IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 21889

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

PIN # 4614941201

APPLICANT: KN Land LLC / The Oaks Group APPLICANT ADDRESS: 1454 Brawley School Rd Mooresville, NC 28117

SITE ADDRESS: 343 Tuskarora Trail Mooresville, NC 28117 PHONE: Kathleen 704-578-4951 ALT. PHONE:

SITE DIRECTIONS: Brawley School Rd TR Tuskarora Tr lot on left @ intersection with Syllabub.

SUBDIVISION: Thunderhill Park SECTION: — LOT # 6 LOT AREA: DESIGN FLOW: 480 gpd L.T.A.R.: .3

Septic Tank	(gal)	STB 1012	Date 4-30-17	☒ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	☒ Residence	No. Bedrooms 4	Water Supply
Pump Tank	(gal)	PT 17	Date 8-16-16	System Description: Pump-PM-25% Reduction				☐ Business	No. Persons 8	☒ Private
Pump Make	Model		Serial #	Repair System Description: LPP PBP3				☐ Other	No. Employees	☐ Public
# Nitrification Fields 1	# Lines 6		Linear Ft: 400	Maintenance Agreement Required:	☐ YES	☒ NO		☐ Slab	☒ Crawl Space	☐ Community
Trench Width 36"	Max. Trench Bottom Depth 36"		Gravel Depth N/A		☐ GRAVITY	☒ PRESSURE		☐ Basement w/plumbing		☐ Basement w/o plumbing

Comments / Conditions: Note: 2-40ft lines connected together on 1 tap.

* Divert stormwater / surface water away from septic

INITIAL SITE SKETCH

See attached, approved Septic Plan by The Oaks Group, PA (dated 5/14/16)

AS BUILT SKETCH

8/23/17: 1000 Gal mid seam Taylorsville Precast. 400' of line (chambers) installed. PM box OK (SCH 80 fittings/tapes) Location of system + components substantially matches permit. * Began to downpour mid-inspection SR

EF-4 Tuff Site Filter

	Date	Initials
Drain Lines Checked	8/23	SR
Tanks Checked	8/23	SR
Pressure Manifold or Valve Box Checked	8/23	SR
Pressure Head Set	11/21/17	MD
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Y (N) Not Required		
Comments:		

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: Kathleen Saunders Date: 6/2/16 Installed by: Steve Jordan

IMPROVEMENT PERMIT by: Maria H. Dotson RS Date: 5/31/16 OPERATION PERMIT by: Maria Dotson Date: 11/21/17

AUTHORIZATION TO CONSTRUCT by: Maria H. Dotson RS Date: 5/31/16 Existing System Inspected by: Date:

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


TUSKARORA TRAIL
SYLLABUB LANE
S63°49'18"W
196.05'
137.46'
S49°15'00"E
N57°46'39"E
308.49'
S50°55'31"E
143.50'
C1
PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES.
pool
40'
20'
flag
Approved
5/31/16

THE OAKS GROUP, PA

Approved
MD
5/31/16

To: Iredell County Environmental Health Department (ICHD)

From: Kathleen Saunders, LSS

RE: 107 Tuskarora Trail

Date: May 14, 2016

Attached is the septic specification information required to permit 107 Tuskarora Trail for an Improvement Permit and/or Construction Authorization Permit in Iredell County via the Expedited Review Process.

The attached information is not an Improvement Permit or an Authorization to Construct, and is only to assist the ICHD with permitting. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC Rules, which these specifications are in accordance with. If the ICHD wishes to change tank locations, distribution devices, etc they may do so at their discretion.

All information and specifications have been prepared in conjunction with ICHD permitting guidelines for the current lot owners to acquire an Improvement Permit and/or Authorization to Construct on this lot. It is ultimately the ICHD's responsibility to verify all specifications, including soil descriptions, before permitting and/or septic system installation.

