

**PYRAMID GEOSCIENCES, INC.**

Geotechnical, Environmental
and Construction Engineering

Via facsimile and mail
910.485.0463

H & H Constructors
2919 Breezewood Avenue, Suite 400
Fayetteville, North Carolina 28303

August 24, 2006

Attention: Mr. Billy Smith

Reference: Foundation Sub-grade Evaluation
Woodshire Development, Lot 102
Spring Lake, North Carolina

Project No. 06FCS-2201
Document No. 06F-0965

Dear Mr. Smith:

As requested, an engineering representative of Pyramid Geosciences, Inc. visited the above referenced site on August 21, 2006 to evaluate foundation sub-grade soils for the new residential dwelling.

The DCP test is performed by driving a conical-shaped tip into the ground using a 15-pound hammer free-falling through a drop of 20 inches. The number of hammer blows required to drive the tip through three successive increments of 1¼ inches is defined as the penetrometer resistance. The DCP test is a generally accepted field method to verify the bearing capacity of soils for shallow foundations.

A total of three (3) shallow hand auger boring were advanced to a maximum depth of 8.0 ft. below existing grades at approximate locations shown on the attached field sketch. Soils encountered in the borings consist predominantly of silty clayey sand. DCP values ranging from 6 to 25 blows per 1¼-inch increment were recorded within the upper 8.0 ft. below grade. Soil conditions encountered in the boring and results of the DCP tests are provided on the attached Summary of Hand Auger and Dynamic Cone Penetrometer (DCP) Resistance Reports. A preliminary evaluation of the sub-grade bearing soils and recommendations were provided at the time of our field tests.

Based on our observations and the field test results, the current condition of foundation bearing soils are considered to be suitable for support of the new construction.

P.O. Box 9367, Fayetteville, North Carolina 28311
Telephone 910.488.1629
FAX 910.488.9450

Foundation Sub-grade Evaluation
H & H Constructors
Woodshire Development, Lot 102
Spring Lake, North Carolina

Pyramid Geosciences, Inc.
Project No. 06FCS-2201
Document No. 06F-0965
August 24, 2006
Page 2

Pyramid Geosciences, Inc. appreciates the opportunity to provide services for the project. If we can be of additional service to you, please do not hesitate to contact us.

Sincerely,
PYRAMID GEOSCIENCES, INC.



Larry R. Meachum, P.E.
Chief Engineer
NC PE Registration No. 029125



Attachments



136-A Bow Street
Fayetteville, North Carolina 28301

**Summary of Hand Auger and Dynamic Cone Penetrometer (DCP)
Resistance Report**

Project: Woodshire Development, Lot 102
Project No.: 08FCS-2201
Project Location: Spring Lake, NC
Client: H & H Constructors

Page 1 of 1

Date	Test Location	Soil Description	Depth (feet)	Hammer Blows		
				1st	2nd	3rd
21-Aug-06	Test No. 1	Light Brown Silty Sand	2	7	9	15
	See Sketch	Yellowish to Brown Sandy Clay	3	9	11	7
		Reddish Brown Clayey Sand	5	6	7	8
		Reddish Brown Clayey Sand	6	7	11	17
		Reddish Brown Clayey Sand	8	7	21	25
Test No. 2	See Sketch	Light Brown Silty Sand	2	13	14	6
		Yellowish to Brown Sandy Clay	3	9	11	14
		Reddish Brown Clayey Sand	5	6	7	7
Test No. 3	See Sketch	Light Brown Silty Sand	2	9	11	14
		Light Brown Silty Sand	3	8	10	11
		Yellowish to Brown Sandy Clay	5	6	9	13

Larry R. Meachum
Signature

Larry R. Meachum, P.E.
Name (Technical Responsibility)

Engineer
Position

Field Report

Pyramid Geosciences, Inc.
136-A Bow Street
Fayetteville, North Carolina 28301
Telephone: 910.488.1629
Fax: 910.488.9450



Geotechnical, Environmental
and Construction Engineering

Project	Woodshire Development, Lot 102		
Location	Spring Lake, North Carolina		
Date	August 21, 2006	Project No.	06FCS-2201
Contractor	H & H Constructors	Client	H & H Constructors
Weather	Cloudy	Temp	88 °F ### PM
Present at Site	No one		

TO: Billy Smith
H & H Constructors

Total Time: 3.0 hrs. Mileage: 45

THE FOLLOWING WAS NOTED:

Arrived at the project site, as requested, to evaluate foundation sub-grade soils.

