DESIGN CALCULATIONS

Design Input:

1. Percolation Rate: 15min/cm (Refer: since the percolation is less than 1min/cm. we have used the minimum rate)

2. Design Criteria: OBC 8.2.1.3.B

3. no. of loading bay: 3 Nos

4. No. of washroom: 1 Nos

DESIGN FLOW:

Flow from Self Storage (Q)
No. of Loading bay: 3
Flow per Loading bay: 150 L/day
No. of Washroom: 1
Flow From Washroom: 950L/day
Design Flow from Loading Bay: (150 x 3 + 950 x 1) = 1,400 L/day (Q)

Total Design Sewage Flow = 1,400 L/day

Leaching Bed design:

$A = \frac{QT}{400}$

Where:

A = the area of contact of the bed when constructed out on native soils (m^2)
Q = the total daily design sanitary sewage flow (L)
T = the percolation rate of the native soil to maximum of 50 min/cm

A = (1,400 x 15)/400 = 52.5 m2
Proposed Leaching Bed Area = 60 m2

Septic Tank Design: (OBC 8.2.2.3)

1. Volume of the Septic Tank = Daily Sewage Flow x 3
= 1,400 x 3 = 4,200 L

4,500 L capacity of tank proposed to install.

Septic Pump Station:

A 5000 L single Component to be installed for pumping station.

FISHER ENGINEERING

Percolation - Test BH110

Percolation Test Data Sheet

Project:	22044 HWY48, East Gwillimbury	Project No	21-11361	Date:	2021-07-28
Test Hole No:	BH110	Tested By:	CAW		
Depth of Test Hole, D_0:	122	USCS Soil Classification:	SP: Poorly graded Sand - little or no fines		
Test Hole Dimensions (cm)			Length	Width	
Radius (if round)=	7.5	Sides (if rectangular)=			

