Supervisor/Administrative Professional Checklist

New Septic ☑ **New Well** ☐ **Use Existing** ☐ **Alteration** ☐ **Modified Plot Plan** ☐

New Septic Fees Paid:

IP ($250.00) _____ Initials/Date

CA ($200.00) lw2 4/26/13 Initials/Date

OP ($200.00) lw2 4/26/13 Initials/Date } Fees need to be paused.

(CA and OP fees need to be paid before a building permit can be issued)

New Well Fee Paid: $550.00 _____ Initials/Date

Use Existing Fee Paid: $100.00 _____ Initials/Date

Alteration Fee Paid: $300.00 (Total) $200 (If use existing was paid)_____ Initials/Date

Modified Plot Plan Fee Paid: $100.00 _____ Initials/Date

Floor plans need to be submitted and reviewed before CA can be issued. ☑ Reviewed ☑ JAM

This site is served by septic and well. Verify each is complete before final hold is released. ☑

Septic file completed. ☐ _____ Well file completed. ☐ _____

Send permit for signature. ☐ Signature received. ☑ JAM

This septic system requires a certified operator contract before final hold is released. ☒ JAM

Certified operator contract is on file. ☐ _____

* O.K. To Generate The CA And Release The Hold (APPROVED AS NOTED)

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 6900 B WASPS App #: 1777

Primary ES assigned to project: OS

Secondary ES assigned to project:

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐

I. File Review:

Rule or Law	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☑	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☑	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☑	No ☐	N/A ☐
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☑	No ☐	N/A ☐
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☑	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the SPS Profiles in system & in repair area?	Yes ☑	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: 4			
	Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .3	Yes ☐	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Repair	Yes ☑	No ☐	N/A ☐
130A-336 (a)(3)	System location identifiable by setbacks - Initial	Yes ☑	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☑	No ☐	N/A ☐

130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench depth indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench width indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench length indicated?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Proposed/existing well shown?	Yes ☐	No ☐	N/A ☐
130A-336(a)(1)	Property line lengths shown?	Yes ☐	No ☐	N/A ☐
130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	Yes ☑	No ☐	N/A ☐
	Operation Permit			
.1937(i)	System type as described in table V(a) of rule .1961	Yes ☐	No ☐	N/A ☐
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	Yes ☐	No ☐	N/A ☐

II. WASPS Review:

Construction authorization issued	Yes ☐	No ☐	N/A ☐
Installation approval issued	Yes ☐	No ☐	N/A ☐
Operation permit issued	Yes ☐	No ☐	N/A ☐
Other related documentation	Yes ☐	No ☐	N/A ☐

Items requiring correction/modification: _____

Comments:

_____

_____

_____

_____

_____

IA issued date: _____

OP issued date: _____

Review performed by: _____ Date performed: _____

MECKLENBURG COUNTY
HEALTH DEPARTMENT

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

1. SEPTIC / TYPE APPLICATION: ○ N/A ☒ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ○ N/A ☒ ~~NEW WELL~~ ○ MAJOR REPAIR ○ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 019-243-03
STREET ADDRESS: 13814 Pavilion Estates Dr.
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION NAME: Pavilion
LOT #: 22 LOT SIZE (acres): 1.6
TOWNSHIP:
○ MECKLENBURG ○ CORNELIUS ☒ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. BUILDING INFORMATION:
BUILDING TYPE:
○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
☒ HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 5300
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 6
FOUNDATION TYPE:
○ CONCRETE SLAB ☒ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC 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 ☒ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. PROPOSED USE OF WELL: ○ N/A ○ IRRIGATION ☒ POTABLE (DRINKING WATER) ○ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED)*:
☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☒ OTHER PPBPS

8A. RANK: ____ ____ ____ ____ ____

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	○ YES ● NO
EXISTING WASTEWATER (SEPTIC) 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
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ● NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ● NO
WASTE STORAGE	○ YES ● NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ● NO

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____ ☒ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? 6/10/15 ☐ N/A

12. PROPERTY OWNER:
NAME: IQ Custom Construction
ADDRESS: 890 Edmisten Rd
CITY: Mantulla ~~Rock~~
STATE: NC ZIP: 28125
WORK PHONE: 980 297 2329
MOBILE PHONE: " "
FAX: N/A
E-MAIL: iqcustombobby@gmail.com

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

14. SEPTIC SYSTEM PERMIT APPLICATION:

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 sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

_____ (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

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 twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

_____ 6/11/15

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

---

OFFICE USE ONLY

O SURVEY PLAT TO SCALE SUBMITTED O SCALED SITE PLAN SUBMITTED O UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

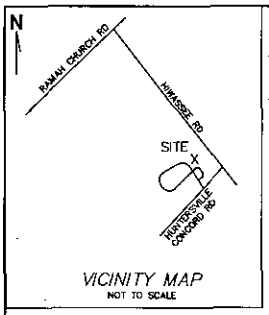
APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 214 CHARLOTTE, NC 28202 OFFICE: 704.336.5183 FAX: 704.336.8804

Site Plan
13814 Pavilion Estates Drive
THE PAVILION
LOT 22

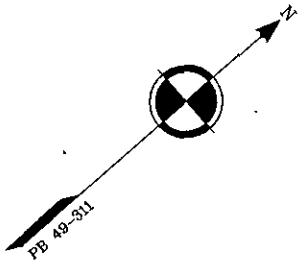
Huntersville Township, Mecklenburg County, NC
Parcel # 01924303 ~ DB 28021-908 ~ MB 49-311
Prepared for: IQ Custom Construction



VICINITY MAP
NOT TO SCALE

NOTES:
1) Area determined by Coordinate Computation Method.
2) Property subject to any facts that may be disclosed by a full and accurate title search.
3) Property may be subject to any Easements and Right of Ways of record and those not of record if they exist.
4) Subject Property is not located in a Special Flood Hazard Area as designated by the FEMA FLOOD INSURANCE RATE MAPS. See Map Number 3710466100J - Effective Date 3/02/2009.
5) No Geodetic Monument found within 2000' of Subject Property.
6) Setbacks shown per M.B. 49-311
Front = 50', Rear = 50', & Side = 12'
7) Boundary information taken from PB 49-311. No fieldwork performed. For planning purposes only.
8) Tree Save Area scaled from MB 49-311.

AREA SUMMARY
LOT 22
1.598 ACRES
69,590 SQ.FT.



PAVILION ESTATES DRIVE
50' PUBLIC R/W

C1
8' SIDEWALK EASEMENT
WELL
50' FRONT SETBACK
52.0'
50.9'
PROPOSED SINGLE FAMILY RESIDENCE
52.0'
5.0'

LOT 21
LOT 22
LOT 23

N48°30'59"W
452.38'
12' SIDE SETBACK
S49°29'50"E
407.78'

REVISED: 8/2/2015 - HOUSE PLAN

I, Thomas E. Williams, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book 28021, Page 908, or other reference source AS NOTED); that the boundaries not surveyed are shown as broken lines drawn from information found in adjoining deeds and plats as noted; that the ratio of precision is 1 : 10,000+; and that this plat meets the requirements of The Standards of Practice for Land Surveying in North Carolina according to North Carolina Administrative Code Title 21, Chapter 56, Section 1600.

This survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.

This 4th day of February, 2015.

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES.

Thomas E. Williams, NCPLS 4718

DETENTION BASIN & RAIN GARDEN

PERMANENT DRAINAGE DITCH

TREE SAVE AREA

50' REAR SETBACK

CURVE TABLE

NUM	DELTA	ARC	RADIUS	BEARING	DISTANCE
C1	13°46'13"	162.23'	675.00'	N55°55'27"E	161.84'

LEGEND
- PROPERTY LINE (P/L)
- RIGHT OF WAY (R/W)
- TIE LINE
- ADJOINING PROPERTY LINE FROM DEED OR PLAT
- BUILDING SETBACK LINE

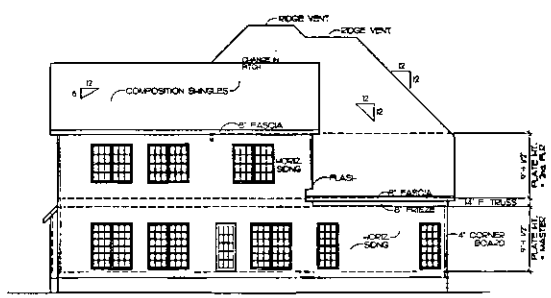
40 0 40 80
SCALE: 1" = 40'

83.38'
S40°02'43"W
81.45'
S39°55'08"W

PLANTATION PIPELINE
70' R/W

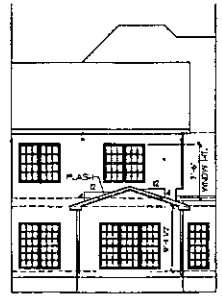
NOTE: IRON STAKES AND MONUMENTS AS SHOWN (●), ALL OTHERS CALCULATED POINTS (○).

Williams Land Surveying, Inc.
License Number C-3638
274 Baymount Drive, Statesville, NC 28625
phone: (704)876-3966 ~ email: runningonfaith@bellsouth.net
file: 15\PAVILION



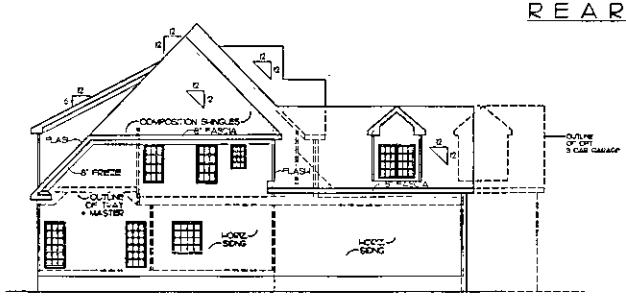
REAR ELEVATION

SCALE: 1/8" = 1'-0"



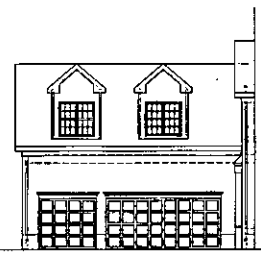
OPT. SUNROOM

SCALE: 1/8" = 1'-0"



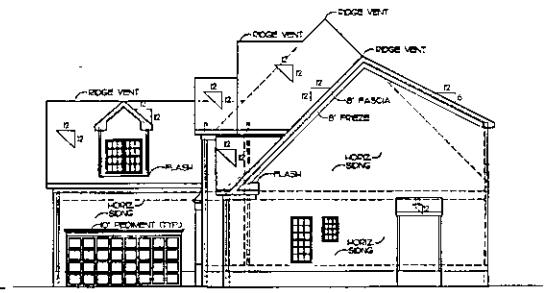
LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



OPT. 3 CAR

SCALE: 1/8" = 1'-0"



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

NOTE: ELEVATION SHOWN WITH CRAWL FOUNDATION

SCALE: 1/4" = 1'-0"

5 REQ'D

I.Q. CUSTOM CONSTRUCTION
840 Edmiston Rd.
Vt. Vlg, NC 28125 Ph. 704-662-5733

Project: THE HAWTHORN HOUSE PLAN

Sheet Title: ELEVATIONS

Drawn By: S. BROOKS

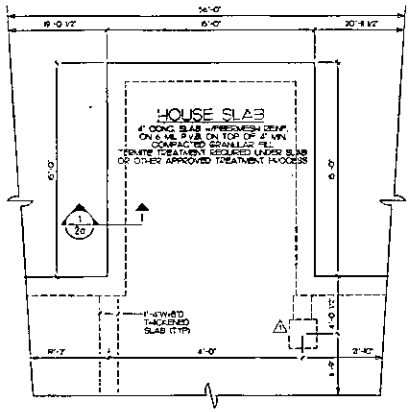
Date: 6-12-15

Rev: 11-26-15

Job:

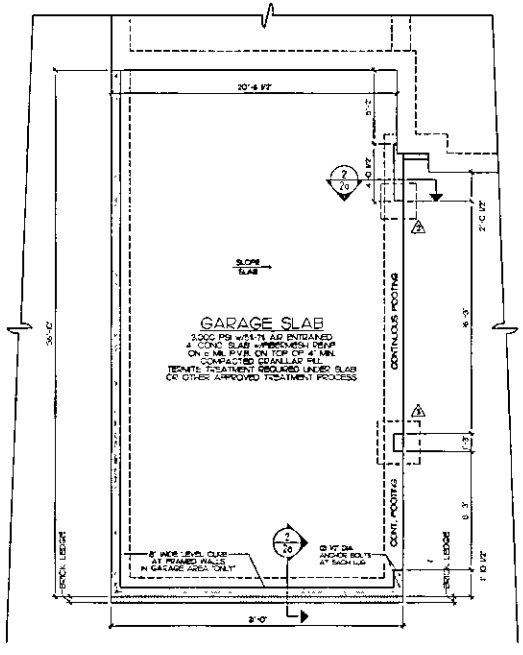
HAWTHFL

Sheet: 1



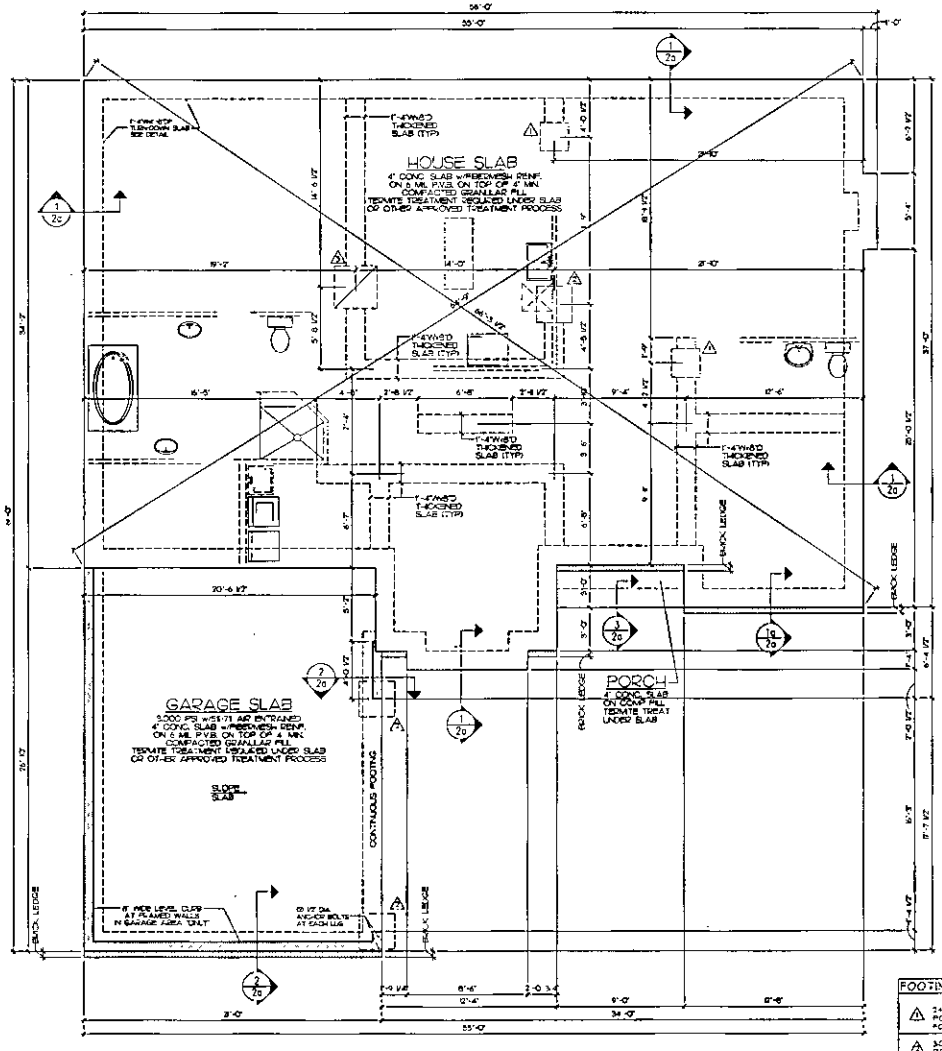
OPT. SUNROOM

SCALE: 1/4" = 1'-0"



