

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED
PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

OPERATIONS PERMIT

PERMIT # WRP-054740-2021 **APPLICATION DATE:** 03/02/2021 **BLDG. PERMIT#:** RBPR-054757-2021
PIN: 1832240857 **RECORDED:** Yes
TOWNSHIP: 19 - Wake Forest **JURISDICTION:** Wake County **ZONING:** R-40W
APPLICANT: Allison Bell
101 Gathering Park CIR **BUSINESS PHONE:** (919) 374-3473
HOME PHONE:
MOBILE PHONE:

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE **EXISTING USE:**

SITE ADDRESS: 2712 OXFORD BLUFF DR

SUBDIVISION: OXFORD HILLS **LOT:** 7 **ACRES:** 0.65

DIRECTIONS: from Raleigh take Capital Blvd to Wake Forest. Turn Left onto Purnell Rd and in 2 miles take a right onto Bud Smith Rd. The location for the coming soon neighborhood is .3 miles ahead on the right

Systems defined as either type III-b, III-g with a pump, IV, V or VI, in accordance with the North Carolina administrative code 15A NCAC 18a .1961, table V as adopted by reference in the "Regulations Governing Wastewater Treatment Dispersal Systems in Wake County", requires Wake County Environmental Services to conduct periodic inspections of the system type pursuant to 15A NCAC 18a. 1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner and/or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The environmental health specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him/her in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

OPERATION PERMIT VALID FOR: No Expiration

INSTALLED BY: BRANTLEY, CORY - 1036 - IV

PROPRIETARY SYSTEM: EZ1203HG - EZFlow EZ 1203H Geo **PRETREATMENT SYSTEM:**

SYSTEM TYPE INSTALLED: III B

OPERATION PERMIT: STATUS: Issued **ISSUED BY:** Alexander Merrell **ISSUED DATE:** 11/02/2021

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** 05/25/2021 **FILTER:** GAG SIM/TECH - STF-110

GREASE TRAP: **DATE OF MANUFACTURE:** **FILTER:**

DOSING PUMP TANK: Brantley - PT-2124 - 1312 gal - 21.5 gal/in **DATE OF MANUFACTURE:** 06/23/2021 **FILTER:**

CC1: 999,823 **ETM1:** 0 **CC2:** **ETM2:**

RECIRCULATION TANK: **DATE OF MANUFACTURE:**

CC1: **ETM1:** **CC2:** **ETM2:**

SEPTIC TANK ELEVATION: 13.88

GREASE TRAP ELEVATION:

DOSING PUMP TANK ELEVATION: 14.25

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION: 10

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
23	12	135	11.875
23	12	135	11
23	12	135	10

ACTUAL PRESSURE HEAD: 3

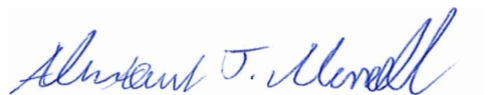
ACTUAL FLOW RATE: 26

ACTUAL DOSE VOLUME: 194

SPECIFIC OPERATION REQUIREMENTS:

- System designed for a 4 bedroom home, with 480 gals per day.
- Site serviced by public water.

ISSUED BY:



DATE: 11/02/2021

I, MICHAEL P. GRIFFIN, certify that under my direction and supervision this map was drawn from an actual field survey; that the error of closure of the survey as calculated by coordinates is 1: 10,000+; that the area shown hereon was calculated by coordinates.

Witness my hand and seal this day of MONTH 2020.

