

13420 PAVILION ESTATES DR

01924317

1/10/2008

duponbj

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

EHS OJ

Reviewer ICR

6640B County Permit Review Worksheet

Rule or Law	Permit Application	1	2	3	4	5	6	7	8	9	10
.1937(d)	Is the Application complete	✓									
.1937(d)	Is there a Site plan/Plat with application	✓									
.1937(d)	Is the Facilityshown?	✓									
.1937(d)	Are appurtenances shown	Nb									
	Site Evaluation Information										
.1939 (a)(1)	Topography and Landscape Position Recorded?	✓									
.1940 (a-g)	Slope % Recorded?	✓									
.1939 (a)(2)	Texture Class Recorded?	✓									
.1939 (a)(2)	Structure type Recorded?	✓									
.1939 (a)(2)	Consistence Recorded?	✓									
.1939 (a)(3)	Mineralogy Recorded?	✓									
.1939 (a)(4)	Soil Wetness Condition Recorded?	✓									
	Soil Depth to Rock or Parent Material Recorded When Encountered?	✓									
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	C									
.1939 (a)(6)	Sufficient Available Space Recorded?	✓									
.1937(m)	Are the Profile Locations Shown?	✓									
.1939(a) & .1945(b)	Are the S/PS Profiles in system & in repair area?	✓									
	Number of auger borings made:	5									
.1939(d), .1955, .1956, .1957	Were sufficient auger borings made?										
	LTAR										
	IP/CA										
G.S. 130A-336(a) & .1937(g)	Proposed System Type stated-Initial	✓									
.1945(b)	Proposed System Type stated-Repair	✓									
G.S. 130A-336(a)(3)	System location identifiable by setbacks - Initial	✓									
.1937(g) & .1945(b)	System components shown - Initial	✓									
.1945(b)	Repair area shown	✓									
.1937 (f)(g)	Does System design match facility, flow & WW characteristics?	Y									
.1937 (f)(g)	Is System design consistent with soil/site conditions?	✓									
.1937 (i)(g)	Is the System located in the approved area?	✓									
G.S. 130A-336(a)	Is the Design flow (gpd) indicated?	✓									
G.S. 130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	✓									
.1937(g)	Trench depth indicated?	✓									
.1937(g)	Trench width indicated?	✓									
.1937(g)	Trench length indicated?	✓									
G.S. 130A-336(a)(1)	Proposed/existing well shown?	✓									
G.S. 130A-336(a)(1)	Property line lengths shown?	✓									
G.S. 130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	✓									
	OP										
.1937(i)	System type as described in table V(a) of rule .1961										
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.										

If system design is incorrect or inconsistent with site conditions, indicate why for each below

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/11/07	**Amount:**	150.00
Receipt #:	50087	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	AIDOOJK		

Account Information

Account #: X39501
Contractor: SIMONINI BUILDERS OF NC LLC
Attn:
Address: 1910 SOUTH BOULEVARD STE 200
Address:
City/State/Zip: CHARLOTTE, NC 28203

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval HUNTERSVILLE CONCORD RD L8		1	150.00	150.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
1,606.25	14,223.81				

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/11/07	**Amount:**	150.00
Receipt #:	50086	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	AIDOOJK		

Account Information

Account #: X39501
Contractor: SIMONINI BUILDERS OF NC LLC
Attn:
Address: 1910 SOUTH BOULEVARD STE 200
Address:
City/State/Zip: CHARLOTTE, NC 28203

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr HUNTERSVILLE CONCORD RD LOT 8		1	150.00	150.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
1,456.25	14,223.81				

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001081** GWS File #: **6640B** Tax Parcel #: **019-242-32**

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is **NOT** transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 4/9/2012

Type of Installation: Residential - New System Lot Number: 8

Structure Type: HOUSE Size (ft^2): 0 # Bedrooms: 5 # Occupants: 6

Building Foundation: Basement With Plumbing Water Supply: Private Well

II. Initial System Type: Pump to Approved Accepted **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	600	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1500	Total Trench Length (ft):	500
Maximum Trench Depth (in):	30	Depth of Media (in):	12	Distribution Device:	Pressure Manifold		

III. Repair System Type: Pretreatment with Drip Irrigation **System Classification:** Vd

Repair System Specifications:

Design Flow (gpd):	600	LTAR (gpd/ft^2):	0.25	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	0	Trench Spacing (ft):	2	Absorption Area (ft^2):	2400	Total Trench Length (ft):	1200
Maximum Trench Depth (in):	6	Depth of Media (in):	N/A	Distribution Device:	Headworks (Drip Irr.		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S.

Date Issued: 4/9/2007

Owner/Legal Agent: Rick Jasinski
Print Name

Signature: Rick Jasinski

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001081** GWS File #: **6640B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- This type of repair system requires the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- *All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.*

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. *This permit is being* issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone R.S.

Date Issued: 4/9/2007

Owner/Legal Agent: Rick Jasinski

Print Name

Signature: Rick Jasinski

SEPTIC ENVIRONMENTAL SOLUTIONS

22 March 2007 AD, 2007

Mr. Trevor Thomason
Mecklenburg Environmental Health Division
Groundwater & Wastewater Services
700 N. Tryon Street, Suite 211
Charlotte, North Carolina 28202

Re: **Improvement Permit Application for Lot #8 Pavilion Estates Drive**
For The Pavilion Subdivision, Parcel #023-201-02 PO,
MCHD File # 6640B
Mecklenburg County, North Carolina

Dear Mr. Thomason:

Thanks for your review and time in reference to Lot 8 at The Pavilion. Per Mr. Marlins soils report Septic Environmental Solutions, Inc. layout the entire septic system (initial and repair) in the field were Mr. Marlin had found suitable soils. All drainfield lines are marked in the field within setbacks see figure and design specification sheet. Thank you for your patience and cooperation in regards to this report. If you should have any questions concerning this report, or need further assistance, please call (704) 502-5588

Sincerely,

Kenneth L. Owens, L.S.S. #1134
North Carolina Soil Scientist, 5522 Whispering Wind Lane, Indian Trail, North Carolina 28079