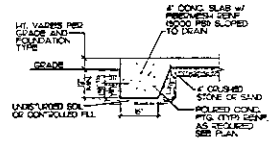
OPT. 3 CAR GARAGE

SCALE: 1/4" = 1'-0"



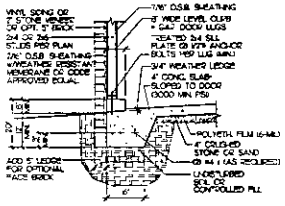
FOUNDATION PLAN / CONCRETE SLAB

SCALE: 1/4" = 1'-0"



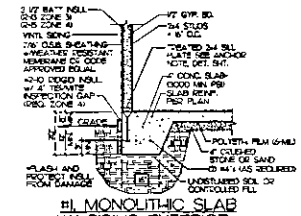
#3. MONOLITHIC SLAB @ FRONT PORCH

NOT TO SCALE



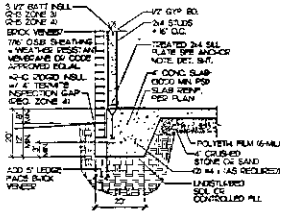
#2. MONOLITHIC SLAB @ GARAGE DOOR

1 & 2 STORIES ONLY NOT TO SCALE



#1 MONOLITHIC SLAB W/ SIDING EXTERIOR

1 & 2 STORIES ONLY NOT TO SCALE



#1a MONOLITHIC SLAB W/ BRICK VENEER

1 & 2 STORIES ONLY NOT TO SCALE

FOOTING SCHEDULE
⚠1 24"x12"x12"Dp POURED CONC FOOTING
⚠2 30"x30"x12"Dp POURED CONC FOOTING w/#4's @ 12" O.C. EA. WAY
⚠3 36"x36"x12"Dp POURED CONC FOOTING w/#4's @ 12" O.C. EA. WAY
⚠4 42"x42"x12"Dp POURED CONC FOOTING w/#4's @ 12" O.C. EA. WAY

Southern Dynamic Engineering and Design, PLLC
P.O. Box 87
Waxhaw, NC 28173
Seal for Structural Only
NC Certificate of Licensure P-4713

I.Q. CUSTOM CONSTRUCTION
8410 Edmiston Rd.
Vl. Mls., NC 28173 Ph. 704-668-5936

THE HAWTHORN
HOUSE PLAN

MONOSLAB PLAN

Project

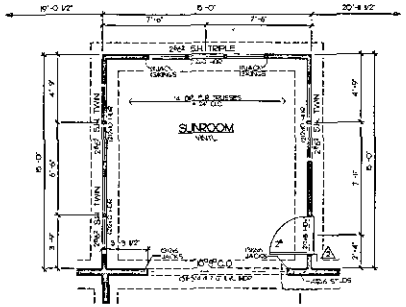
Sheet Title

Drawn By: S. BROOKS
Date: 04-13-15
REV: 05-04-15
Scale:

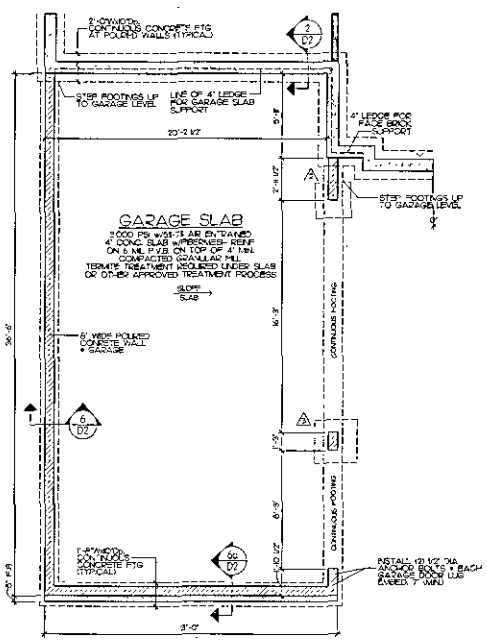
FOUNDATIONS

Sheet

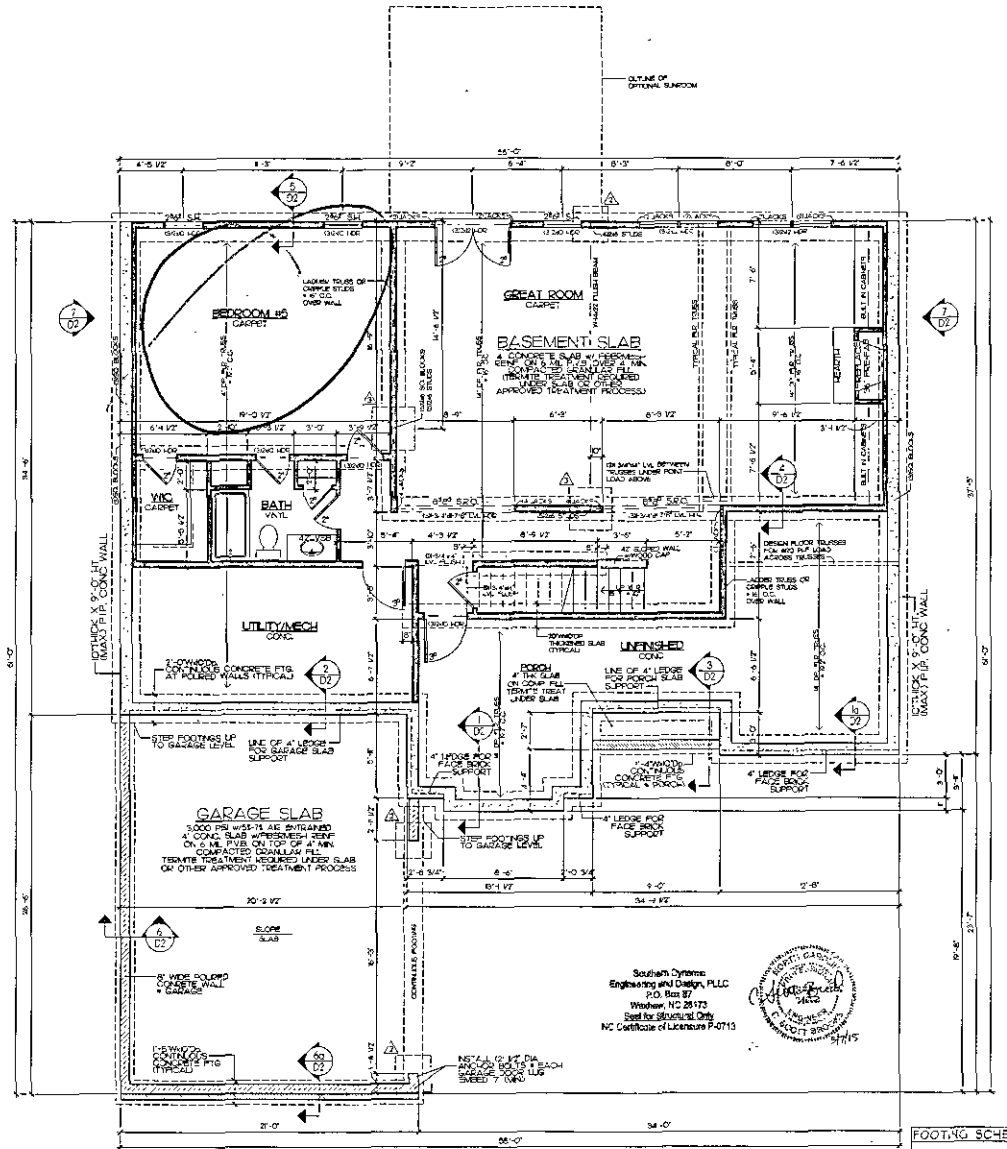
2



OPT. SUNROOM



OPT. 3 CAR GARAGE



FOUNDATION PLAN / BASEMENT

FOOTING SCHEDULE

1	24"x24"x12" Dp POURED CONC FOOTING
2	30"x30"x12" Dp POURED CONC FOOTING w/ #4's @ 24" O.C. EA WAY
3	36"x36"x12" Dp POURED CONC FOOTING w/ #4's @ 24" O.C. EA WAY
4	42"x42"x12" Dp POURED CONC FOOTING w/ #4's @ 24" O.C. EA WAY

I.Q. CUSTOM CONSTRUCTION
840 Edmiston Rd
Mt. Ulla, NC 28125 Ph. 704-660-5738

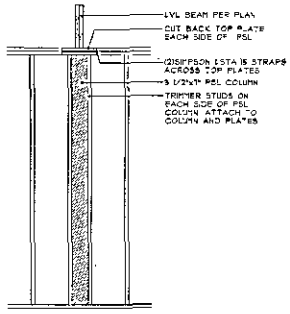
Project: THE HAWTHORN HOUSE PLAN

Sheet Title: BASEMENT FOUNDATION

Drawn By	S. BROOKS
Date	04-13-15
REV	05-06-15
Date	

10-WTHORN

Sheet: 2 of 6

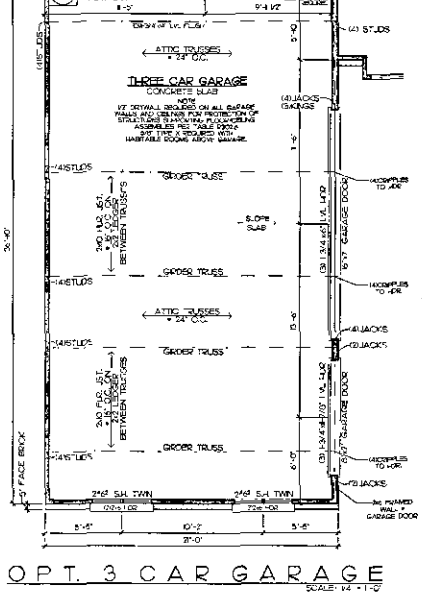


TYPICAL PSL
COLUMN DETAIL
SCALE: 1/2" = 1'-0"

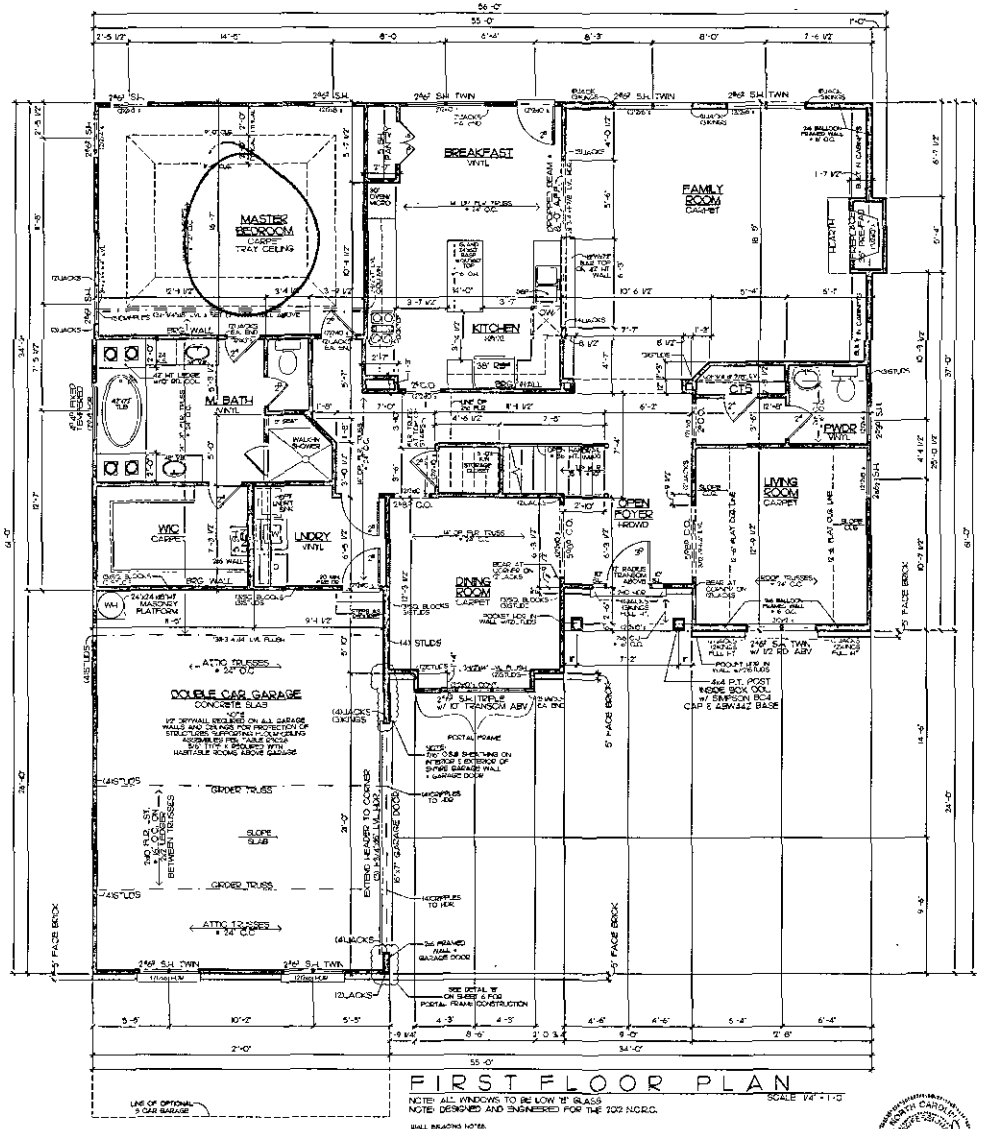
NOTE:
WINDOW* PAN, BLOCKING AND CRIPPLE/STOPPING AT ALL CONCEALED FLOOR & WALL SPACES TO COMPLY.

GENERAL NOTES:
1. ALL FRAMED WALLS THAT FORM THE THERMAL BARRIER OF A HOUSE SHALL HAVE INSULATION INSTALLED (FREE FROM GAPS, VOIDS, OR COMPRESSION) AND SHALL BE ENCLOSED ON ALL SIDES WITH A 2X6 MATERIAL OR AN APPROVED AIR BARRIER MATERIAL. THESE AREAS SHALL INCLUDE BUT NOT LIMITED TO, TUBS, SHOWERS, STAIRS, FIREPLACE UNITS AND THE UNHEATED SIDE OF ALL KNEE WALLS.

