Penninger Soil Consulting, PLLC
Ph: 704-996-6330 Email: pgpenninger@gmail.com

March 29, 2016

Nest Homes
PO Box 3965
Mooresville, North Carolina 28117

Attention: Mr. Michael Wetter, Project Manager

Reference: **Technical Assistance with Expedited Review Septic Permitting**
Lot 11 Georgia Mills
Iredell County, North Carolina
Project No. 15-114K

Dear Mr. Wetter:

Penninger Soil Consulting, PLLC has provided technical assistance to obtain a possible new, 4-bedroom septic system Improvement Permit and Construction Authorization on the above referenced lot from the Iredell County Health Department (ICHD). The technical assistance was performed in general accordance with our written proposal dated March 28, 2016.

We understand Lot 11 was permitted by the ICHD for a 4-bedroom, gravity 25 Percent Reduction System in 2008 and that permit is still valid. You have requested Penninger Soil Consulting, PLLC to assist with a obtaining a new Expedited Review ICHD Improvement Permit and Construction Authorization for a similar 4-bedroom house pad house pad and a well permit. We flagged the proposed 25 Percent Reduction Gravity Distribution primary system and a T&J Panel repair area in the same area as shown on the 2008 ICHD permit. Three of the backhoe pits previously reviewed by the ICHD were observed on the lot. We understand the ICHD has to make a site visit on any lot with an Improvement Permit that has been issued for more than five years. Your surveyor staked the property corners, the lot lines, and the house pad.

Once the septic area is permitted, it should be fenced off for protection during home construction. Access to the lot should only be by the proposed drive. There shall not be cuts of 2 feet or greater within 15 feet of any part of the permitted septic system. Any foundation drain should be at least 15 feet from the septic tank and the drainfield on a side slope landscape position. The proposed septic drainfield is located 25 feet upslope of the storm drain easement shown on the site plan. Any minor topographical irregularities should be smoothed prior to system installation. Care should be taken in locating the plumbing exiting the house so gravity flow can be achieved for the proposed system.

Penninger Soil Consulting, PLLC appreciates the opportunity to provide these services to you. The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist you with the Expedited Review site evaluation. The ICHD may show any changes or modifications they deem necessary to the proposed system on the ICHD Permits or attached site plan. The ICHD must approve each lot and only the ICHD can issue these permits. The ICHD should verify all soil suitability and system specifications, required setbacks, and whether a professional engineer plan is required before permitting and/or septic system installation. Soil evaluations and system layouts are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future septic system performance.

If you have any questions or require additional information please contact us at your convenience.

Sincerely,

Penninger Soil Consulting, PLLC

Paul G. Penninger, L.S.S.
Soil Scientist



Attachments:

1. Septic Permit and Well Application
2. Proposed Site Plan and System Information
3. 2008 ICHD Improvement Permit

Copy: ICHD

C:\Users\Paul G. Penninger\Documents\2015 Projects\15-114 Nest Homes\15-114K Georgia Mills Lot 11 Expedited Review\Nest Homes - Georgia Mills Lot 11 ER Summary Letter.doc

