IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 216991

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4639-73-0927 5.152

APPLICANT: BCSC APPLICANT ADDRESS: 2524 Reliance Ave. Apex, NC 27539

SITE ADDRESS: 356 S. San Agustine Dr. Mrsvl. PHONE: 704-658-8616 ALT. PHONE:

SITE DIRECTIONS: Perth, TL Bells, TL S. San Agustine, last on R

SUBDIVISION: Bells Crossing SECTION: 4 LOT # 152 1525 LOT AREA: 1.01 AC DESIGN FLOW: 480 L.T.A.R.: .125

Septic Tank 1000 (gal) STB 700 Date 11-8
Pump Tank 1000 (gal) PT 306 Date 1-22
Pump Make Zoeller Model 5034-0041 Serial #
Nitrification Fields 1 # Lines 5e96 Linear Ft: 480'
Trench Width 36" Max Trench Bottom Depth *24" * Gravel Depth —

☒ New System ☐ Repair ☐ Expansion System Type: I II (III) IV V VI
System Description: PM-25% Reduction
Repair System Description: LP- Panel Block
Maintenance Agreement Required: ☐ YES ☒ NO ☐ GRAVITY ☒ PRESSURE

☒ Residence ☐ Business ☐ Other ☒ Slab ☐ Basement w/plumbing
No. Bedrooms 4 No. Persons 8 No. Employees — ☐ Crawl Space

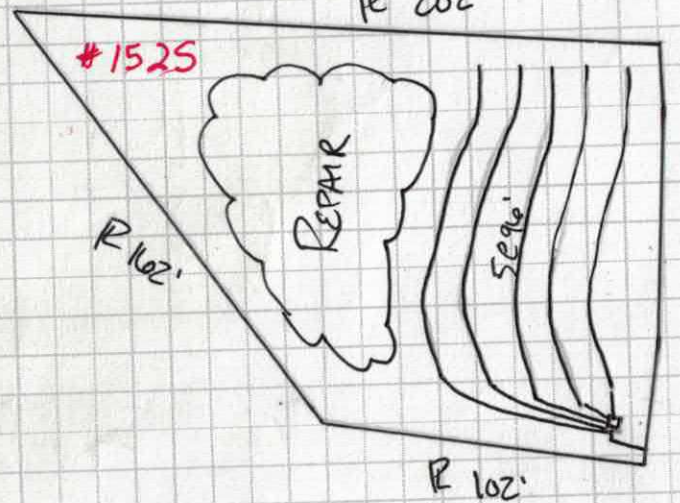
Water Supply: ☐ Private ☐ Public ☒ Community
☐ Basement w/o plumbing

Comments / Conditions: USE 1/2" Sch 40 TAPS. A RECORDED EASEMENT (BK & PG) MUST BE PROVIDED TO RECIEVE AC. SEE ENGINEER DESIGN FOR PUMP LINE. SEE ATTACHED LETTER FROM Tricia Angot (dated 9-14-16) + supplementary design information from Brian Kraynak, PE [dated 8-15-16, sealed 8-16-2016] + *9-29-16: House box is to be 65' wide [per Architecturals] + driveway turnaround to be towards rear of the house.

INITIAL SITE SKETCH

3/7/17 Checked last 2 lines (18 chambers & 6 chambers) Checked supply line from Offsite to street

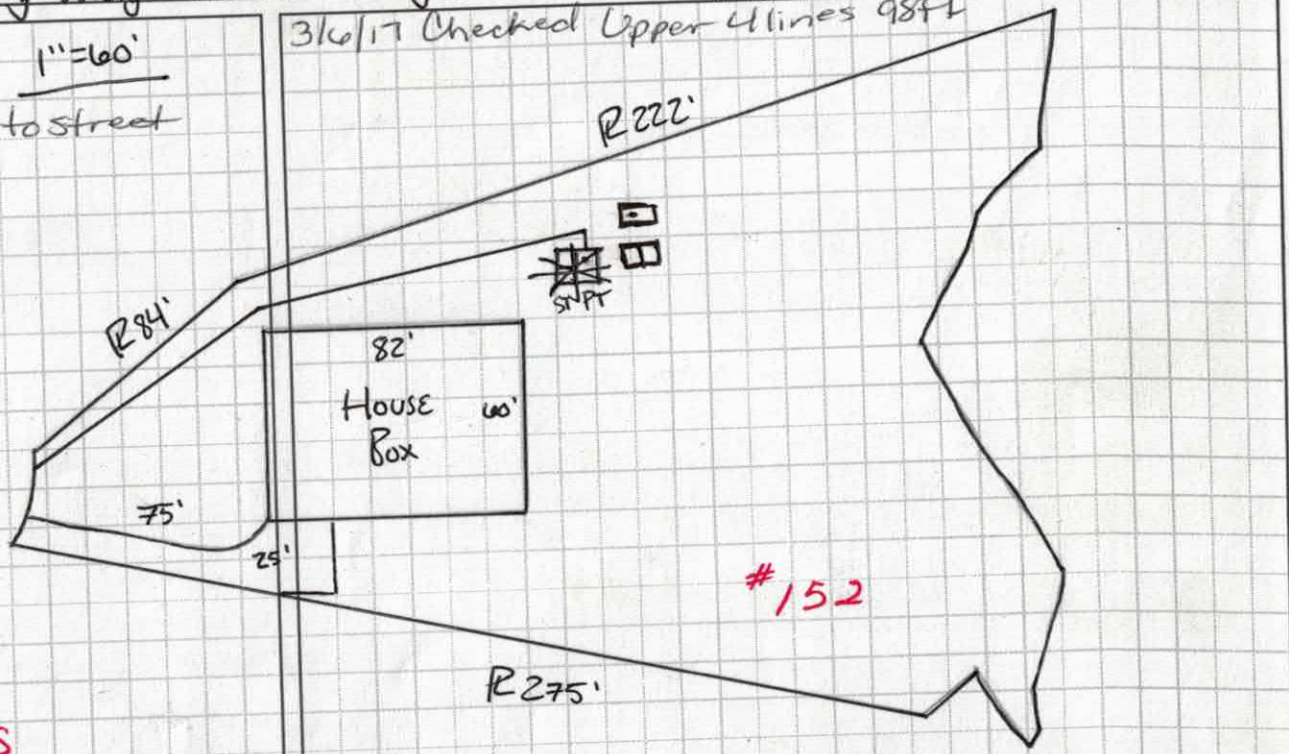
1"=60'



off site septic on lot 1525
PIN # 4649-03-5857

AS BUILT SKETCH

3/6/17 Checked Upper 4 lines 98ft



Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION

☐ IMPROVEMENT PERMIT with plat valid without expiration. ☒ IMPROVEMENT PERMIT with site plan valid for 60 mos. ☒ AUTHORIZATION TO CONSTRUCT valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

Owner / Applicant Signature: Date: 9-30-16 Installed by: Carolina Pipe

IMPROVEMENT PERMIT by: Date: 9-20-16 OPERATION PERMIT by: Marion Dotson Date: 3/17/17

AUTHORIZATION TO CONSTRUCT by: Date: 9-29-16 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

LINE SCHEDULE

LINE NUMBER	COLOR	FIELD ELEVATION	FIELD LENGTH (FT)
1	ORANGE	5.0	103
2	RED	6.2	110
3	YELLOW	8.6	108
4	WHITE	10.7	105
5	ORANGE	11.9	103
6	RED	14.3	104
7	YELLOW	16.6	100
8	ORANGE	18.7	100
9	WHITE	20.9	88

LOT 152 BELLS CROSSING SUBDIVISION

4-BEDROOM PRESSURE MANIFOLD SYSTEM
LINES 1-4 TOTAL 426 LINEAR FEET (USE 400')
EZFLOW OR CHAMBER
LTAR ~~0.3~~ .25
25%REDUCTION
24" TRENCH DEPTH

4-BEDROOM PRESSURE MANIFOLD REPAIR
LINES 5-9 TOTAL 495 LINEAR FEET (USE 400')
LTAR ~~0.3~~ .25
25%REDUCTION
24" TRENCH DEPTH