RBPR-054757-2021

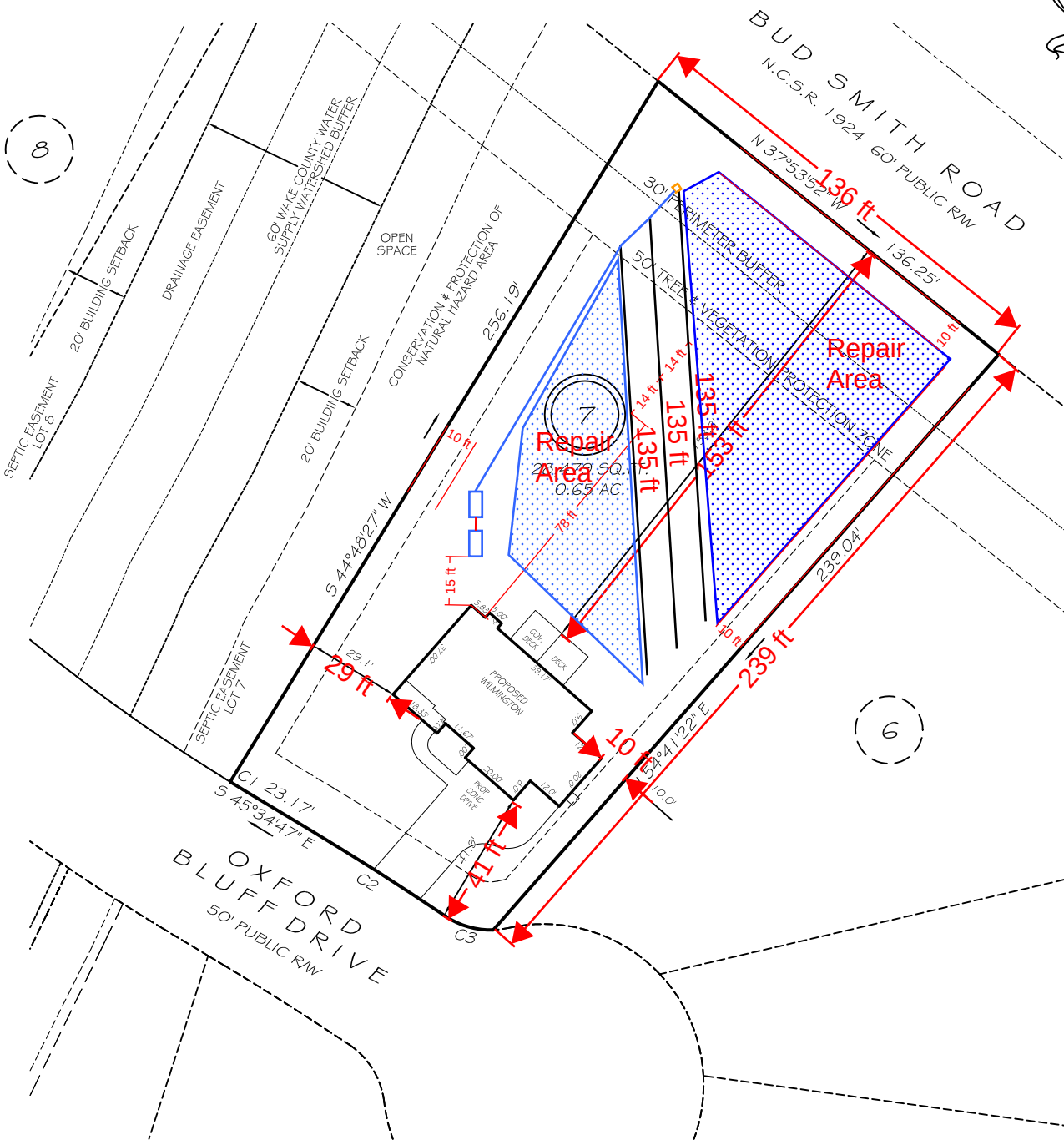


SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.

Dawn Tripp

03/02/2021 4:46:14 PM

WAKE CO. REGISTRY
BM 2017 PG 1169-1174



IMPERVIOUS AREAS	
HOUSE	2163 SQ. FT.
DRIVE & WALKS	1134 SQ. FT.
PATIO	9 SQ. FT.
TOTAL	3306 SQ. FT.
ALLOWED	6968 SQ. FT.

SETBACKS	
FRONT	15'
REAR	15'
SIDE	7.5'
CORNER SIDE	15'

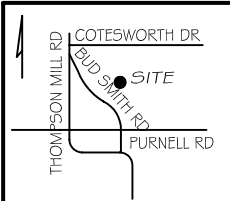
REVISION: BACK 12' 2/24/21
REVISION: EXT. PORCH & DECK; PAD 2/5/21
REVISION: NEW PLANS 1/27/21

C1 R=575.00' L=5.23' S45°19'08"E 5.23'
C2 R=1025.00' L=50.85' S44°09'31"E 50.84'
C3 R=25.00' L=15.71' S60°44'03"E 15.45'

PRELIMINARY
NOT FOR RECORDATION,
SALES OR CONVEYANCE

EIP	EXISTING IRON PIPE	FES	FLARED END SECTION
IPS	IRON PIPE SET	WM	WATER METER
RW	RIGHT OF WAY	CO	CLEAN OUT
N/F	NOW OR FORMERLY	FH	FIRE HYDRANT
EIS	EXISTING IRON STAKE	CB	CATCH BASIN

LEGEND



GRIFFIN LAND SURVEYING, INC.

P.O. BOX 148
FUQUAY-VARINA, NC 27526
(919) 567-1963

PLOT PLAN
FOR

H & H HOMES

OXFORD HILLS

LOT 7

2712 OXFORD BLUFF DRIVE

NORTH CAROLINA

WAKE COUNTY WAKE FOREST TOWNSHIP

DRAWN BY KDF

DATE 11/12/20

CHECKED BY MPG

SCALE 1" = 50'

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***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

CONSTRUCTION AUTHORIZATION PERMIT**PERMIT # WRP-054740-2021****APPLICATION DATE:** 03/02/2021**BLDG. PERMIT#: RBPR-054757-2021****PIN:** 1832240857**RECORDED:** Yes**TOWNSHIP:** 19 - Wake Forest**JURISDICTION:** Wake County**ZONING:** R-40W

APPLICANT: H&H Constructors of Fayetteville, LLC
101 Gathering Park CIR
Cary, NC 27519

BUSINESS PHONE: (919) 500-3834**HOME PHONE:****MOBILE PHONE:** (919) 500-3834**HD USE:** 101A CONVENTIONAL ONE-FAMILY HOUSE**EXISTING USE:****SITE ADDRESS:** 2712 OXFORD BLUFF DR**SUBDIVISION:** OXFORD HILLS**LOT:** 7**ACRES:** 0.65

DIRECTIONS: from Raleigh take Capital Blvd to Wake Forest. Turn Left onto Purnell Rd and in 2 miles take a right onto Bud Smith Rd. The location for the coming soon neighborhood is .3 miles ahead on the right

