



**ARIK ENGINEERING LTD.**  
Where Community Design & Develop  
260 Nebo Road, Unit 205, Hamilton  
Ontario, L8W 3K5  
email: info@arikengineering.com  
web: www.arikengineering.com  
phone: +1-289-965-9772

# MUNICIPALITY:

---

# TOWN OF FORT ERIE

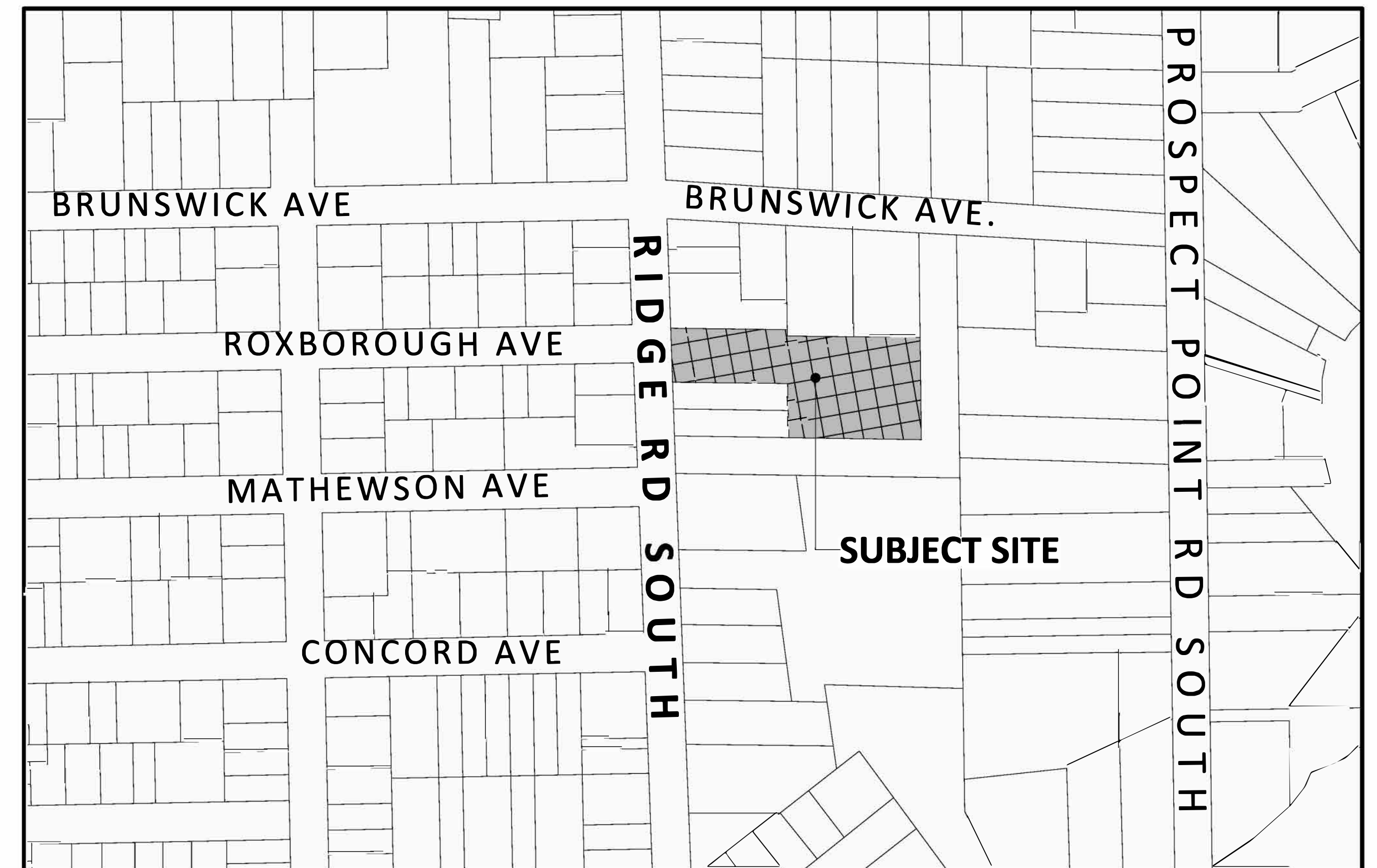
---

# 272 RIDGE ROAD SOUTH

---

### LIST OF DRAWINGS

- DWG-1 GENERAL NOTES AND DETAILS
- DWG-2 SITE SERVICING PLAN
- DWG-3 SITE GRADING PLAN
- DWG-4 EROSION & SEDIMENT CONTROL PLAN
- DWG-5 STORM DRAINAGE AREA PLAN



KEY PLAN  
N.T.S

**OWNER:**  
**5038257 ONTARIO INC**  
**(C/O CRAIG DEVRIES)**

**OCTOBER 12, 2022**

**PROJECT NUMBER: 22127**



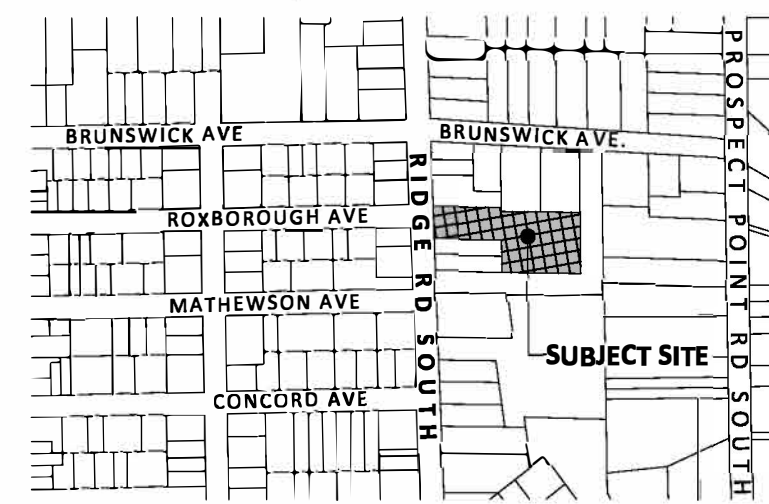
# MUNICIPALITY: TOWN OF FORT ERIE

## 272 RIDGE ROAD SOUTH

**SITE BENCHMARK**

- TOPOGRAPHIC INFORMATION IS BASED ON RASCH & HYDE LTD. DATED APRIL 11, 2022.
- ELEVATIONS ARE GEODETIC, DERIVED BY GPS OBSERVATIONS, REFERRED TO GEODETIC SURVEY OF CANADA BENCHMARK 0011971U037 (AKA 71U037) HAVING AN ELEVATION OF 200.338m (CGVD-1928:1978).

**KEY PLAN (NOT TO SCALE)**



**REVISIONS RECORD**

No.	BY	DD/MM/YYYY	DESCRIPTION
1.	A.R.	12/10/2022	FIRST SUBMISSION
<b>NOT ISSUED FOR CONSTRUCTION</b>			

<b>DATE:</b>	OCTOBER 12, 2022
<b>DESIGN BY:</b>	A.R.
<b>DRAWN BY:</b>	A.J.
<b>CHECKED BY:</b>	A.R.
<b>SCALE:</b>	N/A



**LEGEND**

	N/A
--	-----

**STANDARD NOTES FOR PRIMARY & SECONDARY SERVICES:**

**A. SEWERS**

**SANITARY AND STORM SEWERS**

- CONSTRUCTION OF SANITARY AND STORM SEWERS AND PRIVATE SERVICES SHALL BE IN ACCORDANCE WITH TOWN OF FORT ERIE STANDARDS & SPECIFICATIONS (LATEST EDITION) AND MINISTRY OF ENVIRONMENT AND CONSERVATION PARKS (MECP) GUIDELINES (LATEST EDITION).
- COVER AND BEDDING MATERIAL FOR CONCRETE PIPE SHALL BE GRANULAR 'A' MATERIAL AS PER OPSD 802.030 OR 802.033, CLASS 'B' BEDDING, OR AS PER GEOTECHNICAL SPECIFICATIONS.
- COVER AND BEDDING MATERIAL FOR PVC PIPE SHALL BE GRANULAR 'A' MATERIAL AS PER OPSD 802.010 OR 802.013 OR AS PER GEOTECHNICAL SPECIFICATION.
- ALL SEWERS SHALL BE CLEANED AND FLUSHED PRIOR TO VIDEO INSPECTION.
- MANHOLE FRAMES AND COVERS SHALL BE AS PER OPSD 401.010 (STORM-OPEN, SANITARY-CLOSED).
- SANITARY SEWER (200MM TO 675MM DIA) SHALL BE PVC PIPE, CSA B182.2, SDR-35.
- STORM SEWER (300MM TO 675MM DIA.) SHALL BE PVC PIPE, CSA B182.2, SDR-35.
- STORM SEWER > 675MM DIA. SHALL BE CONCRETE PIPE, CSA A257.2 (AS SPECIFIED)
- ALTERNATE MATERIALS MAY BE ACCEPTABLE IF APPROVAL HAS BEEN OBTAINED FROM THE TOWN OF FORT ERIE.
- THE CONNECTION TO THE MAIN SANITARY SEWER SHALL BE MADE WITH APPROVED MANUFACTURED TEE. APPROVED SADDLES SHALL BE USED FOR CONNECTING TO EXISTING SEWER MAIN.
- MINIMUM SLOPE FOR PRIVATE SERVICES TO BE 2.0%.
- TOP OF SANITARY PRIVATE SERVICES AT STREET LINE TO BE 2.75M (MIN.) BELOW CENTRELINE ROAD ELEVATION AT THAT POINT OR AS DETAILED.
- TOP OF STORM PRIVATE DRAINS AT STREET LINE TO BE 1.5M (MIN.) BELOW CENTRELINE ROAD ELEVATION AT THAT POINT OR AS DETAILED.
- BUILDING RAINWATER LEADERS SHALL NOT BE CONNECTED TO THE STORM PRIVATE DRAIN BUT SHALL DISCHARGE ONTO THE GROUND SURFACE VIA SPLASH PADS.
- SUMP PUMPS WITH CHECK VALVES SHALL BE INSTALLED IN THE BUILDING TO PUMP THE BUILDING WEEPING TILES TO THE GRADE OUTSIDE THE BUILDING. THE SUMP OUTLET PIPE SHALL EXTEND A MINIMUM OF 150MM ABOVE THE PROPOSED GRADE AT THE DWELLING.
- BUILDING RAINWATER LEADERS SHALL NOT BE CONNECTED TO THE STORM PRIVATE DRAIN BUT SHALL DISCHARGE ONTO THE GROUND SURFACE VIA SPLASH PADS.
- SUMP PUMPS WITH CHECK VALVES SHALL BE INSTALLED IN THE BUILDING TO PUMP THE BUILDING WEEPING TILES TO THE GRADE OUTSIDE THE BUILDING. THE SUMP OUTLET PIPE SHALL EXTEND A MINIMUM OF 150MM ABOVE THE PROPOSED GRADE AT THE DWELLING.
- SANITARY SERVICE SIZE FOR EACH UNIT SHALL BE 100MM PVC SDR28 @ MINIMUM 2.0% SLOPE.

**CATCH BASINS**

- ALL CATCH BASIN CONNECTIONS TO BE 250mm DIA PVC CSA B182.2, SDR-35 OR AS DETAILED.
- CATCH BASIN AS PER OPSD 705.010.
- CATCH BASIN COVER IN ASPHALT AREA AS PER OPSD 400.100.
- CATCH BASIN COVER IN GRASS AREA SHALL BE BEEHIVE TYPE GRATE.

**B. WATERMAINS AND WATER SERVICES**

**WATER SERVICES**

- GRANULAR A MATERIAL IS TO BE USED FOR BEDDING UNDER THE WATERMAIN. BALANCE OF TRENCH BACKFILL MATERIAL TO GROUND LEVEL IS ACCORDING TO THE TOWN SPECIFICATIONS.
- CONCRETE THRUST BLOCK OR APPROVED RESTRAINING DEVICES ARE REQUIRED AS PER OPSD-1103.010, 1103.020.
- ALL VALVES, HYDRANTS WATER METERS TO BE INSTALLED AS PER TOWN OF FORT ERIE STANDARDS AND SPECIFICATIONS.
- TO BE INSTALLED TO A MINIMUM COVER OF 1.7m.
- WATER SERVICE SIZE FOR EACH UNITS SHALL BE 20MM Ø TYPE K SOFT COPPER. COMPLETE WITH CURB STOP AND BOX AS PER OPSD 1104.010

**C. ROADWORKS**

**1. SIDEWALKS, CURBS, AND GUTTERS**

- CONCRETE CURB AND GUTTER AS PER OPSD 600.110 - (BARRIER TYPE).
- CURB DEPRESSION AT DRIVEWAYS AS PER OPSD 600.040 AND OPSD 310.050.
- 1.5M WIDE CONCRETE SIDEWALK AS PER COUNTY STANDARD AND SPECIFICATIONS.
- MAXIMUM DRIVEWAY SLOPE NOT MORE THAN 8.0% AND NOT LESS THAN 2.0%.
- 150MM FILTER WRAPPED CORRUGATED SUBDRAINS TO BE INSTALLED CONTINUOUSLY BELOW THE CURB AND GUTTER AND CONNECTED TO THE STORM OUTLET OR AS DETAILED ON SERVICING AND GRADING PLANS.

