

Cartwright Creek, L.L.C.
1551 Thompson's Station Road West
Thompson's Station, TN 37179
615-261-8600

Docket No. 17-00061

June 27, 2017

Mr. David Foster, Chief
Utilities Division
Tennessee Regulatory Authority
502 Deaderick St.
Nashville, TN 37243

Filed electronically in Docket office June 27, 2017

Subject: Cartwright Creek, LLC - Petition for Approval to Use Escrowed Funds
Docket No: To Be Assigned

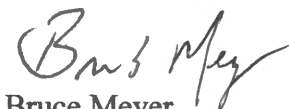
Dear Mr. Foster,

In the "Order Approving Settlement Agreement and Determining Contested Issues" of March 2, 2010 (Docket No. 09-00056), the Commission specified that future tap fee revenues be set aside in an escrow account and that Cartwright Creek file a request for approval before funds can be expended from the account. The purpose of this filing is to request use of escrowed funds for non-routine repairs and maintenance.

I have provided the attached testimony and exhibits describing the amounts and proposed uses of the funds.

Please contact me if you have any questions.

Sincerely,



Bruce Meyer
Operations Manager

Separate Transmittal: Original, four copies and \$25 filing fee sent to TPUC via FedEx 6/27/17

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE**

**PETITION OF CARTWRIGHT CREEK,)
LLC FOR APPROVAL TO USE)
ESCROWED FUNDS)
)**

DOCKET NO. 17-_____

**DIRECT TESTIMONY
of
BRUCE MEYER**

ON BEHALF OF CARTWRIGHT CREEK, LLC

June 27, 2017

1 **Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND**
2 **OCCUPATION FOR THE RECORD.**

3 **A1.** My name is Bruce Meyer and my business address is 1551 Thompson's Station
4 Road West, Thompson's Station, TN 37179.

5
6 **Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 **A2.** I am employed by Sheaffer Wastewater Solutions, LLC as Operations Manager.

8
9 **Q3. HOW LONG HAVE YOU BEEN EMPLOYED BY SHEAFFER**
10 **WASTEWATER SOLUTIONS?**

11 **A3.** I have been employed by Sheaffer Wastewater Solutions ("Sheaffer") for
12 approximately sixteen years.

13
14 **Q4. WHAT ARE YOUR RESPONSIBILITIES AS THE OPERATIONS**
15 **MANAGER FOR CARTWRIGHT CREEK, LLC.?**

16 **A4.** I am responsible for the day-to-day operation, engineering and permitting for
17 Cartwright Creek, LLC ("Cartwright Creek").

18
19 **Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
20 **PROCEEDING?**

21 **A5.** The purpose of this testimony is to request the use of a portion of Cartwright
22 Creek's escrowed funds and describe how the funds will be used.

23

1 ***Q6. PLEASE DESCRIBE THE BACKGROUND FOR THE ESCROW AND***
2 ***THE REASON FOR THIS REQUEST.***

3 ***A6.*** In 2009, Cartwright Creek sought TRA approval for a rate increase, including tap
4 fees. The rate case was Docket No. 09-00056, entitled "Petition of Cartwright
5 Creek, LLC to Change and Increase Rates and Charges". On March 2, 2010
6 TPUC (TRA) issued the "Order Approving Settlement Agreement and
7 Determining Contested Issues" in which the new rates and tap fees were
8 approved. Exhibit A contains a page from that order, which describes the tap fee
9 approval and establishes the requirement for these tap fees to be placed in an
10 escrow account. It also required TPUC approval escrowed funds can be used.

11
12 ***Q7. WHAT OTHER ESCROW ACCOUNTS DOES CARTWRIGHT CREEK***
13 ***HAVE AND IS THIS REQUEST TO USE ANY OTHER ESCROWED***
14 ***FUNDS?***

15 ***A7.*** In 2016, Cartwright Creek sought and received approval for an increase in rates
16 and other charges in Docket No. 16-00127, entitled "Joint Petition of Cartwright
17 Creek, LLC and TRA Staff (As a Party) To Increase Rates and Charges" That
18 petition and subsequent approval, now in effect, included a \$7.50 per month per
19 customer "Capital Recovery Surcharge" which is being deposited into a separate
20 escrow account. Its use also requires TPUC approval, however, Cartwright Creek
21 is not requesting to use funds in the Capital Recovery Surcharge escrow account
22 in this request.