Contractors shall install system on contour. See attached SITE PLAN for wastewater system design and well location. No underground utilities, water lines or sprinklers systems may be located in the original system, or permit areas. A septic tank filter with two risers for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and Operations Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrifications line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation. Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

CONSTRUCTION AUTHORIZATION PERMIT VALID FOR: Five Years**CONSTRUCTION AUTHORIZATION PERMIT: CA STATUS:** Issued**BY:** Bobby Weaver**DATE:** 03/29/2021**CA VALID FOR:** Five Years**DESIGN FLOW:** 480 GALLONS**BASEMENT:** No**BASEMENT FIXTURES:** No**SEPTIC TANK:** 1200 GALLONS**SEPTIC TANK FILTER:** Yes**DOSING PUMP TANK:** 1200 GALLONS**DOSING PUMP TANK FILTER:****GREASE TRAP:****GREASE TRAP FILTER:****RECIRCULATION PUMP TANK:****RECIRCULATION PUMP TANK FILTER:****PROPOSED SYSTEM:** 0.25 - 25% Reduction (Innovative or Accepted)**EXISTING SYSTEM:****DRAINFIELD SQ. FT:** 1,206**AGGREGATE DEPTH:** 12**MAX. TRENCH DEPTH:** 23 INCHES**DISTRIBUTION DEVICE:** PM - Pressure Manifold**TRENCH #:** 3**TRENCH LENGTH:** 134 FEET**TRENCH WIDTH:** 36 INCHES**TOTAL TRENCH LENGTH:** 402 FEET**CENTER SPACING:** 9 FEET**MINIMUM SOIL COVER:** 6 INCHES

PRETREATMENT:
SUBFIELDS #:
PUMP TDH: 17.11 FEET

APPROVAL #:
PUMP DESIGN FLOW: 26.13
ZONE VALVE: No

ASDMS REQUIRED:
P.E. SIGN OFF/ASBUILT REQUIRED:

LINE OF CREDIT REQUIRED:
TRIPARTY AGREEMENT REQUIRED:

OPERATOR REQUIRED:

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

System designed for a 4 bedroom home, with 480 gals per day.

Future repair is a IIIB type system, with a 23" trench depth, and a .3 LTAR

Site serviced by Public Water

Any deviation from accepted design must be approved by Bobby Weaver prior to system installation.

Design has been flagged. Do not remove flags.

Consultant must re-flag prior to installation if flags are removed.

Maintain all setbacks.

Please contact Bobby Weaver at 919-594-3069 with any questions prior to installation.

Issued By:

A handwritten signature in black ink that reads "Robert Weaver". The signature is written in a cursive, flowing style.

Date: 03/29/2021

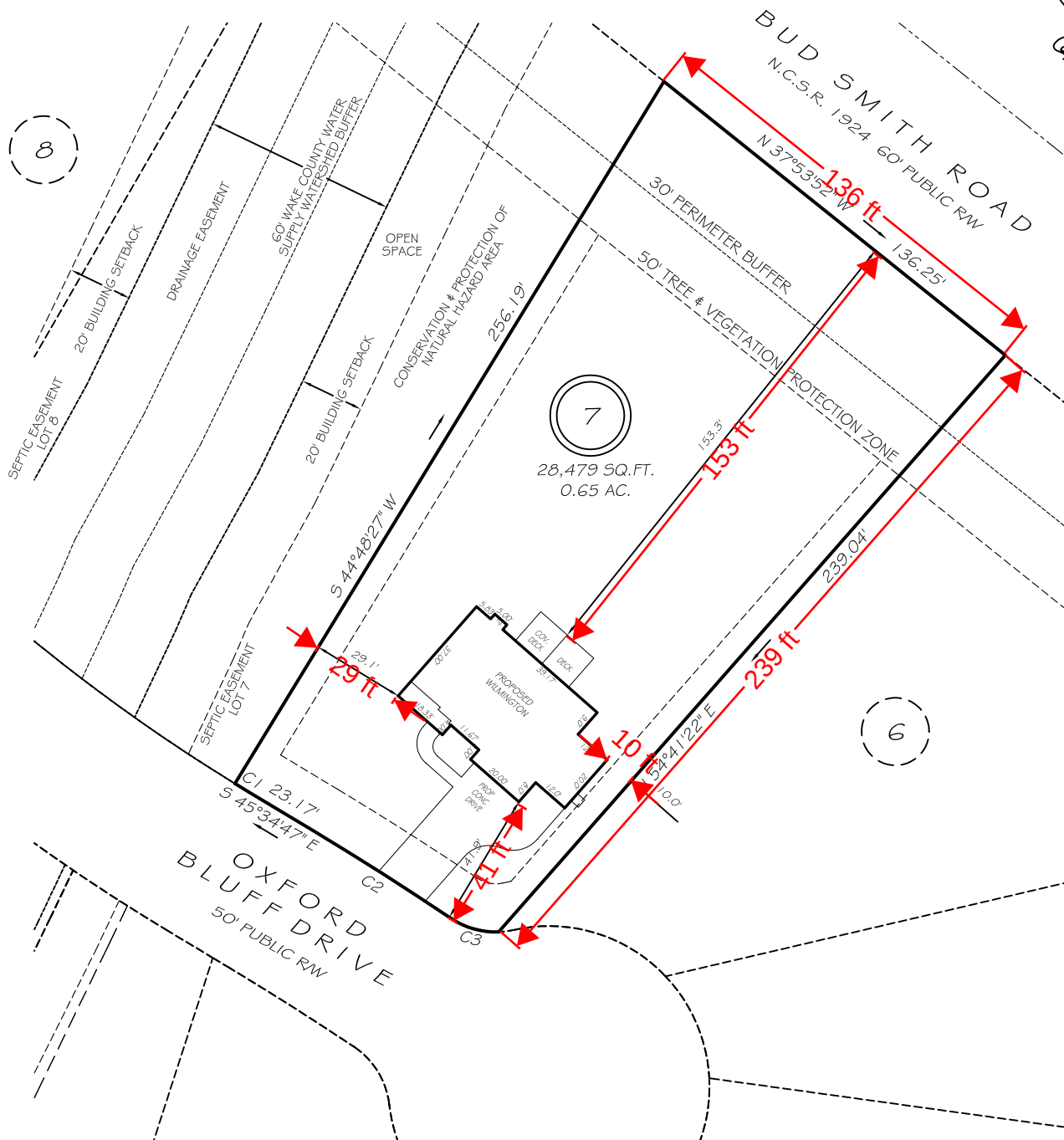
CA PART A

Witness my hand and seal this day of MONTH 2020.

RBPR-054757-2021



WAKE CO. REGISTRATION
BM 2017 PG 1169-1174



IMPERVIOUS AREAS	
HOUSE	2 163 SQ. FT.
DRIVE & WALKS	1 134 SQ. FT.
PATIO	9 SQ. FT.
TOTAL	3306 SQ. FT.
ALLOWED	6968 SQ. FT.

REVISION: BACK 12' 2/24/21
REVISION: EXT. PORCH & DECK; PAD 2/5/21
REVISION: NEW PLANS 1/27/21

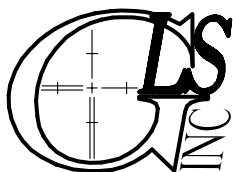
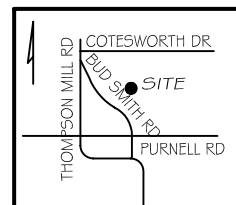
S E T B A C K S

FRONT	15'
REAR	15'
SIDE	7.5'
CORNER SIDE	15'

C1 R=575.00' L=5.23' S45°19'08"E 5.23'
C2 R=1025.00' L=50.85' S44°09'31"E 50.84'
C3 R=25.00' L=15.71' S60°44'03"E 15.45'

P R E L I M I N A R Y
NOT FOR RECORDATION,
SALES OR CONVEYANCE

EIP	EXISTING IRON PIPE	FES	FLARED END SECTION
IPS	IRON PIPE SET	WM	WATER METER
R/W	RIGHT OF WAY	CO	CLEAN OUT
N/F	NOW OR FORMERLY	FH	FIRE HYDRANT
EIS	EXISTING IRON STAKE	CB	CATCH BASIN



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PLOT PLAN

FOR

H & H HOMES

OXFORD HILLS

LOT 7

2712 OXFORD BLUFF DRIVE

NORTH CAROLINA

WAKE COUNTY WAKE FOREST TOWNSHIP

DRAWN BY **KDF**

DATE 11/12/20

CHECKED BY **MPG**

SCALE 1" = 50'



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

4-Bedroom Septic Layout
Lot 7, Oxford Hills Subdivision
Wake County, North Carolina

Job# : 3705
Drawn By : LW
Date : 03/17/2021
Revision:

CA PART C INITIAL
WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
3 TAP PRESSURE MANI-TEE DESIGN

Name: H&H Constructors of Fayette P.I.N. #: 1832-24-0857 Permit #: 054740-2021

Address: 2712 Oxford Bluff Subdiv: Oxford Bluff Lot#: 7

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.30 gal/day/sq.ft

Septic Tank: 1200 gals Pump Tank: 1200 gals Sq. Foot: 1206 Aggregate Depth: 12

Number of Taps: 3 Length of Trenches: 402 ft(See Tap Chart for Details)

Depth of Trenches: 23 in Manifold Length: 36 in

Manifold Diameter: 2in sch 40pvc Mani-Tee Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 110 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 2.91 ft(supply line length + 70' for fittings in pump tank)

Design Head: 3 ft Elevation Head: 11.20 ft

Total Head: 17.11 ft Pump to Deliver: 26.13 gals/min at 17.11 ft head

Dosing Volume: 196 gals,

Drawdown: 196 gals divided by 20 gals/in = 9.8 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required, see permit details for specifics.