2. ALL SILLS OF OPERABLE WINDOWS LOCATED THAN 72" ABOVE GRADE OR WALKING SURFACES BELOW MUST HAVE A SILL AT OR 24" MINIMUM ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. IF THE SILL IS LESS THAN 24" THE WINDOW MUST MEET THE REQUIREMENTS OF SECTION R612 OR R324



OPT. 3 CAR GARAGE
SCALE: 1/4" = 1'-0"



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

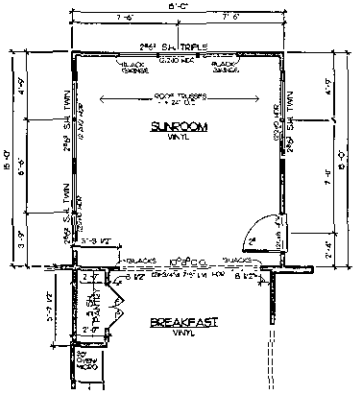
NOTE: ALL WINDOWS TO BE LOW 'E' GLASS
NOTE: DESIGNED AND ENGINEERED FOR THE 2012 N.C.R.C.

WALL BRACING NOTES:
1. THE LATERAL BRACING REQUIREMENTS FOR THIS PLAN HAVE BEEN ACCEPTED FOR UTILIZING AN ENGINEERED DESIGN AS PERMITTED IN R602.10.4 OF THE 2012 NORTH CAROLINA RESIDENTIAL CODE WITH AMENDMENTS. L.B.D.S. APPROVED.

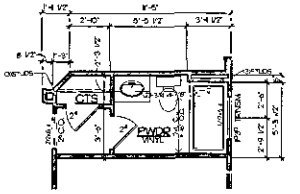
2. ALL PERIMETER WALLS ARE TO BE FULLY SHEATED WITH A MINIMUM 7/16" O.S.B. AND 4" ADHED TO THE WALL PERIMETER EVERY 8'-1/4 BW. 0.5x2 SYP WALL AT 4'-0" O.C. SPACING AT PANEL EDGES AND 8" O.C. AT INTERMEDIATE SUPPORTS.

3. INSTALL BLOCKING ALONG O.S.B. PANEL EDGES, FASTEN PANEL EDGES TO BLOCKING AT 3" O.C. AND 6" O.C. AT INTERMEDIATE FRAMING WHEN LESS THAN 50% BUT GREATER THAN 25% OF THE WALL IS SHEATHED.

4. SHEATH ALL GABLE END WALLS WITH 7/16" O.S.B.



OPT. SUNROOM
SCALE: 1/4" = 1'-0"



OPT. FULL BATH
SCALE: 1/4" = 1'-0"

HANGER SCHEDULE FOR JOISTS AND BEAMS	
MEMBER (NUMBER OF PLY'S)	HANGER
2x8	LUS28
2x10	LUS210
2x12	LUS210
2-2x8	HUS28-2
2-2x10	HUS210-2
2-2x12	HUS212-2
3-2x8	LUS28-3
3-2x10	LUS210-3
3-2x12	HU2 2-3 MIN
2-1 3/4" x 9 1/4" LVL	HGUS410
2-1 3/4" x 9 7/8" LVL	HGUS412
2-1 3/4" x 11" LVL	HGUS414
2-1 3/4" x 14" LVL	HGUS414
2- 3/4" x 9 1/4" LVL	HGUS54
2- 3/4" x 11 7/8" LVL	HGUS54
3-1 3/4" x 9 1/4" LVL	HGUS5510
3-1 3/4" x 9 7/8" LVL	HGUS5512
3- 3/4" x 11" LVL	HGUS5514
3- 3/4" x 14" LVL	HGUS5514
3- 3/4" x 16" LVL	HGUS5514
4-1 3/4" x 9 1/4" LVL	HGUS7510
4-1 3/4" x 9 7/8" LVL	HGUS7512
4- 3/4" x 11" LVL	HGUS7514
4- 3/4" x 14" LVL	HGUS7514
4-1 3/4" x 16" LVL	HGUS7514



Southern Dynamic
Engineering and Design, PLLC
P.O. Box 87
Waxhaw, NC 28173
Seal for Structural Only
NC Certificate of Licensure P-0713

SQUARE FOOTAGE

(HEATED)	
FIRST FLOOR:	2,004 SF
SECOND FLOOR:	1,295 SF
TOTAL HEATED:	3,300 SF
BASEMENT:	2,019 SF
GARAGE:	562 SF
OPT. SUNROOM:	225 SF
OPT. BONUS RM:	858 SF
OPT. 3 CAR	280 SF

I.Q. CUSTOM CONSTRUCTION
840 Edmonston Rd.
Mt. Ulla, NC 28125 Ph. 704-660-5738

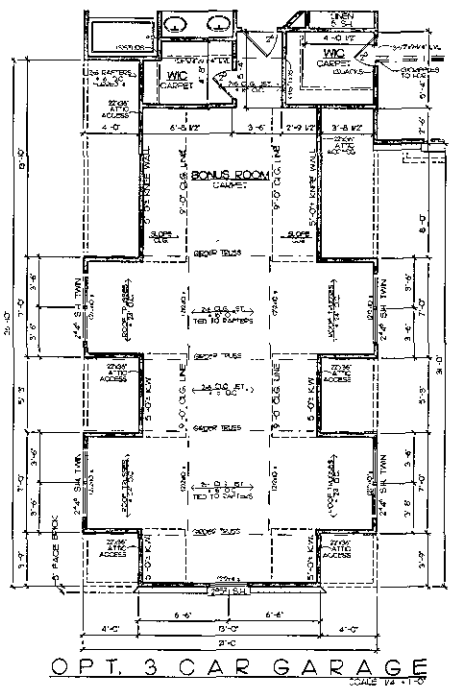
Project: THE HAWTHORN HOUSE PLAN

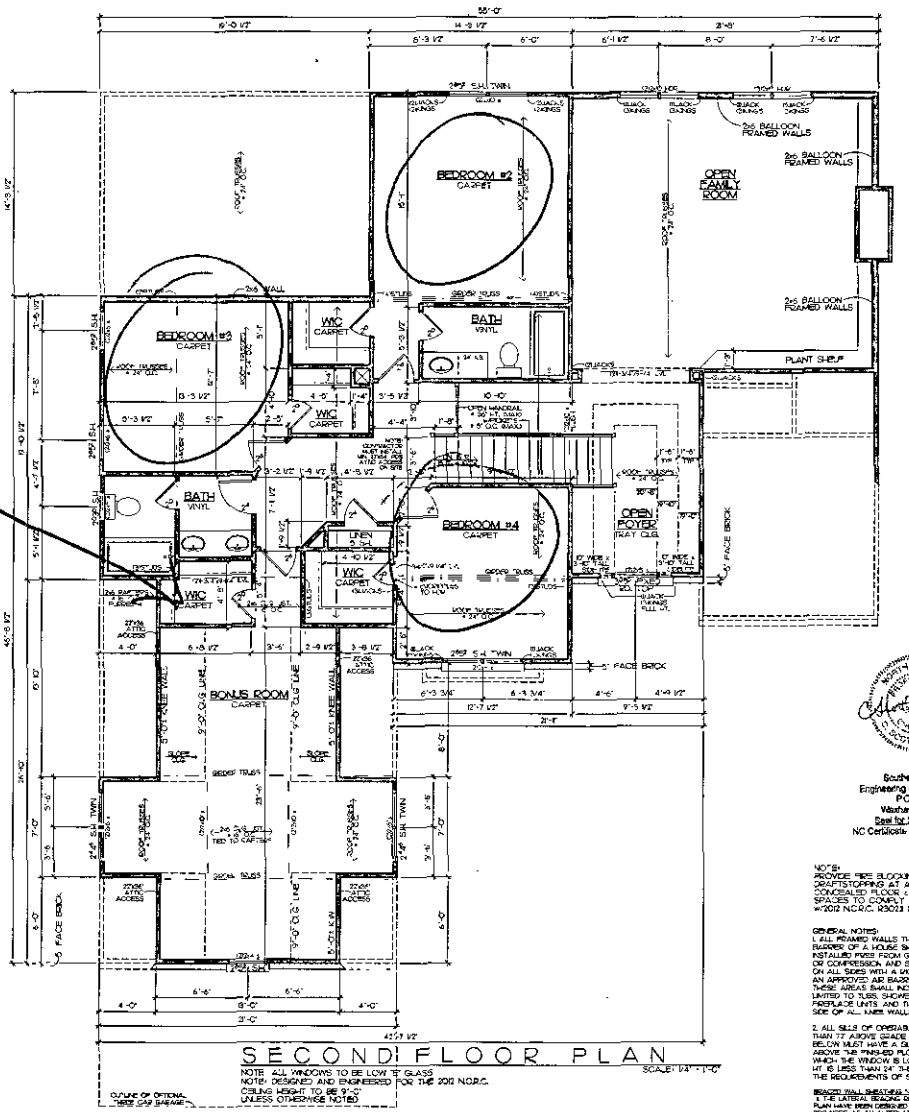
Sheet Title: FIRST FLOOR PLAN

Drawn by: S. BROOKS
Date: 04-13-15
Rev: 05-06-15
Date:

Sheet No: 3

See Attached





Southern Dynamic
Engineering and Design, PLLC
P.O. Box 87
Waxhaw, NC 28173
Seal for Structural Only
NC Certificate of Licensure P-0713

NOTE:
PROVIDE FIRE BLOCKING AND DRAFTSTOPPING AT ALL CONCEALED FLOOR & WALL SPACES TO COMPLY w/2012 N.C.R.C. R302.11 & R302.12

GENERAL NOTES:
1. ALL FRAMED WALLS THAT FORM THE THERMAL BARRIER OF A HOUSE SHALL HAVE INSULATION INSTALLED FREE FROM GAPS, VOIDS, OR COMPRESSION AND SHALL BE ENCLOSED ON ALL SIDES WITH A VAPOR MATERIAL OR AN APPROVED AIR BARRIER MATERIAL. THESE AREAS SHALL INCLUDE BUT NOT LIMITED TO TUBS, SHOWERS, STAIRS, FIREPLACE UNITS, AND THE UNHEATED SIDE OF ALL KNEE WALLS.

2. ALL SILLS OF OPERABLE WINDOWS GREATER THAN 72" ABOVE GRADE OR WALKING SURFACE BELOW MUST HAVE A SILL HT. OF 24" MINIMUM ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. IF THE SILL HT. IS LESS THAN 24" THE WINDOW MUST MEET THE REQUIREMENTS OF SECTION R612.3 OR R612.4

BRACED WALL SHEATHING NOTES:
1. THE LATERAL BRACING REQUIREMENTS FOR BRACED WALLS OF THIS PLAN HAVE BEEN DESIGNED PER SECTION R602.10 IMPLEMENTATION #1 OF THE 2012 NCRC AS AN ALTERNATIVE METHOD.

2. ALL PERIMETER WALLS ARE TO BE FULLY SHEATED WITH A MINIMUM 7/16" OSB AND ATTACHED TO THE WALL FRAMING STUDS WITH 6d (2"LONG) NAILS AT 6" O.C. SPACING AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.

3. INSTALL BLOCKING ALONG OSB PANEL EDGES. PASTENY PANEL EDGES TO BLOCKING AT 3" O.C. AND 1" O.C. AT INTERMEDIATE FRAMING WHEN USED THAN 3/4 BUT GREATER THAN 2/3 OF WALL IS SHEATHED.

4. SHEATH ALL GABLE END WALLS WITH 7/16" OSB.

5. FOR GARAGE WALL LINES, METHOD PFG IS TO BE USED IN ACCORDANCE WITH THE SECTION R602.10.3.4 AS SHOWN IN FIGURE R602.10.3.4.

I.Q. CUSTOM CONSTRUCTION
840 Edmiston Rd.
Mt. Ulla, NC 28125 Ph. 704-660-5738

Project: THE HAWTHORN
HOUSE PLAN

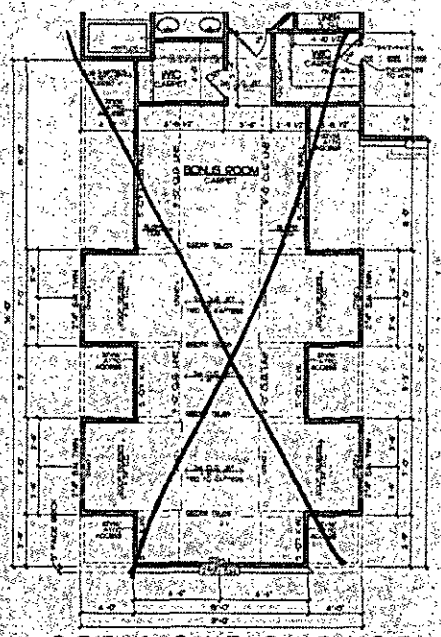
Sheet Title: SECOND FLOOR PLAN

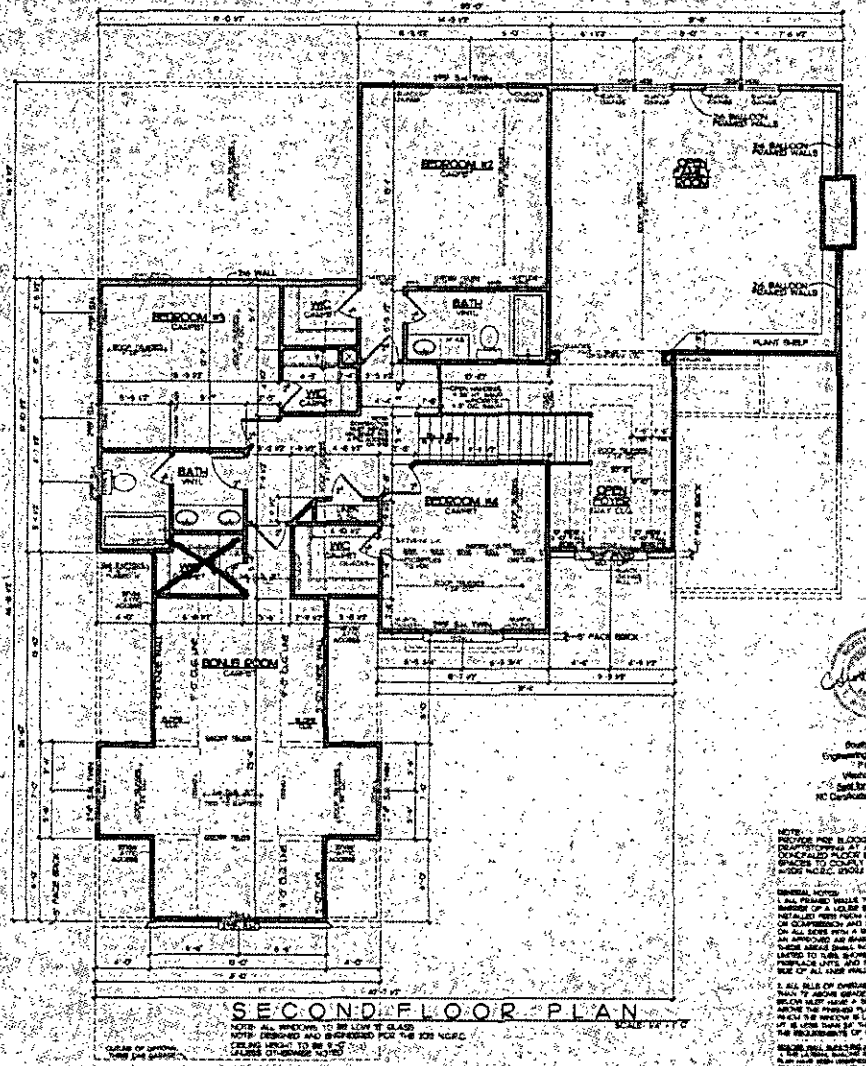
Drawn By: S. BROOKS
Date: 04-08-15
Rev: 05-06-15

Scale: 1/4"=1'-0"

Sheet: 4

For Lot #22 only: NO WIC in bonus room.