**D. COMPACTION REQUIREMENTS**

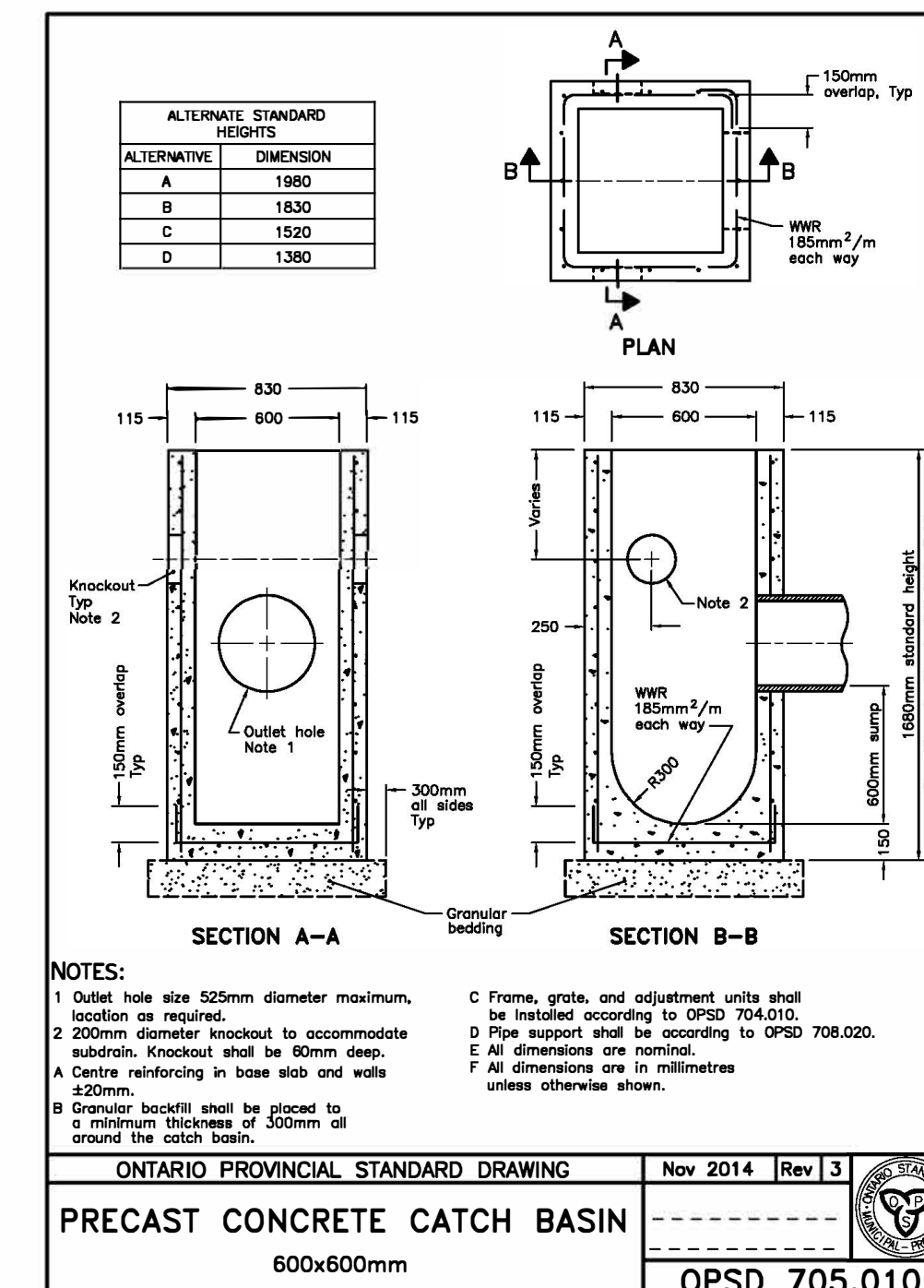
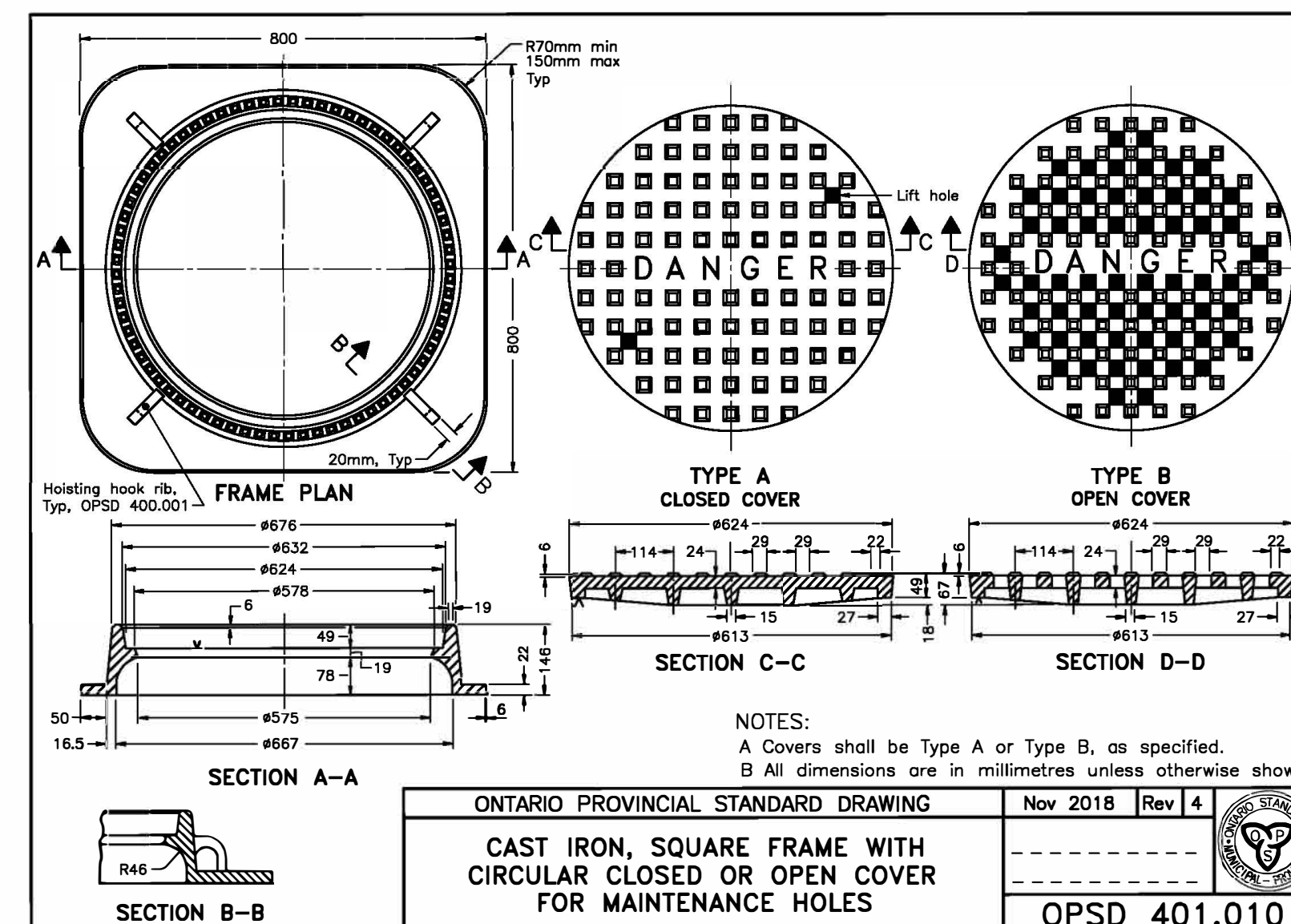
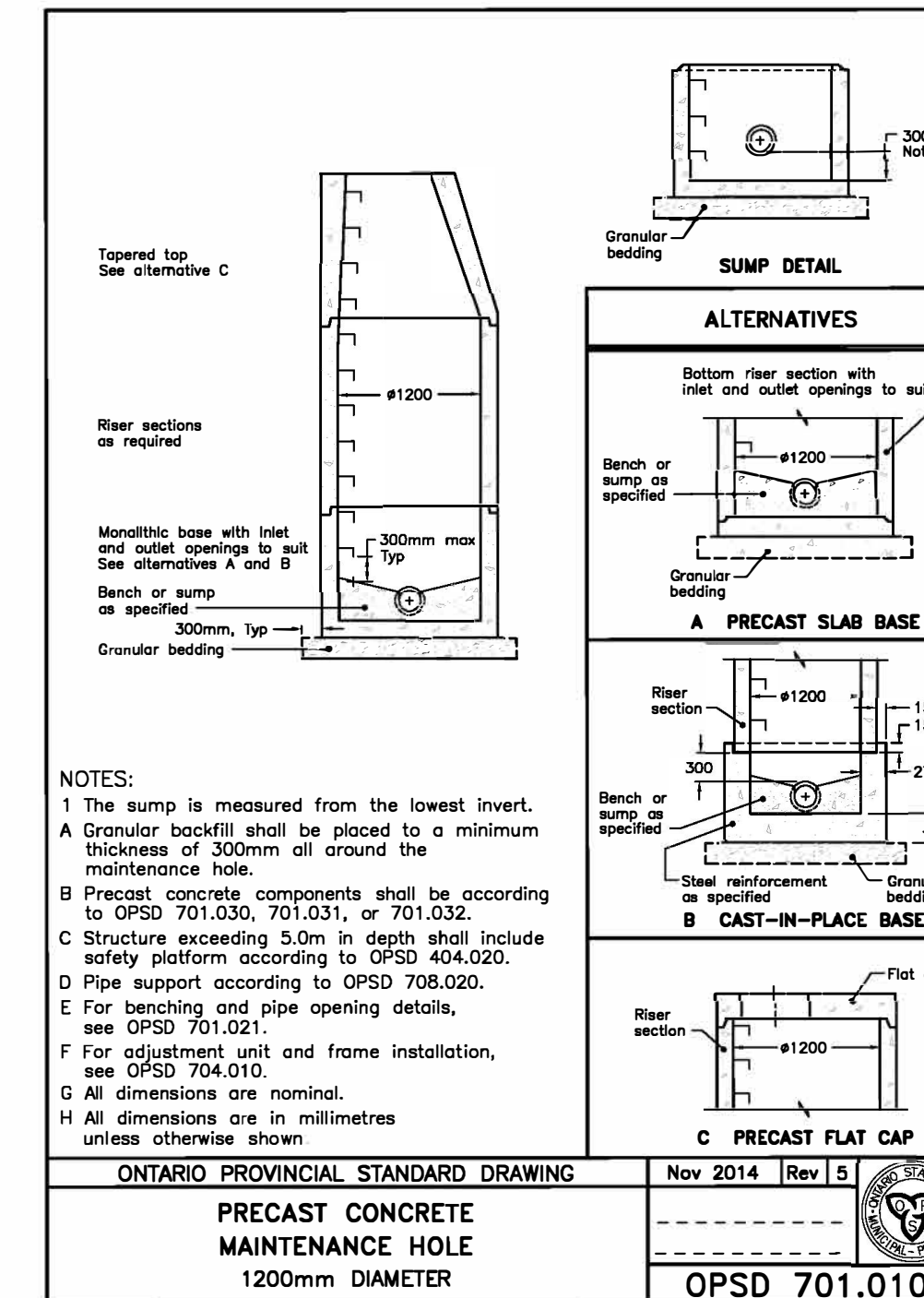
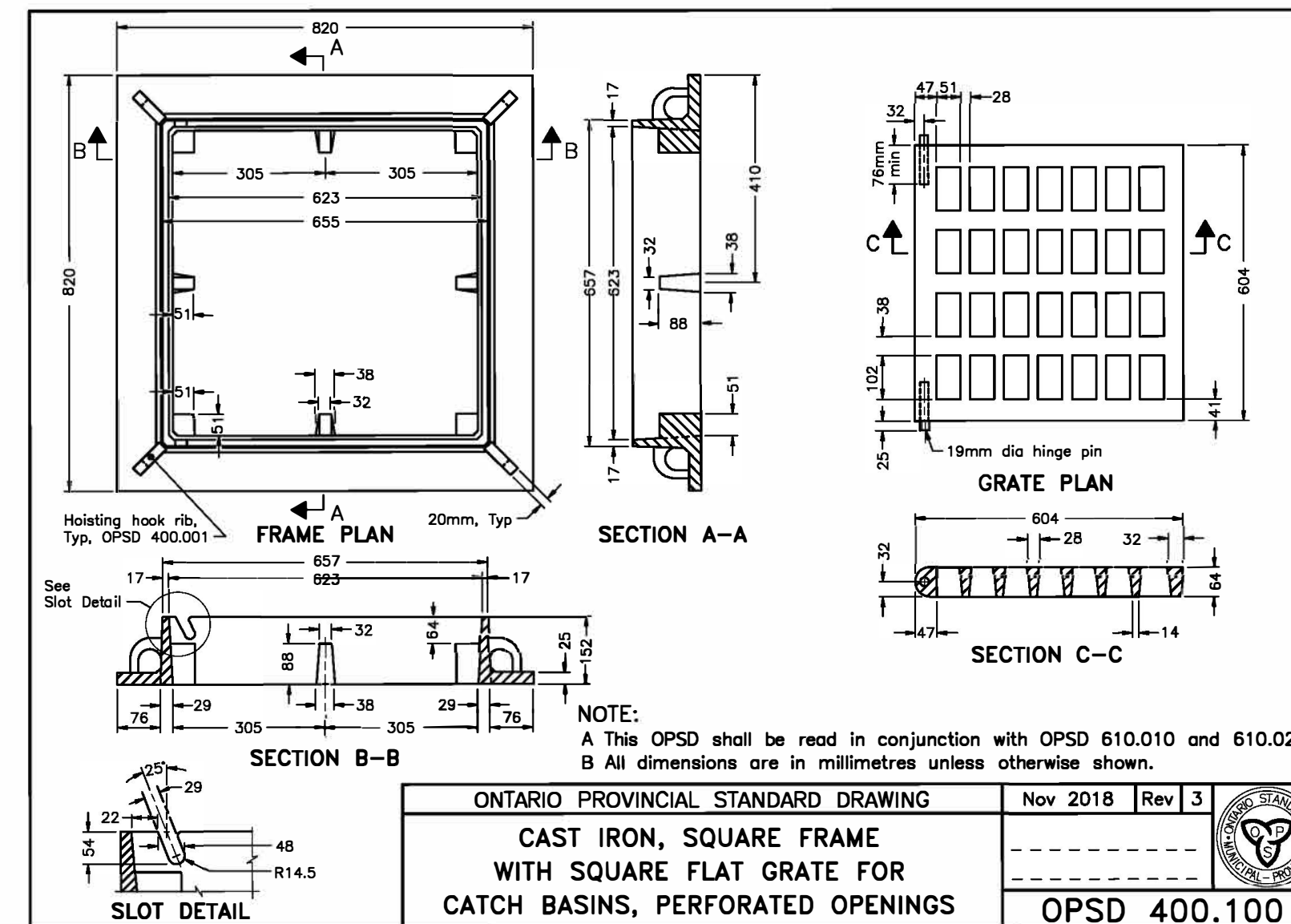
- ALL BEDDING AND BACKFILL MATERIAL, ROAD SUB-GRADES AND GENERALLY ALL MATERIAL USED FOR LOT GRADING AND FILL SECTIONS, ETC., SHALL BE COMPACTED TO MIN. 100% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300MM LIFTS.
- ALL GRANULAR ROAD BASE MATERIALS SHALL BE COMPACTED TO 100% SPD.
- FOR ALL SEWERS AND WATERMAINS IN FILL SECTIONS, THE COMPACTION SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO LAYING OF PIPE.
- REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL ON SITE SOIL INFORMATION AND RECOMMENDATION.