GWS Septic System Design Review

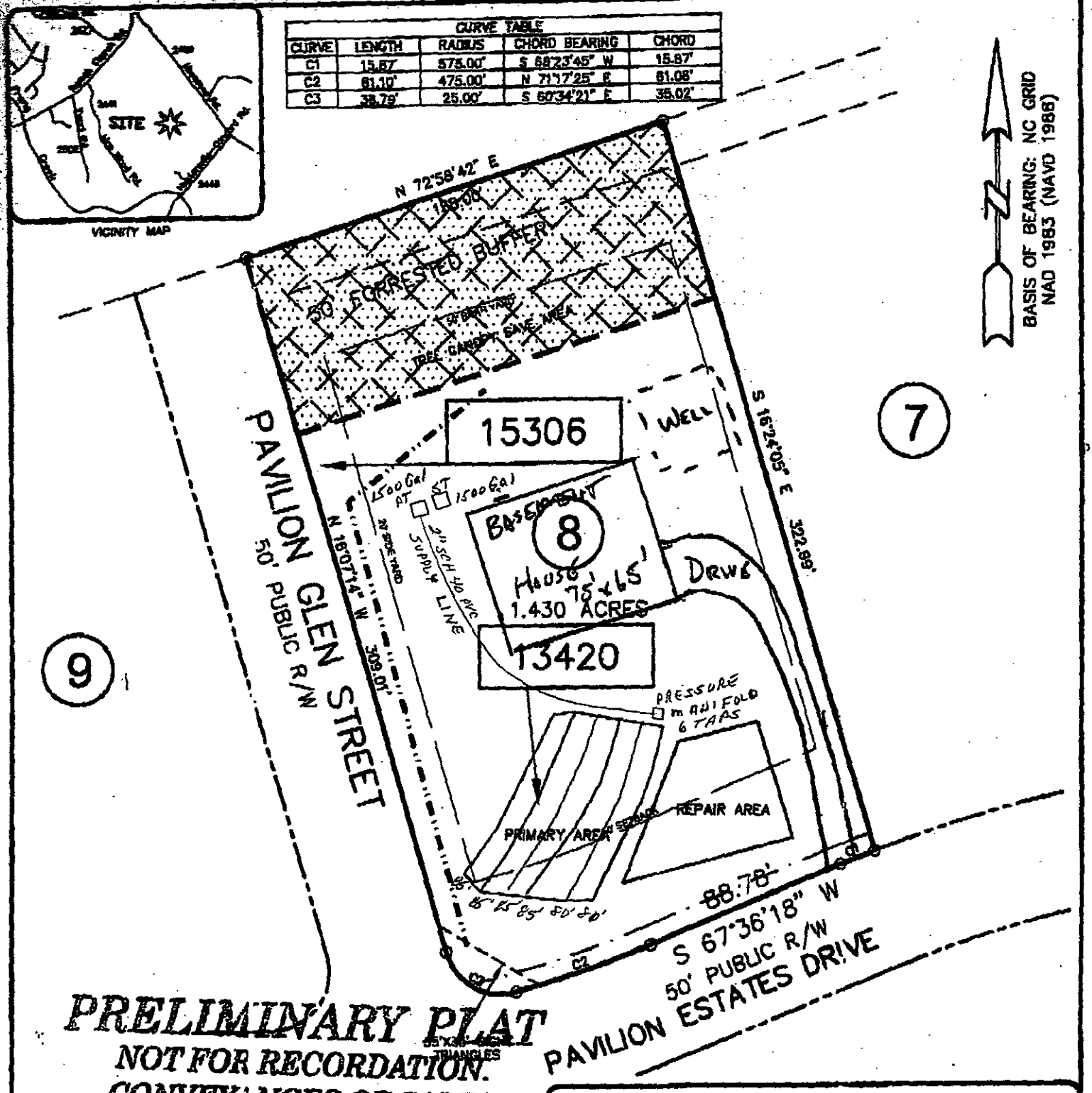
GWS File #: 6640B	**Approved**	**Disapproved**
Design Review: TCT 3-29-07	☒	☐
Field Review: 4/5/07	☒	☐

***Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.**

6206 Birkdale Valley Drive Apt. 515 • Charlotte, North Carolina 28277
Office (704) 540-0771 • Mobile (704) 502-5588 • Fax (704) 541-8094
kennyowens@bellsouth.net

Design Specifications for Lot 8 The Pavilion Subdivision, Huntersville North Carolina

Daily Design Flow:	600 gpd
Number of Bedrooms	5 bedroom
Basement or Crawlspace	Basement
Septic Tank Size	1500 gal
Pump Tank Size	1500 gal
Primary System Loading Rate	0.3 gpd/ft^2 per Mecklenburg County Soil/Site Evaluation 2/9/07
Primary System	25% reduction modified conventional, four 85-foot and two 80-foot lines to be a minimum of 9ft on center with 3ft wide trench widths
Number and Length of Lines	4 @ 85ft and two @ 80ft
Total foot of Primary System	500ft
Pump Requirements	To be determined and calculated by the installer.
Dosing Volume	Approximately 2/3 of total drainfield (4dia pipe volume) = 218 gals per dose.
Depth of effluent Pumped per Dose	Contractor to verify tank dimensions to adequately set the depth of the effluent pump and drawdown per pump cycle. Estimated drawdown per pump cycle should be set approximately at 7.5-inches.
Pressure Manifold	Six taps, 1/2" taps SCH 40 with flow rate of approximately 6.71-GPM per tap.
Check Valve	Yes
Siphon Break Hole	Yes
Repair System Loading Rate	0.25 gpd/ft^2
Repair System	Pretreatment subsurface drip.
Total foot of Repair	1500ft



PRELIMINARY PLAT

NOT FOR RECORDATION, CONVEYANCES OR SALES

PLOT PLAN — SURVEY

PROPERTY OF: LOT 8 THE PAVILION

HUNTERSVILLE TWP., MECKLENBURG CO., NC

ADDRESS: 13420 PAVILION ESTATES DRIVE, HUNTERSVILLE, NC

LOT 8, BLOCK ____, THE PAVILION

SCALE: 1 IN. = 60 FT. DATE: MARCH 19, 20 07

0 60 120 180

LEGEND

- ⊙ SET IRON PIN (#5 REBAR)
- ● EXISTING IRON PIN (AS DESCRIBED)
- TIE LINE
- BOUNDARY AS SURVEYED
- BOUNDARY BY DEED OR PLAT
- RIGHT OF WAY
- EASEMENT