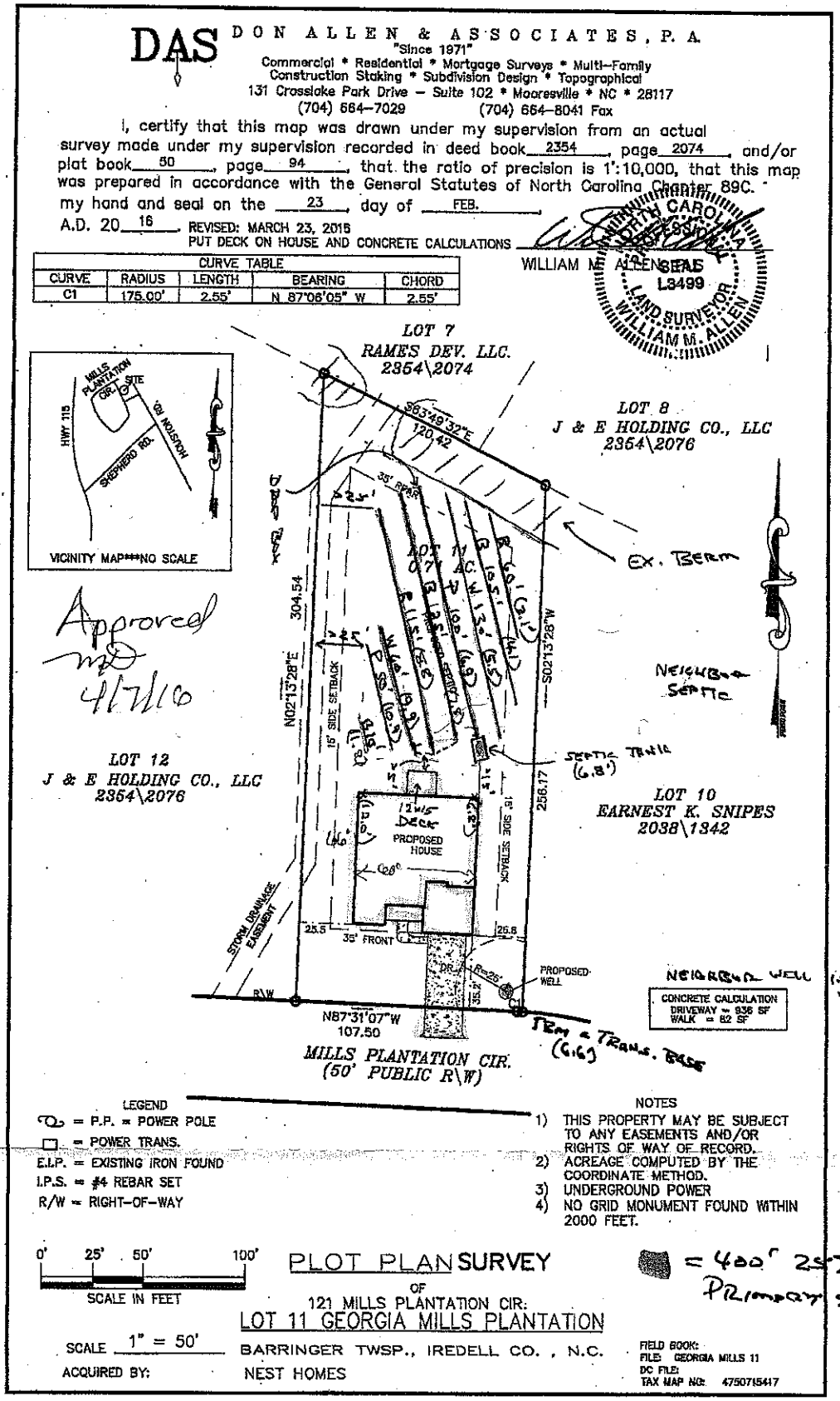
GA Mills Subdivision Lot 11 Expedited Review System Information Pg 1 of 1

Nest Homes, LLC (3-29-16)

Number of Bedrooms	4
Basement or Crawl	**Crawl/Slab Garage**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.3 per existing IP
Primary System Type	**Gravity 25 Percent Reduction**
No. Lines	4 lines (See Site Plan)
Total Linear Feet	400
Trench Width	3' min.
Trench Spacing	9' min.
Trench Depth	36 in. max. per Ex. IP
Pump Required	No
Distribution Device	Drop Boxes (or other ICHD approved devices)
Maintenance Agreement Required	No
Repair System	**LP PPBPS (T&J Panel)**
Total Linear Feet	355 ft shown (267 required)
Repair LTAR	0.3 per existing IP with 36 in. max trench

Note: **Installer and ICHD shall verify all line locations, tank locations, and elevations prior to installation.**
System is to be installed according to ICHD Permit requirements or policies.
These specifications are to satisfy the ICHD Expedited Review checklist and are not intended to represent an Engineered System Design.
Use trench depth on ICHD IP.

Expedited System information tables must accompany Penninger Soil Consulting written report dated March 29, 2016.



Nest Homes – GA Mills Lot 11 Septic Site Plan (March 29, 2016)

Site Plan must accompany Penninger Soil Consulting, PLLC written report dated March 29, 2016.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATERPROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #:
COUNTY:

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

OWNER: Nest Homes
ADDRESS: 121 Plantation Mills - Lot 11 GA Mills
PROPOSED FACILITY: 4 bdr sfr
PROPOSED DESIGN FLOW (.1949): 480
APPLICATION DATE 3-29-16
DATE EVALUATED: 3-28-16
PROPERTY SIZE: 0.71 ac

LOCATION OF SITE:
PROPERTY RECORDED: yes
WATER SUPPLY: ✓ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ✓ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER ✓ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS AND NOTES .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L approx 10 %	0-3	wsbk cl	fr ss/sp	br				PS 0.3
		3-18	m sbk c	fr ss/sp	red; c mica flakes; f inclusion yell lithochromic saprolite				
		18-48	w sbk cl	fr ss/sp	yell red; c mica flakes and saprolite inclusions; yell lithochromic; almost C at 46 in.				
					na	48in	na	na	
2									
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25% grav	T&J Panel
Site LTAR	.3 per ex IP	.3 per ex IP

OTHER FACTORS (.1946):
SITE CLASSIFICATION(.1948): PS
EVALUATED BY: PGP; must be reviewed and approved by ICHD
OTHER(S) PRESENT:

COMMENTS: valid 2008 IP for lot with 25% reduction system at 0.3 LTAR. SEE 2008 IP FOR HARD LOCATION