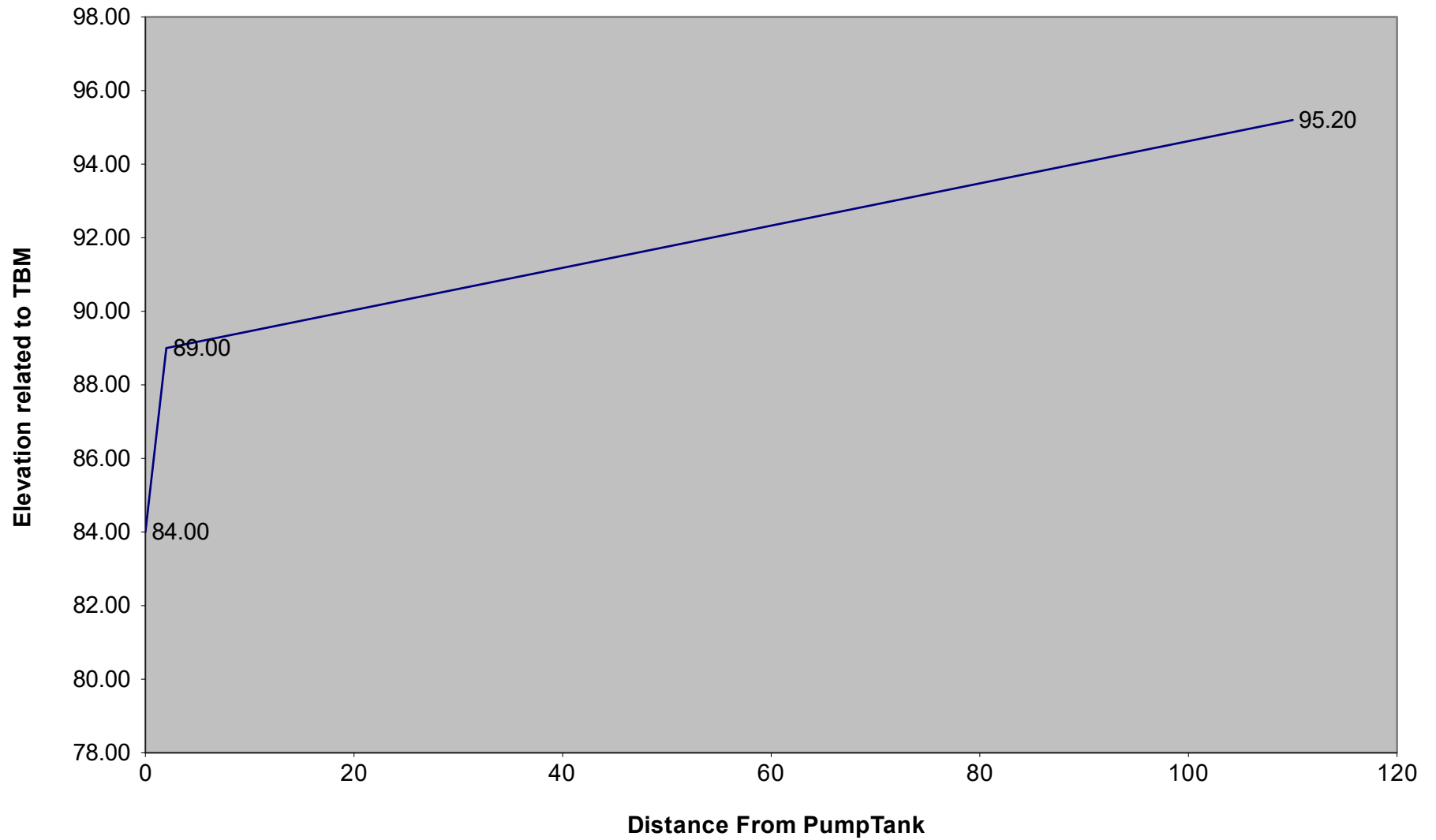
TAP CHART

Bench Mark		is = 100.00	set at				Design Head:	3	
Pump tank elev.		<u>11</u>	89.00	Pump elev.	84.00		Manifold elev.	95.20	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Pink	5.8	94.20	<u>134</u>	1/2in SCH 40	8.71	160.00	402	0.398
2	Red	6.1	93.90	<u>134</u>	1/2in SCH 40	8.71	160.00	402	0.398
3	Blue	7.4	92.60	<u>134</u>	1/2in SCH 40	8.71	160.00	402	0.398
		total	feet =	<u>402</u>	gal/min =	<u>26.13</u>		<u>LTAR =</u>	<u>0.30</u>
% of Dose Vol.		<u>75</u>		<u>Des. Flow</u>	480			(ltar + 5%)	0.32
Dose Volume		196		Pump Run=	18.37			(ltar W/ INOV)	0.40
Dose Pump Time		7.50		Tank Gal/IN	20			(ltar + 5%)	0.42
Drawdown in Inches		9.8		Elev. Head	11.20				
Supply Line Length		110							
Comments:									