**E. SILTATION AND EROSION CONTROL**

- SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.
- ALL SILTATION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AFTER EACH RAINFALL AS DIRECTED AND TO THE SATISFACTION OF THE OF HALDIMAND COUNTY.
- ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE HALDIMAND COUNTY.
- SEDIMENT CONTROL FENCES AS PER OPSD 219.130

**F. GENERAL NOTES**

- EXISTING SEWERS, WATERMAINS & UTILITIES ALIGNMENTS AND ELEVATIONS ARE ONLY PROVIDED FOR INFORMATION PURPOSES. THE CONTRACTOR ONSITE SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING SEWERS, WATERMAINS & UTILITIES ALIGNMENT & ELEVATIONS PRIOR TO START OF CONSTRUCTION.
- THE BIDDER/CONTRACTOR MUST REVIEW/VERIFY EXISTING SOIL CONDITIONS ONSITE.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR COSTS ASSOCIATED WITH THE CROSSING OF ANY EXISTING SEWERS, WATERMAINS AND UTILITIES INCLUDING ANY SUPPORTS AND PRECAUTIONS REQUIRED ON SITE SPECIFIC BASIS.
- THE BIDDER/CONTRACTOR MUST VERIFY ALL DIMENSIONS ON ALL THE DRAWINGS. ANY ERRORS AND/OR OMISSIONS MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.



**PROJECT:** 272 RIDGE ROAD SOUTH

**OWNER:** 5038257 ONTARIO INC (C/O CRAIG DEVRIES)

**MUNICIPALITY:** TOWN OF FORT ERIE

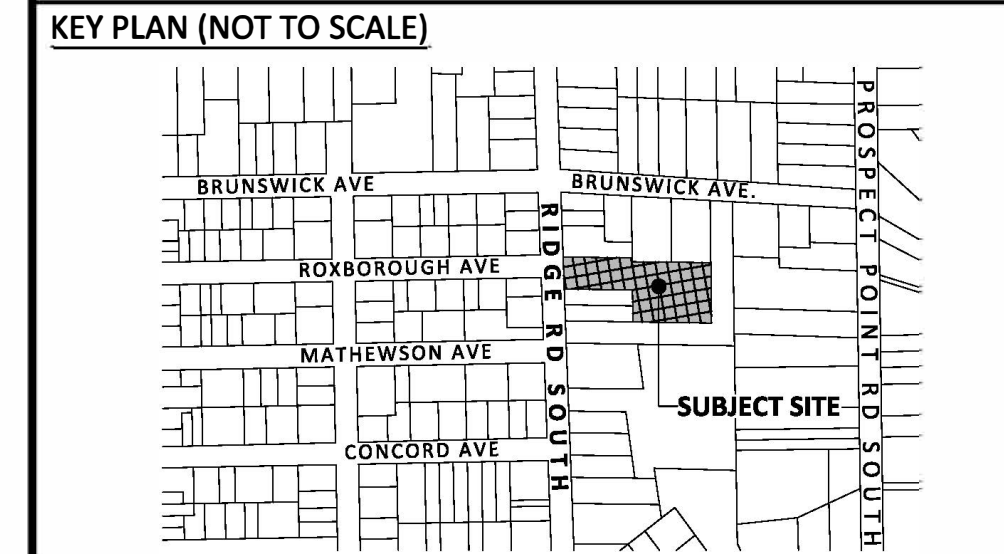
**GENERAL NOTES AND DETAILS**

**PROJECT NUMBER:** 22127 **DRAWING:** DWG-1



**SITE BENCH MARK**

- TOPOGRAPHIC INFORMATION IS BASED ON RASCH & HYDE LTD. DATED APRIL 11, 2022.
- ELEVATIONS ARE GEODETIC, DERIVED BY GPS OBSERVATIONS, REFERRED TO GEODETIC SURVEY OF CANADA BENCHMARK 0011971U037 (AKA 71U037) HAVING AN ELEVATION OF 200.338m (CGVD-1928:1978).



**REVISIONS RECORD**

No.	BY	DD/MM/YYYY	DESCRIPTION
1.	A.R.	12/10/2022	FIRST SUBMISSION

**NOT ISSUED FOR CONSTRUCTION**

**DATE:** OCTOBER 12, 2022  
**DESIGN BY:** A.R.  
**DRAWN BY:** A.J.  
**CHECKED BY:** A.R.  
**SCALE:** 1:250

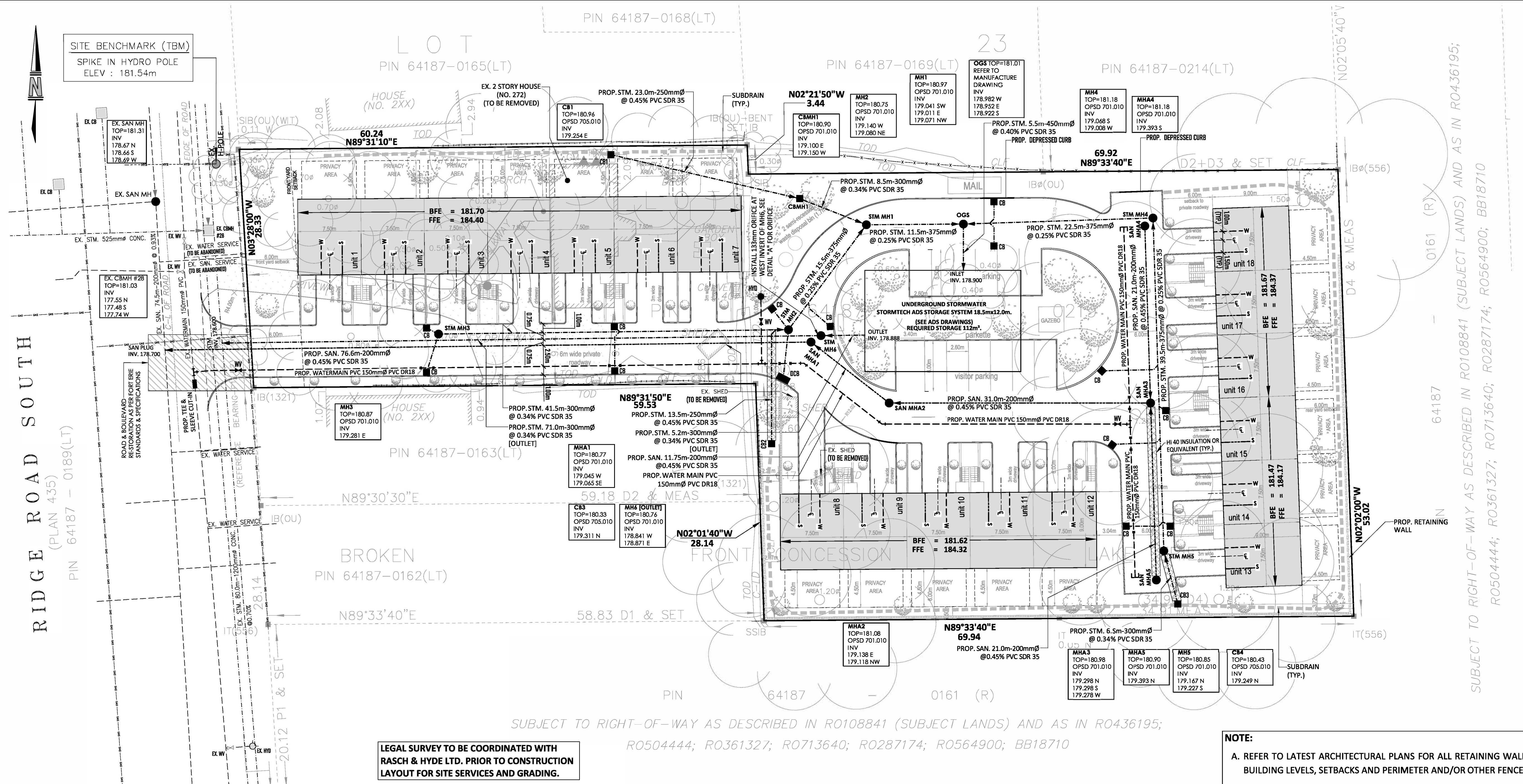
**ENGINEER'S STAMP**

**LEGEND**

- EXISTING STORM SEWER & MANHOLE
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED STORM SEWER & MANHOLE
- PROPOSED SANITARY SEWER & MANHOLE
- EXISTING WATERMAIN
- PROPOSED WATERMAIN
- PROPOSED CURB & GUTTER
- EXISTING CURB & GUTTER
- DEPRESSED CURB
- EXISTING DEPRESSED CURB
- EXISTING CURB STOP
- PROPOSED WATER VALVE
- EXISTING WATER VALVE
- EXISTING CATCHBASIN
- PROPOSED CATCHBASIN
- PROPOSED DOUBLE CATCHBASIN
- EXISTING HYDRANT
- PROPOSED HYDRANT
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED WATER METER
- PROPOSED BACKFLOW PREVENTER
- PROPOSED RETAINING WALL
- PROPOSED TOP OF RETAINING WALL
- PROPOSED BOTTOM OF RETAINING WALL
- PROPOSED SUBDRAIN
- EXISTING FENCE
- PROPOSED FENCE
- HYDRO POLE
- PROPOSED TRANSFORMER
- EXISTING BELL LINES
- EXISTING HYDRO LINES
- EXISTING GAS LINES
- FIRST FLOOR ELEVATION
- BASEMENT FLOOR ELEVATION
- PROPOSED MAILBOX
- EXISTING TREE
- PROPOSED LIGHT POLE
- EXISTING LIGHT POLE
- PROPOSED FLOOR DRAIN
- RAINWATER LEADER

**PROJECT:** 272 RIDGE ROAD SOUTH  
**OWNER:** 5038257 ONTARIO INC (C/O CRAIG DEVRIES)  
**MUNICIPALITY:** TOWN OF FORT ERIE  
**SITE SERVICING PLAN**

**PROJECT NUMBER:** 22127 **DRAWING:** DWG-2



**GENERAL NOTES FOR SERVICING:**

- ALL MUNICIPAL AND PRIVATE SANITARY, STORM AND WATERMAIN SERVICES TO BE INSTALLED AS PER THE CURRENT TOWN STANDARDS AND SPECIFICATIONS.
- EXISTING MUNICIPAL AND PRIVATE SEWERS, WATERMAINS AND UTILITIES ALIGNMENTS AND THEIR ELEVATIONS ARE ONLY PROVIDED FOR INFORMATION PURPOSES. THE CONTRACTOR ON SITE SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING SEWERS, WATERMAINS AND UTILITIES ALIGNMENT AND ELEVATIONS PRIOR TO START OF CONSTRUCTION.
- THE BIDDER/CONTRACTOR MUST REVIEW/VERIFY EXISTING SOIL CONDITIONS ON SITE.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR COST ASSOCIATED WITH THE CROSSING OF ANY EXISTING SEWERS, WATERMAINS AND UTILITIES INCLUDING ANY SUPPORTS AND PRECAUTIONS REQUIRED ON SITE SPECIFIC BASIS.
- THE BIDDER/CONTRACTOR MUST VERIFY ALL DIMENSIONS ON ALL THE DRAWINGS. ANY ERRORS AND/OR OMISSIONS MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.