As we understand the project specifications, the minimum bearing capacity requirement is 2,000 psf. Foundation sub-grade soils were evaluated by advancing shallow hand auger borings at the bottom of footing excavations and by performing dynamic cone penetrometer (DCP) tests at the boring locations. A total of three (3) borings were advanced to a depth of 8.0 ft. below existing grades at approximate locations shown on the attached field sketch. Bearing soils consist predominantly of silty sand and DCP values ranged from 6 to 25 blows per 1¼ in. increment. Based on our observations and DCP test results, sub-grade soils are considered to be suitable for support of the planned construction.

ATTACHMENTS:

COPIES TO:

SIGNED:

Ralph J. Gale

PGI FRT-001
(Mar 04)

The presence of Pyramid Geosciences, Inc. in the field shall not be construed as an acceptance or approval of activities at the site. Pyramid Geosciences, Inc. is in the field to perform specific services and has certain responsibilities which are limited to those specifically authorized in our agreement with our client. In no event shall Pyramid Geosciences, Inc. be responsible for the safety or the means and methods of other parties in the field.

Field Sketch

Pyramid Geosciences, Inc.
136-A Bow Street
Fayetteville, NC 28301
Telephone: 910.488.1629
Fax: 910.488.9450

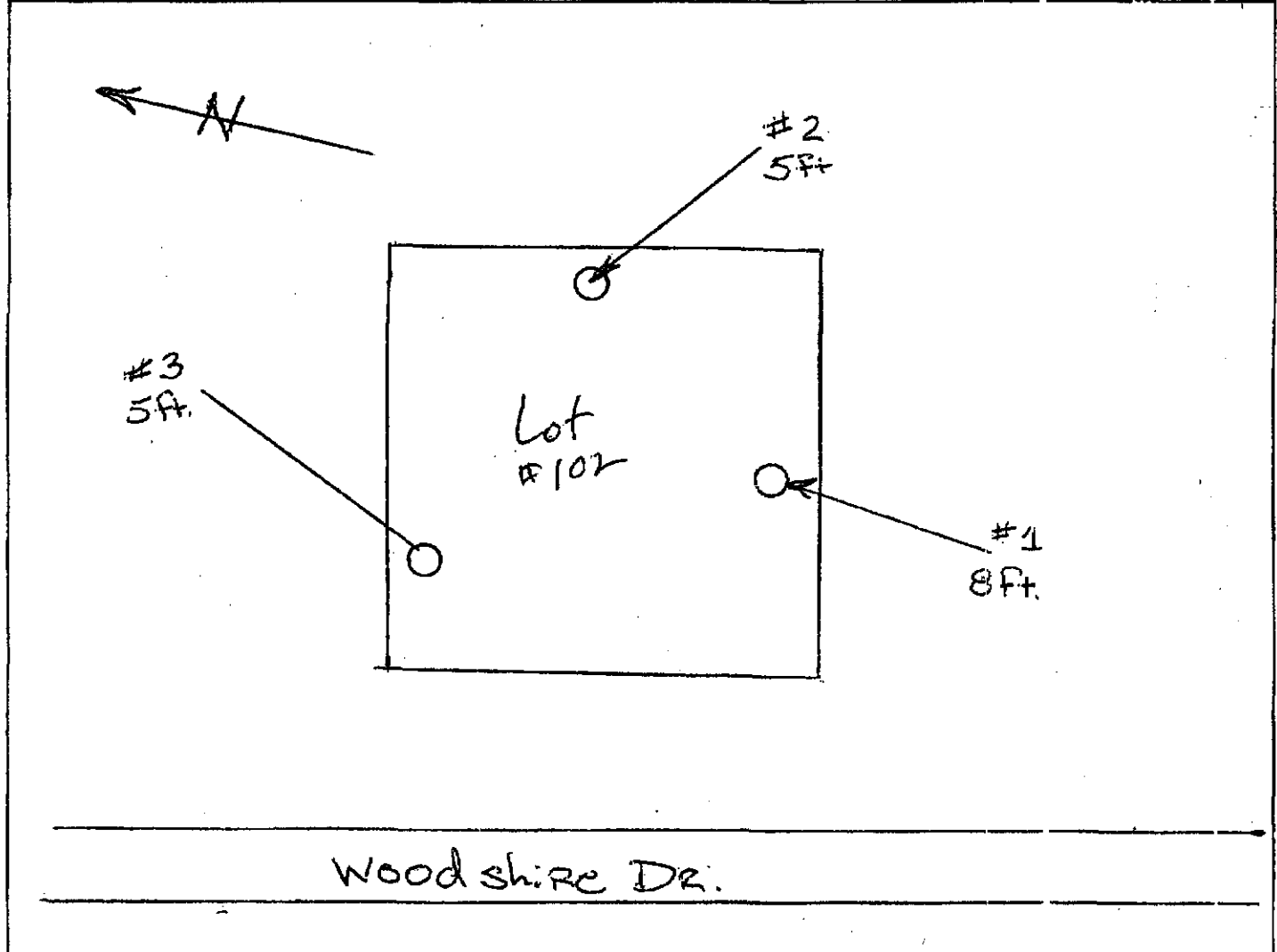


Lot #102

Project	WOODSHIRE
Location	Spring Lake, N.C.
Date	8-21-06
Project No.	06PES-2201
Contractor	H&H CONST.
Client	H&H CONST.
Weather	clearly
Temp	88 °F
Present at Site	AM 12:15 PM
	NC 011E

TO: Billy Smith
H & H Constructors

NOT TO SCALE



ATTACHMENTS: Field Report

COPIES TO:

SIGNED: [Signature]

ADDRESS . : 225 WOODSHIRE DR SUBDIV: WOODSHIRE
CONTRACTOR : H & H CONSTRUCTORS INC PHONE :