FOR GENERAL USE NOT A SURVEY
PRELIMINARY NOT FOR CONSTRUCTION

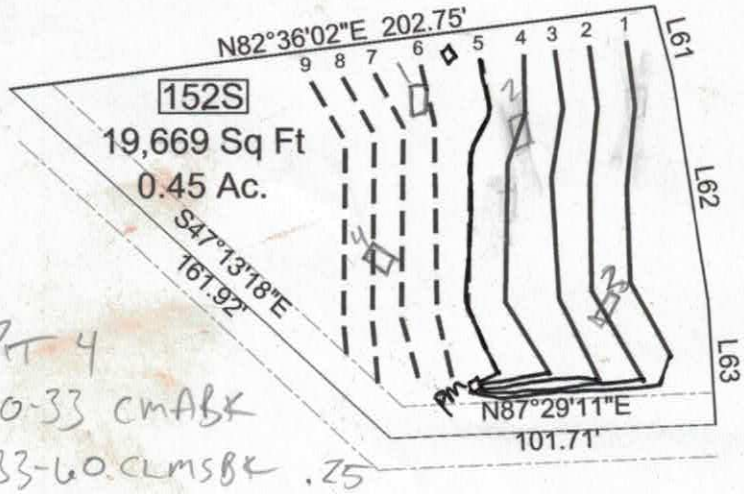
SOIL PROFILES AND ANALYSIS PROVIDED BY
PRICE ENVIRONMENTAL RESOURCE CONSULTING, PC

PIT 1 0-35 CMABK
35-46 CL MANY SAP (.3)
46-60 LSAP

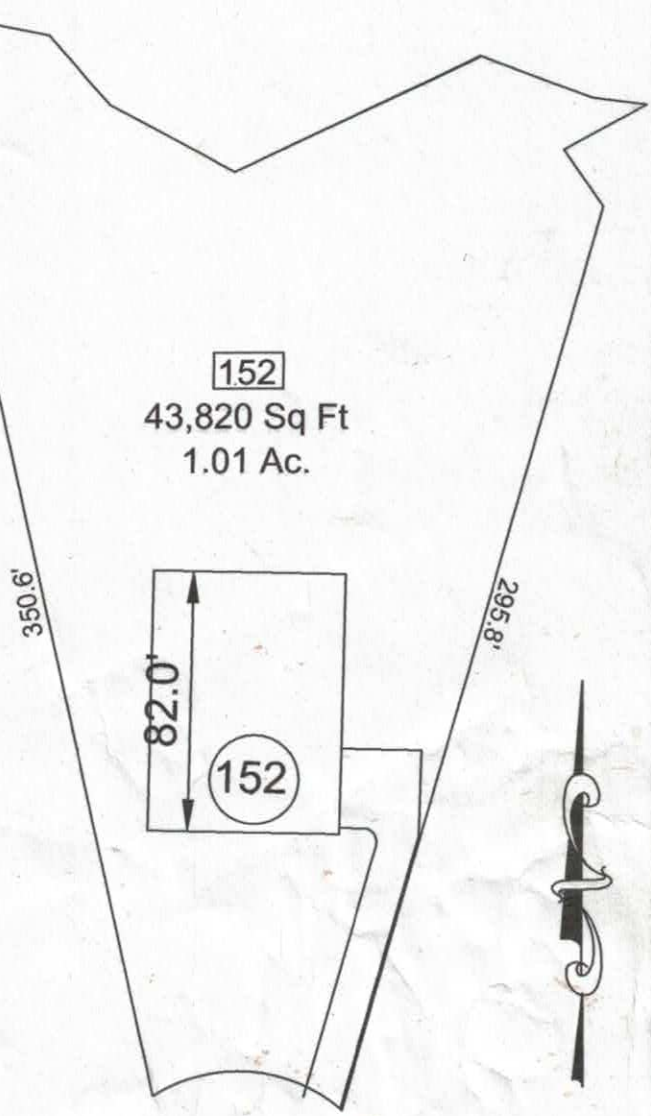
PIT 2 0-40 CMABK FEW F/GR (.25)
40-60 CLSAP
CH2

PIT 3 0-22 CMABK
22-30 CMSBK (.3)
30-60 CLMSBK

OFFSITE EASEMENT



PIT 4
0-33 CMABK
33-60 CLMSBK .25



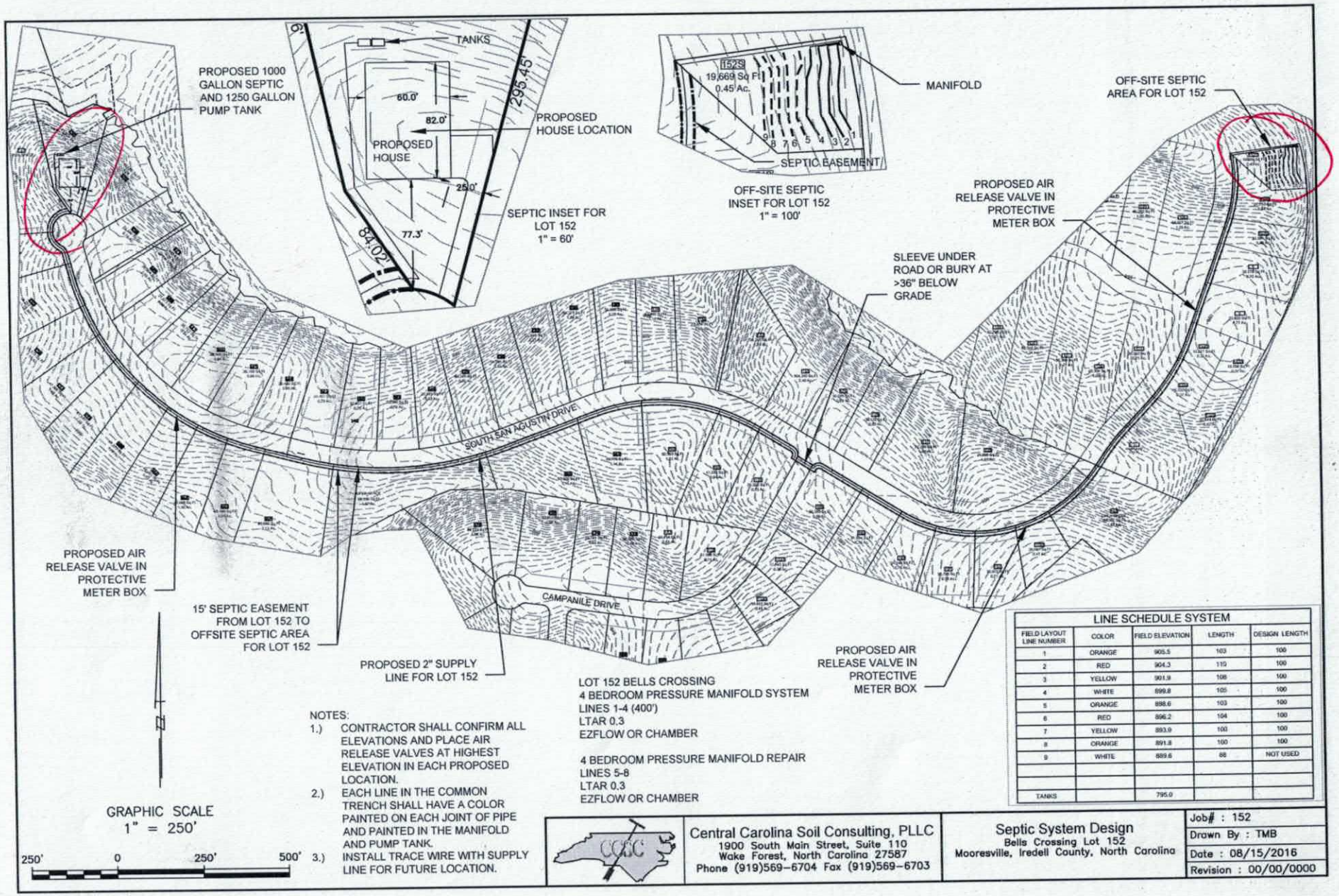
1 PIT OR AUGER BORING
PRIMARY LINES
REPAIR LINES
ADDITIONAL REPAIR LINES
DRIP IRRIGATION REPAIR AREA

0 30 60
SCALE:
1" = 60 ft.

