336 253-8579 2nd

GWS - RES. APP 12/04

SEPTIC FEE: $200.00
DATE: 8/31/05
CRT [ ] X33575 I.W.

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

FILE # 61238

WELL FEE: _____
DATE: _____
CRT [ ]

SEPTIC / TYPE APPLICATION: ☐ NONE ☑ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

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

JOB LOCATION INFORMATION:

TAX/PARCEL #: 19724416
STREET ADDRESS: Fox Trail Court
CITY: Mint Hill
STATE: NC ZIP: 28027
SUBDIVISION OR MOBILE HOME PARK NAME: Meadows of Mint Hill
LOT #: 28
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: 3,500
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 4

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: NVR, Inc.
ADDRESS: 10815 David Taylor Dr., Ste 100
CITY: Charlotte
STATE: NC ZIP: 28262
HOME PHONE: WORK PHONE: 704-548-3534
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Kim Stanley
ADDRESS: PO Box 176
CITY: Stanfield
STATE: NC ZIP: 28163
HOME PHONE: WORK PHONE: 704-732-5635
MOBILE PHONE: FAX: 704-785-8721

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Feb 2006

*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.

Kim Stanley 8/29/05
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: 704-336-6834

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

Sheet: 1 OF 2
Property ID: 197-241-16
Lot #: 17 25
File #: 6123B
Code: 3

ACS

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Applicant: KIM STANLEY
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100, CHARLOTTE, NC 28262
Date Evaluated: 11/3/05
Proposed Facility: 5 BR
Design Flow (.1949): 600 GPD
Property Size: 1
Location of Site: JUMPER DRIVE, MINT HILL, NC 28027
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
	LS,6	0-39	FILL	MASSIVE	NA	NA	NA	NA	U, NA
	"	0-16	FILL	MASSIVE	>48"	>48"	"	"	PS, IV
		16-24	SBK SCL	FR SS SP SEXP					.25
		24-45	ABK/SBK C	FI S P SEXP					
		45-48	SBK CL	FR S P SEXP					
	"	0-56	FILL	MASSIVE	NA	NA	"	"	U, NA
	"	0-6	FILL	MASSIVE	"	>48"	"	"	PS, IV
		6-45	ABK/SBK C	FI S P SEXP					.3
		45-48	SBK CL	FR S P SEXP					
	"	0-26	ABK/SBK C	FI S P SEXP	>40"	40"	"	"	PS, IV
		26-40	SBK CL	FR S P SEXP					.25

Description	Initial System	Repair System
Available Space (.1945)	U	U
System Type(s)		
Site LTAR	.25	NA

Other Factors (.1946): WILL REQUIRE BACKHOE PITS TO FURTHER DETEI
Site Classification (.1948): UNSUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS
Others Present: NONE

COMMENTS:

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Food Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain

Group	Texture	.1955 LTAR
I	S-Sand LS-Loamy Sand	1.2 - 0.8
II	SL-Sandy Loam L-Loam	0.8 - 0.6
III	SI-Silt SICL-Silty Clay Loam CL-Clay Loam SCL-Sandy Clay Loam	0.6 - 0.3
IV	SC-Sandy Clay SIC-Silty Clay C-Clay	0.4 - 0.1

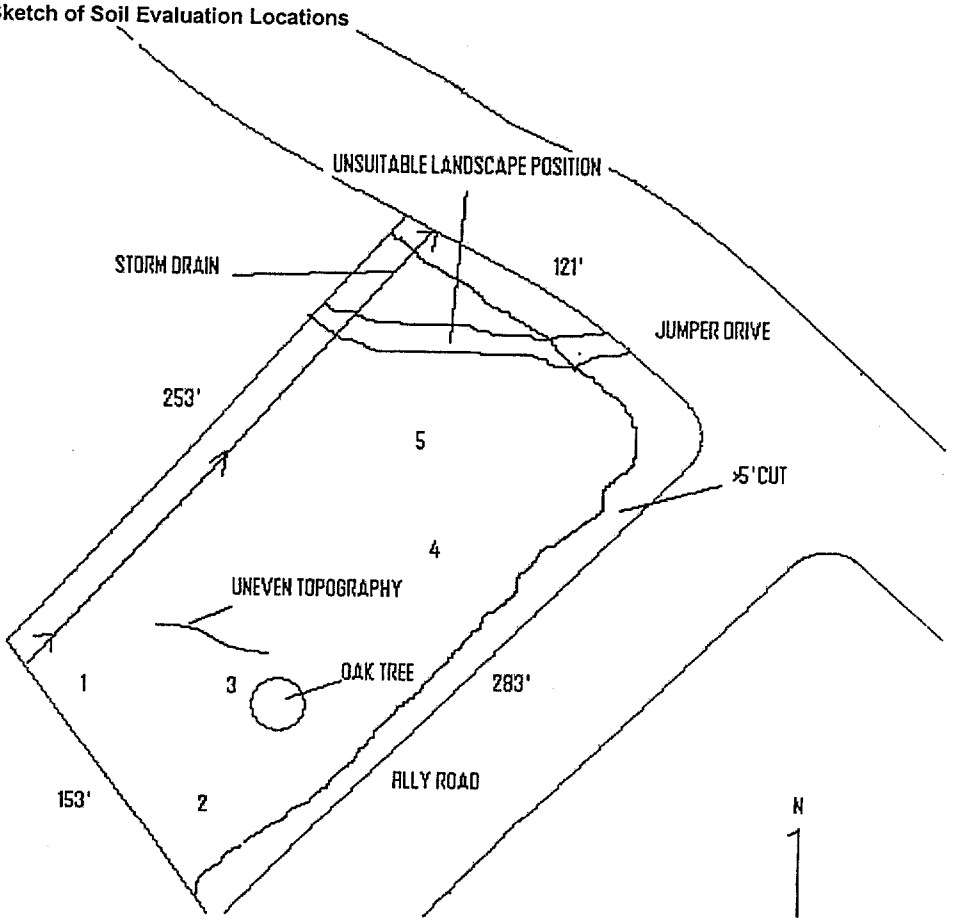
Structure
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic

Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

Consistence
Wet
NS-Non-Sticky
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

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: 197-241-16
Lot #: 28
File #: 6123B
Code: 2 ACS

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Applicant: KIM STANLEY
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100 CHARLOTTE, NC 28262
Date Evaluated: 11/11/05
Proposed Facility: 5 BR
Design Flow (.1949): 600 GPD
Property Size: 1
Location of Site: FOAL COURT, MINT HILL, NC 28027
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 5	0-5	SBK CL	FR SS SP SEXP	>48"	>48"	NA	NA	PS, IV
		5-42	SBK/ABK C	FI S P SEXP					.275
		42-48	SBK CL	FR S P SEXP					
2	LS, 6	0-9	SBK CL	FR SS SP SEXP	"	"	"	"	PS, IV
		9-48	SBK/ABK C	FI S P SEXP					.3
3	LS, 5	0-14	SBK SCL	FR SS SP SEXP	36"	36"	"	"	PS, IV
		14-36	SBK SC	FI S P SEXP					.25
4	LS, 6	0-10	SBK SCL	FR SS SP SEXP	>48"	>48"	"	"	PS, IV
		10-40	ABK/SBK SC	FI S P SEXP					.3
		40-48	SBK SCL	FR S P SEXP					

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	~~TVA~~	TVA
Site LTAR	~~.275~~ .3	.275

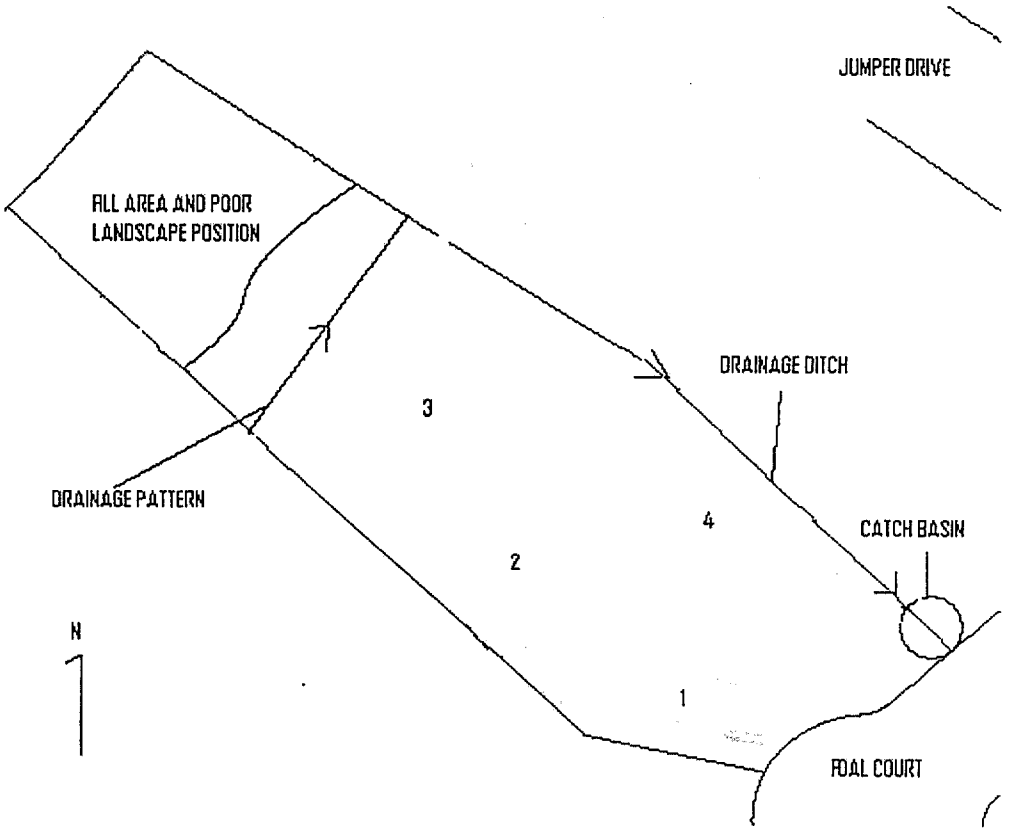
Other Factors (.1946): RECOMMEND PUMP TO FRONT INITIAL & REPAIR
Site Classification (.1948): UNSUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS CMS
Others Present: NONE

COMMENTS:

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-Food 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 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



PROJECT T. Moons of Mt H.Y DATE 12/10/01 COUNTY Mocks
PROPOSAL/LOT# Lot #28
Parent material (res/coll/all) clay mineralogy: (st.exp./exp.?)

	Boring # 1	Boring # 2	Boring # 3	Boring # Y
DEPTH HORIZON I	0 - 8 Ap	0 - 5 Ap	3 - 8 Ap	0 - 13 BA
COLOR	7.5 YR 4/4	7.5 YR 4/3	7.5 YR 4/4	2.5 YR 5/6
TEXTURE	SL	SL	SL	C
STRUCTURE	1 f sbk to Cl	1 f sbk	1 f sbk	??
CONSISTENCE	FR / SS	FR / SS	FR / SS	F: / Stky / Plpc.
DEPTH HORIZON II	8 - 17 Bt1	5 - 33 Bt1	8 - 42 Bt1	13 - 18 Ap
COLOR	5 YR 4/6	5 YR 4/6	9.5 YR 4/6	7.5 YR 4/4
TEXTURE	CL	CL	CL	SL
STRUCTURE	2 m sbk	2 m sbk	2 m sbk	1 f sbk
CONSISTENCE	F: / Vst / st	F: / st / pl	F: / Vst / pl	FR / Slhd / NP.
%CLAY	35% / 10.4	35% / 10.3	35% / 10.3	NOT - limiting
DEPTH HORIZON III	17 - 34 Bt2	33 - 90+ BC	42 - 52+ BC	18 - 50 Bt
COLOR	2.5 YR 5/6	5 YR 5/6 yellow mtl	5 YR 4/6	2.5 YR 5/6
TEXTURE	C	SC	SCL	C
STRUCTURE	2 m sbk	1 to 2 m sbk	2 m sbk	2 m sbk
CONSISTENCE	F: / Vst / st	F: / Vst	F: / Vst / Sticky	F: / Mod / Sticky
%CLAY	40% / 10.3	40% / 10.3	#35% / 10.3	340% / 10.3
		- quartz frag	- quartz frag	
		- 46" Redox	- yellow mottles	
DEPTH HORIZON IV	34 - 60+ BC		@ 51" 10YR 4/ present	50 - 60+ BC
COLOR	2.5 YR 5/6 w/ 7.5 YR 5/4 p.m.	yellow mtl mottles in (increasing with		2.5 YR 5/6 - yellow mtl.
TEXTURE	C	depth)		CL
STRUCTURE	2 m sbk	qtz also		2 m sbk
CONSISTENCE	F: / Vst / st			F: / Vst / S. Sticky
	40% / 10.3			
Soil Depth ? Restrict. Hor?	>60" 58	>50" 46"	>52" 51	>60 >60"
Ld. pos.? Wet? % slope	LS 0-2%.	LS / 0-5%.	LS 0-3%.	LS 0-5%.
LIAR/soil group/ CLASSIFICATION (FS/U)	0.3 / 4	0.3 / 4	0.3 / 3	0.3 / 4
Notes:	Quartz frag in BC Reduced color 10YR 5/2 H20 @ 49" 85%	No mtl in hole		