ENGINEERS - SURVEYORS - PLANNERS
45 SPRING STREET SW CONCORD (704) 786-3404
CONCORD, NC 28025 FAX (704) 786-7454
ACAD FILE: LOT 8.DWG

© 2007

JOB NO.: 050308.001

Tri-County Wastewater Management, Inc.

pressbox
Pressure Manifold

704-821-8841

Specifications details - 1/2 inch taps

Construction specifications

Overall vault size: 24"x48"x24"
Vault material option #1: High Density Polyethylene
Vault material option #2: Double Choped Fiberglass
Vault lid type: Molded structural ribbed, "shoe box" type polypropylene
Vault weight - empty: < 100 pounds
Vault weight - built out <150 pounds
Effluent supply pipe size: 2-inch
Effluent supply pipe external connection type: Schedule 40 PVC, solvent weld, socket fit coupling
Pressure regulating valve size: 2-inch

Effluent supply line to pressure barrel transition connection type: Schedule 40 PVC bushing - 4"x2"
Pressure barrel size: 4-inch
Pressure barrel type: Schedule 80 PVC
Discharge tap size: 1/2-inch
Discharge tap type: Direct thread tap with NPTF threads
Discharge pipe type: Schedule 80 PVC
Discharge flow control device: Spears heavy duty "true union" ball valve, schedule 80, ring reinforced thread connection
Pressure discharge lines to external field supply lines transition connection type: Schedule 40 PVC bushing - 3"x1"
External field supply line connections: 3-inch, schedule 40 PVC, solvent weld, socket fit coupling
Pressure barrel clean-out type: 4-inch, schedule 40 PVC, 90 degree elbow, socket fit, with screw plug
Pressure head check size: 1/2-inch
Pressure head check tap type: Direct thread tap with NPTF threads
Pressure head check flow control device: Spears "true union" ball valve, schedule 80, ring reinforced thread connection
Pressure head check measurement tube type: Clear polyvinyl tubing with 12-inch increment markings
Pressure barrel support unit type: 4-inch double band "Click" PVC support stands

Performance specifications = Flow X Head (Seven pair maximum 1/2" taps)

Discharge tap flow - each	@ 2' ..... 5.48 gpm	@ 3' ..... 6.71 gpm	@ 4' ..... 7.75 gpm
Discharge tap flow - total 2	@ 2' ..... 10.96 gpm	@ 3' ..... 13.42 gpm	@ 4' 15.50gpm
Discharge tap flow - total 3	@ 2' ..... 16.44 gpm	@ 3' ..... 20.13 gpm	@ 4' 23.25gpm
Discharge tap flow - total 4	@ 2' ..... 21.92 gpm	@ 3' ..... 26.84 gpm	@ 4' 31.00gpm
Discharge tap flow - total 5	@ 2' ..... 27.40 gpm	@ 3' ..... 33.55 gpm	@ 4' 38.75gpm
Discharge tap flow - total 6	@ 2' ..... 32.88 gpm	@ 3' ..... 40.26 gpm	@ 4' 46.50gpm
Discharge tap flow - total 7	@ 2' ..... 38.36 gpm	@ 3' ..... 46.97 gpm	@ 4' 54.25gpm
Discharge tap flow - total 8	@ 2' ..... 43.84 gpm	@ 3' ..... 53.68 gpm	@ 4' 62.00gpm
Discharge tap flow - total 9	@ 2' ..... 49.32 gpm	@ 3' ..... 60.39 gpm	@ 4' 69.75gpm
Discharge tap flow - total 10	@ 2' ..... 54.80 gpm	@ 3' ..... 67.10 gpm	@ 4' 77.50gpm
Discharge tap flow - total 11	@ 2' ..... 60.28 gpm	@ 3' ..... 73.81 gpm	@ 4' 85.25gpm
Discharge tap flow - total 12	@ 2' ..... 65.76 gpm	@ 3' ..... 80.52 gpm	@ 4' 93.00gpm
Discharge tap flow - total 13	@ 2' ..... 71.24 gpm	@ 3' ..... 87.23 gpm	@ 4' 100.7gpm
Discharge tap flow - total 14	@ 2' ..... 76.72 gpm	@ 3' ..... 93.94 gpm	@ 4' 108.5gpm

SEPTIC SYSTEM DESIGN REVIEW WORKSHEET

File: 6640B

Address: Lot #8 Sample Rd.

PID #: 023-201-02 PO

Subdivision: The Pavilion

Lot #: 8

Comments:

1. Revise site plan to include all components of the septic system (tanks, supply line, distribution device, etc.) A pressure manifold is required for the system you have designed. Please include a manifold specification sheet showing the tap diameter, PVC schedule (40 or 80), and flow rate for each tap.

2. For the initial system label all drain lines w/ the linear footage for each line.

3. Provide a report cover letter that includes the following items:

   Site Location
   Subdivision Name
   Lot Number
   Parcel Number
   MCHD File Number
   Your contact information
   Date

GWS Septic System Design Review

GWS File #: 6640B	Approved	Disapproved
Design Review: TCT 3-21-07	☐	☒
Field Review:	☐	☐

*Projects are not considered complete until both sections above are completed and indicate "Approved" status.

