVATION
- CB — DENOTES CATCH BASIN
- FIRE HYD — DENOTES FIRE HYDRANT
- HP — DENOTES HYDRO POLE
- TL — DENOTES TRAFFIC SIGNAL LIGHT
- WV — DENOTES WATER VALVE
- DIRECTION OF DRAINAGE FLOW
- OVERLAND FLOW ROUTE
- EXTENT OF DETENTION PONDING
- SIB
- T/G — TOP OF GRATE OG CB
- 97.50 — EXISTING WATER MAIN
- 97.50 — 100YR FLOOD WATER LEVEL
- Snow storage
- CONCRETE
- Ex. BELL PEDESTAL
- SOD
- Ex. ROAD SIGN

BENCHMARK:

ELEVATIONS ARE BASED ON GPS OBSERVATIONS TO PERMANENT REFERENCE STATIONS AND HAVE BEEN CORRECTED TO ORTHOMETRIC ELEVATIONS WITH GEOID MODEL HTv2.0, AS SUPPLIED BY NATURAL RESOURCES CANADA.

ARCHITECTS INC.
1604 BRITANNIA RD E., MISSISSAUGA
ON L4W 3A1, PHONE 905 564 1154
FAX 888 591 0265

No.	Revisions	Date
7	7th Submission comments	2018 07 28
6	6th Submission comments	2018 06 06
5	5th Submission comments	2017 12 24
4	4th Submission comments	2017 11 17
3	3rd Submission comments	2017 09 10
2	2nd Submission comments	2017 06 23
1	1st Submission comments	2017 01 11

RAM ENGINEERING INC
1192 White Clover Way
Mississauga On. L5V1K8
Ph: 905 567 1215
Email: RDharamdial@rogers.com

LICENSED PROFESSIONAL ENGINEER
R. DHARAMDIAL
July 28, 2018
PROVINCE OF ONTARIO

PROJECT:

GAS BAR & CONVENIENCE STORE
AIRPORT ROAD
MULMUR, ONTARIO

DRAWING NAME:

DETAILS

CHECKED BY: RD

PROJECT DATE: 2017 07 13

SCALE: As Shown

DRAWING NAME: <Details>

DRAWING NO: SSG - 3

C:\Users\Ram\Desktop\Mulmur\Mulmur July10 2018.dwg
2018/July/28, 1:06pm