ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | DW Mooresville Office (704) 660-3625 | PERMIT # AP 321958

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

PIN # 4659-76-2408

APPLICANT/OWNER: Serafim & Maria Machado | APPLICANT ADDRESS: 110 Hamilton Park Dr. 28115

SITE ADDRESS: 175 Shepherds Bluff Dr. Mooresville NC, 28115 | PHONE: 516-790-5292 | ALT. PHONE

SITE DIRECTIONS: Hwy 21 N - Rt Shepherd Rd - Lt Shepherds Bluff | SAP CONTROLLED: [X] YES [ ] NO

SUBDIVISION: Shepherds Bluff | SECTION: 3 | LOT # 7 | LOT AREA: 1.13 | DESIGN FLOW: 360gpd | L.T.A.R.: .4

Septic Tank	1000 (gal)	STB	Plastic	Date	Prelim/Info	[X] New System	[ ] Repair	[ ] Expansion	System Type: I II (III) IV V VI
Pump Tank	1000 (gal)	PT		Date	Prelim/Info	System Description:	25% Reduction		
Pump Make		Model		Serial #		Repair System Description:	50% Reduction		
# Nitrification Fields	1	# Lines	2	Linear Ft	225	Maintenance Agreement Required:	[ ] YES	[X] NO	
Trench Width	36in	Trench Bottom Depth(~~Low side~~)	36 in (max)	Gravel Depth	—		[ ] GRAVITY	[X] PRESSURE	

[X] Residence [ ] Business [ ] Other [ ] Slab [ ] Basement w/ plumbing

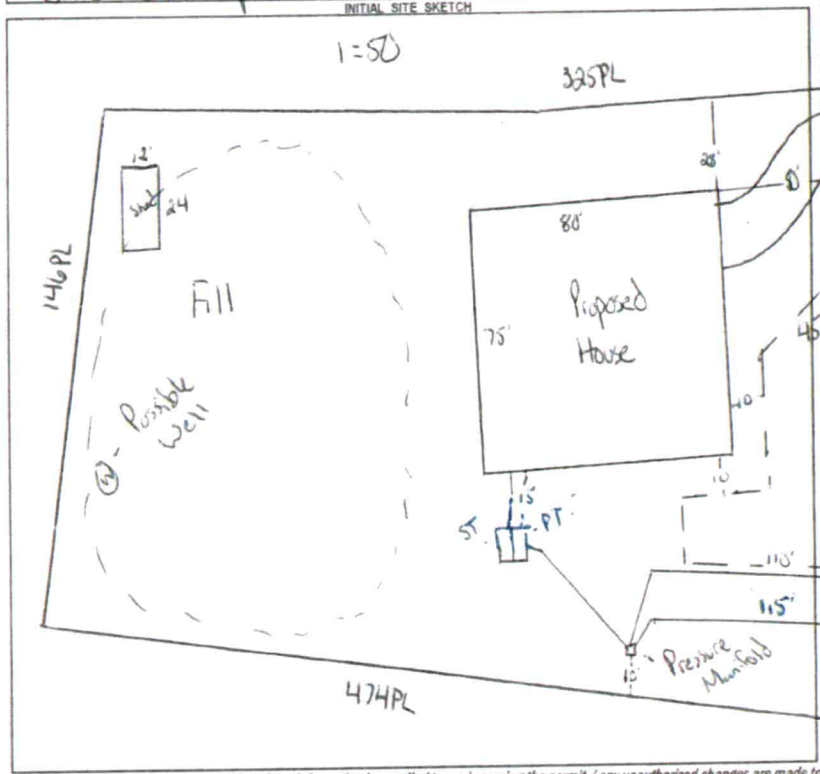
No. Bedrooms: 3 | No. Persons: 6 | No. Employees: | [X] Crawl Space

[ ] Basement w/o plumbing

Water Supply: [X] Private [ ] Public [ ] Community

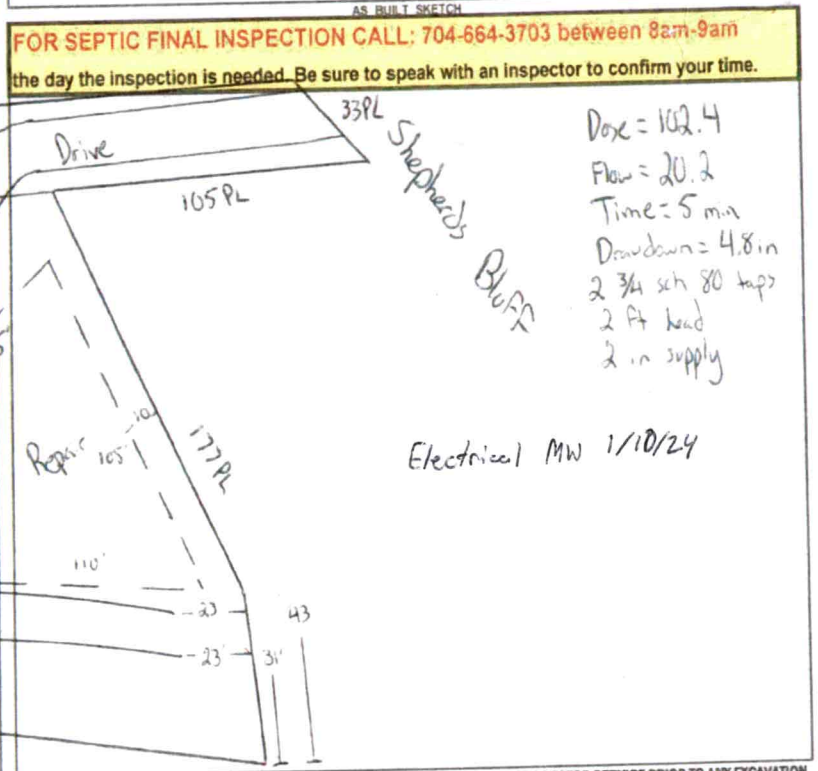
Comments / Conditions: Install drainlines on contour of the land. Utilize a pressure manifold. Do not grade, park, or drive on septic area.

INITIAL SITE SKETCH



AS BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your time.