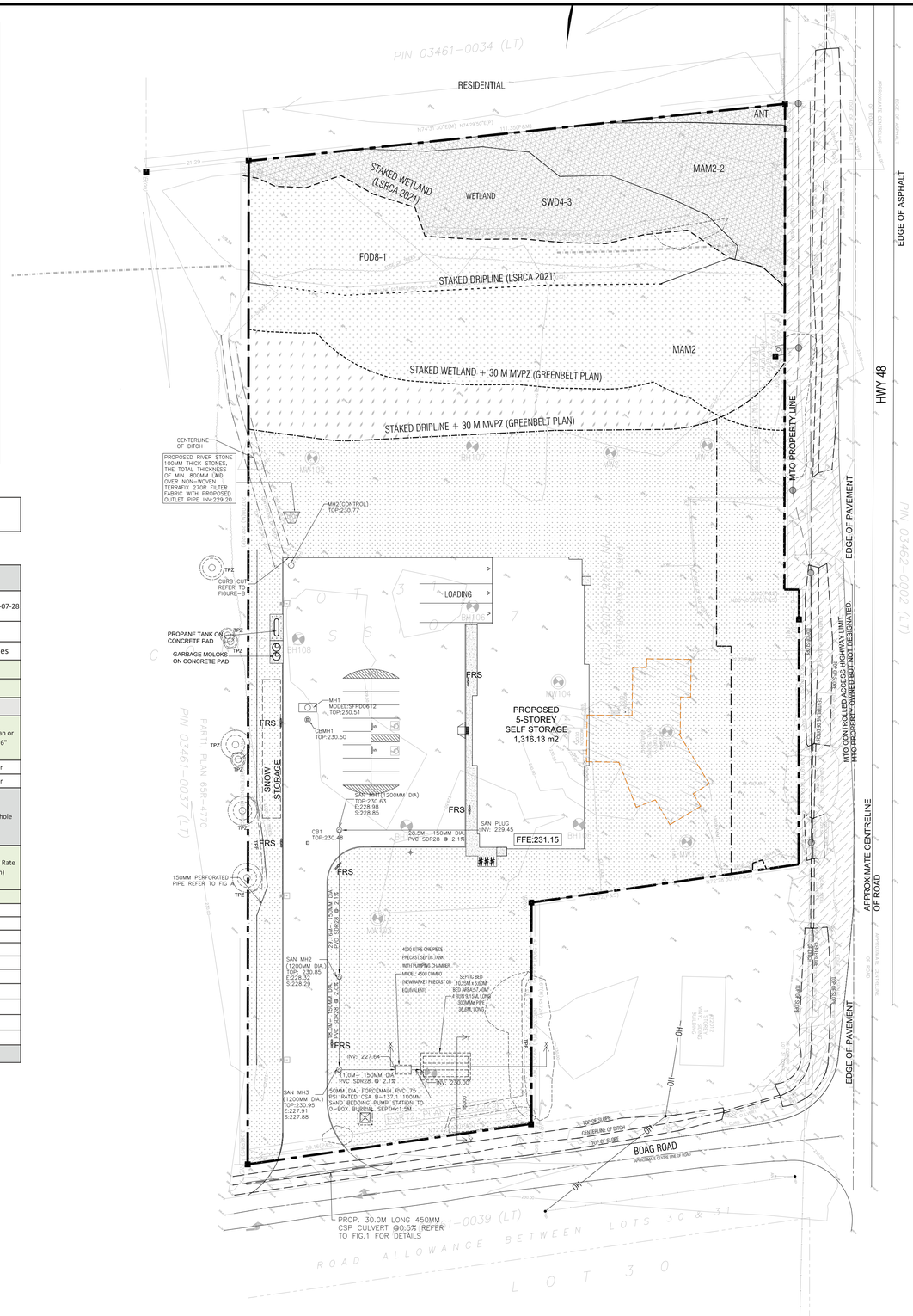
Sandy Soil Criteria Tests

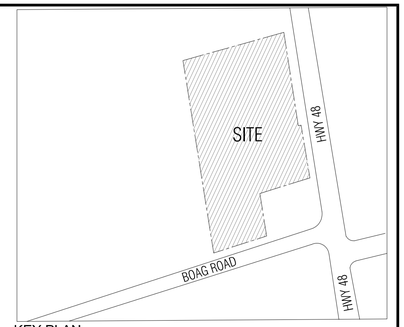
Trial No.	Start Time	Stop Time	Time Interval (min)	Initial Depth to Water (cm)	Final Depth to Water (cm)	Change in Water Level (cm)	Greater than or Equal to 6"
1	11:00	11:05	0:05	64	122	58	Greater
2	11:05	11:10	0:05	75	122	47	Greater

If two consecutive measurements show that six inches of water seeps away in less than 25 minutes (150mm), the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

Measured	Start Time	Stop Time	Δt Time Interval (min)	D_o Initial Depth to Water (cm)	D_f Final Depth to Water (cm)	ΔD Change in Water Level (cm)	Percolation Rate (min/cm)
				Test 1			
1	11:15	11:20	5.00	15.00	27.50	12.50	0.40
2	11:20	11:25	5.00	27.50	39.50	12.00	0.42
3	11:25	11:30	5.00	39.50	51.50	12.00	0.42
4	11:30	11:35	5.00	51.50	63.00	11.50	0.43
5	11:35	11:40	5.00	63.00	73.50	10.50	0.48
6	11:40	11:45	5.00	73.50	84.00	10.50	0.48
7	11:45	11:50	5.00	84.00	93.50	9.50	0.53
8	11:50	11:55	5.00	93.50	103.00	9.50	0.53
9	11:55	12:00	5.00	103.00	112.00	9.00	0.56
10	12:00	12:05	5.58	112.00	122.00	10.00	0.56

COMMENTS: Sunny (23 °C).





KEY PLAN
SCALE-NTS

LEGAL DESCRIPTION
22044 HWY 48
PART OF LOT 31
CONCESSION 7
(REGIONAL MUNICIPALITY OF YORK)

OWNER
SOHAN KANSAL
NORTHFIELD DEVELOPMENT CORPORATION
8 CORTESE TERRACE., THORNHILL,3 ONTARIO, L4J 8S4

SURVEYOR INFORMATION
F.S. SURVEYING INC.
7 COLWICK DRIVE
NORTH YORK, ON
M2K 2G2

ELEVATION NOTE
ELEVATIONS SHOWN HEREON ARE GEODETIC, AND ARE FROM REAL TIME NETWORK GPS READING PROVIDED BY CAN-NET AND TOTAL STATION, AND ARE IN GEOID MODEL CGG2013.

BEARING NOTE
BEARINGS ARE ASTRONOMIC, AND ARE REFERRED TO THE WESTERLY LIMIT OF PART 1 AS SHOWN ON PLAN 65R-2023, HAVING A BEARING OF N9°20'10"W.