**STANDARD SERVICING NOTES:**

- THE PROPERTY OWNER IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE TOWN RIGHT-OF-WAY TO TOWN STANDARDS.
- IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO DEVELOPMENT ENGINEERING DIVISION, PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
- REFER TO LANDSCAPING PLAN FOR TREE PRESERVATIONS AND PROPOSED TREES WITH RESPECT TO THE SITE SERVICING.
- ALL PRIVATE WATER, SANITARY AND STORM SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER TOWN OF FORT ERIE ENGINEERING STANDARDS AND GUIDELINES.
- CONTRACTOR IS RESPONSIBLE TO LOCATE ALL EXISTING UTILITIES AROUND THE DEVELOPMENT PRIOR TO START CONSTRUCTION AND NOTIFY TO THE OWNER AND THE ENGINEER.
- ALL CB LEADS ARE 250mm PVC SDR-35, UNLESS OTHERWISE NOTED.

**ONSITE STORMWATER MANAGEMENT REQUIREMENTS:**

- POST-DEVELOPMENT FLOWS TO MATCH WITH PRE-DEVELOPMENT CONDITIONS UNDER 5-YEAR & 100 YEAR STORM EVENTS.
- STORMWATER MANAGEMENT ONSITE QUANTITY CONTROL REQUIRED STORAGE OF 112m<sup>3</sup> IS TO BE PROVIDED AT THE ALLOWABLE DISCHARGE RATE OF 0.035cms WITH AN ORIFICE SIZE OF 133mm DIAMETER.
- REFER TO ADS STORMTECH DESIGN/DRAWINGS FOR UNDERGROUND STORAGE SYSTEM.

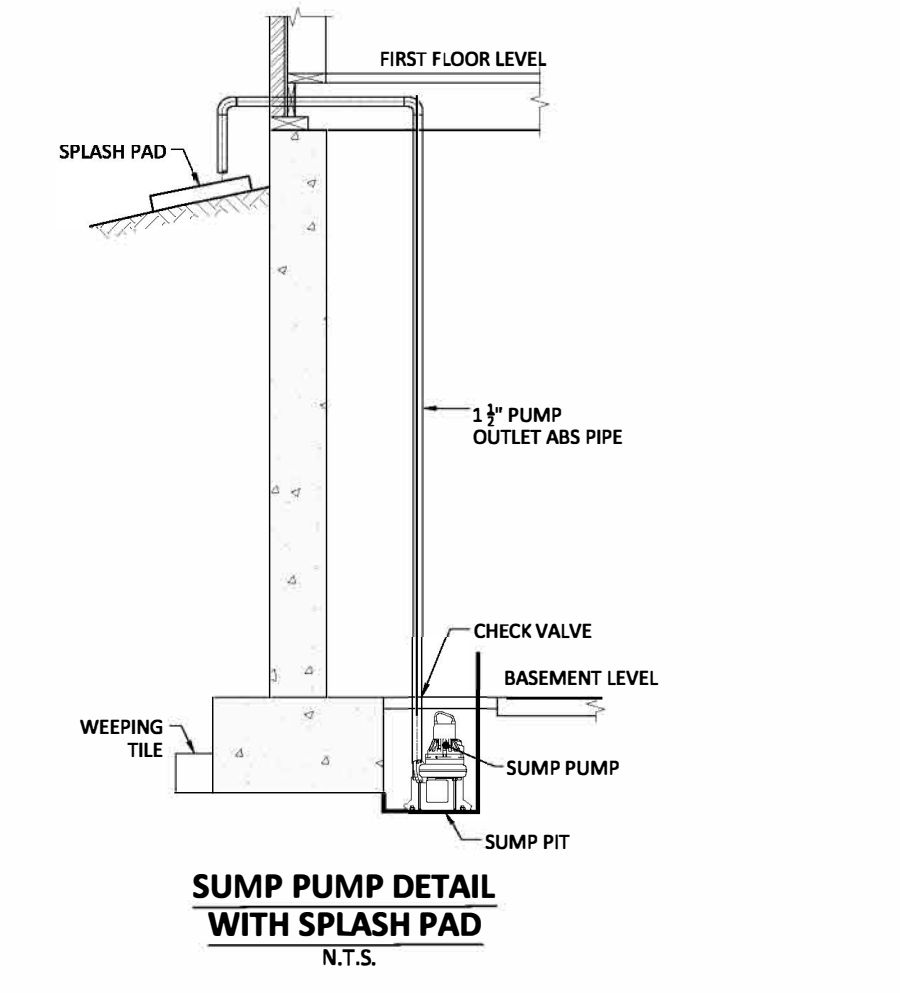
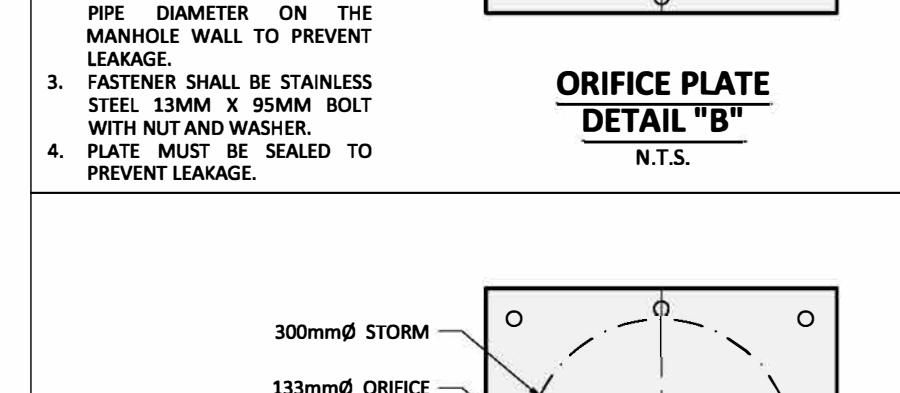
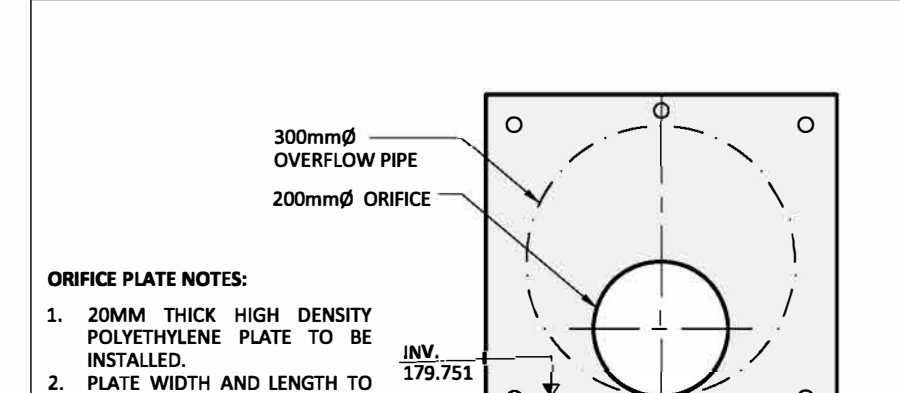
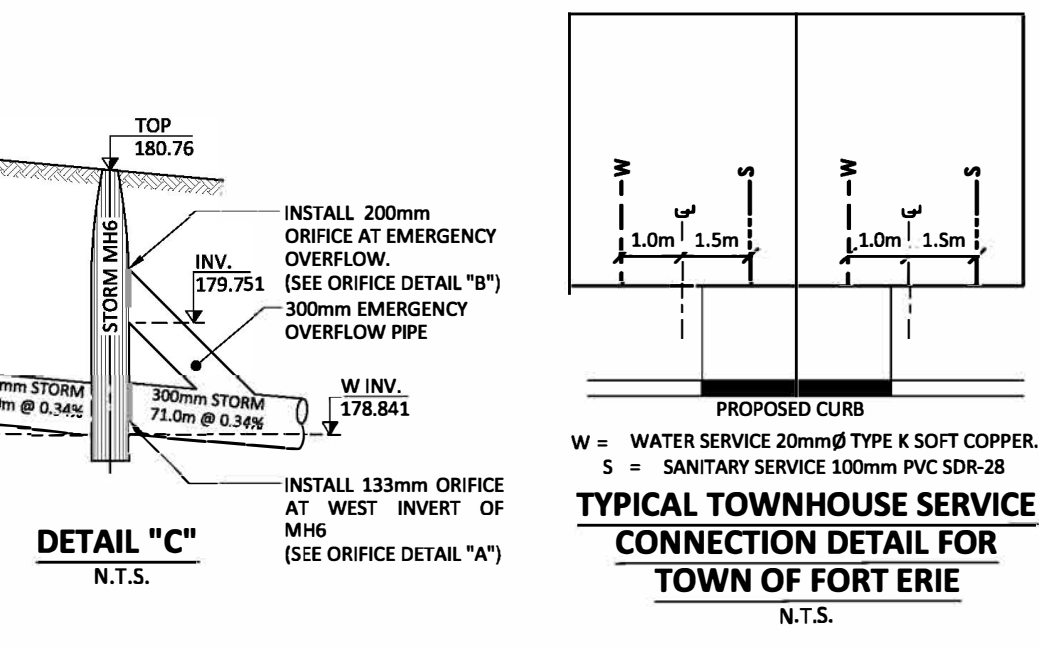
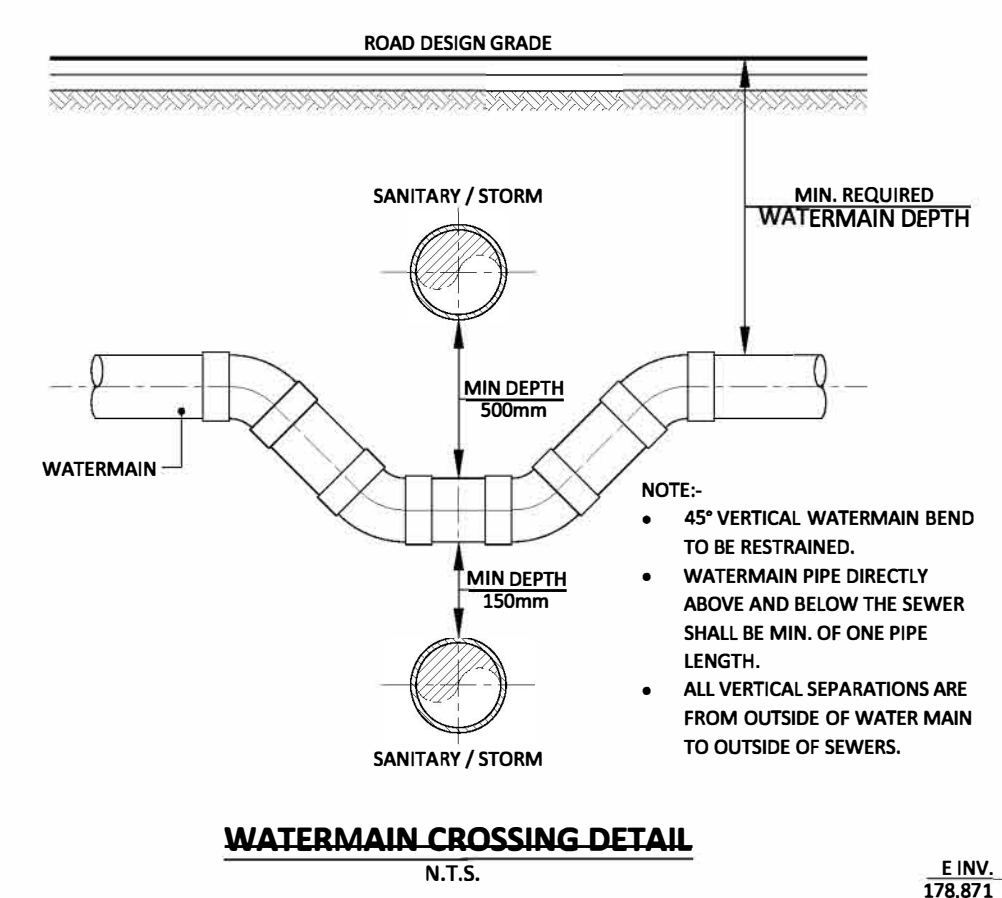
**ALL EXISTING MUNICIPAL SANITARY AND STORM SEWERS LOCATION AND INVERTS WHERE PROPOSED SITE SERVICES WILL TIE IN TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.**

**ALL EXISTING UTILITIES TO BE LOCATED ON SITE.**

**MINIMUM BASEMENT FLOOR ELEVATION SHALL BE BASED ON INVERT OF THE SANITARY SERVICE. CONTRACTOR MUST VERIFY SANITARY SERVICE INVERT PRIOR TO SETTING BASEMENT FOUNDATION LEVEL.**

**RAINWATER ROOF LEADERS AND SUMP PUMPS:**

- ALL RAINWATER LEADERS SHALL DISCHARGE ONTO SPLASH PADS AND THEN TO GRASSED OR LANDSCAPED AREAS A MINIMUM OF 1.20M FROM THE BUILDING FACE.
- SUMP PUMP WITH CHECK VALVE SHALL BE INSTALLED IN EACH DWELLING TO PUMP BUILDING WEeping TILES TO THE GRADE OUTSIDE THE BUILDING. THE SUMP PUMP OUTLET PIPE SHALL EXTEND A MINIMUM OF 150MM ABOVE THE PROPOSED GRADE AT THE DWELLING PRIOR TO DISCHARGE TO THE GRADE OUTSIDE THE BUILDING.