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.* [X] **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* [X] **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Maria Machado Date: 11/24/21

IMPROVEMENT PERMIT by: Cory Wilt Date: 11/22/21

AUTHORIZATION TO CONSTRUCT by: Cory Wilt Date: 11/22/21

Installed by: TW Ammons

OPERATION PERMIT by: Matt Wilkinson Date: 1/10/24

Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 (DW) | PERMIT # AP 321958

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

PIN # 4659 -- 76 -- 2408

APPLICANT/OWNER: Serafim & Maria Machado | APPLICANT ADDRESS: 110 Hamilton Park Dr. 28115

SITE ADDRESS: 175 Shepherds Bluff Dr. Mooresville NC 28115 | PHONE: 516-790-5292 | ALT. PHONE

SITE DIRECTIONS: Hwy 21 N - Rt Shepherd Rd - Lt Shepherds Bluff | SAP CONTROLLED: [X] YES [ ] NO

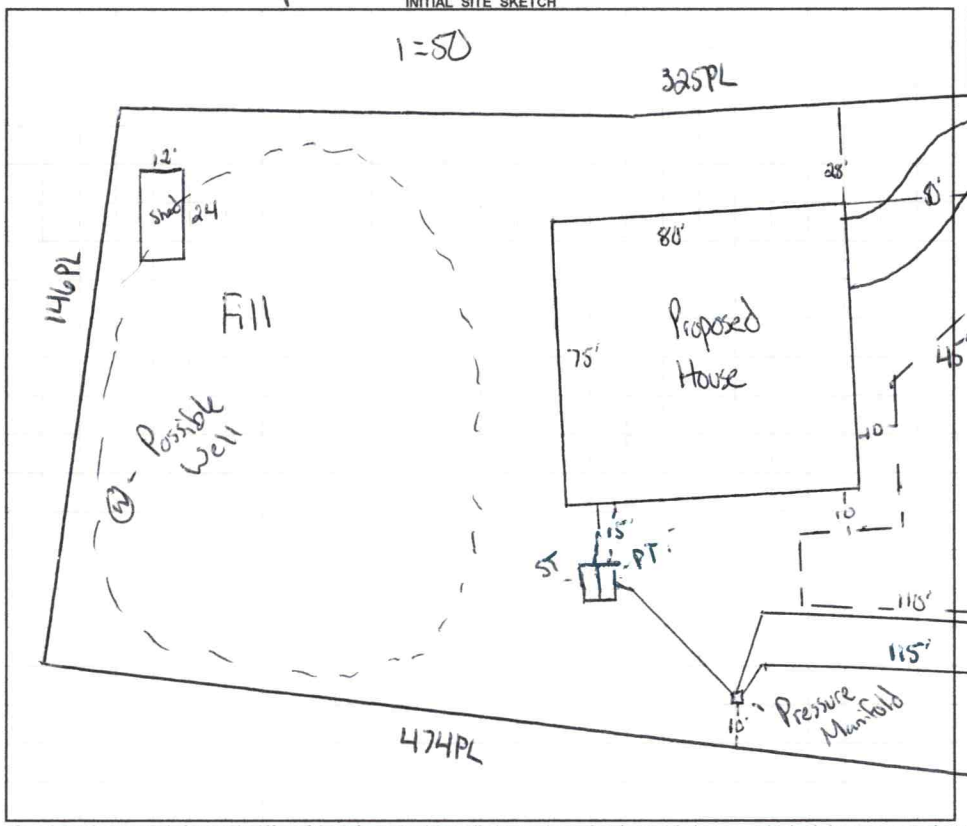
SUBDIVISION: Shepherds Bluff | SECTION: 3 | LOT # 7 | LOT AREA: 1.13 | DESIGN FLOW: 360gpd | L.T.A.R.: 4

Septic Tank	1000 (gal)	STB	Date	[X] New System	[ ] Repair	[ ] Expansion	System Type: I II (III) IV V VI	[X] Residence	No. Bedrooms 3
Pump Tank	1000 (gal)	PT	Date	System Description: 25% Reduction				[ ] Business	No. Persons 6
Pump Make		Model	Serial #	Repair System Description: 50% Reduction				[ ] Other	No. Employees
# Nitrification Fields	1	# Lines 2	Linear Ft 225	Maintenance Agreement Required:	[ ] YES	[X] NO		[ ] Slab	[X] Crawl Space
Trench Width	36in	Trench Bottom Depth(~~Low side~~)	36 in (max)	Gravel Depth –	[ ] GRAVITY	[X] PRESSURE		[ ] Basement w/plumbing	[ ] Basement w/o plumbing

Water Supply: [X] Private [ ] Public [ ] Community

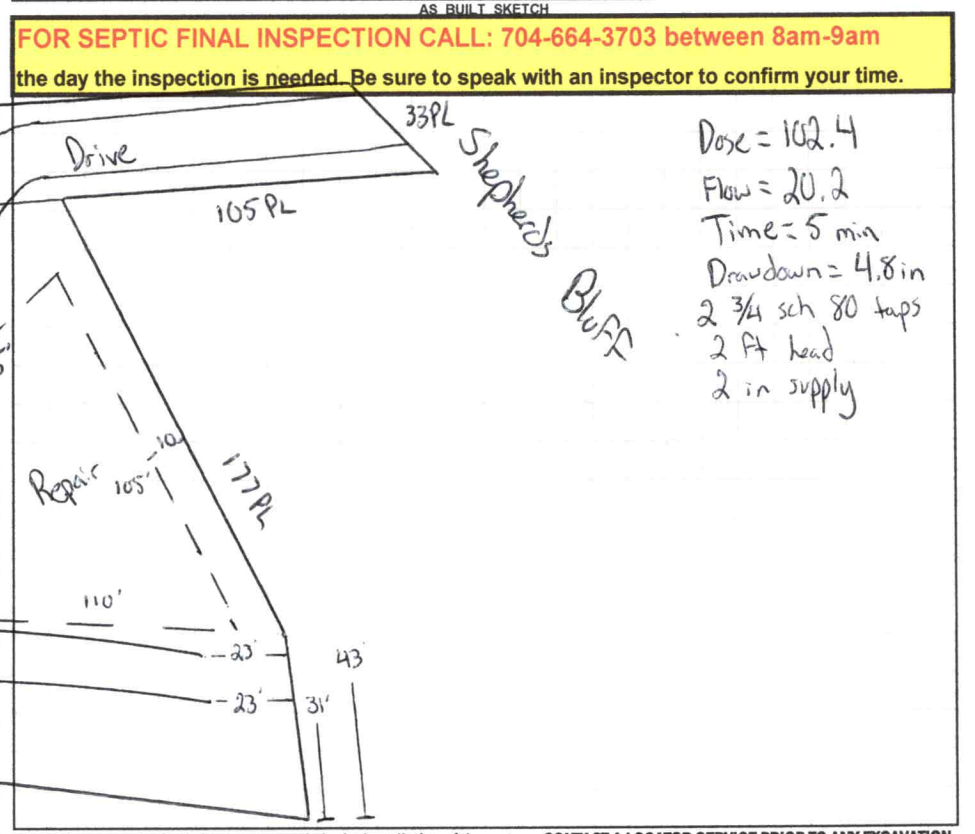
Comments / Conditions: Install drainlines on contour of the land. Utilize a pressure manifold. Do not grade, park, or drive on septic area.