APPLICANT
n Engineering Inc
9120 Leslie Street, Suite-208,
Richmond Hill, Ontario. L4B 3J9
T: 416.303.4821
E: Info@nengineering.com
www.nengineering.com

NOTE:
IF THE SEPTIC TANK AND PUMP CHAMBER ARE BOUGHT SEPERATELY.IT IS CONTRACTOR RESPONSIBILITY TO OBTAIN AN UPDATED DESIGN BEFORE CONSTRUCTION

LEGEND

- PROPERTY LINE
- DEVELOPMENT LIMIT
- PROPOSED CONCRETE CURB
- TM D/C — PROPOSED DEPRESSED CONCRETE CURB
- LANDSCAPED AREA
- CONCRETE WALKWAY/SIDEWALK
- PAINTED LINE
- BARRIER FREE PARKING
- MAIN ENTRANCE
- OVER HEAD DOOR
- OVERLAND FLOW ROUTE
- HP — EX. HYDRO POLE
- FFE — FINISHED FLOOR ELEVATION
- PROPOSED RETAINING WALL
- DCBMH — PROPOSED DOUBLE CATCH BASIN MANHOLE
- CBMH — PROPOSED CATCH BASIN MANHOLE
- MH1 — PROPOSED STORM MANHOLE
- MH1A — PROPOSED SANITARY MANHOLE
- MH — PROPOSED JELLYFISH FILTER
- FH — PROP. FIRE HYDRANT
- WV — PROPOSED WATER VALVE
- PROP. WATER WELL
- 174.00 — EXISTING ELEVATION
- HWL — HIGH WATER LEVEL
- TRAFFIC DIRECTION
- PROP. BERM
- SWALE
- 2.0% — PROPOSED SURFACE SLOPE
- FRS — FIRE ROUTE SIGN
- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION
- MINIMUM TREE PROTECTION ZONE (mTPZ)WITH RADIUS AS MEASURED FROM EDGE OF TREE.
- TREE PROTECTION FENCING
- TREE LOCATION ESTIMATED BY KFCI
- ESTIMATED DRIPLINE
- EX. REGIONAL FLOODLINE

NOTE:
REGIONAL FLOOD PLAIN
ELEVATION AS PER LSRCA:229.71

GENERAL NOTES

1. READ THIS DRAWING IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND LANDSCAPING PLANS.
2. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
3. ALL WORK, MATERIALS AND CONSTRUCTION METHODS TO CONFORM WITH THE LATEST STANDARDS, SPECIFICATIONS, POLICIES, REGULATIONS, GUIDELINES AND LAWS FOR THE TOWN OF EAST GWILLIMBURY, THE ONTARIO BUILDING CODE (OBC), MINISTRY OF ENVIRONMENT, AND CLIMATE CHANGE (MOECC), ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS (OPSD AND OPSS), THE ENVIRONMENTAL PROTECTION ACT AND THE WATER RESOURCES ACT. THE MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS COMPILED FROM LOCATES INFORMATION AND RECORD DRAWINGS FROM THE TOWN. THE INFORMATION IS SHOWN FOR GENERAL INFORMATION ONLY AND THE ACCURACY OR COMPLETENESS OF THE PROVIDED INFORMATION HAS NOT BEEN CONFIRMED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTOR'S EXPENSE.
5. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' PLANS. ANY DISCREPANCIES SHALL BE CLARIFIED PRIOR TO CONSTRUCTION. INFORMATION RELATED TO DIMENSIONS FOR PRIVATE ROADS, PARKING, CURBING, BUILDING LOCATION AND SETBACKS SHALL BE TAKEN FROM THE SITE PLAN PREPARED BY THE ARCHITECT.
6. ALL DIMENSIONS AND ELEVATIONS TO BE VERIFIED PRIOR TO CONSTRUCTION AND ANY DISCREPANCIES FOUND PRIOR TO OR DURING CONSTRUCTION SHALL BE CLARIFIED WITH THE ENGINEER.