OWNER . . : WOODSHIRE PARTNERS LLC #102 PHONE :
PARCEL . . : 01-0536-04- -0028- -01-
APPL NUMBER: 06-50015039 CP NEW RESIDENTIAL (SFD)
DIRECTIONS : HWY 27 W TO NURSERY RD TURN LEFT ON
NURSERY RD LEFT ON LEMUEL BLACK RD LEFT
ON WOODSHIRE DR INTO WOODSHIRE S/D LOT
102 JB

STRUCTURE: 000 000 60.2X37.5 3BDR
FLOOD ZONE : FLOOD ZONE X

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	4/09/07 4/09/07	CE AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 001385030 No t-pole engineer's letter attached
B103 01	4/13/07 <u>4-13-7</u>	TI AP <u>CE</u>	R*BLDG FOUND & TEMP SVC POLE VRU #: 001388938

COMMENTS AND NOTES

~~NOT READY~~

T-pole 10228

ADDRESS : 225 WOODSHIRE DR SUBDIV: WOODSHIRE
 CONTRACTOR : H & H CONSTRUCTORS INC PHONE :
 OWNER : WOODSHIRE PARTNERS LLC #102 PHONE :
 PARCEL : 01-0536-04- -0028- -01-
 APPL NUMBER: 06-50015039 CP NEW RESIDENTIAL (SFD)
 DIRECTIONS : HWY 27 W TO NURSERY RD TURN LEFT ON
 NURSERY RD LEFT ON LEMUEL BLACK RD LEFT
 ON WOODSHIRE DR INTO WOODSHIRE S/D LOT
 102 JB

STRUCTURE: 000 000 60.2X37.5 3BDR
 FLOOD ZONE : FLOOD ZONE X
 # BEDROOMS : 3.00 PROPOSED USE : SFD
 SEPTIC - EXISTING? : NEW

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	4/09/07 4/09/07	CE AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 001385030 No t-pole engineer's letter attached
B103 01	4/13/07 4/13/07	CE AP	R*BLDG FOUND & TEMP SVC POLE VRU #: 001388938 T-pole # 10228.ce
B105 01	4/18/07	TI	R*OPEN FLOOR VRU #: 001391292

4-18-7 AP-CE

----- COMMENTS AND NOTES -----

ADDRESS . : 225 WOODSHIRE DR SUBDIV: WOODSHIRE
CONTRACTOR : H & H CONSTRUCTORS INC PHONE :
OWNER . . : WOODSHIRE PARTNERS LLC #102 PHONE :
PARCEL . . : 01-0536-04- -0028- -01-
APPL NUMBER: 06-50015039 CP NEW RESIDENTIAL (SFD)
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102 JB