INITIAL SITE SKETCH



AS BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your time.



Dose = 102.4
Flow = 20.2
Time = 5 min
Drawdown = 4.8 in
2 3/4 sch 80 taps
2 Ft head
2 in supply

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.* [X] **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* [X] **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Maria Machado | Date: 11/24/21 | Installed by:

IMPROVEMENT PERMIT by: Cory Wirth | Date: 11/22/21 | OPERATION PERMIT by: | Date:

AUTHORIZATION TO CONSTRUCT by: Cory Wirth | Date: 11/22/21 | Existing System Inspected by: | Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

Item	Date	Initials
Drain Lines Checked	12-7	
Tanks Checked	12-7	
Pressure Manifold or Valve Box Checked	12-7	
Pressure Head Set	12-7	
Electrical Checked		
Floats Set	12-7	
Alarm Checked	12-7	
Maintenance Contract Needed? Y / N		
Comments:		

Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	

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

Sheet 1 of 2
PROPERTY ID #:
COUNTY: Iredell

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

OWNER: Serafim & Maria Machado
ADDRESS: 110 Hamilton Park Dr. 28115
PROPOSED FACILITY: 3Bd House
PROPOSED DESIGN FLOW (.1949): 360 GPD
LOCATION OF SITE: 175 Shepherds Bluff Dr. Mooresville NC 28115
APPLICATION DATE 10-26-21
DATE EVALUATED: 11-15-21
PROPERTY SIZE: 1.13
PROPERTY RECORDED: Yes

WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	Linear	0 - 39	Fill		-				US
		39 - 48	SCL SBK	SS SP FR SE					
		48 - 78	SAP LS						
2	Linear	0 - 34	Fill		-				US
		34 - 60							
3	Linear 2%	0 - 42	SAP LS	FR	-		-	-	.4 PS
		42 - 64	SAP CL	FR					
4	Linear 4%	0 - 13	CL SBK	SS SP FR SE	-		-	-	.4 PS
		13 - 67	SAP LS	FR					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%	50%
Site LTAR	.4	.4

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

COMMENTS:

SOIL/SITE EVALUATION

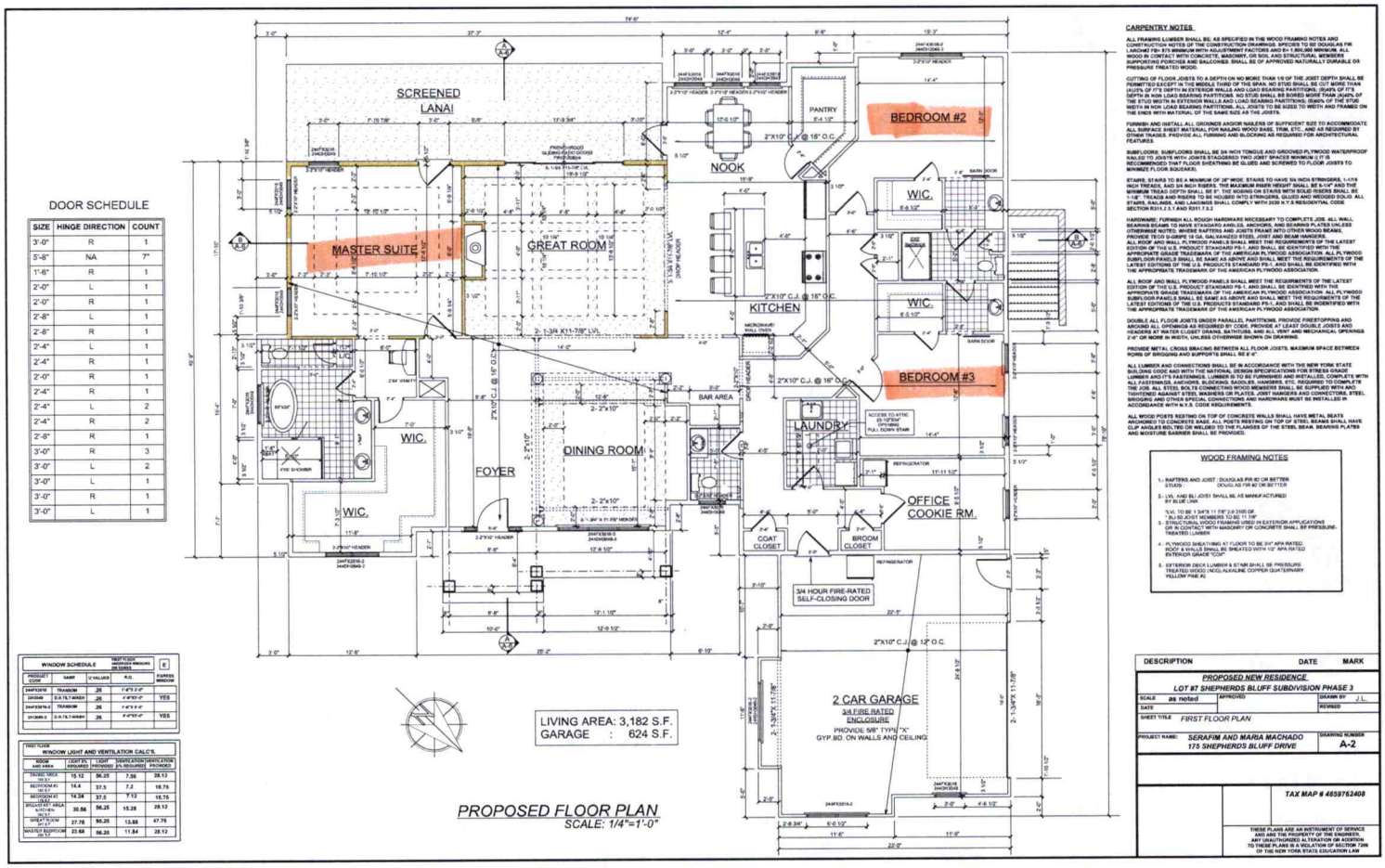
(Continuation Sheet-Complete all field in full)

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

PROPERTY ID #:
DATE OF EVALUATION: 11/15/21
COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	Linear 32%	0 - 9	CL SBK	SS SP FR SE	-	-	-	-	.4 PS
		9 - 36	SAP LS	FR					
		36 - 67	SAP CL	FR					
6	Linear 32%	0 - 67	SAP LS	FR	-	-	-	-	.4 PS

