



**BARILL**  
ENGINEERING LIMITED

50 TRAILS END, COLLINGWOOD, ONTARIO, L9Y 5B2

PHONE: (705) 445-4905

4453 ROAD 111, STRATFORD, ONTARIO, N5A 6S2

PHONE: 705-606-1287

November 9, 2021

Attention: Montana Wilson  
GRIT Engineering Inc.  
169 Huron Street  
Stratford, Ontario  
N5A 5S9

**Re: St. Mary's Self Storage (50 Road 120, St. Mary's, Ontario)**  
**Consulting Structural Engineering Services**  
**Our Project No. 21-316**

As requested, we have completed the water supply calculation for the proposed self-accessing storage buildings located at 50 Road 120, St. Mary's. The following design parameters have been assumed:

- Six (6) 30'-0" wide by 160'-0" long (4800 square feet, 446 square metres per building) self-accessing storage buildings comprised of non-combustible construction (roof assembly and load bearing wall assemblies do not have fire resistance rating).
- An overall building height of 9'-9" with a low slope roof (1/4:12).
- A total spatial coefficient from the property line / adjacent building exposures on all sides of the building of 1.10. Please refer to the attached Site Plan.

Based on the design parameters detailed above, the minimum supply of water required for fire protection is **38,610 L** for the six (6) self-accessing storage buildings. In addition, the required minimum water supply flow rate is **1,800 L/min**.

One (1) below-grade fire water storage tank is to be provided within one (1) of the self-accessing storage buildings. In accordance with the Office of the Fire Marshal Guideline OFM-TG-03-1999, the purpose of the fire water storage tank is to provide an adequate water supply that is immediately accessible, with sufficient volume and flow, to control the growth of the fire until a building is safely evacuated and to limit the growth of the fire from spreading to the adjacent buildings. As such, the water supply calculation has been completed based on the volume of one (1) 30'-0" x 160'-0" self-accessing storage building.

I trust the above is satisfactory. Should you have any questions regarding the above, please do not hesitate to contact the undersigned.

Sincerely,  
Barill Engineering Limited

Jamie Barill, P. Eng.  
[jamie@barillengineering.com](mailto:jamie@barillengineering.com)  
C: 705.606.1287

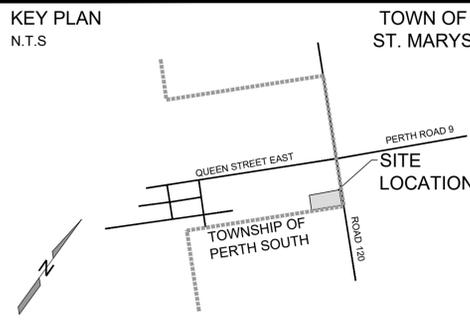
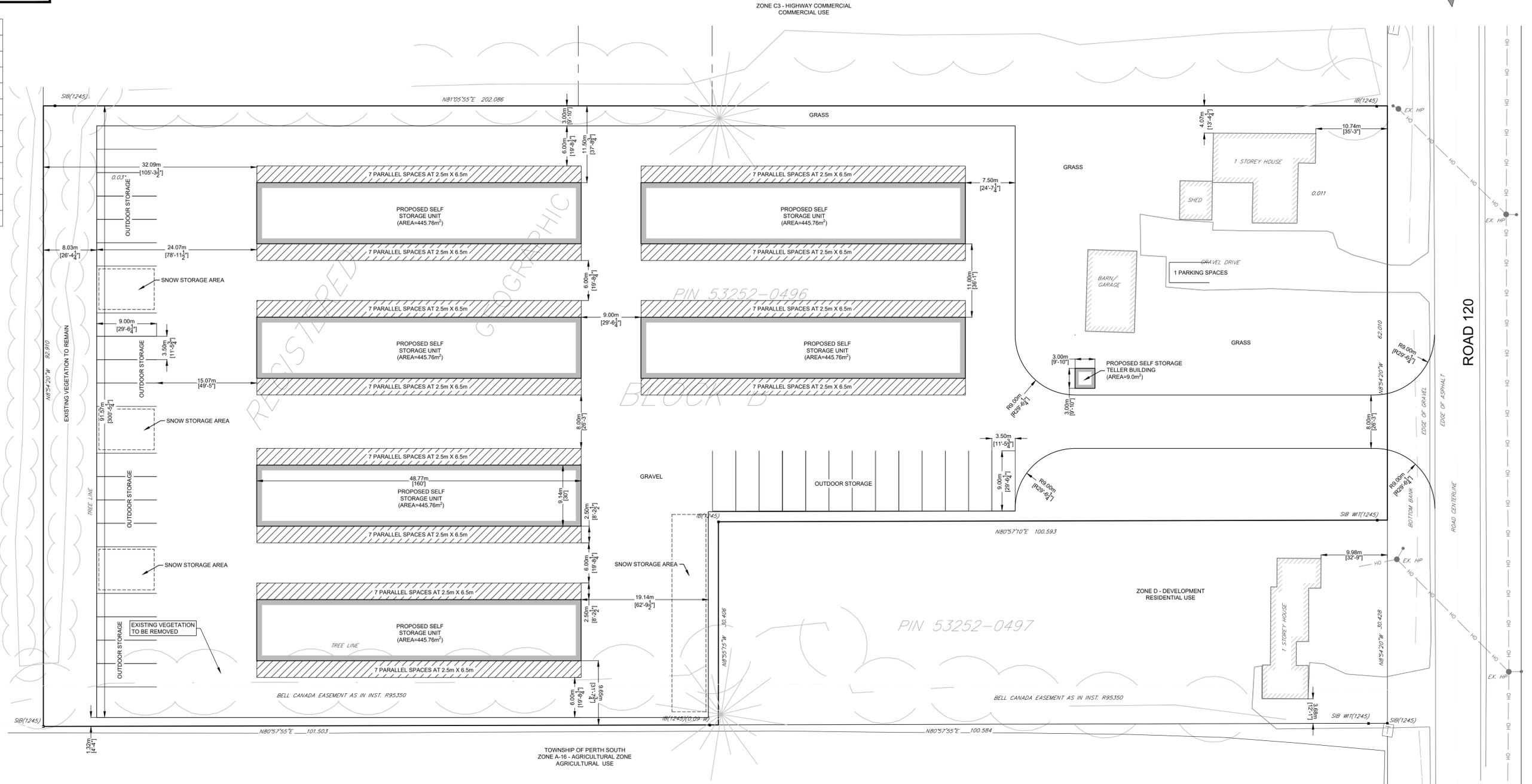


**PROPOSED FEATURES**

PROPOSED BUILDING	
<b>EXISTING FEATURES</b>	
SITE BOUNDARY	
PROPERTY LINE (OTHERS)	
EASEMENT	
EX. BUILDING	
EX. HYDRO (OVERHEAD)	

**ZONING INFORMATION:**

ZONING TYPE:	LIGHT INDUSTRIAL		
ZONE:	M1-HH <sub>2</sub>		
	EXISTING	PROPOSED	REQUIRED BY ZONING BYLAW
LOT AREA	15,669.0m <sup>2</sup>	15,669.0m <sup>2</sup>	1,250.0m <sup>2</sup> (MIN.)
LOT FRONTAGE	62.010m	62.010m	30.0m (MIN.)
LOT DEPTH	202.086m	202.086m	37.5m (MIN.)
FRONT YARD	10.74m	10.74m	7.5m (MIN.)
REAR YARD	32.09m	32.09m	6.0m (MIN.)
INTERIOR SIDE YARD	4.07m	4.07m	3.0m (MIN.)
EXTERIOR SIDE YARD	4.07m	4.07m	7.5m (MIN.)
LOT COVERAGE	2.81% (449.21m <sup>2</sup> )	19.89% (5,132.77m <sup>2</sup> )	50.0% (MAX.)
LANDSCAPED OPEN SPACE	95.3% (14,922.19m <sup>2</sup> )	23.1% (3,627.19m <sup>2</sup> )	20.0% (MIN.)
TOTAL PARKING SPACES	1 SPACES	97 SPACES	1 SPACE PER 40m <sup>2</sup> 3,132.77 / 40 = 80 SPACES



**CONTRACTOR NOTES:**

CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY ERRORS TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.

ALL DRAWINGS SHALL REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REUSED WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

DRAWING SHOULD NOT BE SCALED FOR DIMENSIONS PURPOSES.

**BENCHMARK**  
ELEVATIONS ARE RELATED TO TOP SPINDLE OF FIRE HYDRANT ON THE NORTH SIDE OF QUEEN STREET AT THE CORNER OF QUEEN AND 120 ROAD.

**ELEVATION: 235.88m**

No.	ISSUED DESCRIPTION	DATE
1		
2		
3		
4		
5		

**GRIT ENGINEERING INC**

**PRELIMINARY**

**ROAD 120 SELF STORAGE UNITS**

PROJECT INFORMATION: 60 ROAD 120, ST. MARYS, ONTARIO

**CANDICE KING**

CLIENT INFORMATION: ADDRESS

DRAWING NAME:	
PROJECT No:	DRAWING No:
SCALE:	SHEET SET No: OF