

1-28



BACTERIOLOGICAL CERTIFICATE OF ANALYSIS

(See reverse side for instructions)

SAMPLE NO 09095

MID-ATLANTIC LABORATORIES,

State Certified Environmental Laboratory
VA Lab I.D. #00215 • MD Cert #215
WV Lab I.D. #9926 • NC Lab I.D. #51704

Mailing Address:
14294 Big Timber Road
King George, VA 22485

Physical Address:
224 Main Street, Suite 1
Port Royal, VA 22535

Tel. 804-742-5577
www.midatlanticlaboratories.com

DATE/TIME COLLECTED	COLLECTED BY	AGENCY/COMPANY
1/25/13 11:55 AM PM	Brian S.	Valley Drilling

CHLORINE RESIDUAL: 0.0

FAX RESULTS TO:	FAX #	DAYTIME TEL #
	540-592-3259	540-592-3239

PLEASE PRINT NAME & MAILING ADDRESS BELOW

NAME Valley Drilling Corp of VA
STREET 9172 John S. Mosby Highway
CITY Upperville STATE VA ZIP 20184

OWNER & ADDRESS OF WATER SUPPLY

NAME T.E.C. - MELTON PROJECT
STREET 39465 DIEGES VALLEY ROAD
CITY HAMILTON STATE VA ZIP 20175

FORM OF PAYMENT

CHECK MONEY ORDER #
 CUSTOMER ACCOUNT: Valley Drilling

IF PUBLIC SYSTEM OR NEW WELL, COMPLETE BELOW

KITCHEN TAP
(PWSID# OR HEALTH DEPT. I.D.#)

TO BE COMPLETED BY LAB ONLY					METHOD	
RECEIVED IN LAB	DATE 1-26-13	TIME 1:30	BY JS	<input checked="" type="checkbox"/> ONPG-MUG (24-HR)	<input type="checkbox"/> MPN (Bacterial count)	
COMPLETED	DATE 1-27-13	TIME 1:30	ANALYST JS	<input type="checkbox"/> ONPG-MUG (18-HR)		

RESULTS BOX MARKED WITH "X" INDICATES YOUR RESULTS (EXPLANATION AT RIGHT)

Results valid only when accompanied by Certified Analysis Seal

- NO TOTAL COLIFORM OR E.COLI (FECAL COLIFORM) BACTERIA WERE DETECTED IN THIS SAMPLE** - therefore this sample PASSES THE POTABILITY TEST required by the Environmental Protection Agency (EPA)
- TOTAL COLIFORM BACTERIA WERE DETECTED IN THE SAMPLE** - therefore this sample DOES NOT PASS THE POTABILITY TEST required by the Environmental Protection Agency (EPA). For further information or recommended action, contact your local or state Health Department, drinking water division
- TOTAL COLIFORM AND E.COLI (FECAL COLIFORM) BACTERIA WERE DETECTED IN THIS SAMPLE** - therefore this sample DOES NOT PASS THE POTABILITY TEST required by the Environmental Protection Agency (EPA). **NOTE: the presence of the E.Coli bacteria indicates a potentially serious health threat.** For further information or recommended action, contact your local or state Health Department, drinking water division
- OTHER:**

348362794
46 (19) 2

348 362794

COMMONWEALTH OF VIRGINIA WATER WELL COMPLETION REPORT
(Certification of Completion/County Permit)

State Water Control Board
P.O. Box 1143
2111 North Hamilton Street
Richmond, VA 23230

DEC 20 2012

BWCM No. T20428120001

County/City Loudoun

City/County Stamp

SWCB Permit
County Permit
Certification of inspecting official
This well does does not
meet code/law requirements.
S
Date
For Office Use

Virginia Plane Coordinates
N
E
Latitude & Longitude
N
W
Topo Map No.
Elevation Ft.
Formation
Lithology
River Basin
Province
Type Logs Drillers
Cuttings
Water Analysis
Aquifer Test

Owner Flynn, Robert I. Tee
o/o The Fauquier Bank
Address PO Box 561
Warrenton Va 20188
Phone
Drilling Contractor Valley Drilling Corporation of Virginia
Address 9172 John S. Mosby Highway
Upperville, VA 20184-1723
Phone (800) 582-9355

Tax Map ID# 46-19-2
Subdivision Flynn Division
Section
Block
Lot
Class Well

Well Location: 39465 Diggs Valley Rd.
(If possible please include map showing location marked)

Date Started 12-14-12 Date Completed 12-19-12 Type Rig Rotary Rig # 04

WELL DATA: New

Total Depth 300 Ft.
Depth to Bedrock 8 Ft.
Hole size (Also include reamed zones)
10 inches from 0 to 63 Ft.
6 inches from 63 to 300 Ft.
Casing Size (I.D.) and material
6 inches from +1 to 63 Ft.
Material Steel
Wt. Per foot #13 or wall thickness .188 inches
Material
Wt. Per foot or wall thickness inches
Gravel Pack
From to ft.
From to ft.

WATER DATA Water Temperature 56° F
Static Water Level (unpumped level measured) 45 Ft.
Stabilized measured pumping water level 55 Ft.
Stabilized yield 102 GPM after 3 hours
Natural Flow NO
Comment on quality CLEAR
WATER ZONES 2 GPM @ 77 Ft.
100 GPM @ 295 Ft.
GPM @ Ft.
GPM @ Ft.
GPM @ Ft.

USE DATA Type of Use Drinking
Type of facility Domestic
PUMP DATA: Type Rated HP

MAKE & MODEL PUMP
Intake Depth Capacity GPM @ TDH
WELLHEAD: Type well seal Watertight Cap
MAKE & MODEL PRESSURE TANK
Pressure Tank Gal. Location
Sample Tap Measurement Port
Well Vent Pressure Relief Valve
Gate Valve Check Valve
Electrical disconnect switch on power supply

DISINFECTION Well disinfected
Date Disinfectant used
Amount lb(s) Hours Used

ABANDONMENT (where applicable)
Casing Pulled
Plugging Grout From to ft.
Material

Screen Size and mesh for each zone (where applicable)
Inches from to ft.
Mesh size Type

Grout
From 0 to 60 ft., Type Bentonite
From to ft., Type

State law requires submitting to the Virginia State Water Control Board information about groundwater and wells for every well made in the State intended for water, or any other non-exempt well. This information must be submitted whether the well is completed, on standby, or abandoned. Information required includes an accurately and completely prepared water well completion report, full data from any aquifer pumping tests, drill cuttings taken at ten foot intervals, (unless exemption is secured), the results of any chemical analyses, and copies of any geophysical logs. Quarterly pumpage and use reports are required from owners of public supply and industrial wells. County of State permits to drill may be required in some parts of the state. Some counties require submission of a water well completion report. The Virginia State Health Department requires a water well completion report for public supply wells.

Owner Fynn, Robert L Tee

BWCM No. T20428120001

DRILLER'S LOG
(Use additional sheets if necessary)

Depth (Feet)		Type of Rock or Soil	Remarks
From	To		
0	8	Overburden	
8	280	Blue Stone	
77	78	Waterbearing	@ 2 GPM
295	296	Waterbearing	2 100 GPM

Well lot dedicated? Size Ft. x Ft. Well House?
Distance to nearest pollutant source Ft., Type
Distance to nearest property line Ft., Building Ft.
WATER SERVICE PIPE: Checked under PSI for minutes
Pipe size inches, Material
Installer
Date

I certify that the information contained herein is true and correct and that this well and/or system has been installed and constructed in accordance with the requirements for well construction as specified in compliance with appropriate county or independent city ordinances and the laws and rules of the Commonwealth of Virginia.

Signature James A. Smiling (SEAL)
(Well driller or authorized person)

Date 12-19-12

County License No. 997567

Virginia Class A Contractor's License #2705 027957A

County Of Loudoun

Division of Environmental Health

Leesburg, Virginia 20177

Office (703) 777-0234 Fax (703) 771-5023

Inspection Request (703) 771-5808



WELL/WATER Permit # T20428120001

Owner Name: FLYNN, ROBERT L TEE
 Owner Name2: % THE FAUQUIER BANK
 Owner Address: PO BOX 561
 WARRENTON VA 20188
 Applicant Name: FLYNN, ROBERT L TEE
 Applicant Name2: % THE FAUQUIER BANK
 Applicant Address: PO BOX 561
 WARRENTON VA 20188

Permit Active Date: 2012-12-12
 Pin #: 348362794000
 Tax Map #: /46//19/////2/
 Construction Purpose: OTHER
 Permit Purp: WATER WRD
 Structure Type: STRUCTURE TYPE
 System Type: IIIB

Home Phone: _____ Work Phone: _____ Ext _____
 Subdivision: FLYNN DIVISION Lot: LOT 2

Directions to property : Rt. 7/15 bypass West to business #7 into Hamilton to L on Rt. 704/Harmony Church to L on Digges Valley to 90 degree turn to L turn into driveway - 39465 Digges Valley Rd - A LOCATIONAL CLEARANCE IS

New Repair Abandonment Upgrade Hydrofrack Well ID # **WWIN-2012-0127**
 Based on the application for a well/water supply system construction permit filed in accordance with Chapter 1040. Codified Ordinances, a construction permit is issued to: FLYNN, ROBERT L TEE

DESIGN	NOTE: INSPECTION RESULTS
<p>Water supply, existing: (describe) DRILLED WL</p> <p>To be installed: class <u>IIIB</u></p> <p>Cased and Grouted to Bedrock plus 10' or a minimum cased <u>60'</u> Grouted <u>60'</u> whichever is greater</p> <p>Well Location. See Page <u>3</u></p> <p>I. If well yield as determined by 30 minute airlift test is less than 5 gallons per minute, a pumping test must be performed as follows:</p> <p>A. Pump and related equipment shall be installed and the static water level measured.</p> <p>B. Pumping shall begin at a rate of withdrawal greater than 5 GPM until water level drops to a point close to bottom of the well.</p> <p>C. At this point, the pump rate shall be adjusted so the water level remains constant.</p> <p>D. Measure and record the volume of water discharge and water level (electric tape) at 15 minute intervals throughout the test.</p> <p>E. Discharge water at least 50 feet from the well and sewage disposal area.</p> <p>F. Interruption of pumping longer than 15 minutes shall require extending the pumping time that amount of time.</p> <p>The well/water system is to be constructed as specified by the permit <input checked="" type="checkbox"/> and attached plans/specifications. <u> </u>.</p> <p>This water system construction permit is null and void if (a) conditions are changed from those shown on the application (b) conditions are changed from those shown on the construction permit.</p>	<p>Water supply location: Satisfactory yes <input type="checkbox"/> no <input type="checkbox"/></p> <p>Drillers Report (G.W.2) Received yes <input type="checkbox"/> no <input type="checkbox"/></p> <p>Well Construction Approval yes <input type="checkbox"/> no <input type="checkbox"/></p> <p>Sanitarian <u><i>M. W. Waddy</i></u> Date <u>12/17/12</u></p> <p>Well Driller _____ Lic # _____</p> <p>Pump Installer _____ Lic # _____</p> <p>Chemical Quality Data Received yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>Pumping Data Received yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input type="checkbox"/></p> <p>As built sketch on page _____</p> <p>Bacteriological Sample Received yes <input type="checkbox"/> no <input type="checkbox"/></p> <p>Water System Approved yes <input type="checkbox"/> no <input type="checkbox"/></p> <p>Sanitarian _____ Date _____</p> <p>II. Criteria for approval of well and well yield are as follows: The well must produce a:</p> <p>A. Minimum of 1 gallon per minute for 6 continuous pumping hours after the well has been pumped out according to Part 1, Sec. B of this permit.</p> <p>B. The pump test can be terminated early and well yield considered adequate if:</p> <p>1. The well cannot be pumped out as stated in Part 1, Sec. B of this permit.</p> <p>2. The well yields 2.5 GPM or greater for 3 hours of continuous pumping after Part 1, Sec. B of this permit are completed.</p> <p>C. Sufficient storage and yield may be considered for approval.</p> <p>D. Person conducting the pump test shall collect a sample to be analyzed for constituents described in Codified Ordinances of Loudoun County Title 4, Chapter 1040, Appendix III.</p> <p>E. Replacement wells are exempt from this requirement.</p>

Date: 2012-12-12 Issued By: *[Signature]*
 Date: 12/13/12 Reviewed By: *[Signature]*

This Construction Permit Valid Until
2013-12-12



Permit # : T20428120001
 Pin # : 348362794000
 Tax Map # : /46//19/////2/
 Owner : FLYNN, ROBERT L TEE
 Issue date : 2012-12-12

Planimetric



SEWAGE DISPOSAL CONSTRUCTION PERMIT

The system is designed for a _____ bedroom house with a maximum use of _____ gallons per day.
 Required source capacity _____ gallons per day.



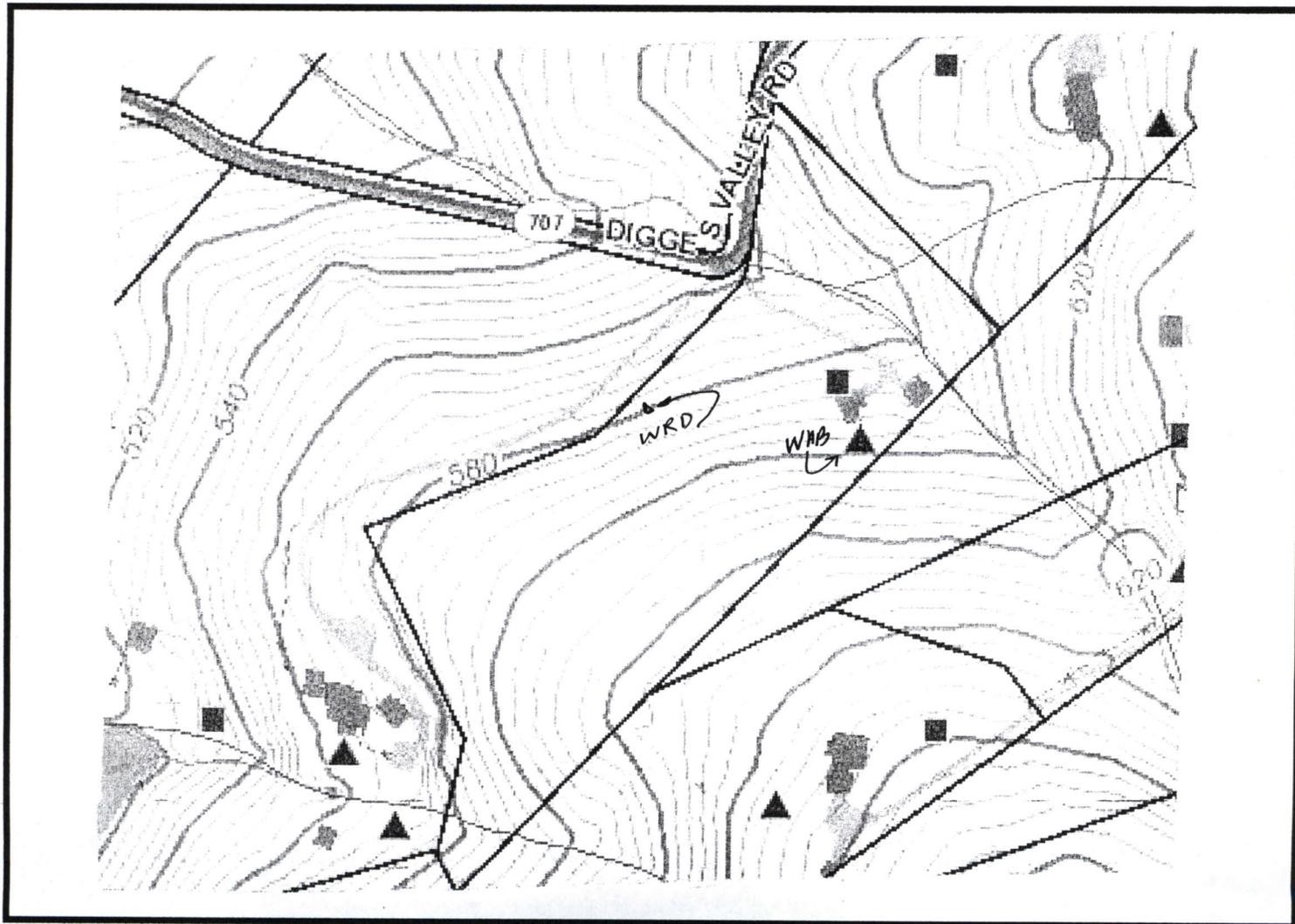
WATER SUPPLY CONSTRUCTION PERMIT - Drilled Well

Class IIIb Private: minimum case depth and grout depth
 _____ Class IIIc Private: minimum case and grout = 20 feet, or bedrock + 10 feet, whichever is greater
 _____ Class IIb Other :

Note : Satisfactory bacteriological sample required prior to occupancy or well use.

PLANIMETRIC MAP # 348 SCALE : 1" = 200'

LOUDOUN COUNTY PHOTOGRAMMETRIC BASE MAPS ARE STRICTLY PROTECTED BY COPYRIGHT; REPRODUCTION OF THESE MATERIALS IS STRICTLY PROHIBITED BY FEDERAL LAW.



Permit #: T20428120001
 Pin #: 348362794000
 Tax Map #: 146/19/11/2
 Owner: FLYNN, ROBERT L TEE
 Issue date: 2012-12-12

Schematic Drawing

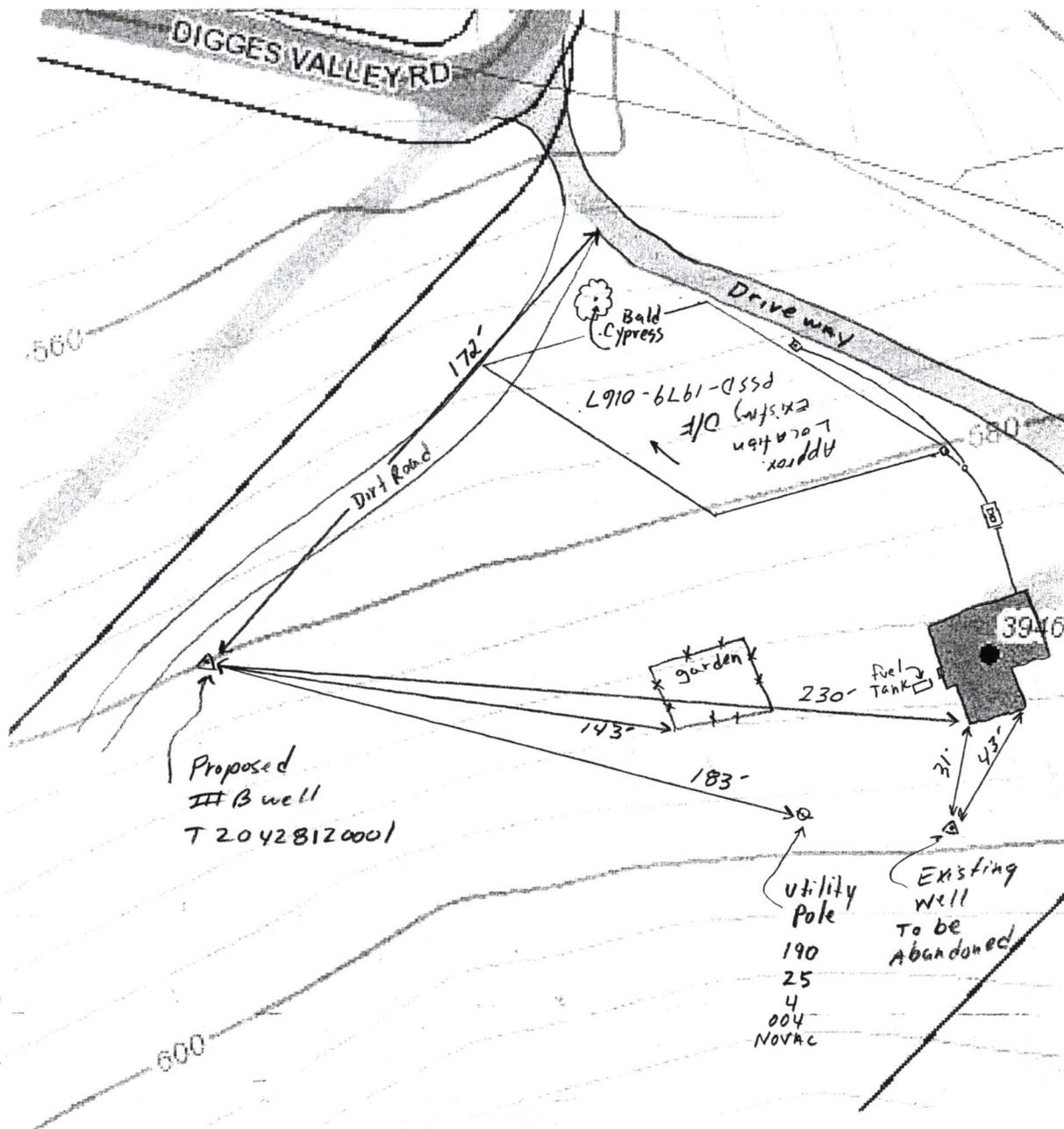


Schematic drawing of sewage disposal system and topographic features.

Show the lot lines of the building lot and building site, sketch of property showing any topographic features which may impact the design of the system, all existing and/or proposed structures including sewage disposal systems and wells within 100 feet of sewage disposal system and reserve area. The schematic drawing of the sewage disposal system shall show sewer lines, pretreatment unit, pump station, conveyance system, and subsurface soil absorption system, reserve area etc. When a nonpublic drinking water supply is to be located on the same lot, show all sources of the pollution within 200 feet.

The information required above has been drawn on the attached copy of the sketch submitted with the application. Attach additional sheets as necessary to illustrate the design.

- PROPOSED WELL MUST MAINTAIN THESE MINIMUM SETBACKS
 - 50 FEET FROM ALL DRAINFIELDS & SEWAGE DISPOSAL COMPONENTS
 - 50 FEET FROM ALL HOUSE LOCATIONS
 - 10 FEET FROM ALL PROPERTY LINES





Permit # :	T20428120001
Pin # :	348362794000
Tax Map # :	146//19/////2/
Owner :	FLYNN, ROBERT L TEE
Issue date :	2012-12-12

General Well System Installation Requirements

1. The well contractor must be licensed by the Loudoun County Health Department to install water supply systems.
2. This permit is null and void if the site conditions are changed from those shown on the application of this permit.
3. The well installation area shall not be physically altered (vehicular traffic, cutting, filling, etc.) prior to installation of the well system.
4. The well must be located and drilled as permitted, maintaining the specified setback distances and casing requirements.
5. Contact the Health Department if there are any questions regarding system location or construction. Contact Miss Utitlity before beginning any work.
6. If pit privies, septic tanks, cesspools, drainfields, underground storage tanks or other potential pollution sources or pertinent features are discovered within 100 feet of the proposed well installation, but are not shown on the permit sketch, contact the Health Department immediately. Do not proceed with construction until, or unless, clearance is granted by the Health department.
7. It is the owner's and builder's responsibility to ensure that the house and/or structure are located such that this lot and all neighboring properties meet the setback requirements to existing or proposed wells and/or drainfileds.
8. The well must be a minimum of 50 feet from all structures, unless the structures are constructed of solid masonry without termite treatment. Wells downslope of potential pollution sources must be placed at further distances, or additional casing and grout is required,
9. The well must be located a minimum of 50 feet from all septic tanks.
10. Additional casing and grout, or setback distance are required for wells placed downslope of septic systems, structures and other actual or potential pollution sources. Contact the Health Department regarding minimum casing and grout requirements for downslope sited wells.
11. The well cannot be placed less than 50 feet from any sewer line, force main, or conveyance line unless special precautions are taken; contact the Health department for direction.
12. The well must be installed a minimum of 10 feet from all property lines.
13. All roof drainage should be diverted away from the well.
14. A satisfactory Health Department inspection of the well location and construction is required prior to grouting the well.
15. A reinspection fee is required prior to scheduling reinspections.
16. All dry holes must be abandoned prior to the release of a building clearance.
17. This is a Health Department permit only, all other county regulations, ordinances, procedures and policies must be met.
18. Pump installer is responsible for obtaining an electrical permit from the Department of Building & Development to wire the pump and run eletrical lines from the well to the pump controls and to ensure all required inspections by the Department of Building & Development are approved prior to ditch concealment.

LOUDOUN COUNTY HEALTH DEPARTMENT

12042812001 WRD

Office use: Received by ecj Date: NOV 30 2012 FEE PAID YES NO APPLICATION # 12042812002 Attach Receipt YES NO

APPLICATION FOR: SEWAGE DISPOSAL WELL PERMIT CERTIFICATION LETTER
 SEPTIC REPAIR WELL/SEPTIC ABANDONMENT ADDITION / DEMO
 BUILDING RENOVATION MINOR REPAIR PUMP AND HAUL
 Betterment Loan Eligibility (\$50.00 fee)

APPLICANT K. McCandless / T.E.C., Inc. HOME TELEPHONE 703-888-9607 *Cell*
MAILING ADDRESS 3308 Mt. Vernon Ave. OFFICE TELEPHONE 703-567-4346
Alexandria, VA 22305 E-Mail Kmccandless@TotalEnvironmental.net

OWNER The Robert Flynn Trust % The Fauquier Bank TELEPHONE 540-349-0223
MAILING ADDRESS P.O. Box 561 E-Mail Sarah.Yakel@Fauquierbank.com
Warrenton, VA 20188 Property address: 39465 Digges Valley Rd

EXACT LOCATION (GIVE DIRECTIONS FROM LEESBURG) Rt. 7/15 Bypass West to Bus. 7 into Hamilton
to Left on 704/Harmony Church, to Left on Digges Valley to 90 degree turn to L. + R: into
PROPERTY IDENTIFICATION NUMBER: SEC. H6 ALPHA DC 9 BLOCK LOT 2 *Driveway*
(IF APPLICABLE) NAME OF SUBDIVISION: PIN # 348 36 2794
ACRES AND/OR SQ. FT. IN THIS PARCEL: 6 ac. ATTACH SITE PLAN (SKETCH) ON FORM PROVIDED.

TYPE OF SEWAGE DISPOSAL: **MOUNTAIN SIDE OVERLAY**
 PROPOSED PUBLIC SEWER (SYSTEM:)
 EXISTING SEPTIC TANK DRAINFIELD SYSTEM
 REPAIR OTHER (DESCRIBE:)
 INTERMITTENT

TYPE OF WATER SUPPLY: PROPOSED PUBLIC-CENTRAL (SYSTEM NAME:)
 EXISTING PRIVATE DRILLED WELL
 OTHER (DESCRIBE:)

TYPE OF CONSTRUCTION: PROPOSED SINGLE FAMILY DWELLING
 EXISTING COMMERCIAL
 REMODELING OTHER (DESCRIBE)
(DESCRIBE) (DESCRIBE) (DESCRIBE)

If application is for an addition or a BOCA : CONSTRUCTION INFORMATION:
Increase waste load? YES NO Number of marketable bedrooms
Extending water? YES NO Will foundation be chemically treated for termites YES NO
Extending sewer? YES NO Will plumbing fixtures be installed in the basement YES NO
Related Building Permit #
*Is addition or BOCA properly staked? YES NO *If no, please stake within 24 hours from date of application.
Would you like to be present at the time of the site visit? YES NO

IF APPLICABLE, HAS THIS PROPERTY BEEN PREVIOUSLY EXAMINED BY THE HEALTH DEPARTMENT? NO YES
IF YES, EXPLAIN (GIVE CASE NUMBER, DATE, ETC.)

THE PROPERTY LINES AND BUILDING LOCATION ARE CLEARLY MARKED AND THE PROPERTY IS SUFFICIENTLY VISIBLE TO SEE THE TOPOGRAPHY. I GIVE PERMISSION TO THE DEPARTMENT TO ENTER THE PROPERTY DESCRIBED FOR THE PURPOSE OF PROCESSING THIS APPLICATION.

IF THE APPLICANT IS OTHER THAN THE LEGAL OWNER OF THE PROPERTY AT THE TIME APPLICATION IS MADE, THEN THE LEGAL OWNER MUST SIGN, THEREBY GIVING CONSENT TO THE AGENTS OF THE COUNTY TO ENTER ONTO THE PROPERTY AND MAKE SUCH TESTS AS ARE NECESSARY AND/OR REQUIRED.
LEGAL OWNER The Fauquier Bank, Trustee
Sy. J. Yakel, VP
(Required Current Legal Owner)
DATE 11/30/12

ATTACH SITE PLAN, FEE AND RETURN TO: LOUDOUN COUNTY HEALTH DEPARTMENT
1 HARRISON STREET, S.E., LEESBURG, VA 20177

- FSM standards must be followed if the proposal is related to a subdivision application.

DEFINITIONS: AOSE-----Authorized Onsite Soil Evaluator BOCA-----The building code
 FSM-----Loudoun County Subdivision and Land Development Ordinance Facility Standards Manual
 1066-----Loudoun County onsite sewage ordinance 1040-----Loudoun County water supply ordinance
 GMP-----State Policy

SITE PLAN

All Items Below Are Required To Be Shown On the Site Plan

- | | |
|---|--|
| <input type="checkbox"/> Property Lines (proposed and existing) | <input type="checkbox"/> Underground utilities (must be field marked) |
| <input type="checkbox"/> House & Structures (proposed and existing) | <input type="checkbox"/> proposed and existing |
| <input type="checkbox"/> Sewage System (DF, privy, P & H, discharge, cesspool, etc.) proposed and existing | <input type="checkbox"/> Water supply (wells, springs, cisterns, etc.) |
| <input type="checkbox"/> Site features, topographical (drainage ways, Swampy areas, rock outcrops, sinkholes, disturbed soil areas, dump sites, fuel tanks, etc.) | |

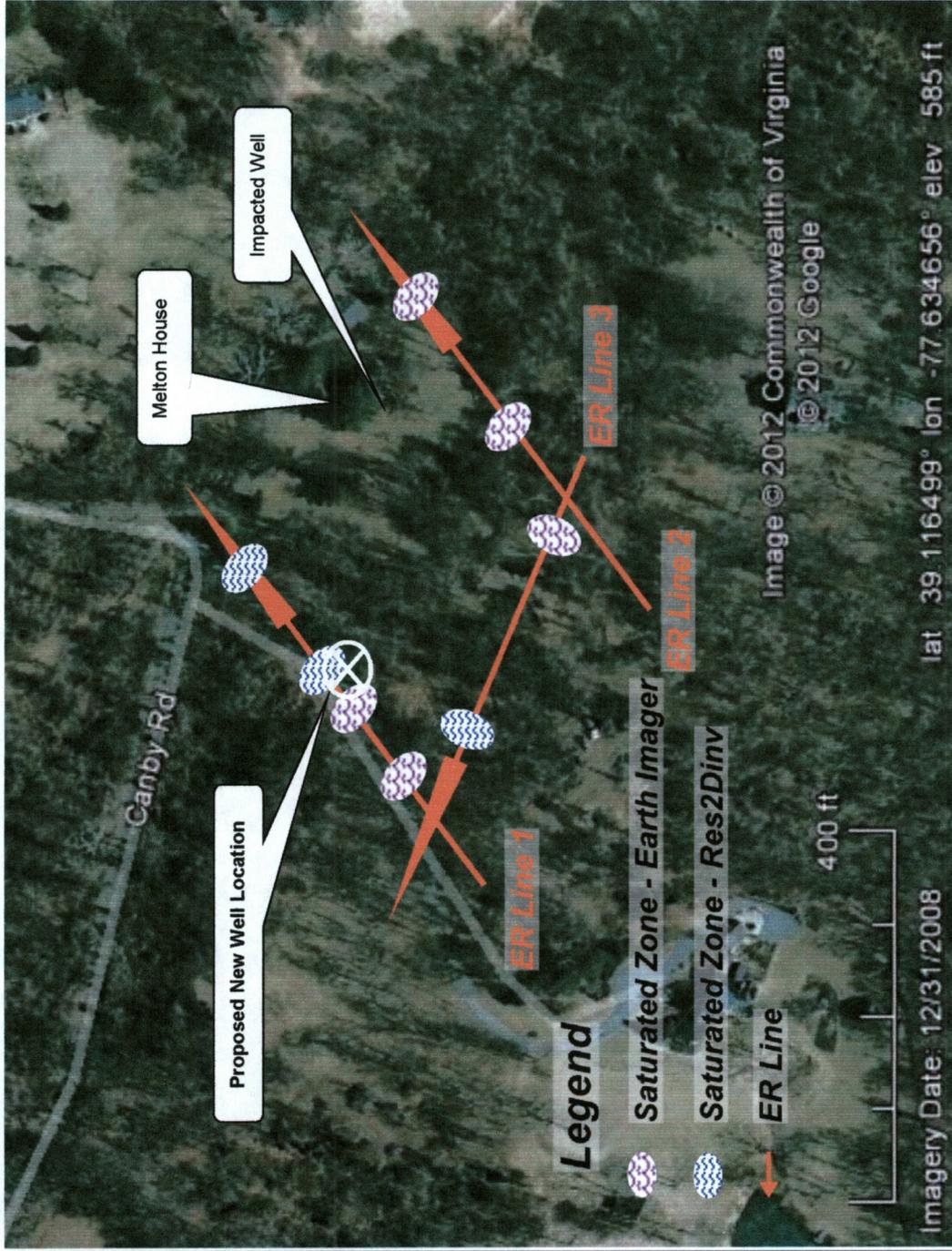
All Items Within 200 Feet of Property Lines Must Be Shown

Attached Drawings include:

- *Figure 1: "Proposed Well Location" (white target)*
- *Figure 2: "Topographic Maps" showing Slope, topography and property lines.*
- *Figure 3: "Site Plan" showing house, Drainfield, buried utilities*

I have accurately and clearly shown all required items on this Site Plan.

 Owner/Agent The Fidelity Bank Trust
 By: Jeffrey A. Lee, RP Date 11/30/12



North

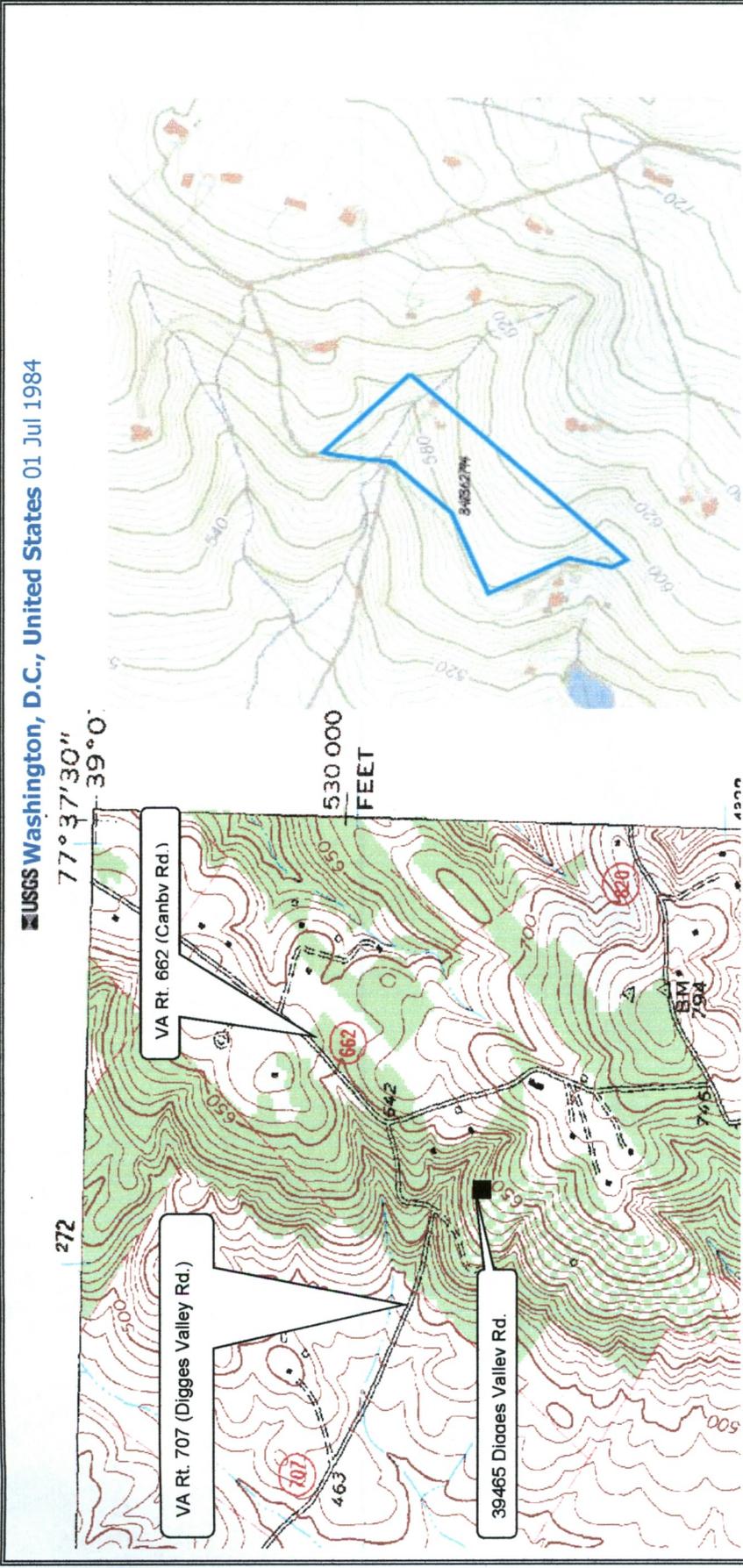
Figure No. **1**

PROPOSED WELL LOCATION
 39465 Digges Valley Road
 Hamilton, Virginia 20175
 PC#2013-3012

Total Environmental Concepts, Inc.

3308 Mt. Vernon Ave, Alexandria, Virginia 22305

(Adapted from Forest Environmental Services report for this site, Figure 2, originally presented in TEC's SCR dated 10/18/12)



39465 Digges Valley Road property outline in blue

USGS Topographic Map to Left; Loudoun County GIS-derived topo map to right.



Total Environmental Concepts, Inc.

3308 Mt. Vernon Ave, Alexandria, Virginia 22305

U.S.G.S. 1983 Loudoun Co., Virginia Quadrangle Map

Scale: As Shown

TOPOGRAPHIC MAP

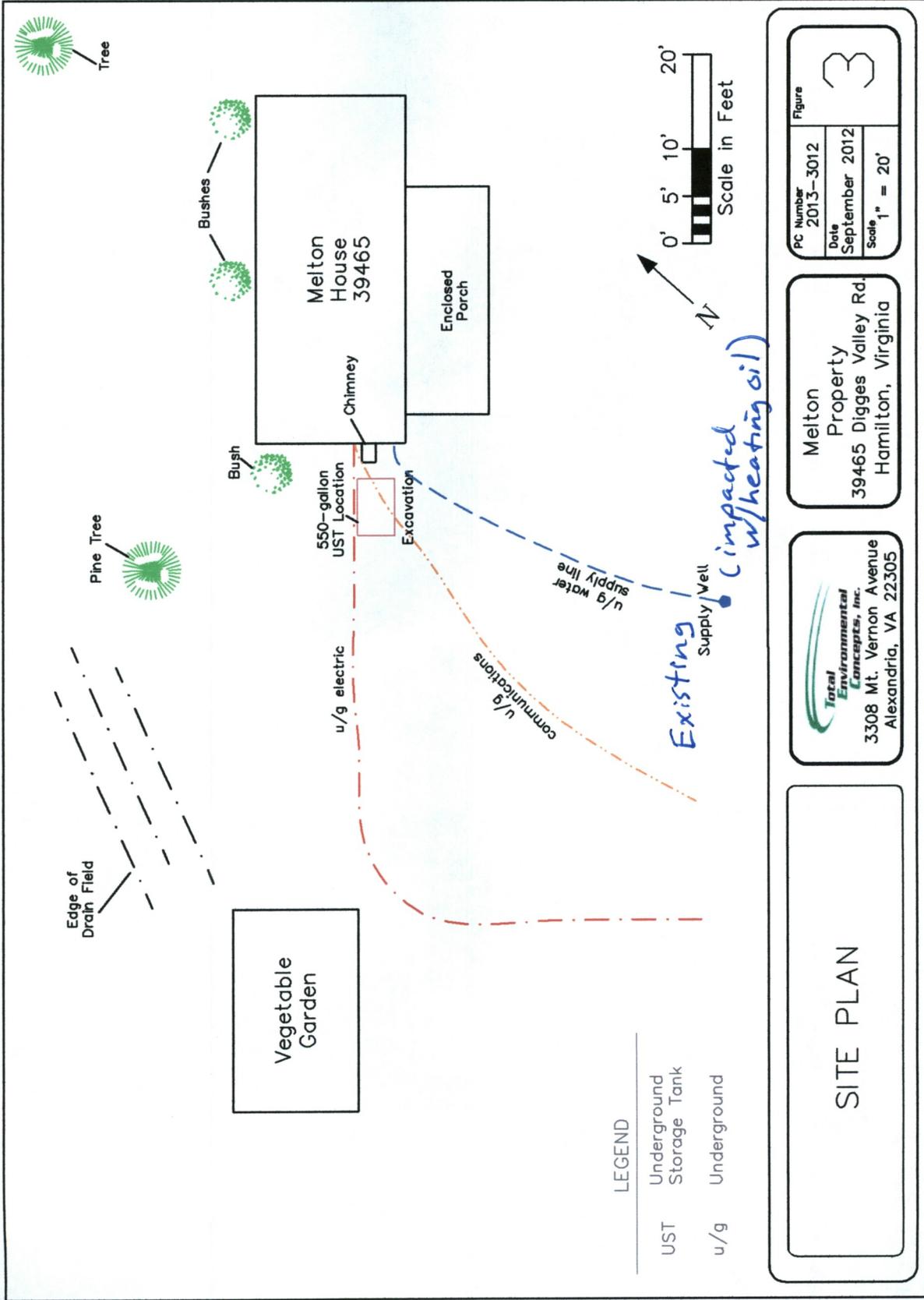
39465 Digges Valley Road

Hamilton, Virginia 20175

PC#2013-3012

Figure No.

2



Edge of Drain Field

Pine Tree

Tree

Bushes

Bush

Vegetable Garden

Melton House 39465

Chimney

Enclosed Porch

550-gallon UST Location

Excavation

u/g electric

u/g communications

u/g water supply line

Existing

Supply Well

(impacted w/heating oil)

LEGEND

- UST Underground Storage Tank
- u/g Underground



PC Number 2013-3012	Figure 3
Date September 2012	
Scale 1" = 20'	

Melton Property
39465 Digges Valley Rd.
Hamilton, Virginia

Total Environmental Concepts, Inc.
3308 Mt. Vernon Avenue
Alexandria, VA 22305

SITE PLAN