1 **Q8. WHAT IS THE CURRENT AMOUNT IN THE ESCROW ACCOUNT**
2 **ESTABLISHED BY DOCKET NO. 09-00056?**

3 **A8.** There currently is \$95,000 in this escrow account.
4

5 **Q9. HOW MUCH IS CARTWRIGHT CREEK REQUESTING TO UTILIZE**
6 **FROM THE ESCROW ACCOUNT?**

7 **A9.** Cartwright Creek is requesting TPAC approval to use approximately \$45,100
8 from the escrow account. One use will be for repair of a leak in the main
9 Grasslands wastewater treatment tank. The other will be to conduct a collection
10 system infiltration investigation of the Grasslands collection system. Both uses
11 are found in the Projects List included in my testimony in the 2016 rate case
12 (Docket 16-00127), a copy of which is attached as Exhibit B.
13

14 **Q10. WHAT DOES THE TANK REPAIR CONSIST OF AND HOW MUCH**
15 **WILL IT COST?**

16 **A10.** The tank repair is item 1 on attached Exhibit B. There is a small opening at one
17 spot in the main treatment tank at the Cartwright Creek Grasslands wastewater
18 treatment facility. A curved steel plate needs to be fabricated and installed. John
19 Bouchard and Company has given Cartwright Creek a proposal for this repair,
20 \$12,300, and it is attached as Exhibit C.
21

1 ***Q11. WHAT DOES THE INFILTRATION INVESTIGATION OF THE***
2 ***GRASSLANDS COLLECTION SYSTEM CONSIST OF AND WHAT ARE***
3 ***THE COSTS?***

4 ***A11.*** The investigation is Item 4 on attached Exhibit B. There are three components:
5 flow measurement, video inspection, and smoke testing.
6

7 For the flow measurement, Cartwright Creek has hired a firm specializing in
8 sewer investigations to do flow monitoring in the Grasslands collection system in
9 the Spring and Summer of 2017. A proposal for \$20,000 from Utility
10 Technologies is included as Exhibit D.
11

12 Based upon findings in the flow study, there will be focused investigations in the
13 collection system areas with the most infiltration. Video inspection and smoke
14 testing of these sections will be conducted at a combined estimated cost of
15 \$12,800. Exhibits E and F are emails from qualified firms (First Response
16 Environmental and Utility Technologies) confirming the costs.
17

18 ***Q12. WHAT IS THE PURPOSE OF THE INFILTRATION INVESTIGATION?***

19 ***A12.*** Item 4 on attached Exhibit B and other information submitted by Cartwright
20 Creek during the rate case in Docket 16-00127 described the excessive infiltration
21 in the aging Grasslands collection system and the importance of repairing it. The
22 infiltration investigation covered in this request will identify the areas of the
23 collection system with the highest amount of infiltration. The video inspection

1 and smoke testing are needed to identify specific repair points. It is hoped that
2 the inspections will identify several significant sources that can be repaired within
3 Cartwright Creek's budget and thereby make a significant reduction in infiltration.
4

5 ***Q13. WHAT IS THE TOTAL AMOUNT OF ESCROW FUNDS THAT***
6 ***CARTWRIGHT CREEK WOULD LIKE TPUC TO APPROVE THE USE***
7 ***OF AT THIS TIME.***

8 ***A13.*** The total amount equals the tank repair (\$12,300) plus the three collection system
9 investigation steps (\$32,800), totaling \$45,100.
10

11 ***Q14. DOES THIS COMPLETE YOUR TESTIMONY?***

12 ***A14.*** Yes, it does.

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE**

**CARTWRIGHT CREEK, LLC
PETITION FOR APPROVAL TO USE
ESCROWED FUNDS**

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DOCKET NO.17-_____

AFFIDAVIT

I, Bruce E. Meyer, on behalf of Cartwright Creek, LLC hereby certify that the attached Direct Testimony represents my opinion in the above-referenced case.



Bruce E. Meyer

Sworn to and subscribed before me

this 27 day of June, 2017.