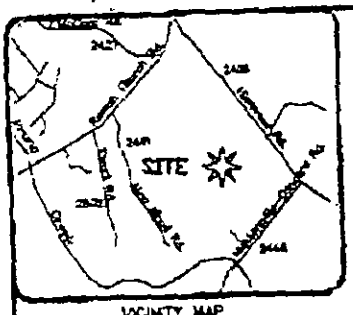
Reviewed By: Trevor Thomason

Date: March 21, 2007

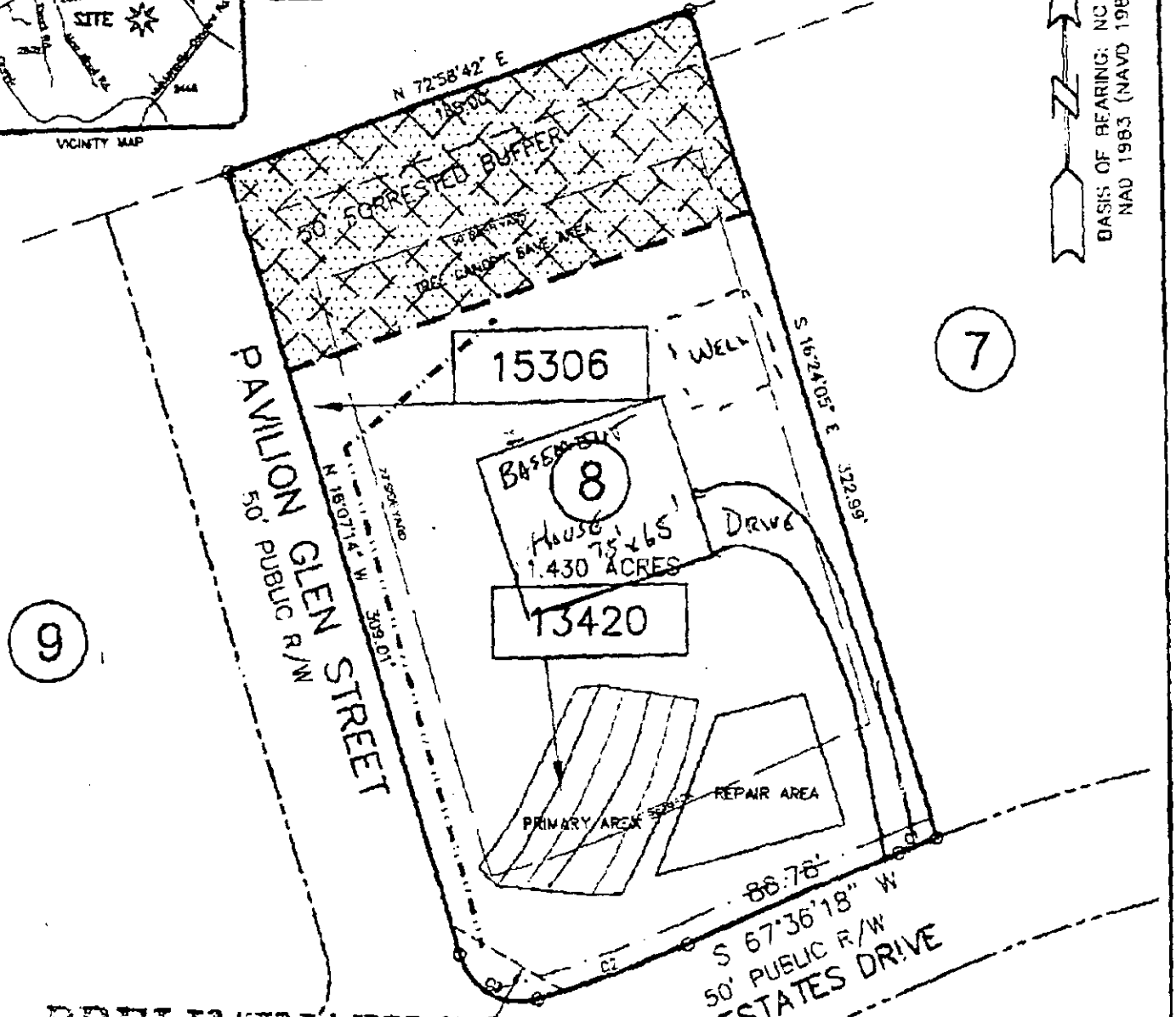
Status: **Approved** **X** **Disapproved** **Pending**

Design Specifications for Lot 8 The Pavilion Subdivision, Huntersville North Carolina

Daily Design Flow:	600 gpd
Number of Bedrooms	5 bedroom
Basement or Crawspace	Basement
Septic Tank Size	1500 gal
Pump Tank Size	1500 gal
Primary System Loading Rate	0.3 gpd/ft^2 per Mecklenburg County Soil/Site Evaluation 2/9/07
Primary System	25% reduction modified conventional. four 85-foot and two 80-foot lines to be 9ft on center with 3ft wide trench widths ✓ 500 L.F.
Number and Length of Lines	4 @ 85ft and two @ 80ft
Total foot of Primary System	500ft
Pump Requirements	To be determined and calculated by the installer.
Dosing Volume	Approximately 2/3 of total drainfield (4dia pipe volume) = 218 gals per dose. ✓
Depth of effluent Pumped per Dose	Contractor to verify tank dimensions to adequately set the depth of the effluent pump and drawdown per pump cycle. Estimated drawdown per pump cycle should be set approximately at 7.5-inches.
Check Valve	Yes
Siphon Break Hole	Yes
Repair System Loading Rate	0.25 gpd/ft^2
Repair System	Pretreatment subsurface drip.
Total foot of Repair	1500ft



CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD
C1	15.87'	575.00'	S 68°23'45" W	15.87'
C2	61.10'	475.00'	N 71°17'25" E	61.06'
C3	38.29'	25.00'	S 60°34'21" E	35.02'



PRELIMINARY PLAT

NOT FOR RECORDATION.
CONVEYANCES OF SALES

LEGEND

- ○ SET IRON PIN (#5 REBAR)
- ● EXISTING IRON PIN (AS DESCRIBED)
- TIE LINE
- BOUNDARY AS SURVEYED
- BOUNDARY BY DEED OR PLAT
- RIGHT OF WAY
- EASEMENT