INSPECTIONS:

7. ALL WORK IN THE MUNICIPAL RIGHT OF WAY AND EASEMENTS IS TO BE INSPECTED BY THE TOWN PRIOR TO BACKFILLING. ALL WORK RELATING TO WATERMAINS AND SEWERS TO BE INSPECTED BY THE TOWN AS PER THE SITE PLAN AGREEMENT.
8. ALL DISTURBED GRASSED AREAS TO BE RESTORED WITH MINIMUM 200MM TOPSOIL AND NO. 1 NURSERY SOD.
9. THE CONTRACTOR AGREES NOT TO MAKE A MATERIAL CHANGE OR CAUSE A MATERIAL CHANGE TO BE MADE TO A PLAN, SPECIFICATION, DOCUMENT OR OTHER INFORMATION, ON THE BASIS OF WHICH THIS DRAWING WAS APPROVED BY THE TOWN, WITHOUT NOTIFYING, FILING DETAILS WITH AND OBTAINING WRITTEN AUTHORIZATION OF THE TOWN AND PROJECT ENGINEER.
10. ALL STORMWATER MANAGEMENT WORK, WATER SERVICING WORK AND SANITARY SEWER WORK INSIDE THE BOUNDARY OF THE SITE IS TO BE INSPECTED BY N ENGINEERING INC PRIOR TO BACKFILLING. ALL WORK RELATING TO WATERMAINS AND SEWERS TO BE INSPECTED BY N ENGINEERING AS PER APPROVED PLANS BY THE TOWN.

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T: 416.256.9741
E: info@nengineering.com
www.nengineering.com

LICENSED PROFESSIONAL ENGINEER
A.S.ZIAUDDIN
100233432
07FEB2025
PROVINCE OF ONTARIO

N
GEODETIC NORTH
PROJECT NORTH

No.	Date	Version	Dwn.
10.	07 FEB 2025	ISSUED FOR SPA V	SP
9.	29 NOV 2024	ISSUED FOR SPA IV	SP
8.	25 OCT 2024	ISSUED FOR LSRCA REVIEW	SP
7.	30 AUG 2024	ISSUED FOR APPROVAL	SP
6.	19 APR. 2024	ISSUED FOR SPA III	SP
5.	26 FEB. 2024	ISSUED FOR COORDINATION	SP
4.	08 SEP. 2022	ISSUED FOR LSRCA PERMIT	AZ
3.	16 AUG. 2022	RE-ISSUED FOR SPA II	AZ
2.	09 AUG. 2022	ISSUED FOR SPA II	AZ
1.	02 FEB. 2022	ISSUED FOR SPA	AZ

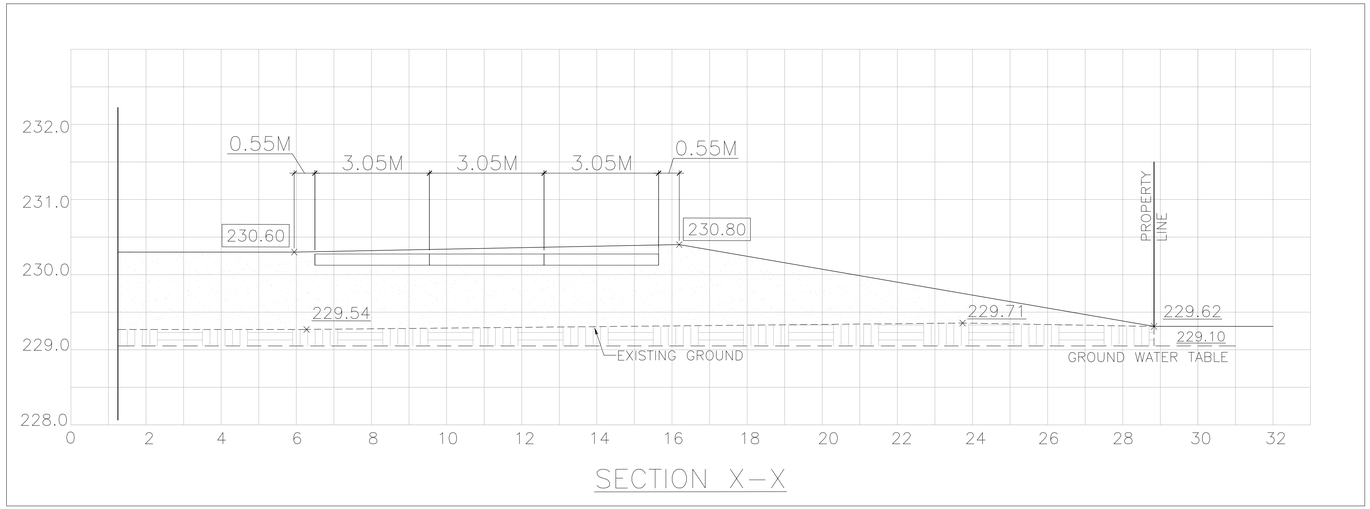
PROJECT:

PROPOSED SELF STORAGE BUILDING 22044 HWY 48, EAST GWILLIMBURY, ON

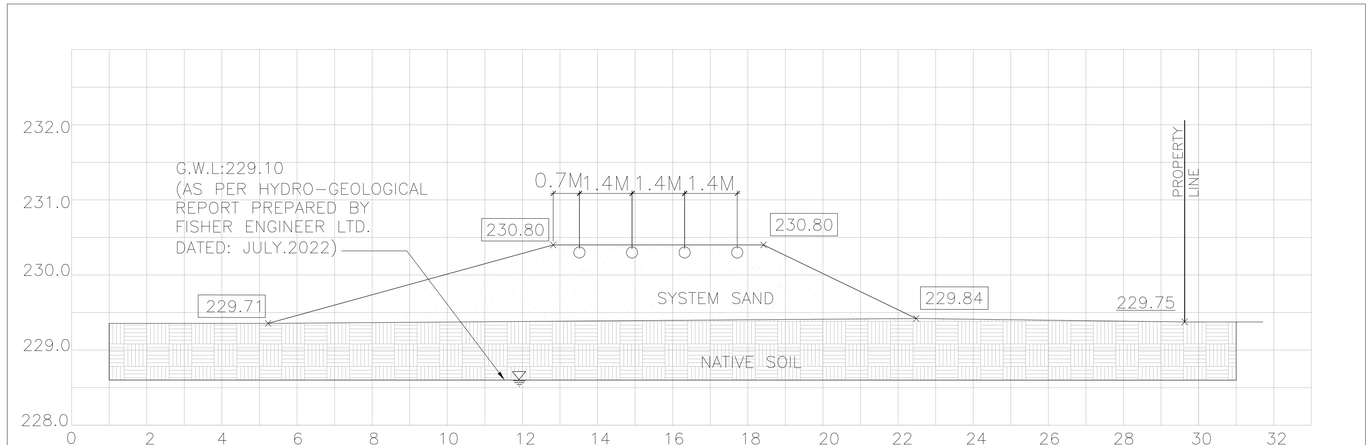
DRAWING TITLE:

SEPTIC SYSTEM PLAN

DRAWN BY: EH	DATE: 06 APR. 2021
CHECKED BY: AZ	SCALE: 1:450
PROJECT NO.: **20-56**	DRAWING NO.: **SD1**



SECTION X–X



SECTION Y–Y

LEGEND

SYSTEM SAND

NATIVE SOIL

SEWAGE SYSTEM CONSTRUCTION / MAINTENANCE NOTES

GENERAL:

1. SEWAGE SYSTEM DESIGNED FOR A MAXIMUM DAILY FLOW OF 7658 L/DAY.
2. PRIOR TO COMMENCEMENT OF EXCAVATIONS, UNDERGROUND SERVICES SHALL BE LOCATED.
3. CONTRACTOR MUST REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER TO DETERMINE THE IMPACT.
4. ANY CHANGES MUST BE APPROVED BY THE PROJECT ENGINEER.
5. ALL CONSTRUCTION MATERIAL MUST MEET AT MINIMUM, THE ONTARIO BUILDING CODE (2012) SPECIFICATIONS.
6. THE BUILDING'S SUMP, FLOOR DRAINS, AND/OR WATER TREATMENT SYSTEM, AND/OR GARBORATOR SHOULD NOT BE CONNECTED TO THE SEWAGE SYSTEM.
7. A DETAILED GRADING / DRAINAGE PLAN AND PLANTING PLAN SHALL BE COMPLETED BY OTHERS UNDER SEPARATE COVER BASED ON THE PROPOSED FINISHED GRADES OF THE SEWAGE SYSTEM.
8. TOPSOIL SHALL BE OF GOOD LANDSCAPING QUALITY WITH LESS THAN 30 % FINES (SILT) TO ALLOW FOR AIR TRANSFER INTO SUBSURFACE.

PIPING:

9. BEDDING, COVER, AND BACKFILL TO BE IN ACCORDANCE WITH OPSS.
10. ALL PVC FITTINGS AND PIPES BETWEEN TANKS ARE SCHEDULE 40.
11. ALL GRAVITY CONNECTIONS SHALL HAVE A MINIMUM 2 % GRADE BETWEEN TANKS/BUILDING(S).
12. ALL SANITARY PIPES / FORCEMAINS SHALL BE INSULATED OR BURIED BENEATH FROST LINE.
13. ALL JOINT SEALS TO BE DONE WITH PRIMER AND MASTIC BAND, OR AS PER THE MANUFACTURER'S REQUIREMENTS.
14. ALL CONCRETE TANKS ARE TO HAVE A MAXIMUM BURIAL DEPTH OF 1.0 m IN NON TRAFFIC AREAS. EXTRA REINFORCEMENT IS REQUIRED FOR TRAFFIC AREAS AND/OR DEEP BURIAL.
15. TANK ELEVATIONS MAY VARY FROM THAT SHOWN DEPENDING ON SELECTED PRE-CASTER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ELEVATIONS.
16. ALL HOLES AROUND PIPES GOING THROUGH CONCRETE STRUCTURE AND RISER SEAMS SHALL BE SEALED WITH NON-SHRINKING GROUT.
17. ALL RISERS SHALL EXTEND TO SURFACE, COMPLETE WITH CHILD PROOF, TAMPER PROOF, LIDS.
18. IF HIGH GROUNDWATER CONDITIONS ARE ENCOUNTERED, TANKS WITH DYNAMIC WATER LEVELS MUST BE ANCHORED. ANCHORING TO BE DESIGNED BY A PROFESSIONAL ENGINEER.
19. TANK SEAMS AFFECTED BY HIGH GROUNDWATER ELEVATIONS MUST BE WATERPROOFED WITH AN EXTERIOR MEMBRANE.
20. TANKS SHALL BE INSTALLED ON 50 mm OF LOOSE SAND SPREAD EVENLY OVER MINIMUM 200 mm OF COMPACTED GRAVEL OR CRUSHED STONE.
21. TANK EXCAVATIONS SHALL BE LEVEL AND APPROPRIATELY COMPACTED TO AVOID SETTLING.

LEACHING BED

27. BASE EXCAVATION IS TO BE SCARIFIED PRIOR TO PLACING FILL MATERIAL. NO EQUIPMENT (RUBBER TIRE OR TRACK) IS TO COME IN CONTACT WITH THE SOILS AFTER SCARIFICATION. SCARIFIED SOILS CANNOT BE LEFT EXPOSED TO RAIN. IMPORTED MATERIAL IS TO BE BLADED ONTO THE SCARIFIED AREA IN 0.20 m TO 0.25 m LIFTS AND TRACK COMPACTED.
28. LEACHING BED SHALL BE IMMEDIATELY SODDED OR HYDRO SEEDED UPON COMPLETION.
29. NO LANDSCAPING OR BUILDINGS ARE PERMITTED ON THE LEACHING BED AREA. NO TREES SHALL BE PLANTED WITHIN 6 m OF THE SEWAGE SYSTEM.
30. NO IRRIGATION SYSTEMS ARE PERMITTED WITHIN THE LEACHING BED AREA.
31. ALL SLOPES SHALL BE CONSTRUCTED NO STEEPER THAN 4:1 (H:V) UNLESS OTHERWISE NOTED.
32. SEWAGE SYSTEM DESIGNED IN COMPLIANCE WITH ONTARIO BUILDING CODE 8.1.3.1. "DISCHARGE".

Top View

Isometric View

Side View

End View

WORKING CAPACITY: 4516L (993 IG)

Bare Base Weight.....4337 Kg (10,665 Lbs)
Lid Weight.....1418 Kg (3,128 Lbs)
Total Tank Weight.....6255 Kg (13,793 Lbs)

Notes
1. Two 100mm x 150mm partition flow through
2. Concrete inlet baffle is pre-fittec to accommodate three 100mm flexible rubber connections
3. Outlet contains one 100mm flexible rubber connection fitted with Tuf-tite EF-6 Effluent Filter
4. Cast in place 610mm ID Tuf-tite riser with dome lid secured with stainless steel fasteners extending 70mm above top
5.390mm x 400mm Pad 75mm high cast into tank for pump

Tank Markings Observed:
Inlet & Outlet are Marked
Tank is Marked on Tank Lid - Inlet End

NPCP
SEPTIC 4500 L
B.D. 1 METRE
1200 LIQUID DEPTH
WC 4516
NON SULPHATE
AGINP
PML

NPCP
SEPTIC 1350 L
B.D. 1 METRE
WC 1371
NON SULPHATE
AGINP
PML

NEWMARKET PRE-CAST
Solid For 60 Years

20 Victoria St
Uxbridge, ON L9P 1N4
Tel: 905-852-6111
Toll Free: 1-800-263-1297
Fax: 905-852-4340
Info@Newmarketprecast.com
Newmarketprecast.com