NOTARY PUBLIC



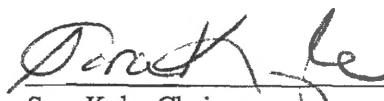
My commission expires: 12-12-2020

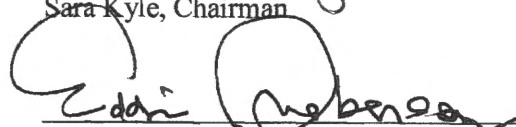
Exhibit A

5. A tap fee of \$5,000 applicable to new customers is hereby approved.¹⁷ The revenues from such new fee shall be booked as revenue and placed in an escrow account dedicated to the necessary system repairs and upgrades. The Company shall file a request for preapproval by the Authority before funds can be expended from the escrow account.

6. The Company shall perform a feasibility study concerning changing to volumetric billing. The results of the study shall be filed with the Authority no later than June 14, 2010.

7. Any party aggrieved by the Authority's decision in this matter has the right to judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle Section, within sixty (60) days from the date of this Order.


Sara Kyle, Chairman


Eddie Roberson, Director


Mary W. Freeman, Director

¹⁷ The Company agreed in these proceedings that persons demonstrating that they have previously paid tap fees, though not yet customers, would not be required to pay the new tap fee nor any difference between the amount of the tap fee paid and the new tap fee amount.

Exhibit B in Docket No. 17- _____

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

**JOINT PETITION OF CARTWRIGHT CREEK,)
LLC AND TRA STAFF (AS A PARTY) TO)
INCREASE RATES AND CHARGES)
)**

DOCKET NO. 16-00127

**EXHIBIT
of
BRUCE MEYER**

ON BEHALF OF CARTWRIGHT CREEK, LLC

November 10, 2016

Cartwright Creek, LLC - Projects List 10/26/16

#	Site	Project	Estimated Cost	Year			Comments
				2017	2018	2019	
1	GL	Repairs to Wastewater System Tank	\$10,000	\$10,000			The main tank of the Grasslands treatment system has a small opening just above the water level at one place. A curved steel plate needs to be fabricated and welded.
2	GL	Entrance Road Repair	\$35,000	\$25,000	\$10,000		The entrance to the Grasslands facility is on a road that passes by the River Rest HOA n Clubhouse, pool and tennis courts. The road just beyond the clubhouse is used only by Cartwright Creek. Portions of the road have been extremely worn and sunken in by sludge hauling trucks from Cartwright Creek. The Homeowners Association is asking Cartwright Creek to repair it. We received a quotation for partial repair of the most severely damaged section for \$25,000. The other portions of the road also need repair.
3	GL	Sludge Handling Improvements	\$75,000	\$25,000	\$50,000		In January 2016 the Town of Thompsons Station stopped allowing disposal of outside septage and sludge in their wastewater treatment system. As a result, Grasslands sludge is being hauled a longer distance and with a higher end disposal cost. Costs went from \$400 per truckload in 2015 to \$750 per truckload in 2016. Approximately 8 truckloads per month are hauled, for an annual total of \$72,000. These costs will continue to go up because the places to haul this material (without further processing at the Grasslands plant) are disappearing and, when available, are farther away. If Cartwright Creek could install a dewatering box system, which would reduce the water content in the sludge and allow landfill disposal, the cost for hauling and disposal would be cut in half.