PLOT PLAN SURVEY

PROPERTY OF: LOT 8 THE PAVILION

HUNTERSVILLE TWP. MECKLENBURG CO., NC

ADDRESS 13420 PAVILION ESTATES DRIVE, HUNTERSVILLE, NC

LOT 8, BLOCK —, THE PAVILION

SCALE: 1 IN. = 60 FT. DATE: MARCH 19, 20 07

0 30 120 180

CESI ENGINEERS - SURVEYORS - PLANNERS

45 SPRING STREET SW CONCORD (704) 786-5404
CONCORD, NC 28025 FAX (704) 786-7454
ACAD FILE: LOT 8.DWG

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JOB NO.: 05C308.001

SEPTIC SYSTEM DESIGN REVIEW WORKSHEET

File: 6640B

Address: 13420 Pavilion Estates Drive

PID #: 019-242-32 PO

Subdivision: The Pavilion

Lot #: 8

Comments:

1. [redacted] Soil report dated 11/28/06 is vastly different from report dated 2/9/07 (need clarification from Bill Marlin, LSS).
2. Site plan scale should not exceed 1" = 60'. Also, site plan should include detailed system layout of tank locations, supply, piping, and drain field.
3. Site plan should include: building envelope, driveway, well location, and all appurtenances.
4. Calculations for system specification are incorrect. Total linear footage for a conventional system (600 GPD, 0.3 LTAR) should be 667 ft. Also, designer should provide calculations for dose volume, drawdown, and pump run time.
5. Incorrect linear footage of repair area shown. Correct and show adequate area for installation on site plan. Also, provide explanation for use of 0.25 LTAR for repair system.

Reviewed By: Trevor Thomaon

Date: March 16, 2007

Status: ☐ **Approved** ☒ **Disapproved** **Pending**

GWS Septic System Design Review

GWS File #: 6640B **Approved** **Disapproved**

Design Review: TCT 3-16-07 ☐ ☒

Field Review: _____ ☐ ☐

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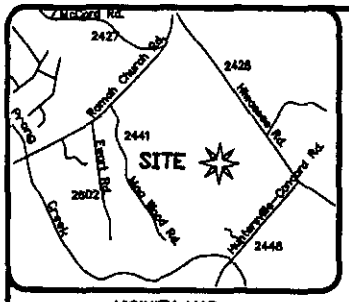
Design Specifications for Lot 8 The Pavilion Subdivision, Huntersville North Carolina

Daily Design Flow:	600 gpd
Number of Bedrooms	5 bedroom
Basement or Crawspace	Basement
Septic Tank Size	1500 gal
Pump Tank Size	1500 gal
Primary System Loading Rate	0.3 gpd/ft^2 per Mecklenburg County Soil/Site Evaluation 2/9/07
Primary System	Conventional, four 85-foot and two 80-foot lines to be 9ft on center with 3ft wide trench widths
Number and Length of Lines	X 4 @ 85ft and two @80ft
Total foot of Primary System	X500ft 667 L.F. CONVENTIONAL REQUIRED
Pump Requirements	To be determined and calculated by the installer.
Dosing Volume	NA CALCULATE
Depth of effluent Pumped per Dose	To be determined and calculated by the installer.
Check Valve	Yes CALCULATE
Siphon Break Hole	Yes
Repair System Loading Rate	0.25 gpd/ft^2
Repair System	Pretreatment subsurface drip.
Total foot of Repair	1500ft

GWS Septic System Design Review

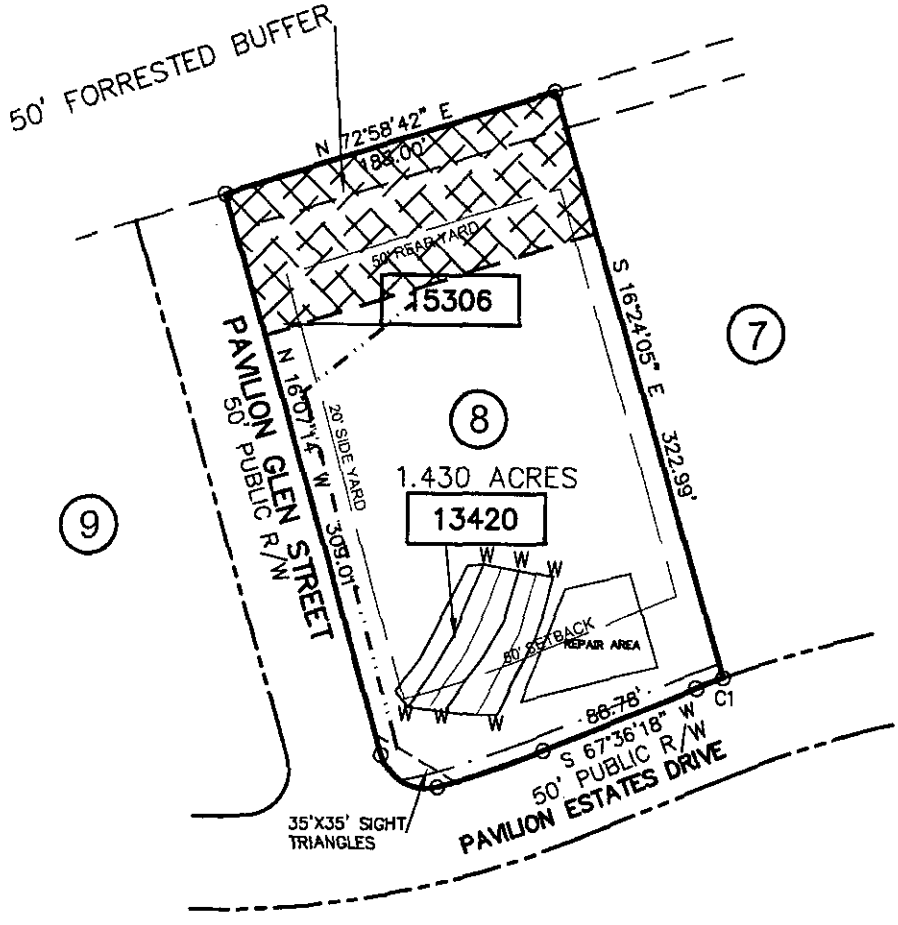
	Approved	Disapproved
File #: 6640B		
Review: 3-16-07 (TCP)	☐	☒
Review:	☐	☐

are not **considered "APPROVED"** until both sections above ...ted and **indicate an APPROVED** status