Bateman Civil Survey Company
Engineers • Surveyors • Planners

MeritageHomes

LOT 152
BELLS CROSSING SUBDIVISION
MOORESVILLE, NC



LOT 152 BELLS CROSSING
4 BEDROOM PRESSURE MANIFOLD SYSTEM
LINES 1-4 (400')
LTAR 0.3
EZFLOW OR CHAMBER

4 BEDROOM PRESSURE MANIFOLD REPAIR
LINES 5-8
LTAR 0.3
EZFLOW OR CHAMBER

NOTES:
1.) CONTRACTOR SHALL CONFIRM ALL ELEVATIONS AND PLACE AIR RELEASE VALVES AT HIGHEST ELEVATION IN EACH PROPOSED LOCATION.
2.) EACH LINE IN THE COMMON TRENCH SHALL HAVE A COLOR PAINTED ON EACH JOINT OF PIPE AND PAINTED IN THE MANIFOLD AND PUMP TANK.
3.) INSTALL TRACE WIRE WITH SUPPLY LINE FOR FUTURE LOCATION.

LINE SCHEDULE SYSTEM

FIELD LAYOUT LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH	DESIGN LENGTH
1	ORANGE	905.5	103	100
2	RED	904.3	115	100
3	YELLOW	901.9	108	100
4	WHITE	899.8	105	100
5	ORANGE	898.6	103	100
6	RED	896.2	104	100
7	YELLOW	893.9	100	100
8	ORANGE	891.8	100	100
9	WHITE	889.6	88	NOT USED
TANKS		795.0		

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

Septic System Design
Bells Crossing Lot 152
Mooresville, Iredell County, North Carolina

Job# : 152
Drawn By : TMB
Date : 08/15/2016
Revision : 00/00/0000

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

Sheet: 1 OF 1
PIN #: 4639-73-0925
Lot #: 152
Permit #: 216991
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: MERITAGE HOMES
Applicant: BCSC
Address: 11605 N. COMMUNITY HOUSE RD. #250 CHARLOTTE, NC 28217
Date Evaluated:
Proposed Facility: SFR
Design Flow (.1949) 480
Property Size: .98 AC (.45 AC SFE)
Location of Site: BELLS CROSSING 152
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [X] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] 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
PIT 1	LINEAR 15%	0-35	C,M,ABK	SS	NA	46"	S	60"+	.3
		35-46	CL,W,SBK	SS					
		46-60	LSAP	SS					
PIT 2	LINEAR 15%	0-40	C,M,ABK	SS	CH2 @ 40"	40"	U	40"	.25 TO 40"
		40-60	CLSAP	SS					
PIT 3	LINEAR 15%	0-22	C,M,ABK	SS	NA	60"	NA	60"+	.3
		22-30	C,M,SBK	SS					
		30-60	CL,W,SBK	SS					
PIT 4	LINEAR 15%	0-33	C,M,ABK	SS	NA	60"	NA	60"+	.25
		33-60	CL,M,SBK	SS					

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	PM 25% RED	LP PANEL BLOCK
Site LTAR	.25	.25

Other Factors (.1946):
Soil Evaluation By: BEN ALDRIDGE
Others Present: MICHAEL BENFIELD
Site Classification (.1948): PS
Site Evaluation By: BEN ALDRIDGE
Others Present: MICHAEL BENFIELD

Public Health
HEALTH AND HUMAN SERVICES

RICHARD O. BRAJER
Secretary

DANIEL STALEY
Director, Division of Public Health

September 14, 2016

Mr. Thomas Shuck
Iredell County Health Department
610 East Center St
Mooresville, NC 28115

Subject: Approval of Supply Line Designs for Bells Crossing Lots 132, 143, 144, 151, 152, and 162
Iredell County, NC

Dear Mr. Shuck:

We have reviewed revised plans and specifications for the supply lines serving Bells Crossing Lots 132, 143, 144, 151, 152, and 162 received from Brian Kraynak, PE, Bateman Civil Survey Company, PA.

The revised supply line designs are approved for the above listed lots.

A registered professional engineer must certify that the systems have been installed in accordance with the approved plans and specifications. This certification is based upon periodic observations of construction and a final inspection for design compliance by the certifying engineer or his representative. Record drawings must be provided by the engineer unless the installation is completed without alteration to the approved plans. The installation must be approved by the health department prior to the issuance of an operation permit.

Please contact us if you have any questions pertaining to this letter or if we may be of further assistance with this project. I can be contacted at 919-707-5878 or by email at trish.angoli@dhhs.nc.gov.

Sincerely,

Tricia Angoli, PE
On-Site Wastewater Engineering

cc: Brian Kraynak, PE, Bateman Civil Survey Company, PA

Bells Crossing PH 4 S/D Lot 152

Contact Information

Client:	Meritage Homes
Attn:	Robert Price
Street Address:	11605 North Community House Road Charlotte, NC 28277
Phone:	(704) 944-8939
Fax:	na

Engineer:	Bateman Civil Survey Company, PC
Attn:	Brain Kraynak, PE
Street Address:	2524 Reliance Ave. Apex, North Carolina 27539
Phone:	919-577-1080
Fax:	919-577-1081

Designer:	Central Carolina Soil Consulting, PLLC
Attn:	Matt Burdette
Street Address:	1900 South Main Street Wake Forest, North Carolina 27587
Phone:	919-569-6704
Fax:	919-569-6703

Bells Crossing PH 4 S/D Lot 152

Layout/Design Specifications

Facility Type:	Single Family Home	
# of Bedrooms:	4	
Daily Flow:	480	gal/day
L.T.A.R.:	0.300	gal/day/sq.ft
Trench Depth:	24-30	in
Trench Width:	36	in
Stone Depth:	accepted	in
Manifold Length:	42	in
Manifold Diameter:	4	in sch 80pvc
Supply Line Length:	5120	ft
Supply Line Diameter:	2	in sch 40pvc
Supply Line Volume:	890.88	gallons
Friction Loss + Fitting Loss:	64.64	ft(supply line length +25% for fittings)
Design Head:	2	ft
Elevation Head:	139.40	ft
Total Head:	206.04	ft
Dose Volume:	195.24	gals
% of Pipe Vol.	.75	
Drawdown:	8.96	in @ 21.8 gal/in
Pump Run Time:	8.91	Minutes
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)	
Pump:	Zoeller5034-0011 High Flow (or approved equivalent)	
Septic Tank Effluent Filter:	Zoeller 170-0144 residential effluent filter (or approved equivalent)	
Septic Tank:	1000	gallon Shoaf
Pump Tank:	1250	gallon Shoaf

Bells Crossing PH 4 S/D Lot 152

SYSTEM TAP CHART

Bench Mark:	0	= 100.00		Manifold elev:	906.50				
Pump tank elevation:	795.00			Pump elev:	789.60				
line	color	rod read	elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Orange	2.50	905.50	100	1/2in SCH 80	5.48	120.00	300	0.4000
2	Red	3.50	904.30	100	1/2in SCH 80	5.48	120.00	300	0.4000
3	Yellow	4.20	901.90	100	1/2in SCH 80	5.48	120.00	300	0.4000
4	White	5.30	899.80	100	1/2in SCH 80	5.48	120.00	300	0.4000
	P-TANK		795.00						
		total	feet =	400	gal/min =	21.92		LTAR =	0.300
				Des. Flow	480			(ltar + 5%)	0.32
				24 Hour Pump Run=	21.90			(ltar W/ INOV)	0.40
								(ltar + 5%)	0.42

Comments:

RECEIVED SEP 26 2016

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

1. APPLICATION FOR: ___Improvement Permit ✓ Authorization To Construct ___ Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
The following optional attachments may also be submitted: ___Survey Plat, Scaled no more than 1 Inch = 60 Feet
Place check ( ) beside whichever is submitted if applicable ___Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. Applicant Information:

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Robert Ruthenberg	11605 N. Community House Rd #250	704-944-8918	
Owner Name	Mailing Address	Home Phone #	Alternate Phone #
Meritage Homes	11605 N. Community House Rd #250	704-944-8901	

4. Property Information:

356 S. San Agustin Dr. | Bells Crossing | Phase 4/Lot 152
Street Address | Subdivision Name | Section/Phase and Lot Number

Driving Directions: From I-77 and NC-150, Head West on NC-150 Turn Right onto Perth Rd., Turn Left onto Bellscrossing Drive, Turn Left onto S. San Agustin Drive

5. RESIDENTIAL Site Development Information: *(Check or Complete ALL that apply)*

(✓) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
(X) Repair To Failing Septic System due to _____
( ) Other _____

Maximum Number of Bedrooms 4
Maximum Number of Occupants 8
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
(✓) Concrete Slab Foundation?
( ) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non-Residential Site Development: Type of Business _____
Square Footage of Building _____
Maximum Number of Employees _____
Maximum Number of Seats _____

6. Proposed Water Supply:

( ) New Well ( ) Existing Well (✓) Community Well ( ) City Water (✓) Other Public Water

7. Desired Septic System Type: *(You may rank in order of preference, if any)* ( ) EXISTING SYSTEM installed ____ *Year*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional (✓) Other Excepted

8. Please Answer The Following ( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
To The Best of Your Ability: ( ) Yes (✓) No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes (✓) No Is the site subject to approval by any other public agency?