Cartwright Creek, LLC - Projects List 10/26/16

4	GL	Collection System Infiltration Investig.	\$75,000	\$35,000	\$40,000		The Grasslands collection system is 20 to 40+ years old and suffers from large amounts of rainwater and groundwater infiltration. The quantity of infiltration is a potential source of system overflows and hurts the performance of the existing system. Any long term solution to improving the Cartwright Creek treatment system will require elimination of a majority of the infiltration. The infiltration sources need to be identified so a cost effective repair plan can be developed. Cartwright Creek has contacted firms that do the investigations consisting of multiple steps, including mapping, visual inspections, smoke testing, video inspection, and flow monitoring. We have received an estimate of \$100,000 for the study from a qualified testing firm. The study costs could be higher depending upon what the initial phases reveal. The first phase of the work, consisting of mapping and visually inspecting manholes was completed for \$25,000 in September 2016. The next phases of the study are being identified and the work needs to continue.
5	GL	Plant Replacement/Upgrade Study	\$50,000	\$30,000	\$20,000		The existing Grasslands wastewater treatment system is over 40 years old and needs significant refurbishing. The existing system cannot meet the permitted discharge standard for Total Nitrogen, which is expected to be more stringent in the next permit reissuance (already overdue). There are multiple potential options for processes that might be added to the existing plant or replace the existing plant. There needs to be a concept level engineering study that evaluates the performance and costs of the various options and come up with recommended options for Cartwright Creek.
6	GL	Main Pump Station Control Refurbishing	\$25,000		\$5,000	\$20,000	The electrical panels and controls for the Main Grasslands Pump Station that pumps all the wastewater to the Grasslands treatment plant are 40+ years old. The panels are in need of replacement due to the damp environment 30' below ground. The

Cartwright Creek, LLC - Projects List 10/26/16

							level control system is a technology outdated about 20 years ago and has failed causing alarms and occasional overflows.
7	GL	Rerouting of Sample Lines	\$10,000		\$10,000		The influent and effluent samples are taken via individual pumps that pump to two wastewater samplers in the building. The samplers are flow through on a continuous basis and they flow back into the main pump station and are monitored twice by the influent flow meter. We believe this is a main reason that the influent and effluent flow readings for Grasslands never match. This will eventually be a permit issue. Rerouting the discharge of the sampler lines to the wastewater process tank will eliminate the double reading.
8	AR	Irrigation Pump Station Improvements	\$7,500		\$7,500		The irrigation pump, which is suspended at the bottom of a 20' deep manhole, stops working frequently during irrigation periods due to debris (plastics, snails, algae) carryover to the manhole. A screening device that is easily cleanable from the surface needs to be designed and installed.
9	GL	Old Natchez Pump Station 2 Refurbishing	\$25,000			\$25,000	The pump station, serving about 75 homes, is over 20 years old. The control panel is outside and weathered and with worn interior electrical parts. The tops of the wet well and valve vault are rusted and need replacing. The pump control and electrical feed wiring need to be replaced due to age. The wooden fence needs to be painted with some repairs to slats. The pumps need to be pulled, inspected, reworked, and/or replaced.
10	GL	Remote Monitoring at Old Natchez Pump Stations	\$21,000		\$10,000	\$11,000	The two Old Natchez pump stations have no remote notifications of a pending or immediate problem. Cartwright Creek staff visually inspect each station once a day. The cellular based dialers available now would link these pump stations to a remote server that would be custom programmed by Cartwright Creek for

Cartwright Creek, LLC - Projects List 10/26/16

							alarm monitoring. It would also monitor pump run times and starts to anticipate and early warn of potential problems. It would also eliminate the need for a daily visual inspection by staff.
11	GL	Chemical Room Scales and Monitor	\$8,000		\$8,000		The scales for the chlorine gas and sulfur dioxide gas cylinders (to monitor gas usage and required to be reported monthly TDEC) need to be replaced because they are each over 20 years old. Chlorine gas monitoring and alarm equipment needs to be purchased and installed.
12	GL	Confined Space Entry Equipment	\$10,000		\$10,000		Electric hoist, boom, winch, concrete mounting pad, harness. It could also be used to remove the pumps.
13	GL	Lowering of Manhole Top	\$5,000	\$5,000			Need to lower the top of a manhole in an isolated area near the Cartwright Creek plant to create a collection system low point.
14	GL	Building Interior Refurbishing	\$10,000			\$10,000	The 40+ year old treatment building, consisting of a lab, chemical room, blower room, and washroom needs repair due to the age. Some of the refurbishing: Washroom: Drywall repair, floor repair, hot and cold piping repair, sink and toilet replacement, interior door replacement, light and switch repair. Laboratory: Lighting replacement, fixing and painting cabinets, repair and replacement of windows. Chemical and Blower room: Similar structural repairs.
15	GL	External Storage Building	\$7,500			\$7,500	The Grasslands building has no interior storage for large tools, supplies, mowers, etc. A separate storage building (Lowe's, Home Depot) would provide this and allow better organization of the lab and blower room as well as the outside area.
16	GL	Wastewater Samplers Replacement	\$20,000		\$10,000	\$10,000	The influent and effluent wastewater automatic samplers are no longer manufactured. Key electronic and mechanical parts are unobtainable.