Described by: SJM

rained a lot recently

Residential Subsurface Wastewater Treatment and Disposal System Design

for

Lot 28 – The Meadows of Mint Hill
Foal Court
Mint Hill, North Carolina

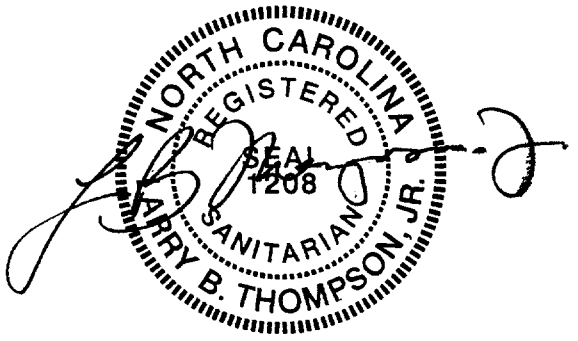
Tax Parcel # 197-24-116 PO
Mecklenburg County File # 6123B
December 5, 2005

Prepared for:

NVR, Inc.
10815 David Taylor Drive, Ste. 100
Charlotte, NC 28262

Prepared by:

Larry Thompson, RS, PWS
The Catena Group, Inc.
410-B Millstone Drive
Hillsborough, NC 27278
Phone: 704-301-4881
Fax: 704-888-1496



CC: Mr. Philo Walker, RS
Mecklenburg County Environmental Health

Details

In an application for an Improvement Permit filed with the Mecklenburg County Health Department (MCHD) by NVR, Inc., August 29, 2005, the subject property was proposed to be developed with a single family 5-bedroom residence served by a municipal water supply. Based upon this information, a soil and site evaluation was conducted by the MCHD where the lot was determined to be "Unsuitable" for the installation of a subsurface wastewater treatment and disposal system in accordance with the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section).

Upon further investigation by The Catena Group, Inc. (TCG), it was determined that a sufficient amount of "Suitable" Group IV soils are located on the property which would allow for the installation of a Type III innovative system for a 4-bedroom residence. It is the desire of the owner that the MCHD consider reclassifying this lot as "Suitable", allowing for the issuance of a Construction Authorization, based upon the following proposal.

Location

The subject property is located in The Meadows of Mint Hill (Lot 21 – 12000 Jumper Drive) in the town of Mint Hill, North Carolina. From NC 51, travel south on SR 1004 (Bain School Road) approximately 0.8 mile, turn left onto Gait Drive and right onto Canter Lane, left onto Filly Road, and left onto Jumper Drive. After turning left onto Foal Court, Lot 8 will be on your right in the cul-de-sac.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, February 1, 2005.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Innovative Wastewater System Approval: IWWS-95-3-R3; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 18, 2002.

Plans and Specifications

Septic Tank

- The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
- The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
- It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

Pump Tank

- The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
- The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
- The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4X rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
- The pump tank shall have a properly functioning high water alarm incorporated into the control panel. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
- The float switch for the high water alarm should be mounted at a location slightly above the "pump on" elevation for the pump float control switch. The high water alarm float switch shall not be set more than 3 inches above this elevation.
- Pump float(s) shall be mounted so that the effluent at the end of a pump cycle is above the top of the effluent pump. The septic contractor must determine pump draw down and set the float switch accordingly.
- Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be

mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).
- The pump must be placed on two 4-inch concrete blocks to allow for some settling of solid particulates within the pump tank.

Pump Tank Effluent

- The pump discharge piping shall be fitted with a pressure effluent filter. The filter must be equivalent to the GAG Sim Tech Filter, Boyne City, Michigan, 49712, and telephone: 1-888-999-3290. This device provides a very high degree of filtration and is highly recommended.

Pipe and Fittings

- All discharge piping, supply lines, valves and disconnects should be made of PVC.
- All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
- The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 65 feet).

Pressure Manifold

- The pressure manifold shall be contained within an adequately sized box/vault that is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
- A gate valve shall be provided at the Pressure Manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
- There shall be 5 taps (direct thread or saddle), ½ inch in diameter, each to have a true union ball valve that will allow for future removal/replacement.
- The connecting pipe between the Pressure Manifold taps and the 4-inch single wall corrugated pipe shall be constructed of PVC.

Drainfield Installation

- The drainfield has been previously laid out on-site utilizing metal stemmed flags. Once this area has been approved by the MCHD, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to the system installation, the septic contractor shall contact the MCHD and the system designer for a preconstruction conference at which time the drainfield area will be re-verified.
- Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition. If the installer has doubts as to whether or not the drainfield area is dry enough to begin construction, the Mecklenburg County Health Department should be contacted for permission to proceed with the installation.
- The specified system is a Type III Innovative, specifically the **EZ*flow* 1203H**.

- The drainfield consists of (8) lateral trenches to be constructed 3 foot wide by 55 feet in length.
- The maximum trench depth for this system shall be 30 inches.
- The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
- The trenches should be left open for the final inspection by the MCHD.

Proper Operation Check

- After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
- With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed and prepare to set the head pressure at the manifold box.

Pressure Head Adjustment

- A 2-foot section of pipe (standpipe) shall be threaded into the "pressure head check tap" and the pump activated once again. The gate valve should be adjusted so that the water exiting this 2-foot section of pipe is barely trickling out of it. Once the 2-feet of head pressure has been properly set, the pump can be turned off and the standpipe removed. A male threaded plug should be used to replace the standpipe.
- Turn the pump on again and allow it to run through the remainder of the cycle. The pump float switch will automatically turn the pump off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, making adjustments to the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.

Final Landscaping

- The drainfield shall be shaped to shed rainwater and be free from low spots.
- The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Utility Conflicts

- The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage. If there are any questions regarding preferred routes, contact the MCHD as soon as possible.

Maintenance

In General

- The minimum inspection/maintenance frequency for a Type III system is once every 5 years by the local health department. However, it is recommended that the homeowner contract with a reputable subsurface system operator to perform an annual maintenance inspection to ensure that the system is operating properly.
- The septic and pump tanks shall be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 1/3 of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
- When it becomes necessary to clean the effluent filter, the filter should be removed and the accumulated debris washed back into the septic tank – not onto the lawn.
- All piping and valves should be inspected annually for damage and corrections/repairs made immediately.
- The pump and float controls/switches should be inspected annually to assure proper operation
- The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
- Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Suggestions to the Homeowner

- As previously mentioned, if you plan to use a garbage disposal in your home you should plan to have your septic and pump tanks cleaned out annually. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.
- Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
- Used motor oil or any oily liquids should not be disposed of in a septic tank.
- Be aware of the amount of water that you are using in your home. Water saving fixtures and devices can be installed on sinks, toilets and showers to reduce the volume of wastewater that you are sending to your drainfield.
- Run dishwashers and washing machines only when you have a full load.
- Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
- Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drainfield.
- Do not use chemical additives in your system. Studies have indicated that they do not increase the biological activity that naturally occurs in the septic system and in some cases certain additives have been found to be detrimental to the life of a system.

Design Specifics

Lot 28 – The Meadows of Mint Hill

Daily Design Flow:	480 GPD – 4 bedroom house
Septic Tank Size:	1500 gallons (2 compartments)
Pump Tank Size:	1000 gallons (one piece)
Effluent Loading Rate:	Design = 0.275 GPD per sq. ft.
Supply Length and Diameter:	Approx. 188 feet of 2 inch Sch. 40 PVC (please see note at the bottom of this page.)
Distribution Method:	Pressure Manifold
Number and Size of Taps:	(8) ½ inch taps
Dosing Volume:	284.40 gallons per dose
Flow Rate Through System:	56.88 gallons per minute
Elevation Head:	23.0 feet (may vary, please see note at the bottom of this page)
Pressure Head:	2 feet
Pump Requirements:	56.88 GPM at 23.0 feet of head
Depth of Water Pumped:	13.54" (J&S STB-97-1000 used) check with individual tank manufacturer (1 cu. Ft. of water equals 7.5 gal.)
Pump Run:	5 minutes
Check Valve:	Yes
Vapor Lock Hole:	Yes (A vapor lock hole can reduce vibrations in the discharge pipe upon start up and shut down)

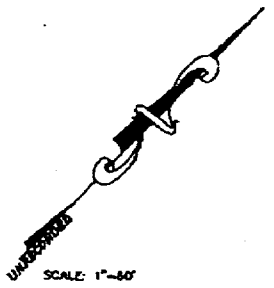
* Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.

PROPOSED MODEL FIT

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

MODEL FIT ONLY NOT TO BE USED FOR CONSTRUCTION OR STAKING



ESTIMATED DRIVEWAY AREA = 1272.2 SQ.FT.±

NOTE: DELTA LAND SERVICES IS NOT RESPONSIBLE FOR ANY CHANGES DUE TO UNRECORDED COVENANTS AND RESTRICTIONS

N/F
DAVID MASCORRO &
ROSA ELBA
DB 18803 PG 453

LOT 28

N/F
DAVID MASCORRO &
ROSA ELBA
DB 18803 PG 453

LOT 27
UNRECORDED

LOT 29
UNRECORDED

MODEL FIT ONLY
MONTAGUE PLAN

FOAL COURT
60' PUBLIC R/W
UNRECORDED

ESTIMATED DRIVE AREA = 1527.9 SQ.FT.±

LINE TABLE		
LINE	LENGTH	BEARING
L1	33.41	N38°42'08"E
L2	34.71	N48°22'13"E
L3	2.29	N39°01'26"E

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	562.55	55.74	55.72	N41°28'18"E	5°40'38"
C2	47.00	48.76	46.60	S57°44'38"W	59°26'22"
C3	20.00	13.65	13.38	N67°55'01"E	39°05'36"

STAKEOUT ☐

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision MEADOWS @ MINT HILL, MAP 2 UNRECORDED County MECKLENBURG
Address FOAL COURT Owner RYAN HOMES
Lot 28 Block ___ Plan MONTAGUE Elevation 9 Drive (Left) SIDE (Right) ___ (Courtyard) ___ Deck ___
Patio ___ Fireplace ___ Garage (1 Car) ___ (2 Car) ___ X (3 Car) ___ Brick FRONT Basement ___ Curtain Wall ___
Crawl ___ Slab X Other MORNING ROOM

REVISED: FLIP HOUSE; MOVE LEFT DWN: EHD CKD: DATE: 11/ 21/ 05

The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

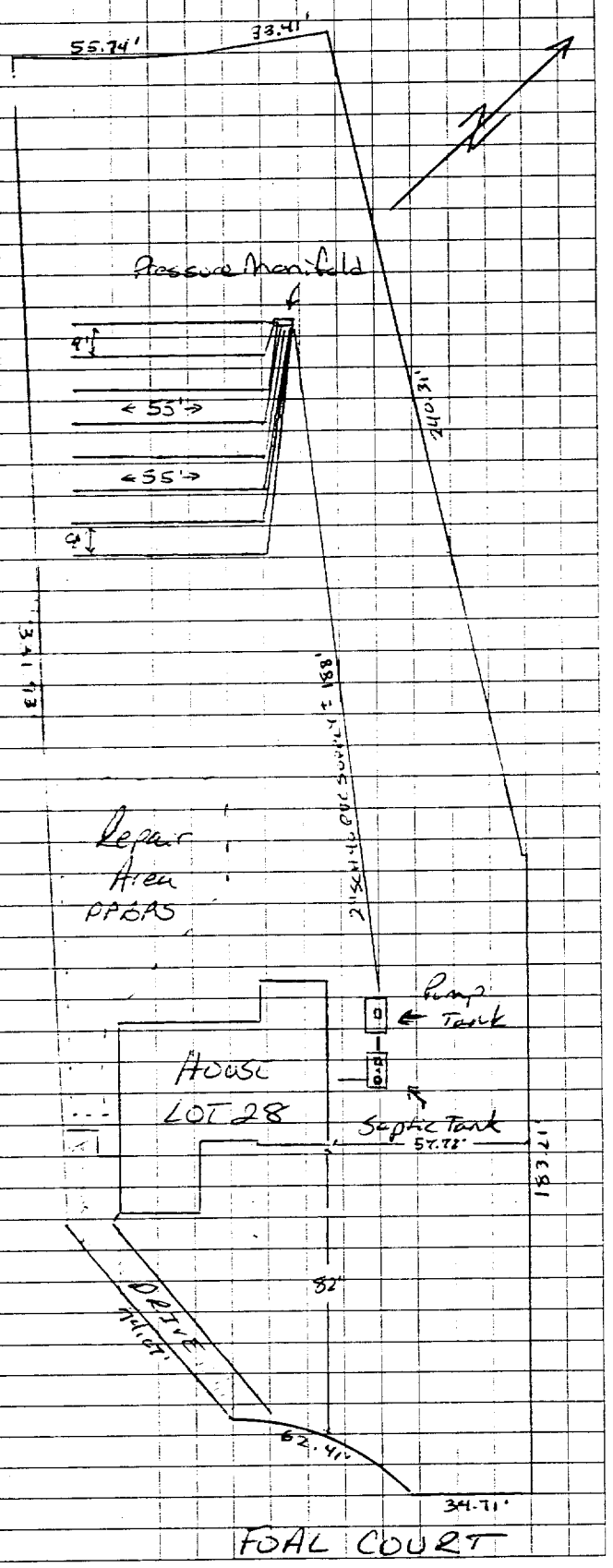
Permit Number: 6123B

Location: Lot 28 – The Meadows

Date: December 5, 2005

SCALE: 1" = 50'

- 1500 Gallon Septic Tank
- 1000 Gallon Pump Tank
- Pressure Manifold w/ 8 ½" Taps
- (8) 3'w x 55'L x 30" D Drain Lines
- Type IV PPBRS Repair Area

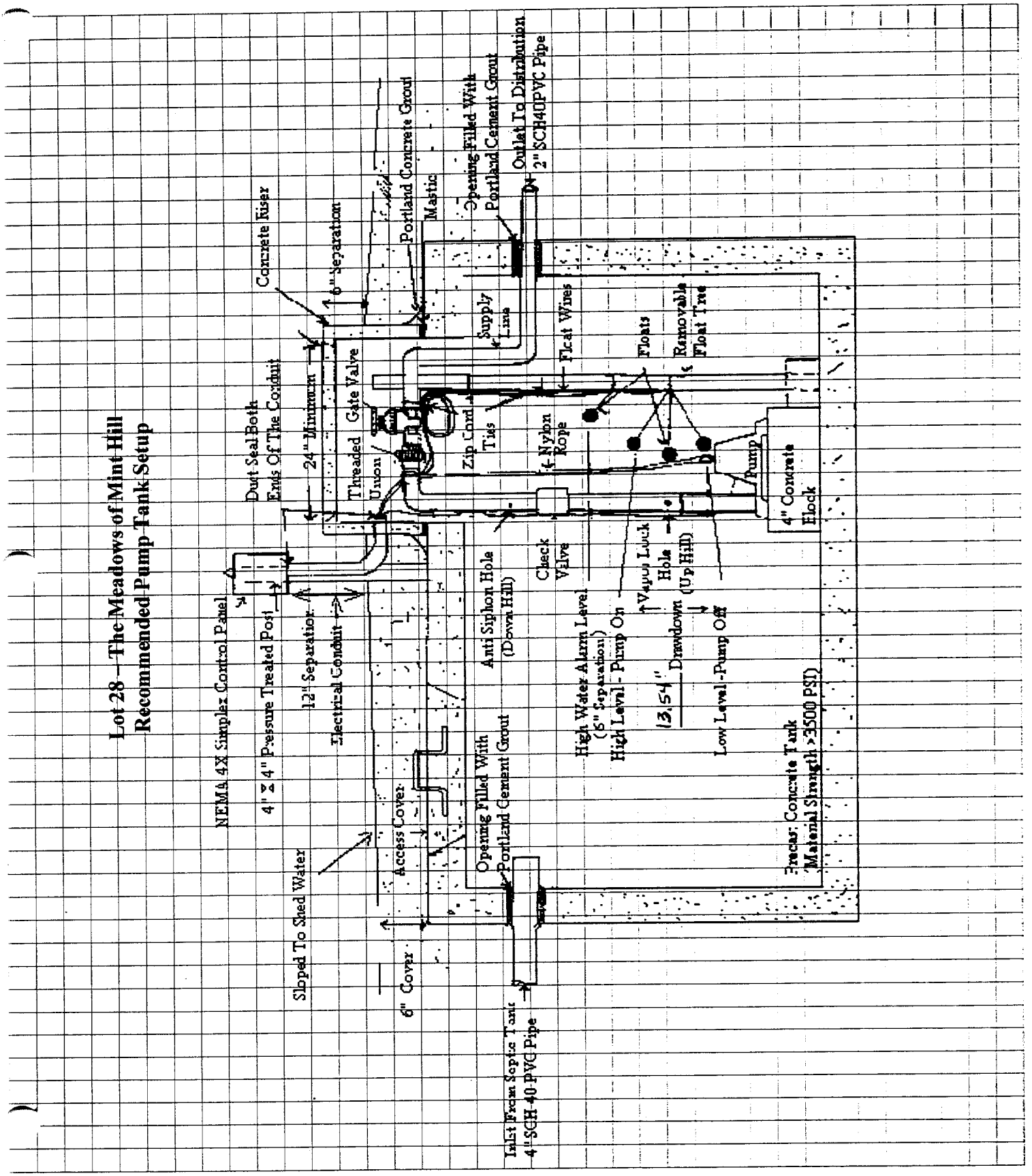


The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

Permit Number: 6123B

Location: Lot 28 – The Meadows

Date: December 5, 2005



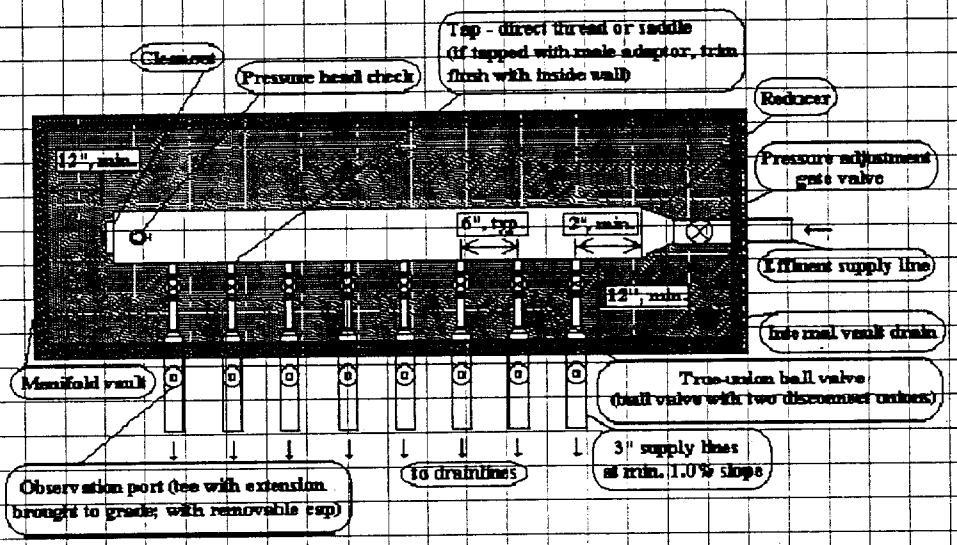
The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

Permit Number: 6123B

Location: Lot 28 – The Meadows

Date: December 5, 2005

Lot 28 – The Meadows of Mint Hill
Recommended Pressure Manifold Design



336 253-8579 2nd

GWS - RES. APP 12/04

SEPTIC FEE: $200.00
DATE: 8/31/05
CRT [ ] X33575 V.W.

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

FILE # 61238

WELL FEE: _____
DATE: _____
CRT [ ]

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

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

JOB LOCATION INFORMATION:

TAX/PARCEL #: 19724416
STREET ADDRESS: Foxi Court
CITY: Mint Hill
STATE: NC ZIP: 28027
SUBDIVISION OR MOBILE HOME PARK NAME: Meadows of Mint Hill
LOT #: 28
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: 3,500
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 4

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: NVR, INC.
ADDRESS: 10815 David Taylor Dr., Ste 100
CITY: Charlotte
STATE: NC ZIP: 28262
HOME PHONE: WORK PHONE: 704-548-3534
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Kim Stanley
ADDRESS: PO Box 176
CITY: Stanfield
STATE: NC ZIP: 28163
HOME PHONE: WORK PHONE: 704-732-5635
MOBILE PHONE: FAX: 704-785-8721

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Feb 2006

*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.

Kim Stanley 8/29/05
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: 704-336-6834

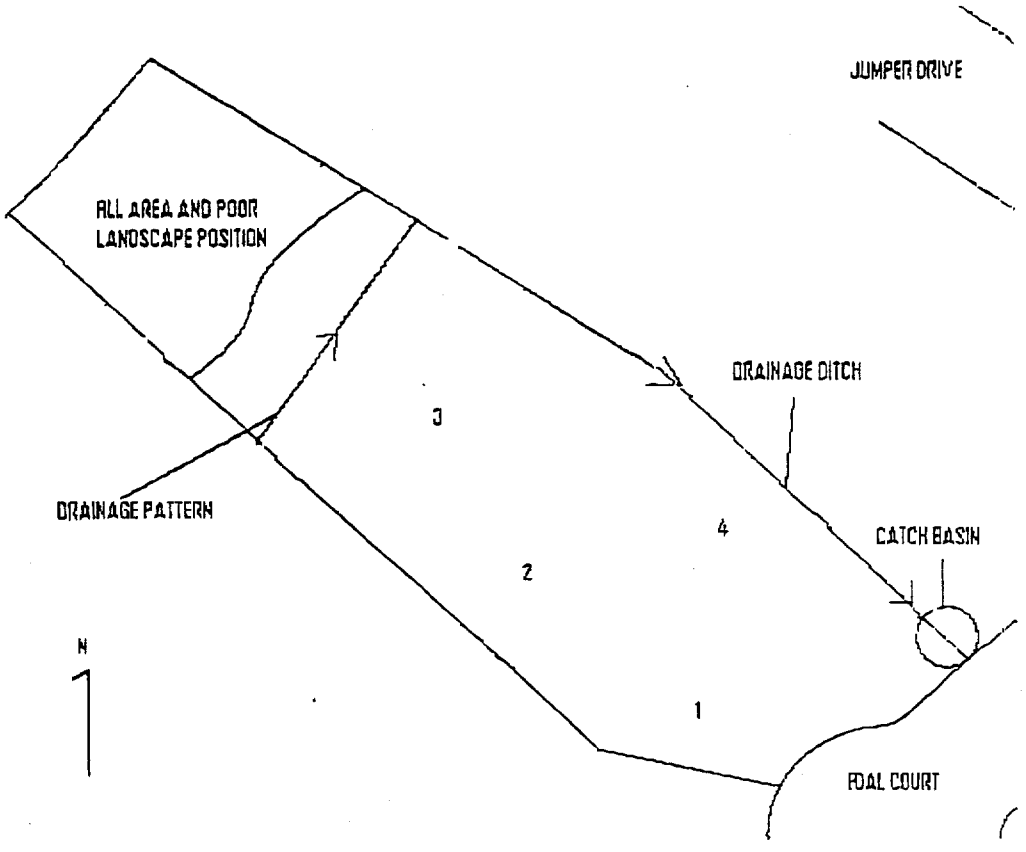
COMMENTS:

FILE #: 6123B

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-Food 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 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



PROPOSED MODEL FIT

PREPARED BY:

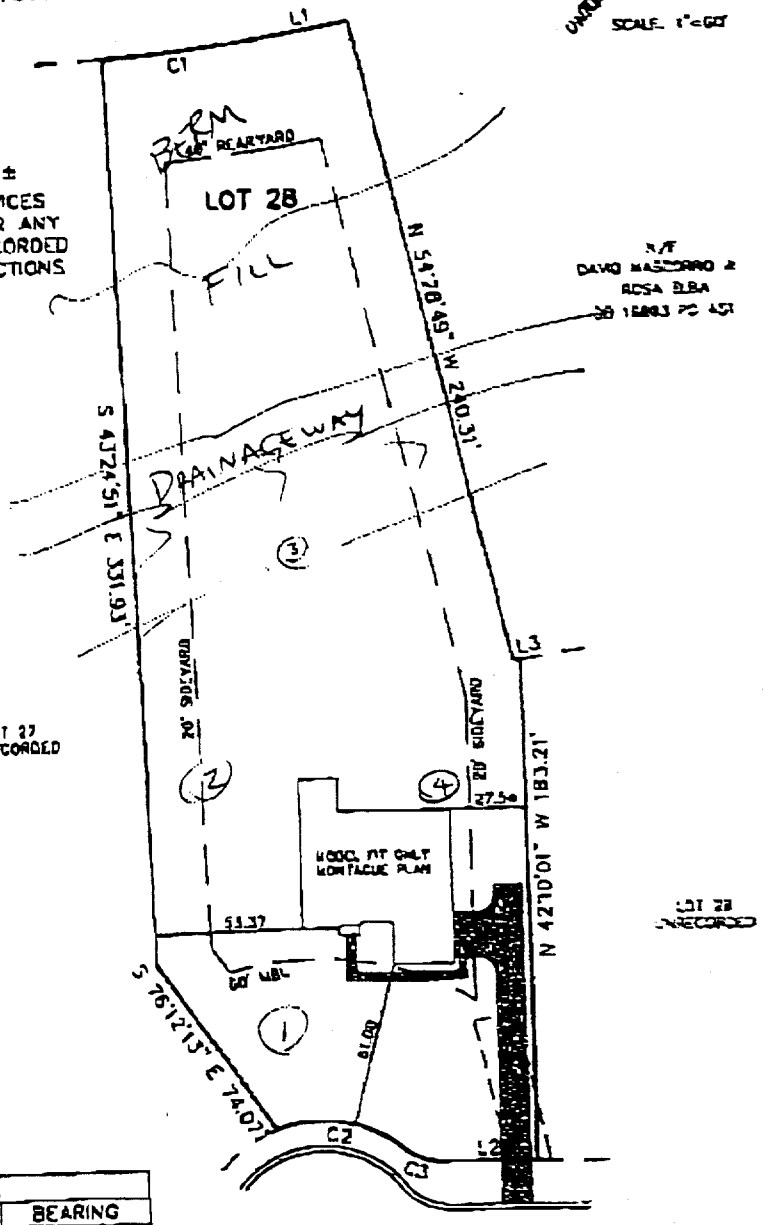
DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

MODEL FIT ONLY
NOT TO BE USED
FOR CONSTRUCTION
OR STAKING

N/F
DAVID MASCORRO &
ROSA ELBA
DB 16803 PG 451

ESTIMATED DRIVEWAY
AREA = 1272.2 SQ.FT.±

NOTE: DELTA LAND SERVICES IS NOT RESPONSIBLE FOR ANY CHANGES DUE TO UNRECORDED COVENANTS AND RESTRICTIONS



LINE TABLE		
LINE	LENGTH	BEARING
L1	33.41	N38°42'08"E
L2	34.71	N48°22'13"E
L3	2.29	N39°01'26"E

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	562.55	55.74	55.72	N41°28'18"E	5°40'38"
C2	47.00	43.76	46.60	S57°44'38"W	59°26'22"
C3	20.00	13.65	13.38	N67°55'01"E	39°05'36"

STAKEOUT

NOT FOR RECORDATION, CONVEYANCES OR SALES

0-5 CL
5-42 C
42-48 CL
.275

0-9 CL
9-48 C
.3

0-14 SCL
14-36 SC
.25

0-10 SCL
10-40 SC
40-48 SCL
.3

COMMEND
UP TO
FRONT
UNITS
REP

Proj. # 217197

FILE COPY	
FILED FOR REGISTRATION	DOC. # 200701812 9
DATE 1/29/07	TIME 1:24 pm
BOOK 21696	PAGE 564
STAMPS	FEE 20.00
JUDITH A. GIBSON REGISTER OF DEEDS MECKLENBURG COUNTY, NC	

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AGREEMENT: 15A NCAC 18A .1948 AND ANY OF THE FOLLOWING RULES: .1956; .1957(a); .1957(b); or .1957(c); OR .1969

MA 1028

FILE # 6123B

PARCEL # 197-241-81

The undersigned, NVR, INC. DBA Ryan Homes, owner of property located at 8107 FOAL CT., (the "site") and described in an instrument recorded in Book 44 at Page 535, Mecklenburg Public Registry, hereby acknowledges that the undersigned applied to the Mecklenburg County Health Department (the 'Department") for a permit to install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in accordance with the regulations promulgated by the North Carolina Commission for Health Services as 15A NCAC 18A .1900 et seq.; that the Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requested that the Department reclassify the site as "provisionally suitable" in light of the particular septic tank system proposed by the undersigned; that the Department considered various studies, data, and other information which indicate to the Department that the septic tank system proposed by the undersigned is allowed by the rules; and that the Department therefore reclassified the site as "provisionally suitable" and issued an appropriate permit for such proposed septic tank system.

The undersigned further acknowledges that the proper design, construction, operation and maintenance of such septic tank system is the responsibility of the designer, owner, developer, installer, or user of the system, as applicable, and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time or that the Department, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunction of such system.

The undersigned further acknowledges that the following conditions will apply to the site:

This instrument was prepared by: NVR, INC. DBA Ryan Homes
Mail after recording to: 10815 David Taylor Dr
Charlotte NC 28262

DC

MAIL 2-8

FILE NUMBER: 6123B

Revised On: January 3, 2007

APPLICATION NUMBER: 1932

SEPTIC FEE 100.00
DATE: 2-19-07
X33575 JKA

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

WELL FEE _____
DATE _____

1. SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☒ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ☒ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 19724116
STREET ADDRESS: 8107 Foal Court
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION NAME: @ Meadows of Mint Hill
LOT #: 28 LOT SIZE (acres): 1/3 acre
TOWNSHIP:
☐ 9-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☒ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

4. BUILDING INFORMATION:
BUILDING TYPE:
☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☒ HOUSE ☐ OTHER _____
HEATED SQUARE FOOTAGE: 3,500
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 5
FOUNDATION TYPE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☒ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☒ N/A
NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ☒ MUNICIPAL ☐ PUBLIC WELL ☐ PRIVATE WELL ☐ SHARED WELL ☐ SPRING

7. PROPOSED USE OF WELL: ☒ N/A ☐ IRRIGATION ☐ POTABLE ☐ GEOTHERMAL ☐ OTHER

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE (1-MOST DESIRED 5-LEAST DESIRED).

8A. RANK: ☒ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☒ NO	GRADING/SOIL REMOVAL PERFORMED - Berm at Rear removed	☒ YES ☐ NO
EXISTING WASTEWATER SYSTEMS	☐ YES ☒ NO	JURISDICTIONAL WETLANDS	☐ YES ☒ NO
WELLS, SPRINGS, OR WATER LINES	☐ YES ☒ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES ☒ NO
EASEMENTS OR RIGHT-OF-WAYS	☒ YES ☐ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES ☒ NO

10. PROPERTY OWNER:
NAME: NVR, Inc.
ADDRESS: 10815 David Taylor Dr., Ste 100
CITY: Charlotte
STATE: NC ZIP: 28262
HOME PHONE: WORK PHONE: 704-548-3534
MOBILE PHONE: FAX:

11. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME: Kim Widenhouse
ADDRESS:
CITY:
STATE: ZIP:
HOME PHONE: WORK PHONE:
MOBILE PHONE: 704-591-6552 FAX:

12. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 10-14-2005
13 WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? June 2007

14. SEPTIC SYSTEM PERMIT APPLICATION SIGNATURE SECTION:
If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. 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. The permit is valid for either 60 months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

Kim Widenhouse 2/16/07
Property Owner's or Owner's Legal Representative Signature / Date

15. WELL PERMIT APPLICATION SIGNATURE SECTION:
If the information in this application is falsified, changed, or the site is altered then the Well Permit shall become invalid. 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. The permit is valid for a period of 12 months from the date of issuance.

_____
Property Owner's or Owner's Legal Representative Signature Date

☐ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☒ UN-SCALED SITE PLAN SUBMITTED

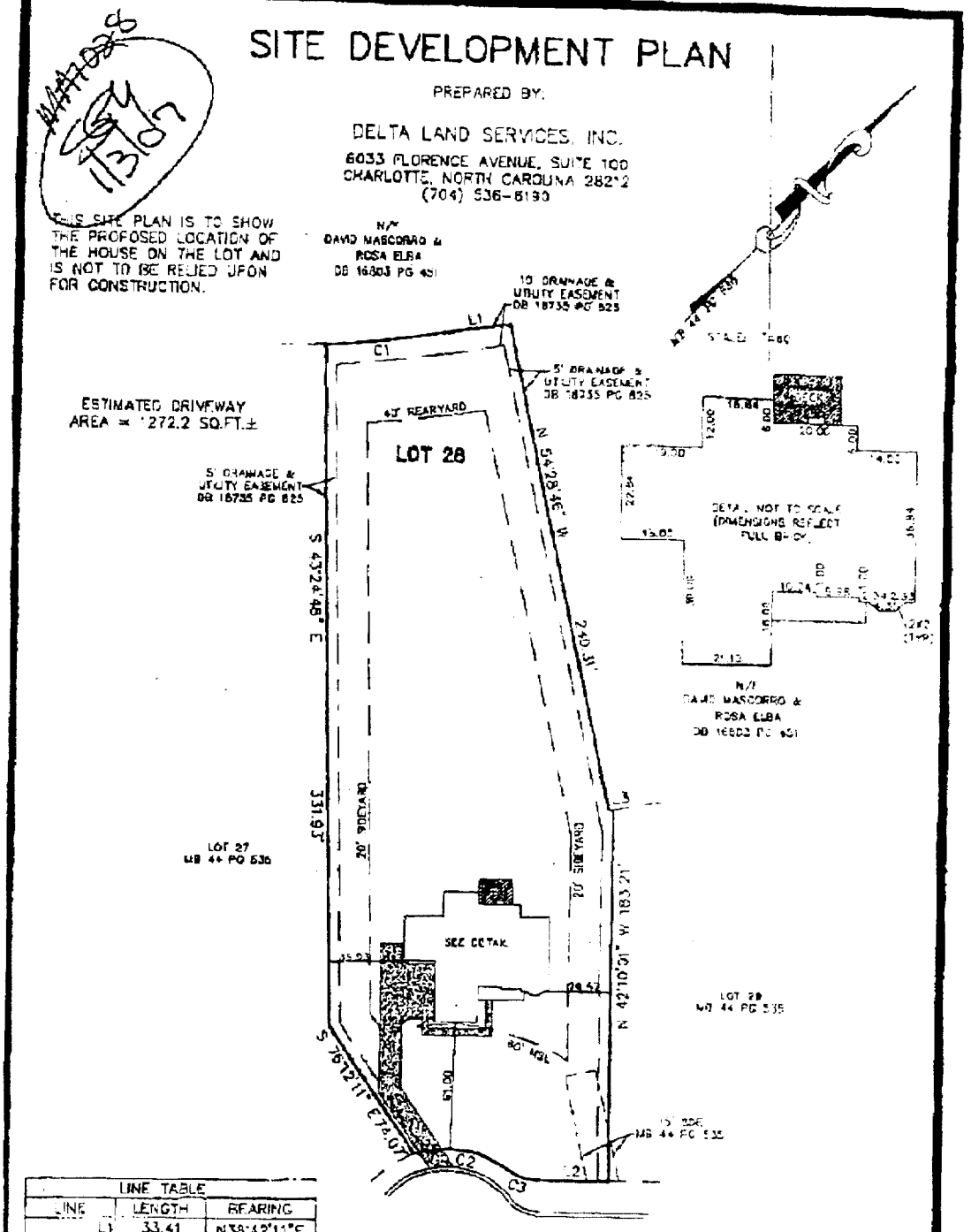
SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6130

#44703
CSM
1307

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.