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
1313
STATE OF NORTH CAROLINA

Kathleen Saunders

Syllabub Lot 6 Fast Track Septic Spec Sheet

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	6 (See Table)
Total Linear Feet	400
Trench Width	3' min.
Trench Spacing	9' min.
Max Trench Depth	~~24~~ 36" kms
Pump Required	Yes
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	125' of 2" SCH 40 PVC
Flow Rate through the system	27.5 gpm
Elevation head	Approx. 11.5'
Pressure head	2.0'
Friction head	2.2'
20% Contingency	3.1'
Total Head	18.8'
Pump Requirements	27.5 gpm @ 18.5' of head To be designed by installer.
Maximum Dosing Volume	240 gal -2.0 doses/day @ design flow
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	8.7
Repair System	**LP PPBPS**
Total Linear Feet	282
Repair Loading Rate	0.3

Approved
MD
5/31/16

Approved MD 5/31/16

Table: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Elevation (Ft.)
1	Repair	Blue	LP PPBPS	54	2.78
2	Repair	Orange	LP PPBPS	70	3.54
3	System	Red	25% Reduction	80 endfed	4
4	System	Pink	25% Reduction	80 endfed	4.87
5	System	Blue	25% Reduction	80 endfed	5.68
6	System	Orange	25% Reduction	80 endfed	6.37
7	Repair	Red	LP PPBPS	66	7.43
8	Repair	Pink	LP PPBPS	67	8.26
9	System	Blue	25% Reduction	40 endfed	9.58
10	System	Red	25% Reduction	40 connected	10.22
				Total System: 400'	
				Total Repair: 282'	

Tank	Red	1000 gal (2 compartment)	8.30
Pump Tank	Red	1000	
House	Orange		7.80

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	5
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: **All rod readings should be verified by installer prior to installation**
Tank Locations and distribution devices may be altered at the discretion of the ICHD
Use proper setbacks if foundation drains are used
Two 40 ft lines should be connected and use 1 tap

SCH 40 1/2" used

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

Approved 5/31/16 MO

Sheet:
Property ID:
Lot #:
File #:
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: LKN Land
Address: 1454 BSR 28117
Proposed Facility: SFR Design Flow (.1949) 480
Location of Site: Lot 6 - Tuskarora/Syllabub

Applicant:
Date Evaluated: 5/12/16
Property Size:
Property Recorded:

Water Supply: [ ] 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
1	(A-H) L	0-18	MD SBK C	FR SS/SP	R				0.3
		18-34	WK SBK C	↓	R; C Sap				
		34-48	MA L Sap	↓	R				
A	L	0-9	Fill						0.3 use 36" TB
		9-15	ARK/MA CL	Compacted					
		15-31	WK SBK CL	FR SS/SP	R, C Sap				
		31-62	MA L/SL Sap	FR SS/SP	multi				
B	L 8%	0-22	MD SBK CL/L	FR SS/SP	R, F/C Sap				0.3
		22-38	WK SBK CL	↓	Yel/R C/M Sap				
		37-53	MA L Sap	↓	Yel/R				
C	L	0-14	MD SBK CL/L	FR SS/SP	F Sap				0.3
		14-34	WK SBK CL	↓	C/M Sap				
		34-54	WK SBK CL	↓					
		25-33" Quartz vein on side of pit, able to pick off							

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)	III-b	IV
Site LTAR	0.3	0.3

Other Factors (.1946):
Soil Evaluation By: KMS
Others Present: ELH
Site Classification (.1948): PS
Site Evaluation By: KMS
Others Present: ELH

D 0-16 WK SBK C R F Sap
16-38 MA L Sap multi F inc CL 0.3
38-60 MA L Sap multi

RECEIVED MAY 17 2016

IREDELL COUNTY HEALTH DEPARTMENT

Paid $850.00
#218891

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: APPLICATION FORM

Application For:

(X) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) Septic Improvement Permit (X) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repai

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.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted:
Place an (X) beside whichever is submitted if applicable