Southern Dynamic Engineering and Design, PLLC
PO Box 97
Waxhaw, NC 28173
Not for Structural Use
NC Certificate of Licensure P-0713

I.Q. CUSTOM CONSTRUCTION
340 Edmiston Rd.
Mt. Ulla, NC 28125 Ph. 704-660-5138

THE HAWTHORN
HOUSE PLAN
SECOND FLOOR PLAN

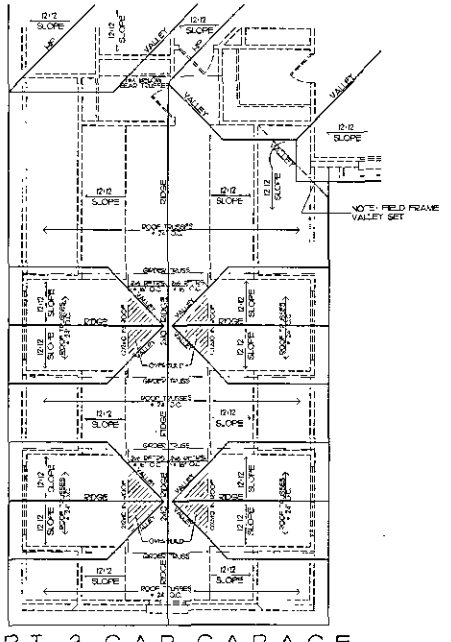
ROOF CONSTRUCTION:

1. ALL ROOF TRUSSES MUST BE BUILT IN ACCORDANCE WITH TRUSS MANUFACTURERS REQUIREMENTS. WHEN ROOF TRUSS MANUFACTURERS DO NOT PROVIDE THE REQUIRED CONNECTORS IT * THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ROOF TRUSS ENGINEER OR THE ENGINEER OF RECORD TO PROVIDE AN ADEQUATE CONNECTION
2. RAFTERS SHALL BE 2x6 * 16" O.C. FOR SHINGLES EXCEPT AS NOTED. THEY ARE TO BE CUT INTO HIPS RIDGES ETC. UNLESS NOTED OTHERWISE. TILE, SLATE AND OTHER HEAVY ROOF COVERINGS SHALL USE 2x8 RAFTERS * 16" O.C. UNLESS NOTED OTHERWISE
3. COLLAR TIES SHALL BE 2x4 * 48" O.C. AT RIDGES UNLESS NOTED OTHERWISE AND LOCATED A NOMINAL 3'-0" BELOW THE RIDGE. VAULTED CEILINGS REQUIRE SPECIAL COLLAR TIE DETAILS. SEE PLANS AS REQUIRED
4. A MINIMUM OF THREE (3) COLLAR TIES SHALL BE USED AT ALL RIDGES EVEN IF TWO (2) TIES MUST BE PUT ON ONE (1) SET OF RAFTERS.
5. ALL HIPS AND RIDGES ARE A SIZE LARGER THAN RAFTERS UNLESS NOTED OTHERWISE
6. 4x6 HOGS ON CEILING JOISTS OR RAFTERS ARE (9.5mm) LONG UNLESS NOTED OTHERWISE. RAFTERS MAY BE SPLICED OVER HOGS. SPLICE RAFTER HOGS ONLY AT A ROOF BRACE
7. GABLE END FRAMING MUST BE BRACED PARALLEL TO RIDGE WITH 1 PAIRS OF 2x4 DIAGONAL BRACES * MAX O.C. ALONG GABLE WALL TO INTERIOR CEILING JOISTS. BRACES TO BEAR ON 2x6 HOGS AND TO GABLE WALL AT APPROXIMATELY 45° HEIGHT OF GABLE WALL. BRACED SHALL BE AT APPROXIMATELY A 45° ANGLE. OTHER BRACING MAY BE USED IF IT MEETS WITH DESIGN ENGINEER'S APPROVAL
8. GENERAL GUIDELINES FOR DESIGNING ROOFS WITH FIBERGLASS SHINGLES AND 10 PSF LIVE LOAD ONLY
   - A. USE 2x6 RAFTERS * 16" O.C. (#2 SPRUCE PINE FIR RAFTERS). THE MAXIMUM ALLOWABLE SPAN SHALL BE 12'-0" MEASURED HORIZONTALLY. THIS SIZE AND SPAN IS BASED ON A DEFLECTION OF L/240 THAN L/180. USE TWO 12 2x6 HOGS AT RAFTER WITH TWO (2) 2x4 BRACES * 6'-0" MAXIMUM SPACING FOR SPANS OVER 12'-0". CARRY BRACES TO PARTITIONS OR BEAMS BELOW. NEVER BRACE RAFTER HOGS TO TWO (2) 2x6 HOGS ON CEILING JOISTS UNLESS SHOWN ON PLANS
   - B. CUT IN ALL RAFTERS, KING & QUEEN VALLEYS, ETC. WHICH ARE ONE SIZE LARGER THAN RAFTER SIZE. ALL BRACE LOADS MUST GO TO FOUNDATION WITH A TRUNK OF TWO 2x4 STUDS FLOWING FROM PARTITION PLATES TO BEAMS OR FOUNDATION BELOW. FOR ROOF FRAMING OF DIFFERENT MATERIAL AND LIVE LOAD - SEE DESIGN ENGINEER
9. CEILING JOISTS WHEN DIRECTED PARALLEL TO RAFTERS MUST BE NOTCHED TO RAFTERS AND NAILED WITH THREE (3) 16d NAILS AT EACH RAFTER. IF A KNEEWALL IS USED AND CEILING JOISTS CANNOT TOUCH RAFTERS, THEN RAFTERS MUST BE BRACED TO THE CEILING JOISTS USING FRAMING CONSTRUCTION. RESIDENTIAL NOTE #6
10. ROOF PLAN LEGEND
    - A. CIRCLE INDICATES LOCATION OF ROOF BRACE POINT (RAFTER LEVEL)
    - B. ARROW AWAY FROM BRACE POINT INDICATES DIRECTION OF ROOF BRACE TO PARTITION BEAM OR OTHER BRACE POINT BELOW
    - C. ARROW INTO BRACE POINT INDICATES A VERTICAL OR ALMOST VERTICAL ROOF BRACE TO PARTITION BEAM OR BRACE POINT BELOW
    - D. ALL ROOF BRACES ARE TWO (2) 2x4 NAILED WITH 16 NAILS * AT O.C. VERTICAL ROOF TOP TO BOTTOM UNLESS NOTED OTHERWISE. BRACES LONGER THAN 10'-0" MUST BE BRACED HORIZONTALLY IN TWO (2) DIRECTIONS AT MIDHEIGHT
11. MAXIMUM SPACING OF ROOF BRACES IS TO BE AS FOLLOWS.
    - A. FOR 2x4 HOG ..... 4'-0" O.C.
    - B. FOR 2x6 HOG ..... 6'-0" O.C.
12. ROOF DECKING SHALL BE 7/16" OSB (TYP.)

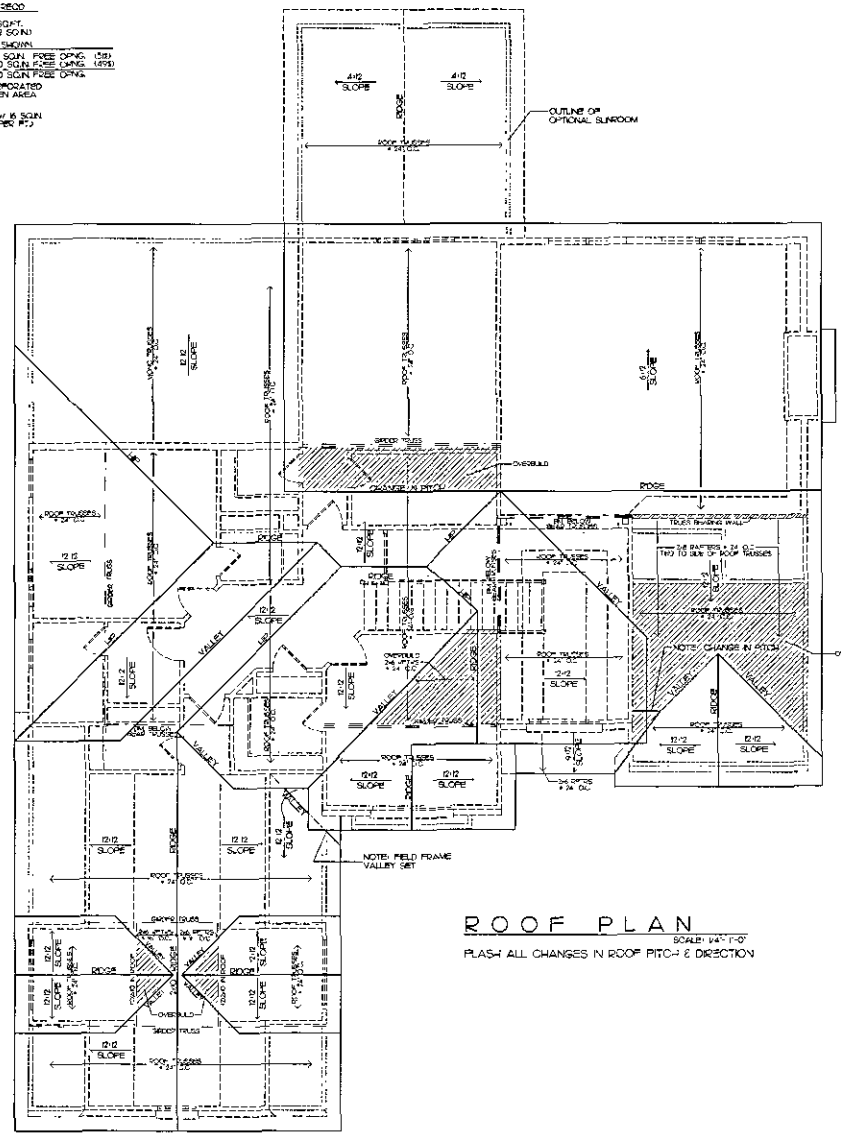
ATTIC
2456 SQ. FT.
ATTIC VENTILATION REQD
2456 SQ. FT. / 300 = 8.19 SQ.FT. (1179.3 SQ.IN.)
ATTIC VENTILATION SHOWN
RIDGE VENTS = 960 SQ.IN. FREE OPNG. (58)
SOFFIT VENTS = 960 SQ.IN. FREE OPNG. (49%)
TOTAL = 1920 SQ.IN. FREE OPNG.

* 100" - 2 3/4" W PERFORATED = 5 SQ.IN. FREE OPEN AREA PER FT.)

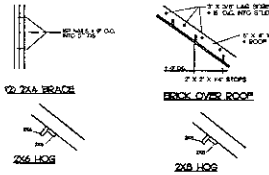
** 60" = RIDGE VENT w/ 16 SQ.IN. FREE OPEN AREA PER FT.)



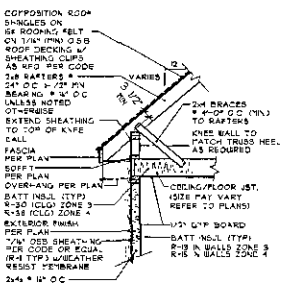
OPT. 3 CAR GARAGE
SCALE: 1/4" = 1'-0"



ROOF PLAN
SCALE: 1/4" = 1'-0"
FLASH ALL CHANGES IN ROOF PITCH & DIRECTION



DETAILS
NO SCALE



TYPICAL RAFTER TIE DETAIL
SCALE: 1/2" = 1'-0"

Southern Dynamic Engineering and Design, PLLC
P.O. Box 87
Waxhaw, NC 28173
Seal for Structural Only
NC Certificate of Licensure P-0713

I.Q. CUSTOM CONSTRUCTION
840 Edmiston Rd.
Mt. Ulla, NC 28125 Ph. 704-660-5738

THE HAWTHORN
HOUSE PLAN

ROOF PLAN

Drawn By: S. BROOKS
Date: 05-04-15
Job:

IQHWTHNP
Sheet
5

RESIDENTIAL FOUNDATIONS:

1. ALL CONTINUOUS WALL FOOTINGS ARE 14" WIDE x 8" DP FOR TWO (2) STORY HOUSES AND FOOTINGS FOR THREE (3) STORY WALLS SHALL BE 24" WIDE x 12" DP UNLESS OTHERWISE NOTED. MINIMUM CLEAR SPAN IS TO BE 4'-0" NOMINAL O.C. SPACING OF PIERS. ALL GIRDER AND BEAM SPLICES ARE TO FALL ONLY ON PIERS
2. ALL INTERIOR PIERS ARE 8" x 24" CITE UP TO A MAXIMUM HEIGHT OF 32". ALL PIERS OVER 32" HIGH MUST BE FILLED WITH TYPE S MORTAR. MAXIMUM HEIGHT FOR 8" x 16" FILLED PIER IS 4'-0". PIERS LARGER THAN 8" x 16" ARE NOTED ON PLANS AND MUST BE FILLED WITH TYPE S MORTAR. PIER CAP IS TO BE 4" OF SOLID MASONRY
3. FOOTINGS FOR 8" - 4" PIERS ARE 2'-0" - 2'-6" x 8" UNLESS NOTED OTHERWISE. REFERENCING TO BE AS NOTED ON PLANS
4. CONCRETE SHALL BE 3000 PSI IN 28 DAYS UNLESS NOTED OTHERWISE. NO CONCRETE SHALL BE POURED IN TEMPERATURES BELOW 40 DEGREES FAHRENHEIT UNLESS HEAT TO BE PROVIDED DURING THE CURING FOR TWO DAYS. THE BOTTOM OF ALL FOOTINGS MUST BE A MINIMUM OF 12" BELOW GRADE
5. ALL REBAR SHALL BE GRADE 60 UNLESS NOTED OTHERWISE
6. BASEMENT SLABS ARE SELF-SUPPORTING SLABS REINFORCED ACCORDING TO DETAILS AND DO NOT REQUIRE PIER SUPPORT. SOIL MUST ONLY BE CAPABLE OF SUPPORTING CONCRETE UNTIL IT HARDENS AND DEVELOPS STRENGTH
7. CAISSON FOUNDATIONS SHALL BE A MINIMUM OF 12" DIAMETER DRILLED UNREINFORCED CONCRETE CAISSONS. CAISSON SHALL EXTEND TO A MINIMUM DEPTH PROVIDING 5'-0" PENETRATION INTO GOOD ORIGINAL GROUND AND CAPABLE OF EIGHT (8) TONS SUPPORT CAPACITY BASED ON THE SIZE AND FOOTPRINT OF THE CAISSON BEING USED. DEPTH OF DRILLING IS LIMITED TO 15'-0". HOWEVER, NO POOR MATERIAL GREATER THAN 8'-0" OR DEPTH IS SUITABLE FOR A CAISSON FOUNDATION. CAISSONS CANNOT BE USED IF WATER RISES IMMEDIATELY INTO A DRILLED HOLE. PILES SHALL HAVE TO BE USED IN SUCH CASES
8. 8" MINIMUM DIAMETER TREATED WOOD PILES WITH A MINIMUM DESIGN LOAD OF EIGHT (8) TONS ARE USED FOR ALL FOUNDATIONS WITH UNSUITABLE SOIL DEEPER THAN 15'-0" OR THE WATER IN DRILLED CAISSON HOLES CAVE PER NORTH CAROLINA OR SOUTH CAROLINA CODE
9. SIZES AND REINFORCING FOR FOOTING CAPS OVER CAISSONS OR PILES SHALL BE AS SHOWN ON PLANS
10. CHIMNEY FOOTINGS HAVE A MINIMUM OF 12" PROJECTION LARGER THAN FOOTPRINT BY 12" THICK
11. FOUNDATION WALL BACKFILLED WITH DIRT BEFORE SUPPORTS STRUCTURAL FRAMING SHALL BE CONSTRUCTED AS FOLLOWS
   A. FOR EARTH FILL UP TO 4'-0" MAXIMUM HEIGHT - USE 12" CMU OR 8" BRICK WITH SYTHEMIC RESILIENT WATERPROOFING ON EXTERIOR. FOOTING TO BE 12" x 24" OR AS NOTED ON PLAN
   B. FOR EARTH FILL 4'-0" TO 7'-0" MAXIMUM HEIGHT - USE 12" x 24" CMU FOOTING WITH 2-#5 DOWELS HOOKED IN FOOTING AND PROJECTING 24" ABOVE FOOTING. USE 12" CMU WALLS WITH #4 BARS 8" O.C. VERTICAL BARS ARE TO BE LOCATED IN MOST NON-DIRT FILL FACE SIDE. ALL SPACES 24" AND LESS BETWEEN HORIZONTAL REINFORCING EVERY 8" 'X' CMU JOINTS. INSTALL ONE (1) #4 REBAR WITH 24" LEGS IN EVERY OTHER JOINT HORIZONTALLY AT ALL CORNERS (8', 83' CORNER BARS 4" O.C. VERTICALLY. FILL ALL OPEN CELLS OF CMU WITH 3000 PSI PEA GRAVEL CONCRETE MIX. INSTALL WATERPROOF SYSTEME REFLEX OR EQUAL
   C. IN LIEU OF THE PRECEDING DESIGN, BASEMENT WALLS MAY BE CONSTRUCTED IN ACCORDANCE WITH ENDS OF THE CODE. HOWEVER 24" x 24" X3 CORNER PIERS SHALL BE INSTALLED 8'-0" O.C. VERTICALLY REGARDLESS OF THE WALL HEIGHT. ERECT ALL FRAMING BEFORE BACKFILLING
12. WHERE FULL-HEIGHT FOUNDATION OR PIER IS NOT USED, FLOOR FRAMING OR CONCRETE SLAB MUST BE PROVIDED BETWEEN JOIST + 3'-0" O.C. FOR NOT LESS THAN 3'-0" (4) JOIST SPACINGS OR FROM WALL
13. FOR RETAINING WALLS WITHOUT FRAMING SEE SPECIAL DESIGNS ON DRAWINGS
14. ALL GARAGE DOOR SIDE PANELS (WOOD LESS THAN THE AMOUNT ALLOWED BY CURRENT CODE STANDARDS SHALL BE CONSTRUCTED PER DETAIL ON PLANS
15. INTERIOR STEMWALL FOOTINGS WHICH OCCUR IN BASEMENTS TO BE 20" WIDE x 8" DP AND SLABS ON GRADE FOOTINGS ARE 16" WIDE x 8" DP UNLESS NOTED OTHERWISE. THICKENED SLAB FOOTINGS ARE REQUIRED UNDER ALL BEARING WALLS
16. SHALLOW FOUNDATIONS ARE DESIGNED FOR AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD IF ANY SOILS ARE FOUND TO BE UNSUITABLE FOR THIS FRAMING CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING SOIL TESTING TO ENSURE THAT THE BEARING CAPACITY OF THE SOIL TESTS ON EXCEEDS THIS VALUE. ALL FILL IS TO BE COMPACTED TO 95% DENSITY AS MEASURED BY THE STANDARD PROCTOR TEST (ASTM D1557)
17. ALL SOILS AND ALL UNDER FLOORS AND/OR WITHIN OR UNDER BUILDINGS SHALL HAVE PRECONSTRUCTION SOIL TREATMENT FOR TERMITE PROTECTION AGAINST SUBTERRANEAN TERMITES. COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY
18. ALL FOOTING EXCAVATIONS SHALL BE NEAT, STRAIGHT AND LEVEL IN THE PROPER ELEVATIONS TO RECEIVE THE CONCRETE. EXCESSIVE VARIATIONS IN THE DIMENSIONS OF FOOTINGS OR SLABS WILL NOT BE PERMITTED. REINFORCING STEEL AND ANY BOLTS SHALL BE ACCURATELY PLACED AND SUPPORTED TO MAINTAIN THEIR POSITION DURING CONCRETE POURING. EDGE FORMS SHALL BE USED FOR CONCRETE THAT WILL BE EXPOSED
19. ALL SLAB PENETRATIONS ARE TO BE THE SHORTEST OF TWO CONSTRUCTION. PENETRATIONS INTERFERING WITH REINFORCING SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO THE PLACEMENT OF CONCRETE
20. ELEVATION DIFFERENCES BETWEEN THE BOTTOM OF ADJACENT FOOTINGS SHALL BE NO MORE THAN 1/2 THEIR HORIZONTAL DISTANCE LESS ONE FOOT. DIFFERENTIAL HEIGHTS BETWEEN FOOTINGS CAN BECOME EXCESSIVE WHERE A PIER FOOTING OR GARAGE FOOTING IS NEXT TO A BASEMENT WALL FOOTING

MATERIALS SPECIFICATIONS

CONCRETE GENERAL NOTES:

1. EXCEPT WHERE DIMENSIONS NOTED FOR ALL CONCRETE. THE PROPORTION OF CEMENT AGGREGATE AND WATER TO ATTAIN REQUIRED PLASTICITY AND COMPRESSIVE STRENGTH SHALL BE IN ACCORDANCE WITH ACI 318 CODE. CONCRETE SHALL BE 3000 PSI IN 28 DAYS FOR FOOTINGS AND 3000 PSI FOR SLABS, BEAMS AND GIRDERS UNLESS NOTED OTHERWISE
2. BEFORE PLACING CONCRETE ALL DEBRIS, WATER AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE PLACES TO BE OCCUPIED BY THE CONCRETE. THE PLACING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318 AND ASTM REQUIREMENTS. CONCRETE SHALL BE DEPOSITED AS NEARLY AS POSSIBLE FROM THE FACE TO FORMS AND DEPOSITED AS NEARLY AS POSSIBLE TO ITS FINAL POSITION TO AVOID SEGREGATION DUE TO REHANDLING. CONCRETE TO BE SPADED AND WORKED BY HAND AND VIBRATED TO ASSURE CLOSE CONTACT WITH ALL SURFACES OF FORMS AND REINFORCING STEEL, AND FLOATED OFF AT PROPER GRADE TO RECEIVE FINISH. ALL CONCRETE SHALL BE PLACED UPON CLEAN, DAMP SURFACES. VIBRATION SHALL BE APPLIED DIRECTLY TO THE CONCRETE AND SHALL BE SUFFICIENT TO CAUSE FLOW OF SETTLEMENT BUT NOT LONG ENOUGH TO CAUSE SEGREGATION OF THE MIX
3. CONSTRUCTION JOINTS SHALL BE LOCATED IN ACCORDANCE WITH ACI 301. ALL REINFORCING STEEL SHALL BE CONTINUOUS ACROSS JOINTS. IN SLABS ON GRADE, SAW CONTRACTION JOINTS SHALL NOT BE OVER 30'-0" CENTER TO CENTER EACH WAY. JOINTS SHALL BE SAWN A DEPTH OF ONE-FOURTH OF THE SLAB THICKNESS. SAWING OF THE JOINTS SHALL COMMENCE AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELING
4. CONCRETE MIXER DISPENSED, SHALL HAVE A TEMPERATURE NOT BELOW 50° F AND NOT ABOVE 90° F. THE METHODS AND RECOMMENDED PRACTICES AS DESCRIBED IN ACI 301 SHALL BE FOLLOWED FOR COLD WEATHER CONCRETING AND ACI 305 FOR HOT WEATHER CONCRETING
5. REINFORCING STEEL BARS SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A305 AND/OR A496 AND FORMED OF ASTM A48-76 GRADE 60 STEEL. 4#10 MIN. FABRIC REINFORCING TO BE ASTM A185 STEEL WIRE. ACCESSORIES SHALL CONFORM TO THE CRSI MANUAL OF STANDARD PRACTICE. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED OVER REINFORCING BARS
   A. EXPOSED TO EARTH 3"
   B. EXPOSED TO WEATHER #1/2"
   C. SLABS NOT EXPOSED TO WEATHER 3/4"
   D. BEAMS AND COLUMNS #1/2"

MASONRY GENERAL NOTES

1. MASONRY WALLS ARE TO BE THE SIZES AND IN THE LOCATIONS SHOWN ON THE PLANS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF ACI 530
2. HOLLOW LOAD BEARING UNITS - ASTM C90 MADE WITH LIGHTWEIGHT OF NORMAL WEIGHT AGGREGATES GRADE N-I (NOT SUITABLE FOR EXTERIOR WALLS). CONCRETE BRICK - GRADE N-I OR S-II UNITS SHALL BE PROVIDED FOR OTHER LOAD BEARING WALLS OR PARTITIONS
3. CONCRETE MASONRY UNITS - ASTM C55 MADE WITH LIGHTWEIGHT OF NORMAL AGGREGATES GRADE N-I OR S-I EXCEPT THAT BRICKS EXPOSED TO WEATHER SHALL BE N-I
4. MORTAR - ASTM C270-76, TYPE S PROPORTIONED PORTLAND CEMENT-LIME MIX WHICH SHALL NOT CONTAIN ANY NON-CEMENTITIOUS FILLERS OR ADDITIVES WITH NOT MORE THAN THREE (3) PARTS SAND PER ONE (1) PART MIX
5. REINFORCING STEEL - ASTM A615 GRADE 60 STEEL DEFORMED BARS WHERE INDICATED ON THE PLANS. UNLESS NOTED, REINFORCING BARS ARE INSTALLED IN THE CELLS OF CONCRETE MASONRY UNITS THEY SHALL BE SECURED WITH WIRE TIES AT INTERVALS NOT EXCEEDING 24" O.C. TO MAINTAIN THE BARS LOCATION IN THE CELL. THE TOLERANCE FOR SPACING OF VERTICAL BARS IS ±3" ALONG THE LENGTH OF THE WALL. THE TOLERANCE FOR THE DISTANCE BETWEEN THE FACE OF THE CONCRETE MASONRY UNIT AND THE CENTER OF THE BAR SHALL NOT EXCEED ±1/2"
6. MORTAR PROTECTION SHALL BE LESS THAN 1/2". A PROTRUSION OF 1/2" OR GREATER MUST BE REMOVED BEFORE GROUTING
7. HORIZONTAL JOINT REINFORCEMENT - ASTM A82 FABRICATED FROM COLD DRAWN STEEL WIRE AND NOT ZINC COATED (A-1) ASTM A1. SHALL CONSIST OF TWO OR MORE LONGITUDINAL WIRES OF 3/16" IN DIAMETER WITH WELD CONNECTED CROSS WIRE OF 1/8" IN DIAMETER AT A MAXIMUM OF 16" O.C. JOINT REINFORCEMENT IS TO BE INSTALLED IN EVERY OTHER COURSE AND IN THE FIRST TWO (2) COURSES AT THE BOTTOM AND TOP OF WALL OPENINGS AND SHALL EXTEND NOT LESS THAN 24" PAST THE OPENING. SPLICES SHALL OVERLAP NOT LESS THAN 6"
8. EXECUTION - MASONRY UNITS SHALL BE LAID IN A RUNNING BAND PATTERN UNLESS NOTED OTHERWISE. THE WALLS SHALL BE CARRIED UP LEVEL AND PLUMB WITHIN THE TOLERANCES SPECIFIED IN ACI 530-1-85, SECTION 3.3.3.2. IF NONSTANDARD DIMENSIONS ARE ENCOUNTERED, BLOCK SHALL BE CUT WITH A MASONRY SAW TO FIT, NOT BY STRETCHING OR SHRINKING JOINTS. UNFINISHED WORK SHALL BE STEPPED BACK FOR TOOTHING WITH NEW WORK. TOOTHING WILL NOT BE PERMITTED EXCEPT WHERE SPECIFICALLY APPROVED. DAMAGED UNITS ARE TO BE CUT OUT AND NEW UNITS SET IN PLACE
9. THE HOLLOW CELLS AND BOND BEAM BLOCKS OF REINFORCED MASONRY WALLS ARE TO BE FILLED WITH ASTM C476-76, GROUT OR MIX (MASONRY MIX WITH MINIMUM COMPRESSIVE STRESS OF 3000 PSI

FRAMING CONSTRUCTION - OTHER THAN ROOF:

1. CRAWL GIRDERS AND BAND WITH 4" CURTAIN WALL AND PIER CONSTRUCTION SHALL BE THREE (3) 2x10 #2 SYP GIRDERS AND TWO (2) 2x10 #2 SYP BAND UNLESS NOTED OTHERWISE. MAXIMUM CLEAR SPAN IS TO BE 4'-0" NOMINAL O.C. SPACING OF PIERS. ALL GIRDER AND BAND SPLICES ARE TO FALL ONLY ON PIERS
2. TO AVOID OBJECTIONABLE CRACKING IN FINISHED HARDWOOD FLOORS OVER ANY GIRDERS USE THE FOLLOWING PROCEDURE
   A. NAILING
      a) ALL FLOOR JOIST MUST BE TOENAILED TO THEIR SUPPORT GIRDERS WITH A MINIMUM OF THREE (3) 8d NAILS AT EACH END. LARGER NAILS WILL SPLIT AND RENDER THE TOENAIL INEFFECTIVE. NO END NAILING THROUGH THE GIRDER OR BAND IS PERMITTED.
      b) IF DROPPED GIRDERS ARE USED, END EAR ALL JOISTS AND SIDE NAIL EACH WITH A MINIMUM OF THREE (3) 8d NAILS AT EACH END OF EACH JOIST. LEDGER STRIPS NAIL WITH THREE (3) 8d NAILS AT EACH JOIST END, SPACED 8" APART.
      c) WHERE PLATFORM FRAMING IS BUILT UP GIRDERS WITH TWO (2) ROWS OF 16d NAILS STAGGERED + 32" O.C. BY DOWN FROM THE TOP AND 2" UP FROM BOTTOM WITH THREE (3) 8d NAILS AT EACH END OF EACH PIECE IN THE JOIST THROUGH THE RIPPERS MAKING UP THE PLATFORM GIRDER
      d) THE NAILING PATTERN WILL INSURE A TIGHT FLOOR FROM OUTSIDE OF THE HOUSE TO OUTSIDE SO THAT WHEN THE FRAMING SHRINKS DURING THE FIRST HEATING SEASON THE SHRINKAGE WILL BE IMPOSSIBLE DISTRIBUTED OVER THE ENTIRE FLOOR. IF THIS CAREFUL NAILING PATTERN IS OMITTED THEN THE SHRINKAGE WILL ACCUMULATE OVER THE GIRDERS AND AN OBJECTIONABLE CRACK WILL DEVELOP IN THE FINISHED HARDWOOD FLOOR OVER THE GIRDER LINE
   B. AT ALL GIRDERS WHERE THE JOISTS CHANGE DIRECTION INSTALL BRIDGING 4'-0" O.C. FOR A MINIMUM OF SIX (6) JOIST SPACES BEYOND ANY JOIST DIRECTION CHANGE. THIS WILL ASSURE SHRINKAGE DISTRIBUTION OVER THE FLOOR AND NOT LET IT ACCUMULATE AT THE GIRDER
   C. HEADS MUST BE SOLID BLOCKING THROUGH BOLTED TO THE STEEL BEAM WITH JOISTS TOENAILED OR ATTACHED TO THE BEAM WITH METAL HANGERS UNDER ANY HARDWOOD FLOORS THAT RUNS OVER A STEEL BEAM SUPPORTING FLOOR JOISTS. THIS CONDITION OFTEN EXISTS OVER BASEMENT AREAS
3. ALL OTHER LUMBER MAY BE SPRUCE #2 UNLESS NOTED OTHERWISE
4. STEEL BEAMS FLAT HAVE FIVE (5) 2x4 STUD JACKS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE ON PLAN. BRAND TEST MAYS THREE (3) 2x4 STUD JACKS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE. ROOF TRUSS GIRDERS MUST HAVE THREE (3) 2x4 STUD JACKS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE. ALL STUDS MUST BE NAILED TOGETHER WITH TWO (2) VERTICAL ROWS OF 10d NAILS AT 8" O.C. UNLESS NOTED OTHERWISE
5. FASCIA AND RAFTER TAILS FOR OPEN EAVE HOME ANCHORS ARE ATTACHED TO HEADER WITH 2 ROWS OF 1/2"Ø x 4" LONG LAG BOLTS AT 16" O.C.
   A. WHERE STRUCTURAL STEEL BEAMS WITH BOTTOM PLATES ARE USED TO SUPPORT MASONRY THE BOTTOM PLATE MUST EXTEND THE FULL LENGTH OF STEEL BEAM. THIS PROVIDES SUPPORT TO THE ENDS OF THE PLATE
   B. WHERE STEEL BEAM BEARS ON BRICK OR CONCRETE THE BEAM MUST BE TEMPORARILY SHORED PRIOR TO LAYING THE MASONRY. THE SHORING MAY BE REMOVED FIVE (5) DAYS AFTER LAYING THE MASONRY
6. ALL BRICK VENEER OVER LOWER ROOFS (BRICK CURVES) MUST HAVE A 4"x4"x5/16" STEEL ANGLE LAG SCREWED TO ADJACENT STUD WALL WITH STAGGERED STEEL BRICK STOPS TO PREVENT SLIPPAGE OF BRICK. ATTACH ANGLE WITH ROWS OF 1/2"Ø LAG SCREWS 8" O.C. INTO DOUBLE 2x4 STUDS OR DOUBLE 3x8 BLOCKING BETWEEN STUDS WITH JACK UNDER EACH END OF BLOCK. PLACE DOUBLE 2x6 RAFTERS UNDER THIS ROOF STARTING WITH THE 3RD OR 5TH RAFTER FROM EACH SIDE OF THE RIDGE. SPACE RAFTERS AT NOT TWO (2) ROWS OF 16d NAILS AT 12" CENTERS STAGGERED BETWEEN ROWS THE IS RAFTER TO THE NEXT MAXIMUM OVERHANG OF DOUBLE RAFTERS IS 8'-0". IF AN ENGINEERED TRUSS ROOF IS USED PLACE DOUBLE TRUSSES UNDER ALL BRICK CURVES WITH A MAXIMUM DEFLECTION OF L/600. MINIMUM BRICK TIE SPACING IS 24" O.C. WITH 3 VERTICAL ANGLES PER SECTION. ALL BRICK VENEER CONFORMS TO THE TIE SPACING IS UNTIED TO THREE (3) STORY STRUCTURES. ALL VENEER INSTALLATION IS TO BE IN ACCORDANCE WITH GUIDELINES PROVIDED BY THE BRICK ASSOCIATION
7. ALL RAFTER BRACING MUST HAVE TWO (2) STUDS FROM PLATE THROUGH ALL FLOORS TO FOUNDATION OR SUPPORTING BEAM BELOW. NO BRACES SHALL BE ATTACHED TO TOP WALL PLATE WITHOUT STUDS DIRECTLY ABOVE THEM
8. PROVIDE DOUBLE JOISTS IN FLOOR UNDER PARALLEL PARTITIONS. ALTERNATIVE TO DOUBLE JOISTS IS TO INSTALL SOLID BLOCKING AT 4'-0" O.C. BETWEEN ADJACENT JOISTS UNDER NON-LOAD BEARING PARTITIONS TO SUPPORT THE TONGUE AND GROOVE OSB DECKING. THE LADDERS SHALL BE SUPPORTED WITH A SIMPSON TY CLIP ON SIMILAR DEVICE
9. ALL WOOD I-JOISTS AND OPEN JOISTS MUST BE BRACED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS PLUS DETAILS SHOWN ON PLANS. LOAD BEARING PARTITIONS JACKS BEAMS AND COLUMN SUPPORTS MUST BE SOLIDLY BLOCKED THROUGH FLOOR TO A BEAM OR FOUNDATION BELOW. JOISTS, TRUSSES, I-JOISTS AND TJI OSB CANNOT CARRY CONCENTRATED POINT LOADS. ALL POINT LOADS MUST BE CARRIED TO FOUNDATION WITH BLOCKING AND/OR BEAMS. NOTE: ALL BEAMS AND DOUBLE JOISTS ETC. MAY BE OMITTED SHOWN FOR A LOAD BEARING PURPOSE. PLACEMENT OF THE LOAD CARRYING MEMBERS SHOWN IN THE PLANS IS LOCATIONAL ONLY AND THE STRUCTURAL SUPPORT THEY ARE INTENDED TO CARRY IS THE RESPONSIBILITY OF THE CONTRACTOR. EXACT BEAM LOCATIONS ARE NOT TO BE SCALED FROM THE FRAMING PLANS
10. CONTINUOUS 2x6 BRIDGING SHALL BE NAILED TO DIAGONAL OR VERTICAL ASE MEMBERS OF ALL OPEN WEB FLOOR TRUSSES OVER 10'-0" LONG. THEY SHALL BE INSTALLED NEAR MID-SPAN AS A LOAD DISTRIBUTION METHOD. IF THE SPAN BRIDGING IS NOT CONTINUOUS (AT ENDS OF BRIDGING ONLY IF TRUSS SPACE
11. UNLESS NOTED OTHERWISE ON THE PLANS ALL EXTERIOR FACING STUD WALLS TALLER THAN 10'-0" SHALL BE CONSTRUCTED AS FOLLOWS
   A. WALLS 10'-0" TO 11'-0" HIGH - BALLOON FRAME 2x4 STUDS @ 12" O.C. WITH 1/2" OSB SHEATHING AND THREE (3) KING STUDS ON EACH SIDE OF EACH OPENING NAILED SECURELY TO THE HEADER
   B. WALLS 11'-0" TO 14'-0" HIGH - BALLOON FRAME 2x4 STUDS @ 8" O.C. 1/2" OSB SHEATHING REQUIRED FOR WALL HEIGHTS). PROVIDE TWO (2) 2x4 KING STUDS FOR OPENINGS LESS THAN 3'-0" WIDE. FASTEN KING STUDS SECURELY TO ALL HEADERS WITH A MINIMUM OF TWELVE (12) 16d NAILS OR FOUR (4) 5/8" DIA METER LAG SCREWS EMBEDDED A MINIMUM OF 4" INTO THE HEADER
   C. GABLE END WALLS OR ROOFS WITH VAULTED CEILING JOISTS - BALLOON FRAME WALL ACCORDING TO ABOVE SPECIFICATIONS AND PROVIDE KING STUDS ON EACH SIDE OF OPENINGS PER PLAN. NAILED SECURELY TO THE HEADER
   D. TWO 12' STORY 16d FOOTER BALLS LESS THAN 9'-0" WIDE - EXTEND 2'-1/2" + 1'-6" PSL NEITHER WITH THREE 3" 2x6 PLATE ACROSS THE ENTIRE WALL. LOCATE THE BEAM NEAR MIDNIGHT
   NOTE: SEE SPEC AL DESIGN OR ENGINEER FOR WALLS TALLER THAN 9'-0" WIDE
12. OPENINGS IN WALLS ENDED 9'-0" IN WIDTH OR IF THE WALL CANNOT BE CONSTRUCTED USING ANY OF THE METHODS MENTIONED
13. LOWER STUD WALLS FOR SUPPORTING TWO (2) FLOORS ROOF AND CEILING
   A. INTERIOR WALLS (10'-0" WALL HEIGHT MAX.)
      a) LOAD BEARING ..... 2x4 @ 12" O.C. OR 2x6 @ 16" O.C.
      b) NON-LOAD BEARING ..... 2x4 @ 16" O.C.
   B. EXTERIOR WALLS
      USE 2x4 @ 12" O.C. OR 2x6 @ 16" O.C. WITH 7/16" x 4' x 8' OSB SHEATHING ON EXTERIOR FACE OF ALL STUD WALLS
   C. HEAD REQUIREMENTS ARE PLAN STRIKING UNLESS NOTED OTHERWISE
14. HEADERS IN LOAD BEARING WALLS SHALL BE AS SHOWN UNLESS NOTED OTHERWISE ON PLANS
   A. INTERIOR
      a) SPANS 3'-0" TO 3'-6" ..... (2) 2x6
      b) SPANS 3'-6" TO 5'-0" ..... (2) 2x8
      c) SPANS 5'-0" TO 6'-0" ..... (2) 2x10
      d) SPANS 6'-0" OR MORE ..... SEE PLAN
   B. EXTERIOR
      a) SPANS UP TO 3'-0" ..... (2) 2x6
      b) SPANS 3'-0" TO 5'-0" ..... (2) 2x10
      c) SPANS 5'-0" TO 6'-0" ..... (2) 2x12
      d) SPANS 6'-0" OR MORE ..... SEE PLAN
15. WHEN CEILING JOISTS ARE PARALLEL TO AN EXTERIOR WALL AND RAFTERS BEAR ON THIS EXTERIOR STUD WALL TOP PLATE, TIE THE RAFTERS NEAR THE TOP PLATE TO CEILING JOISTS WITH 2x4 BRACES 4'-0" O.C.
16. AT ALL BAY WINDOWS EACH PANEL SHALL BE NAILED TO EACH ADJACENT PANEL WITH FIVE (5) 16d NAILS OR TIED TOGETHER WITH METAL STRAPPING NAILED AT FOUR (4) LOCATIONS BETWEEN FLOORS WITH A MINIMUM OF TWO 20 16d NAILS INTO EACH PANEL AT EACH STRAP
17. AT ALL STAIRS EVERY STUD AT EACH STRINGER MUST BE NAILED TO EACH STRINGER WITH A MINIMUM OF TWO (2) 8d NAILS. THIS WILL AVOID CRACKING BETWEEN BALUSTER AND TOP OF BASE MOLDING DUE TO VERTICAL OSCILLATION OF STAIR STRINGERS. MINIMUM DEPTH OF STRINGERS NOT LESS THAN 3-1/2" AT NOTCHES
18. ROOF TRUSSES THAT HAVE NON BEARING PARTITIONS RUNNING UNDER THEM SHOULD BE SHIFTED AND BRACED TO THE PARTITION PLATES TO AVOID CEILING-WALL CRACKING
19. ROOF TRUSSES CLOSE TO GABLE ENDS HAVING AND USED AS END WOOD FOR SHEETROCK BOARDS SHOULD BE NAILED TO THE GABLE FRAMING TO PREVENT CEILING-WALL CRACKING
20. A GARAGE DOOR SIDE PANELS (WOOD) THAT EXTEND 4'-0" OR MORE IN FRONT OF THE FRONT HOUSE WALL AND ARE LESS THAN MINIMUM ALLOWED BY CURRENT CODE STANDARDS SHALL BE CONSTRUCTED PER DETAIL ON PLANS
21. ALL STEEL COLUMNS SHALL REAK ON CONCRETE MASONRY OR STEEL ONLY. BEAMS THAT BEAR ON TOP OF STEEL COLUMNS SHALL BE WELDED TO THE COLUMN. WHERE STEEL COLUMNS BEAR ON CONCRETE OR MASONRY UNLESS OTHERWISE NOTED A 6"x6"x1/4" BASE PLATE SHALL BE USED TO SPREAD THE COLUMN LOAD ACROSS THE BEARING SURFACE. BASE PLATES SHALL BE BOLTED WITH FOUR (4) 1/2" DIAMETER ANCHOR BOLTS OR EXPANSION BOLTS TO CONCRETE OR MASONRY
22. ALL EXTERIOR BALLS TO BE FULL BRICK 12" OSB
23. TILE SHOULD BE INSTALLED ON A FLOOR STRUCTURE PREPARED IN ACCORDANCE WITH THE TILE INSTALLATION AVAILABLE BY THE TILE COUNCIL OF AMERICA. SPECIFIC DEFLECTION REQUIREMENTS APPLY. SOUTHERN DYNAMIC ENGINEERING + DESIGN, PLLC HAS ONLY BASED THE STRUCTURE FOR NORMAL FLOOR LOAD DESIGN UNLESS SPECIFICALLY STATED
24. SEE TABLE R602.3(5) OF THE CODE FOR A FASTENER SCHEDULE FOR STRUCTURAL MEMBERS
25. WOOD BEAMS SHALL BE SUPPORTED BY METAL HANGERS OF ADEQUATE CAPACITY WHERE FRAMING INTO BEAMS OR GIRDERS. THE ALLOWABLE LOAD CAPACITY OF THE HANGER SHALL BE EQUAL TO OR GREATER THAN THE LOAD SPECIFIED ON THE PLAN. WHERE NO LOAD IS SPECIFIED THE LOWEST AVAILABLE HANGER FOR THE APPLICATION IS ACCEPTABLE
26. ALL STRUCTURAL FRAMING LUMBER EXPOSED DIRECTLY TO THE WEATHER OR BEARING DIRECTLY ON EXTERIOR MASONRY PIERS OR CONCRETE SHALL BE TREATED. ALL WOOD IN CONTACT WITH THE GROUND IS TO BE GROUND CONTACT APPROVED. ALL WOOD EXPOSED DIRECTLY TO THE WEATHER SHALL BE PROTECTED TO PREVENT THE OCCURRENCE OF ROT
27. UNLESS OTHERWISE DETAILED ALL STICK BUILT WALLS OR PARTITIONS SHALL BE CONSTRUCTED WITH 2x4 STUDS @ 12" O.C. BALLOON FRAMED FROM THE ATTIC CEILING OR FLOOR. FASTEN 7/16" OSB PLYWOOD ON ALL EXTERIOR SIDES OF THE CHIMNEY ALONG THE FULL LENGTH OF THE STUDS. FASTEN EACH STUD TO THE SUPPORTING BEAM OR CEILING JOIST WITH A 1/2" x 24" 18 GAUGE METAL STRAP OR A SIMILAR CONNECTOR. SPECIAL DESIGN CONSIDERATIONS WILL NEED TO BE MADE FOR CHIMNEYS THAT ARE LOCATED SUCH THAT THE DISTANCE FROM THE ROOF TO CEILING JOISTS IS LESS THAN THE DISTANCE FROM THE ROOF TO THE TOP OF THE CHIMNEY TO PREVENT OVERTURNING OF THE CHIMNEY
28. GUARDS SHALL BE LOCATED ALONG OPEN SIDED WALKING SURFACES INCLUDING FLOORED ATTIC AREAS PER R801 AND R802
29. ALL STRUCTURAL MEMBERS ARE TO BE ATTACHED PER TABLE R602.3(1)

RESIDENTIAL STANDARD NOTES (REVISED 8/9/12)

DESIGN LOADS:

1. DESIGN LOADS ARE PER DEAD LOADS PLUS
   A. MAIN FLOOR LIVE LOADS KITCHEN LEVELS ..... 40 PSF
   B. ALL OTHER FLOOR LIVE LOADS ..... 30 PSF
   C. BALCONIES ..... 40 PSF
   D. DECKS ..... 40 PSF
   E. SUSPENDED GARAGES ..... 50 PSF
      OR 2000 POUND POINT LOAD AT ANY LOCATION
   F. ATTIC FLOOR LIVE LOADING WITH THE FOLLOWING
      a) AREA ACCESSIBLE BY STAIRS ..... 30 PSF
      b) ROOF SLOPES 3 TO 12 ..... 20 PSF
      c) ROOF SLOPES 3 TO 12 ..... 10 PSF
   G. ROOF LIVE LOAD ..... 20 PSF
   H. WIND LOAD ..... 90 MPH(3 SECOND GUST)
   I. SNOW LOAD ..... 30 PSF
2. BEARING FOR FOOTINGS ON ORIGINAL SOLID GROUND IS ASSUMED TO BE 2000 PSF UNLESS NOTED OTHERWISE
3. ALL DESIGNS ARE IN ACCORDANCE WITH THE 2012 NORTH CAROLINA RESIDENTIAL CODE
4. ENGINEERING DESIGN S FOR STRUCTURAL INFORMATION ONLY. THE ENGINEER OF RECORD DOES NOT ACCEPT RESPONSIBILITY FOR DIMENSION ERRORS, ARCHITECTURAL ERRORS, DETAILING OF WATERPROOFING, PLUMBING, ELECTRICAL OR MECHANICAL INFORMATION OR ANY PART OF THE PLAN NOT RELEVANT TO THE STRUCTURAL INFORMATION

LUMBER GENERAL NOTES:

1. ALL COMMON BEARING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT

MATERIAL	Fbase	Fbpal	Fcperp(Pwet)	Eapal
#2 SPRUCE PINE +S	850	482	405	1,400,000
SOUTHERN YELLOW PINE	850	878	565	1,600,000

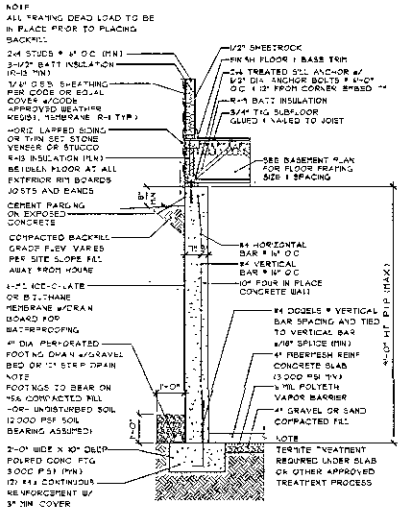
2. ALL STRUCTURAL CORPOS TF LUMBER FIVE L.N. FEET TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS

APPLICATION	Fbpal	Fcperp(Pwet)	Fc(perp)(wet)	Eapal
GIRDERS x BEAMS LVL 2.0	2,600	23.0	390	1,900,000
CRIPPLES 5.2.1 x STUDS/PLATES	1,700	1000	440	1,600,000

3. ALL GABLE LATERALLY TIMBER (GLT-PLAT) IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS

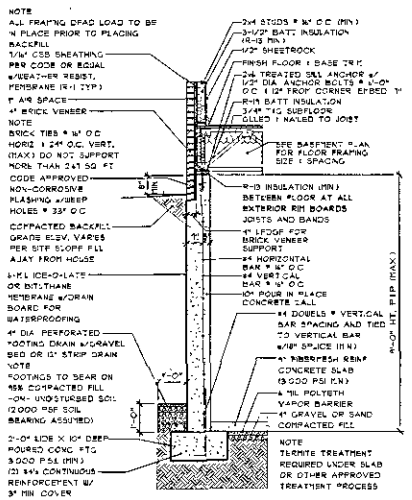
APPLICATION	Fbpal	Fcperp(Pwet)	Fc(perp)(wet)	Eapal
GIRDERS x BEAMS (LVL YELL	2400	2100	740	1,900,000
COLUMNS (LVL)	1600	1650	580	1,500,000

4. WHERE THREE (3) OR MORE DEEPER AND ALL FOUR (4) PLY "LA



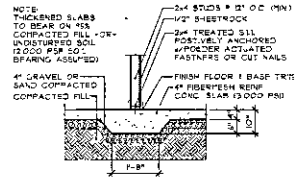
#1 TYPICAL 10" CONCRETE P.I.P. WALL w/SIDING

SCALE 1/2" = 1'-0"



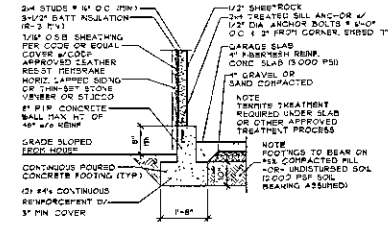
#1a. TYPICAL 10" CONCRETE P.I.P. WALL w/BRICK VENEER

SCALE 1/2" = 1'-0"



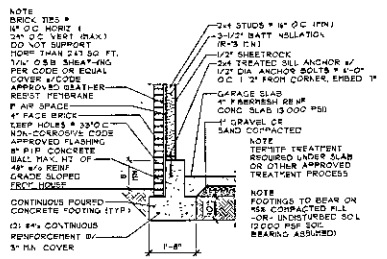
#4. TYP. THICKENED SLAB

SCALE 1/2" = 1'-0"



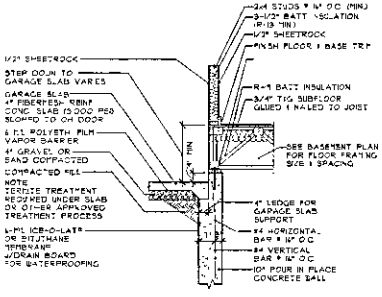
#6 TYP. EXTERIOR 8" P.I.P. WALL AT GARAGE w/ SIDING OR STONE

SCALE 1/2" = 1'-0"



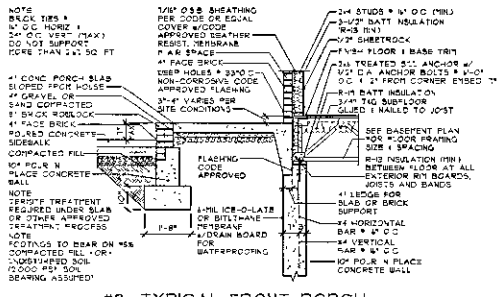
#6a. TYP. EXTERIOR 8" P.I.P WALL AT GARAGE w/ BRICK VENEER

SCALE 1/2" = 1'-0"



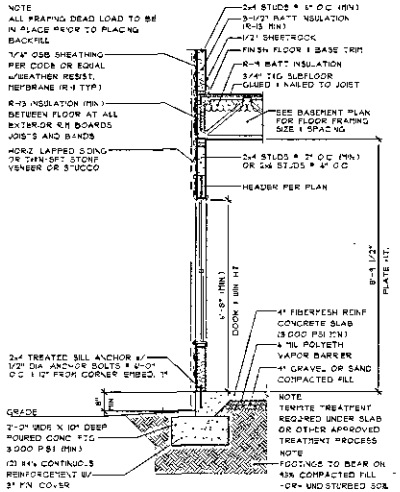
#2 TYPICAL GARAGE SLAB BEARING AT POURED WALL

SCALE 1/2" = 1'-0"



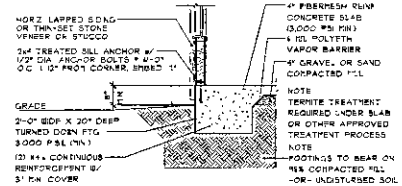
#3. TYPICAL FRONT PORCH BEARING AT P.I.P. w/BRICK

SCALE 1/2" = 1'-0"



#5. TYPICAL FRAMED WALL AT WALKOUT BASEMENT w/SIDING

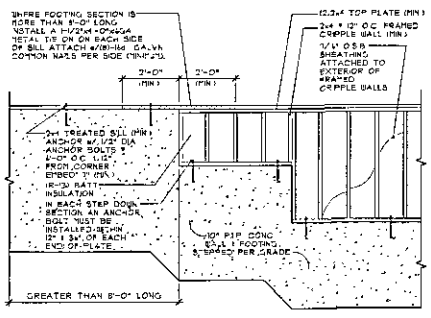
SCALE 1/2" = 1'-0"



#5. OPTIONAL TURN DOWN SLAB AT WALKOUT BASEMENT w/SIDING

SEE DET'AIL #5 FOR FRAMED WALL ABOVE.

SCALE 1/2" = 1'-0"



#7. TYPICAL STEPPED 10" CONCRETE P.I.P. WALL w/CRIPPLE WALL ABOVE

SCALE 1/2" = 1'-0"



Southern Dynamic Engineering and Design, PLLC
P.O. Box 87
Whitakers, NC 27573
Seal for Structural Only
NC Certificate of Licensure P-0713

5/7/15

I.Q. CUSTOM CONSTRUCTION
940 Edmiston Rd
Mt. Olive, NC 28125 Ph 704-660-5738

THE HAWTHORN HOUSE PLAN

DETAILS

Project

Drawn by S. MCCOOLS
Date 05.04.15
REV 05/06/15
Title

IQHAWTRNO2
Sheet
D2



13814 PAVILION ESTATES DR

01924303

1/11/2008

duponbj

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

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 #: **30001777** GWS File #: **6900B** Tax Parcel #: **019-243-03**

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

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

Type of Installation: Residential - New System Lot Number: 22

Structure Type: HOUSE Size (ft^2): 0 # Bedrooms: 5 # Occupants: 4

Building Foundation: Basement With Plumbing Water Supply: Private Well

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):	30	Depth of Media (in):	N/A	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):	0.3	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):	30	Depth of Media (in):	N/A	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: Jeremy Michelone

Signature: Jeremy Michelone R.S.

Date Issued: 4/9/2007

Owner/Legal Agent: Rick Jasinski

Print Name

Signature: Rick Jasinski

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

NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: **30001777** GWS File #: **6900B**

IV. Permit Conditions/Comments:

- Prior to issuing the Authorization to Construct for this project, all stormwater detention and treatment devises required by Huntersville shall be reviewed along with the proposed final site plan.

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

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

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S.

Date Issued: 4/9/2007

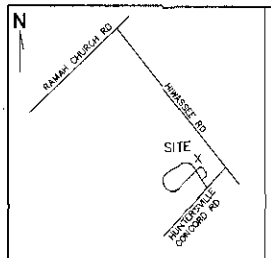
Owner/Legal Agent: Rick Jasinski

Print Name

Signature: Rick Jasinski

Site Plan
13814 Pavilion Estates Drive
THE PAVILION
LOT 22

Huntersville Township, Mecklenburg County, NC
Parcel # 01924303 ~ DB 28021-908 ~ MB 49-311
Prepared for: IO Custom Construction



VICINITY MAP
NOT TO SCALE

NOTES:
1) Area determined by Coordinate Computation Method.
2) Property subject to any facts that may be disclosed by a full and accurate title search.
3) Property may be subject to any Easements and Right of Ways of record and those not of record if they exist.
4) Subject Property is not located in a Special Flood Hazard Area as designated by the FEMA FLOOD INSURANCE RATE MAPS. See Map Number 3710466100J - Effective Date 3/02/2009.
5) No Geodetic Monument found within 2000' of Subject Property.
6) Setbacks shown per M.B. 49-311
Front = 50', Rear = 50', & Side = 12'
7) Boundary information taken from PB 49-311. No fieldwork performed. For planning purposes only.
8) Tree Save Area scaled from MB 49-311.

AREA SUMMARY
LOT 22
1.598 ACRES
69,590 SQ.FT.

PAVILION ESTATES DRIVE
50' PUBLIC R/W

C1
8' SIDEWALK EASEMENT
WELL
51.0'
65.6'
50' FRONT SETBACK
62.0'
50.9'
PROPOSED SINGLE FAMILY RESIDENCE
52.0'

N
PB 49-311

LOT 21
LOT 22
LOT 23

N48°05'59"W
452.33'
12' SIDE SETBACK
S49°39'50"E
407.78'
12' SIDE SETBACK

REVISED, 6/2/2015 - HOUSE PLAN

I, Thomas E. Williams, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book 28021, Page 908, or other reference source AS NOTED); that the boundaries not surveyed are shown as broken lines drawn from information found in adjoining deeds and plats as noted; that the ratio of precision is 1 : 10,000+; and that this plat meets the requirements of The Standards of Practice for Land Surveying in North Carolina according to North Carolina Administrative Code Title 21, Chapter 56, Section 1600.

This survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.

This 4th day of February, 2015.

PRELIMINARY PLAT NOT FOR RECORDATION, CONVEYANCES, OR SALES.

Thomas E. Williams, NCPLS 4718

DETENTION BASIN & RAIN GARDEN

PERMANENT DRAINAGE DITCH

TREE SAVE AREA

50' REAR SETBACK

CURVE TABLE

NUM	DELTA	ARC	RADIUS	BEARING	DISTANCE
C1	13°46'13"	162.23'	675.00'	N55°55'27"E	161.84'

LEGEND
PROPERTY LINE (P/L)
RIGHT OF WAY (R/W)
TIE LINE
ADJOINING PROPERTY LINE FROM DEED OR PLAT
BUILDING SETBACK LINE

40 0 40 80
SCALE: 1" = 40'

83.38'
S40°02'43"W
81.45'
S39°55'08"W

PLANTATION PIPELINE
70' R/W

NOTE: IRON STAKES AND MONUMENTS AS SHOWN (●), ALL OTHERS CALCULATED POINTS (○).