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.

9. Signature: _____ 9/26/16
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

EASEMENT RECORDED?

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

RECEIVED APR 19 2016

1. APPLICATION FOR: ✓ Improvement Permit ___ Authorization To Construct ___ Existing System Inspection

****

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application Paid $500.00 # 216991

The following optional attachments may also be submitted: ✓ Survey Plat, Scaled no more than 1 Inch = 60 Feet

Place check ( ) beside whichever is submitted if applicable ___ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. Applicant Information:

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
BCSC	2524 Reliance Ave Apex NC 27539		704-658-8616
Owner Name	Mailing Address	Home Phone #	Alternate Phone #
Meritage Homes	11605 N Community House Rd #250 Charlotte NC 28217		

Paid $700.00 9-26-16

4. Property Information:

Street Address	Subdivision Name	Section/Phase and Lot Number
356 S San Agustine	Bells Crossing	Ph 4 152

Driving Directions: 150 W, R on Perth, L into Bells Crossing L onto S San Agustine, Last lot on the Right

5. RESIDENTIAL Site Development Information: *(Check or Complete ALL that apply)*

(✓) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
(X) Repair To Failing Septic System due to _____
( ) Other _____

Maximum Number of Bedrooms 4
Maximum Number of Occupants 8
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
(✓) Concrete Slab Foundation?
(✓) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business _____
Square Footage of Building _____
Maximum Number of Employees _____
Maximum Number of Seats _____

6. Proposed Water Supply:

( ) New Well ( ) Existing Well (✓) Community Well ( ) City Water ( ) Other Public Water

7. Desired Septic System Type: *(You may rank in order of preference, if any)* ( ) EXISTING SYSTEM installed _____ *Year*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional (✓) Other _____

8. Please Answer The Following To The Best of Your Ability:
( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes ( ) No Is the site subject to approval by any other public agency?

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.

9. Signature: Will Bell — 4-19-16

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — DATE

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*:

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

_____ Property Line measurements are clearly identified... **_____ All proposed structures are indicated...**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

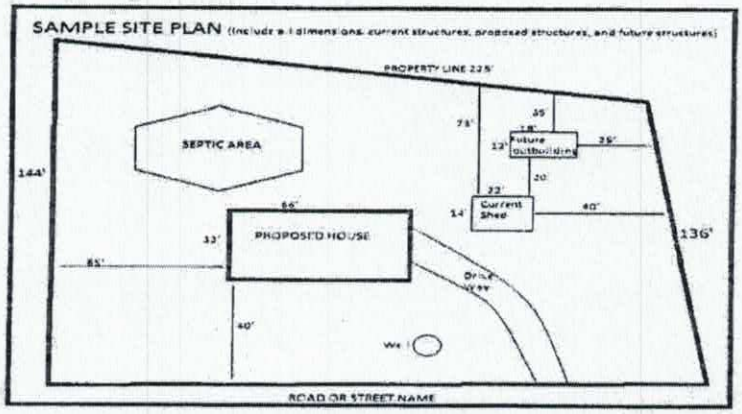
_____ Front and side setbacks from property line... **_____ Preferred driveway location and configuration, preferred well location...**

_____ Area you prefer your septic system to be placed... **_____ North arrow, or other sufficient indicator of direction...**

Circle N/A on the following if appropriate:

_____ Location of septic systems and wells within 100' of your property... N/A

_____ Location of easements and rights of ways on your property... N/A **_____ Location of any designated wetlands on the property... N/A**



USE THIS SPACE TO DRAW YOUR SITE PLAN

Please see Attached Plot Plan and IP Documents

Signature: _____

REQUIRED property owner or owner's legal representative signature.

9/26/16

DATE

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*:

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

/ Property Line measurements are clearly identified… **/ All proposed structures are indicated…**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

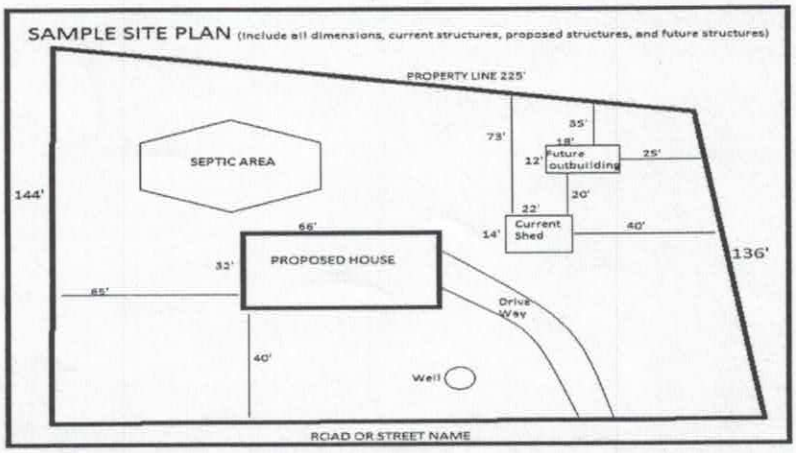
/ Front and side setbacks from property line… **/ Preferred driveway location and configuration, preferred well location…**

/ Area you prefer your septic system to be placed… **____ North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

____ Location of septic systems and wells within 100' of your property… N/A

____ Location of easements and rights of ways on your property… N/A **____ Location of any designated wetlands on the property… N/A**



USE THIS SPACE TO DRAW YOUR SITE PLAN

See Attached

Signature: *Will Bell* 4-19-16

REQUIRED **property owner or owner's legal representative signature.** **DATE**

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, Robert Price (Meritage Homes), am the legal owner of the property located at Bells Crossing, identified as PIN(Parcel Identification Number) Lot 152, located in Iredell County, North Carolina.

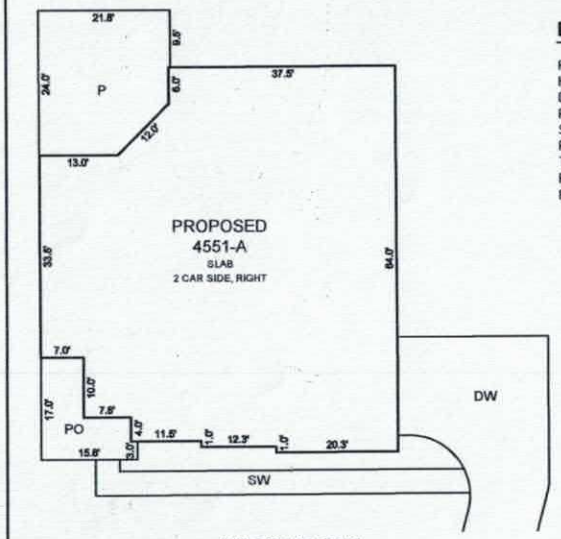
I do hereby authorize (print authorized agent/company name) Bateman Civil Survey Company, Michael Benfield, Matt Burdette, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