(X) Survey Plat, scaled no more than 1 inch = 60 feet
( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

contact Kathleen Saunders (704) 578-4951

Applicant Name: LKN Land LLC Address: 1454 Brawley School Rd Mooresville NC 28117 Phone:

Owner Name: same Address: Phone:

Property Information:

Street Address: 107 Tuskarora Trl Mooresville NC 28117

Subdivision Name: Thunderhill Park Section/Phase: 56-111 Lot Number: 6

Driving Directions: Brawley School Rd. Right of Tuskarora Trl, Lot on Left

Site Development Information: *(check or complete ALL that apply)*

(X) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: 8
(X) Swimming Pool
( ) Other Addition/Structure:

(X) Crawl Space Foundation
(X) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbi

Non-Residential Site Development:

Type of Business:
Square Footage of Building:
Maximum Number of Employee:
Maximum Number of Seats/Beds/Other:

Water Supply:

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

Desired Septic System Type: (you may rank in order of preference) Year existing system installed:

( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other:

Please answer the following to the best of your ability:

( ) Yes (X) No Does the site contain any jurisdictional wetlands?
( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (X) 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 grant right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

Signature: Emma Helt 5/12/16

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) 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, Lon K. Beaver (LKN Land, LLC), am the legal owner of the property located at 107 Syllabub, Mooresville, identified as PIN(Parcel Identification Number) 4614941201.00, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) The Oaks Group, PA (Kathleen Saunders), _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

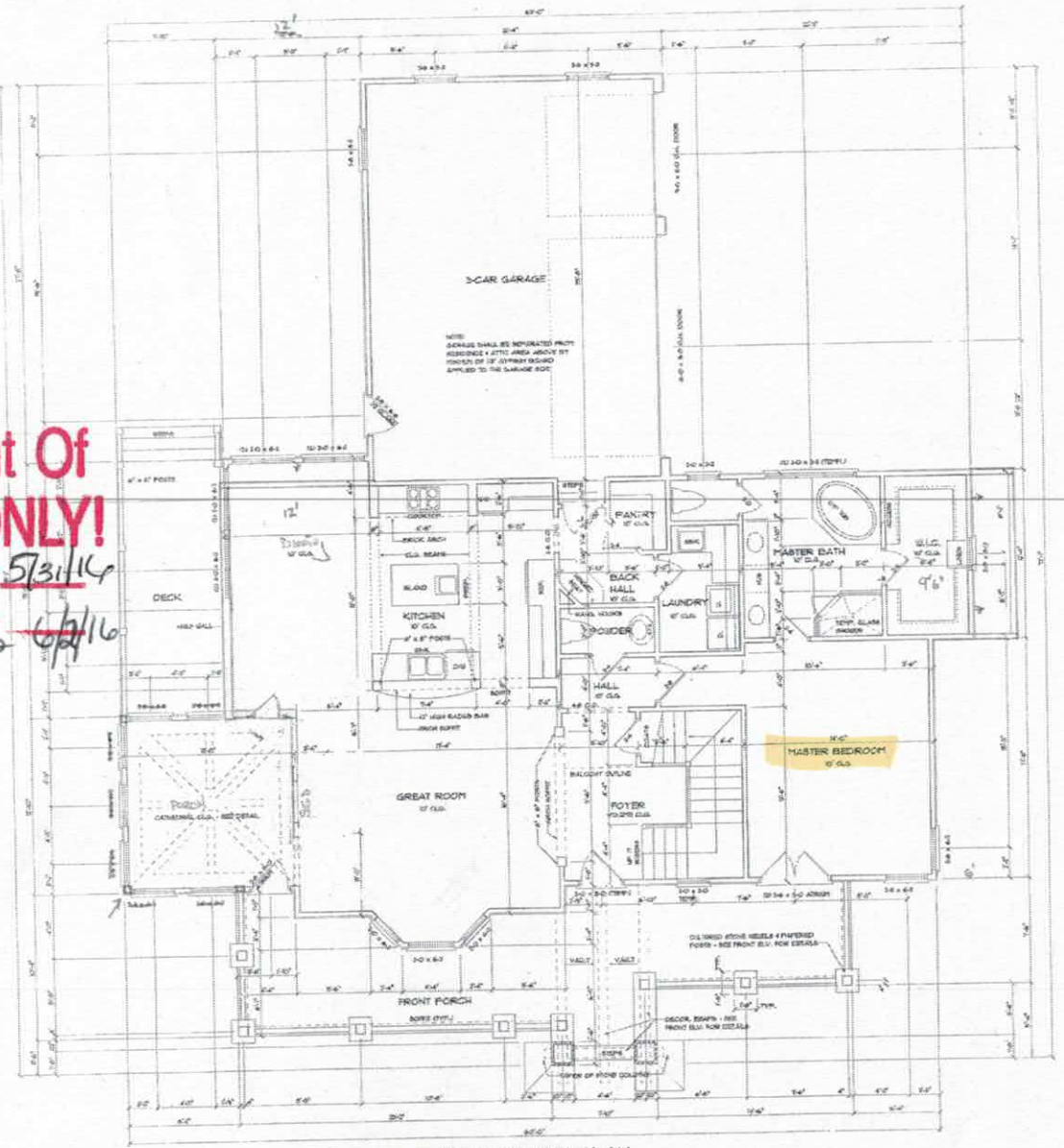
1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

