



**SOIL AND ENVIRONMENTAL TECHNOLOGY, INC**  
 111 N. Franklin Street, Christiansburg, VA 24073  
 Phone: (540) 381-0309 Fax: (540) 381-9430  
 E-mail: setec@soilandenvironmentaltechnology.com

**General Information**

Date: 1/30/2018 Roanoke County Health Department  
 Applicant: Susan Delp Telephone #: (540) 556-5445  
 Address: 5445 Woodchuck Lane, Roanoke, VA 24018  
 Directions to the Property: US-220 S, Exit for VA-419 N/US-220 BUS/ Franklin Rd (0.8 mi), L on Starkey Rd (1.6 mi), R on Starkey Rd (0.5 mi), R on Merriman Rd (0.2 mi), L on Crystal Creek Dr. (1.1 mi), R on Willow Spring Rd. Property located on R on corner of Willow Spring Rd & Crystal Creek Dr.  
 Tax Map ID: 086.20-02-13.01-0000  
 Acreage: 0.54 acres

**Soil Information Summary**

1. Position in landscape satisfactory Yes  No  Describe: Sideslope
2. Slope 42 %
3. Depth to rock\impervious strata: Max. >72" Min. 60" None
4. Depth to seasonal water table (gray mottling or gray color) No  Yes
5. Free water present No  Yes  range in inches
6. Soil percolation rate estimated Yes  Texture group 2  
 No  Estimated rate 35 Min/inch
7. Percolation test performed Yes  Number of percolation test holes  
 No  Depth of percolation test holes  
 Average percolation rate

Name and title of evaluator: Bill Evans PSS/COSE

Signature:

**X** Site Approved: Absorption trenches dispersing TL-2 effluent to be placed at 36" depth at site designated. Site provides a total of 480 square feet of absorption area for the drainfield. This site does not require a reserve area.

Site Disapproved:

Reason for rejection: (check all that apply)

- 1 Position in landscape subject to flooding or periodic saturation.
- 2 Insufficient depth of suitable soil over hard rock.
- 3 Insufficient depth of suitable soil to seasonal water table.
- 4 Rates of absorption too slow.
- 5 Insufficient area of acceptable soil for required drainfield, and/or reserve area
- 6 Proposed system too close to well
- 7 Other (Specify)

**PROFILE DESCRIPTION  
SOIL EVALUATION REPORT**

Date of Evaluation: 1/24/2018

Roanoke County Health Department  
Identification No.

x See application sketch See construction permit

**Applicant:** Susan Delp **Acreage:** 0.54 (Willow Spring Rd) **Tax Map ID:** 086.20-02-13.01-0000

Hole #	Horizon	Depth	Description	Texture Group
Auger 1	A	0-3	Dark Yellowish Brown (10YR 3/4) gravelly sandy loam; 15% coarse fragments	2
	BA	3-8	Dark Yellowish Brown (10YR 4/6) gravelly sandy loam; 15% coarse fragments	2
	Bt	8-34	Strong Brown (7.5YR 5/6) loam	2
	BC	34-60	Yellowish Red (5YR 4/6) loam; common Brownish Yellow (10YR 6/8) lithochromic mottles	2
	AR	60	Sandstone	
Auger 2	A	0-5	Dark Yellowish Brown (10YR 4/6) sandy loam	2
	Bt	5-20	Yellowish Red (5YR 4/6) sandy loam; pockets of sandy clay loam	2
	BC	20-42	Strong Brown (7.5YR 5/6) gravelly sandy loam; 15% coarse fragments	2
	C	42-72	Brownish Yellow (10YR 6/6) gravelly sandy loam; 15% coarse fragments, common White (10YR 8/1)-Very Pale Brown (10YR 8/3) lithochromic mottles	2
Auger 3	A	0-3	Dark Yellowish Brown (10YR 4/4) sandy loam	2
	BA	3-12	Brown (7.5YR 5/4) sandy loam	2
	Bt	12-20	Strong Brown (7.5YR 5/8) sandy clay loam	2
	BC	20-32	Reddish Yellow (7.5YR 6/8) sandy loam	2
	C	32-72	Brownish Yellow (10YR 6/6) sandy loam	2
Auger 4	A	0-3	Dark Yellowish Brown (10YR 4/4) sandy loam	2
	BA	3-12	Brown (7.5YR 5/4) sandy loam	2
	Bt	12-20	Strong Brown (7.5YR 5/8) sandy clay loam	2
	BC	20-32	Reddish Yellow (7.5YR 6/8) sandy loam	2
	C	32-72	Brownish Yellow (10YR 6/6) sandy loam	2
Pit/Auger 5	A	0-3	Dark Yellowish Brown (10YR 4/4) sandy loam	2
	BA	3-12	Brown (7.5YR 5/4) sandy loam	2
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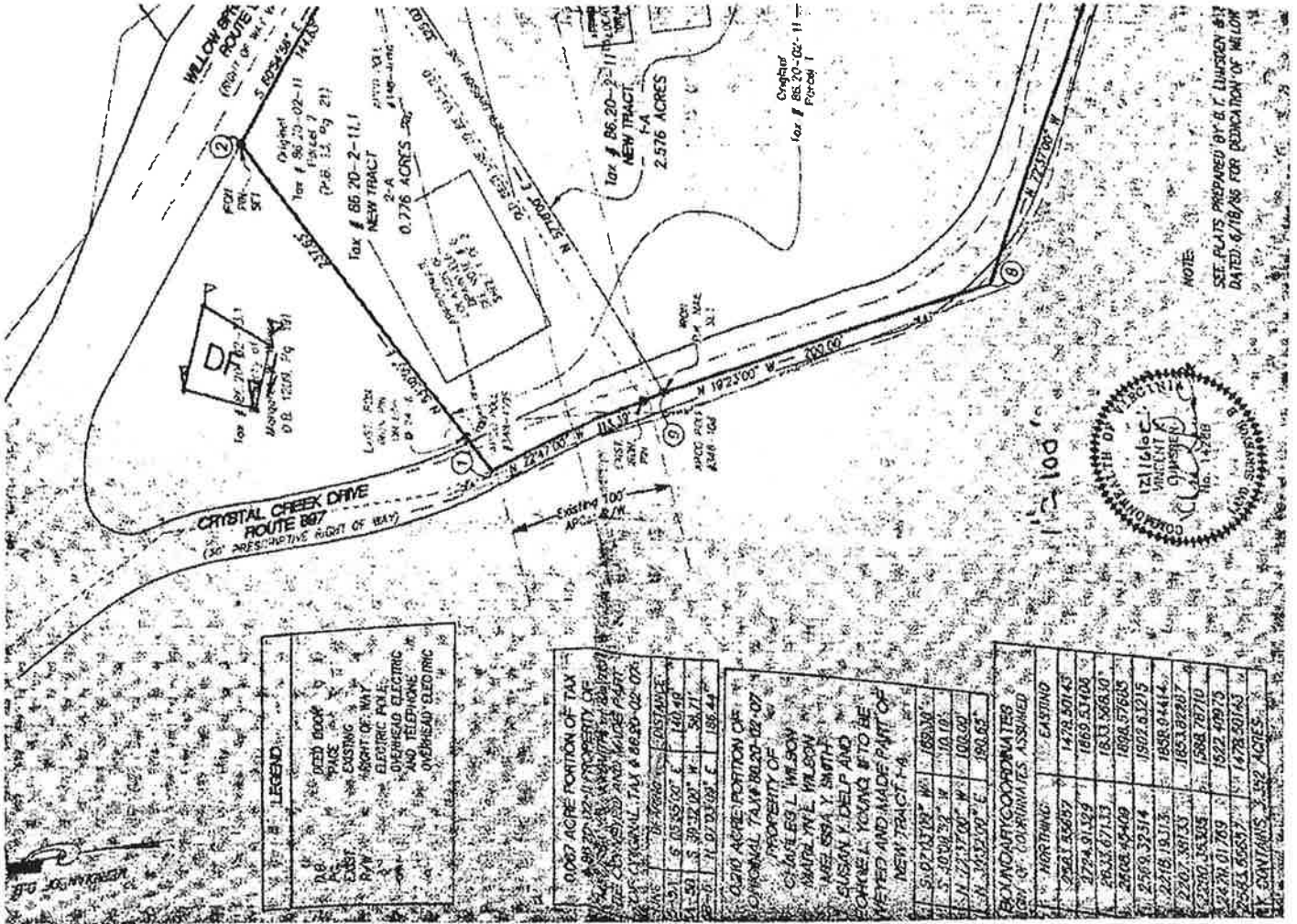
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**DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS  
AND WELL RECOMMENDATION & SPECIFICATIONS**

Main DF		Reserve DF	
Type of system	TL-2 Pretreatment into Conventional Line	Reserve Area Required	No
EPR	35	Type of Reserve	N/A
Slope %	42	EPR	N/A
# Bedrooms	3	Slope %	N/A
Gallons/Day	450	Gallons/Day	N/A
Width of Trench (ft.)	3	Width of Trench (ft.)	N/A
Design Loading Rate (gpd/ft <sup>2</sup> )	0.94		N/A
Total Square Ft. of Trench Bottom Required per BR	154	Total Square Ft. of Trench Bottom Required	N/A
Total Square Ft. of Trench Bottom per BR in Design	160	Total Square Ft. of Trench Bottom in Design	N/A
Total Square Ft. of Trench Bottom Required	460	# Lines of Reserve	N/A
Total Square Ft. of Trench Bottom in Design	480	Line Length (ft.)	N/A
# Lines Installed	4	Installed <24" from Rock or Other Impervious Strata	N/A
Length of Line Installed (ft.)	40	Centers (ft.)	N/A
Installed <24" from Rock or Other Impervious Strata	No	Width Required (ft.)	N/A
Centers (ft.)	12	Width in Design (ft.)	N/A
Width Required (ft.)	39	Installation Depth (inches into natural soil)	N/A
Installation Depth (inches into natural soil)	36	Amount of Backfill Required (inches)	N/A
Amount of Backfill Required (inches)	N/A	Type of Well Recommended	3B
		Amount of Casing and Grout (ft.)	50' min.



NOTE:  
SEE PLATS PREPARED BY G. C. LUNDGREN #11  
DATED 6/18/86 FOR DETAIL OF YELLOW



**LEGEND**

- DEED BOOK
- PLAT
- PAUSE
- EXISTING
- EAST
- RAW
- RIGHT OF WAY
- ELECTRIC POLE
- OVERHEAD ELECTRIC
- AND TELEPHONE
- OVERHEAD ELECTRIC

**0.067 ACRE PORTION OF TAX PROPERTY OF**  
**88.20-02-11.1**

THE SURVEY AND MAKE PART OF

CRISTAL CREEK DRIVE ROUTE B97

CRISTAL CREEK DRIVE ROUTE B97

2-51	6	05.85/00° E	140.410
51-50	3	39.32/00° W	58.71
0-0	1	07.03/08° E	198.44

**0.276 ACRE PORTION OF TAX PROPERTY OF**  
**86.20-02-11.1**

PROPERTY OF

CECILE L. WILSON

MARIE W. L. WILSON

MELISSA Y. SMITH

SUSAN F. DEMP AND

CHORLE YOUNG & TO BE

VEYED AND MADE PART OF

NEW TRACT F.A.

51-02-03-02	W	180.00
5-0-08-02	W	10.00
51-02-03-02	W	100.00
5-0-08-02	E	180.63

**BEARING COORDINATES**  
**BY OF COORDINATES ASSUMED**

BEARING	EASTING
2681.63657	1478.50143
2794.91529	1669.51408
2633.67133	1833.56810
2408.45409	1898.57685
2269.32514	1902.81215
2216.18113	1898.94414
2207.81133	1853.82287
2200.53305	1588.78710
2278.01789	1822.48975
2583.65657	1478.50143

TOTAL ACRES: 0.52 ACRES

**Property Location:** 0 WILLOW SPRING RD  
**Parcel ID:** 086.20-02-13.01-0000  
**Magisterial District:** Cave Spring  
**Account:** 37374  
**Card 1 of 1**

**Owner Name and Mailing Address:**  
 WILSON MARGARET L ESTATE ; WILSON CHARLES L EXEC  
 3804 BRANDON AVE SW APT 304 ROANOKE VA 24018

**Current Property Assessment 2018**  
**Total Building Value:** 0  
**Total Land Value:** 28000  
**Total Value:** 28000



**Narrative Description**

This property contains 0.54000 AC of land with a(n) N/A style building, Built about N/A, having primary N/A secondary N/A exterior and N/A roof cover, N/A bedroom(s), N/A full bath(s), N/A half bath(s).

**Property Characteristics**

**Jurisdiction:** Roanoke County  
**Legal Description:** BACK CREEK  
**Deeded Acreage:** 0.54000 AC  
**Estimated Acreage:** 0.5657 AC  
**Vacant Land:** YES  
**Neighborhood:** G052 / CRYSTAL CREE/MERRIMAN  
**Census Block:** 511610308021012  
**Land Use Program:** NO

**Sales Information  
 Most Recent Sales**

<u>Sale Date</u>	<u>Sale Price</u>	<u>Legal Reference</u>	<u>Sales Description</u>
6/17/1999	0	WB0000571514	NEEDS REVIEW
7/1/1984	0	DB0012090391	NEEDS REVIEW
1/1/1900	0	PB0127101818	PLAT



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Zoning Information

Split:

Zoning Code

County-R1

Zoning Description

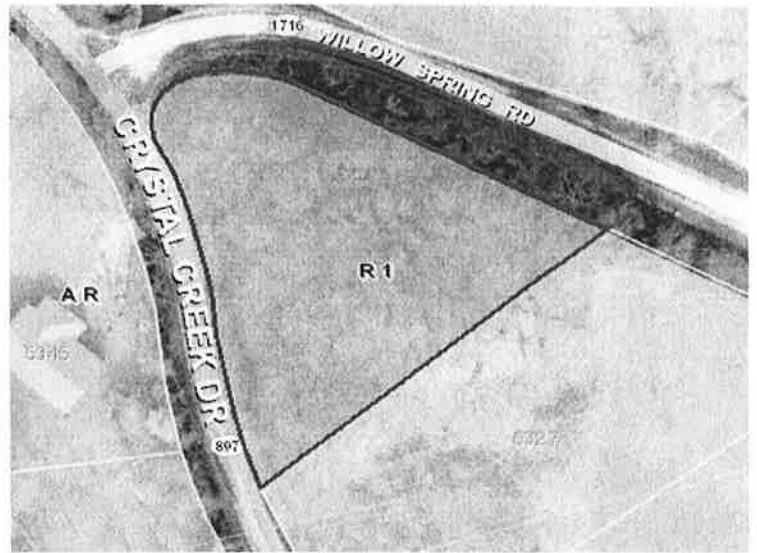
Low Density Residential

Action No:

Date:

Ordinance:

Name:



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**Overlay Districts**

Emergency Communications: No                      Roanoke River Conservation: No  
Airport: No    \*Manufactured Housing: No  
Wellhead Protection: No                           Clearbrook Village: No  
Floodplain: Yes

\*For more Information on Roanoke County Zoning, please call 540-772-2068 or visit <http://www.roanokecountyva.gov/pz>

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Community Number: 510190                      **Flood Zone Information**

<u>Flood Certificates</u>	FIRM Panel: <u>51161C0234G</u>	Effective Date: 9/28/2007
	Flood Zone: X	Floodway:
	FIRM Panel: <u>51161C0234G</u>	Effective Date: 9/28/2007
	Flood Zone: 0.2 PCT ANNUAL CHANCE FLOOD HAZARD	Floodway:
	FIRM Panel: <u>51161C0234G</u>	Effective Date: 9/28/2007
	Flood Zone: AE	Floodway:



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**Building Areas**

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<u>Sub Area</u>	<u>Sketched Area</u>	<u>Finished Area</u>	<u>Perimeter</u>
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### Services

**Trash Service:** [Tuesday](#)

[Website](#)

**Bulk & Brush Pickup:** [B Route](#)

**Water:**

**Recycling:** [Map](#)

**Sewer:**

Brambleton Teen Center (2.74 miles)

**Police Station:** [Map](#)

**Recreational Center:** [Map](#)

[Public Safety Center, 5925 Cove Rd, Roanoke VA](#)

Brambleton Recreation Center (2.73 miles)

**Library:** [Map](#)

**Fire Station:**

South County Library (0.88 miles)

[Cave Spring](#)

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### Schools

**Elementary School:** [Penn Forest](#)

**Middle School:** [Cave Spring](#)

**High School:** [Cave Spring](#)

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**Broadband Providers**

**Satellite**

<u>Provider Name</u>	<u>Upload Speed</u>	<u>Download Speed</u>
HUGHESNET	Maximum 2 Mbps	Maximum 15 Mbps
DISHNET SATELLITE BROADBAND	Maximum 2 Mbps	Maximum 10 Mbps
SKYCASTERS	Data Not Available	Maximum 2 Mbps
VIASAT INC	Maximum 3 Mbps	Maximum 12 Mbps

**Wireless 4G**

<u>Provider Name</u>	<u>Upload Speed</u>	<u>Download Speed</u>
AT&T MOBILITY	Data Not Available	768 Kbps - 1.5 Mbps
NTELOS	Data Not Available	768 Kbps - 1.5 Mbps
SPRINT	Data Not Available	768 Kbps - 1.5 Mbps
T-MOBILE	Data Not Available	768 Kbps - 1.5 Mbps
US CELLULAR	Data Not Available	768 Kbps - 1.5 Mbps
VERIZON WIRELESS	Data Not Available	768 Kbps - 1.5 Mbps

**Wireless LTE**

<u>Provider Name</u>	<u>Upload Speed</u>	<u>Download Speed</u>
AT&T MOBILITY	Minimum 4 Mbps	Minimum 512 Kbps
T-MOBILE	Minimum 4 Mbps	Minimum 512 Kbps
US CELLULAR	Minimum 4 Mbps	Minimum 512 Kbps
VERIZON WIRELESS	Minimum 4 Mbps	Minimum 512 Kbps

**Wireline Cable**

<u>Provider Name</u>	<u>Upload Speed</u>	<u>Download Speed</u>
COX COMMUNICATIONS	Maximum 20 Mbps	Maximum 200 Mbps



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**Wireline DSL**

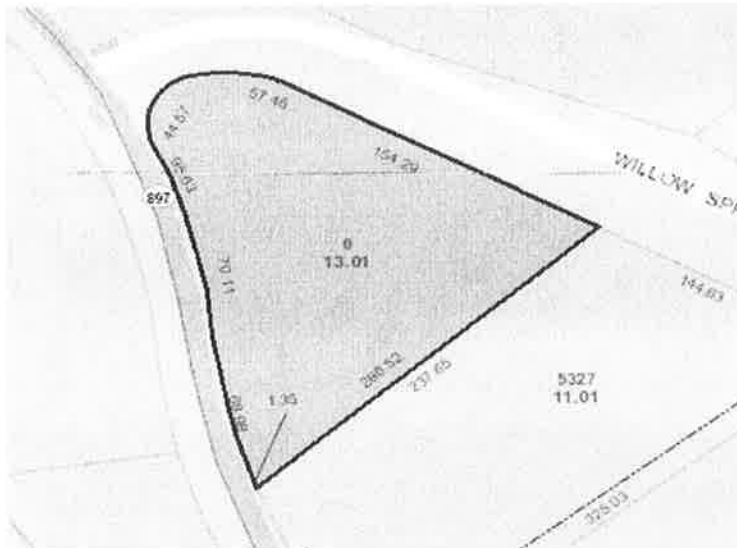
<u>Provider Name</u>	<u>Upload Speed</u>	<u>Download Speed</u>
VERIZON VIRGINIA LLC	Data Not Available	Maximum 5 Mbps

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**Pictometry**



**Tax Map**



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**Hybrid**