Williams Land Surveying, Inc.
License Number C-3698
274 Baymount Drive, Statesville, NC 28625
phone: (704)876-9988 ~ email: runningonfaith@bellsouth.net
file: 15\PAVILION

13814 PAVILION ESTATES DR.

019-243-03

S&ME

GWS Septic System Design Review

	Approved	Disapproved
GWS File #: 6900B		
Design Review: TCT 4-2-07	☒	☐
Field Review: 4/5/07	☑	☐

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

March 28, 2007

Mr. Rick Jasinski
Simonini Builders
1910 South Boulevard, Suite 200
Charlotte, North Carolina 28203

Reference: **Request for a Septic Improvement Permit for Lot 22 at The Pavilion**
Mecklenburg County Health Department (MCHD) File #6900B

Dear Mr. Jasinski,

Attached is the request for the Improvement Permit for the above referenced lot. We are requesting an Improvement Permit for a 5 bedroom house. We are proposing a LPPPBPS system and repair. Mr. Bill Marlin, LSS with the MCHD, has evaluated the soils (see attached MCHD soil sheets) and approved the proposed septic area at a 0.3 gpd/sqft LTAR. S&ME, Inc. has flagged the system and repair on the lot. The end of each septic line has been located by the surveyor and was sketched on the attached maps by S&ME. The attached sketch and specifications are not an Improvement Permit and are intended only to assist the MCHD in permitting the referenced lot at The Pavilion.

A building permit cannot be issued until the MCHD issues an Authorization to Construct (ATC). The buyer will apply for the ATC. If the buyer's house pad does not fit in the "building envelope" shown on the Improvement Permit, the proposed system or number of bedrooms may have to be modified prior to the MCHD issuing the ATC. **No grading shall take place on the lot prior to obtaining the ATC from the MCHD.**

Lot 23 has some complex topography near the proposed septic system. There are several gullies noted on the site plan that should be filled with clean soil prior to system installation. To ensure this is done properly before house construction commences, we request that the Improvement Permit have the following conditions:

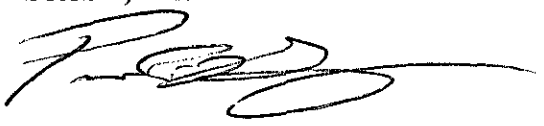
1. The Authorization to Construct shall not be issued until the proposed primary and repair area have been fenced with metal "T" posts and orange or black barricade or silt fence.
2. The Authorization to construct shall not be issued until the gullies near the primary and repair have been filled with a clean clay, clay loam, or sandy clay loam soil approved by the MCHD. The septic areas shall be fenced prior to any filling of the gullies.

3. Also, any storm water detention or treatment devices required by Huntersville shall be reviewed with the proposed house plans and location prior to issuing the Authorization to Construct.

The proposed system is a TYPE IV system and will require a contract with a Certified Operator to supply maintenance services for the septic system. Please review the attached system sketch and design specifications for the Improvement Permit. If necessary, the MCHD may add comments to the site plan or specifications. Please call in you have and questions or comments.

Sincerely,

S&ME, Inc.



Paul G. Penninger, LSS
Licensed Soil Scientist

Rob Willcox, LSS
Natural Resources Department Manager

Attachments:
1. System Specifications
2. Site Plan
3. MCHD Soil Evaluation

Copy: Mr. Jeremy Michelone, R.S.
MCHD

Design Specifications for Lot 22 at The Pavilion ✓ TCT
MCHD File # 6900B

Daily Design Flow:	600 gpd
Number Bedrooms:	5 bdr.
Basement or Crawlspace:	Basement
Septic Tank Size:	1500 gal
Pump Tank Size:	1500 gal
Primary System Loading Rate:	0.3 gpd/ft^2
Primary System:	LP PPBPS
Number and length of laterals:	3 @ 50 ft., 1 @ 60 ft., 2 @ 62 ft.
Total ft. of primary system:	334 ft.
Number of T&J Panels:	11 per 50 ft. line, 14 per 60 ft. line, 14 per 62 ft. line for a total of 75 panels
Flow Rate through system:	37.5 gpm – use 5/32 in. holes with 3 ft. head pressure
Pump Requirements:	to be calculated by installer when specific house and pump tank locations are available
Dosing Volume:	approx. 270 gal. – (3.6 gal per panel)*
Depth of effluent pumped per dose:	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Check Valve:	yes
Siphon break hole:	yes
Repair System Loading Rate:	0.3 gpd/ft^2
Repair System:	LP PPBPS
Total ft. of repair	477 ft. (334 ft. required)

Notes: Before placement of cap block, one panel on each line, near the center of the field should be observed filling to male certain that it does not overflow the top chamber into the air chambers. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.

S

FEE: 200.00
DATE:4/8/2015

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 6900B

PERMIT NUMBER: 30001777

PARCEL NUMBER: 01924303

JOB LOCATION INFORMATION

ADDRESS: 13814 PAVILION ESTATES DR

CITY: HUNTERSVILLE **STATE: NC** **ZIP:** 28078

ISSUED TO: THE PAVILLION OF HUNTERSVILLE

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 4/8/2015

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30001777, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. A PRE-CONSTRUCTION MEETING MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A LICENSED SEPTIC TANK CONTRACTOR WITH THE NORTH CAROLINA ONSITE WASTEWATER CONTRACTOR INSPECTOR CERTIFICATION BOARD.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.

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

Sheet: 1 of 2
Property ID: PO 019-242-32
Lot #: 22
File #: 6900B
AppID: 1777

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: The Pavilion of Huntersville
Applicant: S & ME- Jacob Presley
Address: 1910 s. Blvd., Ste 200, Charlotte, N. C. 28203
Date Evaluated: 1/31/07
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: 1.6a
Location of Site: Pavilion Estates Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 15	0-2	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV
		2-48	SBK/C	FI/SEXP/S/P					.3GPD/FT^2
2	"	0-3	GR/CL	FR/SEXP/SS/SP	>49" TO SOIL WETNESS	49	"	"	"
		3-49	SBK/C	FI/SEXP/S/P					
3	"	0-4	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		4-48	SBK/C	FI/SEXP/S/P					
4	LS, 10	0-3	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
					SITE LTAR .3GPD/FT^2				

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	Iva	Iva
Site LTAR	.3GPD/FT2	.3GPD/FT2

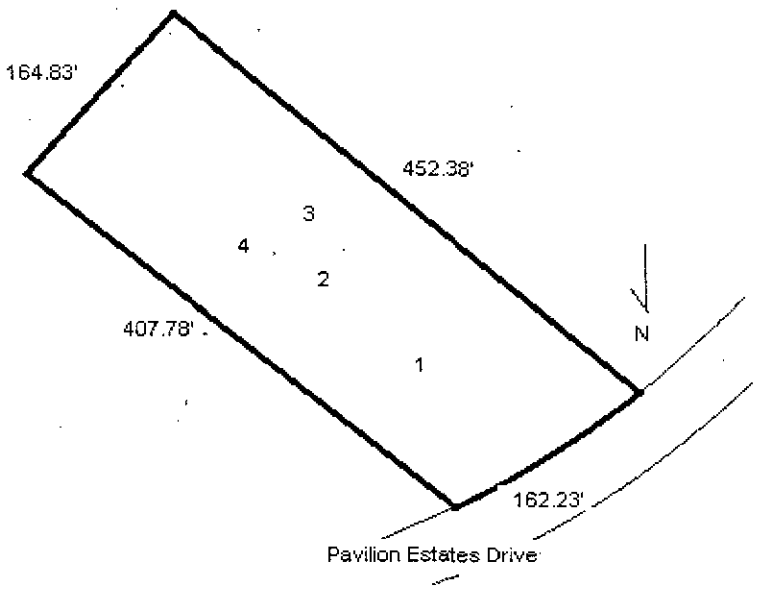
Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 2/2/2007
Others Present:
Site Classification (.1948): PS
Site Evaluation By:
Others Present:

COMMENTS:
100% repair

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



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

Sheet: 1 of 2
Property ID: PO 019-242-32
Lot #: 22
File #: 6900B
AppID: 1777

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: The Pavilion of Huntersville
Applicant: S & ME- Jacob Presley
Address: 1910 s. Blvd., Ste 200, Charlotte, N. C. 28203
Date Evaluated: 1/31/07
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: 1.6a
Location of Site: Pavilion Estates Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr. Horiz.	Profile Class & LTAR
1	LS, 15	0-2	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV
		2-48	SBK/C	FI/SEXP/S/P					.3GPD/FT^2
2	"	0-3	GR/CL	FR/SEXP/SS/SP	>49" TO SOIL WETNESS	49	"	"	"
		3-49	SBK/C	FI/SEXP/S/P					
3	"	0-4	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		4-48	SBK/C	FI/SEXP/S/P					
4	LS, 10	0-3	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
					SITE LTAR .3GPD/FT^2				

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

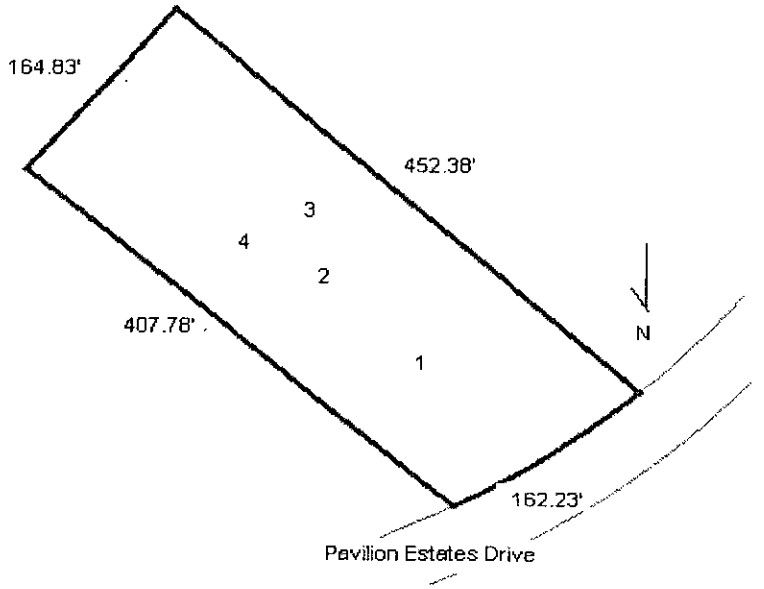
Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 2/2/2007,
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:
100% repair

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



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

Sheet: 1 of 2
Property ID: PO 019-242-32
Lot #: 22
File #: 6900B
AppID: 1777

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: The Pavilion of Huntersville
Applicant: S & ME- Jacob Presley
Address: 1910 s. Blvd., Ste 200, Charlotte, N. C. 28203
Date Evaluated: 1/31/07
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: 1.6a
Location of Site: Pavilion Estates Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	SOIL MORPHOLOGY .1941 Consistence Mineralogy	b PROFILE FACTORS 1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Sapro Class	1944 Restr. Horiz.	Profile Class & LTAR
1	LS, 15	0-2	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV
		2-48	SBK/C	FI/SEXP/S/P					.3GPD/FT^2
2	"	0-3	GR/CL	FR/SEXP/SS/SP	>49" TO SOIL WETNESS	49	"	"	"
		3-49	SBK/C	FI/SEXP/S/P					
3	"	0-4	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		4-48	SBK/C	FI/SEXP/S/P					
4	LS, 10	0-3	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
					SITE LTAR .3GPD/FT^2				

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

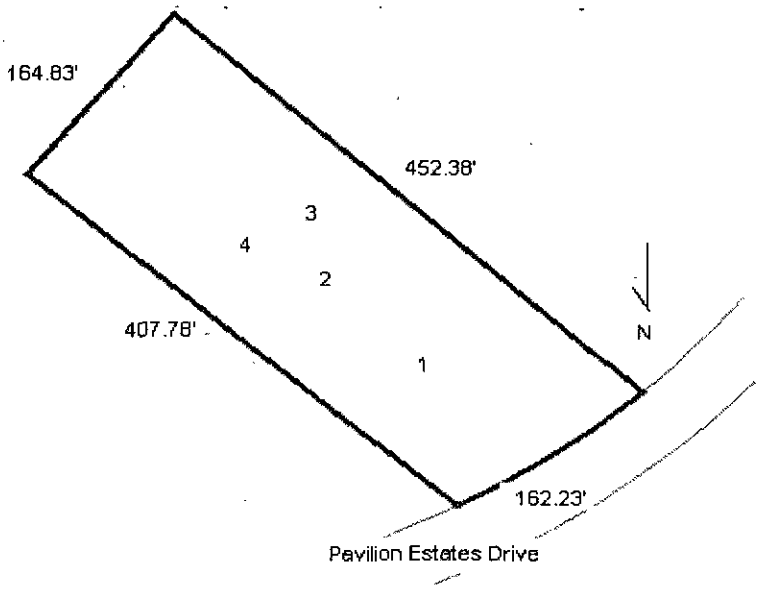
Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 2/2/2007, W. R. Marlin
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:
100% repair

Landscape Position	Group	Texture	1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



SEPTIC SYSTEM DESIGN REVIEW WORKSHEET

File: 6900B

Address: 13814 Pavilion Estates Dr.

PID #: 019-243-03

Subdivision: The Pavilion

Lot #: 22

Comments:

1. Special requirements listed by designer for fencing, filling, and storm water control structures. Make sure to include these in the permit.

Reviewed By: Trevor Thomason TCT

Date: April 2, 2007

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

CLR

#1777

GWS – RES. APP 07/05

SEPTIC FEE: 200
DATE: 11/30/7
CRT [ ]

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 # 6900B

WELL FEE: _____
DATE: _____
CRT [ ]

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

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

JOB LOCATION INFORMATION:

TAX/PARCEL #: 01924232P0
STREET ADDRESS: Pavilion Blvd D.
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #: 22
TOWNSHIP:

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

BUILDING INFORMATION:

TYPE OF BUILDING:

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

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

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: The Pavilion of Huntersville
ADDRESS: 1910 S. Blvd. STE 200
CITY: Charlotte
STATE: NC ZIP: 28203
HOME PHONE: WORK PHONE: 704-358-9940
MOBILE PHONE: 704-201-8976 FAX: 704-358-9978

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Jacob Presley, SBME, Inc.
ADDRESS: 3718 Old Battleground Rd.
CITY: Greensboro
STATE: NC ZIP: 27410
HOME PHONE: WORK PHONE: 336-288-7180
MOBILE PHONE: 336-312-1123 FAX: 336-288-8880

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?

WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?

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

Owner's/Agent's Signature 12-22-06 Date

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

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

Owner's/Agent's Signature Date

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

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/26/13	**Amount:**	200.00
Receipt #:	83857	**Tendered:**	200.00
Check / Auth #:	CHECK 2356	**Returned:**	0.00
Received By:	SADERLW		

Account Information

Account #: 200000
Contractor: PARKER & ORLEANS HOMEBUILDER
Attn:
Address: 8730 STONY POINT PKY, STE 201
Address:
City/State/Zip: RICHMOND, VA 23235

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval 13814 PAVILION ESTATES DR		1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
40.00	1,387.15				

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/26/13	**Amount:**	200.00
Receipt #:	83856	**Tendered:**	200.00
Check / Auth #:	CHECK 2356	**Returned:**	0.00
Received By:	SADERLW		

Account Information

Account #: 200000
Contractor: PARKER & ORLEANS HOMEBUILDER
Attn:
Address: 8730 STONY POINT PKWY, STE 201
Address:
City/State/Zip: RICHMOND, VA 23235

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr 13814 PAVILION ESTATES DR		1	200.00	200.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
40.00	1,387.15				