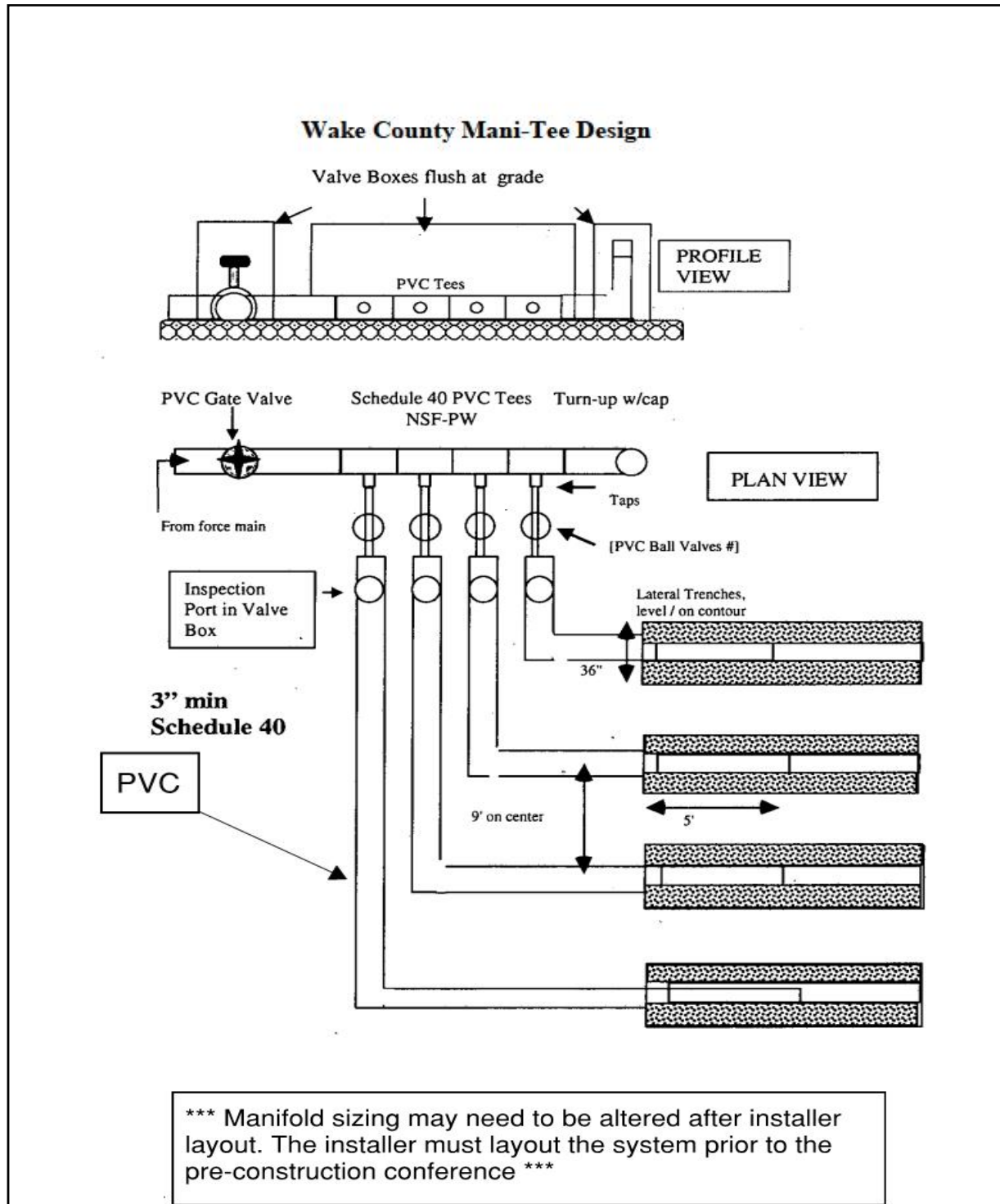
Hydraulic Profile

Manifold Elevation	95.20	110
Pump tank elev.	89.00	2
Pump elev.	84.00	0

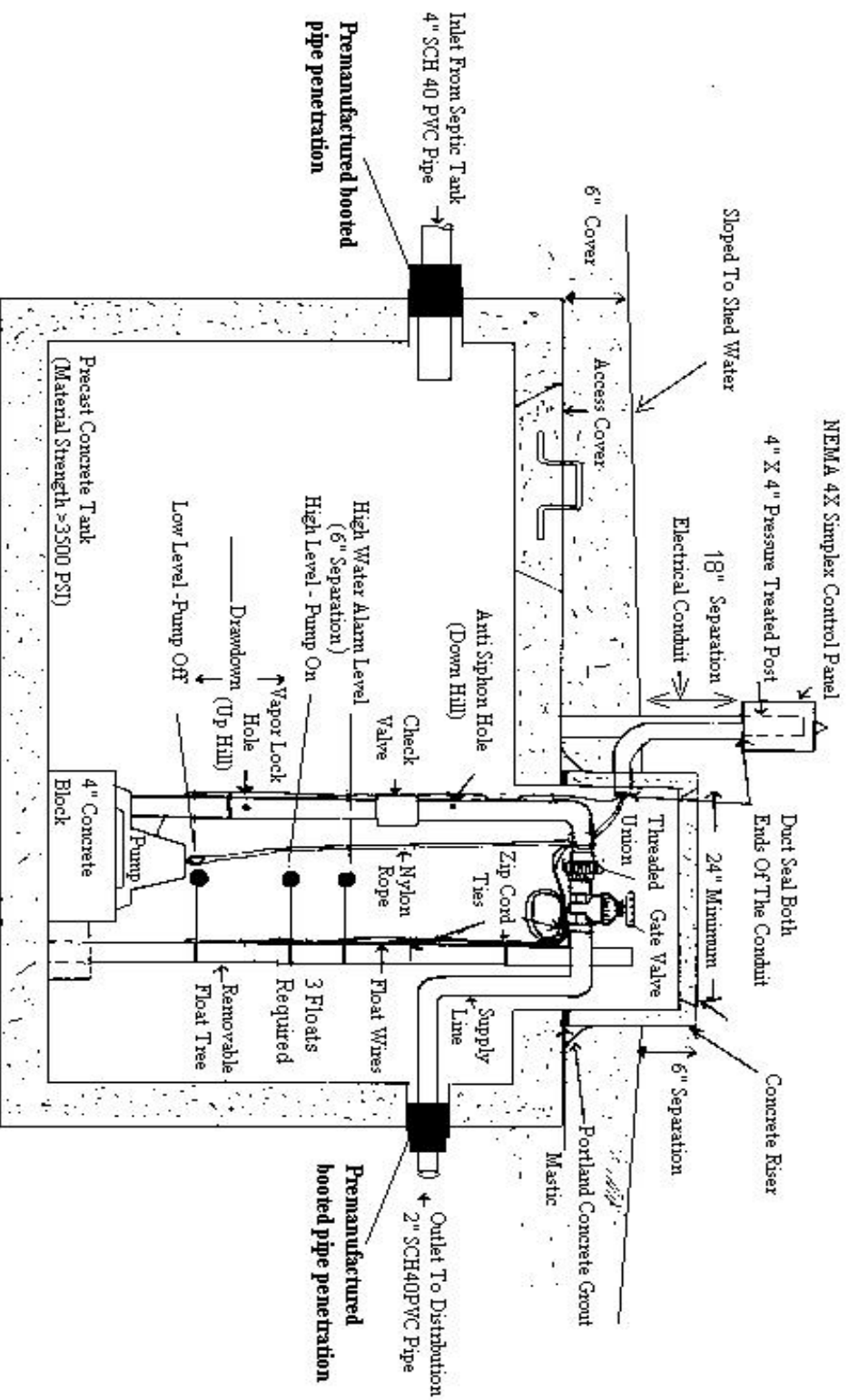
Hydraulic Profile



	Line 1	Line 2	Line 3
Taps	1/2in SCH 40	1/2in SCH 40	1/2in SCH 40
Flow	8.71	8.71	8.71



Wake County Department Of Environmental Services



_____ GALLON PUMP TANK

1200 Gals Pump Tank

Minimum Panel Requirements

The following items will be considered the minimum for all pump systems:

1. It must be a NEMA 4X Box.
2. It must use a HOA (Hand, Off, Auto) switch to control the pump. No more use of piggyback plugs!
3. It must have a motor contactor to prevent high voltage electricity in the water at all times.
4. It must have an audible and visual alarm.
5. **All Pressure Manifold and LPP Systems must have an elapsed time meter and cycle counter installed in the panel.**
6. It must have 2 separate power supplies, wired from the fuse panel at the house.
7. All panels must have 2 circuit breakers installed in the panel to allow for disconnecting of power, so that the pump or switches maybe serviced.
8. Panels and pumps are to be wired at the time of our inspection. Power must be supplied by use of generators or from the house temporary meter, if the builder applied for it and has had all required inspections and the temporary meter has been set. **We will no longer inspect any system that has been hot wired from the temporary power pole or jumped through the house wiring without a meter being set.**

Pressure Manifolds

1. A float tree or hanging floats must be used.
2. A Simplex Control Panel with a Hand - Off - Auto switch and alarm in a NEMA - 4X box is required. See the plans or CA comments for further details on the panel.
3. 2 separate power supplies are needed. Try to look and make sure they have not used a 120V only panel with a 240V pump.
4. The taps and pipes for the taps must be of the same material! If it is a sch80 tap (usually gray plastic) then the tap, pipe and valve (the valve can be sch40pvc if there is an adequate amount of sch80 pipe used) must be constructed of sch80pvc. The same goes for sch40 taps, you cannot use sch80 pieces with the sch40.
5. The taps must go directly to the 3" pipe; no elbows can be used in the tap connections.
6. All of the tap must be the same size or larger. 3/4" pipe cannot have a 1/2" valve, but a 1/2" pipe could have a 3/4" valve, if at there is at least 6" total 1/2" pipe used.
7. Should the wrong size or material be used in the tap itself, the flow to the line can be corrected by using an adequate amount of the proper pipe material and size. The amount of pipe needed to control the flow is dependent on the size pipe/tap. If 1/2" pipe is needed, then at least 6" of total pipe is needed. A 3/4" size requires at least 9" of pipe to be used. A 1" size needs 12" of total pipe length to control the flow.

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IMPROVEMENT PERMIT

PERMIT #: WRP-054740-2021

APPLICATION DATE: 03/02/2021

BLDG. PERMIT #: RBPR-054757-2021

PIN: 1832240857

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DIRECTIONS: from Raleigh take Capital Blvd to Wake Forest. Turn Left onto Purnell Rd and in 2 miles take a right onto Bud Smith Rd. The location for the coming soon neighborhood is .3 miles ahead on the right

Permit is subject to revocation if the Site Plan or Plat changes or the intended use changes.

*Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

IP VALID FOR: Five Years AS PER GS 130A-335 (f)

DESIGNED BY: Bobby Weaver

SYSTEM LAYOUT: Private Sector

SITE CLASSIFICATION: Provisionally Suitable

IP STATUS: Issued

BY: Bobby Weaver

DATE: 03/29/2021

NUMBER OF BEDROOMS: 4

OR TOTAL NUMBER OF OCCUPANTS: 8

PERMITTED DESIGN FLOW: 480 GPD

BASEMENT: No

BASEMENT PLUMBING: No

WASTEWATER STRENGTH: Domestic

SYSTEM TYPE: III B

LTAR: 0.300

EXISTING SYSTEM UTILIZED:

PRETREATMENT STRENGTH REQUIRED:

EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL:

MAXIMUM TRENCH DEPTH: 23 INCHES

PUMP REQUIRED: Yes

SPECIFIC SYSTEM REQUIREMENTS: System Designed for a 4 bedroom home, with 480 gals per day
Future Repair is a type IIIB system with a trench depth of 23" and a .3 LTAR
Site serviced by public water.
No cutting, grading, alterations, or utilities in septic area.
Maintain all setbacks

ISSUED BY:

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DATE: 03/29/2021

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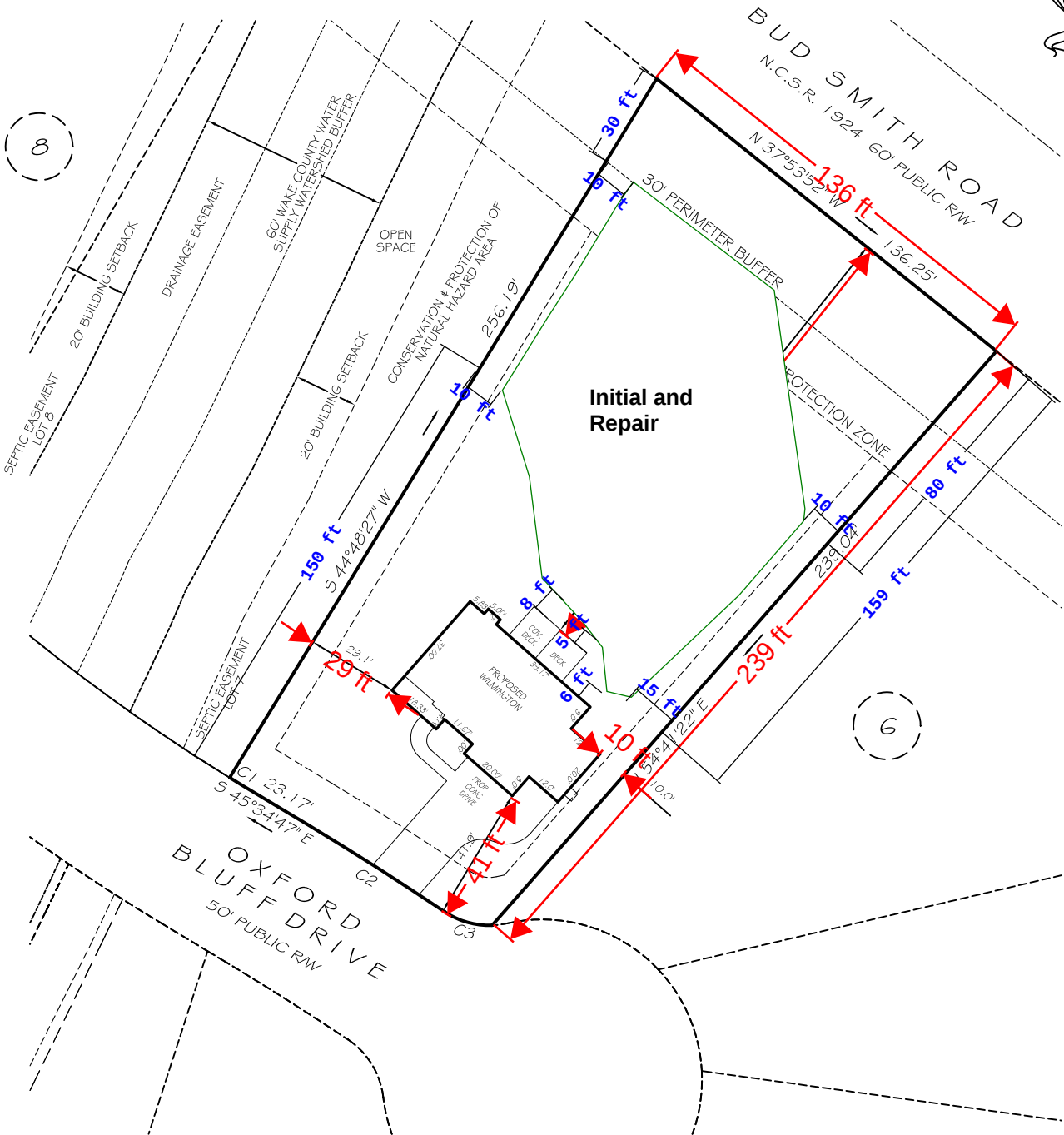
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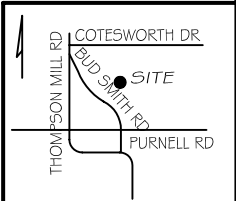
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