**NOTE:**

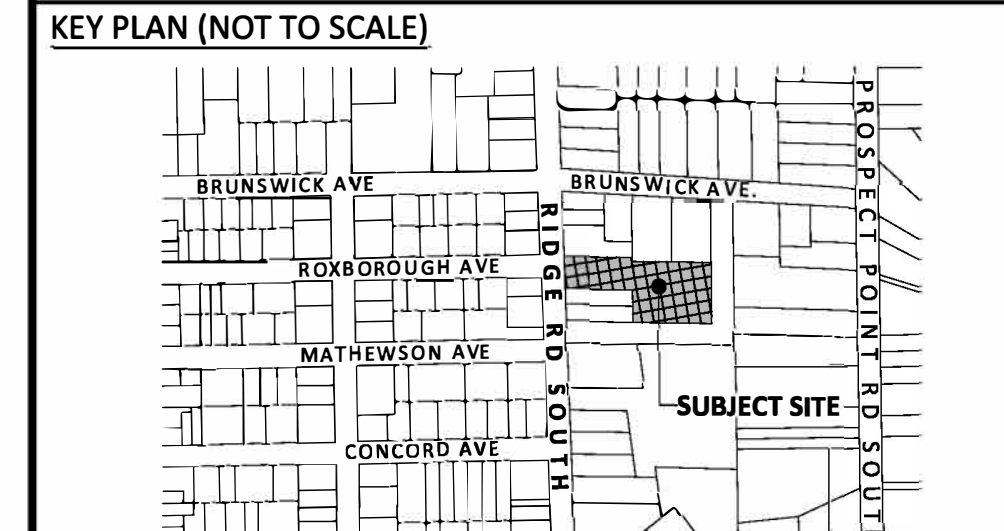
- REFER TO LATEST ARCHITECTURAL PLANS FOR ALL RETAINING WALLS, BUILDING LEVELS, SETBACKS AND PERIMETER AND/OR OTHER FENCES.
- FENCE TO BE INSTALLED AT THE TOP OF RETAINING WALLS, RETAINING WALLS TO BE DESIGNED TO ACCOMMODATE FENCE LOADING.
- RETAINING WALLS TO BE DESIGNED BY OTHERS.
- MINIMUM BASEMENT FLOOR ELEVATION SHALL BE BASED ON INVERT OF THE SANITARY SERVICE. CONTRACTOR MUST VERIFY SANITARY SERVICE INVERT PRIOR TO SETTING BASEMENT FOUNDATION LEVEL.
- PROVIDE INSULATION ON SANITARY SERVICE WHERE COVER FORM THE FINISH GRADE LESS THEN 1.2m.
- CONTRACTOR MUST REVIEW SERVICING AND GRADING PLAN FOR CONSTRUCTION.

272 RIDGE ROAD SOUTH



**SITE BENCH MARK**

- TOPOGRAPHIC INFORMATION IS BASED ON RASCH & HYDE LTD. DATED APRIL 11, 2022.
- ELEVATIONS ARE GEODETIC, DERIVED BY GPS OBSERVATIONS, REFERRED TO GEODETIC SURVEY OF CANADA BENCHMARK 0011971U037 (AKA 71U037) HAVING AN ELEVATION OF 200.338m (CGVD-1928:1978).



**REVISIONS RECORD**

No.	BY	DD/MM/YYYY	DESCRIPTION
1.	A.R	12/10/2022	FIRST SUBMISSION

**NOT ISSUED FOR CONSTRUCTION**

DATE: OCTOBER 12, 2022

DESIGN BY: A.R

DRAWN BY: A.J

CHECKED BY: A.R

SCALE: 1:250



**LEGEND**

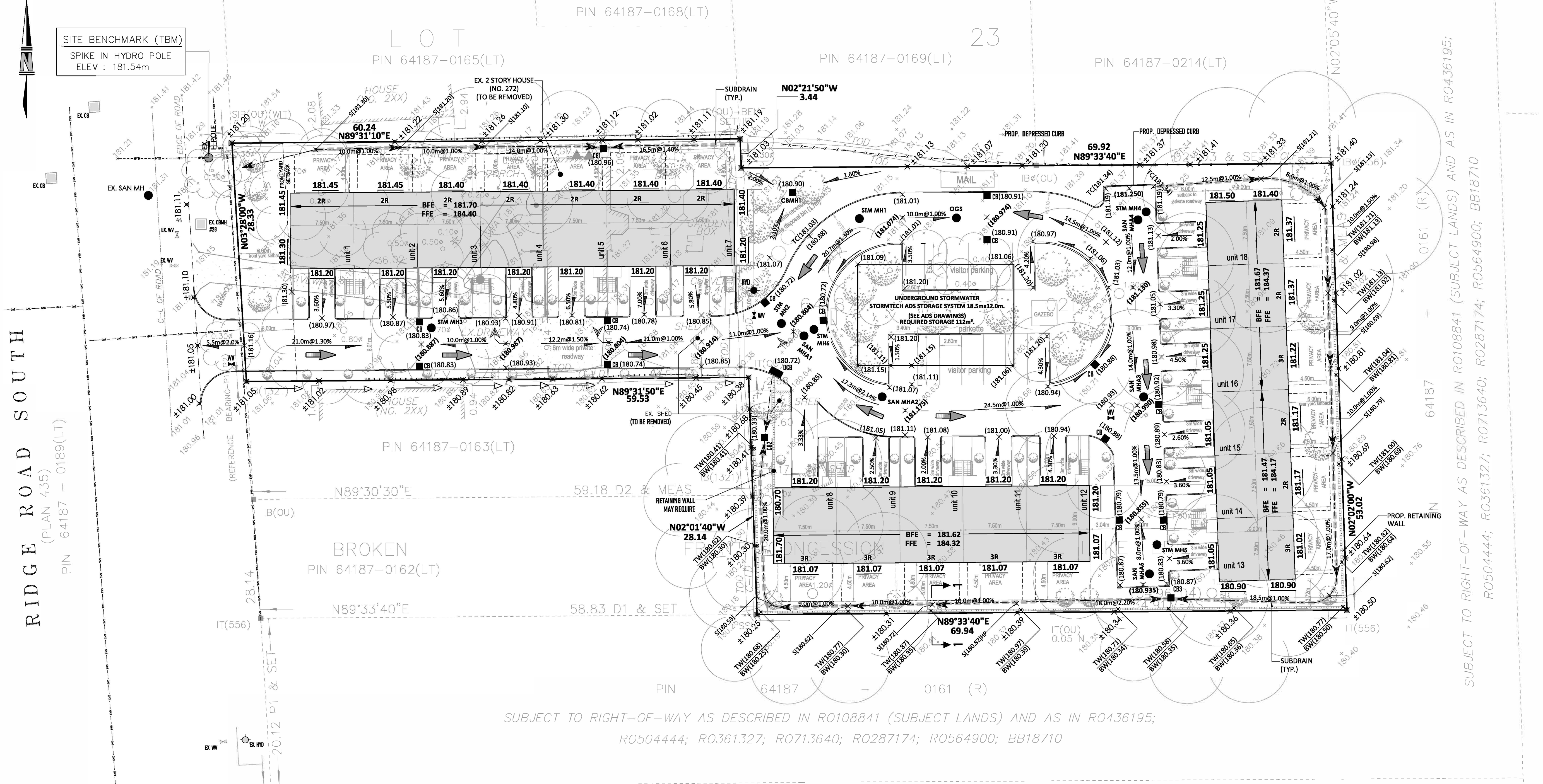
±900.00	EXISTING GROUND ELEVATION TO REMAIN
±000.00	CONTOUR ELEVATION
±000.00	EXISTING GROUND ELEVATION
±000.00	PROPOSED DESIGN GRADE
TC(±000.00)	PROPOSED TOP OF CURB DESIGN GRADE
±000.00	APPROXIMATE GRADE AT THE BUILDING
S(±000.00)	PROPOSED SWALE ELEVATION
TW(±000.00)	PROPOSED RETAINING WALL
BW(±000.00)	PROPOSED TOP OF RETAINING WALL
FFE	PROPOSED BOTTOM OF RETAINING WALL
BFE	FIRST FLOOR ELEVATION
→	DIRECTION OF MAJOR DRAINAGE ROUTE
→	SHEET FLOW DIRECTION
1.00%	ROAD/PARKING/GRASS AREA SLOPE
5m@1.00%	GRASS SWALE
—	PROPOSED CURB & GUTTER
—	EXISTING CURB & GUTTER
—	DEPRESSED CURB
—	EXISTING DEPRESSED CURB
●	EXISTING STORM MANHOLE
●	EXISTING SANITARY MANHOLE
●	PROPOSED STORM MANHOLE
●	PROPOSED SANITARY MANHOLE
—	PROPOSED SUBDRAIN
□	EXISTING CATCHBASIN
□	PROPOSED CATCHBASIN
□	PROPOSED DOUBLE CATCHBASIN
□	EXISTING HYDRANT
□	PROPOSED SANITARY MANHOLE
□	PROPOSED SUBDRAIN
□	EXISTING CATCHBASIN
□	PROPOSED CATCHBASIN
□	PROPOSED DOUBLE CATCHBASIN
□	EXISTING HYDRANT
□	PROPOSED HYDRANT
□	PROPOSED CATCHBASIN MANHOLE
□	EXISTING FENCE
□	PROPOSED FENCE
□	HYDRO POLE
□	PROPOSED TRANSFORMER
□	EXISTING BELL LINES
□	EXISTING GAS LINES
□	PROPOSED FLOOR DRAIN
□	EXISTING TREE
□	PROPOSED LIGHT POLE
□	EXISTING LIGHT POLE

**PROJECT:** 272 RIDGE ROAD SOUTH

**OWNER:** 5038257 ONTARIO INC (C/O CRAIG DEVRIES)

**MUNICIPALITY:** TOWN OF FORT ERIE

**SITE GRADING PLAN**



**GENERAL LOT GRADING NOTES**

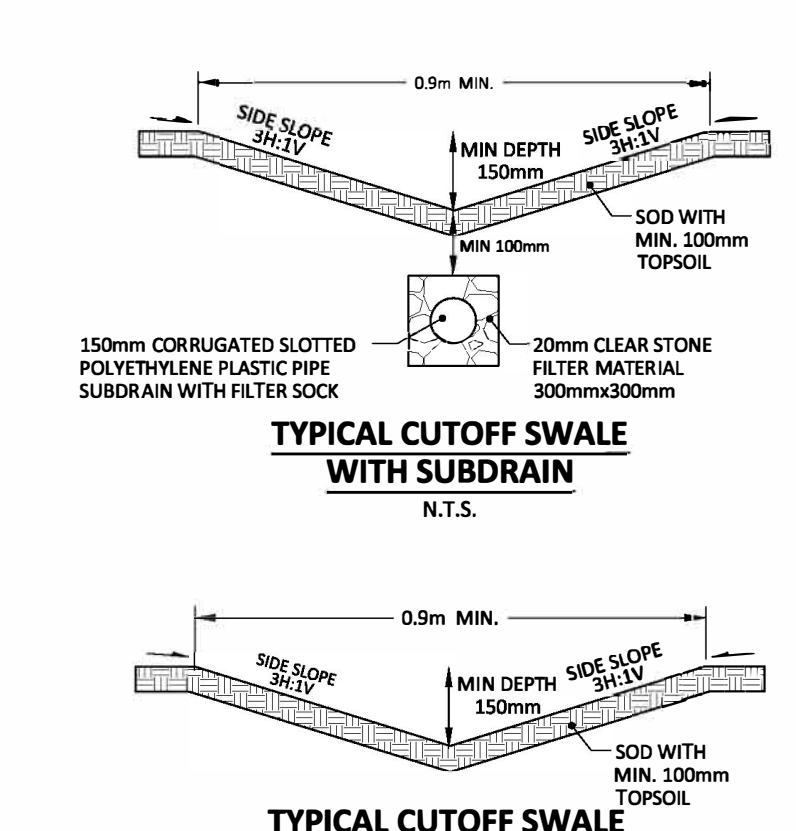
- ALL RETAINING WALLS 1.0M OR HIGHER SHALL BE DESIGNED AND CERTIFIED BY THE STRUCTURAL ENGINEER.
- IF A RETAINING WALL IS REQUIRED, THE TOP OF WALL ELEVATION SHALL BE SET 150MM ABOVE THE PROPOSED SIDE YARD SWALE WHERE APPLICABLE.
- RETAINING WALL 0.60M IN HEIGHT OR MORE WILL REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR THE RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF EXTERIOR GUARD AS PER THE ONTARIO BUILDING CODE.
- ADJOINING PROPERTIES GRADE SHALL MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED.
- TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE MINIMUM 150MM ABOVE FINISHED GRADE.
- MINIMUM DRIVEWAY SLOPES SHALL BE 2% AND MAXIMUM SLOPE 8.0%.
- ALL FILL PLACED SHALL BE COMPACTED TO A MINIMUM 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300MM LIFTS.
- FOR TREE PROTECTION/REMOVAL AND HOARDING FENCE DETAILS REFER TO TREE PROTECTION PLAN AND REPORT PREPARED BY THE ARBORIST.
- GRADING SHALL FOLLOW STRICTLY WITH THIS DRAWING. ANY CHANGES, UNLESS APPROVED PRIOR TO CONSTRUCTION BY THE MUNICIPALITY, SHALL RESULT IN NON-ACCEPTANCE OF THE MUNICIPALITY.
- IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN AGREEMENT FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS SHALL BE USED.
- WRITTEN AGREEMENT FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. IF AGREEMENT NOT OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE CONSTRUCTION, THEN THE DEVELOPER MUST LIMIT ACTIVITIES TO THE LIMITS OF THEIR DEVELOPMENT SITE.