Model 4500 Combo
1000 Imperial Gallon

Designed for up to **One Metre** burial over top of tank - Deep burial and vehicle traffic tanks are available upon request. Specialty conformatio ns may be possible

- This tank design is a one piece unit. Top is sealed with a fibrous mastic sealant
- Tanks are cast with 45 MPA stength concrete at 7 days with 5-7% air
- 3.0 Kg. structural fibre added to concrete. ASTM C 1116
- Lid has 10m Pre-manufactured welded wire
- Rebar Cover 25mm
- Tanks conform to National Standard of Canada CAN/CSA B66-16
- Non-sulphate resistant concrete
- Chamber divider monolithically cast in with structure
- Standard three 100mm Inlets and one 100mm Outlet from second chamber with fitter that meets building code and one 50mm Outlet from tank for pump line

SYSTÈME ENVIRO-SEPTIC SYSTEM

DBO EXPERT MAKE WAY ENVIRONMENTAL TECHNOLOGIES INC.

Enviro-Septic Configuration Simulator - BMEC Authorization of September 27th 2018 (#18-05-386)

For leaching bed **Version 1.4**

Project Name: Self Storage, East Gwillimbury (Revised)
Designer Name: AB
2024-02-27

Line	Information required or element calculated	Enter proper information in the green cells	Units	Then validate the configuration	Instructions / comments
1	Soil percolation time (T-Time)	15	Min/cm	OK	Enter the receiving soil T-Time.
2	Enter Enviro-Septic System Design Flow	1,400	L/d	OK	Enter the Enviro-Septic System Design Flow as determined from 8.2.1.3 of the Ontario On-Site Sewage Systems Code.
3	S_{mvs} - *Minimum Vertical Separation*	0.45	m		Minimum Vertical Separation as measured from the bottom of the Enviro-Septic System sand to: High ground water table or Bedrock or Soil with a percolation time (T) greater than 50 cm/min.
4	Dept of the receiving soil	1	m	OK	Enter the dept of the receiving soil from the surface (original grade) to: High ground water table or Bedrock or Soil with a percolation time (T) greater than 50 cm/min. If receiving soil has a T-Time < 50 min/cm, enter 0.
5	Dept of the excavation	0	m	OK	Enter the dept at which the base of the system will be installed. If imported sand is used under the Enviro-Septic System, enter the dept at which the imported sand is installed. If the system or the imported sand layer are installed at the surface (original grade), the vaue is 0 .
6	Natural Slope of the ground	0	%	OK	The slope must be 25 % or less. For a flat land, the slope is 0%.
7	D_{ES} - *Dept of receiving soil under the excavation*	1	m	OK	This value represent the thickness of receiving soil remaining after excavation before the high ground wrter table or bedrock or soil with a percolation time (T) greater than 50 cm/min.
8	I_S -Thickness of the imported sand layer (if used)	0	m	OK	Enter the dept of receiving soil still in place after installation between the base of the system or the imported sand layer and the high ground water table or bedrock or soil with a percolation time (T) greater than 50 cm/min.
9	S_D - *Separation distance*	1	m	OK	This value represent the thickness of soil and imported sand (when used) between the system base and the ground water table or bedrock or soil with a percolation time (T) greater than 50 cm/min.
10	*Minimum number of Enviro-Septic Pipes*	12	ESP		This value represent the minimum number of Enviro-Septic pipes required to treat the daily flow of Septic Tank Effluent using formula Q/126.
11	*Minimum length of Enviro-Septic Pipes*	36.6	m		This value represent the minimum length of Enviro-Septic pipes required to treat the daily flow of Septic Tank Effluent using formula 3.09*(Q/126).
12	*Minimum Enviro-Septic Contact Area*	52.5	m^2		This value represent the minimum Enviro-Septic contact Area using formula QT/400
13	Number of rows of Enviro-Septic Pipes	4	Rows	OK	Enter the number of rows of the configuration wanted.
14	Number of Enviro-Septic Pipes per row	3	ESP	OK	Enter the number of pipes per row for the configuration wanted. This number should equal or greater than 2 without going over 10.
15	*Total number of Enviro-Septic Pipes*	12	ESP	OK	This value represent the product of the number of rows by the number of pipes per rows (line 12 x line 13). An error message will appear if the result is smaller than the minimum number of pipes required shown at line 10.
16	*Total length of Enviro-Septic Pipes*	36.6	m		This value represent the product of the total number of pipes required by the length of one pipe.