LINE TABLE		
LINE	LENGTH	BEARING
L1	33.41	N38°42'11"E
L2	34.71	N48°22'16"E
L3	2.29	N39°01'29"E

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	562.55	55.74	55.72	N41°28'18"E	5°40'36"
C2	47.00	48.76	46.60	S57°44'38"W	59°26'22"
C3	20.00	13.65	13.38	N67°55'01"E	39°05'36"

ESTIMATED DRIVE AREA = 1596.3 SQ.FT.±

STAKEOUT _____

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision MEADOWS @ MINT HILL, MAP 3 County MECKLENBURG
Address 2107 FOAL COURT Owner RYAN HOMES
Lot 28 Block ___ Plan AVALON Elevation D Drive (Left) SIDE (Right) ___ (Courtyard) ___ Crawl ___
Patio ___ Fireplace REAR Garage (1 Car) ___ (2 Car) ___ (3 Car) X Brick Full Basement ___ Curtain Wall ___
Crawl ___ Slab ___ Other MORNING ROOM, GUEST SUITE, 4' EXT TO FR, PARTIAL FRONT PORCH, BAY @ FRONT

REVISED: MODEL CHANGE, CHANGE TO PLOT PLAN DWN: JDA CKD: DATE: 1 / 2 / 07

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 #: **30001932** GWS File #: **6123B** Tax Parcel #: **197-241-81**

- 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):** 3/27/2012

Type of Installation: Residential - Modified Plot Plan Lot Number: 28

Structure Type: HOUSE Size (ft^2): 3500 # Bedrooms: 5 # Occupants: 5

Building Foundation: Crawl Space Water Supply: Municipal

II. Initial System Type: PPBPS (pressurized) **System Classification:** IVa

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):	999	Total Trench Length (ft):	333
Maximum Trench Depth (in):	28	Depth of Media (in):	24	Distribution Device:	Manifold (LPP Distri		

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd):	600	LTAR (gpd/ft^2):	0.275	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1092	Total Trench Length (ft):	364
Maximum Trench Depth (in):	28	Depth of Media (in):	24	Distribution Device:	Manifold (LPP Distri		

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: Chris Sherrill

Signature: Christ M Sherrill

Date Issued: 3/27/2007

Owner/Legal Agent: _____
Print Name

Signature: _____

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 #: **30001932** GWS File #: **6123B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 3 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 septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- This type of repair system requires the installation of a pump tank and all associated components. This type of system will require routine inspections by our office. The system owner is responsible for all fees associated with these inspections.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.

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: Chris Sherrill Owner/Legal Agent: _____
Print Name

Signature: Christopher M Sherrill Signature: _____

Date Issued: 3/27/2007

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5100 Fax: (704) 336-6854

NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: 30001932 GWS File #: 61230 Tax Parcel #: 197-241-81

- 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):** 3/27/2012

Type of Installation: Residential - Modified Plot Plan Lot Number: 26

Structure Type: HOUSE Size (ft^2): 3500 # Bedrooms: 5 # Occupants: 5

Building Foundation: Crawl Space Water Supply: Municipal

II. **Initial System Type:** PPBPS (pressurized) **System Classification:** IVa

Initial System Specifications:

Design Flow (gpd): 500 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1000

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 999 Total Trench Length (ft): 333

Maximum Trench Depth (in): 28 Depth of Media (in): 24 Distribution Device: Manifold (LPP Distri

III. **Repair System Type:** PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd): 500 LTAR (gpd/ft^2): 0.275 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1000

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 1092 Total Trench Length (ft): 364

Maximum Trench Depth (in): 28 Depth of Media (in): 24 Distribution Device: Manifold (LPP Distr

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: Chris Sheerin

Signature: [signature]

Date Issued: 3/27/2007

Owner/Legal Agent: Patrice Garner
Print Name

Signature: Patrice Garner

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 #: 30001932 GWS File #: 6123B

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 3 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 septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- This type of repair system requires the installation of a pump tank and all associated components. This type of system will require routine inspections by our office. The system owner is responsible for all fees associated with these inspections.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.

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: Chris Shekerjian

Signature: Christopher M Shekerjian

Date Issued: 3/27/2007

Owner/Legal Agent: Patrice Garner
Print Name

Signature: Patrice Garner

Residential Subsurface Wastewater Treatment and Disposal System Design

for

Lot 28 – The Meadows of Mint Hill
8107 Foal Court
Mint Hill, North Carolina

Tax Parcel # 197-241-81
Mecklenburg County File # 6123B
March 8, 2007

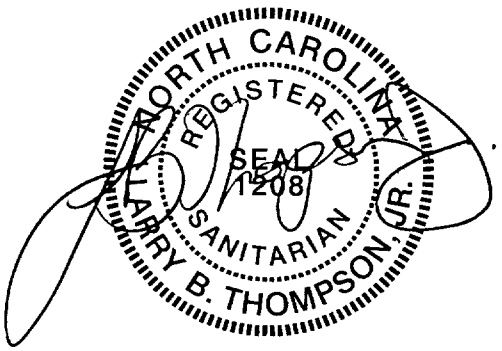
GWS Septic System Design Review
GWS File #: 6123B **Approved** ☐ **Disapproved**
Design Review: TCT 3-19-07 ☒
Field Review: CMS 3-27-07 ☑
***Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.**

Prepared for:

NVR, Inc.
10815 David Taylor Drive, Ste. 100
Charlotte, NC 28262

Prepared by:

Larry Thompson, RS, PWS
The Catena Group, Inc.
410-B Millstone Drive
Hillsborough, NC 27278
Phone: 704-301-4881
Fax: 704-888-1496



CC: Mr. Chris Sherrill, RS, LSS
Mecklenburg County Environmental Health

700 N. Tryon St.
Ste. 211
Charlotte, NC 28202

Details

In an application for an Improvement Permit filed with the Mecklenburg County Health Department (MCHD) by NVR, Inc., August 29, 2005, the subject property was proposed to be developed with a single family 5-bedroom residence served by a municipal water supply. Based upon this information, a soil and site evaluation was conducted by the MCHD where the lot was determined to be "Unsuitable" for the installation of a subsurface wastewater treatment and disposal system in accordance with the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section).

Upon further investigation by The Catena Group, Inc. (TCG), it was determined that a sufficient amount of "Suitable" Group IV soils were located towards the rear of the property which would allow for the installation of a Type III innovative system for a 4-bedroom residence. A proposal was submitted to the MCHD in December of 2005 and was approved.

NVR, Inc. has recently revised their proposed site plan in an effort to obtain an approval for a 5-bedroom residence. Based upon an adjusted house site, it is possible to install a pressure dosed prefabricated porous block panel system (PPBPS) in the front yard and still have sufficient repair area left for the installation of a washing machine wastewater repair system in the front yard and the original innovative repair system in the back yard. It is the desire of the owner that the MCHD consider reclassifying this lot as "Suitable", allowing for the issuance of a Construction Authorization, based upon the following proposal.

Location

The subject property is located in The Meadows of Mint Hill (Lot 28 – 8107 Foal Court) in the town of Mint Hill, North Carolina. From NC 51, travel south on SR 1004 (Bain School Road) approximately 0.8 mile, turn left onto Gait Drive and right onto Canter Lane, left onto Filly Road, and left onto Jumper Drive. After turning left onto Foal Court, Lot 8 will be on your right in the cul-de-sac.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, June, 2006.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Design, Installation and Maintenance of the T & J Panel Wastewater Treatment System; Sixth Edition, published by T & J Panel.

Plans and Specifications

Septic Tank

- The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
- The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
- It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

Pump Tank

- The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1500 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
- The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
- The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4X rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
- The pump tank shall have a properly functioning high water alarm incorporated into the control panel. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
- The float switch for the high water alarm should be mounted at a location slightly above the "pump on" elevation for the pump float control switch. The high water alarm float switch shall not be set more than 3 inches above this elevation.
- Pump float(s) shall be mounted so that the effluent at the end of a pump cycle is above the top of the effluent pump. The septic contractor must determine pump draw down and set the float switch accordingly.
- Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).

- The pump must be placed on two 4-inch concrete blocks to allow for some settling of solid particulates within the pump tank.

Pump Tank Effluent

- The pump discharge piping shall be fitted with a pressure effluent filter. The filter must be equivalent to the GAG Sim Tech Filter, Boyne City, Michigan, 49712, telephone: 1-888-999-3290. This device provides a very high degree of filtration and is highly recommended.

Pipe and Fittings

- All discharge piping, supply lines, valves and disconnects should be made of PVC.
- All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
- The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 125 feet).
- The lateral distribution lines shall be 1¼ inch Schedule 40 PVC. Holes in the laterals should be drilled on site and at the 12 o'clock position (one hole per panel). Lateral hole size is 5/32 of an inch.
- There shall be a threaded PVC union above each pump to facilitate easy removal of the pumps for maintenance or replacement.
- The end of each lateral is to be provided with a "turn up", contained within a turf/gate valve box, that provides above ground access for periodic clean out and pressure head adjustment.

Supply Manifold

- The control valves (gate valves) for each lateral distribution line shall be contained within one manifold box/vault of adequate size. The box should be placed upon a gravel base.
- The supply manifold conveys effluent from the pump to the lateral distribution lines.
- The supply manifold should be constructed by connecting a series of (8) 2" x 2" x 1 ¼" tees to the 2 inch supply line.

Backfill

- Backfill sand shall be a clean, washed, medium sand that is naturally occurring and falls within the gradation of ASTM C-33 specification (used in the ready mix industry and is readily available).

Drain Field Installation

- The drain field has been previously laid out on-site utilizing metal stemmed flags. Once this area has been approved by the MCHD, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to

the system installation, the septic contractor shall contact the MCHD and the system designer for a preconstruction conference at which time the drain field area will be re-verified.

- Under no circumstances shall any construction take place within the drain field area while the soil is in a wet condition. If the installer has doubts as to whether or not the drain field area is dry enough to begin construction, the Mecklenburg County Health Department should be contacted for permission to proceed with the installation.
- The specified system is a Type IVa, pressure dosed, pre-fabricated permeable block panel system – specifically the 16 inch high panel system manufactured by T&J Panel Wastewater Treatment System, Patent No. 4013559; telephone: 1-800-222-2577. The installer must follow the manufacturer's guidelines for installing the T&J Panel System and should request an installation manual from the manufacturer prior to beginning construction.
- The initial drain field consists of (8) lateral trenches to be constructed 3 feet wide by 42 feet in length. It is essential that the lateral trenches be constructed on contour with the land, with each trench being excavated level from beginning to end. The use of a tripod mounted engineer's level is essential to assure that each trench is constructed as level as possible.
- The maximum trench depth for this system shall be 28 inches and each trench shall be placed on a minimum of 9 foot on centers.
- Once trenches are dug, the side walls shall be raked and a light dusting of lime applied.
- Backfill the trench with 6 inches of sand and level to grade. Once leveled, place 1 x 4 or 6 inch boards on top of the sand the entire length of each trench. Once the grade boards have been set, the panels may be set into the trench. The panels should be placed 6 inches apart.
- Once the panels have been set, line the top chamber of each panel with 10 – 12 pounds of clean particle sand (medium sand blasting sand). Coverage depth should be approximately 1 inch thick. *Please note that this sand is not the same material specified for backfill.*
- Tar seal rope should be placed in the "U" outs of each end of the panel to form seals. Once the tar rope is in place, the 1 ¼ inch Schedule 40 PVC laterals can be added and the seal completed by the addition of more tar rope on the top and sides of the pipe. Now that the connection and seals are complete, a block cap is placed on each end of the panel so that all openings are covered.
- The end of each lateral should be fitted with a short turn up topped by a threaded female coupling with cap. Each turn up must be fitted with a turf/gate valve box with lid fitted flush to finished grade.
- Once the lateral has been installed and the panels closed, the trench is ready to be backfilled to the top with the sand used in the trench bottom. At this point, the trenches should be left open for the final inspection by the MCHD.

Proper Operation Check

- After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
- With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed and prepare to set the head pressure at the manifold box.

Pressure Head Adjustment

- The pressure head must be adjusted to match the design specifications. The pressure head is measured by the height of the liquid coming from the turn ups at the end of each lateral when the pump is running (utilizing stand pipes).
- Prepare a length of pipe (stand pipe), cut to the desired head pressure height and fitted with a threaded adapter that will screw into the turn up couplings at the end of each lateral. Thread the stand pipes into each lateral and then turn the power on to the pump, allowing the water to rise within the stand pipes. Adjust the gate valves within the supply manifold box to achieve the specified head pressure (liquid height in the stand pipes should equal the design head pressure).
- Once the pressure head has been adjusted, allow the pump to run through the remainder of the cycle. The pump float switch will automatically turn the pump off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, making adjustments to the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.
- At this point, the standpipes may be removed and replaced with the threaded turn up caps.

Final Landscaping

- The drain field shall be shaped to shed rainwater and be free from low spots.
- The entire area of the drain field should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Utility Conflicts

- The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage. Irrigation systems must not be placed over the septic drain field area. If there are any questions regarding preferred routes, contact the MCHD as soon as possible.

Maintenance

Operation and Maintenance

The designed system is classified as a Type IVa wastewater treatment and disposal system and will require ongoing maintenance. State regulations require that a system of this type be managed by a person certified (Certified Subsurface System Operator) by the North Carolina Department of Environment and Natural Resources to operate subsurface wastewater systems (Section .1961 Maintenance of Sewage Systems). A "Maintenance Contract" between the system owner and a Certified Operator will be required by the MCHD prior to the issuance of a final system approval or Operation Permit.

- The minimum inspection/maintenance and reporting frequency for a Type IVa system is twice a year by the Certified Operator. The local health department is required to inspect the system once every three years.
- The septic and pump tanks shall be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 1/3 of the volume of the tank. In some situations, the tanks may need to be pumped more frequently; for example, if you are using a garbage disposal, it is recommended that the septic and pump tanks be cleaned out annually. Regardless, the Certified Operator will be able to advise when it is necessary to pump out tank solids.
- Pressure head for laterals should be checked and adjusted semi-annually, flushing with clean water as necessary to remove any accumulated solids.
- The effluent filters should be inspected semi-annually. When it becomes necessary to clean the effluent filters, the filters should be removed and the accumulated debris washed back into the septic or pump tank – not onto the lawn.
- All piping and valves should be inspected semi-annually for damage and corrections/repairs made immediately.
- The pump and float controls/switches should be inspected semi-annually to assure proper operation
- The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
- Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Suggestions to the Homeowner

- As previously mentioned, if you plan to use a garbage disposal in your home you should plan to have your septic and pump tanks cleaned out annually. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.
- Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
- Used motor oil or any oily liquids should not be disposed of in a septic tank.

- Be aware of the amount of water that you are using in your home. Water saving fixtures and devices can be installed on sinks, toilets and showers to reduce the volume of wastewater that you are sending to your drain field.
- Run dishwashers and washing machines only when you have a full load.
- Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
- Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drain field.
- Divert gutter water away from the septic system.
- Do not irrigate the septic drain field area.
- Do not use chemical additives in your system. Studies have indicated that they do not increase the biological activity that naturally occurs in the septic system and in some cases certain additives have been found to be detrimental to the life of a system.
- Finally, taking good care of your septic system will help to assure that you experience years of trouble free service at a relatively low cost. On-site wastewater treatment and disposal is still the most environmentally friendly method of treating residential/commercial waste and you should keep your system in use for as long as it is properly functioning! If you have additional questions, please feel free to contact your system designer or the MCHD.

√ (TCT) 3-19-07

Design Specifics

Daily Design Flow:	600 GPD – 6 bedroom house
Septic Tank Size:	1500 gallons (2 compartments)
Pump Tank Size:	1500 gallons (one piece)
Effluent Loading Rate:	Design = 0.3 GPD per sq. ft. (50 % reduction for the PPBPS)
Supply Length and Diameter:	Approx. 125 ft. of 2 in. SCH 40 PVC (please see note at the bottom of this page.)
Number and Size of Laterals:	(8) 1 1/4 inch x 42 feet long
Hole Size:	5/32 inch
Hole Spacing:	1 per panel = 72 total
Dosing Volume:	259.20 gallons per dose
Flow Rate Through System:	29.52 gallons per minute
Elevation Head:	11.0 feet (may vary, please see note at the bottom of this page)
Pressure Head:	2 feet
Pump Requirements:	31.52 GPM at 13.0 feet of head (2 GPM added for Vapor Lock)
Depth of Water Pumped:	10.37" (check with individual tank manufacturer (1 cu. Ft. of water equals 7.5 gal.)
Pump Run:	8.78 minutes
Check Valve:	Yes
Vapor Lock Hole:	Yes (A vapor lock hole can reduce vibrations in the discharge pipe upon start up and shut down)

* Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.

PPBPS Design Worksheet							File #:	6123B
							Tax #:	197-241-81
System Requirements							Address:	8107 Foal Court
Design Flow	600	gpd						Lot 28 - The Meadows
LTAR	0.300	gpd/ft.^2					Consultant:	Larry Thompson
Linear footage	667	ft. (conventional)					Phone:	704-301-4881
Linear footage	333	ft. (50% Reduction)						
							Reviewed By:	TCT ✓
Design Layout							Date:	3-19-07
Laterals	Length (ft)	# Panels						
Line # 1	42	9						
Line # 2	42	9						
Line # 3	42	9						
Line # 4	42	9						
Line # 5	42	9						
Line # 6	42	9						
Line # 7	42	9						
Line # 8	42	9						
Totals	**336**	**72**						
Absorption Area								
Length (ft)	Width (ft)	Area (ft^2)						
336	3	1,008						
System Pressure Head	2	ft.	Value selected by system designer (must be between 2-5 ft.)					
Orifice Diameter	5/32	in.	Size selected by system designer (1/8 in. minimum)					
Flow Rate per Orifice	0.41	gpm	Determined from orifice flow design table (value dependent on pressure head & orifice diameter)					
Total System Flow Rate	29.52	gpm	Total number of panels required multiplied by the orifice flow rate					
System Dose Volume	259.20	gal.	Total number of panels required multipled by 3.6 gal./panel					
Pump Run Time	8.78	min.	System dose volume divided by the total system flow rate					
Pump Tank Drawdown	10.37	in.	1,500 gal. Pump tank, volume is approximately 25 gallons per inch					
Comments:								
1. Install system using 3 ft. wide trenches.								
2. Install drainlines on 9 ft. centers, level, and on contour.								
3. System design requires effluent pump for distribution.								
4. 100% repair area required for property.								

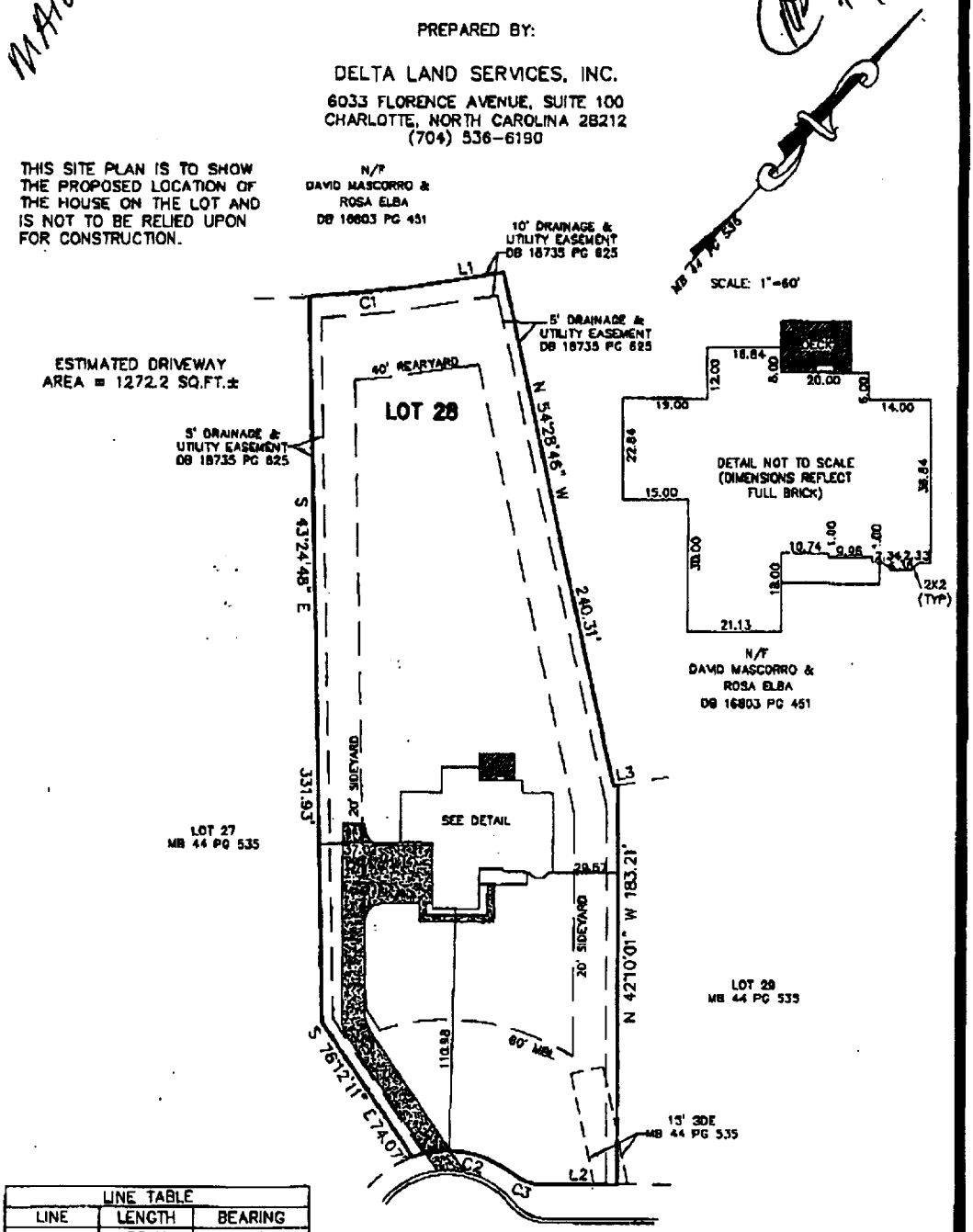
MA1038

SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.



LINE TABLE		
LINE	LENGTH	BEARING
L1	33.41	N38°42'11"E
L2	34.71	N48°22'16"E
L3	2.29	N39°01'29"E

FOAL COURT

60' PUBLIC R/W

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	582.55	55.74	55.72	N41°28'18"E	5°40'38"
C2	47.00	48.76	46.60	S57°44'38"W	59°26'22"
C3	20.00	13.65	13.38	N67°55'01"E	39°05'36"