COMMENTS:



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

DOOR SCHEDULE

SIZE	HINGE DIRECTION	COUNT
3'-0"	R	1
5'-8"	NA	7"
1'-6"	R	1
2'-0"	L	1
2'-0"	R	1
2'-8"	L	1
2'-8"	R	1
2'-4"	L	1
2'-4"	R	1
2'-0"	R	1
2'-4"	R	1
2'-4"	L	2
2'-4"	R	2
2'-8"	R	1
3'-0"	R	3
3'-0"	L	2
3'-0"	L	1
3'-0"	R	1
3'-0"	L	1

WINDOW SCHEDULE

PRODUCT CODE	NAME	U VALUES	R.O.	EGRESS WINDOW
2446FD2816	TRANSOM	.26	1'-4"X 2'-4"	
DH3068	D.H.T.W.WASH	.26	4'-4"X5'-4"	YES
2442FD3616	TRANSOM	.26	1'-4"X 4'-4"	
DH3668-2	D.H.T.W.WASH	.26	5'-4"X5'-4"	YES

WINDOW LIGHT AND VENTILATION CALC'S.

ROOM AND AREA	LIGHT REQUIRED	LIGHT PROVIDED	VENTILATION REQUIRED	VENTILATION PROVIDED
DINING AREA 180 S.F.	10.12	56.25	7.56	28.12
BEDROOM #3 140 S.F.	14.4	37.5	7.2	18.75
BEDROOM #2 140 S.F.	14.34	37.5	7.13	18.75
SPECIALTY KIT. AREA 225 S.F.	20.56	56.25	15.38	28.12
GREAT ROOM 371 S.F.	27.76	56.25	13.88	47.76
MASTER BEDROOM 180 S.F.	23.68	56.25	11.84	28.12

CARPENTRY NOTES

ALL FRAMING LUMBER SHALL BE: AS SPECIFIED IN THE WOOD FRAMING NOTES AND CONSTRUCTION NOTES OF THE CONSTRUCTION DRAWINGS. SPECIES TO BE DOUGLAS FIR LARCH#2 FB= 875 MINIMUM WITH ADJUSTMENT FACTORS AND E= 1,600,000 MINIMUM. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR SOIL, AND STRUCTURAL MEMBERS SUPPORTING PORCHES AND BALCONIES SHALL BE OF APPROVED NATURALLY DURABLE OR PRESSURE TREATED WOOD.

CUTTING OF FLOOR JOISTS TO A DEPTH ON NO MORE THAN 1/6 OF THE JOIST DEPTH SHALL BE PERMITTED EXCEPT IN THE MIDDLE THIRD OF THE SPAN. NO STUD SHALL BE CUT MORE THAN (A)25% OF 1"S DEPTH IN EXTERIOR WALLS AND LOAD BEARING PARTITIONS; (B)40% OF 1"S DEPTH IN NON LOAD BEARING PARTITIONS. NO STUD SHALL BE BORED MORE THAN (A)40% OF THE STUD WIDTH IN EXTERIOR WALLS AND LOAD BEARING PARTITIONS; (B)60% OF THE STUD WIDTH IN NON LOAD BEARING PARTITIONS. SEE TABLE R 6252 TO WIDTH AND FRAMED ON THE ENDS WITH MATERIAL OF THE SAME SIZE AS THE JOISTS.

FURRING AND INSTALL ALL GROUNDS AND/OR NAILERS OF SUFFICIENT SIZE TO ACCOMMODATE ALL SURFACE SHEET MATERIAL FOR NAILING WOOD BASE, TRIM, ETC. AND AS REQUIRED BY OTHER TRADES. PROVIDE ALL FURRING AND BLOCKING AS REQUIRED FOR ARCHITECTURAL FEATURES.

SUBFLOORS: SUBFLOORS SHALL BE 3/4 INCH TONGUE AND GROOVED PLYWOOD WATERPROOF NAILED TO JOISTS WITH JOINTS STAGGERED TWO JOIST SPACES MINIMUM (I.T IS RECOMMENDED THAT FLOOR SHEATHING BE GLUED AND SCREWED TO FLOOR JOISTS TO MINIMIZE FLOOR SQUEAKS).

STAIRS: STAIRS TO BE A MINIMUM OF 36" WIDE. STAIRS TO HAVE SIX INCH STRINGERS, 1-1/16 INCH TREADS, AND 3/4 INCH RISERS. THE MAXIMUM RISE IS 8 INCHES AND THE MIN. RUN IS 9 INCHES. THE MAXIMUM RISE IN STAIRS WITH SOLID RISERS SHALL BE 8 INCHES AND RISERS SHALL BE HOUSED INTO STRINGERS, GLUED AND WEDGED SOLID. ALL STAIRS, RAILINGS, AND LANDINGS SHALL COMPLY WITH 2020 N.Y.S RESIDENTIAL CODE SECTION R311.7.5.1 AND R311.7.8.2

HARDWARE: FURNISH ALL ROUGH HARDWARE NECESSARY TO COMPLETE JOB. ALL WALL BEARING BEAMS TO HAVE STANDARD ANGLES, ANCHORS, AND BEARING PLATES UNLESS OTHERWISE NOTED. WHERE RAFTERS AND JOISTS FRAME INTO OTHER WOOD BEAMS, PROVIDE JOIST HANGERS OF SIZE AND TYPE AS SHOWN ON THE DRAWINGS.
ALL ROOF AND WALL PLYWOOD PANELS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS-1. AND SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD SUBFLOOR PANELS SHALL BE SAME AS ABOVE AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE U.S. PRODUCTS STANDARD PS-1. AND SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.

ALL ROOF AND WALL PLYWOOD PANELS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS-1. AND SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD SUBFLOOR PANELS SHALL BE SAME AS ABOVE AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE U.S. PRODUCTS STANDARD PS-1. AND SHALL BE INDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.

DOUBLE ALL FLOOR JOISTS UNDER PARALLEL PARTITIONS. PROVIDE FIRESTOPPING AND AROUND ALL OPENINGS AS REQUIRED BY CODE. PROVIDE AT LEAST DOUBLE JOISTS AND HEADERS AT WATER CLOSET DRAINS, BATHTUBS, AND ALL VENT AND MECHANICAL OPENINGS 2'-0" OR MORE IN WIDTH, UNLESS OTHERWISE SHOWN ON DRAWING.

PROVIDE METAL CROSS BRACING BETWEEN ALL FLOOR JOISTS. MAXIMUM SPACE BETWEEN ROWS OF BRIDGING AND SUPPORTS SHALL BE 8'-0".