17	*Total length of a row of Enviro-Septic Pipes*	9.15	m		This value represent the product of the number of pipes per row by the lenght of one pipe.
18	Number of sections	2	section(s)	OK	The number of section chosen must allow even distribution of rows between sections (Ex. 9 rows can be divided in 3 section of 3 rows, but 8 rows can't be divided in 3 sections).
19	*Suggested* E_{CC}	1.3			Suggestec Center to Center spacing calculated automatically based on an equal distribution of the rows of pipes. The minimum value is 0.45 m.
20	E_{CC} - Center to Center Spacing	1.3	m	OK	Enter the Center to Center Spacing. The miaimum ECC is 0,45 m
21	*Suggested E L*	0.65			Suggestec Lateral extension spacing calculated automatically based on the Center to Center Spacing. The minimum value is 0.45 m. When Ecc is 0,9 m or above, EL is half Ecc.
22	E L - Lateral Extension Distance	0.7	m	OK	Lateral extension spacing needs to be 0,45 cr more.
23	*N/A*	N/A			When slope is more than 3%, the Lateral extension spacing is larger downhill than uphill. The EL2 is calculated automatically and is equa to the Center to Center Spacing.
24	*Suggested* E_E	0.5			Suggestec Extremity extension spacing calculated automatically based on the Center to Center Spacing. The minimum value is 0,3 m. When Ecc is 0,9 m or above, EE is half Ecc. - 0,15 m
25	E_E - Extremity Extension Distance	0.55	m	OK	Extremity extension spacing needs to be 0,3 cr more.
26	*L - Length of one section of the Enviro-Septic System*	10.25	m		This value represent the length of a row of pipes plus the two Extremity Extension Distances
27	*W - Width of one section of the Enviro-Septic System*	2.70	m		This value represent the width of a section including the Center to Center Spacing and the Lateral Spacing.
28	*Total Enviro-Septic Contact Area per section*	27.68	m^2		This value represent the total Enviro-Septic Contact Area for each independant section.
29	*Total Enviro-Septic Contact Area*	55.35	m^2	OK	This value represent the total Enviro-Septic Contact Area.
29	*Hydraulic Loading Rate (HLR)*	25.29	$L/m^2.d$		The Hydraulic Loading Rate represent the volume of water per square meter per day based on the Total Design Daily Flow and the Total Enviro-Septic Contact Area.
30	*Lateral height of the system if partially or completely above ground*	0.90	m	Above Ground System	This value represents the height of the system above ground on the limit of the contact area or, in other words, where the 1:3 lateral backfill starts. The height may be a little bit more in the center of the system to keep a small slope on top for rainwater evacuation.
31	S_E - *Total length of System Sand Extension*	N/A	m		The value represents the length of the down slope sand extension when it is required (for slope above 10 %)
32	*W2 - Width of the Enviro-Septic System including System Sand Extension*	N/A			The value represents the width of the system including sand extension when it is required (for slope above 10 %)
33	*Estimation of the Volume of System Sand Required*	36.1	m^3		The volume of system sand required is the product of the length by the width by the number of section and by the thickness of the sand layer from which we subtract the volume of the Enviro-Septic Pipes.
34	*Estimation of the Volume of Imported Sand Required*	0.0	m^3		The volume of imported sand required is the product of the length by the width by the number of section and by the thickness of the impoded sand layer enter on line 8.
35	**Final Configuration Validation**			OK	"OK!" will be shown when all Enviro-Septic design rules of the configuration simulator have been met.

Attention: The designer is responsible to conformto all applicable laws and to all Enviro-Septic design rules. This simulator is provided free of charge as a configuration developement tool and the user understands that OBO Expert inc. cannot be held responsible for errors or omissions because of this service.

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100233432
07FEB2025
PROVINCE OF ONTARIO

N
GEODETIC NORTH
PROJECT NORTH

No.	Date	Version	Dwn.
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1.	02 FEB. 2022	ISSUED FOR SPA	AZ

PROJECT:

PROPOSED SELF STORAGE BUILDING 22044 HWY 48, EAST GWILLIMBURY, ON

DRAWING TITLE:

SECTIONS & DETAILS

DRAWN BY: EH
DATE: 06 APR. 2021
CHECKED BY: AZ
SCALE: 1:450
PROJECT NO.: **20-56**
DRAWING NO.: **SD2**