Signature of Owner — Date: 3/10/15

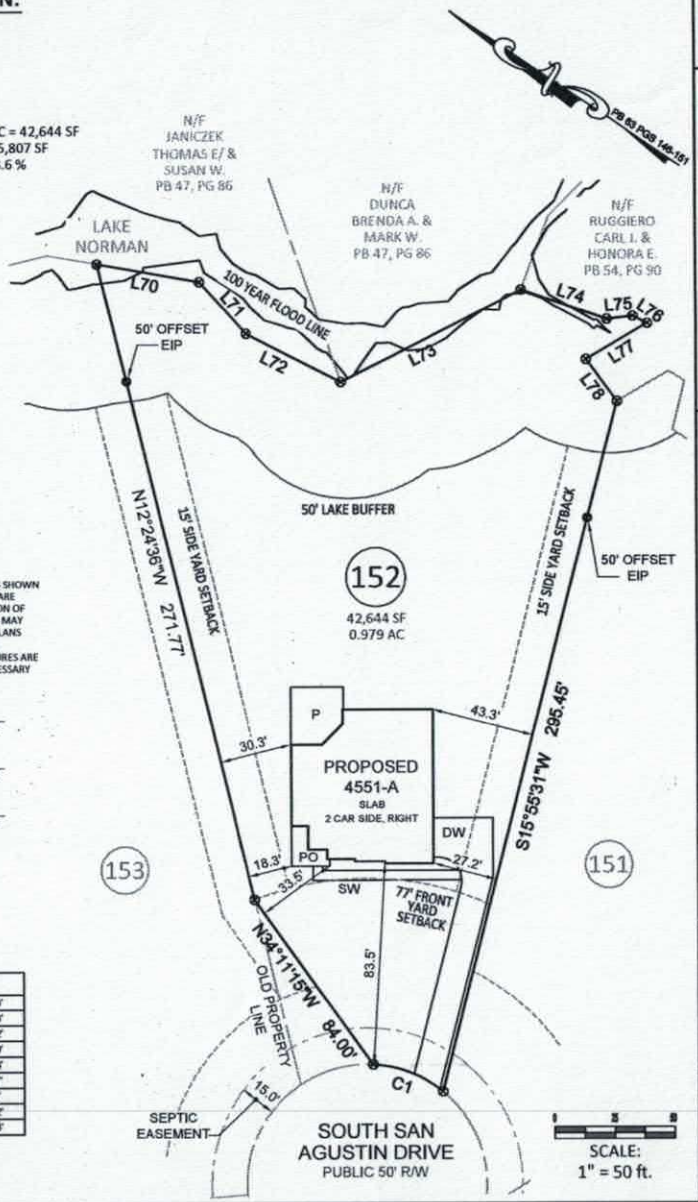
Signature of Witness — Date: 3/10/15



INSET SCALE: 1"=20'

LOT INFORMATION:

PIN: 4639730927
HOUSE = 3,306 SF
DRIVEWAY = 1,587 SF
PORCH = 177 SF
SIDEWALK = 254 SF
PATIO = 483 SF
TOTAL LOT AREA = 0.979 AC = 42,644 SF
PROPOSED IMPERVIOUS = 5,807 SF
PERCENT IMPERVIOUS = 13.6 %



SCALE:
1" = 50 ft.

NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT
4. VERTICAL DATUM IS ASSUMED. THE LATITUDE, LONGITUDE AND STATE PLANE COORDINATES, IF SHOWN, ARE GIVEN IN NORTH AMERICAN DATUM OF 1983 (NAD83).
5. FIELD EQUIPMENT USED: NIKON TOTAL STATION, EPOCH 35.
6. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
7. THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
8. THE PROPERTY LIES IN ZONES "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3710463900J & 3710464900J, DATED MARCH 18, 2008.
9. ZONING IS RA.
10. ALL LOT LINES HAVE A 10' DRAINAGE AND UTILITY EASEMENT ALONG ALL LOT LINES UNLESS SHOWN OTHERWISE.
11. PROPERTY OWNER: MERITAGE HOMES OF THE CAROLINAS INC.
    11605 NORTH COMMUNITY HOUSE ROAD
    CALHOUN BUILDING, STE. 250
    CHARLOTTE, NC 28277

NOTE:

ALL DIMENSIONS, LOCATIONS AND FEATURES SHOWN ON THIS PLOT PLAN ARE APPROXIMATE AND ARE ONLY AN ARTISTS RENDITION, EXACT LOCATION OF ALL FEATURES ARE SUBJECT TO CHANGE AND MAY NOT BE INSTALLED EXACTLY AS SHOWN ON PLANS AND/OR IN MODELS, PLACEMENT OF HOME, DRIVEWAY, SIDEWALKS AND EXTERIOR FEATURES ARE SUBJECT TO MODIFICATION AS DEEMED NECESSARY BY FIELD PERSONNEL.

CUSTOMER _____ DATE _____

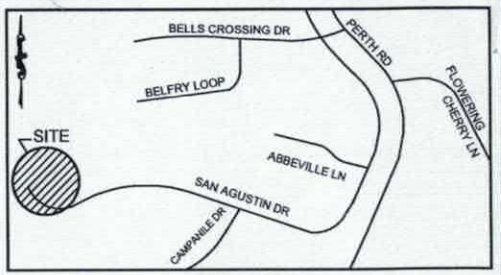
CUSTOMER _____ DATE _____

MERITAGE REPRESENTATIVE _____ DATE _____

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD
C1	31.66'	50.00'	N67°30'59"W	31.17'

LINE TABLE		
L70	S78°44'50"E	43.28'
L71	S41°00'46"E	29.13'
L72	S61°27'47"E	44.32'
L73	N64°36'43"E	84.69'
L74	S69°25'20"E	37.54'
L75	N84°38'51"E	10.97'
L76	S61°34'56"E	6.73'
L77	S61°05'05"W	29.52'
L78	S34°44'05"E	21.64'

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378



VICINITY MAP

(Not to Scale)

LEGEND

PO = PORCH
CP = COVERED PORCH
P = CONCRETE PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY
⊗ = COMPUTED POINT
○ = IRON PIPE FOUND
● = IRON PIPE SET
● = DRILL HOLE FOUND
WM = WATER METER
CO = CLEAN OUT
AC = AIR CONDITIONER
S = SEWER MANHOLE
EB = ELECTRIC BOX
C = CABLE BOX
T = TELEPHONE PEDESTAL
CI = CURB INLET
SP = SCREENED PORCH
☼ = LIGHT POLE

BUILDING SETBACKS:

LOT 152 FRONT = 77 ft
SIDE = 15 ft
REAR = 35 ft
SIDE STREET = 25 ft
LAKE BUFFER = 50ft

I hereby certify that this map is correct and that the building lies wholly on the lot and that there are no visible encroachments on said lot.

PRELIMINARY

Steven P. Carson, PLS 4752
Date

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

APPROVAL FOR STAKING:

THIS PLOT PLAN AS PREPARED BY BATEMAN CIVIL SURVEY CO., IS CORRECT AND IS HEREBY APPROVED FOR STAKING ON THE DATE AS SHOWN BELOW.