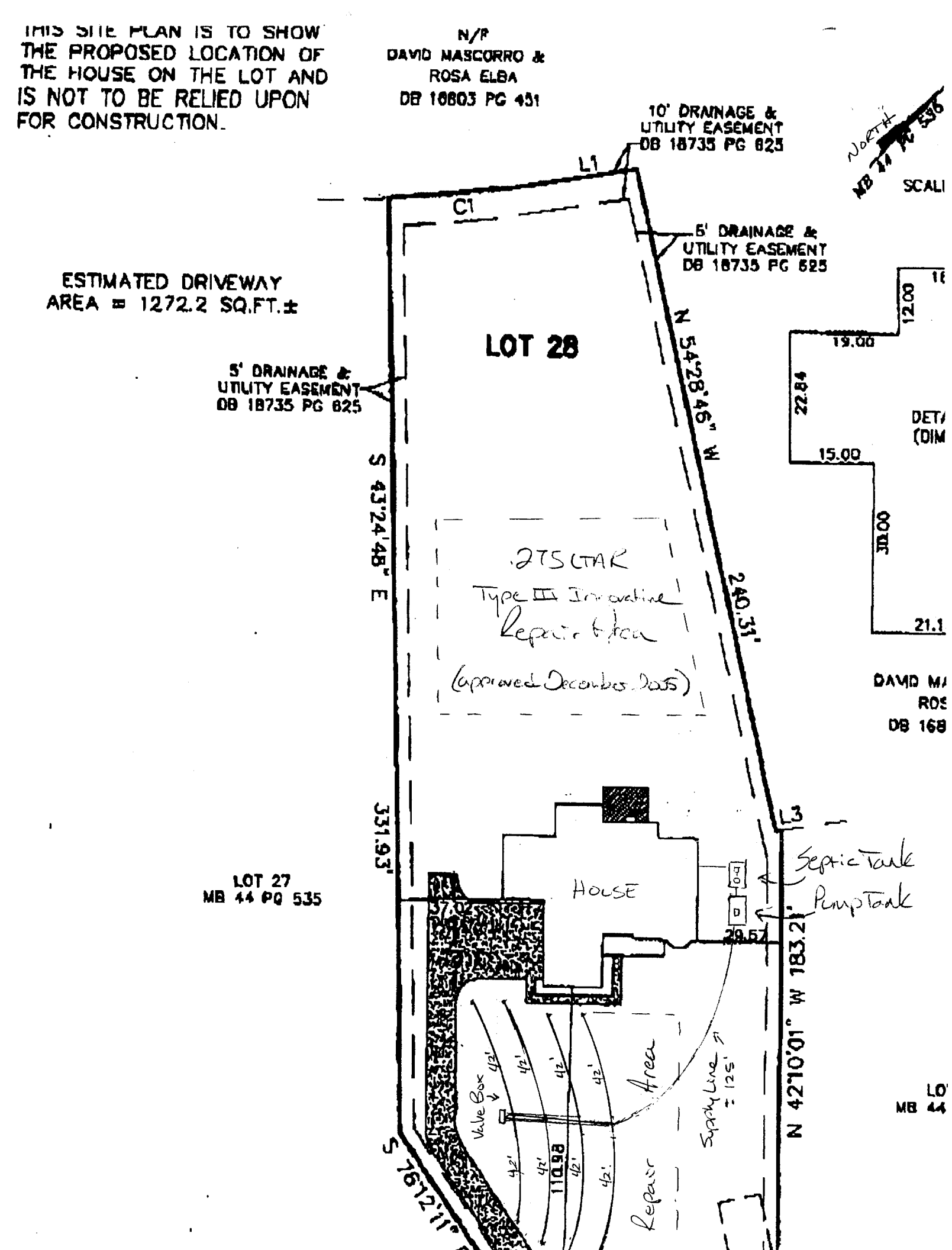
ESTIMATED DRIVE AREA = 2565.4 SQ.FT±

STAKEOUT ☐

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision MEADOWS @ MINT HILL, MAP 3 County MECKLENBURG
Address 8107 FOAL COURT Owner RYAN HOMES
Lot 28 Block ___ Plan AVALON ... Elevation D Drive (Left) SIDE (Right) ___ (Courtyard) ___ Deck X
Patio ___ Fireplace REAR Garage (1 Car) ___ (2 Car) ___ (3 Car) X Brick FULL Basement ___ Curtain Wall X
Crawl ___ Slab ___ Other MORNING ROOM, GUEST SUITE, 4' EXT TO FR, PARTIAL FRONT PORCH, BAY @ FRONT

REVISED: REDRAW DRIVEWAY DWN: JDA CKD: MB DATE: 02/ 28/ 07


THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.
N/F
DAVID MASCORRO &
ROSA ELBA
DB 16803 PG 451
10' DRAINAGE & UTILITY EASEMENT DB 18735 PG 625
L1
C1
5' DRAINAGE & UTILITY EASEMENT DB 18735 PG 625
ESTIMATED DRIVEWAY AREA = 1272.2 SQ.FT.±
LOT 28
5' DRAINAGE & UTILITY EASEMENT DB 18735 PG 625
N 54°28'46" W
240.31'
S 43°24'48" E
331.93'
.275 CTAR
Type II Innovative
Repair Area
(approved December 2015)
HOUSE
Septic Tank
Pump Tank
LOT 27
MB 44 PG 535
N 42°10'01" W 183.21'
29.67
37.02
Valve Box
42'
110.98
Supply Line
= 125'
Repair Area
S 16°12'11"
North
SCALE
12.00
19.00
22.84
15.00
30.00
21.1
DETAIL
(DIM
DAVID MA
ROS
DB 168
LOT
MB 44

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

THIS AGREEMENT is made and entered into this 17 day of August, 200 by and between Ryan Homes (hereinafter the "Owner") and R.C.S., Inc. , Joe R. Hudson (hereinafter the "Contractor").

WITNESSETH

WHEREAS, the Owner owns or controls the property upon which a ground absorption sewage treatment (hereinafter the "system") is installed, such system being designated a Type panel block system under the Rules for Sanitary Sewage Colection, Treatment and Disposal found at 15A N.C. Admin. Code 18A.1900 et seq.; and

WHEREAS, 15A N.C. Admin.Code 18A.1961 requires a contract to be executed between the system owner and a management entity prior to the issuance of an Operation Permit for said system: and

WHEREAS, 15A N.C. Admin. Code 18A.1961 requires that a condition of the Operation Permit for said system be that a properly executed contract between the system owner and a management entity shall be in effect for as long as the system is in use; and

WHEREAS, the Contractor is a management entity of a type authorized by 15A N.C. Admin. Code 18A.1961 to manage a Type panel block system.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and promises contained in this Agreement, it is hereby agreed by and between the Owner and the Contractor as stipulated below.

1. The Contractor's Obligations. The Contractor shall perform the following services on the Owner's system located at Lot 28 Meadows of Mint Hill 8107 FOAL COURT

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

a. The Contractor shall inspect the system at least at the frequency required in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type panel block system.

b. The Contractor shall perform th following routine maintenance procedures in accordance with the conditions of the Operation Permit:

(1) (from the operation permit)
(2)
(3)

c. The Contractor shall report the results of its inspections to the local health department at the frequency specified in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type lpp system.

d. If an inspection indicates the need for system repairs, the Contractor shall notify the local health department within 48 hours of the inspection.

e. The Contractor shall notify the Owner of needed repairs which are outside of the scope of routine maintenance described in subparagraph (b) above. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment therefor at the Contractor's normal charge for services and materials.

f. The Contractor shall employ of shall contract with a certified operator(s) if required by Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type panel block System.

g. The Contractor shall respond to a request for a nonscheduled service or maintenance call within 24-48 hours after receipt of such request depending on the urgency of the request.

2. The Owner's Obligations.

a. The Owner shall pay to the Contractor the sum of $ 200.00 per year for periodic inspections, routine maintenance procedures and periodic reports. The annual fee may be amended upon sixty(60) days advance notice to the Owner but may not be increased more than 20 percent per year. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days shall accrue interest

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COUNTY OF Mecklenburg

from the due date until paid at a rate of 15 percent per month.

b. Within 10 days of receipt of notice of needed repairs pursuant to paragraph 1.e. above, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

c. The Owner shall provide the Contractor with such access to the system as is reasonably necessary tor the Contractor to comply with the terms of this Agreement.

3. Term. This Agreement shall remain in effect until terminated.

a. Automatic Termination.
This agreement shall automatically terminate if the Operation Permit for the system is revoked and all appeals of the revocation are exhausted or time for taking an appeal; has passed.

b. Termination by Mutual Consent.
The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local health department thirty (30) days in advance of the date of termination.

c. Termination by the Owner.
The Owner may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance to the date of termination.

d. Termination by the Contractor.

(1.) The Contractor may terminate this Agreement for cause by giving written notice of intent to terminate this Agreement to the Owner and to the local health department thirty (30) days is advance of the date of termination. Cause shall be defined as:

(a) failure to remit payment for any bill for services performed under and in accordance with this Agreement if said bill is not is not paid within thirty (30) days of receipt by the Owner of the bill. If said bill is paid after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

effect:

or

(b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs to the system were completed by another entity within 10 days of receipt of notice of needed repairs pursuant ot paragraph i.e. above. If said authorization to comlete needed repairs or evidence of completion of said repairs is provided after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect;

(c) failure of the Owner to allow the Contractor such access to the system as is reasonably necessary in order for the Contractor to comply with the terms of this Agreement.

(2) The Contractor may not terminate this Agreement without cause, but may assign its rights and duties under this Agreement as provided in paragraph 4, below.

4. Assignment.

a. Assignment by the Owner. The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all tights and duties under this Agreement to said purchaser.

b. Assignment by the Contractor. The Contractor may assign its rights and duties under this Agreement to another management entity which is qualified pursuant to 15A NC Admin. Code 18A.1961 to manage a Type Ipp system upon thirty (30) days written notice to the Owner and to the local health department.

5. Use of Subcontractors. The Contractor may subcontract with such manufacturers, suppliers and contractors as it deems desirable to perform any of the Contractor's duties under this Agreement. The Contractor shall at all times remain responsible for the performance of and payment for all work performed by all subcontractors.

6. Representations. The Parties represent to each other that each has the power, auhority and legal right to enter into and perform its obligations as set forth in this

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

Agreement.

7. Regulatory Amendments. References in this Agreement to sections of the Administrative Code shall include such rules as they may be amended in the future.

8. No Implied Waiver. The waiver by either Party of a default or a breach by the other Party of any provision of this Agreement shall not operate or be construed to operate as a waiver of any subsequent default or breach. The failure at any time of either Party to enforce any provision of this Agreement (a) shall not be construed to be a waiver of such provisions, or of any other provision; and (b) shall not in any way affect the validity of this Agreement, or any part of this Agreement, or the right of either Party thereafter to enforce each and every provision of this Agreement.

9. Notice. Every notice required under this Agreement shall be in writing and shall be deemed sufficiently given if delivered in person or sent by certified or registered mail, return receipt requested, postage prepaid to the Party to be notified and addressed as follows:

To the Owner: Ryan Homes / NVR, INC
10815 David Taylor Drive Ste 100
Charlotte, NC 28262

To the Contractor:
R.C.S. ,Inc.
Joe R. Hudson
PO Box 708
Monroe, NC 28111

To the Local Health Department:
Mecklenburg County Groundwater & Wastewater Services
700 N.Tryon St.,Suite 211
Charlotte, NC 28202

The date of any Notice shall be the date of personal delivery or the date shown on the return receipt as the date of delivery of attempted delivery, as the case may be. Changes in the respective addresses to which notice may be directed may be made form time to time by either Party by notice to the other party/

10. Place of Agreement. This Agreement and any questions concerning its validity, construction or performance shall be governed by the laws of the State of

COUNTY OF Mecklenburg

North Carolina, notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

11. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof. To be effective, any amendment or modification to this Agreement must be in writing and must be signed by the Parties.

12. Severability. In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement of such other appropriate actions as shall to the maximum extent practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such action, remain in full force and effect.

IN TESTIMONY WHEREOF, the Parties hereto have executed this Agreement in duplicate originals, one of which is retained by each of the Parties, the day and year first above written.

(Owner) Ryan Hamill

Attest:

(Contractor)

Attest:

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

INSTALLATION APPROVAL for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6123B Permit #: _____ Tax Parcel #: 197-241-81

Property Owner: NVR, INC.

Job Location Address: 8107 FOAL CT (LOT # 28)

City: MINT HILL State: NC Zip Code: 28227

Installation Approval Issuance Date: 8/7/07

Permission is hereby given to ☑ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before 9/7/07, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 600 GPD

Site LTAR: 0.3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1500 gallons

Drainfield Design ☐ N/A

Trench Depth: 28 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 336 feet

# of Lines: 8 @ 42 feet

Depth of Media: 24 inches (Type) SAND

Distribution Device: GATE VALVES

Bed Design *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

Minimum System Setbacks

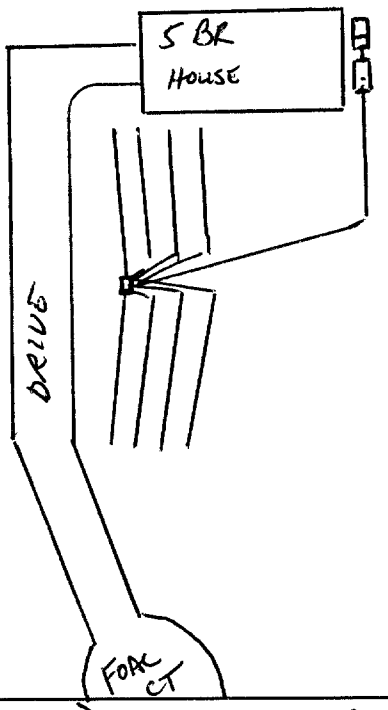
Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

INSTALL PER PLANS ON FILE
CMS
8-7-07



Comments: System Classification & Type: IVa PPBPS (PRESSURIZED); INSTALL PER, 1961; TO BE INSPECTED BY GWS/3YRS; MAINTENANCE AGREEMENT REQD.

DENR Authorized Agent: Chris Sherrill, RS, LSS Signature: Christopher M Sherrill

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

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6123B Permit #: _____ Tax Parcel #: 197-241-81

Property Owner: NVR INC.

Job Location Address: 8107 FOAL CT (LOT # 28)

City: MINT HILL State: NC Zip Code: 28227

Operation Permit Issuance Date: 8/30/07 Contractor Name: RCS

Permitted Design Flow: 600 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1500 gallons

Effluent Pump Model: WE0311L

Drainfield Installation ☐ N/A

Trench Depth: 28 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 336 feet

# of Lines: 8 @ 42 feet

Depth of Media: 24 inches (Type) SAND

Depth of Cover: 4 inches

Distribution Device: GATE VALVE

Bed Installation *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10 feet

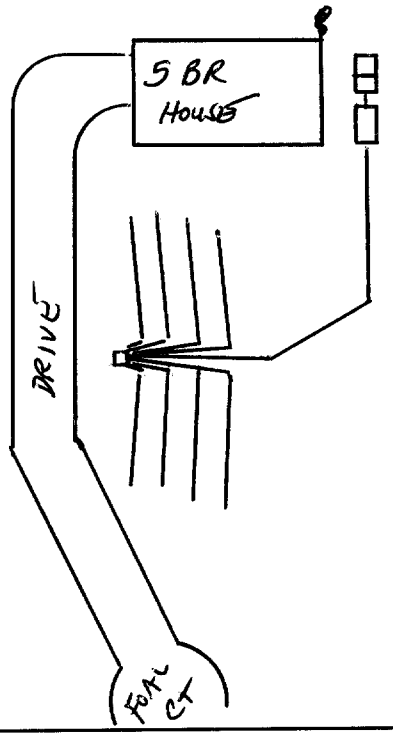
Inspection Dates

Tank(s) Inspected: 8/15/07

Excavation Inspected: 8/15/07

Pump & Controls Inspected: 8/30/07

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



The undersigned has inspected the Septic Tank System described above, and certifies it has been ☑ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☑ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: IIIa PPBPS ; INSTALLED PER , 1961 ; TO BE INSPECTED BY GWS / 3 YRS. ; MAINTENANCE CONTRACT REQD.

DENR Authorized Agent: Chris Sherrill, RS, LSS Signature: Chris Sherrill

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

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6123B Permit #: _____ Tax Parcel #: 197-241-81

Property Owner: NVR, INC.

Job Location Address: 8107 FOAL CT (LOT # 28)

City: MINT HILL State: NC Zip Code: 28227

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IV a

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☑ No ☐

☑ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☑ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other: _____

DENR Authorized Agent: Chris Shemill, RS, LSS Date: 8/30/07

Signature: Chris M Shemill

FEB-19-2008 14:26 MECKLENBURG CO GWS 272349 Project 704 336 6894 P.01/02

FEE: 100.00 cost
DATE: 3/18/08
CRT# 1

APPLICATION FOR APPROVAL TO USE AN EXISTING ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM
MECKLENBURG COUNTY - GROUNDWATER & WASTEWATER SERVICES
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

GWS - UES.APP 08/07

FILE # 4123B

JAM 3356

TYPE APPLICATION:
- ☐ ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A / M)
- ☒ ADDITION - RENOVATION OR GARAGE WITH NO MAJOR CHANGES (X)
- ☐ EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
- ☐ COMMERCIAL OR INDUSTRIAL (N)

PERSON FILING APPLICATION:
NAME: George Atpas
ADDRESS: 8107 Foal court
CITY: Mint Hill
STATE: NC ZIP: 28227
PHONE: 704-607-0552
ALTERNATE PHONE: 704-893-0877

PROPERTY OWNER:
NAME:
ADDRESS: Same
CITY:
STATE: ZIP:
PHONE:
ALTERNATE PHONE:

JOB LOCATION INFORMATION
TAX/PARCEL #: 197-241-81
STREET ADDRESS: 8107 Foal court
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME: Meadows of Mint Hill
LOT #: 28

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

WATER SUPPLY:
- ☒ MUNICIPAL (M)
- ☐ COMMUNITY (C)
- ☐ PRIVATE WELL (P)
- ☐ SHARED WELL (S)
- ☐ OTHER 'SPRINGS' (O)

RESIDENTIAL PROPERTY TYPE:
- ☒ HOUSE (H)
- ☐ MODULAR HOME (M)
- ☐ MULTIPLE FAMILY (U)
- ☐ SINGLE MOBILE HOME (S)
- ☐ DOUBLE WIDE (D)
- ☐ OTHER (O)

OCCUPANCY (both fields are required):
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 3

COMMERCIAL / INDUSTRIAL PROPERTY TYPE:
TYPE OF BUSINESS:
EMPLOYEES PER SHIFT:
OF SHIFTS:
INDUSTRIAL WASTES? ☐ YES ☐ NO
UNDERGROUND STORAGE TANKS? ☐ YES ☐ NO

ADDITION TYPE ATTACHED TO EXISTING STRUCTURE:
- ☐ BEDROOM
- ☐ BATHROOM
- ☐ KITCHEN
- ☐ DINING ROOM
- ☐ LIVING ROOM
- ☐ DEN
- ☐ GARAGE
- ☐ SUNROOM
- ☐ PORCH
- ☐ DECK
- ☐ OTHER

ADDITION TYPE DETACHED FROM EXISTING STRUCTURE:
- ☐ DETACHED GARAGE
- ☐ DETACHED GARAGE WITH PLUMBING
- ☒ POOL HOUSE
- ☐ SHOP
- ☐ BARN
- ☐ STORAGE SHED
- ☐ DETACHED PORCH / DECK
- ☐ OTHER

"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 — 3-12-08 Date

The undersigned, an authorized agent of the Mecklenburg County Health Department, certifies that the Department has approved the Request for the Job location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules for Sanitary Sewage Collection, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

- No work shall be conducted on the septic tank system until an installation, construction, alteration and/or repair approval is granted y this Department.
- This permit is not transferable.

☐ ADDITION / RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE
☐ MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE

SHED MEETS REQUIRED SETBACKS OFF SEPTIC & REPAIR AREA.

Jeremy Morton — 03-20-08
EHS Signature — Date

370 6/8/04

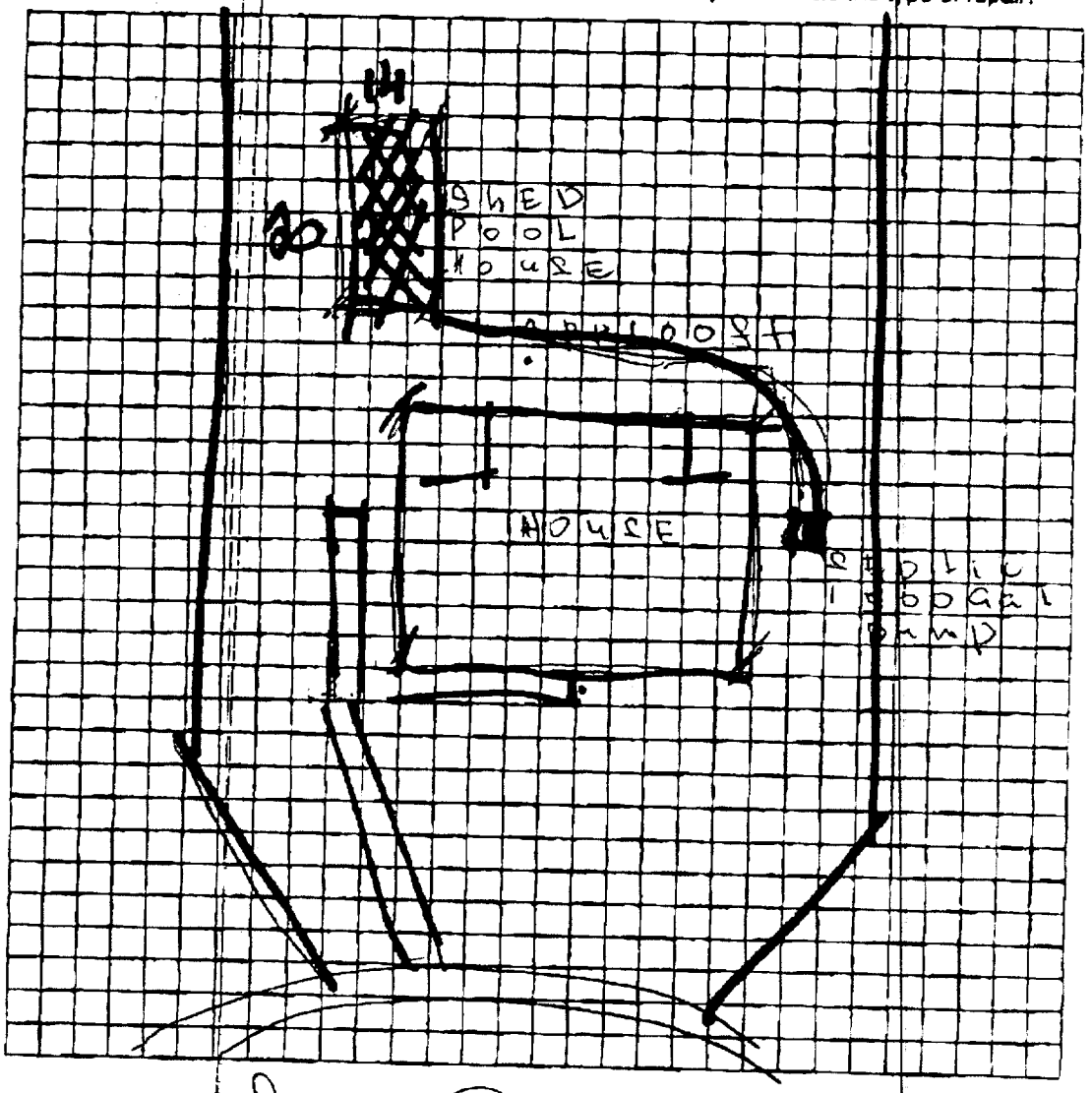
FEB-19-2008 14:26 MECKLENBURG CO GWS 704 336 6894 P.02/02

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

File #_____
Date_____

PROPOSED PLOT PLAN

A map showing existing and proposed property lines and easements with dimensions, the location of the single family residence, non-single family residence, or other facility, and appurtenances, the site for the proposed well, and the location of existing or proposed sewer lines and/or sewage disposal systems, surface water bodies, aboveground or underground storage tanks. Name all roads adjoining the property. If this a repair indicate the type of repair.



Owner/Agent Signature

Date 2-19-08

LBC 12/15/04

TOTAL P.02

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.

N/F
DAVID MASCORRO &
ROSA ELBA
DB 16803 PG 451

10' DRAINAGE & UTILITY EASEMENT
DB 18735 PG 625

NORTH
MB 44 PG 536

SCALE

L1

C1

5' DRAINAGE & UTILITY EASEMENT
DB 18735 PG 625

ESTIMATED DRIVEWAY
AREA = 1272.2 SQ.FT.±

LOT 28

5' DRAINAGE & UTILITY EASEMENT
DB 18735 PG 625

N 54°28'46" W

240.31'

S 43°24'48" E

331.93'

.275 LTAR
Type III Innovative
Repair Area
(approved December 2015)

HOUSE

Septic Tank

Pump Tank

29.57

L3

N 42°10'01" W 183.21'

LOT 27
MB 44 PG 535

Valve Box

42'

Supply Line ± 125'

Repair Area

110.98

S 76°12'11" E 74.07'

C2

C3

L2

15' SDE
MB 44 PG 535

12.00

19.00

22.84

15.00

30.00

21.1

DET
(DIM

DAVID MA
ROS
DB 168

LO
MB 44

LINE TABLE		
LINE	LENGTH	BEARING
L1	33.41	N38°42'11"E
L2	34.71	N48°22'16"E
L3	2.29	N39°01'29"E

The Meadows
Lot 28
Scale 1" = 40'

FOAL COURT

60' PUBLIC R/W

CURVE TABLE					
URVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	582.55	55.74	55.72	N41°28'18"E	5°40'35"

ESTIMATED