VICINITY MAP

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD
C1	15.87'	575.00'	S 68°23'45" W	15.87'
C2	61.10'	475.00'	N 71°17'25" E	61.06'
C3	38.79'	25.00'	S 60°34'21" E	35.02'



N

NO LOCATIONS FOR:

- HOUSE PAD (BLDG. ENVELOPE)
- DRIVEWAY
- WELL
- APPURTENANCES

LEGEND

- ⊙ SET IRON PIN (#5 REBAR)
- ● EXISTING IRON PIN (AS DESCRIBED)
- TIE LINE
- BOUNDARY AS SURVEYED
- BOUNDARY BY DEED OR PLAT
- RIGHT OF WAY
- EASEMENT

PLOT PLAN — SURVEY

PROPERTY OF: LOT 8 THE PAVILION

HUNTERSVILLE TWP., MECKLENBURG CO., NC

ADDRESS: 13420 PAVILION ESTATES DRIVE, HUNTERSVILLE, NC

LOT 8, BLOCK ____, THE PAVILION

1"=60' MAXIMUM

SCALE: 1 IN. = 100 FT. DATE: JUNE 21, 20 06

0 100 200 300

CONCORD ENGINEERING & SURVEYING, INC.
ENGINEERS - SURVEYORS - PLANNERS
43 SPRING STREET SW CONCORD (704) 786-5404
CONCORD, NC 28025 FAX (704) 786-7454
ACAD FILE: LOT 8.DWG

© CESI 2006

JOB NO.: 050306.001

Division of Environmental Health
On-site Wastewater Section

Property ID: 019-242-17
Lot #: 8
File #: 66408
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Simoni Builders
Address: 1910 South Blvd., Ste 200, Charlotte, N. C. 28203
Proposed Facility: Residence Design Flow (.1949): 600gpd
Location of Site: 13420 Pavilion Estates Drive
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Kenny Owens
Date Evaluated: 2/9/07
Property Size: 1.43a
Property Recorded:

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941		PROFILE FACTORS				
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Sapro Class	1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-2	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV .3GPD/FT²
		2-16	SBK/ABK/C	FI/SEXP/S/P					
		16-48	SBK/CL	FR/SEXP/SS/SP					
2	"	0-3	GR/CL	"	>36" TO SOIL WETNESS	36	"	"	"
		3-14	SBK/ABK/C	FI/SEXP/S/P					
		14-36	SBK/CL	FR/SEXP/SS/SP					
3	"	0-4	GR/CL	"	>48" TO SOIL WETNESS	46	"	"	"
		4-21	SBK/ABK/C	FI/SEXP/S/P					
		21-46	SBK/CL	FR/SEXP/SS/SP					
4	"	0-4	GR/SCL	"	>56" TO SOIL WETNESS	56	"	"	US
		4-21	SBK/ABK/C	VFI/EXP/VS/VP					
		21-56	SBK/ABK/C/SC	VFI/EXP/VS/VP >1"					
5	"	0-4	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		4-18	SBK/ABK/C	VFI/EXP/VS/VP >1"					
		18-48	M/CL	FR/SEXP/SS/SP					
					SITE LTAR .3GPD/FT²				

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

Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 2/16/2007.
Others Present: K. Owens
Site Classification (.1948):
Site Evaluation By:
Others Present:

100% repair

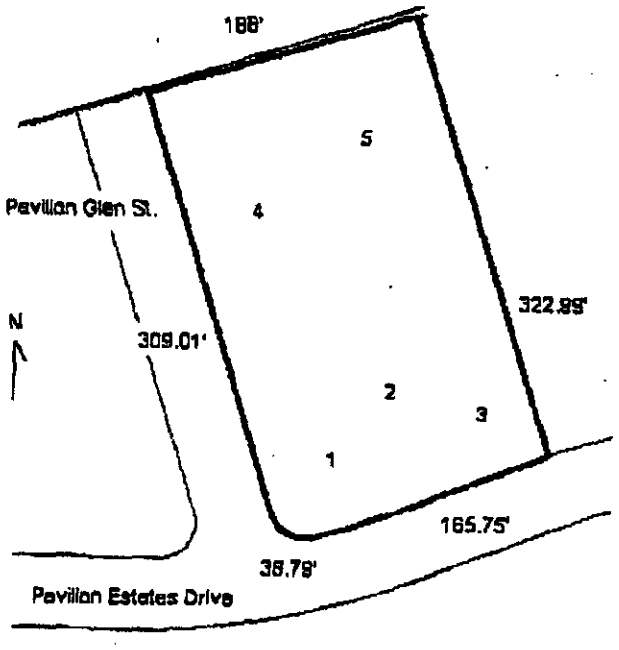
FILE #: 66408

Landscape Position	Group	Texture	.1955 LTAR
R-Ridge	I	S-Sand	1.2 - 0.8
SS-Shoulder Slope		LS-Loamy Sand	
LS-Linear Slope			
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6
NS-Nose Slope		L-Loam	
HS-Head Slope			
CC-Concave Slope	III	SI-Silt	0.6 - 0.3
CV-Convex Slope		SICL-Silty Clay Loam	
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	

Structure
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
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



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

Sheet: 1 of 2
Property ID: PO 019-242-32
Lot #: 8
File #: 6640B
AppID: 1081
Code: 2

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Simoni Builders
Applicant: Kenny Owens
Address: 1910 South Boulevard, Suite 200, Charlotte, N. C. 28203
Date Evaluated: 11/28/06
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: 1.43a
Location of Site: 13420 Pavilion Estates Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 6	0-4	GR/CL	FR/SEXP/SS/SP	>37" TO SOIL WETNESS	37	N/A	NONE	PS, IV .3GPD/FT^2
		4-23	SBK/C	FI/SEXP/S/P					
		23-37	SBK/C	FR/SEXP/SS/SP					
2	"	0-5	GR/CL	"	>17" TO SOIL WETNESS	17	"	"	US, III .1GPD/FT^2
		5-17	SBK/CL	"					
3	LS, 8	0-2	GR/CL	"	>29" TO SOIL WETNESS	29	"	"	US, IV .25GPD/FT^2
		2-29	SBK/C	FI/SEXP/S/P					
4	"	0-2	GR/CL	FR/SEXP/SS/SP	>16" TO SOIL WETNESS	16	"	"	US, IV .1GPD/FT^2
		2-14	SBK/C	FI/SEXP/S/P					
		14-16	SBK/CL	FR/SEXP/SS/SP					
5	"	0-2	GR/CL	"	>21" TO SOIL WETNESS	21	"	"	US
		2-21	SBK/C	VFI/EXP/VS/VP					