MERITAGE HOMES REPRESENTATIVE _____ DATE _____

PRELIMINARY PLOT PLAN

FOR

MeritageHomes

BELLS CROSSING - PHASE FOUR - LOT 152
356 SOUTH SAN AGUSTIN DRIVE, MOORESVILLE, NC
DAVIDSON TOWNSHIP, IREDELL COUNTY

DATE: 7/6/16 DRAWN BY: NMW CHECKED BY: SPC

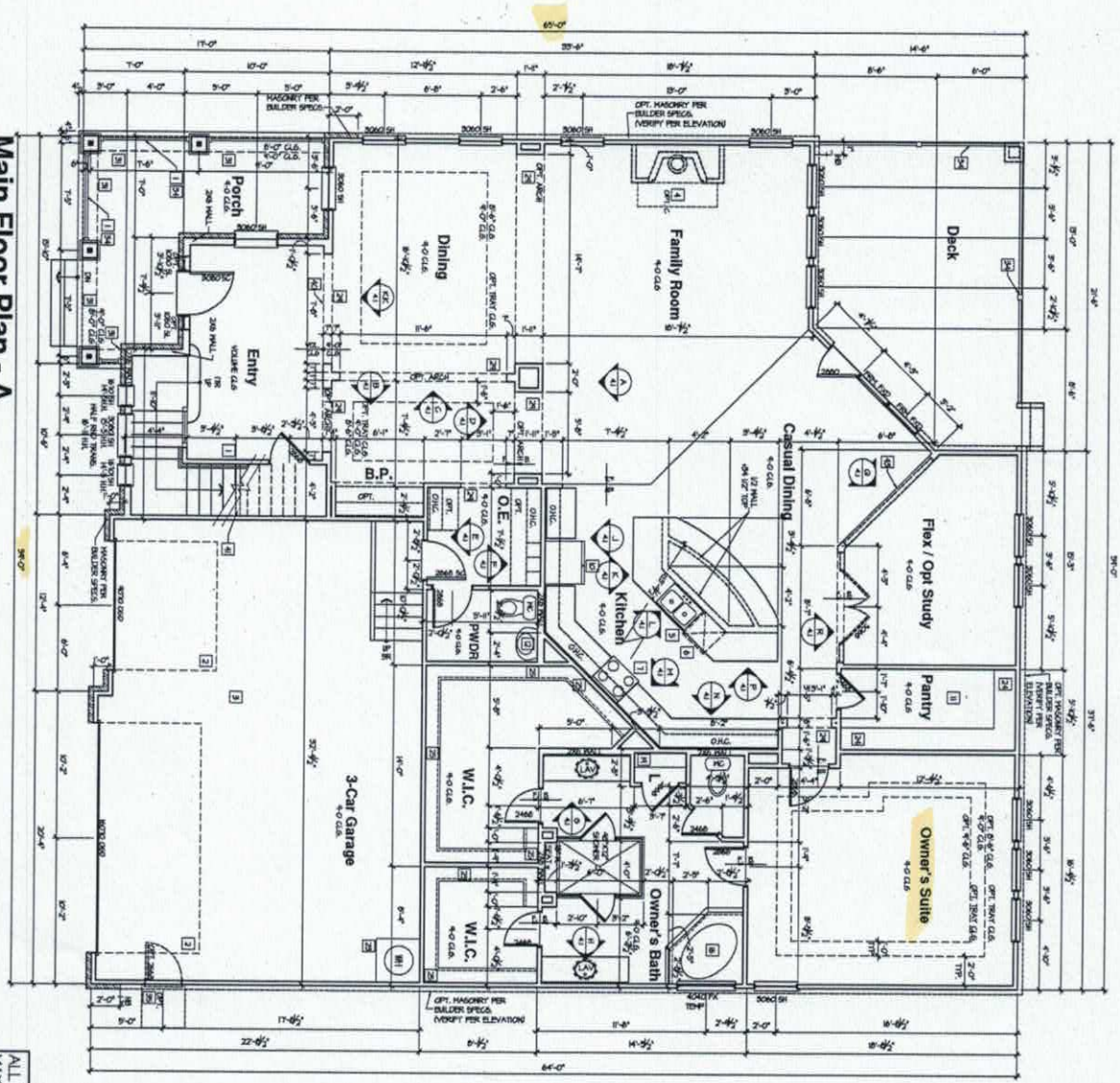
REF: PB 63, PGS. 146-151 BCS# 120314 SCALE: 1" = 50'

V:\120314 Bells Phase 4\dwg\120314 Bells Ph4 Plat MJS.dwg, 7/7/2016 10:38:31 AM, mgilpin

Acknowledgement of
Plans Submittal ONLY!

Date 9-30-16

Date 9-29-16



ALL EXTERIOR HOUSE WALLS MAY BE OPTIONAL 2X6 STUD WALLS - SEE STRUCTURAL PLANS FOR DETAILS.

SQUARE FOOTAGES	
	A
MAIN FLOOR	2947
SECOND FLOOR	1118
BONUS ROOM	0
GARAGE	506
PORCH	78
PATIO	78
DECK	0
1ST BALCONY	0
TOTAL	4727

FLOOR PLAN NOTES:

SHEET INDEX

1. THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS.
2. 8" RAILING / DIAGONAL IS PROVIDED. ALL RAILING / DIAGONAL DIVISIONS TO BE EQUALLY SPACED SO THAT NO SPHERE CANNOT PASS THROUGH. RAILING HEIGHT TO BE 36" MINIMUM ABOVE FLOOR OR STAIR TREAD. RAILING HEIGHT TO BE 34" MINIMUM ABOVE A 30" HORIZONTAL SURFACE AT GUARDS.
3. 9'-0" H GARAGE DOOR W/ OPEN LITE OR OVERHEAD GARAGE DOOR W/ OPEN LITE OR SIMILAR
4. 8'-0" H GARAGE DOOR UP PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING. SEE SPECIFICATION "ALL FACTORY BUILT WINDOWS SHALL COMPLY WITH LOCAL CODES
5. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING. INSTALL PER MANUFACTURERS SPECIFICATION. ALL FACTORY BUILT WINDOWS SHALL COMPLY WITH LOCAL CODES
6. 36" H GARBAGE DISPOSAL
7. RANGE
8. HOOD
9. DW
10. REFRIGERATOR SPACE
11. PANTRY
12. 42" H CAT SHELF
13. 42" H CAT SHELF
14. 42" H CAT SHELF
15. 42" H CAT SHELF
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42. 42" H CAT SHELF
43. 42" H CAT SHELF
44. 42" H CAT SHELF
45. 42" H CAT SHELF
46. 42" H CAT SHELF

TYPICAL CONSTRUCTION ASSEMBLIES:

A. TYPICAL ROOF CONSTRUCTION:
ASPHALT ROOF SHINGLES
B. TYPICAL FLOOR CONSTRUCTION:
FINISH FLOORING ON 3/4" EXTERIOR E GRADE APA RATED T&G SUBFLOOR GLUED AND NAILED OVER FLOOR FRAMING OR FLOOR TRUSSES AT 16" O.C. MAX. SPACING AS NOTED OR STRUCTURAL DRAWINGS.
C. SLAB ON GRADE FLOOR CONSTRUCTION:
4" SOIL REPORT, AND SPECIFICATIONS. SEE SOIL REPORT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. MOISTURE VAPOR BARRIER PER ENGINEER. MOISTURE VAPOR BARRIER PER SOIL REPORT.
D. GENERAL:
A. ALL WINDOWS SHALL COMPLY WITH APPLICABLE REQ. CODES.
B. WINDOW SUPPLIER TO VERIFY AT LEAST ONE EGRESS WINDOW IN ALL BEDROOMS TO HAVE A CLEAR OPENING OF 5.7 SQ. FT. MIN. AREA WITH MIN. DIMENSION OF 24" IN HEIGHT AND 20" IN WIDTH. SILL HEIGHT NOT GREATER THAN 44" ABOVE FINISH FLOOR.
C. TYPICAL HEADER HEIGHT:
7'-0" A.F.F. @ 8'-1 1/8" PLATE HEIGHT (9'-0" A.F.F. @ 9'-1 1/8" PLATE HEIGHT 1ST FLOOR)
D. ELECTRICAL:
ALL ELECTRICAL AND MECHANICAL EQUIPMENT SHALL BE INSTALLED TO MEET OR EXCEED ENERGY CONSERVATION REQUIREMENTS AS REQUIRED BY LOCAL CODES AND REGULATIONS. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
E. MECHANICAL:
PROVIDE BACK DRAFT DAMPERS & DRYER VENT HOOD VENT & EXHAUST FANS.
F. PLUMBING:
ALL PLUMBING SHALL COMPLY WITH LOCAL CODE.
G. ROOF PITCH:
ROOF PITCH VARIES AS SHOWN ON ELEVATIONS.
H. ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUD.
I. ALL INTERIOR DIMENSIONS ARE TO FACE OF STUD UNLESS OTHERWISE NOTED.
J. ALL DIMENSIONS ARE TO FACE OF BRICK UNLESS OTHERWISE NOTED.
K. BRICK SIDING SHALL COMPLY WITH LOCAL CODE.

TYPICAL CONSTRUCTION ASSEMBLIES:

A. TYPICAL ROOF CONSTRUCTION:
ASPHALT ROOF SHINGLES
B. TYPICAL FLOOR CONSTRUCTION:
FINISH FLOORING ON 3/4" EXTERIOR E GRADE APA RATED T&G SUBFLOOR GLUED AND NAILED OVER FLOOR FRAMING OR FLOOR TRUSSES AT 16" O.C. MAX. SPACING AS NOTED OR STRUCTURAL DRAWINGS.
C. SLAB ON GRADE FLOOR CONSTRUCTION:
4" SOIL REPORT, AND SPECIFICATIONS. SEE SOIL REPORT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. MOISTURE VAPOR BARRIER PER ENGINEER. MOISTURE VAPOR BARRIER PER SOIL REPORT.
D. GENERAL:
A. ALL WINDOWS SHALL COMPLY WITH APPLICABLE REQ. CODES.
B. WINDOW SUPPLIER TO VERIFY AT LEAST ONE EGRESS WINDOW IN ALL BEDROOMS TO HAVE A CLEAR OPENING OF 5.7 SQ. FT. MIN. AREA WITH MIN. DIMENSION OF 24" IN HEIGHT AND 20" IN WIDTH. SILL HEIGHT NOT GREATER THAN 44" ABOVE FINISH FLOOR.
C. TYPICAL HEADER HEIGHT:
7'-0" A.F.F. @ 8'-1 1/8" PLATE HEIGHT (9'-0" A.F.F. @ 9'-1 1/8" PLATE HEIGHT 1ST FLOOR)
E. ELECTRICAL:
ALL ELECTRICAL AND MECHANICAL EQUIPMENT SHALL BE INSTALLED TO MEET OR EXCEED ENERGY CONSERVATION REQUIREMENTS AS REQUIRED BY LOCAL CODES AND REGULATIONS. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
F. MECHANICAL:
PROVIDE BACK DRAFT DAMPERS & DRYER VENT HOOD VENT & EXHAUST FANS.
G. PLUMBING:
ALL PLUMBING SHALL COMPLY WITH LOCAL CODE.
H. ROOF PITCH:
ROOF PITCH VARIES AS SHOWN ON ELEVATIONS.
I. ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUD.
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K. ALL DIMENSIONS ARE TO FACE OF BRICK UNLESS OTHERWISE NOTED.
L. BRICK SIDING SHALL COMPLY WITH LOCAL CODE.

