ICHD

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

October 17, 2015

Nest Homes
PO Box 3965
Mooresville, North Carolina 28117

Attention: Mr. Michael Wetter, Project Manager

**Reference:** **Technical Assistance with Septic Permitting**
Lot 1 - Mary Collins Subdivision
168 Big Indian Loop
Iredell County, North Carolina
Project No. 15-114H

Dear Mr. Wetter:

Penninger Soil Consulting, PLLC has provided technical assistance to obtain a possible new, 4-bedroom septic system Improvement Permit 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 October 10, 2015.

Lot 1 was recently subdivided and you have requested Penninger Soil Consulting, PLLC to assist with a obtaining a new Fast Track ICHD Improvement Permit for a 4-bedroom house pad house pad and a well permit. We described five backhoe pits in the proposed septic area and flagged a proposed 25 Percent Reduction Gravity Distribution primary system and a T&J Panel repair area as shown on the attached site plan. Your surveyor staked the property corners, the lot lines, the house pad, and located the backhoe pits.

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. The old field terrace crossing the lot should be smoothed prior to system installation. Any minor depressions should be smoothed with clean soil material.

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 Fast Track 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 Application and Zoning Permit
2. Proposed Site Plan and System Information

C:\Users\Paul G. Penninger\Documents\2015 Projects\15-114 Nest Homes\15-114H Bluefield Road Septic Permitting\Nest Homes - Bluefield Road Lot 1 FT Summary Letter.doc

APPROVED OCT 22 2015

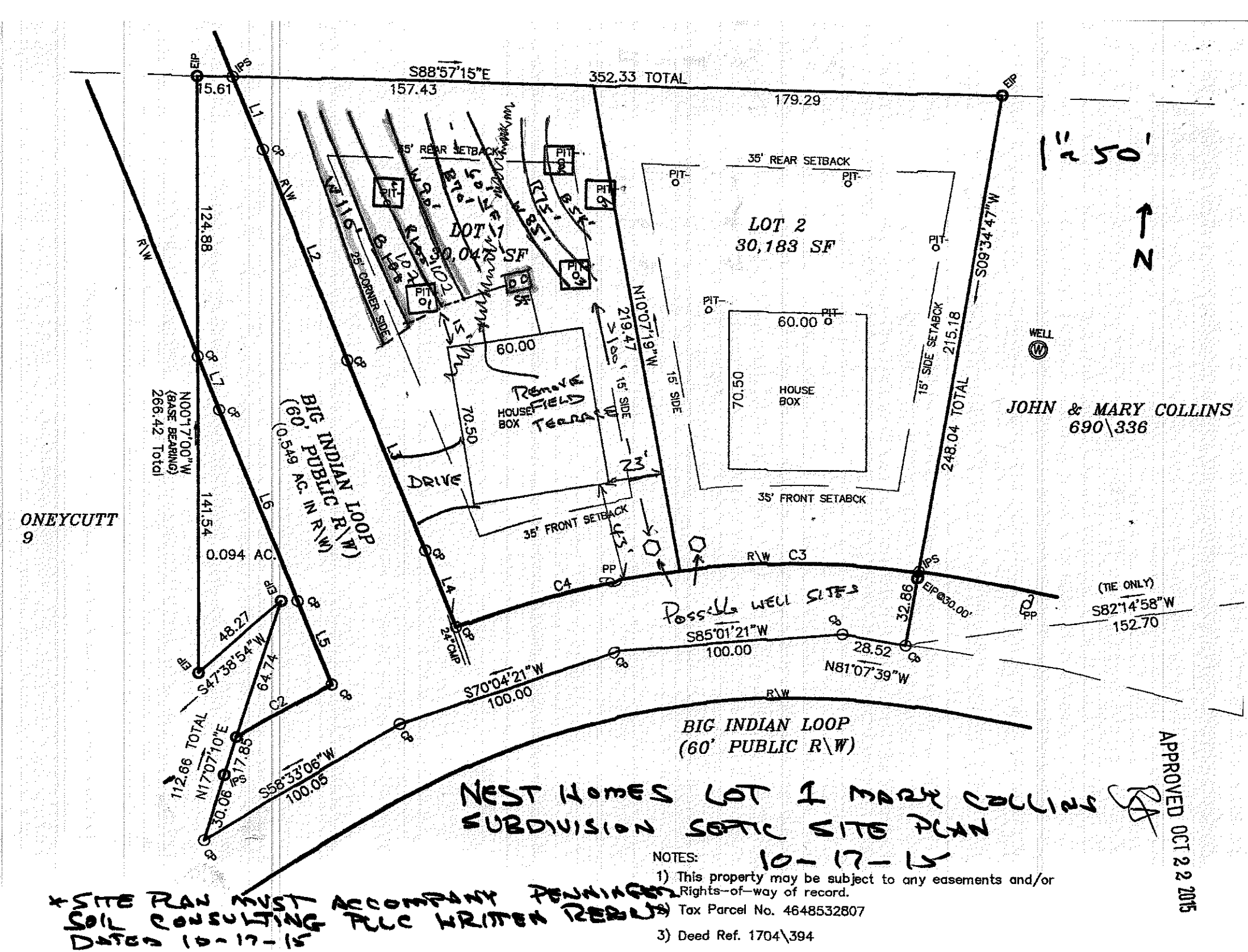
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## Mary Collins Subdivision Lot 1 Fast Track System Information (10-17-15) Pg 1 of 1

**Nest Homes, LLC**

| | |
|---|---|
| **Number of Bedrooms** | 4 |
| **Basement or Crawl** | **Crawl/Slab Garage** |
| **Design Flow (gpd)** | 480 |
| **LTAR (gpd/ft2)** | 0.3 |
| **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. |
| 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 | 344 ft shown (267 required) |
| Repair LTAR | 0.3 |

**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 Fast Track LSS checklist and are not intended to represent an Engineered System Design.
Use trench depth on ICHD IP.
Remove old field terrace and smooth any depressions.
Fast Track System information tables must accompany Penninger Soil Consulting written report dated October 17, 2015.




NEST HOMES LOT 1 MARY COLLINS
SUBDIVISION SEPTIC SITE PLAN
10-17-15

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NOTES:

1) This property may be subject to any easements and/or Rights-of-way of record.
2) Tax Parcel No. 4648532807
3) Deed Ref. 1704\394

* SITE PLAN MUST ACCOMPANY PERMIT APPLICATION
SOIL CONSULTING PLLC WRITTEN REPORT
DATED 10-17-15

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

APPROVED OCT 2 2 2015

Sheet 1 of 2
PROPERTY ID #:
COUNTY:

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

OWNER: NEST Homes
ADDRESS: Lot 1 108 Birch Lane
APPLICATION DATE
DATE EVALUATED: 9-16
PROPOSED FACILITY: SFR
PROPOSED DESIGN FLOW (.1949): 4BR
PROPERTY SIZE:
LOCATION OF SITE: Lot 1 Birch Lane
PROPERTY RECORDED: not
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 .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | C 5-10% | 0-19 | ABK C | fr sl/p - fr ss/sp | | | | | PS .3 |
| | | 19-30 | WSBK sl | fr ss/sp | | | | | |
| | | 30-65 | mass D. SAP | fr ss/sp | | 30"r | PS | D | |
| | | | | | D | | | | |
| | | upper 12" compl | | wood | | | | | |
| 2 | C 5-10% | 0-20 | ABK C | fr - fr slg | | | | | PS .3 |
| | | 20-43 | WSBK CL | fr ss/sp | | | | | |
| | | 43-64 | mass SAP | fr ss/sp | | 43" | PS | D | |
| | | | | | D | | | | |
| 3 | C 5-10% | 0-28 | mass/weak C | fr sl/p fr ss/sp | | | | | PS .3 |
| | | 28-53 | WSBK/CL | fr ss/sp | | | | | |
| | | | | | | | | D | |
| | | | WSBK CL | 15" to 36" | | | | | |
| | | | | > 50" | | 53" | | | |
| 4 | C 5-10% | 0-8 | WSBK SCL | fr ss/sp | | | | | PS .3 |
| | | 8-41 | ABK - C | fr ss/sp | | | | | |
| | | 41-60 | STR SL | fr ss/sp | | 60"r | | D | |
| | | | | | D | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | PS | PS |
| System Type(s) | 2SC | PGBES |
| Site LTAR | .3 | .3 |

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: PGP - must be
OTHER(S) PRESENT: Reviewed by Leslie

COMMENTS:

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

APPROVED OCT 22 2015


PROPERTY ID #:
COUNTY:

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

OWNER: Mary Collins - Nest Homes is Applicant — APPLICATION DATE 10-17-15
ADDRESS: Big Indian Loop — DATE EVALUATED:
PROPOSED FACILITY: SFR — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE:
LOCATION OF SITE: Big Indian Loop — PROPERTY RECORDED: not
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 .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | L 2-5-1C | 0-6<br>6-24<br>24-48<br>D.H | scl wsbk<br>c mssbk<br>cl wsbk<br>Dry wash 2' dia | fr ss/ss<br>fr ss/ss<br>fr ss/ss | br<br>red<br>mott | f | sap | bd | PsH |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | | |
| System Type(s) | SGD | CC 1 |
| Site LTAR | | |

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY:
OTHER(S) PRESENT:

COMMENTS: