THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS. APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

1. APPLICATION FOR: ___ Improvement Permit X Authorization To Construct ___ BOTH ___ Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
The following optional attachments may also be submitted: ___ Survey Plat, Scaled no more than 1 Inch = 60 Feet
Place check ( ) beside whichever is submitted if applicable X Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. Applicant Information:

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Richard Guilt	800 McKendree Rd	704-660-1465	Cell 704-651-8613
Owner Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**
RHG Vehicle Storage	800 McKendree Rd	704-660-1465	704-651-8613

4. Property Information:

Street Address	Subdivision Name	Section/Phase and Lot Number
120 Fast Lane	Bradley Rd Business Park	Lot 3A

Driving Directions: Brandy School Rd to Stutts Rd - Turn Left, go about 200' ft and turn right on Fast Lane and Site is app 500 Ft on right side of street.

5. RESIDENTIAL Site Development Information: *(Check or Complete ALL that apply)*

( ) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
( ) Repair To Failing Septic System
( ) Other ___

Maximum Number of Bedrooms ___
Maximum Number of Occupants ___
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
( ) Concrete Slab Foundation?
( ) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non-Residential Site Development:

Type of Business	Self Storage Units
Square Footage of Building	13,000 SF
Maximum Number of Employees	0
Maximum Number of Seats	0

6. Proposed Water Supply:

X New Well ( ) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

7. Desired Septic System Type: *(You may rank in order of preference, if any)*

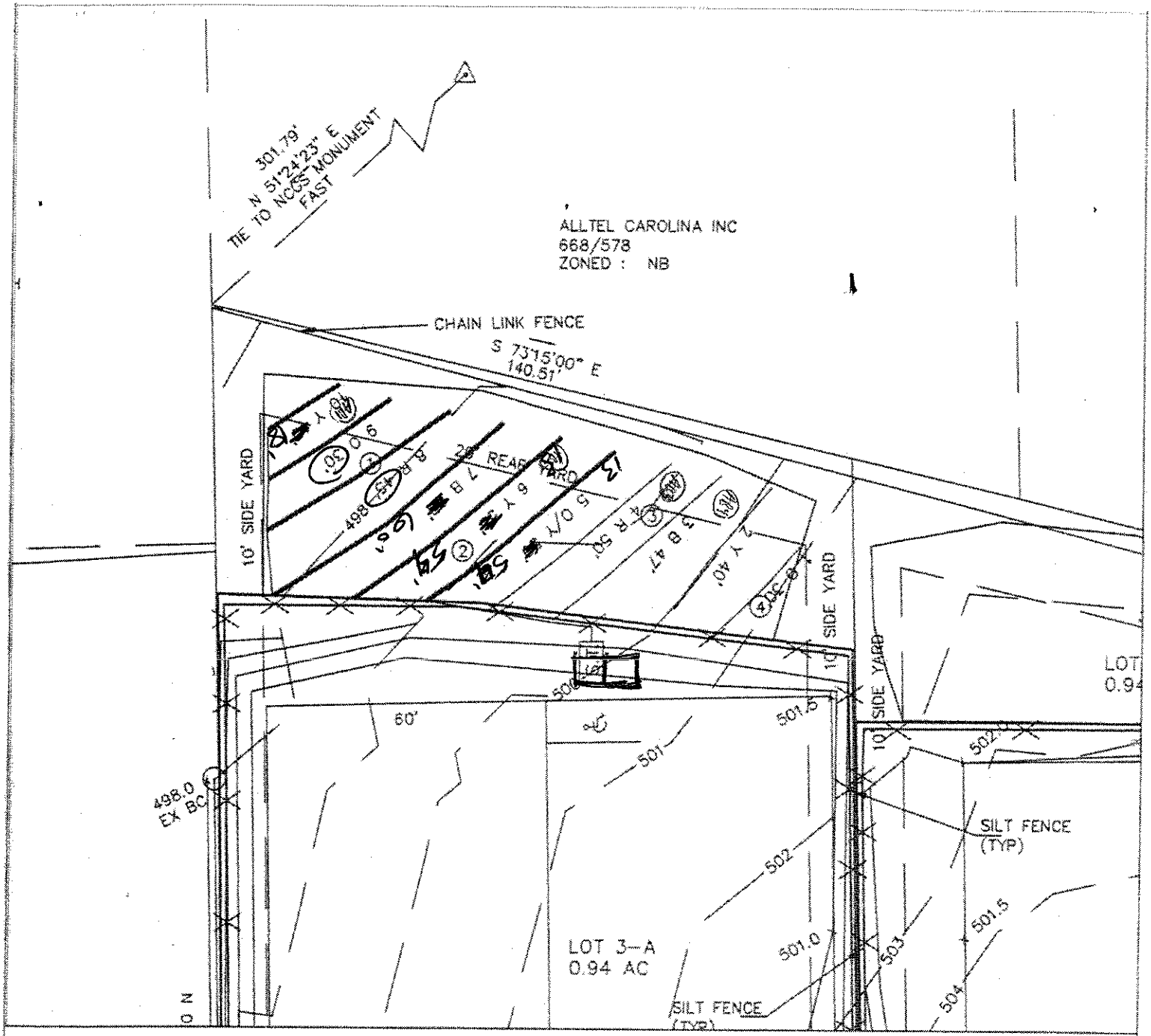
( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other ___ ( ) No Preference