**SITE PLAN ROAD PAVEMENT STRUCTURE**  
 (TO BE CONFIRMED BY GEOTECHNICAL ENGINEER)

**LIGHT DUTY PAVEMENT STRUCTURE**  
 ASPHALTIC CONCRETE WEARING COURSE OPSS HL3 OR HL3A - 40MM  
 BINDER COURSE OPSS HL8 - 50MM  
 BASE COURSE OPSS GRANULAR "A" - 150MM  
 SUB-BASE COURSE OPSS GRANULAR "B" TYPE II - 200MM

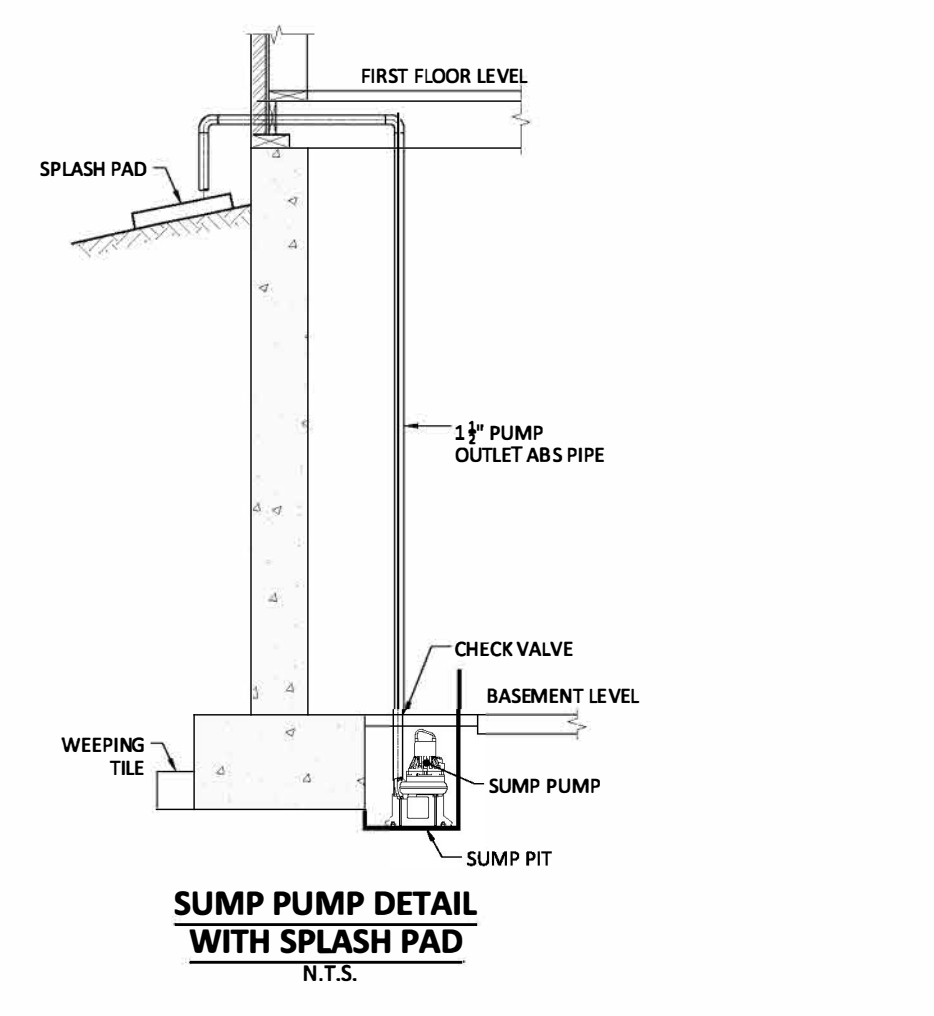
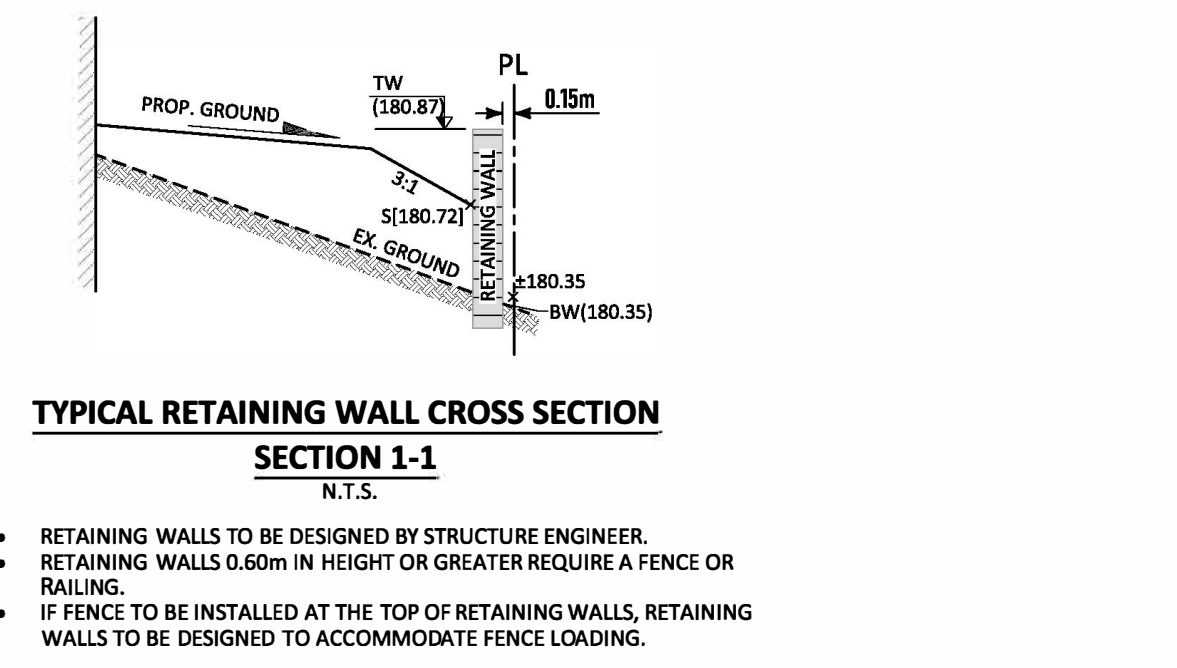
**HEAVY DUTY (TRUCK ROUTE) PAVEMENT STRUCTURE**  
 ASPHALTIC CONCRETE WEARING COURSE OPSS HL3 OR HL3A - 40MM  
 BINDER COURSE OPSS HL8 - 65MM  
 BASE COURSE OPSS GRANULAR "A" - 150MM  
 SUB-BASE COURSE OPSS GRANULAR "B" TYPE II - 350MM

**NOTE:**  
 PAVEMENT STRUCTURE DEPTHS OVER THE ADS STORMTECH CHAMBERS TO BE CONFIRMED BY THE GEOTECHNICAL ENGINEER.



**NOTE:**

- REFER TO LATEST ARCHITECTURAL PLANS FOR ALL RETAINING WALLS, BUILDING LEVELS, SETBACKS AND PERIMETER AND/OR OTHER FENCES.
- FENCE TO BE INSTALLED AT THE TOP OF RETAINING WALLS, RETAINING WALLS TO BE DESIGNED TO ACCOMMODATE FENCE LOADING.
- RETAINING WALLS TO BE DESIGNED BY OTHERS.
- MINIMUM BASEMENT FLOOR ELEVATION SHALL BE BASED ON INVERT OF THE SANITARY SERVICE. CONTRACTOR MUST VERIFY SANITARY SERVICE INVERT PRIOR TO SETTING BASEMENT FOUNDATION LEVEL.
- PROVIDE INSULATION ON SANITARY SERVICE WHERE COVER FORM THE FINISH GRADE LESS THEN 1.2m.
- CONTRACTOR MUST REVIEW SERVICING AND GRADING PLAN FOR CONSTRUCTION.



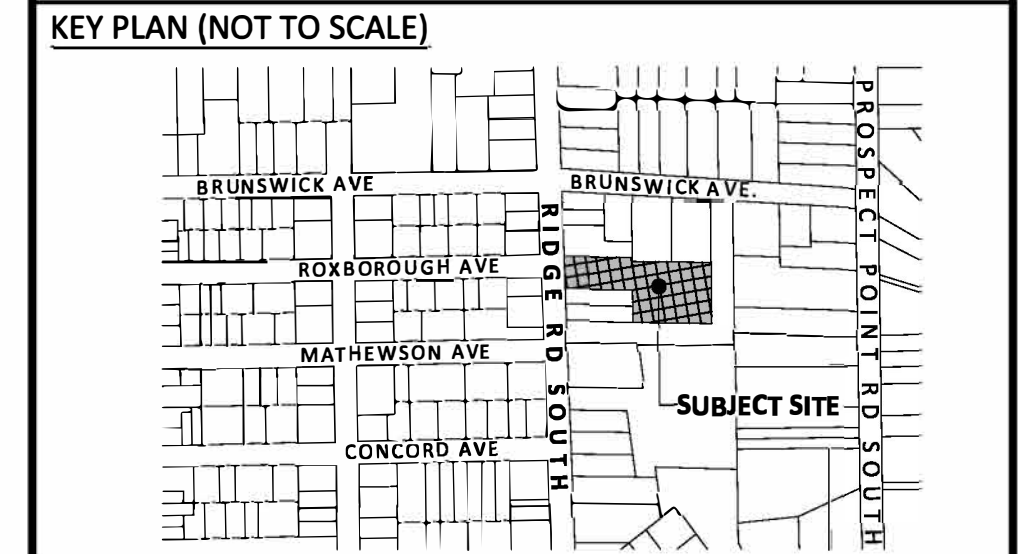
- RETAINING WALLS TO BE DESIGNED BY STRUCTURE ENGINEER.
- RETAINING WALLS 0.60M IN HEIGHT OR GREATER REQUIRE A FENCE OR RAILING.
- IF FENCE TO BE INSTALLED AT THE TOP OF RETAINING WALLS, RETAINING WALLS TO BE DESIGNED TO ACCOMMODATE FENCE LOADING.

272 RIDGE ROAD SOUTH



**SITE BENCHMARK**

- TOPOGRAPHIC INFORMATION IS BASED ON RASCH & HYDE LTD. DATED APRIL 11, 2022.
- ELEVATIONS ARE GEODETIC, DERIVED BY GPS OBSERVATIONS, REFERRED TO GEODETIC SURVEY OF CANADA BENCHMARK 0011971U037 (AKA 71U037) HAVING AN ELEVATION OF 200.338m (CGVD-1928:1978).



**REVISIONS RECORD**

No.	BY	DD/MM/YYYY	DESCRIPTION
1.	A.R	12/10/2022	FIRST SUBMISSION

**NOT ISSUED FOR CONSTRUCTION**

DATE: OCTOBER 12, 2022

DESIGN BY: A.R

DRAWN BY: A.J

CHECKED BY: A.R

SCALE: 1:250



**LEGEND**

- SEDIMENT CONTROL FENCE - OPSD 219.130
- SEDIMENT TRAP FOR STREET CATCHBASIN DETAIL "AA"
- SEDIMENT TRAP FOR BACKYARD CATCHBASIN DETAIL "BB"
- ▨ MUD MAT CONSTRUCTION VEHICLE TRACKING CONTROL DETAIL "CC"

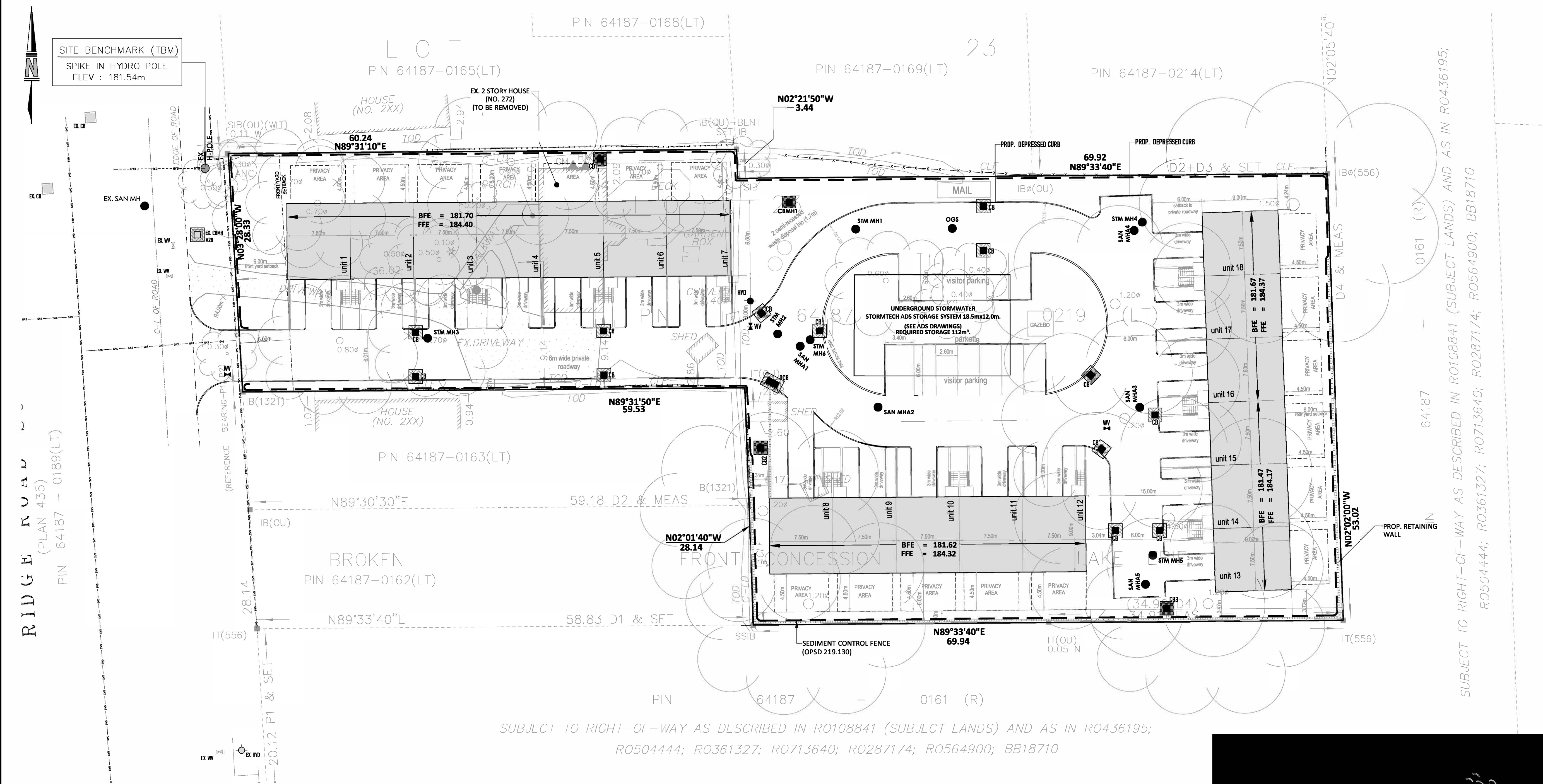
**PROJECT:**  
272 RIDGE ROAD SOUTH

**OWNER:**  
5038257 ONTARIO INC  
(C/O CRAIG DEVRIES)

**MUNICIPALITY:**  
TOWN OF FORT ERIE

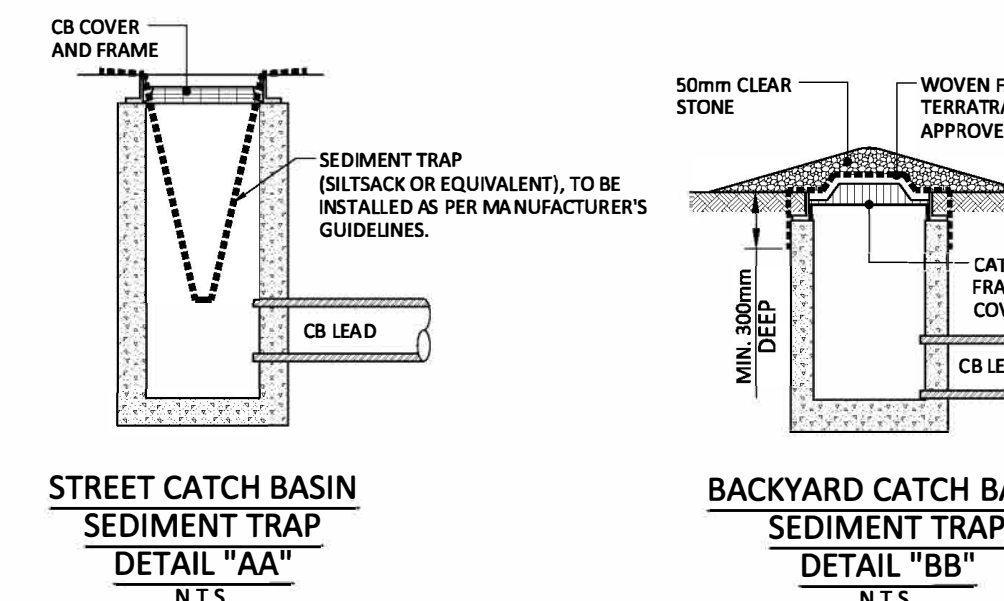
**EROSION & SEDIMENT CONTROL PLAN**

PROJECT NUMBER: 22127 DRAWING: DWG-4



- EROSION AND SEDIMENT CONTROL GENERAL NOTES**
- ALL EROSION AND SEDIMENT CONTROL MEASURES (TEMPORARY SEDIMENT CONTROL FENCES, MUD MAT CONTROL AND SEDIMENT BASINS, ETC) MUST BE INSTALLED PRIOR TO DEVELOPMENT AND MAINTAINED THROUGHOUT THE CONSTRUCTION, UNTIL ALL DISTURBED AREAS HAVE BEEN REVEGETATED. ALL ESC MEASURES SHALL BE INSTALLED AS DETAILED ON THIS DRAWINGS AND AS PER "EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN CONSTRUCTION", DECEMBER 2006.
  - TEMPORARY VEHICLE TRACKING CONTROLS TO BE CONSTRUCTED AT ALL ACCESS POINTS. CONTRACTOR SHALL MAINTAIN THESE AS REQUIRED AND AS DIRECTED BY THE CITY ENGINEER.
  - SEDIMENT CONTROL FENCES SHALL BE AS PER OPSD 219.130.
  - CUT-OFF SWALES TO BE CONSTRUCTED WHERE SPECIFIED AND PERIODICALLY INSPECTED TO ENSURE THAT EROSION DOES NOT OCCUR.
  - REGULAR MAINTENANCE FOR ALL CATCH BASIN IS REQUIRED. ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM CATCH BASIN. FLUSHING OF SEDIMENTS IN TO THE STORM SEWER IS NOT PERMITTED. FILTER CLOTH IN CATCH BASIN MUST BE CLEANED OR REPLACED IF STANDING WATER REMAIN IN THE CATCH BASIN MORE THAN 24 HOURS AFTER A STORM EVENT.
  - STREET CATCH BASIN SEDIMENT TRAP TO BE INSTALLED AS PER DETAIL "AA". VEHICLE TRACKING CONTROL/MUD MAT TO BE INSTALLED AS PER DETAIL "CC".
  - TOPSOIL PILES SHALL BE TEMPORARY SEEDED TO PREVENT EROSION. ANY DISTURBED AREA IN THE PROPOSED DEVELOPMENT NOT SCHEDULE FOR FURTHER CONSTRUCTION WITHIN 45 DAYS MUST BE STABILIZED WITH A SUITABLE TEMPORARY MULCH AND SEED COVER WITHIN 7 DAYS OF THE COMPLETION OF THAT PARTICULAR PHASE OF CONSTRUCTION.
  - ALL DISTURBED EXTERNAL AREAS SHALL BE VEGETATED WITH PERMANENT SOD WITHIN 7 DAYS OF THE COMPLETION OF THE CONSTRUCTION.
  - WORK LIMIT FENCE SHALL CONSIST OF PLASTIC SNOW FENCE SUPPORTED BY STEEL "T" POSTS AT A MINIMUM 2.4M CENTRE TO CENTRE.
  - THE OWNER SHALL SUBMIT A MONTHLY SEDIMENT AND EROSION CONTROL RECORDS AND REPORT PREPARED BY A PROFESSIONAL ENGINEER TO THE SATISFACTION OF THE LOCAL MUNICIPALITY AND CONSERVATION AUTHORITY. THE REPORT MUST INDICATE FREQUENCY OF INSPECTION AND AREA INSPECTED.
  - VEGETATION RESTORATION FOR ALL AREAS DISTURBED BY GRADING ACTIVITY SHALL BE SEED AS FOLLOWS WITH THE APPLICATION RATE OF 2.5 KG/100 SQUARE METERS. THE CONTRACTOR SHALL MAINTAIN THESE AREAS UNTIL SATISFACTORY GROUND COVER IS ESTABLISHED:
    - i. CREEPING RED FESCUE 30%
    - ii. PERENNIAL RYE 30%
    - iii. CANADA BLUEGRASS 20%
    - iv. RED TOP 20%

- MAINTENANCE SCHEDULE FOR SEDIMENT TRAPS AND BASINS**
- SEDIMENT TRAPS/BASINS MUST BE INSPECTED AND MAINTAINED AFTER EVERY RAINFALL EVENT TO THE SATISFACTION OF LOCAL MUNICIPALITY AND CONSERVATION AUTHORITY.
  - TRASH AND DEBRIS SHALL BE REMOVED FROM WITHIN THE TRAP/BASIN. ANY DAMAGE TO THE TRAPS/BASIN OUTLET MUST BE REPAIRED IMMEDIATELY.
  - THE SEDIMENT TRAP/BASIN SIDES ONTO DITCH SIDE SLOPES MUST BE INSPECTED TO ENSURE THAT THEY HAVE NOT ERODED OR SETTLED. IMMEDIATE ACTION SHALL BE TAKEN TO RESHAPE AND STABILIZE SLOPES.
  - WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF THE SEDIMENT TRAP/BASIN DESIGN DEPTH THEN SEDIMENT REMOVAL IS REQUIRED. CARE MUST BE TAKEN TO AVOID DAMAGING THE OUTLET AND INLET DURING THIS MAINTENANCE OPERATION. DISPOSAL OF THE SEDIMENT SHALL BE TO A CONTROLLED AREA AND STABILIZED (VEGETATED).
  - IF STANDING WATER REMAINS IN THE SEDIMENT TRAP/BASIN FOR 48 HOURS (MINIMUM) AFTER A STORM EVENT THEN IT COULD INDICATE A BLOCKAGE. VISUALLY INSPECT THE EXCESSIVE SEDIMENTS AND/OR TRASH BUILDUP. IF SURFACE SEDIMENT AND TRASH REMOVAL DOES NOT ALLEVIATE THE PROBLEM THEN REPLACEMENT OF TRAP AND/OR GRANULAR MATERIAL IN THE SEDIMENT BASIN IS REQUIRED.
  - ALL WORKS MUST BE PERFORMED TO THE SATISFACTION OF THE LOCAL MUNICIPALITY AND CONSERVATION AUTHORITY.

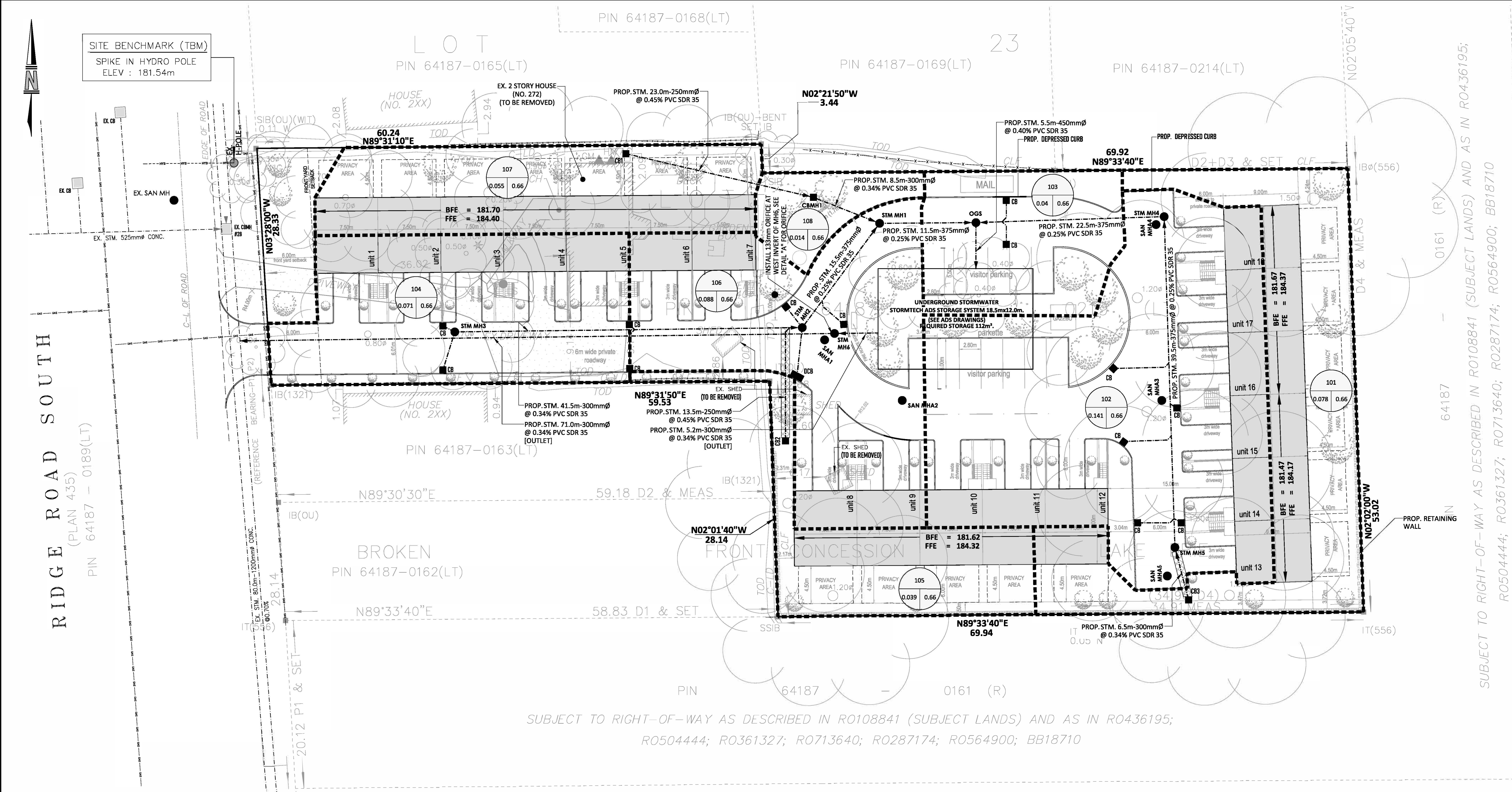


CONTRACTOR TO CLEAN SEDIMENTS FROM EXISTING ROADWAYS DUE TO CONSTRUCTION TRAFFIC EVERY DAY



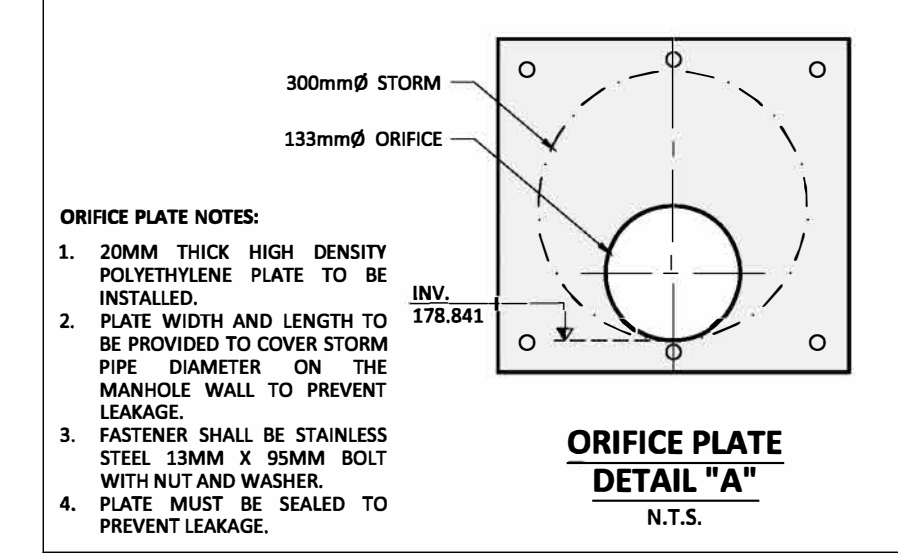
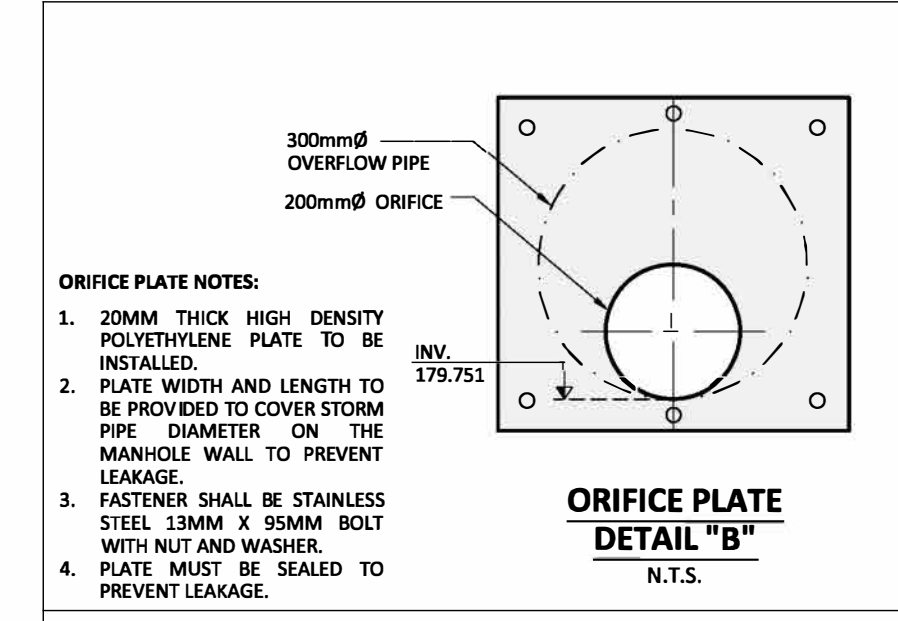
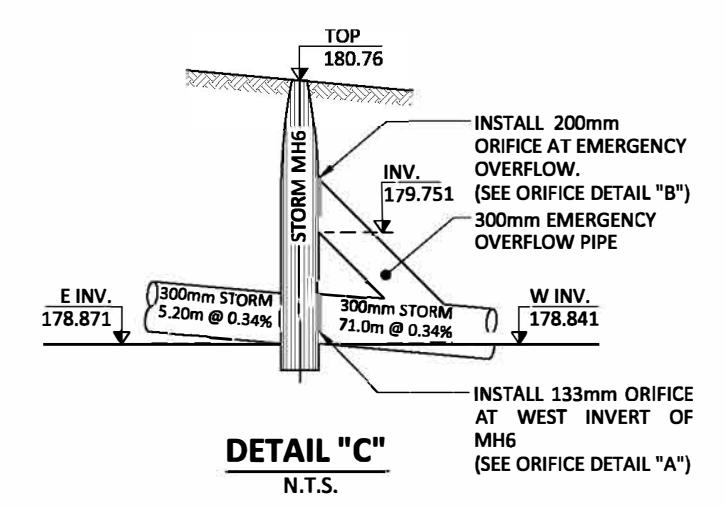
272 RIDGE ROAD SOUTH





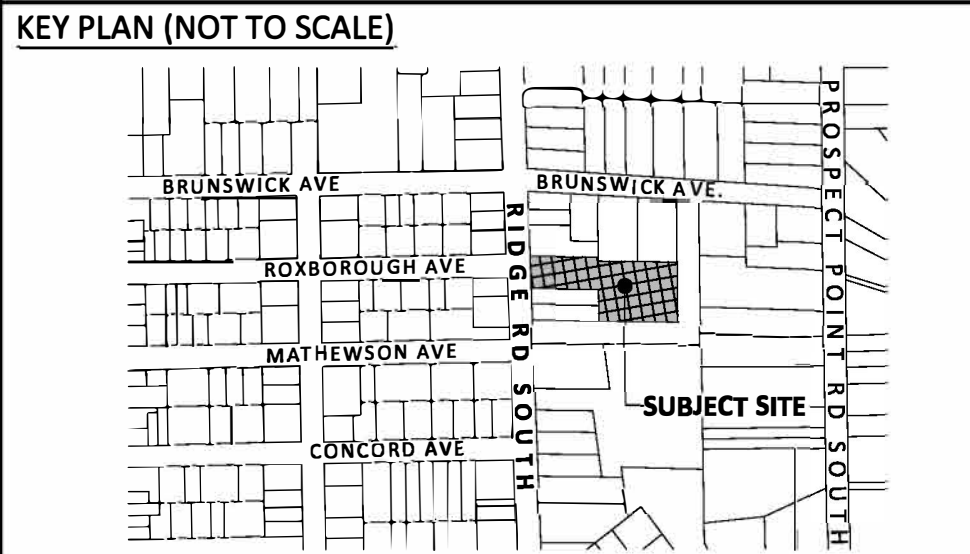
SUBJECT TO RIGHT-OF-WAY AS DESCRIBED IN R0108841 (SUBJECT LANDS) AND AS IN R0436195; R0504444; R0361327; R0713640; R0287174; R0564900; BB18710

- ONSITE STORMWATER MANAGEMENT REQUIREMENTS:**
1. POST-DEVELOPMENT FLOWS TO MATCH WITH PRE-DEVELOPMENT CONDITIONS UNDER 5-YEAR & 100 YEAR STORM EVENTS.
  2. STORMWATER MANAGEMENT ONSITE QUANTITY CONTROL REQUIRED STORAGE OF 112m<sup>3</sup> IS TO BE PROVIDED AT THE ALLOWABLE DISCHARGE RATE OF 0.035cms WITH AN ORIFICE SIZE OF 133mm DIAMETER.
  3. REFER TO ADS STORMTECH DESIGN/DRAWINGS FOR UNDERGROUND STORAGE SYSTEM.



**SITE BENCH MARK**

- TOPOGRAPHIC INFORMATION IS BASED ON RASCH & HYDE LTD. DATED APRIL 11, 2022.
- ELEVATIONS ARE GEODETIC, DERIVED BY GPS OBSERVATIONS, REFERRED TO GEODETIC SURVEY OF CANADA BENCHMARK 0011971U037 (AKA 71U037) HAVING AN ELEVATION OF 200.338m (CGVD-1928:1978).



**REVISIONS RECORD**

No.	By	DD/MM/YYYY	DESCRIPTION
1.	A.R	12/10/2022	FIRST SUBMISSION

**NOT ISSUED FOR CONSTRUCTION**

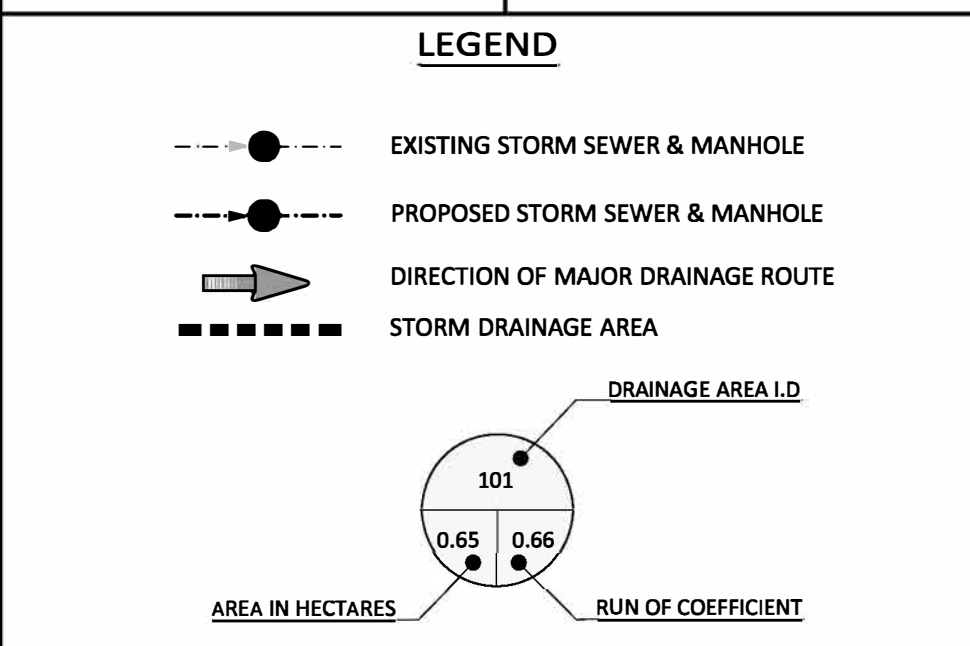
DATE: OCTOBER 12, 2022

DESIGN BY: A.R

DRAWN BY: A.J

CHECKED BY: A.R

SCALE: 1:250



**PROJECT:**  
272 RIDGE ROAD SOUTH

**OWNER:**  
5038257 ONTARIO INC  
(C/O CRAIG DEVRIES)

**MUNICIPALITY:**  
TOWN OF FORT ERIE

**STORM DRAINAGE AREA PLAN**