Cartwright Creek, LLC - Projects List 10/26/16

17	AR	Water Service to Plant and Safety Shower	\$12,000			\$12,000	Potable water was not run to the treatment plant. For operator safety and general cleanup, potable water is needed. We will eventually need to start using sodium hypochlorite (high strength bleach) for disinfection. The site needs an emergency shower for worker safety.
18	AR	Influent Flow Meter	\$10,000			\$10,000	The flow meter installation was postponed during initial plant construction until there were sufficient homes to give a wastewater flow that could be measured. The cost includes not only the meter but influent piping modifications to ensure a full pipe at the measurement point.
19	AR	Building Refurbishing	\$5,000			\$5,000	The site building is a small frame structure that needs repairs due to insects and rodents.
20	AR HA	ATV For Irrigation Area inspection and Maintenance	\$12,000	\$12,000			Between Arrington Retreat and Hideaway Cartwright Creek now owns and maintains about 20 acres of drip and spray wastewater application areas. These need to be visually inspected for leaks and other problems on a regular basis, which is time prohibitive on foot. The fields are natural and difficult to walk and possible snakes during the right weather conditions. When a repair is required, tools must be brought into the field. This is a personnel safety concern in wet and hot weather. A two seat ATV such as a Deere Gator or equivalent with tool carrying capacity and trailer is needed.
21	HA	Commercial Zero Turn for Hideaway Irrigation Mowing	\$15,000	\$15,000			The Hideaway treatment system has approximately 10 acres of drip irrigation field that need to be mowed 2x per month.
		Totals Items 1 through 21	\$448,000	\$157,000	\$180,500	\$110,500	

Cartwright Creek, LLC - Projects List 10/26/16

22	GL	Collection System Infiltration Reduction	\$0.5 million+	Schedule to be determined 2-3 years once funds are available	The scope and cost of collection system repairs will be identified 4 above. Work will include interior lining of manholes and pipe and pipe replacement.		
23	GL	Treatment System Replacement	\$3 -\$4 million	Schedule to be determined 2-3 years once funds are available	The Grasslands system is 40+ years old and doesn't meet the Total Nitrogen limit on its Harpeth River discharge permit. The scope and cost will be identified 5 above. Work may include replacement of the entire treatment system, or construction of additional treatment steps, or refurbishing the existing system or a combination thereof. The main pump station will need to be replaced regardless of treatment upgrades.		

Since 1900

JOHN BOUCHARD & SONS CO.

1024 HARRISON ST.

NASHVILLE, TN 37203

PHONE 615-256-0112 FAX 615-256-2427

MACHINE SHOP SERVICES



Name	Cartwright Creek		
LOCAL	1000 Treatment Plant Rd		
City	Franklin	State	Tn Zip 37069
Phone	615-714-7868	FAX	
Attn:	Bruce Myer	Quote #	DCP-157 updated

Date	3/21/2017
Rep	DOUG PRESSON
Terms	NET 30
FOB	ON SITE-- OUR SHOP
Frt Term	PREPAY & ADD

		Description	Unit Price	Total
		<p>JOHN BOUCHARD & SONS CO. IS PLEASED TO QUOTE THE FOLLOWING.</p> <p>Provide labor, material and equipment to prep tank install and weld 5/16" patch metal to outside diameter section of wall approximatley 24'long x 8' tall</p> <p>ACCEPTED BY:</p>		\$12,309.00
			TOTAL	\$12,309.00

TAXES AND FREIGHT NOT INCLUDED
ALL QUOTATIONS SUBJECT TO
ACCEPTANCE WITHIN 30 DAYS

STOCK ITEMS SUBJECT TO PRIOR SALE

Quoted BY: *DOUG PRESSON*

April 25, 2017

Mr. Bruce Meyer
 CARTWRIGHT CREEK LLC
 1551 Thompson's Station Road West
 P.O. Box 147
 Thompson's Station, Tennessee 37179

**RE: Cartwright Creek Collection System
 Temporary Flow Monitoring Proposal**

Dear Bruce:

Utility Technologies (UT) provided you and Cartwright Creek this proposal to provide temporary flow monitoring services in the sanitary sewer collection system. The goal of this effort will be to measure and quantify inflow/infiltration within the collection system, and hopefully to isolate most I/I to particular portions of the collection system. UT could begin a flow study as early as next week. In a previous proposal, UT recommended a 4 flow monitor, 60 day temporary flow study with rainfall monitoring and a detailed I/I and capacity analysis in the final report. UT feels this is still an appropriate scope, and UT is still flexible to minor changes (example 3-6 monitors for 45-90 days) for the same unit pricing provided in the following table.

FLOW MONITORING COST TABLE			
Installation	4 Monitors	\$1,500/Mtr	\$6,000.00
O&M	240 monitor-days	\$40/Mtr-day	\$9,600.00
Rain Gauge	1 RG	\$800/RG	\$800.00
Processing/Reporting	1 Lump Sum	\$3,600 LS	\$3,600.00
TOTAL			\$20,000.00

UTILITY TECHNOLOGIES

Flow Monitoring Studies & Installations Sewer Evaluation Surveys I/I Analysis

I appreciate your consideration on this project. Please contact me should you have any questions or require further assistance. If agreeable, we can simply execute the agreement with authorized signatures on the bottom of this page.

Sincerely,

UTILITY TECHNOLOGIES

Bill Miller

Bill Miller

UTILITY TECHNOLOGIES

CARTWRIGHT CREEK LLC

BY: _____

Br 1/1/17

TITLE: _____

OPERATIONS MANAGER

DATE: _____

4/26/17

Exhibit E

Bruce Meyer

From: Kevin Brown <kevin.brown@frenvgroup.com>
Sent: Thursday, June 22, 2017 2:20 PM
To: Bruce Meyer
Subject: Re: Cartwright Creek's Sewer Video Inspection

I approve. You should be covered.

Sent from my iPhone

On Jun 22, 2017, at 2:12 PM, Bruce Meyer <bmeyer@sheafferwws.com> wrote:

Kevin,

Please confirm our phone conversation of a few weeks ago.

Cartwright Creek has approximately 3,000 ft of sewer lines and manholes to be video inspected looking for infiltration sources. For this work, the vide inspection unit (\$165/hr) and the large jet cleaning truck (\$205/hour) will be needed. So the total rate for both is \$370/hr. The actual time in for this work will depend upon the condition of the sewer and the extent of cleaning and other issues. However, Cartwright Creek should allow approximately 3 days for the work 24 hours x \$370 = \$8,880.

Please confirm via return email that this looks reasonable for a budget number.

Thank you,

Bruce Meyer
Operations Manager
Sheaffer Wastewater Solutions, LLC
Managers of Cartwright Creek, LLC
1551 Thompson's Station Road West
Thompson's Station, TN 37179

Mobile: 615-714-7868
Fax: 615-261-8613
bmeyer@sheafferwws.com

Exhibit F

Bruce Meyer

From: Bill Miller <utilitytecs@aol.com>
Sent: Friday, June 23, 2017 2:10 PM
To: 'Bruce Meyer'
Subject: RE: Cartwright Creek Smoke Testing

Correct. Just let me know when you would like to proceed. Bill Miller
Utility Technologies
1531 Kensington Drive
Murfreesboro, TN 37130
615-631-7411

From: Bruce Meyer [mailto:bmeyer@sheafferwws.com]
Sent: Friday, June 23, 2017 1:37 PM
To: 'Bill Miller'
Subject: Cartwright Creek Smoke Testing

Bill,

To confirm our conversation today: The smoke testing of the approximately 2500 ft. to 3000 ft. of Cartwright Creek collection line highlighted in orange on the drawing I emailed you would be approximately \$4,000.

Please comment back if this is correct or incorrect.

Thanks for reviewing the information and your input.

Bruce Meyer
Operations Manager
Sheaffer Wastewater Solutions, LLC
Managers of Cartwright Creek, LLC
1551 Thompson's Station Road West
Thompson's Station, TN 37179

Mobile: 615-714-7868
Fax: 615-261-8613
bmeyer@sheafferwws.com