8. Please Answer The Following To The Best of Your Ability:

( ) Yes X No Does the site contain any jurisdictional wetlands?
( ) Yes X No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes X No Is the site subject to approval by any other public agency?

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

9. Signature: [signature] May 7, 2014
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE



LEGEND

- House Footprint
- System lines.
- Repair lines.
- Temporary Bench Mark (TBM)
- Well Location.
- (25) Pit/Boring Location.

GRAPHIC SCALE

1" = 30'

30 0 30 60

FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE FINAL APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND COMPLEX TOPOGRAPHIC FEATURES. THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS.

PLEASE REFER TO ATTACHED SOIL REPORT FOR ADDITIONAL SITE SPECIFIC INFORMATION

ROLLANS SOIL & ENVIRONMENTAL SERVICES, PA
P.O. BOX 652
MOORESVILLE, NC 28115
PHONE/FAX: (704) 278-1966
ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746-5066
EMAIL: rollans@alltel.net

MAP TITLE: SITE PLAN & DRAINFIELD AREAS

PROJECT NAME: RICHARD SMILE / EAST LAKE LOT 3 - A

LOCATION/DATE: EAST LAKE, IREDELL COUNTY, NORTH CAROLINA, JULY 2014

JOB # : 01-2008
FILE: C:\JOBS\01-2008
PROJECT MGR.: S.A.R.
FIELD WORK: S.A.R.
DRAWN BY: S.A.R.

GRAVITY ACCEPTED SYSTEM FOR WASTEWATER TREATMENT

Owner/Applicant: RHG ~~RGH~~ INDOOR VEHICLE STORAGE, LLC

Address: 800 McKendree Road
Mooresville, NC 28117

Phone: 704.651.8613

County: Iredell

Location: 120 Fast Lane

Source of Wastewater Flow: Indoor Vehicle Storage Facility

Estimated Gallons Per Day Flow: 250

System Flow: N/A

Design Specifications

Drainfield Size: 255

Loading Rate (gpd/ft.^{2}): 0.25

Depth of Gravel in Trench: N/A

Gravel Size: N/A

Trench Depth: 30-34"

Trench Width: 36 in.