Description	Initial System	Repair System
Available Space (.1945)	US	US
System Type(s)		
Site LTAR	.25GPD/FT^2	.25GPD/FT^2

Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 11/29/2006, W. R. Marlin
Others Present:

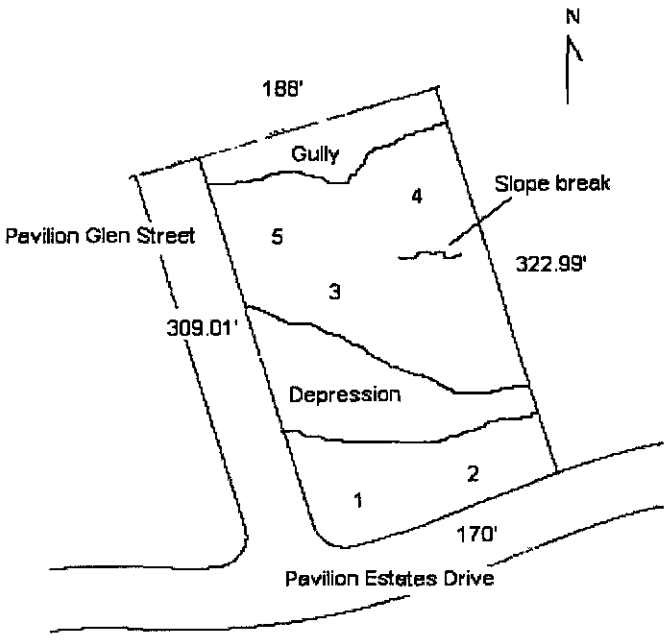
COMMENTS:

100% repair, house site not identified at time of investigation

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				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
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



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

Sheet: 1 of 2
Property ID: 019-242-17
Lot #: 8
File #: 6640B
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Simoni Builders
Applicant: Kenny Owens
Address: 1910 South Blvd., Ste 200, Charlotte, N. C. 28203
Date Evaluated: 2/9/07
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: 1.43a
Location of Site: 13420 Pavilion Estates Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-2	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV .3GPD/FT^2
		2-16	SBK/ABK/C	FI/SEXP/S/P					
		16-48	SBK/CL	FR/SEXP/SS/SP					
2	"	0-3	GR/CL	"	>36" TO SOIL WETNESS	36	"	"	"
		3-14	SBK/ABK/C	FI/SEXP/S/P					
		14-36	SBK/CL	FR/SEXP/SS/SP					
3	"	0-4	GR/CL	"	>46" TO SOIL WETNESS	46	"	"	"
		4-21	SBK/ABK/C	FI/SEXP/S/P					
		21-46	SBK/CL	FR/SEXP/SS/SP					
4	"	0-4	GR/SCL	"	>56" TO SOIL WETNESS	56	"	"	US
		4-21	SBK/ABK/C	VFI/EXP/VS/VP					
		21-56	SBK/ABK/C/SC	VFI/EXP/VS/VP >1"					
5	"	0-4	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		4-18	SBK/ABK/C	VFI/EXP/VS/VP >1"					
		18-48	M/CL	FR/SEXP/SS/SP					
					SITE LTAR .3GPD/FT^2				

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

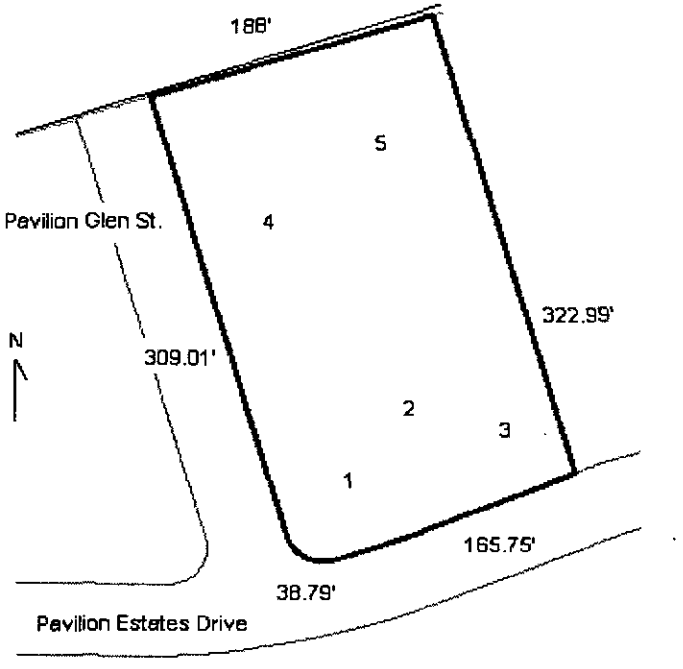
Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 2/16/2007
Others Present: K. Owens
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:
100% repair

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				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
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



GWS - RES. APP 07/05

PERMIT APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATION FOR ON-SITE WASTEWATER SYSTEM NEW WELL INSTALLATION OR REPAIR OF EXISTING WELL MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

SEPTIC FEE: $1081 $100 2nd site on act
DATE: 6/12/06
APPT. TIME:

WELL FEE: on act
DATE: 6/12/06
APPT. TIME:

FILE # 66408

SEPTIC / TYPE APPLICATION: ☐ NONE ☑ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFY PLOT PLAN

WELL / TYPE APPLICATION: ☐ NONE ☑ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

JOB LOCATION INFORMATION:

TAX/PARCEL #: 01924232
STREET ADDRESS: Huntersville - Concord RD
CITY: Huntersville
STATE: NC ZIP:
SUBDIVISION OR MOBILE HOME PARK NAME: The Pavilion
LOT #: 8
TOWNSHIP:

☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☑ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:

TYPE OF BUILDING:

☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☑ HOUSE (H) ☐ OTHER

HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 6

FOUNDATION FOR RESIDENCE:

☐ CONCRETE SLAB ☑ BASEMENT WITH PLUMBING
☐ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:

NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☑ NO TYPE:

WATER SUPPLY:

☐ MUNICIPAL (M) ☐ PUBLIC (C) ☑ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)

PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☑ POTABLE ☐ GEOTHERMAL ☐ OTHER

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES	☑ NO	WELLS, SPRINGS, OR WATER LINES	☐ YES	☑ NO
EXISTING WASTEWATER SYSTEMS	☐ YES	☑ NO	DESIGNATED WETLANDS	☐ YES	☑ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES	☑ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES	☑ NO

PROPERTY OWNER:

NAME: Simonini Builders
ADDRESS: 1910 South Boulevard Suite 200
CITY: Charlotte
STATE: NC ZIP: 28203
HOME PHONE: WORK PHONE: 704-358-3060 EXT 158
MOBILE PHONE: 704-756-9460 FAX: 704-358-9978
ACC # X39501

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Kenny Owens
ADDRESS: 6206 Birkdale Valley Dr. APT #515
CITY: Charlotte
STATE: NC ZIP: 28277
HOME PHONE: WORK PHONE: 704-540-[illegible]
MOBILE PHONE: 704-502-5588 FAX: 704-541-8094

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?

WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?

*An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Kathy L. 6-14-06
Owner's/Agent's Signature Date

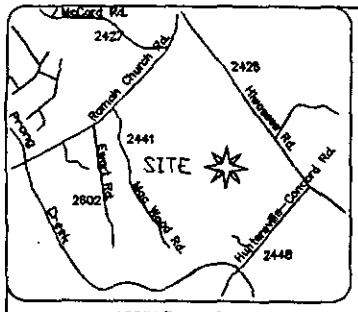
NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES DIVISION
OF ENVIRONMENTAL HEALTH ON-SITE
WASTEWATER SECTION

*A Well Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202 704-336-5103 / FAX: 704-336-6894

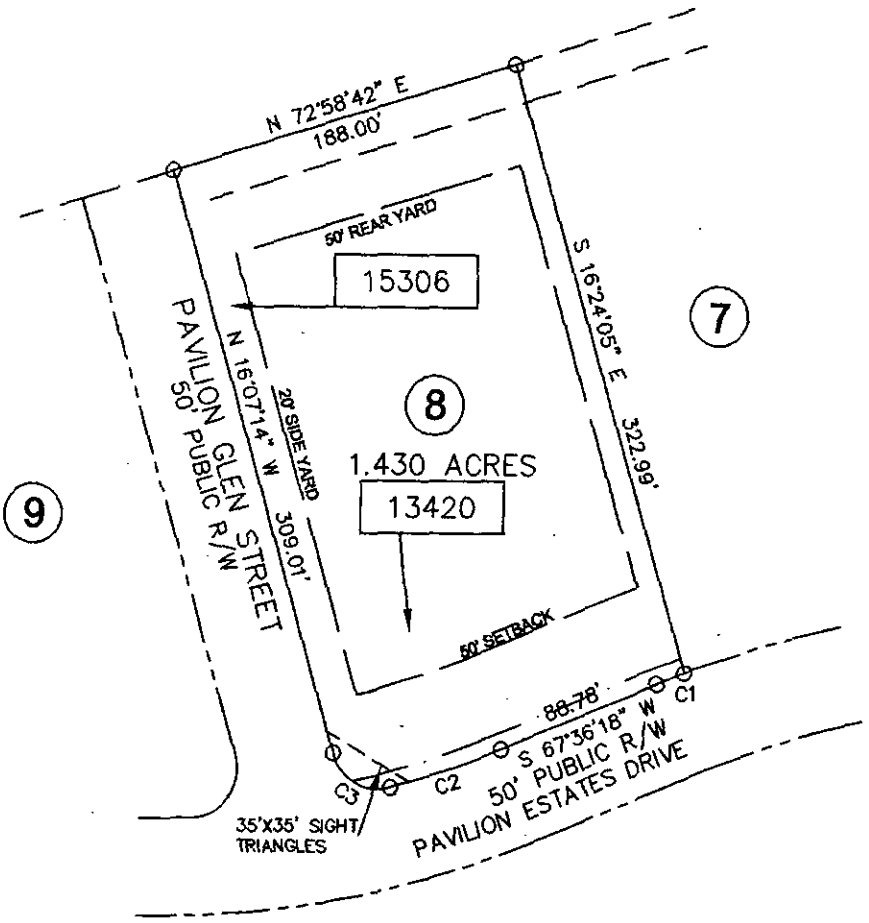
0702



VICINITY MAP

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD
C1	15.87'	575.00'	S 68°23'45" W	15.87'
C2	61.10'	475.00'	N 71°17'25" E	61.06'
C3	38.79'	25.00'	S 60°34'21" E	35.02'

6640B



LEGEND

- ⊙ SET IRON PIN (#5 REBAR)
- ● EXISTING IRON PIN (AS DESCRIBED)
- TIE LINE
- BOUNDARY AS SURVEYED
- BOUNDARY BY DEED OR PLAT
- RIGHT OF WAY
- EASEMENT

PLOT PLAN — SURVEY

PROPERTY OF: LOT 8 THE PAVILION

HUNTERSVILLE TWP., MECKLENBURG CO., NC

ADDRESS: 13420 PAVILION ESTATES DRIVE, HUNTERSVILLE, NC

LOT 8, BLOCK ____, THE PAVILION

SCALE: 1 IN. = 100 FT. DATE: JUNE 21, 20 06

0 100 200 300

CONCORD ENGINEERING & SURVEYING, INC.
ENGINEERS - SURVEYORS - PLANNERS
45 SPRING STREET SW CONCORD (704) 786-5404
CONCORD, NC 28025 FAX (704) 786-7454
ACAD FILE: LOT 8.DWG

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JOB NO.: 050306.001