Meritage Homes

Meritage Homes

5400 Trinity Road
Suite 107
Raleigh,
North Carolina 27607
919-322-2285 Phone

ISSUE DATE: 01/17/2014

REVISIONS

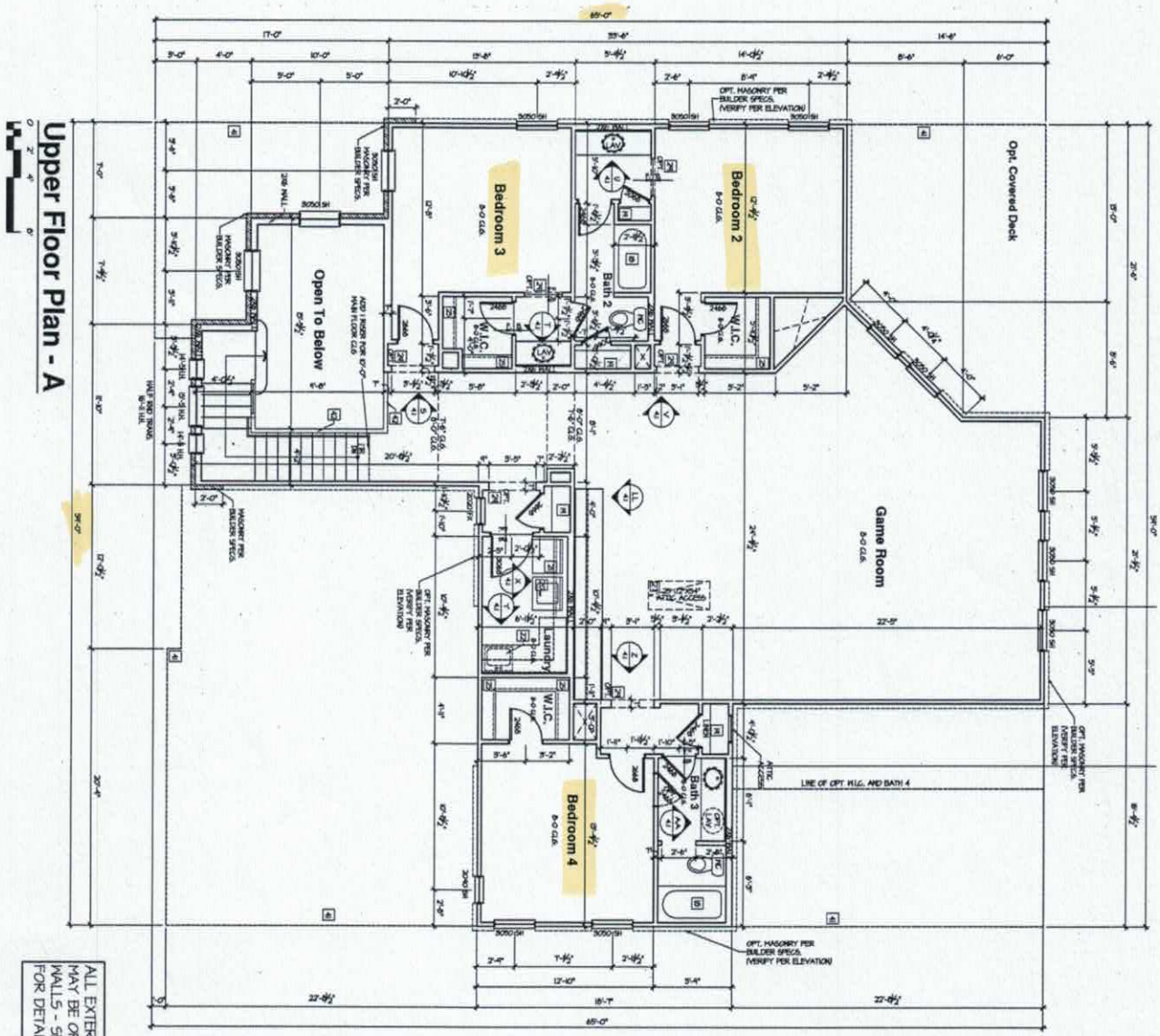
BSB DESIGN

Plan 4551
A2.1A

Acknowledgement of
Plans Submittal ONLY!

Date 9-30-16

Date 9-29-16



ALL EXTERIOR HOUSE WALLS MAY BE OPTIONAL 2X6 STUD WALLS - SEE STRUCTURAL PLANS FOR DETAILS.

FLOOR PLAN NOTES:

TYPICAL CONSTRUCTION ASSEMBLIES:

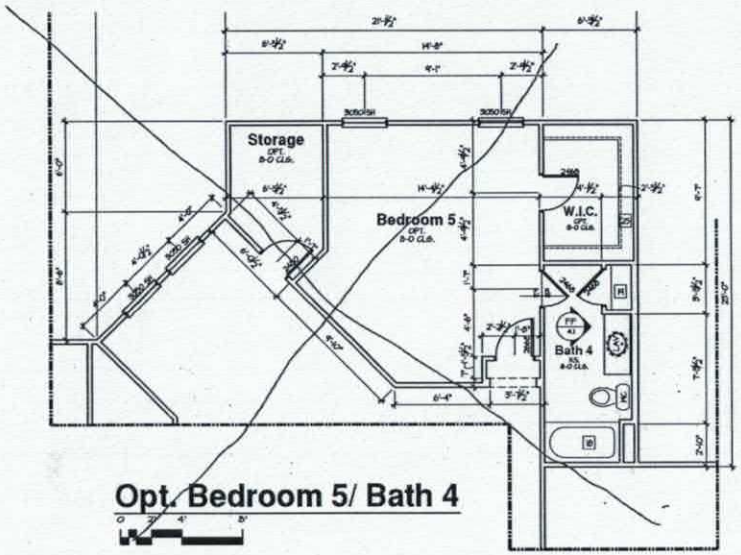
Meritage Homes

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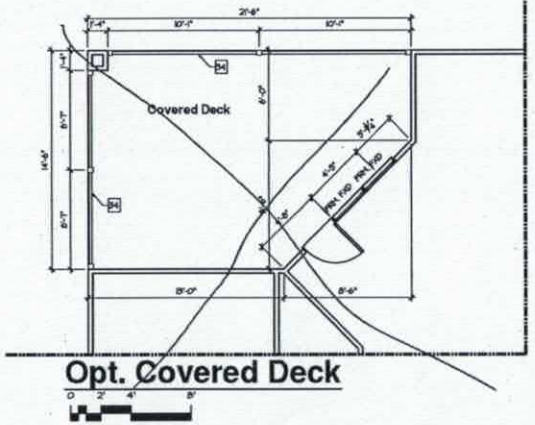
ISSUE DATE: 01/17/2014
REVISIONS