Septic Tank Size: 1000

Estimated Supply Line Length: 15

Supply Line Diameter: 4 in. SCH 40 PVC

Supply Line Volume: 9.80

Dosing Volume: N/A

Supply Manifold: N/A

Supply Manifold Length: N/A

Supply Manifold Volume: N/A

Recommended Float Controls: N/A

Recommended Control Panel: N/A

Pressure Head: N/A

Friction Head: N/A

Elevation Head: N/A

Total Dynamic Head: N/A

Threaded Union: N/A

Gate Valves: N/A

Check Valves: N/A

Anti-Siphon Hole: N/A

Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services

120 Fast Lane

ACCEPTED SYSTEM

DESIGN FLOW (gpd):	250
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	765
TOTAL LATERAL LENGTH:	255
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	250
SUPPLY LINE LENGTH:	15
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1000

120 Fast Lane

Project #: 01-2008

LAYOUT FOR AUTO STORAGE FACILITY - 250gpd

August 1, 2014

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
1	ORANGE					30	30
2	YELLOW					40	40
3	BLUE					47	47
4	RED					50	50
5	*YELL-ORANGE*					*50*	*50*
6	*YELLOW*					*55*	*55*
7	*BLUE*					*60*	*60*
8	*RED*					*45*	*45*
9	*ORANGE*					*30*	*30.*
10	*YELLOW*					*16*	*15.*
					Total	**423**	**422**

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION
** System*	*255*	*0.250*	*ACCEPT.*	*0.250*	*25% RED.*	*GRAVITY*
Repair	167	0.250	*MOD CONV.*	0.250	*PPBPS*	*LOW PRESSURE*

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings

CALCULATIONS

Location 120 FAST LANE

Project Number 01-2008

Lot No: 3-A

No. of Bedrooms N/A

Design Flow 250 $^{gal}/_{day}$

LTAR 0.250 $^{gal}/_{ft^2\,day}$

PPBPS? (YES OR NO) NO

Supply Line Length 15 ft.

Supply Line Volume 9.795 gal.

Required Feet of Line 250 ft.
Amount of Line from Layout 255 ft.

Gallons per Minute N/A $^{gal}/_{min}$

Required Septic Tank Capacity 1000 gal.
Septic Tank Size 1000 gal.

Panel Volume N/A gal.
# of Panels N/A
Dosing Volume N/A gal.

Tank Draw Down N/A

Pump Run Time

Elevation Head N/A ft.
Pressure Head N/A ft.
Friction Factor N/A ft./100 ft. *(From the interpolater.)*
Friction Head N/A ft.

Total Dynamic Head (+15%) N/A ft.

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet 1 of 1
PROPERTY ID #: 4636378141
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: RHG Indoor vehicle Storage ~~Facility~~, LLC
ADDRESS: 120 Fast Lane
PROPOSED FACILITY: Vehicle Storage PROPOSED DESIGN FLOW (.1949): 250 gpd
LOCATION OF SITE: Brawley School, Lt on Stutts, Rt. on Fastlane, Prop on Rt
WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

APPLICATION DATE: 5/7/14
DATE EVALUATED: 7/14
PROPERTY SIZE: 1 0.94
PROPERTY RECORDED:

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
B 1	L/5%	0-6	BRcl sr	FrSSSPSExP	f [Fe] depl 12-24"	48	—	—	PS 0.25-.275
		6-48	RC wmsbk/Abk	FSSSPSExP					
B 2	L/5%	0-10	BRcl wfsbk	FrSSSPSExP	f [Fe] depl 12-25" f sap	48	—	—	PS 0.25-.275
		10-38	RCwmsbk/Abk	F-FrSSSPSExP					
		38-48	RCwmsbk	FrSSSPSExP					
3	L/10%	0-8	Bsl sr	FrSSSPSExP	f sap	48	—	✓	PS 0.3
		8-24	RBC wfAbk/sbk	" " " "					
		24-43	RC wfAbk/sbk	" " " "					
		43-48	RCl wmsbk	" " " "					
4	L/6%	0-20	B ls	FrSSSPSExP	f [Fe] depl	48	—	—	PS 0.275-0.3
		20-28	RB cl wfsbk	" " " "					
		28-36	RCwmsbk	" " " "					
		36-48	RCwmsbk/Abk	" " " "					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted	PPBPS
Site LTAR	0.25-.275	0.275-.3