STRUCTURE: 000 000 60.2X37.5 3BDR
FLOOD ZONE : FLOOD ZONE X

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	4/09/07 4/09/07	CE AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 001385030 No t-pole engineer's letter attached
B103 01	4/13/07 4/13/07	CE AP	R*BLDG FOUND & TEMP SVC POLE VRU #: 001388938 T-pole # 10228.ce
B105 01	4/18/07 4/18/07	CE AP	R*OPEN FLOOR VRU #: 001391292
A814 01	4/24/07 4/20/07	TI AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 001392521 225 Woodshire Dr Lot 102
R425 01	5/07/07 5/07/07	MR CA	FOUR TRADE ROUGH IN VRU #: 001403118 per request
R425 02	5/09/07	TI	FOUR TRADE ROUGH IN VRU #: 001405866

AP. MB

----- COMMENTS AND NOTES -----

ADDRESS : 225 WOODSHIRE DR SUBDIV: WOODSHIRE
CONTRACTOR : H & H CONSTRUCTORS INC PHONE :
OWNER : WOODSHIRE PARTNERS LLC #102 PHONE :
PARCEL : 01-0536-04- -0028- -01-
APPL NUMBER: 06-50015039 CP NEW RESIDENTIAL (SFD)
DIRECTIONS : HWY 27 W TO NURSERY RD TURN LEFT ON
NURSERY RD LEFT ON LEMUEL BLACK RD LEFT
ON WOODSHIRE DR INTO WOODSHIRE S/D LOT
102 JB

STRUCTURE: 000 000 60.2X37.5 3BDR
FLOOD ZONE : FLOOD ZONE X

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	4/09/07 4/09/07	CE AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 001385030 No t-pole engineer's letter attached
B103 01	4/13/07 4/13/07	CE AP	R*BLDG FOUND & TEMP SVC POLE VRU #: 001388938 T-pole # 10228.ce
B105 01	4/18/07 4/18/07	CE AP	R*OPEN FLOOR VRU #: 001391292
A814 01	4/24/07 4/20/07	TI AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 001392521 225 Woodshire Dr Lot 102
R425 01	5/07/07 5/07/07	MR CA	FOUR TRADE ROUGH IN VRU #: 001403118 per request
R425 02	5/09/07 5/09/07	MR AP	FOUR TRADE ROUGH IN VRU #: 001405866
I129 01	5/14/07	TI	R*INSULATION INSPECTION VRU #: 001408239

AP JH

COMMENTS AND NOTES

ADDRESS . . : 225 WOODSHIRE DR SUBDIV: WOODSHIRE
 CONTRACTOR : H & H CONSTRUCTORS INC PHONE :
 OWNER . . : WOODSHIRE PARTNERS LLC #102 PHONE :
 PARCEL . . : 01-0536-04- -0028- -01-
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 102 JB

STRUCTURE: 000 000 60.2X37.5 3BDR
 FLOOD ZONE : FLOOD ZONE X

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	4/09/07 4/09/07	CE AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 001385030 No t-pole engineer's letter attached
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B105 01	4/18/07 4/18/07	CE AP	R*OPEN FLOOR VRU #: 001391292
A814 01	4/24/07 4/20/07	TI AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 001392521 ✓225 Woodshire Dr Lot 102
R425 01	5/07/07 5/07/07	MR CA	FOUR TRADE ROUGH IN VRU #: 001403118 per request
R425 02	5/09/07 5/09/07	MR AP	FOUR TRADE ROUGH IN VRU #: 001405866
I129 01	5/14/07 5/14/07	JH AP	R*INSULATION INSPECTION VRU #: 001408239
H824 01	9/25/07 9/25/07	BM AP	✓ ENVIR. OPERATIONS PERMIT TIME: 17:00 VRU #: 001493337
R431 01	9/26/07	TI	FOUR TRADE FINAL >2500 VRU #: 001493196

AP JH

----- COMMENTS AND NOTES -----

**COUNTY OF HARNETT
DEPARTMENT OF BUILDING INSPECTION
AND PLANNING/DEVELOPMENT
CERTIFICATE OF OCCUPANCY**

This certificate issued pursuant to the requirements of Section 105 of the North Carolina State Building Code and the Harnett County Zoning Ordinance certifies at the time of issuance this structure was in compliance with the various ordinances of the County of Harnett regulating development and building construction or use. For the following:

Use Classification: SFD Conditional Use Permit No.: _____
Type of Construction: V Building Permit No.: _____
Owner of Building: Glenwood Electrical Permit No.: _____
Building Address: 225 Woodshire dr Insulation Permit No.: _____
Zoning District: _____ Plumbing Permit No.: _____
Zoning Permit No.: _____ Mech. Permit No.: 06-500150A
Date: 9-26-07 Envir. C.O. No.: _____

James Hall
Building Official

Zoning Official