

**Town of Thompson's Station  
Utility Board  
Meeting Agenda  
August 21, 2019**

**Call Meeting To Order**

**1. Consideration Of The Minutes Of The June 19, 2019 Meeting.**

Documents:

[ITEM 1 UTILITY BOARD 6-19-19 MINUTES.PDF](#)

**2. System Operator's Update/Cell 1 Update**

**3. Update On Hill Property Drip Project**

**4. I & I Investigation**

Documents:

[ITEM 4 BARGE WW I AND I INVESTIGATION.PDF](#)

**5. Drafted Memorandum Of Understandings**

- a. Littlebury MOU for Onsite System (Copy of MOU to be forwarded prior to UB meeting)
- b. Pleasant Creek Bio-Clere Request (Pending)

Documents:

[ITEM 5B PLEASANT CREEK BIOCLERE REPORT.PDF](#)

**6. Master Plan Work Session**

**7. Alexander Property Soil Testing**

Documents:

[ITEM 7 MEMORANDUM TO KEN\\_ PROJECT 8-12-2019.PDF](#)  
[ITEM 7 COSTS ANALYSIS.PDF](#)  
[ITEM 7 COSTS ANALYSIS\\_V2.PDF](#)  
[ITEM 7 THOMPSONS STATION ALEXANDER PROPERTY GRID  
STAKE\\_07302019 FINAL ELI LLC.PDF](#)  
[ITEM 7 ALEXANDER  
PROP\\_GRID\\_STAKING\\_SURVEY\\_PROPOSAL\\_CIVIC\\_07292019.PDF](#)  
[ITEM 7 BID\\_THOMPSONS STATION EARTHSEARCH PROPOSAL.PDF](#)  
[ITEM 7 REFERENCES.PDF](#)  
[ITEM 7 SOIL TESTING EMAILS.PDF](#)  
[ITEM 7 SURVEYORS EMAILS.PDF](#)  
[ITEM 7 THOMPSONS STATION SURVEY PROPOSAL AHLER PDF.PDF](#)  
[ITEM 7 THOMPSONS STATION ALEXANDER PROPOSAL 19 JOHN GIBI.PDF](#)  
[ITEM 7 SURVEYORS.PDF](#)

## **8. New Board Member Recommendation**

Documents:

[ITEM 8 APPLICANTS FOR UTILITY BOARD VACANCY.PDF](#)

## **9. Announcements**

## **10. Adjourn**

*This meeting will be held at 6:00 p.m. at the Thompson's Station Community Center  
1555 Thompson's Station Rd West*

**Town of Thompson 's Station  
Utility Board  
Meeting Minutes  
June 19, 2019 6:00 p.m.**

**1. Meeting Called to Order**

Chairman Jeff Ridsen called the meeting to order at 6:00 pm with the required quorum. Present was Brian Stover, Bruce Difrancisco, Jeff Ridsen, Brad Wilson, Joe Whitson, and John Peterson, Town Administrator Kenneth McLawhon, Town Clerk Regina Fowler, Waste Water Operator Kenny Bond and Waste Water Assistant Brandon Haskins.

**2. Approval of Minutes from the May 15, 2019 Meeting**

**A motion to approve the minutes for the May 15, 2019 meeting was made by Mr. Peterson. The motion was seconded. Motion carried unanimously.**

**3. System Operator's Update**

Kenny Bond, Waste Water Operator, updated the Board on possible sources of leakage in the system, re-calibration of the flow meter, nitrogen levels and possibility of discharge into the pond at Tollgate Village, possible issues with our system (Heritage and Regional), status of the problem concerning the pump station with an update on Cell I.

**4. Update on Whistle Stop Pipeline**

Matthew Johnson with Barge updated the Board on the Whistle Stop Pipeline. The location of the pipe will have to be verified before a determination can be made as to where the easement is located.

**5. Waste Water Request TriStar Energy**

**6. Waste Water Request Holt Property**

Upon discussion a determination was made to combine Waste Water Request for TriStar Energy and Holt Property.

**A motion was made by Mr. Peterson to approve deferral of the Waste Water Request on TriStar Energy and the Holt Property The motion was seconded. Motion carried unanimously.**

**7. Waste Water Request for Littlebury**

**A motion was made by Mr. Ridsen to approve the Bioclere Waste Water System for Littlebury contingent upon the completion of further discussion, negotiations and a Memorandum of Understanding (MOU). The motion was seconded. Motion carried unanimously.**

**8. Waste Water Request Pleasant Creek (Pump and Haul System)**

**A motion was made by Mr. Stover to change this Waste Water Request from Pleasant Creek to Parson's Valley (Pump and Haul System) and to deny said request. The motion was seconded. Motion carried unanimously.**

**9. Waste Water Request for Bioclere for Three (3) Phases across from Littlebury (Pleasant Creek).**

After much discussion, Mr. McLawhon noted that philosophically speaking, it would take amendments and modifications to the current Plan of Service, a re-visit to the Master Plan with much concern to annual Milestones etc. before this request could properly be addressed.

**Town of Thompson 's Station  
Utility Board  
Meeting Minutes  
June 19, 2019 6:00 p.m.**

**A motion was made by Mr. Peterson to defer action on the Request for Waste Water Request for Bioclere for Three (3) Phases for a development across from Littlebury (Pleasant Creek). The motion was seconded. Motion carried unanimously.**

**10. Discussion Related to Applicants of Interest for Vacant Utility Board Position and recommendation to BOMA.**

A determination was made for Brian Stover and Jeff Riden to interview said applicants for vacant Utility Board position and to bring a candidate recommendation to the Utility Board at the July Meeting for recommendation to BOMA.

**A motion was made by Mr. Stover to defer discussion of Applicants of Interest for Vacant Utility Board Position and Recommendation to BOMA until the July meeting. The motion was seconded. Motion carried unanimously.**

**11. Announcements**

None

**12. Adjournment**

A motion to adjourn was made by Brian Stover. The motion was seconded. The meeting adjourned at 7:12 p.m.

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**Jeff Riden, Chairman**

**Town of Thompson's Station**  
1550 Thompson's Station Rd W  
Thompsons Station, TN 37179  
US  
billing@thompsons-station.com  
www.thompsons-station.com



# Purchase Order

**VENDOR**

Barge Design Solutions, Inc.  
615 3rd Avenue South  
Suite 700  
Nashville, TN 37210

**SHIP TO**

Wastewater Fund

**P.O. NO.** 40200

**DATE** 08/14/2019

**APPROVED BY**

Ken McLawhon

**DATE APPROVED**

08/14/2019

**BUDGETED ITEM**

Yes


ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Regional Plant investigation (Barge Project 3672700)		1.00	4,200.00

Any price increases will require a change order prior to installation or service.

**TOTAL**

**\$4,200.00**

Approved By

  
\_\_\_\_\_

Date

8-15-19

**TOWN OF THOMPSON'S STATION, TENNESSEE**

**WORK AUTHORIZATION**

**TASK ORDER No. 17**

Date: August 12, 2019

Barge Project No. 3672700

It is agreed to undertake the following work in accordance with the provisions of the Agreement between the Town of Thompson's Station, TN (Client) and Barge Design Solutions, Inc. (Barge) dated August 17, 2018.

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Scope of Services:

In January 2019, the Town of Thompson's Station (Town) observed an approximately 2 million gallons (MG) per month increase, from 7 MG to 9 MG, in wastewater flow to their Regional wastewater treatment plant. This increase has continued and remained steady for each month of 2019. The Town is interested in identifying the source of this increase due to the limited treatment and disposal capacity at the Regional plant. The Town has completed a preliminary review of their system, and thus far has been unable to locate the source of the additional water. Barge has been tasked with determining an approach to investigate where inflow and infiltration (I/I) is entering into the Thompson's Station collection system without direct data collection through flow monitoring or CCTV investigation.

As part of this scope of services Barge will:

1. Review Lift Station Operation:
  - a. By reviewing night run times of all lift station's pumps in the Thompson's Station system, potential anomalies in pumping times or flow rates may be seen which could narrow the search for I&I source locations. The work will include nightly visits by Thompson's Station staff to each lift station unless the lift station has been equipped with runtime or flow monitoring and recording. The visits are anticipated to take 1 week to determine a baseline flow for each basin. Once data has been collected, Barge will review the run time data to identify which pump station(s), if any, have elevated flows. Barge will provide a summary of the pump station review to the Town. In addition, Barge will review the available flow data from the Town's Hightide units for any anomalous indicators that relate to the I&I investigation.
2. Review Maps:
  - a. Barge will use sewer maps and other available data including GIS elevation data and USGS quadrangle maps to identify areas which have the highest likelihood of receiving a constant source of inflow. Barge will provide maps of the highlighted sewers which warrant field investigation. The maps and information will be utilized by Town staff to conduct field investigations.
3. Comcast Investigation
  - a. Barge will contact Comcast regarding their work in the Canterbury neighborhood to obtain information on the area their contractor was working in during January

2019. In addition, Barge will request any utility damage reports for that time period.

4. HB&TS Investigation

- a. Barge will conduct a review of the available water use data from HB&TS to identify any unusual patterns in water usage which would correlate with the sewer flow increase. Additionally, Barge will contact HB&TS to obtain any available water loss information on the areas which are in their system and are served by the Thompson's Station sewer collection system. Depending on the information available, Barge and the Town will determine what steps to take following the data acquisition.

Time of Performance:

Barge can complete this work within approximately 1 month after receiving the notice to proceed on this task order.

Compensation:

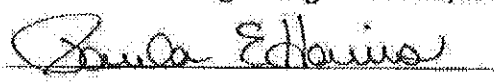
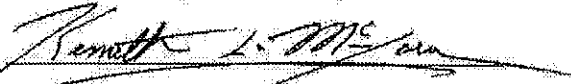
Barge compensation for this Task Order will be on an hourly basis, in accordance with the Agreement, for a total estimate amount of \$4,200.00. Invoices will be prepared based on services specifically requested and performed.

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Agree as to Scope of Services, Time of Performance, and Compensation:

Town of Thompson's Station, Tennessee

Barge Design Solutions, Inc.



Date: 8-15-19

Date: 8-15-19



## Engineering Report

### Pleasant Creek Wastewater Treatment Facility

### Gravity Sanitary Sewer Collection, Bioclere Wastewater Treatment & Land Drip Dispersal System

for

**Pleasant Creek Investments LLC  
Thompson Station, TN**

**SEC, Inc.**  
SITE ENGINEERING CONSULTANTS  
ENGINEERING • SURVEYING • LAND PLANNING  
850 MIDDLE TENNESSEE BLVD • MURFREESBORO, TENNESSEE 37129  
PHONE (615) 890-7901  
WWW.SEC-CIVIL.COM



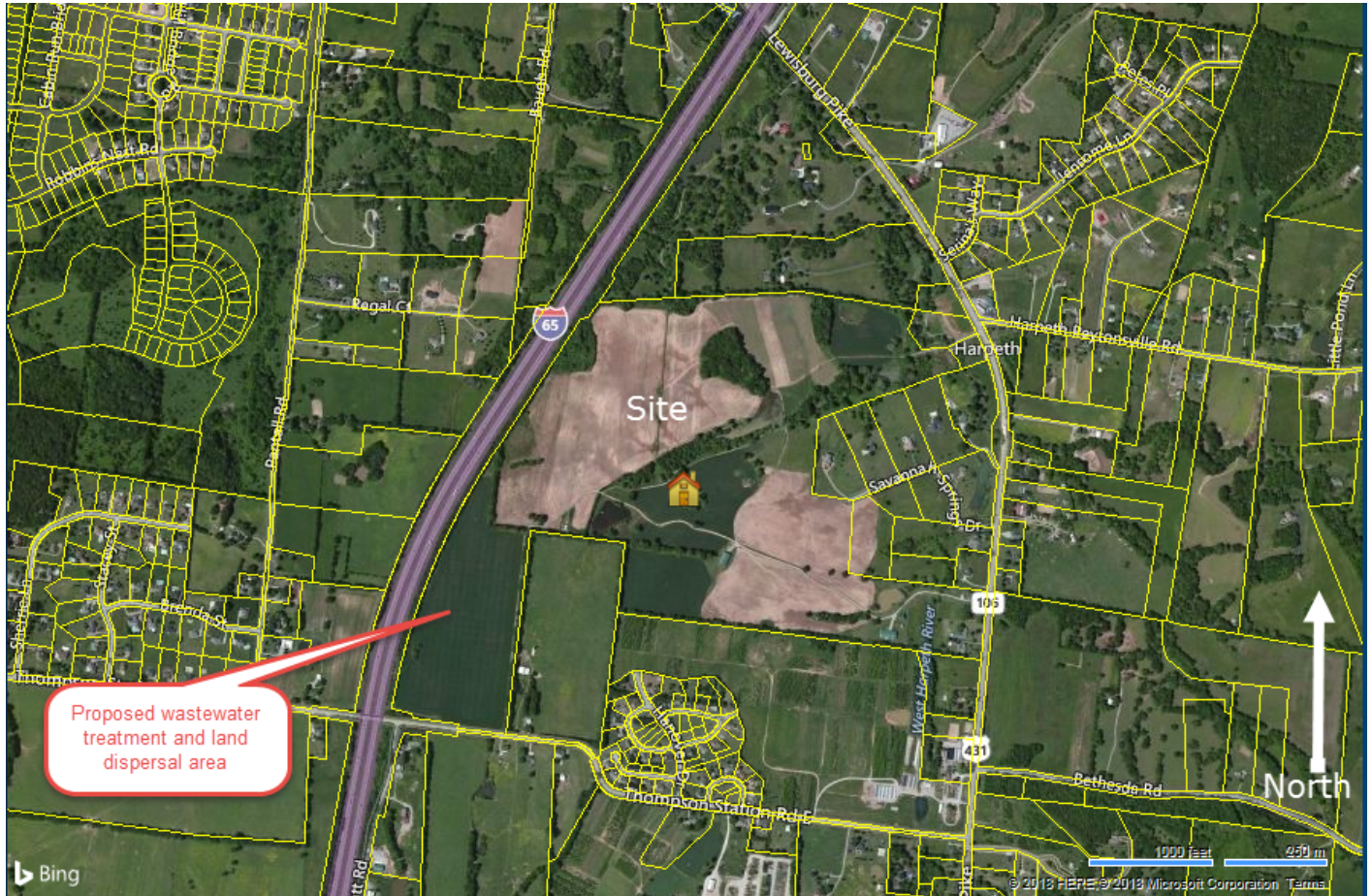


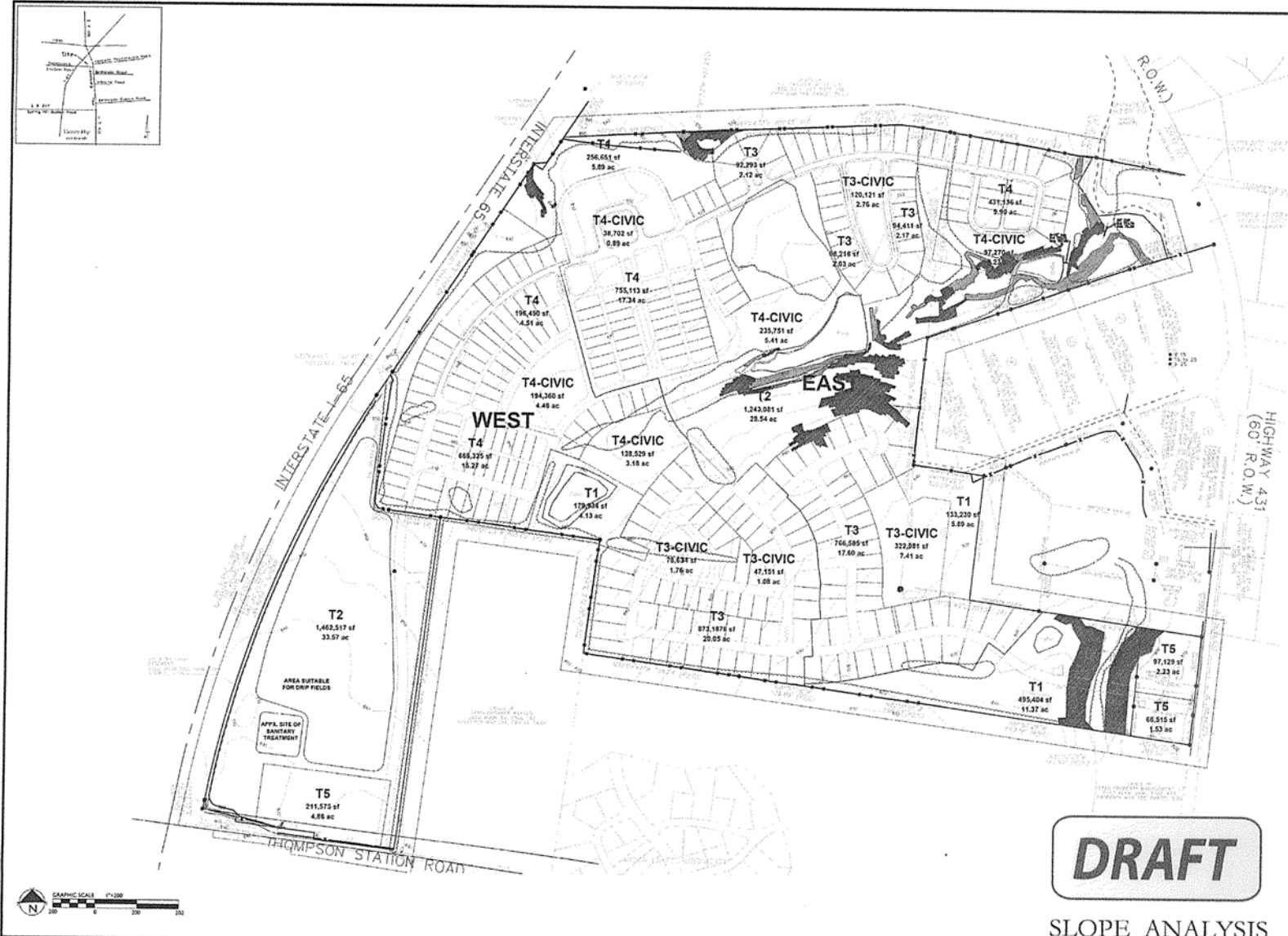
## Section Index

- 1 General Information of Wastewater Treatment
- 2 Wastewater Effluent Calculations
- 3 Wastewater Treatment
- 4 Effluent Disposal
- 5 Effluent Storage
- 6 Summary of Estimated Cost

# 1 General Information of Wastewater Treatment

## Site Location





**GDC**  
**GAMBLE**  
 DESIGN COLLABORATIVE  
 DEVELOPMENT PLANNING AND  
 LANDSCAPE ARCHITECTURE  
 100 SOUTH 4TH AVENUE  
 SUITE 200  
 NASHVILLE, TENNESSEE 37203  
 615.259.1100  
 gdc@gdcgambledesign.com

Pleasant Creek Subdivision  
 Site Concept Plan

Town of Thompson's Station, Williamson County, Tennessee

date \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 GDC Job No. 14000  
 FEBRUARY 03, 2016

SHEET

**DRAFT**

SLOPE ANALYSIS



Pleasant Creek Wastewater Treatment System  
TDEC SOP No  
Thompson Station, Tennessee

**The proposed Pleasant Creek Wastewater Treatment Facility is located at 2816 Thompson Station Road East. This report will outline wastewater treatment effluent flow of 120,000 gpd. Bioclere** was selected as the wastewater treatment option for this area due to the nature of wide range of variable treatment. (IE solids handling, meeting TDEC limits, ease of operation, and minimum sludge volumes). The Bioclere system can also be installed in phases as the development is constructed. In addition, the manufacturer and equipment are local to the Tennessee service area.

**Bioclere wastewater treatment:** (Effluent flow 120,000gpd)

The best balance of construction cost and phasing would be to **install (3) 40,000 gpd treatment trains**. Because we have gravity collection here, each train would consist of the following...

**Domestic Wastewater Flow (120,000gpd)**

- (1) 40,000 gallon baffled primary tank (this could be comprised of two 20,000 gallon FRP tanks in series to make it more economical).
- (1) 15,000 gallon flow equalization tank
- (1) FRP dual weir flow splitter manhole
- (2) 36/30 Bioclere units in parallel
- (1) 5,000 gal Final Dose Pump Tank

**So, in total for the 120,000 gpd build out we would have 120,000 gallons of primary settling, 45,000 gallons of EQ and (6) 36/30 Biocleres**

- The baffled primary tanks will be for the solids to settle out while the grey water flows to the equalization tank
- The equalization tank is designed to reduce hydraulic surges and meter the flow at a consistent rate to the Bioclere units throughout the day. We will recycle back to the primary settling tanks.
- The biocleres will polish the effluent via discharging into the final dose tank.
- The final dose tank will pump effluent through the ultra violet disinfection building with arkal disc cleaning filters
- Once the effluent leaves the UV building it is dispersed into the drip disposal areas of good suitable soils

The wastewater (effluent) at each home will discharge to a common gravity collection line. The wastewater is then collected from Pleasant Creek Subdivision ultimately discharging into a common baffled primary tank (septic tank). At this point, the grey water will flow to equalization tank. The effluent then flows through the equalization tank to a splitter valve manhole. The effluent is then pumped through the bioclere for final polishing. Once the effluent leaves the biocleres it discharges into the final dose tank that pump effluent through ultra violet disinfection. Once disinfection has taken place, the effluent is pumped to suitable land for underground drip dispersal for land application for the final treatment of the wastewater. The land application area includes 35 drip dispersal zones @ 4,290 LF per zone. In addition, this site will contain reserve area approximately 20.66 acres. Drip dispersal is designed for 120,000 gpd.

## 2 Wastewater Effluent Calculations

### Daily Flow

Number of 3-BR Buildable Residential Lots	400 lots
Daily Flow for 3-BR	300 gpd/lot
Daily Flow	120000 gpd

### Land Application Area

Land Application Area	0.2 gal/sf/day*
Total Area Required	600000 s.f.
or	13.77 acres

\* assumed soil absorption rate

### Number of Required Zones

Length per zone (@ 4' o.c.)	4290 L.F.
Number of Zones	35.0 Zones

### Land Reserve Area

Area per lot	50% S.F./lot
Total Area Required	300000 S.F.
or	6.89 acres

### Total Soils Area Required (Land Application + Reserve)

900000 s.f.	20.66 acres
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The land application area includes 35 drip dispersal zones @ 4,290 LF per zone. The site will also contain 50% reserve area approximately 6.89 acres. In addition, there will be a 10 day storage pond installed adjacent to drip dispersal fields. Drip dispersal is designed for 120,000 gpd.

### 3 Wastewater Treatment

# Bioclere 120,000 gpd design





# BIOCLERE™ Wastewater Treatment Systems

## Features & Benefits

- Treats flows from 200 to 100,000 gpd
- Cost effective treatment with efficient installation and operation
- Treats high strength wastewater
- Internal flow stabilization treats intermittent flows
- Fully automated pump system
- Self adjusting process control
- Small footprint / Compact design
- Gravity flow system
- Quiet operation
- Sealed and insulated for seasonal conditions
- Durable UV resistant fiberglass construction
- Minimal energy usage
- Remote monitoring control options

### The Bioclere Advantage

Bioclere is a modified trickling filter over a clarifier. It is designed to treat wastewater with varying organic and nutrient concentrations as well as intermittent flows. Bioclere's natural fixed film treatment process is stable, simple to maintain and inexpensive to operate.

Bioclere reduces biochemical oxygen demand (BOD5) and total suspended solids (TSS) to levels that meet or exceed NSF and EPA standards. As water trickles through the biofilter, organic material is consumed by a

population of microorganisms that form on the surface of the media. Sloughed solids from the biofilter filter are returned to the primary tank as secondary sludge and treated water is displaced to the next treatment component or the disposal area.

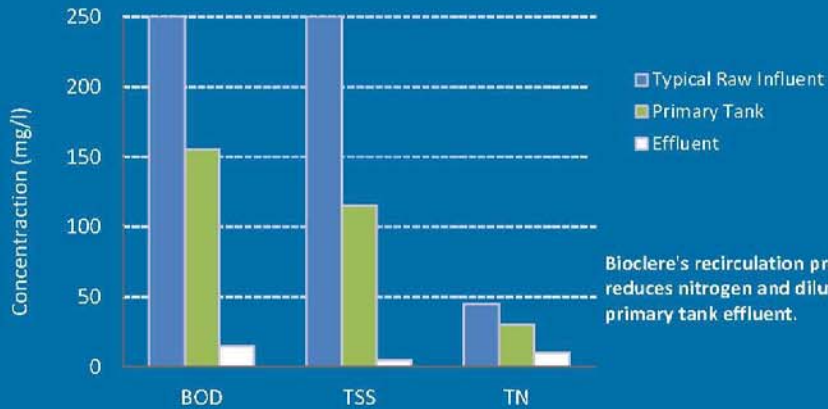
Bioclere is a modular technology. Units can be installed in parallel to accommodate large flows or in series to achieve high levels of treatment. The systems are sealed and insulated to minimize the impact of seasonal temperature variations on the treatment process.

### Nitrogen Reduction

Bioclere systems can be designed to consistently convert and reduce nitrogen. Total nitrogen is reduced substantially and cost effectively by recirculating nitrified water from the Bioclere back to the primary settling tank. Large Bioclere systems may incorporate a second stage nitrifying Bioclere and a tertiary anoxic reactor to achieve < 10 mg/l total nitrogen.

### Applications include

Residential, commercial, institutional, light industrial and municipal wastewater treatment.



Bioclere's recirculation process reduces nitrogen and dilutes primary tank effluent.

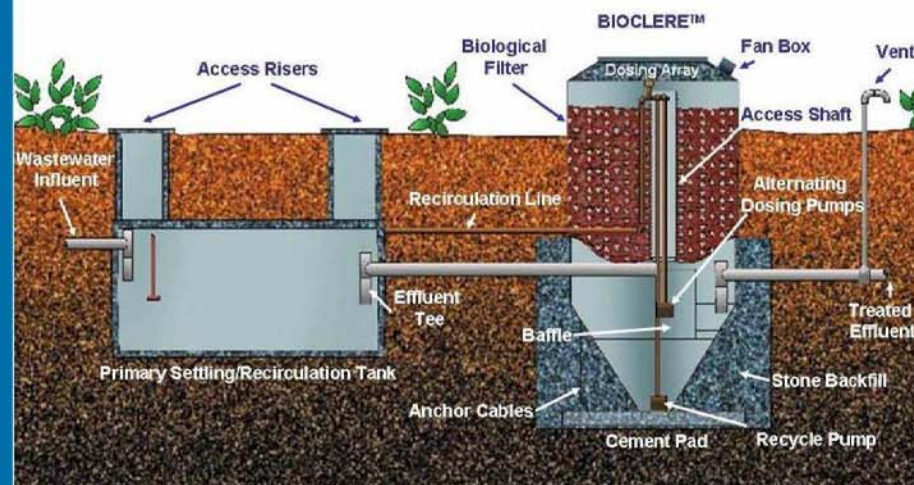


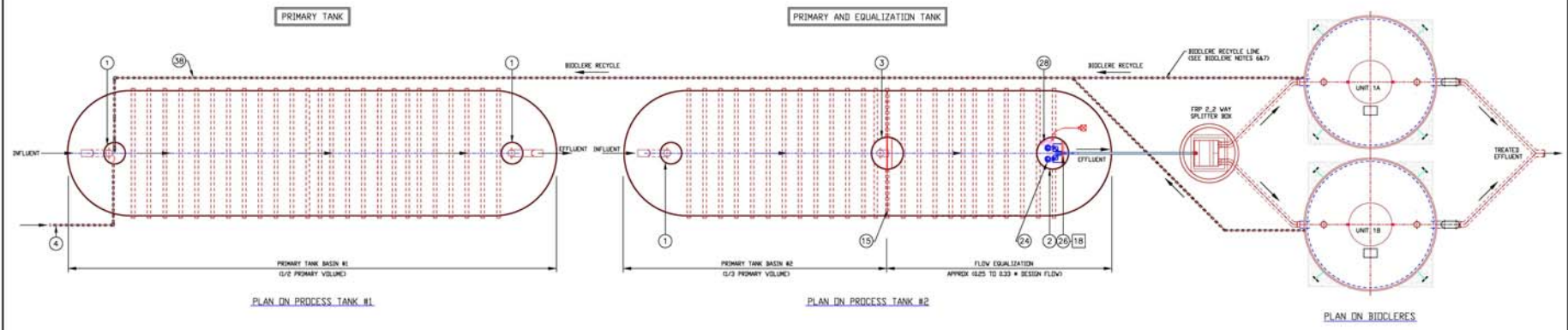
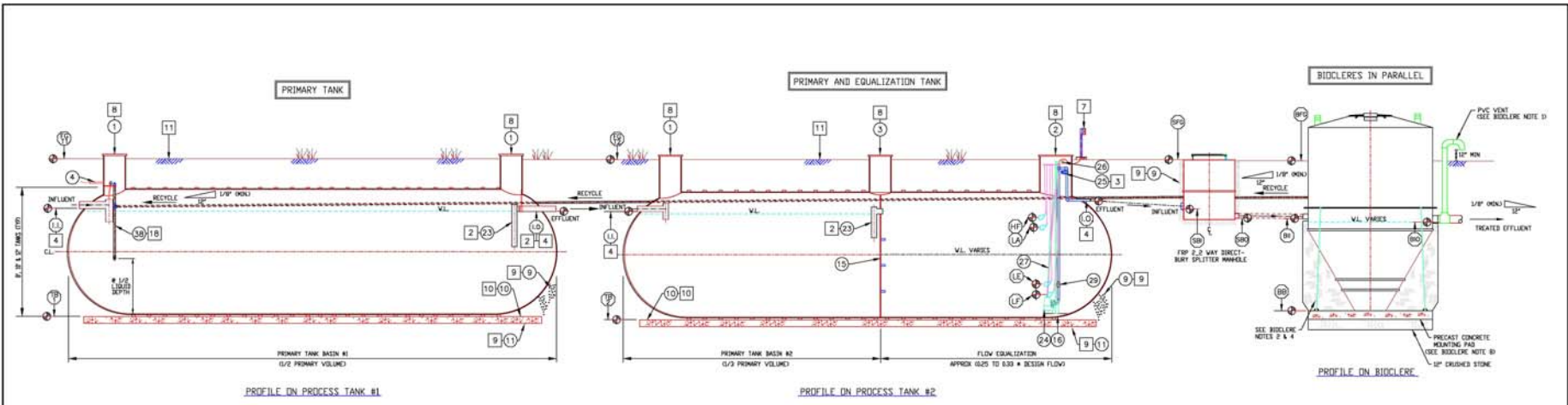
Bioclere 16/12-350 is ANSI/NSF Standard 40 certified by the National Sanitation Foundation (NSF). The above performance results (BOD & TSS) are based on a six month accumulative average from NSF's certification testing



U.S. Environmental Protection Agency's (EPA) technology verification program. Total nitrogen results can be viewed at [www.EPA.GOV/ETV](http://www.EPA.GOV/ETV). Above TN results are based on achievable standards.

## Standard Single Bioclere™ Installation:



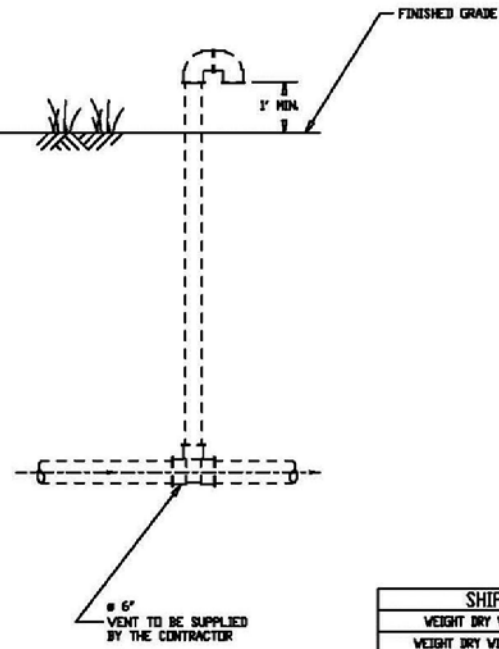
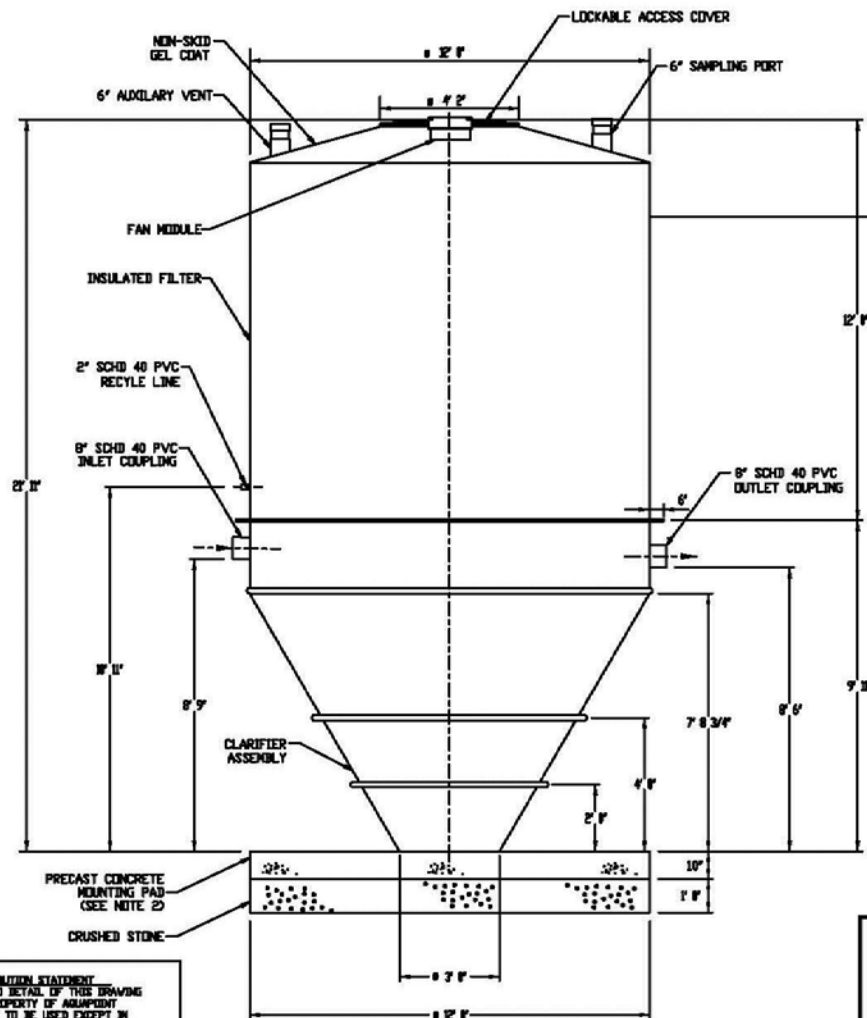


SEE SHEET 2 FOR NOTES

SYMBOL LEGEND:	
□	NOTES
○	COMPONENTS USED
⊙	COMPONENTS NOT USED
⊕	FLD/AT OR INVERTS
+	ELEVATIONS

GENERAL TWO STAGE PRIMARY BAFFLED WITH EQUALIZATION TANK,  
DIRECT BURY FLOW SPLITTER AND TWO BIDCLERES IN PARALLEL

<b>AquaPoint</b> 24 HANCOCK PLACE NEW BEDFORD, MA 02745 508-548-9000 FAX 508-548-9005 WWW.AQUAPPOINT.COM	<b>TYPE:</b> FIRST STAGE PRIMARY TO SECOND STAGE PRIMARY/ED FRP TANK TO DIRECT BURY FLOW SPLITTER TO TWO PARALLEL BIDCLERES
	<b>ISSUING NO.:</b> FRP-1136-3
	<b>REVISION:</b> NONE
	<b>DATE:</b> SEPT. 2009
<small>THE DESIGN AND DETAIL OF THIS DRAWING ARE THE PROPERTY OF AQUALINE AND ARE TO BE USED EXCEPT IN CONNECTION WITH THE AQUALINE DESIGN AND MANUFACTURE OF THE EQUIPMENT. THE BIDCLERE ARE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION.</small>	<b>TANK NO.:</b> 306 <b>SCALE:</b> NTS <b>SHEET #:</b> 1 OF 2



SHIPPING WEIGHTS	
WEIGHT DRY WITH MEDIA	= 7000 lbs (GRP)
WEIGHT DRY WITH NO MEDIA	= 3900 lbs (GRP)

- NOTES:
1. VENT MAY BE RUN UP THE SIDE OF BUILDING.
  2. SEE DRAWING 1244-9 FOR MOUNTING PAD CONSTRUCTION DETAILS.
  3. FINISHED GRADE MAY BE BETWEEN 18\"/>
- 36-30 Gal/Day

**DISCLAIMER STATEMENT**  
 THE DESIGN AND DETAIL OF THIS DRAWING ARE THE PROPERTY OF AQUAPPOINT AND ARE NOT TO BE USED EXCEPT IN CONNECTION WITH OUR WORK. DESIGN AND INVENTION RIGHTS ARE RESERVED. NO FURTHER DUPLICATION OR DISTRIBUTION OF THIS DOCUMENT ARE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION.

MODEL 36/30 BIOCLERE

## AQUAPOINT

39 TARKILN PLACE  
 NEW BEDFORD, MA 02745  
 (508) 985-9050 FAX (508) 985-9072

TITLE	BIOCLERE 36/30	
	GENERAL ARRANGEMENT	
DRAWING NO.	UK.1263-14	
REVISION	B	
DATE	May 9 2008	
DRAWN BY	P.Villey	
SCALE	1 : 40	SIZE: B
SHEET #	1 of 1	

## 4 Effluent Disposal

The effluent will be treated by a series of Biocleres, continuing with ultraviolet disinfection, and pumped to drip dispersal fields. In the Bioclere, the effluent receives the majority of its treatment. The effluent passes through the Bioclere before it is pumped through a disc filter and ultraviolet light / disinfection, effectively destroying bacteria and viruses before releasing it in a subsurface drip irrigation system. At this point, the soil continues to provide treatment on an already cleaned effluent.

### Daily Flow

Number of 3-BR Buildable Residential Lots	400 lots
Daily Flow for 3-BR	300 gpd/lot
Daily Flow	120000 gpd

### Land Application Area

Land Application Area	0.2 gal/sf/day*
Total Area Required	600000 s.f.
or	13.77 acres

\* assumed soil absorption rate

### Number of Required Zones

Length per zone (@ 4' o.c.)	4290 L.F.
Number of Zones	35.0 Zones

### Land Reserve Area

Area per lot	50% S.F./lot
Total Area Required	300000 S.F.
or	6.89 acres

### Total Soils Area Required (Land Application + Reserve)

900000 s.f.	20.66 acres
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The USDA soils map on following pages references the soils area for the above 20.66 acres required for the 120,000 gpd design.

Soil Map—Williamson County, Tennessee  
(Pleasant Creek Sd)



Wastewater treatment  
and land dispersal area

Wastewater Treatment and Land Application Area  
Land Application Area only for 120,000 gpd design

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
ArB	Amour silt loam, 2 to 5 percent slopes	2.8	8.1%
ArB2	Amour silt loam, 2 to 5 percent slopes, eroded	2.5	7.1%
DnB2	Donerail silt loam, 2 to 5 percent slopes, eroded	2.3	6.5%
DoC2	Donerail silt loam, concretionary, 5 to 12 percent slopes, eroded	6.2	17.6%
Hu	Huntington silt loam, phosphatic	4.9	14.0%
Lp	Lindell silt loam, 0 to 2 percent slopes, occasionally flooded	1.3	3.8%
SrC3	Stiversville clay loam, 5 to 12 percent slopes, severely eroded	6.0	17.0%
SIB2	Stiversville silt loam, 2 to 5 percent slopes	6.2	17.7%
StC2	Stiversville silt loam, 5 to 12 percent slopes, eroded	2.9	8.2%
<b>Totals for Area of Interest</b>		<b>35.1</b>	<b>100.0%</b>

## 5 Effluent Storage

Tennessee Department of Environment and Conservation (TDEC) require 24 hours of storage volume for drip dispersal. With drip dispersal as the effluent disposal, the project would not be required to have additional effluent storage unlike spray irrigation.

In addition, we will provide a 10 day holding storage pond for additional wastewater capacity for emergencies.

### 120,000 gal Effluent Storage

<b>Bioclere REQUIRED STORAGE</b>		
Domestic	120000	gpd
<b>Required Storage</b>	<b>120000</b>	<b>gal.</b>
<b>PROVIDED STORAGE</b>		
10 day storage pond	1,200,000	gal.
Primary Tanks	120,000	gal.
Equalization Tanks	60,000	gal.
Final Dose Tank Size	5,000	gal.
<b>Storage Provided</b>	<b>1,385,000</b>	<b>gal.</b>
<b>EXCESS STORAGE</b>	<b>1265000</b>	<b>gal.</b>



## 7 Summary of Estimated Cost

Each Bioclere will use about 750 KwHrs/Mo and the EQ will use about 250 KwHrs/Mo. Therefore, each train will use about 1,750 KwHrs/Mo. Assuming \$0.1 per KwHr that's about \$175 per train per month. At full build out the system would cost approximately **\$525** in electrical per month or about **\$6,300 annually**. Typically Bioclere uses about 1/3 the energy of conventional systems that use blowers similar to activated sludge.

Once the energy used for the drip system is added the energy cost will be approximately number of **\$8,000** per year for electrical cost should be very accurate.

## BIOCLERE™

### SLUDGE CALCULATION -- Pleasant Creek Development - TN

BOD5 = Influent from raw waste + Recycle

$$BOD_5 = \left[ \frac{(Q \times BOD_i \times c)}{1 \times 10^6} + \frac{(0.5 \times Q \times BOD_i \times c)}{1 \times 10^6} \right] \times sf$$

BOD5 = **265.212** lbs. BOD5/day

Q =	<b>120,000</b> gpd
BOD <sub>i</sub> =	<b>250</b> mg/l
c =	<b>8.34</b> lb/gal
BOD <sub>1</sub> =	<b>30</b> mg/l
TSS =	<b>250</b> mg/l
sf =	<b>1</b>

### Sludge Yield for Trickling Filters (TF's)

Y = 0.047

### References:

- 1) National Sanitation Foundation (NSF) Standard 40 test results for Bioclere Trickling Filter - May 15, 2000
- 2) Environmental Technology Verification (ETV) for Bioclere - US EPA - April 2003

### Design Assumptions:

- 1) 3% sludge concentration in Bioclere clarifier = **1.872** pcf, dry [ **62.4** pcf = specific weight of water ]
- 2) Yield = 0.047 lb VSS/lb BOD oxidized

### TOTAL Sludge Production Equation:

$$Mass_{sludge} = Q [ P_s (TSS) + (1 - P_b) (Y) (BOD_5) (A_b) ]$$

**Variables:**

Q = Design daily flow, liters/day	454,200
TSS = Concentration of TSS in influent, mg/l	250
Ps = Fraction of TSS removed in primary tank	0.5
BOD5 = Concentration of BOD5 in influent, mg/l	250
Pb = Fraction of BOD removed in primary tank	0.25
Ab = Fraction of BOD removed during aerobic treatment	0.95
Y = Yield coefficient	0.047
VOLs = Volume of sludge (gallons per month)	16,197
VOLd = Volume of dry sludge (lbs per month)	4,053

VOLs = Mass/sludge concentration = 16197 gal/month
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VOLd = Mass/sludge concentration = 4053 lbs/month
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**Note:**

Sludge generation calculations are far from an exact science for the following reasons...

Actual sludge generation is typically far less than the calculated amount due to compaction and digestion in the primary or sludge holding tank. It is difficult to calculate actual compaction and digestion rates in a passive sludge management tank but digestion can achieve between 20% and 40% reduction in sludge volume on its own. Additionally, compaction in the sludge holding tank can result in higher % solids concentrations than the 3% used to calculate sludge generation. 3% solids is the anticipated concentration in the secondary Bioclere clarifier before evacuation.

Actual sludge generation is also usually far less than calculated because of the fact that the average daily flow and pollutant load are usually well below the design parameters. The calculations assume design flow and load 24/7/365.

The actual yield coefficient for any given site is unknown until the plant is in operation. Actual sludge yield per lb of BOD could be less than or greater than the 0.047 lbs VSS/lb BOD oxidized. Generally, higher yields exist when BOD loading is higher and lower yields under lightly loaded conditions.

Because of the above variables, it is common for Bioclere plants to consistently generate far less than the calculated sludge yield. It is most likely that after accounting for actual flow rates and digestion in the primary that the actual sludge yield will be only about 1/3 of what is calculated above. Most similar facilities receiving approximately 65% of design flow require primary tank pumping every 2 years.

# MEMORANDUM

**TO:** Kenneth McLawhon, Town Administrator  
**FROM:** Caryn Miller  
**CC:**  
**DATE:** 8/16/2019  
**RE:** Soils Project (revised)

---

## **Methodology:**

I contacted all the soils testing people on the list provided by Jeff that were closer to us and inquired about their interest in our project.

I contacted all surveyors in the TN Association of Surveyors list to get quotes on the gridding and mapping of the 75+/- identified possible good soils. All results are to be delivered in CAD. Gridding and mapping are to be done at 50 ft intervals and staked accordingly.

## **Soil Testing Results:**

To date only four responded. A spreadsheet was created and attached for your convenience. Questions asked based on input from Matthew at Barge were references, need for equipment from the Town as well as an operator, when they could start and cost to do the job based on the 75+/- acres identified as possible good soils. Earthsearch Soil Consulting LLC is the only company that has their own equipment. All others need an excavator and one of our people to operate it (Brandon or Kenny).

Some included the price per pit as an additional separate cost, others included it in their totals. Usually there are 2 pits per acre. Proposed pricing was emailed to me and recorded on spreadsheet as received. Those that sent a formal proposal are attached. Emails attached too.

## **Surveying Results:**

The results from the Surveyors was much more encouraging with a total of 12 responding. I kept track of these in a separate spreadsheet which is attached for your convenience. Some sent actual proposals in writing which I forwarded to you earlier but have attached them to this Memo anyway. Others simply emailed the information and the spreadsheet was updated as received.

## **Conclusion:**

Soils testing will range between \$56,835 (David Myers Soil Consultants LLC Cleveland, TN) and \$87,147 (John Gibbi).

Surveying will cost from \$6,441 (OHM Advisors) and \$45,468 (Champlain)

The entire 75+/- may not be suitable for the drip fields and there may be some impressions that cannot be used based on TDEC requirements. That will not be known until the actual soil testing is performed.

I spoke with TDEC yesterday and they informed me that the soil tests are good forever unless the land is disturbed. So as long as the only thing we do at either the Hill or Alexander properties prior to the laying down of the drip fields is mow the land we are in good shape!

Please let me know if you have any questions.

**NOTE:** Survey results were also added to the main spreadsheet attached for ease of understanding the totals.

**ATTACHMENTS:**

3 Survey proposals in writing

Main Spreadsheet containing soil testing and surveying results

Surveyors spreadsheet

Emails from Soils Consultants

2 Soils Consultant Proposals

Soils Consultants References (other than John Gibi)

Alexander Property Costs Analysis

Company	Cost per acre	Additional costs for deemed favorable spots	75.78 acres	2 pits per acre	Totals	Gridding	Equipment	Deployment	Duration	References
David Myers Soil Consultants LLC Cleveland, TN	750	included	56,835	Included	56,835	Separate Surveyor cost	* Needs a mini excavator and operator from us	End of July	Depends on terrain	Yes
The Soils Group, Nashville TN	600	200	45,468	31,512	76,980	Separate Surveyor cost	Has own equipment	One month after verification	Depends on terrain	
John Gibi	850	150	64,413	23,634	88,047	Separate Surveyor cost	* Needs a mini excavator and operator from us	September	Depends on terrain	Yes
Lonnie Norrod	1,000	Included	75,780	Included	75,780	Separate Surveyor cost	* Needs a mini excavator from us	No answer to emails	No answer to emails	No answer to emails
Earthsearch Soil Consulting LLC	800	Included	60,624	Included	60,624	Separate Surveyor cost	Has own equipment	Within 3 weeks of acceptance	Depends on terrain	Yes

Surveying	Phone	Cost per acre	Acres of possible good Soils	Total	Start
Chapdalain and Associates	615-799-8104	600	75.78	45,468	Not Known

Arrowhead and Associates	615-599-7347	190	75.78	14,398	2 weeks after NOC	
H & H Surveying		321.98	75.78	24,400	Immediate	
ELI-LLC	615-349-7227	400	75.78	30,312	2 weeks after NTP	
Patrick Smith	615-256-0920	450	75.78	34,101	2 weeks after NTP	
Jason Moseley OHM Advisors	615-649-5264	85	75.78	6,441	2 weeks after NTP	
Civic Inc. Todd Fowlkes	615-425-2000 xt 243	265	75.78	20,082	2 weeks after NTP	
Collier Engineering Daniel Curry	615-331-1441	200 + 1,600 office work	75.78	16,756	2 weeks after NTP	
CECI James Cooley	615-622-7801	350	75.78	26,523	1 week after NTP	
Ahler and Associates	615-481-3106	550	75.78	41,679	1 week after NTP	* additional hourly charges if we need anything else
Michael Story	615-370-8500	255.3	75.78	19,347	1 week after NTP	* \$19,000 quote
Danny Wamble	615-251-9555	325	75.78	24,629	2-3 weeks to complete	* \$24,000 quote

Alexander Property Costs Analysis

Company	Cost per acre	Additional costs for deemed	75.78 acres	2 pits per acre	Totals	Gridding	Equipment	Deployment	Duration	References	Surveying	Phone	Cost per acre	Acres of possible good Soils	Total	Start
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	800	Included	60,624	Included	60,624	Separate Surveyor cost	Has own equipment	Within 3 weeks of acceptance	Depends on terrain	Yes	Jason Moseley OHM Advisors	615-649-5264	85	75.78	6,441	2 weeks after NTP
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											Danny Wamble	615-251-9555	325	75.78	24,629	2-3 weeks to complete

\* additional hourly charges if we need anything else

\* \$19,000 quote

\* \$24,000 quote





## ENERGY LAND & INFRASTRUCTURE

July 31, 2019

Ms. Caryn Miller  
Town of Thompson's Station  
1550 Thompson's Station Road W  
Thompson's Station, TN 37179

**RE: PROPOSAL FOR PROFESSIONAL SERVICES FOR SURVEY  
ALEXANDER FARMS PROPERTY DRIP AREA GRID STAKING**

Ms. Miller:

Energy Land & Infrastructure, LLC (ELI-LLC) is pleased to submit this proposal to grid stake the Alexander Farms property with the purpose of preparing a soils map for the proposed drip field. The staked area will include approximately 76 acres as shown on the attached "Alexander Property Drip Area from John Gibi Soils Map" as "Excellent Drip Area (75.74 acres)". The stakes will be based on an approximate 50-foot grid and established using the boundary survey "Alexander Farms for Encompass Land Group" prepared by Ragan Smith and dated February 15, 2018. The soils survey for the proposed drip field will be conducted by a third-party Soil Scientist.

If required, ELI-LLC can also provide a wide array of services on a broad range of project types and sizes as required for each situation. Among these services are Studies and Reports, Bridge and Structural Design, Land Planning, Conceptual Design, Landscape Architecture Design and Detailed Engineering Design, Right-of-Way and Easement Documentation and other related services. We desire that you have a complete understanding of the scope of services prior to entering into an agreement. Please let us know if you have any questions or desire any additions, deletions or amendments to this proposal.

We appreciate the opportunity to move forward as your consultant on this project. We feel that ELI-LLC can provide efficient and cost-conscious services that will contribute to the project's overall success.

Sincerely,

**ENERGY LAND & INFRASTRUCTURE, LLC**

Suzanne B. Herron, P.E., CPESC  
Project Manager/Environmental Practice Lead

Attachments

**PROPOSAL AGREEMENT**

This Agreement (Agreement) between Energy Land & Infrastructure, LLC (ELI-LLC) and the Town of Thompson’s Station (Town) delineates the terms and conditions under which ELI-LLC will provide professional services to the Town.

**SCOPE OF SERVICES**

ELI will grid stake the Alexander Farms property with the purpose of preparing a soils map for the proposed drip field. The staked area will include approximately 76 acres as shown on the attached “Alexander Property Drip Area from John Gibi Soils Map” as “Excellent Drip Area (75.74 acres)”. The stakes will be placed on an approximate 50-foot grid and established using the boundary survey “Alexander Farms for Encompass Land Group” prepared by Ragan Smith and dated February 15, 2018. The soils survey for the proposed drip field will be conducted by a third-party Soil Scientist. ELI has assumed we will be provided with the cad file for the Boundary Survey and also the Drip Field map, if it exists. This cost estimate assumes the property is accessible and has been bush-hogged recently or the open areas are below “knee height” to ensure efficiency. This estimate also assumes ELI will be released to grid stake the entire 76 acres at one time and the Town of Thompson’s Station ensures permission is granted for access to stake the 8.44 acres of “good soil” that is located on the property owned by Alexander Prop, LLC.

We anticipate 5 weeks for completion of work unless otherwise agreed upon with client.

**FEE FOR SERVICES ..... \$ 400.00 Per Acre\***

**Terms and Conditions**

The attached Terms and Conditions are listed below and are for your review and approval.

**Method of Compensation**

The attached Schedule of Services and Expenses presents both the hourly billing rates of the various professional and technical classification of staff for purposes of compensation. Additional services can be performed on an hourly basis at the rates included on the fee schedule.

Upon execution of this Agreement, ELI-LLC can perform services once receiving a Notice to Proceed.

CLIENT EXECUTION

By: \_\_\_\_\_ Date: \_\_\_\_\_

Printed/Typed Name: \_\_\_\_\_ Title \_\_\_\_\_

\_\_\_\_\_  
Approved as to Form

## **CONTRACT TERMS AND CONDITIONS**

**PARTIES, SERVICES, ASSIGNMENT AND ENTIRE AGREEMENT** – ELI-LLC as an independent consultant, agrees to provide consulting services to the client for the Client's sole benefit and exclusive use. No third party beneficiaries are intended by this agreement. The ordering of services from ELI-LLC constitutes acceptance of the terms and conditions set out in this Agreement. This Agreement may not be assigned by either party without prior written permission of the other party. This Agreement constitutes the entire understanding of ELI-LLC and the Client and there are no other warranties or representation made other than as set forth herein and specifically within the Agreement.

**STANDARD OF CARE** – ELI-LLC agrees to perform consulting services in accordance with the degree of care and skill ordinarily exercised by other reputable members of our profession under similar circumstances. No warranty expressed or implied is made or intended by this Agreement relating to the services provided by ELI-LLC.

**OPINIONS OF COST** – When requested by the Client, ELI-LLC will use its best efforts, experience and judgment to offer an opinion of estimated construction costs. Such opinions are based on available historical data and are intended to provide an estimate of cost. No warranty of the actual construction cost is expressed or implied.

**INSURANCE** – ELI-LLC maintains insurance coverage including Workers' Compensation Insurance, Employer's Liability Insurance, Commercial General Liability Insurance, Automobile Liability Insurance and Professional Errors and Omission Insurance. Certificates of Insurance will be furnished upon request. Commercial General Liability Insurance and Professional Errors and Omissions Insurance will each carry limitations of not less than \$1,000,000.00.

**LIMITATION OF LIABILITY** – In recognition of the relative risks and benefits of the project to both the Client and ELI-LLC, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the total aggregate liability of ELI-LLC for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, to \$1,000,000 or ELI-LLC's applicable insurance, whichever is greater. Such claims and causes include, but are not limited to, claims for negligence, professional errors or omissions, negligent misrepresentation, strict liability, breach of contract, breach of warranty.

**WAIVER OF CONSEQUENTIAL DAMAGE** – ELI-LLC and Client waive their right to recover consequential damages against each other, and ELI-LLC and Client do hereby release each other from consequential damages for claims, disputes or other matters in question arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages including damages resulting from the termination of this Agreement.

**PAYMENT TERMS** – Client will be invoiced once each month for services performed during the preceding period. If payment is not received within thirty (30) days of the invoice date, the Client agrees to pay a service charge on any undisputed past due

amount of one half percent (½%) per month compounded monthly. The Client additionally agrees to pay all attorney fees, collection fees, court and lien costs, and other such expenditures incurred to satisfy any unpaid balance.

**DISPUTE RESOLUTION/MEDIATION** – In an effort to resolve any disputes that arise during or subsequent to the performance of services outlined in this Agreement, the Client and ELI-LLC agree to submit all such disputes to mediation prior to the commencement of litigation.

**TERMINATION** – The Agreement may be terminated for cause upon seven (7) days of written notice. In the event of termination, ELI-LLC will be entitled to compensation for all services provided and expenses incurred up to and including the termination date.

**SCHEDULE OF SERVICES AND EXPENSES  
PROFESSIONAL SERVICES HOURLY RATE SCHEDULE**

<b>Classification</b>	<b>Hourly Rate</b>
Principal Engineer	\$195.00
Project Manager	\$170.00
Senior Engineer	\$145.00
Project Engineer	\$125.00
Engineering Intern	\$110.00
Senior Designer	\$110.00
Registered Surveyor	\$85.00
CADD Designer	\$75.00
Inspector	\$75.00
3-person Survey Crew	\$145.00
2-person Survey Crew	\$120.00
Landscape Architect	\$110.00
Administration	\$45.00

GENERAL NOTES

- BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983...
2. TYPE OF GPS EQUIPMENT USED: TRIMBLE MODEL R10, DUAL FREQUENCY RECEIVER...
3. THIS PROPERTY IS CURRENTLY ZONED D1 - (LOW DENSITY RESIDENTIAL) PER THOMPSON'S STATION LAND DEVELOPMENT ORDINANCE...

TRACT 1 PROPERTY DESCRIPTION - AS SURVEYED

A TRACT OF LAND LYING ON THE SOUTH SIDE OF INTERSTATE 840 AND AT THE EAST END OF CHALKER PARKLANE IN THE CIVIL DISTRICT OF THOMPSON'S STATION...

TRACT 2 PROPERTY DESCRIPTION - AS SURVEYED

A TRACT OF LAND LYING ON THE SOUTH SIDE OF INTERSTATE 840 AND ON THE WEST SIDE OF TOM ANDERSON ROAD IN THE TOWN OF THOMPSON'S STATION...

TRACT 2 PROPERTY DESCRIPTION - AS SURVEYED

- BEGINNING AT A CONCRETE RIGHT OF WAY MONUMENT (OLD) AT THE INTERSECTION OF THE SOUTH RIGHT OF WAY OF INTERSTATE 840 AND THE WEST RIGHT OF WAY LINE OF TOM ANDERSON ROAD...
1. THENCE, ALONG THE WEST RIGHT OF WAY LINE OF TOM ANDERSON ROAD, S 07°45'49" W, 100.00 FEET TO A CONCRETE RIGHT OF WAY MONUMENT (OLD);
2. THENCE, CONTINUING ALONG THE WEST RIGHT OF WAY MONUMENT (OLD), 105.72 FEET TO A CONCRETE RIGHT OF WAY MONUMENT (OLD);

UTILITY NOTE

THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS...

LEGEND

- CONCRETE MONUMENT (OLD)
CONCRETE MONUMENT (NEW) 4" DIAMETER ALUMINUM DISK W/ 5/8" IRON ROD MARKED "RAGAN-SMITH ASSOCIATES"
IRON ROD (OLD)
IRON ROD (NEW)
IRON PIPE (OLD)
MAG NAIL (NEW)
EDGE OF WATER
FEMA ZONE "AE"
FEMA FLOODWAY AREA ZONE "AE"
ZONE "X" (OTHER FLOOD AREAS)

PROPERTY MAP REFERENCE

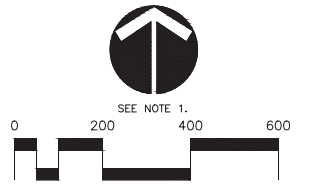
BEING A PORTION OF PARCEL 006.09 AS SHOWN ON WILLIAMSON COUNTY PROPERTY MAP 132.

DEED REFERENCE

BEING A PORTION OF THE SAME PROPERTY CONVEYED TO BARRY ALEXANDER FARMS, LLC, A TENNESSEE LIMITED LIABILITY COMPANY BY BARRY D. ALEXANDER OF RECORD IN BOOK 6638, PAGE 741, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.

PLAT REFERENCE

BEING ALL OF LOTS 14, 15, AND 16 AS SHOWN ON THE FINAL PLAT ENTITLED "MINTON PROPERTY" OF RECORD IN PLAT BOOK 18, PAGE 111, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.



LINE TABLE

Table with columns: LINE, BEARING, DISTANCE. Lists measurements for lines L1 through L5.

LINE TABLE

Table with columns: LINE, BEARING, DISTANCE. Lists measurements for lines L6 through L10.

TRACT 1 = 2,622,450 SQUARE FEET OR 60.20 ACRES±
TRACT 2 = 4,688,934 SQUARE FEET OR 107.64 ACRES±
TOTAL AREA = 7,311,384 SQUARE FEET OR 167.84 ACRES±

SURVEYOR'S STATEMENT

TO: ENCOMPASS LAND GROUP, STEWART TITLE GUARANTY COMPANY. THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NPS/LAND TITLE SURVEYS...

RAGAN-SMITH ASSOCIATES, INC.

RAGAN-SMITH LAND PLANNERS • CIVIL ENGINEERS LANDSCAPE ARCHITECTS • SURVEYORS CHATTANOOGA, TN

LOCATION MAP showing SITE, STATE ROUTE 840, TOM ANDERSON RD, CRITZ LANE, LEWISBURG HWY, INTERSTATE 840.

ALEXANDER FARMS FOR ENCOMPASS LAND GROUP. TOWN OF THOMPSON'S STATION, ELEVENTH CIVIL DISTRICT, WILLIAMSON COUNTY, TENNESSEE.

Job order form: JOB NO. 05043, WK ORDER 1107, APPROVED BY: JTD, DRAWN: SLJ/KCK, SCALE: 1"=200', DATE: FEBRUARY 15, 2018.

ALTA/NPS LAND TITLE SURVEY 1 of 1. REVISIONS: DATE: FEBRUARY 15, 2018.

# Alexander Property Drip Area from John Gibbi Soils Map

Total Soils: (+/- 1 ac)  
 Good - 75.74 ac  
 Bad - 78.24 ac  
 Marginal - 10.88 ac

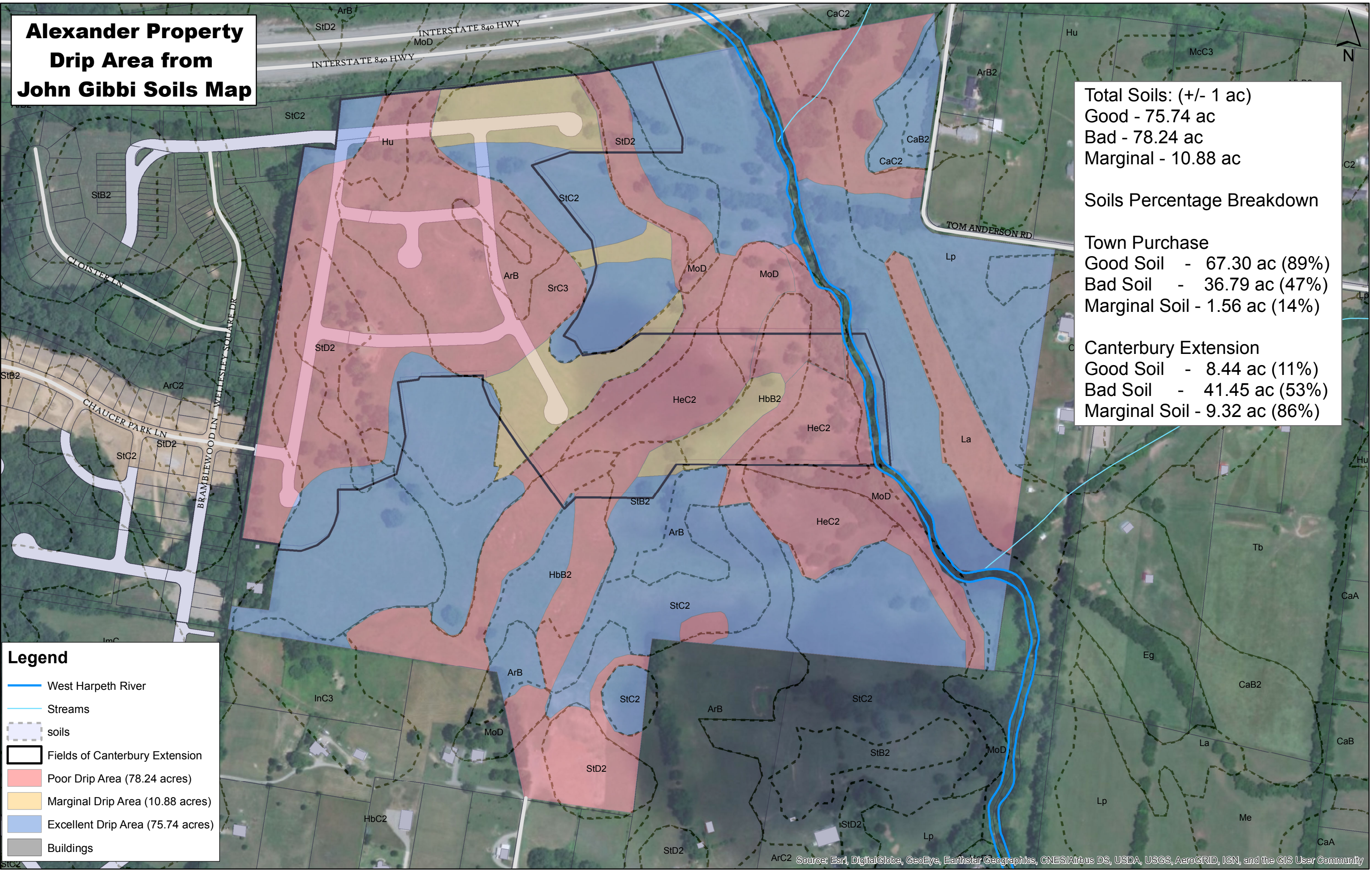
Soils Percentage Breakdown

Town Purchase  
 Good Soil - 67.30 ac (89%)  
 Bad Soil - 36.79 ac (47%)  
 Marginal Soil - 1.56 ac (14%)

Canterbury Extension  
 Good Soil - 8.44 ac (11%)  
 Bad Soil - 41.45 ac (53%)  
 Marginal Soil - 9.32 ac (86%)

**Legend**

- West Harpeth River
- Streams
- soils
- Fields of Canterbury Extension
- Poor Drip Area (78.24 acres)
- Marginal Drip Area (10.88 acres)
- Excellent Drip Area (75.74 acres)
- Buildings



July 29, 2019

Transmitted by: E-mail:  
cmiller@thompsons-station.com

Town of Thompson's Station  
Attn: Caryn Miller  
1550 Thompson's Station Rd West  
Thompson's Station, TN 37179

**RE: Alexander Property Grid Staking and Map**

Dear Caryn Miller:

Civic Engineering and Information Technologies, Inc. (Civic) sincerely appreciates the opportunity to submit the subject proposal for your consideration. This proposal is in response to your Survey Request made via e-mail dated July 23, 2019.

Based on the information provided with the referenced email, our fee for surveying services are as follows:

Map 132, Parcels 6.09 & 6.15

1. Provide grid staking at 50 ft. across +/- 75.74 acres shown as "Good" or "Excellent" Drip Area on the attached drawing entitled "Alexander Property Drip Area from John Gibbi Soils Map".
2. Apply the relative 50 ft. grid to the provided soils map.

Price Per Acre: \$265 (+/- \$20,000 Lump Sum)

Start Date: No later than two weeks from written notice to proceed.

Please let us know if you have any questions or need any additional information. We sincerely appreciate your consideration of Civic to provide our services for this very important project.

Sincerely,  
**Civic Engineering &  
Information Technologies, Inc.**



Todd Fowlkes, RLS  
Project Manager



# Alexander Property Drip Area from John Gibbi Soils Map

Total Soils: (+/- 1 ac)  
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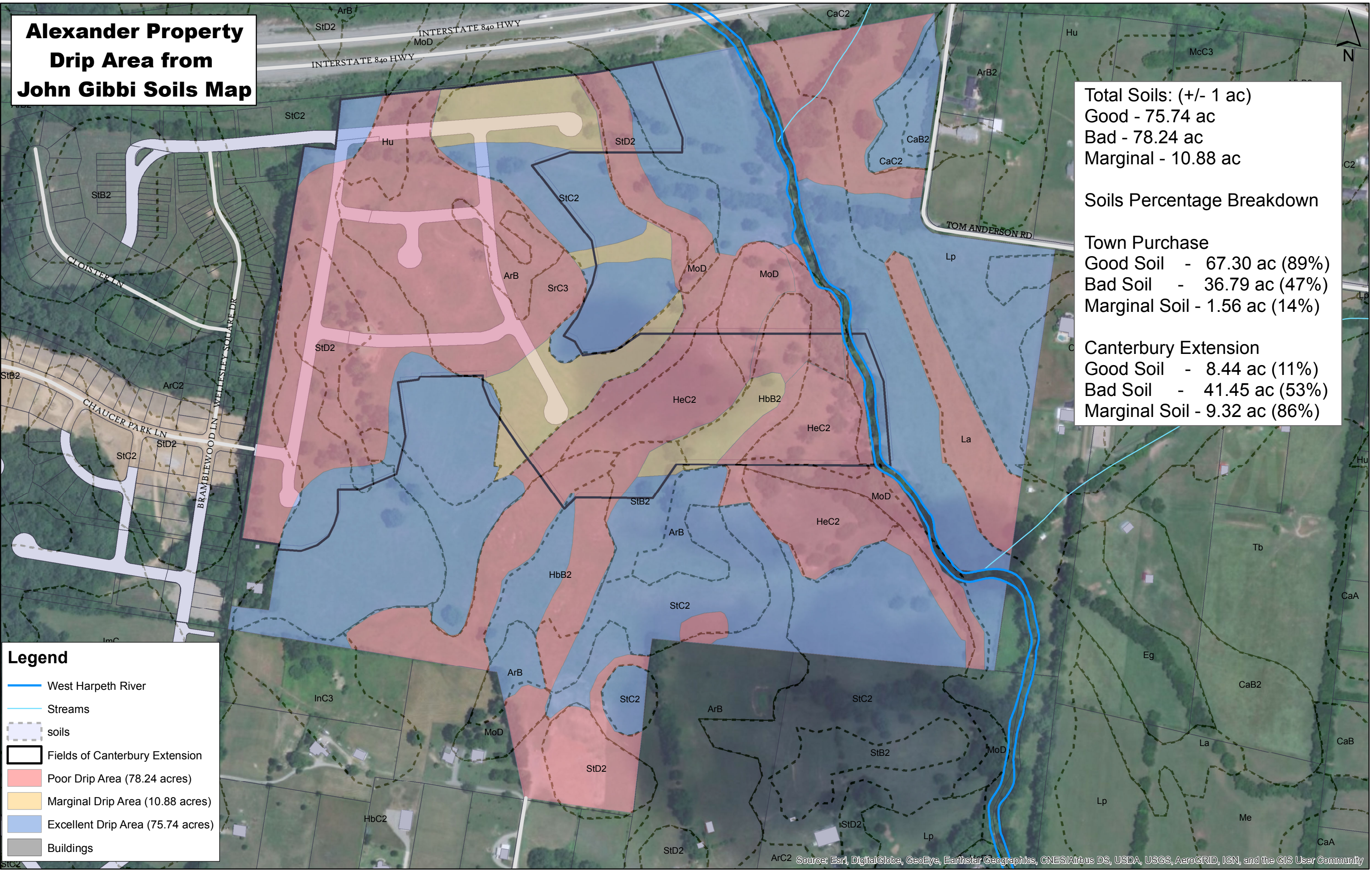
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### Legend

- West Harpeth River
- Streams
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- Excellent Drip Area (75.74 acres)
- Buildings



# EARTHSEARCH SOIL CONSULTING LLC

## Proposal for Services: Town of Thompson's Station

### OVERVIEW

Earthsearch Soil Consulting LLC has been independently owned and operated in the Williamson County and surrounding counties for almost 19 years. As per request of Caryn Miller, Assistant Town Administrator, I am providing a bid for services. This bid specifically covers consulting, mapping, and related results submissions for the Barry Alexander property. The property is approximately 107 acres located in the town of Thompson's Station.

### The Proposal

A preliminary evaluation, if needed, will be charged at \$50 per acre for a total of \$5,350. Soil Mapping services provided will be charged at \$800 per acre. Assuming the entire 107 acres is evaluated and mapped, the total charge for this project will be \$85,600.

David Meyers

- ) Backhoe: I would require the client to provide a backhoe and operator.
- 2) Deployment: I could start towards the end of July.
- 3) Timeframe: It will depend on the acreage needing evaluated. For example, 10 acres will take 2 to 3 days depending on vegetation and other factors.
- 4) References:
  - a. Tennessee Valley Authority new office building and substation in Georgetown, TN (approx. 6000 gallons per day flow)
  - b. Ooltewah, TN subdivision (estimated 60,000 gallons per day)
  - c. Love's Truckstops in Greene and Mcnairy Counties (2000 gdp flow each)



**Michael Haarbauer** Wed, Jun 26, 2:56 PM (5 days ago)

to me, Kenneth

Hi Caryn - I do provide my own equipment. I can deploy within 3 weeks of acceptance. The preliminary will take approximately one week. The mapping will take several weeks and cannot start until the survey is completed. Paul Varney Const., Carbine and Associates, Kole Custom Homes are 3 recent clients with larger acreage jobs. I can provide contact information if required.

Thanks  
Mike

John Gibi

Tim Turner, Engineer Franklyn, TN

John Franks, several developments

Beau Childress, Franklyn TN



**The Soils Group** Tue, Jul 2, 8:54 AM (1 day ago)

to me

We can provide our own excavator

We could begin within one month of verification

Unknown how long due , unknown quantity

References yes, city of Murfreesboro, Hohenwald, Camden. Multiple

Thanks

randy

Caryn,

The charge to do the soil evaluation will be 750 per acre mapped (4 acre minimum). I can get started at the beginning of July.

Thanks,

David

*David Myers Soil Consultants, LLC*

P.O. Box 5088

Cleveland, TN 37320

Office: (423) 559-8122

Fax: (423) 472-8366

Cell: (423) 716-2577

Email: [davidmsoil@yahoo.com](mailto:davidmsoil@yahoo.com)

[www.davidmyerssoilconsultants.com](http://www.davidmyerssoilconsultants.com)

---



**Lonnie Norrod** <[lnorrod6@gmail.com](mailto:lnorrod6@gmail.com)> Mon, Jun 3, 9:30 AM

to me

Caryn,

TDEC is currently under a rule making process that will require an extra-high intensity soil map for all SOP approvals after 6/1/19. With that in mind, I would charge \$1000/acre of soil mapped which includes the Extra-High Intensity soil map, the pedon descriptions and all coordination with TDEC, the project engineer, surveyor ...etc. You would have to provide me with a mini excavator for the pedon descriptions for however many days needed. We can usually get 15 +/- pits per day and TDEC requires about 2 pits per suitable acre of soils. Hope this helps. Let me know if you need something more formal.

Thanks!

Tennessee Lic. #61

Crossville, TN. 38571  
615-969-4443



**Caryn Miller** <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)> Wed, Jun 26, 8:57 AM

to Lonnie

Lonnie,

If you are still interested, we need the following questions answered:

Will you have your own Excavator?

How soon can you deploy

How long do you expect the job to take?

Can you please provide us with three references on similar work

Can you please send the information to our Town Administrator at [kmclawhon@thompsons-station.com](mailto:kmclawhon@thompsons-station.com)

Thanks!



**Caryn Miller** <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)> Wed, Jun 26, 8:59 AM

to **Kenneth**

**Caryn Miller MPA**

Assistant Town Administrator

Town of Thompson's Station

615-229-7493

**From:** Caryn Miller <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)>

**Sent:** Wednesday, June 26, 2019 8:57 AM

**To:** 'Lonnie Norrod' <[lnorrod6@gmail.com](mailto:lnorrod6@gmail.com)>

**Subject:** RE: soils testing needed

Lonnie,

If you are still interested, we need the following questions answered:

Will you have your own Excavator?

How soon can you deploy

How long do you expect the job to take?

Can you please provide us with three references on similar work

Can you please send the information to our Town Administrator at [kmclawhon@thompsons-station.com](mailto:kmclawhon@thompsons-station.com)

Thanks!

**Caryn Miller MPA**

DID NOT GET AN ANSWER

---

**From:** The Soils Group <[thesoilsgroup@comcast.net](mailto:thesoilsgroup@comcast.net)>  
**Sent:** Tuesday, May 21, 2019 9:44 AM  
**To:** 'Caryn Miller' <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)>  
**Subject:** RE: soils testing

Thanks for inquiring. We will work with your timing in most cases within reason. Weather and property conditions play a large role in time consumption. On drip fields through TDEC, assuming a 100' grid interval we usually invoice @ \$600/ac. for the entire acreage. For the areas that is deemed favorable, we invoice an additional \$200 per ac. since this is where the pit descriptions have to be written. If you need more information, please advise.

Randy

615 848 2780

\*\* While staked and surveyed at 50 ft intervals, they charge by 100 ft interval.





**Karla Lee** <[karlalee@wambleassociates.com](mailto:karlalee@wambleassociates.com)> Fri, Aug 2, 10:41 AM (10 days ago)

to **Jack, Mary**, me, Danny

Ms. Miller,

Mr. Wamble asked me to email you regarding your request for survey work on a 75-acre parcel.

Our fee to perform this work would be \$325 per acre. We could start the project in 2-3 weeks, and it would take another 2-3 weeks to finish. If this is acceptable, we'll provide a Professional Services Agreement for your review and execution. If you wish to move forward, please provide full contact information for the entity that we will be invoicing, along with the person's name that will be signing the contract. We'll be happy to immediately provide that agreement. The work cannot be scheduled until we receive the signed contract.

We appreciate you contacting us about this project and we look forward to working with you.

Thanks!

Karla

*Karla Lee*

**Wamble & Associates, PLLC**

40 Middleton Street

Nashville, TN 37210

615.251.9555

Email: [KarlaLee@wambleassociates.com](mailto:KarlaLee@wambleassociates.com)

[www.WambleAssociates.com](http://www.WambleAssociates.com)

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**Michael Story** Fri, Aug 2, 8:26 AM (10 days ago)

to me

Good Afternoon Caryn,

Thank you again for asking us to provide a quote for Land Surveying Services.

It is my understanding that you would like to have approximately 76 acres (areas shown in blue and good as per your map "Alexander Property Drip Area from John Gibbi Soils Map")

staked in the field on a 50' grid with grid numbers on the stakes. We will provide you a paper and or digital/pdf map with the grid point and elevation shown at each point.

Also my understanding is the open areas are being mowed on a regular basis and that we will be able to do all of this work at once and not be limited to doing sections at a time.

Our fee for this work would be \$19,400 or \$255.3 per acre. We could start the project within a week of signed contract. We hope this is found to be acceptable.

Best Regards,



**Cooley, James** Mon, Jul 29, 4:04 PM

to me

Caryn,

Thank you for the opportunity to propose on this survey. Based on the Drip Area map you provided we estimate the cost per acre to be \$350 per acre. This is based on completing the survey for the approximately 75 acres of excellent drip area shown in blue on the provided map. This estimate includes staking the 50 foot grid that is required on the ground and creating an Extra High-Intensity Soil Map for the soil scientist to use in their mapping efforts.

As far as timing we could begin working on this project next week if given the notice to proceed. Please let me know if you have any other questions and if selected I will send you a formal proposal.

Regards,



**Patrick Smith** Thu, Jul 25, 6:15 PM

to me

Caryn,

I am assuming that the drip system will require an Extra-High Intensity Soil Map. This type of map will require grid staking every 50 feet.

We can get started in 3 weeks from when you give us the go ahead. The price per acre for the soil map would be \$450 per acre.

Let me know if I have misunderstood.

Thank you,

**Patrick Smith, PE, PLS | President**

Office: [731-644-1014](tel:731-644-1014)

[www.lismith.com](http://www.lismith.com) | [psmith@lismith.com](mailto:psmith@lismith.com)

[302 N Caldwell St, Paris, TN 38242](#)

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**Dan Curry** Fri, Jul 26, 7:46 AM

to me

Caryn,

Thank you for the map. I am assuming a 50 foot grid? Also, would we provided the survey in electronic format? That is a pretty detailed survey and I would assume we need to tie to a property corner to the soil grid by bearing and distance and that you all will wanted a stamped copy of that? To be able to do that I will have to re-create the survey in CAD if it is not provided. Also, I am assuming the areas in blue on the initial attachment is the areas is which we will be grid staking? Again if these areas are already delineated in CAD that would be a huge help. If not it will create additional office work. Will you be needing some sort of hard copy deliverable showing the areas tied to a property corner? If not then disregard my questions above.

As far a just field work goes I my thought is we can do a 50' grid of the approximate 75 acres at roughly 5 acres a day. This would take us approximately 15 days to get everything staked with no weather interruptions. I don't know that we can be there 3 weeks straight but will make the effort to be. If my math is correct this puts us at approximately \$200 per acre. In addition, we can have a crew onsite first thing Monday morning to begin the work.

Being that there are a few variables(questions above) regarding how much office time I will have to spend that I do not know yet and that \$200/acre is field work only. In a worst case scenario I would anticipate the office work taking a day to day and a half - \$800-\$1200.



**Caryn Miller** <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)> Mon, Jul 29, 12:37 PM

to Dan

Yes, you would have to tie it all in to a point. We will eed it in CAD format. No we do not have anything in CAD format right now. Sorry. Also, TDEC said that 25 feet from sink holes(depressions) needs to be subtracted from available soil areas. Do not know if it affects the surveying portion or not.



**Dan Curry** Mon, Jul 29, 12:43 PM

to me

Understood. Well as on right now we could start this week. So yes the \$200/acre is field time only. I am thinking with everything you told me we would be looking at an additional \$1600 or so for office time.

Do you need anything more from me at this point?

We appreciate the opportunity and hope to be able to work with you all.

---

**Jason Moseley** Fri, Jul 26, 2:05 PM

to me

Caryn,

The price per acre would be \$6,400 (\$85 per acre). We could begin within 2 weeks of NTP. Do you need a formal proposal?

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This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.



**Caryn Miller** <[cmiller@thompsons-station.com](mailto:cmiller@thompsons-station.com)> Mon, Jul 29, 12:47 PM

to Jason

Not at this time. Thanks!!!! will keep in touch as soon as Town moves forward. Just collecting info at this time. Also, TDEC said that 25 feet from sink holes needs to be subtracted from available soil areas. This may not affect your portion of the job but more the actual testing of the soils.

---

**Mike Holmes, Jr. - H&H Land Surveying, Inc.** Fri, Jul 19, 2:07 PM

to **Kenneth**, me

Caryn, we can stake the 75 acres of good soil and prepare a soil grid map for \$24,400.00

???????????????????????????????????? we can get started right away please let us know if there is anything else you may need.

Thank you and have a good weekend.

---



**Mark Cantrell** <mark@arrowheadsurvey.com> Tue, Jul 9, 9:42 AM

to me

Caryn,

I looked at the maps and on that particular piece of property, I propose grid staking at 50' intervals at a cost of \$190 per acre. We would be able to start within 2 weeks of a Notice to Proceed.

Thank you,

Mark Cantrell

615-599-7347

---

**Chapdelaine and Associates Land Surveying**  
<chapsurveyors@msn.com>

Mon, Jul 8, 8:45  
AM

to me

Good Morning,

Joe is on vacation this week, but he wanted me to reach out and let you know we could do this project for \$600 per acre. If you have any questions feel free to give me a call.

Thank you,

Ashley Hughes  
Administrative Assistant  
Chapdelaine & Assoc. Land Surveying  
7376 Walker Rd. Fairview, TN 37062  
(615)799-8104

July 26, 2019

Caryn Miller  
Town of Thompson's Station  
P.O. Box 100  
Thompson's Station, TN 37179

RE: Land Surveying Services  
Drip Irrigation Project  
Map 132, Parcel 6.09

Dear Ms. Miller:

I wish to thank you for taking time to review our proposal for your upcoming project. Our understanding of the project, scope of basic services, schedule, deliverables, fees, items to be provided by others, terms and conditions are as follows:

**UNDERSTANDING OF THE PROJECT**

A grid map must be prepared for the Town's soil scientist to accurately located and map the existing soils for use in the design of a drip irrigation field for the Town's Wastewater disposal on a 75 acre tract near Critz Lane.

**SCOPE OF SERVICES - Basic**

Based upon authorization to proceed, Ahler & Associates, LLC will provide the following services:

1. Attend a meeting with the Town, and Soil Scientist to finalize the scope and schedule of the project.
2. Field locate the existing boundary of the property and any existing improvements. Survey will be based upon TN State Plane Coordinates
3. Calculate a 50' grid pattern and install 2x1x36 wooden stakes labeled with grid designation.
4. Prepare a Location Plat showing the property boundary, the grid pattern, any existing improvements on the property, and the grid's actual location with reference to the property lines.

**ITEMS TO BE PROVIDED BY Town of Thompson's Station:**

As part of this agreement, the Owner agrees to provide the following items:

1. Access to the site during working and other convenient hours
2. Any maps prepared for the project

# *Ahler & Associates, LLC*

## CONSULTING ENGINEERS AND LAND SURVEYORS

3. All fees required by the approval agencies
4. Mowing the property and protection of the installed stakes

### **SCHEDULE**

Based upon authorization to proceed with this work, Ahler & Associates, LLC anticipates the work completion schedule as follows:

- |                     |             |
|---------------------|-------------|
| 1. Kickoff Meeting  | One Week    |
| 2. Field work       | Eight Weeks |
| 2. Location Plat(s) | Two Weeks   |

Please note inclement weather can affect the schedule. Please allow additional time for completion due to the weather.

### **DELIVERABLES**

Items to be delivered to the Owner or relevant agency/representative are:

1. 50'x50' Grid staked on the ground
2. Location Plat(s) provided in PDF and DWG formats

### **COMPENSATION :**

For work outlined above, you agree to compensate Ahler & Associates, LLC on a lump sum basis broken down as follows:

- |                   |               |
|-------------------|---------------|
| 1. Price per Acre | \$550.00/acre |
|-------------------|---------------|

Ahler & Associates, LLC will invoice the completed work every 15 days throughout the project with payment due and payable within 10 days.

Additional services beyond the scope of services presented herein can be performed at standard hourly billing rates (Attachment A) or negotiated via proposal at the time of request. Ahler & Associates will notify you of additional services at the time of occurrence or request. Additional services will not be performed without proper authorization.

We wish to thank you in advance for this opportunity to work with you. Should questions arise, please do not hesitate to contact us. To execute this contract, please sign one copy and return it to my attention.

P.O. Box 1636  
SPRING HILL, TN 37174  
PHONE 615-481-3106  
FAX 615-523-1517  
[www.ahlerengineering.com](http://www.ahlerengineering.com)



*Ahler & Associates, LLC*

CONSULTING ENGINEERS AND LAND SURVEYORS

Sincerely,  
Ahler & Associates, LLC

*Joseph Ahler*

Joseph Ahler, P.E.  
Principal

To signify your acceptance to the above proposal and terms, sign both copies of, retain one copy for your files, and return other to address herein.

Town of Thompson's Station:

AHLER & ASSOCIATES, LLC:  
Joseph Ahler P.E., R.L.S.

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(Signature) (date) *Joseph Ahler* 7/26/19 (Signature) (date)

Attachments: Exhibit A Standard Hourly Rates

Gibi Soil Mapping, LLC  
John Gibi, LPSS  
2103 Donna Kaye Court  
Mount Juliet, TN 37122  
[jgibi@outlook.com](mailto:jgibi@outlook.com)  
615-351-4512

May 8, 2019

Ms. Caryn Miller  
Assistant Town Administrator  
Town of Thompson's Station  
615-229-7493  
[cmiller@Thompsons-Station.com](mailto:cmiller@Thompsons-Station.com)

Dear Caryn,

I want to thank both you and Ken for taking the time to discuss the Hill property and the Alexander property. Both projects have come with challenges. The Hill property required a lot more time than I budgeted, but I just lack the pit descriptions in a few fields. I am feeding the individual fields to Matthew as they are completed.

I have been vacillating on a proposal for the Alexander property. I am willing to commit to the job, but with some flexibility in the completion date. This project will, like the Hill property, require more borings to isolate as much usable area due to the terrain, sink holes, drains, and other disturbances.

I am bidding this job at \$1,200.00 per acre and \$150.00 per pit description.

It was a pleasure meeting you both.

Sincerely,

John Gibi, LPSS  
615-351-4512

Name	Phone	Location	Email			
HMB Profesional Engineering	615-361-4345	Nashville	<a href="mailto:eadams@hmbpe.com">eadams@hmbpe.com</a>	No answer		
Adkins Engineering	931-388-5226	Columbia	<a href="mailto:adkinsengineering@msn.com">adkinsengineering@msn.com</a>	Retired no longer in business		
Ahler and Associates	615-481-3106	Spring Hill	<a href="mailto:joe.ahler@hmbpe.com">joe.ahler@hmbpe.com</a>	emailed 7/25 boundary map sent	550 per acre + hourly rates if necessary for other additional needs Can start one week after approval	
Steven Artz and Associates	615-382-0481	Springfield	<a href="mailto:artz.steve@yahoo.com">artz.steve@yahoo.com</a>	email returned undeliverable		
David Brackman	615-476-8107	Nashville	<a href="mailto:dbrack@bellsouth.net">dbrack@bellsouth.net</a>	No answer		
Ronny Brown	615-790-1980	Franklin	<a href="mailto:rgbsurveying@gmal.com">rgbsurveying@gmal.com</a>	No answer		
T. Buchanan	615-406-9383	Hendersonville	<a href="mailto:bls1698@bellsouth.net">bls1698@bellsouth.net</a>	No answer		
Robert Burke	615-337-7839	Brentwood	<a href="mailto:robert.burke@gmail.com">robert.burke@gmail.com</a>	No answer		
Corbin Caruthers	615-210-5370	Franklin	<a href="mailto:foresightls@comcast.net">foresightls@comcast.net</a>	No answer		
P. Grant Chapman	615-566-0509	Nashville	<a href="mailto:phillip.chapman@amecfw.com">phillip.chapman@amecfw.com</a>	No answer		
Scott Cherry	615-269-3972	Nashville	<a href="mailto:cheryls@comcast.net">cheryls@comcast.net</a>	Micahel Charette emailed 7/25 boundary map sent		
Robert Clay	615-796-7487	Gallatin	<a href="mailto:robertclay24@msn.com">robertclay24@msn.com</a>	email returned undeliverable		
James Cooley	615-622-7801	Franklin	<a href="mailto:jcooley@cecinc.com">jcooley@cecinc.com</a>	emailed 7/25 boundary map sent	email 7/29/2019 with questions	\$350 per acre Start one week after NTP
J. Allen Crawford III	615-292-2661	Nashville	<a href="mailto:allen@ccsurveyors.net">allen@ccsurveyors.net</a>	email returned undeliverable		
Christopher Conrad	629-203-6583	Nashville	<a href="mailto:chris.conrad@pca-llc.biz">chris.conrad@pca-llc.biz</a>	resent. Wrong email 7/25		
Pat Coode	615-974-1814	Nashville	<a href="mailto:pscoode@comcast.net">pscoode@comcast.net</a>	No answer		

Daniel Curry	615-331-1441	Brentwood	<a href="mailto:dan.curry@collierengineering.com">dan.curry@collierengineering.com</a>	emailed 7/25 boundary map sent	start in few weeks	email 7/29 \$200 per acre and \$1600 in office work Could start 2 weeks after
Gregory Daniels	615-837-3664	Brentwood	<a href="mailto:gdan3629@bellsouth.net">gdan3629@bellsouth.net</a>	No answer		
Lee Davidson	615-242-0040	Nashville	<a href="mailto:ldavidson@loseassoc.com">ldavidson@loseassoc.com</a>	No answer		
Walter Davidson	615-331-2156	Nashville	<a href="mailto:whdavidson@comcast.net">whdavidson@comcast.net</a>	No answer		
Clint Elliot	615-533-2054	Nashville	<a href="mailto:stephanie@clintelliotsurvey.com">stephanie@clintelliotsurvey.com</a>	mail returned undeliverable		
Todd Fowlkes	615-425-2000 xt	Nashville	<a href="mailto:fowlkes@civicinc.com">fowlkes@civicinc.com</a>	emailed 7/25 boundary map sent	email 7/29/2019 more info	\$20,000 lump sum \$265 per acre Start 2 weeks after NTP
Chris Goetz	615-428-0172	Nashville	<a href="mailto:chris@daleandassociates.net">chris@daleandassociates.net</a>	Too busy right now		
Richard Graves	615-644-2077	Westmoreland	<a href="mailto:gavessr@nctc.com">gavessr@nctc.com</a>	No answer		
Greg Gurney	615-775-6522	Nashville	<a href="mailto:gregg-gurney@qspnet.com">gregg-gurney@qspnet.com</a>	No answer		
Tom Guss	615-460-0562	Nashville	<a href="mailto:tguss@ssr-inc.com">tguss@ssr-inc.com</a>	mail returned undeliverable		
Tom King III	615-238-4958	Franklin	<a href="mailto:tomking3@gmail.com">tomking3@gmail.com</a>	No answer		
Brandn Lambert	615-385-4144	Nashville	<a href="mailto:lambert@leainc.com">lambert@leainc.com</a>	email returned undeliverable		
Ronnie Lowery	615-850-3506	Brentwood	<a href="mailto:ronl@deltaassociatesinc.com">ronl@deltaassociatesinc.com</a>	email returned undeliverable		
Scott McCormick	615-758-8243	Nashville	<a href="mailto:mccormick@tds.net">mccormick@tds.net</a>	email returned undeliverable		
Paul Moody	615-982-0938	Franklin	<a href="mailto:paul.k.moody@gmail.com">paul.k.moody@gmail.com</a>	No answer		
Bobby Moore	615-415-2077	Brentwood	<a href="mailto:bmoore1939@comcast.net">bmoore1939@comcast.net</a>	No answer		
Jason Moseley	615-649-5264	Nashville	<a href="mailto:jason.moseley@ohm-advisors.com">jason.moseley@ohm-advisors.com</a>	emailed 7/25 boundary map sent	85 per acre can start 2 weeks after NTP 6,400 total	
Kevin Morehead	615-948-5852	Nashville	<a href="mailto:initialpoint@bellsouth.net">initialpoint@bellsouth.net</a>	emal returned undeliverable		
Allen O"Leary	931-626-9570	Columbia	<a href="mailto:allen@olearyaa.com">allen@olearyaa.com</a>	No answer		
Dan Parker	615-785-3661	Smyrna	<a href="mailto:dan@danparkersurveing.com">dan@danparkersurveing.com</a>	No answer		
Brian Reifschneider	615-451-6739	Gallatin	<a href="mailto:blueridgesurveing@yahoo.com">blueridgesurveing@yahoo.com</a>	Too busy right now		

Mark Sawyer	615-486-1580	Spring Hill	<a href="mailto:msawyer@charterbn.com">msawyer@charterbn.com</a>	email returned undeliverable		
Jacob Slaughenout	615-268-9568	Spring Hill	<a href="mailto:jakerls2583@gmail.com">jakerls2583@gmail.com</a>	emailed 7/25 boundary map sent	8/6 return email for more info	
Patrick Smith	615-256-0920	Nashville	<a href="mailto:psmith@lismith.com">psmith@lismith.com</a>	emailed 7/25 boundary map sent	450 per acre can start two weeks after approval	
Steven Spears	615-830-6182	Nashville	<a href="mailto:spears_surveying@yahoo.com">spears_surveying@yahoo.com</a>	No answer		
Michael Stanford	615-486-2441	Spring Hill	<a href="mailto:leon@stanfordandassocitesinc.com">leon@stanfordandassocitesinc.com</a>	email returned undeliverable		
Michael Story	615-370-8500	Brentwood	<a href="mailto:mstory@hfrdesign.com">mstory@hfrdesign.com</a>	called 7/25 sent boundary map	8/5 proposal \$19,000 \$255.3 per acre, start one week after NTP	
Phillip Taylor	615-351-0766	Nolensville	<a href="mailto:taylorlandsurvey@comcast.net">taylorlandsurvey@comcast.net</a>	No answer		
Bennie Wheeler	615-349-7227	Nashville	<a href="mailto:bennie.wheeler@eli-llc.com">bennie.wheeler@eli-llc.com</a>	Michael Ray emailed 7/25 sent boundary map and spoke on phone also. He has worked with John Gibbi a lot	Proposal sent 7/31/2019 Can start 2 weeks after approval \$400 per acre	
William Wall	615-771-0202	Franklin	<a href="mailto:tennlandsurveyor@comcast.net">tennlandsurveyor@comcast.net</a>	No answer		
Danny Wamble	615-251-9555	Nashville	<a href="mailto:jdwamble@wambleassociates.com">jdwamble@wambleassociates.com</a>	emailed 7/25 boundary map sent	8/5 \$325. per acre. Will take 2-3 weeks to complete	
Joey Wilson	615-794-2275	Franklin	<a href="mailto:jwilson@wilsonpc.com">jwilson@wilsonpc.com</a>	emailed 7/25 boundary map sent	7/29 email more questions	
Doug Worsham	615-688-5190	Westmoreland	<a href="mailto:Worsham1306@gmail.com">Worsham1306@gmail.com</a>	No answer		

**Caryn Miller**

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**From:** Tyler Rainey  
**Sent:** Friday, June 7, 2019 11:12 AM  
**To:** Jeff Risdén  
**Cc:** Kenneth McLawhon; Caryn Miller; Corey Napier; Regina Fowler  
**Subject:** Fwd: Online Form Submittal: Utility Board Interest Form

----- Forwarded message -----

**From:** <noreply@clvicplus.com>  
**Date:** Fri, Jun 7, 2019 at 11:08 AM  
**Subject:** Online Form Submittal: Utility Board Interest Form  
**To:** <info@thompsons-station.com>, <tralney@thompsons-station.com>

### Utility Board Interest Form

First Name	Charles
Last Name	Thompson
Address1	3217 Vinemont Dr
City	Thompsons Station
State	TN
Zip	37179
E-mail Address	<a href="mailto:cbtpharmd@gmail.com">cbtpharmd@gmail.com</a>
Phone Number	865-771-4321

Introduce yourself and explain your interest in participating in the Utility Board

Hello, my name is Charles "Brent" Thompson. I was born and raised in Middle Tennessee, specifically, in Dickson County. I have lived in both Spring Hill and Thompsons Station, and my family and I currently reside in the Tollgate subdivision in Thompsons Station. I must admit I do not have previous experience on a utility board, although I am looking to be of better service to my community and town. I saw the ad for a volunteer position, and I believe that I could add value to the existing board. Regarding my educational background and/or qualifications, I attended the University of Tennessee where I was a biochemistry/cellular & molecular biology major. After college, I attended pharmacy school in Memphis, Tennessee. I have practiced as a pharmacist in various roles in both



Tyler Rainey &lt;trainey@thompsons-station.com&gt;

## Online Form Submittal: Utility Board Interest Form

1 message

noreply@civicplus.com &lt;noreply@civicplus.com&gt;

Thu, Jun 13, 2019 at 3:38 PM

To: info@thompsons-station.com, trainey@thompsons-station.com

### Utility Board Interest Form

First Name	Everett (Skip)
Last Name	Beasley
Address1	3371 Vinemont Dr
City	Thompsons Station
State	Tennessee
Zip	37179-2925
E-mail Address	skipbeasley49@gmail.com
Phone Number	6154988491

Introduce yourself and explain your interest in participating in the Utility Board

I am a new resident in Tollgate Village, having moved from Franklin, TN in October. I am retired. I am presently serving at the Treasurer for P38 INC, a 501c3 organization supporting the 1st Brigade at Fort Campbell. I serve as the Treasurer for a homeowners association and have previously served either as President or VP for Cross Creek HOA in Franklin for 15 years. I have a Civil Engineering degree from Tulane Univ. but have not practiced engineering. I was the COO of a vegetable processing plant in Smyrna and dealt with BOD problems with the local waste water treatment plant. My other work background is 21 years as a USAF pilot and 16 years as a Commercial airline pilot. My interest in joining the board is due to the future delays in sewer taps in the Tollgate Village area and other future growth areas. I want to be able to serve my new community in some capacity and feel that this is an area were I might be able to contribute some talent and energy too.

Resume, Statement of Interest, etc. (not required)

*Field not completed.*

*Utility Board Members are appointed by the Board of Mayor and Aldermen.*