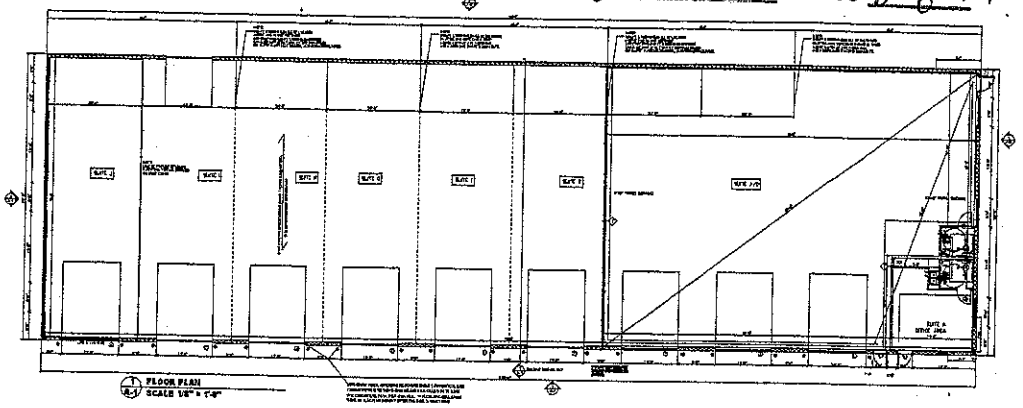
OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S. Ashley Rollans & Wendell Orerby
OTHER(S) PRESENT:

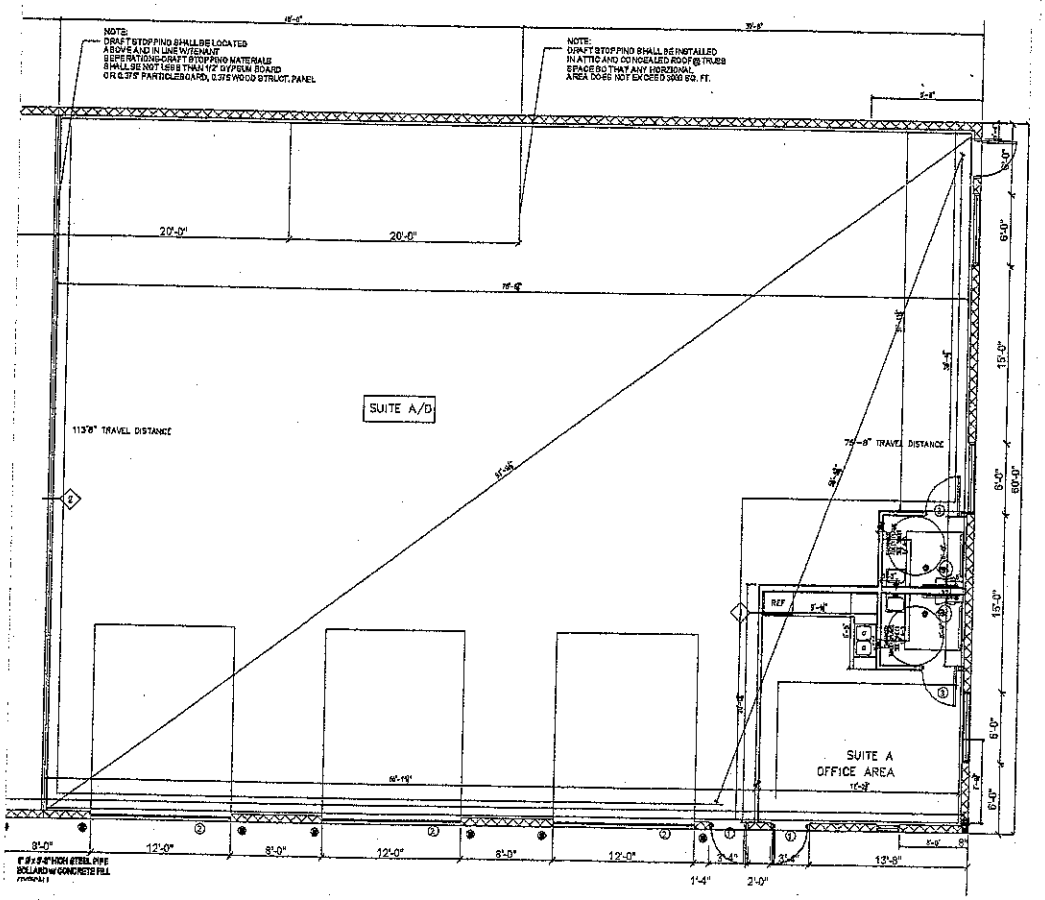
COMMENTS: #1 0-9 B scl br FrSS sP fExP
SS 9-27 R C wfSbk FrS P SSxP com Rx, few .25
5%27-32 R C wPSbk FrS P SSxP few Rx
32-48 R C wPABk FrSP SSxP com Rx few Rx

Additional Notes ON BACK

Acknowledgement Of
Plans Submittal ONLY!
Revised Plans Date 8/6/14
Date 8-6-14

CODE REVIEW





12.000 TOTAL BUILDING EXTERIOR SQUARE FOOTAGE
IIIB CONSTRUCTION
NOT SPRINKLERED

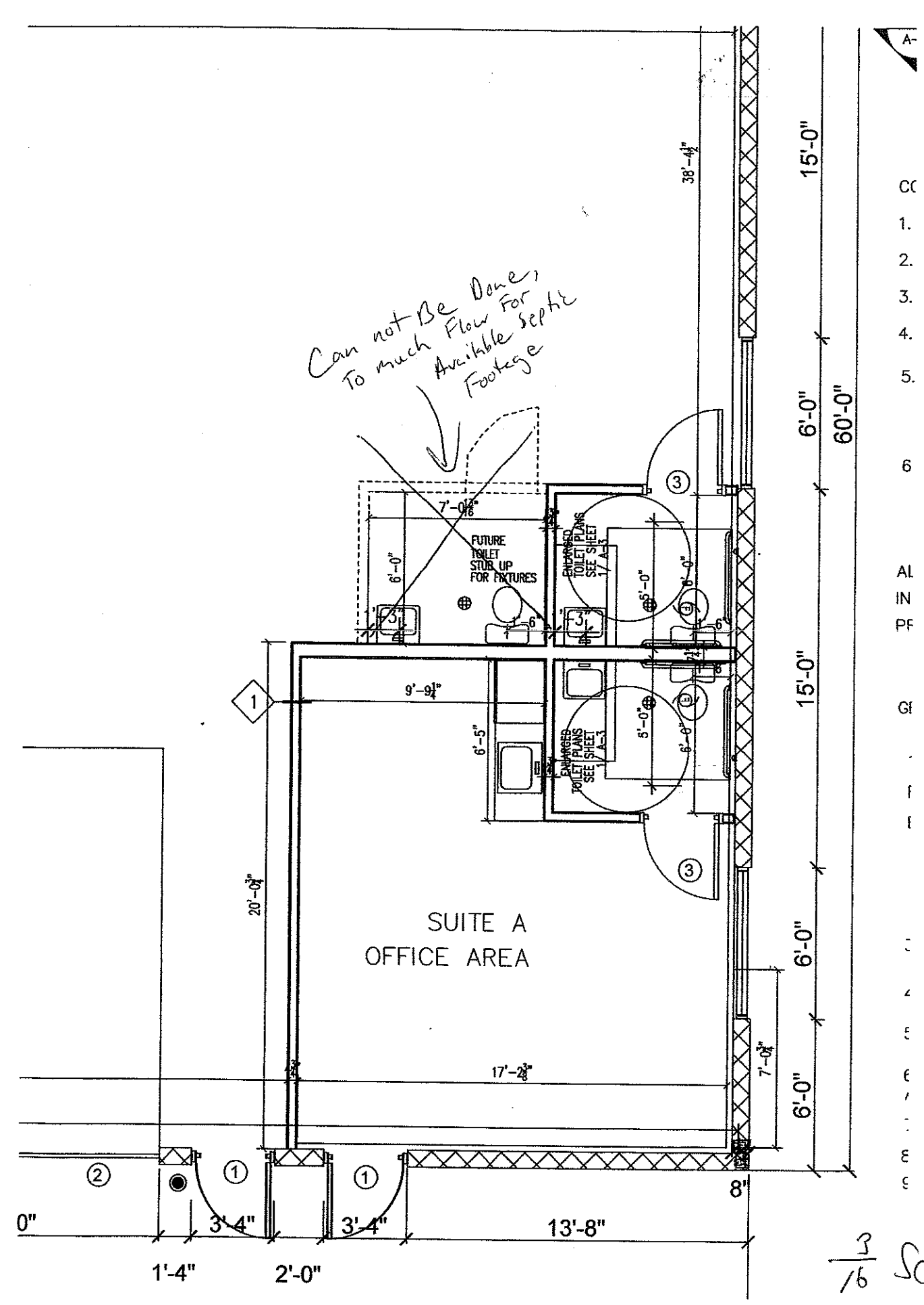
TOTAL EXTERIOR SQUARE FOOTAGE SPACE A/D 4780
TOTAL INTERIOR SQUARE FOOTAGE SPACE A/D 4573
OFFICE AREA 338 S.F ACCESSORY AREA
2 EXITS REQUIRED- 2 EXITS PROVIDED
4235 S.F./200=21 OCCUP
DISTANCE BETWEEN DOORS 97'-9"/2=48'-10"
58'-6" DISTANCE BETWEEN DOORS

OFFICE AREA 1 EXIT REQUIRED
338 S.F/100=3 OCCUP
TRAVEL DISTANCE 33'-9"

TOTAL EXTERIOR SQUARE FOOTAGE SPACES E THRU J 1209 S.F. EACH SPACE
TOTAL INTERIOR SQUARE FOOTAGE SPACES E THRU J 1161 S.F EACH SPACE

UPFIT PERMIT

SEE PLUMBING, MECHANICAL AND ELECTRICAL


Can not Be Done,
To much Flow For
Available Septic
Footage
FUTURE
TOILET
STUB UP
FOR FIXTURES
ENLARGED
TOILET PLANS
SEE SHEET
1/ A-3
SUITE A
OFFICE AREA
38'-4½"
15'-0"
6'-0"
60'-0"
15'-0"
6'-0"
6'-0"
7'-0¼"
9'-9¼"
17'-2⅜"
20'-0¾"
6'-5"
5'-0"
6'-0"
7'-0¼"
8"
0"
3'-4"
3'-4"
13'-8"
1'-4"
2'-0"

3/16 Scale

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet:
Property ID:
Lot #:
File #:
AppID:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner:
Address:
Proposed Facility: Design Flow (.1949)
Location of Site:
Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [ ] Sewage [ ] Industrial Process [ ] Mixed

Applicant:
Date Evaluated:
Property Size:
Property Recorded:

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941		b PROFILE FACTORS				Profile Class & LTAR
			1941 Structure/ Texture	.1941 Consistence Mineralogy	1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	
A5	LL 5%	0-9	BCL, WSBK	FR,SS,SP,SEXP	FEW MOTTLES AT 12"-15" QUARTZ AT 24" FEW SAP INCL	48"	N/A	N/A	PS .25
		9-36	YRC, SBK/ABK	FR,SS,SP,SEXP					
		36-48	RCL, SBK/WSBK	FR,SS,SP,SEXP					
A6	LL FS 6%	0-4	SL, ~~GR~~	~~VFR~~ FR,SS,SP,SEXP	YELLOW MOTTLES FROM 15" TO 22"	48"	N/A	N/A	PS .275
		4-8	SCL, WSBK	FR,SS,SP,SEXP					
		8-30	YRS, WSBK/ABK	FR,SS,SP,SEXP					
		30-48	RCL, WSBK	FR,SS,SP,SEXP					

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR		

Other Factors (.1946):
Soil Evaluation By: SHANE CASHION
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:

Sheet:
FILE #:

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace		CL-Clay Loam		
FP-Flood Plain		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence	Consistence	Mineralogy
Moist	Wet	SEXP-Slightly Expansive
VFR-Very Friable	NS-Non-Sticky	EXP-Expansive
FR-Friable	SS-Slightly Sticky	
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations