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.

Lon K Beaver — 5/12/16
Signature of Owner — Date

Erin Helton — 5/12/16
Signature of Witness — Date

Acknowledgement Of
Plans Submittal ONLY!
Date 5/31/16
6/2/16



FIRST FLOOR PLAN

REVERSE PLAN 66'x72'

SQUARE FOOTAGE:	
1ST FLOOR HEATED	1708
SECOND FLOOR HEATED	113
HEATED TOTAL	2821
UNFIN. FINISHED SPACE	486
GARAGE	664
FRONT PORCH	346
TOTAL UNDER ROOF	4315

BUILDER TO VERIFY ALL DIMENSIONS, ANGLES, MATERIALS, ETC... PRIOR TO CONSTRUCTION & IN THE FIELD DURING CONSTRUCTION

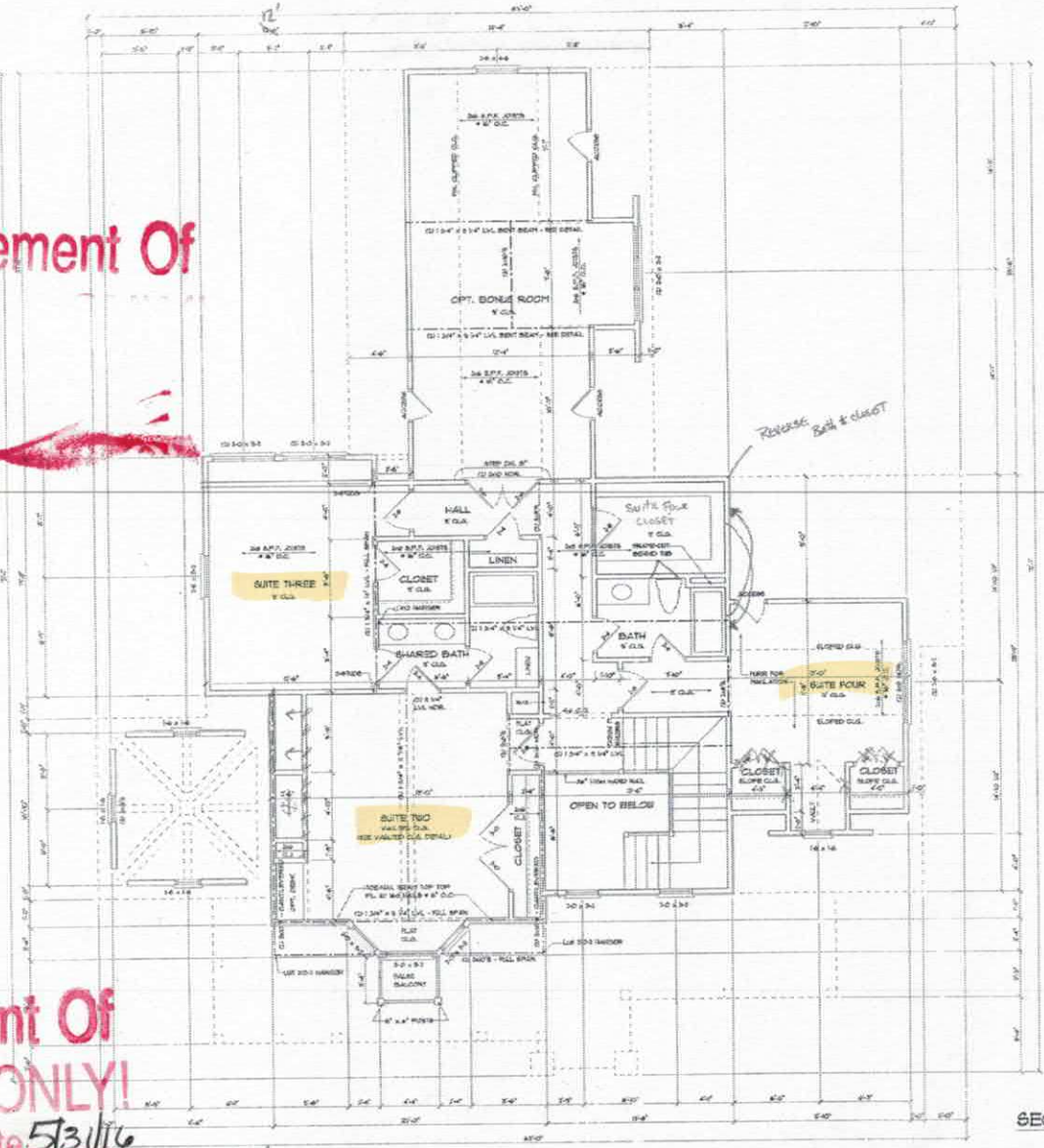
AN ARTS & CRAFTS HOUSE
BY
KENNETH BEALER HOMES
Lot 6, Thunderhill Park

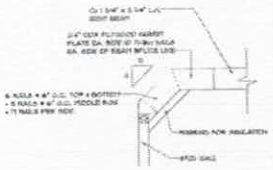
DATE:

3
OF
10

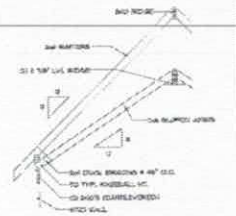
66'x72'

Acknowledgement Of





BENT BEAM DETAIL



VAULTED CLG. DETAIL

SECOND FLOOR PLAN

BUILDER TO VERIFY ALL DIMENSIONS, ANGLES, MATERIALS, ETC... PRIOR TO CONSTRUCTION & IN THE FIELD DURING CONSTRUCTION

AN ARTS & CRAFTS HOUSE
BY
KENNETH BEALER HOMES
LOT 6, Thunderhill Park

DATE:

5
OF
10

Acknowledgement Of
Submittal ONLY!
Maria Dobson Date 5/31/16
Kathleen Saunders 6/2/16

IREDELL COUNTY

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

APPLICATION NUMBER
218891
Issue Date: 05/17/2016

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4614941201.000	345 TUSKARORA TRAIL, MOORESVILLE, NC 28117	

Owner Information	Applicant Information
Owner: LKN LAND LLC	Applicant: THE OAKS GROUP
Address: 4210 IREDELL CO, NC 28625	Address: 121 HOLT LN MOORESVILLE, NC 28117
Phone:	Phone: 704-578-4951

Use Requested	Zone Code
SFD	

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.010	35.00	35.00	15.00	25.00	CA	X

Remarks:

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	68927	TOTAL FEES:	$ 77.25