ALL LUMBER AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE BUILDING CODE AND WITH THE NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND IT'S FASTENINGS. LUMBER IS TO BE FURNISHED AND INSTALLED, COMPLETE WITH ALL FASTENINGS, ANCHORS, BLOCKING, SADDLES, HANGERS, ETC. REQUIRED TO COMPLETE THE JOB. ALL STEEL BOLTS CONNECTING WOOD MEMBERS SHALL BE SUPPLIED WITH AND TIGHTENED AGAINST STEEL WASHERS OR PLATES. JOIST HANGERS AND CONNECTORS, STEEL BRIDGING AND OTHER SPECIAL CONNECTIONS AND HARDWARE MUST BE INSTALLED IN ACCORDANCE WITH N.Y.S. CODE REQUIREMENTS.

ALL WOOD POSTS RESTING ON TOP OF CONCRETE WALLS SHALL HAVE METAL SEATS ANCHORED TO CONCRETE BASE. ALL POSTS RESTING ON TOP OF STEEL BEAMS SHALL HAVE CLIP ANGLES BOLTED OR WELDED TO THE FLANGES OF THE STEEL BEAM. BEARING PLATES AND MOISTURE BARRIER SHALL BE PROVIDED.

WOOD FRAMING NOTES

1.- RAFTERS AND JOIST : DOUGLAS FIR #2 OR BETTER
STUDS : DOUGLAS FIR #2 OR BETTER

2.- LVL AND BLI JOIST SHALL BE AS MANUFACTURED BY BLUE LINK

*LVL TO BE 1 3/4"X 11 7/8" 2.0 2300 OF
*BLI-80 JOIST MEMBERS TO BE 91 1/8"

3.- ENGINEERED WOOD PRODUCTS USED IN EXTERIOR APPLICATIONS OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED LUMBER

4.- PLYWOOD SHEATHING AT FLOOR TO BE 3/4" APA RATED. ROOF & WALLS SHALL BE 3/8"APA RATED EXTERIOR GRADE "CDX"

5.- EXTERIOR DECK LUMBER & STAIR SHALL BE PRESSURE TREATED WOOD (NCU) ALKALINE COPPER QUATERNARY. YELLOW PINE #2

DESCRIPTION	DATE	MARK

PROPOSED NEW RESIDENCE
LOT #7 SHEPHERDS BLUFF SUBDIVISION PHASE 3

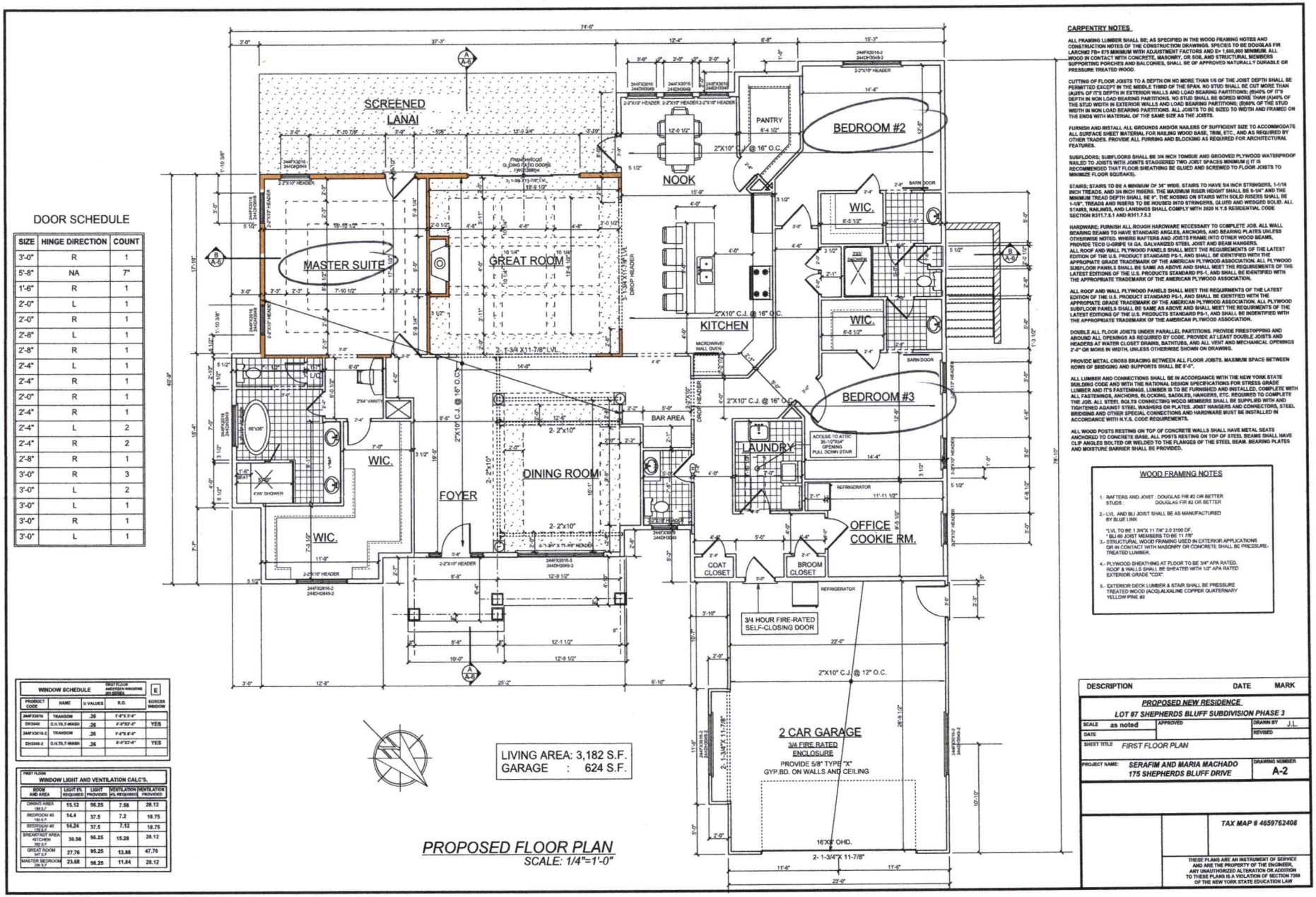
SCALE	as noted	DRAWN BY	J.L.
DATE		APPROVED	REVISED
SHEET TITLE	FIRST FLOOR PLAN		
PROJECT NAME:	SERAFIM AND MARIA MACHADO 175 SHEPHERDS BLUFF DRIVE	DRAWING NUMBER	A-2

TAX MAP # 4659762408

THESE PLANS ARE AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER. ANY UNAUTHORIZED ALTERATION OR ADDITION TO THESE PLANS IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW

M. Machadt

Cay Ulrich 11/22/21



DOOR SCHEDULE

SIZE	HINGE DIRECTION	COUNT
3'-0"	R	1
5'-8"	NA	7"
1'-6"	R	1
2'-0"	L	1
2'-0"	R	1
2'-8"	L	1
2'-8"	R	1
2'-4"	L	1
2'-4"	R	1
2'-0"	R	1
2'-4"	R	1
2'-4"	L	2
2'-4"	R	2
2'-8"	R	1
3'-0"	R	3
3'-0"	L	2
3'-0"	L	1
3'-0"	R	1
3'-0"	L	1

WINDOW SCHEDULE — FIRST FLOOR AMERIVISION WINDOWS 200 SERIES — E

PRODUCT CODE	NAME	U VALUES	R.O.	EGRESS WINDOW
244FX3016	TRANSOM	.26	1'-6"X 3'-0"	
DH3049	D.H.TILT-WASH	.26	4'-4"X2'-6"	YES
244FX3016-2	TRANSOM	.26	1'-6"X 6'-0"	
DH3049-2	D.H.TILT-WASH	.26	6'-4"X3'-6"	YES

FIRST FLOOR — WINDOW LIGHT AND VENTILATION CALC'S.

DOOR AND AREA	LIGHT REQUIRED	LIGHT PROVIDED	VENTILATION REQUIRED	VENTILATION PROVIDED
DINING AREA 180 S.F.	15.12	56.25	7.56	28.12
BEDROOM #3 150 S.F.	14.4	37.5	7.2	18.75
BEDROOM #2 150 S.F.	14.34	37.5	7.12	18.75
BREAKFAST AREA KITCHEN 562 S.F.	30.56	56.25	15.28	28.12
GREAT ROOM 947 S.F.	27.76	95.25	13.88	47.76
MASTER BEDROOM 336 S.F.	23.68	56.25	11.84	28.12

LIVING AREA: 3,182 S.F.
GARAGE : 624 S.F.

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

CARPENTRY NOTES

ALL FRAMING LUMBER SHALL BE; AS SPECIFIED IN THE WOOD FRAMING NOTES AND CONSTRUCTION NOTES OF THE CONSTRUCTION DRAWINGS. SPECIES TO BE DOUGLAS FIR LARCH#2 FB= 875 MINIMUM WITH ADJUSTMENT FACTORS AND E= 1,600,000 MINIMUM. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR SOIL AND STRUCTURAL MEMBERS SUPPORTING PORCHES AND BALCONIES, SHALL BE OF APPROVED NATURALLY DURABLE OR PRESSURE TREATED WOOD.

CUTTING OF FLOOR JOISTS TO A DEPTH ON NO MORE THAN 1/6 OF THE JOIST DEPTH SHALL BE PERMITTED EXCEPT IN THE MIDDLE THIRD OF THE SPAN. NO STUD SHALL BE CUT MORE THAN (A)25% OF IT'S DEPTH IN EXTERIOR WALLS AND LOAD BEARING PARTITIONS; (B)40% OF IT'S DEPTH IN NON LOAD BEARING PARTITIONS. NO STUD SHALL BE BORED MORE THAN (A)40% OF THE STUD WIDTH IN EXTERIOR WALLS AND LOAD BEARING PARTITIONS; (B)60% OF THE STUD WIDTH IN NON LOAD BEARING PARTITIONS. ALL JOISTS TO BE SIZED TO WIDTH AND FRAMED ON THE ENDS WITH MATERIAL OF THE SAME SIZE AS THE JOISTS.

FURNISH AND INSTALL ALL GROUNDS AND/OR NAILERS OF SUFFICIENT SIZE TO ACCOMMODATE ALL SURFACE SHEET MATERIAL FOR NAILING WOOD BASE, TRIM, ETC., AND AS REQUIRED BY OTHER TRADES. PROVIDE ALL FURRING AND BLOCKING AS REQUIRED FOR ARCHITECTURAL FEATURES.

SUBFLOORS: SUBFLOORS SHALL BE 3/4 INCH TONGUE AND GROOVED PLYWOOD WATERPROOF NAILED TO JOISTS WITH JOINTS STAGGERED TWO JOIST SPACES MINIMUM ((IT IS RECOMMENDED THAT FLOOR SHEATHING BE GLUED AND SCREWED TO FLOOR JOISTS TO MINIMIZE FLOOR SQUEAKS)).

STAIRS: STAIRS TO BE A MINIMUM OF 36" WIDE. STAIRS TO HAVE 5/4 INCH STRINGERS, 1-1/16 INCH TREADS, AND 3/4 INCH RISERS. THE MAXIMUM RISER HEIGHT SHALL BE 8-1/4" AND THE MINIMUM TREAD DEPTH SHALL BE 9". THE NOSING ON STAIRS WITH SOLID RISERS SHALL BE 1-1/8". TREADS AND RISERS TO BE HOUSED INTO STRINGERS, GLUED AND WEDGED SOLID. ALL STAIRS, RAILINGS, AND LANDINGS SHALL COMPLY WITH 2020 N.Y.S RESIDENTIAL CODE SECTION R311.7.8.1 AND R311.7.8.2

HARDWARE: FURNISH ALL ROUGH HARDWARE NECESSARY TO COMPLETE JOB. ALL WALL BEARING BEAMS TO HAVE STANDARD ANGLES, ANCHORS, AND BEARING PLATES UNLESS OTHERWISE NOTED. WHERE RAFTERS AND JOISTS FRAME INTO OTHER WOOD BEAMS, PROVIDE TECO U-GRIPE 18 GA. GALVANIZED STEEL JOIST AND BEAM HANGERS.

ALL ROOF AND WALL PLYWOOD PANELS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS-1, AND SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD SUBFLOOR PANELS SHALL BE SAME AS ABOVE AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE U.S. PRODUCTS STANDARD PS-1, AND SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.

ALL ROOF AND WALL PLYWOOD PANELS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS-1, AND SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD SUBFLOOR PANELS SHALL BE SAME AS ABOVE AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE U.S. PRODUCTS STANDARD PS-1, AND SHALL BE INDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.

DOUBLE ALL FLOOR JOISTS UNDER PARALLEL PARTITIONS. PROVIDE FIRESTOPPING AND AROUND ALL OPENINGS AS REQUIRED BY CODE. PROVIDE AT LEAST DOUBLE JOISTS AND HEADERS AT WATER CLOSET DRAINS, BATHTUBS, AND ALL VENT AND MECHANICAL OPENINGS 2'-0" OR MORE IN WIDTH, UNLESS OTHERWISE SHOWN ON DRAWING.