BSB DESIGN

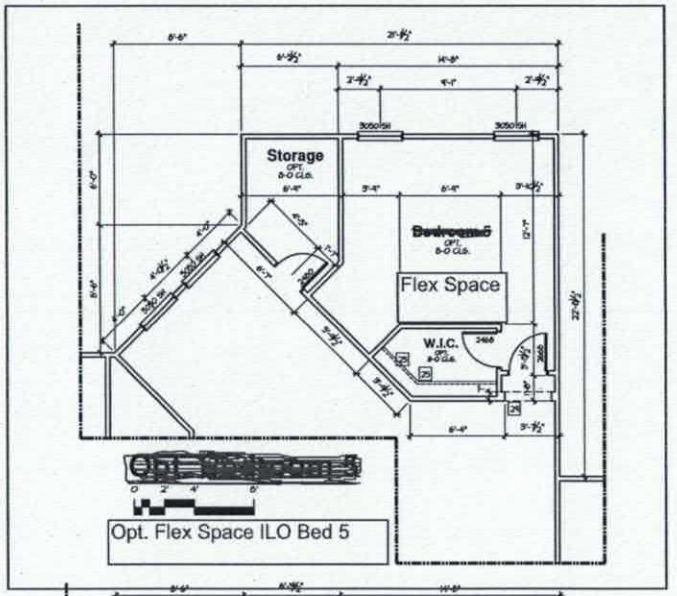
Plan 4551
A2.2A



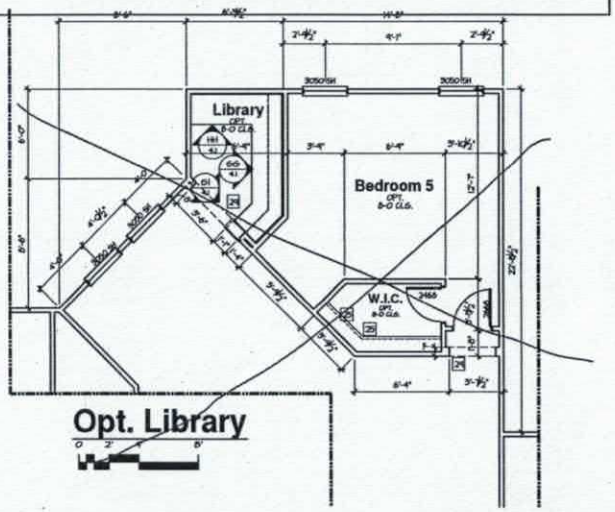
Opt. Bedroom 5/ Bath 4



Opt. Covered Deck



Opt. Flex Space ILO Bed 5



Opt. Library

ALL EXTERIOR HOUSE WALLS MAY BE OPTIONAL 2X6 STUD WALLS - SEE STRUCTURAL PLANS FOR DETAILS.

FLOOR PLAN NOTES:

[SITE_FLOOR]

9 THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. IF RAILING / GUARDRAIL IS PROVIDED, ALL RAILING / GUARDRAIL BALUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALUSTERS. RAILING/HANDRAILS ARE TO BE AT A 34" MINIMUM TO 36" MAXIMUM HEIGHT A.F.F. FOR STAIRS AND 36" MINIMUM ON HORIZONTAL SURFACE GUARDS.
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. FIREPLACE, AS SPECIFIED BY BUILDER. INSTALL PER MANUFACTURERS SPECIFICATIONS. ALL FACTORY BUILT FIREPLACES SHALL COMPLY WITH LOCAL CODES
5. SINK W/ GARBAGE DISPOSAL
6. DISHWASHER
7. RANGE
8. COOK TOP
9. OVEN
10. REFRIGERATOR SPACE.
11. PANTRY
12. PEDESTAL SINK
13. 42" X 42" SHOWER
14. 48" X 42" SHOWER
15. 42" X 60" TUB 20" TO TOP OF DECKING
16. 60" X 60" CORNER TUB
17. 30" X 60" TUB/SHOWER
18. 32" X 60" TUB/SHOWER
19. LINEN SHELVING PER BUILDER SPECS.)
20. WASHER SPACE
21. DRYER, VENT
22. OPTIONAL LAUNDRY SINK.
23. PROVIDE NON-COMBUSTIBLE PLATFORM ELEVATED 8" ABOVE GARAGE FLOOR FOR WATER HEATER.
24. 5 SHELVES PER BUILDER SPECS.
25. 6068 LINO SHEER SHELVING/ROD
26. ATTIC ACCESS (22 1/2"x30" U.N.O.)
27. ATTIC ACCESS W/ STAIRS (25 1/2"x54 1/2")
28. GYPSUM BOARDED SOFFIT @ 8'-0" AT MAIN FLOOR & 7'-0" AT UPPER FLOOR U.N.O.
29. GYPSUM BOARD ARCH @ 7'-2" TO 8'-0".
30. GYPSUM BOARD LOH WALL 30" A.F.F. (U.N.O.) W/ HDF CAP.
31. SOFFIT, REFER TO EXTERIOR ELEVATIONS FOR HEIGHTS & ARCHITECTURAL DETAILS FOR FINISH.
32. PLANT SHELF, SEE EXTERIOR ELEVATIONS.
33. HALF WALL W/ WOOD CAP OR OPTIONAL LOH WALL WITH RAILING ABOVE.
34. PORCH RAIL, SEE ELEVATION.
35. 36"x36" CONCRETE STOOP.
36. 6x6 BEAM.
37. OPTIONAL UPPER CABINETS.
38. OPTIONAL CABINETS.
39. OPTIONAL COFFERED CEILING @ 8'-6" PER BUILDER SPEC.
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. 2X4 LOH WALL 42" A.F.F.
43. 2X6 LOH WALL 42" A.F.F.
44. ART NICHE
45. HORIZONTAL LAUNDRY CHUTE
46. LOH WALL 424" A.F.F.
47. GYPSUM BOARD ARCH @ 8'-0" TO 8'-6"
48. LOH WALL 303" A.F.F.
49. NO HARD LATCH OR LOCKING KNOB

TYPICAL CONSTRUCTION ASSEMBLIES:

A. TYPICAL ROOF CONSTRUCTION: ASPHALT ROOF SHINGLES
B. TYPICAL FRAME FLOOR CONSTRUCTION: FINISH FLOORING ON 3/4" TONGUE & GROOVE FLOOR SHEATHING ON FLOOR TRUSSES OR FLOOR JOISTS AS NOTED ON STRUCTURAL DRAWINGS.
C. SLAB ON GRADE FLOOR CONSTRUCTION: 4" CONCRETE SLAB, EXCEPT AS SPECIFIED BY SOIL REPORT, AND STRUCTURAL ENGINEER. INCLUDE VAPOR BARRIER PER SECTION IV, C, 3, a.
D. WINDOWS:
   A. ALL WINDOWS SHALL COMPLY WITH MINIMUM STANDARDS OUTLINED IN APPLICABLE RES. CHECKS.
   B. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.7 SQ. FT. WITH MIN. DIMENSION OF 24" IN HEIGHT AND 20" IN WIDTH, SILL HEIGHT NOT GREATER THAN 44" ABOVE FLOOR.
   C. TYPICAL WINDOW HEAD HEIGHT: 7'-0" A.F.F @ 8'-1 1/8" PLATE HEIGHT (U.N.O.) 8'-0" A.F.F @ 9'-1 1/8" PLATE HEIGHT (U.N.O.)
E. ELECTRICAL: ALL ELECTRICAL AND MECHANICAL EQUIPMENT & METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS. CONTRACTOR TO VERIFY.
F. HVAC: PROVIDE BACK DRAFT DAMPERS @ DRYER VENT, HOOD VENT, & EXHAUST FANS.
G. STONE SIDING: INSTALL PER LOCAL CODE.
H. DIMENSIONS ARE TO THE FACE OF STUD, U.N.O.
I. ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED.
H. ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.
K. BRICK SIDING: INSTALL PER LOCAL CODE.

ISSUE DATE: 01/17/2014
REVISIONS

5400 Trinity Road
Suite 107
Raleigh,
North Carolina 27607
919-322-2295 Phone

Meritage Homes

Meritage Homes

BSB DESIGN

UPPER FLOOR PLAN - BEDROOM 5 OPT.

Plan 4551
A2.4

Acknowledgement of Plans Submittal ONLY!

Date _____

Date _____

Lot 152

IREDELL COUNTY

PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
216991
Issue Date: 03/01/2016

ZONING PERMIT

Parcel Number	Street Address	Jurisdiction
4639730927.000	356 S ~~204552~~ SOUTH SAN AGUSTIN DRIVE, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: MERITAGE HOMES	Applicant: MERITAGE HOMES
Address: 11605 N COMMUNITY HOUSE RD. #250 CHARLOTTE, NC 28277	Address: 11605 N COMMUNITY HOUSE RD. #250 CHARLOTTE, NC 28277
Phone: 704-944-8933	Phone: 704-944-8933

Use Requested	Zone Code
SFD	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.010	35.00	35.00	15.00	15.00	CACL	AE

Remarks:

PAID
✓ 70509994 $77.25
✓ 70509996 $500.00
3-3-16

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant: _____ Date: _____

Permit Number	61615	TOTAL FEES:	$ 77.25