PROVIDE METAL CROSS BRACING BETWEEN ALL FLOOR JOISTS. MAXIMUM SPACE BETWEEN ROWS OF BRIDGING AND SUPPORTS SHALL BE 8'-0".

ALL LUMBER AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE BUILDING CODE AND WITH THE NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENINGS. LUMBER IS TO BE FURNISHED AND INSTALLED, COMPLETE WITH ALL FASTENINGS, ANCHORS, BLOCKING, SADDLES, HANGERS, ETC. REQUIRED TO COMPLETE THE JOB. ALL STEEL BOLTS CONNECTING WOOD AND MEMBERS SHALL BE SUPPLIED WITH AND TIGHTENED AGAINST STEEL WASHERS OR PLATES. JOIST HANGERS AND CONNECTORS, STEEL BRIDGING AND OTHER SPECIAL CONNECTIONS AND HARDWARE MUST BE INSTALLED IN ACCORDANCE WITH N.Y.S. CODE REQUIREMENTS.

ALL WOOD POSTS RESTING ON TOP OF CONCRETE WALLS SHALL HAVE METAL SEATS ANCHORED TO CONCRETE BASE. ALL POSTS RESTING ON TOP OF STEEL BEAMS SHALL HAVE CLIP ANGLES BOLTED OR WELDED TO THE FLANGES OF THE STEEL BEAM. BEARING PLATES AND MOISTURE BARRIER SHALL BE PROVIDED.

WOOD FRAMING NOTES

1.- RAFTERS AND JOIST : DOUGLAS FIR #2 OR BETTER
STUDS : DOUGLAS FIR #2 OR BETTER

2.- LVL AND BLI JOIST SHALL BE AS MANUFACTURED BY BLUE LINX

"LVL TO BE 1 3/4"X 11 7/8" 2.0 3100 DF.
" BLI 60 JOIST MEMBERS TO BE 11 7/8"

3.- STRUCTURAL WOOD FRAMING USED IN EXTERIOR APPLICATIONS OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED LUMBER.

4.- PLYWOOD SHEATHING AT FLOOR TO BE 3/4" APA RATED. ROOF & WALLS SHALL BE SHEATED WITH 1/2" APA RATED EXTERIOR GRADE "COX".

5.- EXTERIOR DECK LUMBER & STAIR SHALL BE PRESSURE TREATED WOOD (ACQ),ALKALINE COPPER QUATERNARY YELLOW PINE #2

DESCRIPTION	DATE	MARK

PROPOSED NEW RESIDENCE
LOT #7 SHEPHERDS BLUFF SUBDIVISION PHASE 3

SCALE	as noted	APPROVED	DRAWN BY	J.L.
DATE			REVISED	

SHEET TITLE: FIRST FLOOR PLAN

PROJECT NAME: SERAFIM AND MARIA MACHADO
175 SHEPHERDS BLUFF DRIVE

DRAWING NUMBER: A-2

TAX MAP # 4659762408

THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF THE ENGINEER, ANY UNAUTHORIZED ALTERATION OR ADDITION TO THESE PLANS IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW

RECEIVED OCT 26 2021

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE
OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM* AP-321958 $500.00

CW Comprehensive

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

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: ( ) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Serafim & Maria Machado **Address:** 110 Hamilton Park Dr. **Zip:** 28115
Applicant Email: lusotilenstone@aol.com **Phone:** 516-790-5292 **Alt. Phone:**
Owner Name: Serafim & Maria Machado **Address:** 110 Hamilton Park Dr. **Zip:** 28115
Owner Email: lusotilenstone@aol.com **Phone:** 516-790-5292 **Alt. Phone:**

Property Information:

Street Address: 175 Shepherds Bluff Dr., Mooresville, NC 28115
Subdivision Name: Shepherds Bluff **Section/Phase:** 3 **Lot Number:** 7
Driving Directions:

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

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:

Maximum Number of Bedrooms: 3
Maximum Number of Occupants: 3
( ) Swimming Pool
(✓) Other Addition/Structure: detached garage/shed

CHECK FOUNDATION TYPE
(✓) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development: Type of Business:
Square Footage of Building: Max. Number of Employees: Max. Number of Seats/Beds/Other:

Water Supply: ( ) Replacement Well – Reason:

( ) Multi-connection Well Number of Houses: Number of Persons:

(✓) 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 (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) 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.

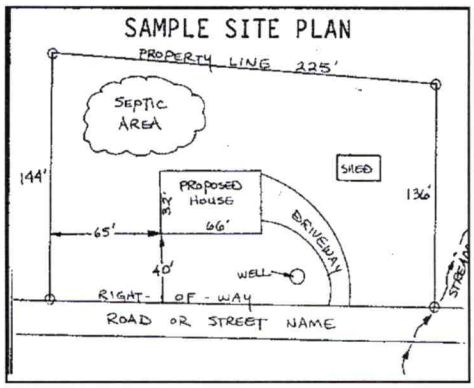
Signature: Maria Machado 10/26/2021
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *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:

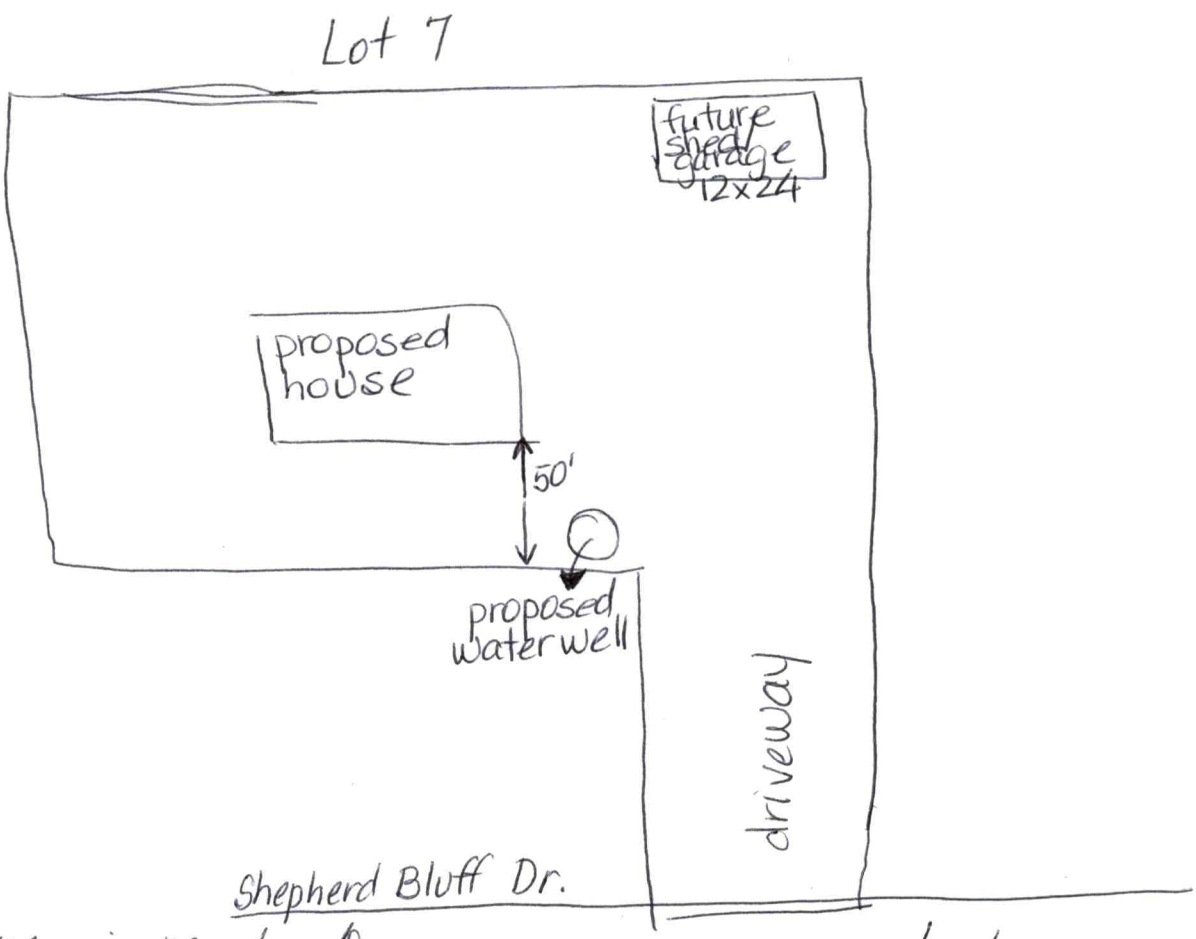
- ( ) **Property Line measurements are clearly identified**
- ( ) **All proposed structures are indicated**
- ( ) **Front and side setbacks from property line**
- ( ) **Preferred driveway location and well location**
- ( ) **Area you prefer your septic system to be placed**
- ( ) **North arrow, or other 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

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



Signature: Maria Machado

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

10/26/2021

DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

☑ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) Maria Machado

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative: *Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship*
In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:
Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form. If there are multiple property owners, then all property owners must sign the form that designates a legal representative.
By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

☐ **2.** I, _____, am the legal owner(s) of the property located at _____, identified as PIN (Parcel Identification Number)_____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

Maria Machado
Signature of Owner(s)

10/26/2021
Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

ENVIRONMENTAL HEALTH REQUIREMENTS for SEPTIC and WELL PERMITS

The following items must be completed *PRIOR* to the *SUBMITTAL* of any Environmental Health Application. Incomplete applications will be returned to the applicant and cannot be processed or placed on the work list.

*** Initial all lines below to indicate you have submitted each form and completed every site requirement ****

MM **Complete all Environmental Health forms**:

- ✓ Application
- ✓ Site Plan including the dimensions of proposed structure, addition, pool etc.
- ____ Documentation to Authorize Owner Agent (even if the property owner is the applicant – complete section 1 or 2)
- ____ Copy of Zoning Permit when applicable
- ✓ Sign this sheet after you have completed all items

MM ✓ **Lot must be cleared of heavy undergrowth**. In order to evaluate the lot, the footprint of the proposed structure must be visible. Adequate area for the septic drain field and repair area must be sufficiently cleared of heavy undergrowth, with 50 feet of visibility in all directions. Inspectors must be able to evaluate the property, shoot laser level elevations, layout the drain field, do soils work, etc. **If the lot is not cleared sufficiently, then a $100 site revisit fee will be charged and the evaluation will be put on HOLD until the requirement is met.**

MM ✓ **Clearly mark all property corners by locating existing iron or concrete markers.** Flag all property lines every 25 feet if adjacent corners are not visible when standing on any given corner. Property lines must be flagged by a licensed NC surveyor & easily identified **prior to application submittal** (exception may apply for septic repair evaluations only). 'Mow lines' and/or fence lines do NOT constitute marked lines. **If the property lines are not properly marked when the lot is ready to be evaluated, then the application will be put on HOLD and a $100 site re-visit fee charged**.

MM ✓ **Stake or flag the footprint of the proposed structure, addition, pool etc. to match the site plan submitted**. The proposed structure, etc. must be staked out on the property as per the site plan.

____ **If an Authorization to Construct (AC) is desired,** submit a recorded copy of the plat for newly created or subdivided lot(s) and a LEGIBLE copy of the basic floor plan no larger than 8 ½" x 14" for each floor of the structure including decks, porches, etc. **The overall dimensions must be clearly noted & the rooms labeled.**

Any site not meeting the above requirements when staff arrives for the evaluation will result in a $100 site revisit fee being charged and the request being placed on HOLD. This will delay the processing of the application. *Once work by Environmental Health staff begins, the up-front fees paid toward securing any health department permit are nonrefundable. Refunds for work not started, due to a customer changing their mind or plans, are subject to an administrative fee of $50 to defray a portion of the costs of processing the refund.*

Backhoe pits are required for all applications that require a soils evaluation.
DO NOT DIG PITS UNTIL THE EH SPECIALIST HAS AUTHORIZED AND SCHEDULED YOUR EVALUATION TIME.

- **All utilities shall be marked before pits are dug. Call NC 811 for this service.**
- The applicant/agent is responsible for securing these services
- Backhoe pits are to be dug at the locations and depths determined by the Environmental Health Specialist or a NC Licensed Soil Scientist. A minimum of four pits must be dug.
- The EH specialist will contact you when your application is ready to be processed for pit scheduling.
- Your backhoe operator must be on site during the EH Specialist's evaluation to prevent your operator from having to return to the property for additional work.

By signing below, I am acknowledging the above specifications have been met and the site is READY to be evaluated AND I understand the backhoe pit requirement and will secure those services (if applicable).

Signature Maria Machado **Date** 10/26/2021

Questions? Contact the Environmental Health Offices below:

Statesville Office
349 North Center Street (2nd Floor Building Standards)
Statesville, NC 28677-4063
Phone: (704)878-5305 ext. 3456

Mooresville Office
610 East Center Avenue (2nd Floor Govt. Center South)
Mooresville, NC 28115-2548
Phone: (704)660-3625