

Williamson County, Tennessee
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Department of
Community Development
2009 ANNUAL REPORT



COMMUNITY DEVELOPMENT
BUILDING CODES
CODES COMPLIANCE
ENGINEERING
PLANNING
SEWAGE DISPOSAL MANAGEMENT

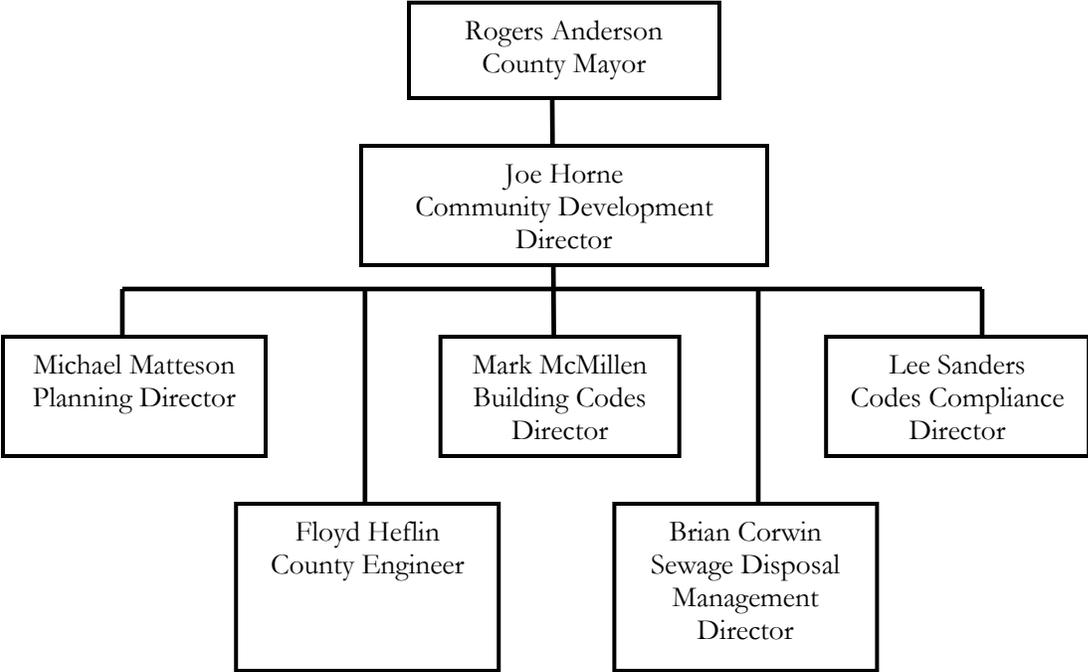
Table of Contents

Community Development.....	4
Introduction	4
Planning & Zoning	5
Introduction	5
Overview	5
Zoning Certificates	5
Map Amendments	6
Text Amendments	6
Major Subdivisions	7
Minor Subdivisions.....	7
Plat Revisions	7
Non-Residential Site Plans	7
Conditional Uses	8
Staff Level Site Plans	8
Update to the Williamson County Zoning Ordinance	9
College Grove Special Area Plan	9
Update to the Major Thoroughfare Plan	9
Department of Codes Compliance	11
Introduction	11
Inspections.....	12
Building Codes.....	14
Introduction	14
Organization.....	14
Building Permits	14
Adequate Facilities Tax.....	15
Goals	16
Engineering	17
Introduction	17
Overview	17
Surety	18
Land Disturbance Permits.....	18
Blasting Information.....	18
Floodplain Management	18
Storm Water Quantity	19
Storm Water Quality and Erosion Control.....	19
Department Goals for 2010.....	20
Sewage Disposal Management	21
Introduction	21
Board of Health Members	22

Department Overview & Quantitative Data	22
Soil Assessment.....	23
Soil Maps	23
Percolation Tests	23
Property Development	23
Subdivisions and SSDS Location Maps	23
Alternative & Experimental System Designs	24
Construction Permits	25
System Inspections.....	26
Other Department Services.....	27
Licensing of Septic System Installers	28
Pumpers.....	29
Miscellaneous	29
Technology Initiatives - Z-Miscellaneous Receipts	29
Department Checklists.....	29
Regulations – Amendments & Review	30
Meadowgreen/Grassland Area Sanitary Sewer Construction Project	31
Commendations.....	31
Department Goals for 2010.....	32

Community Development

Introduction

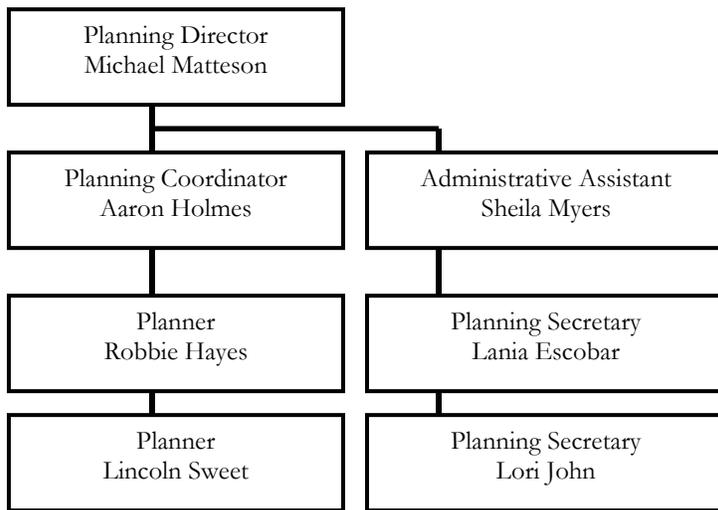


The Community Development Department provides the framework for planning and development services for the unincorporated portion of Williamson County. In a county undergoing the growth confronting Williamson County, it is important these services are integrated as much as practicable. The integration of these services allows not only for the provision of housing and related services to our community, but allows for the opportunity to monitor these markets and develop new techniques to mitigate the effects of this growth.

Planning & Zoning

Introduction

The County Planning Department plays an integral role in maintaining the quality of development in Williamson County. The Department is dedicated to providing sound, professional land use guidance as well as the highest level of technical and customer service. This role includes assisting developers and the general public in navigating the County's Zoning Ordinance and other development regulations. This department is responsible for the support of the County Board of Commissioners, the Williamson County Regional Planning Commission, the Highway Commission, and other boards that may require routine aid in administering and interpreting the Zoning Ordinance, the Subdivision Regulations and Flood Plain Regulations, and for any specific research that may arise.



The County's Planning Department is located on the 4th floor of the Williamson County Administrative Complex along with the Building Codes, Codes Compliance, Engineering, and Sewage Disposal Management Departments. County Planning services are directed by Michael Matteson, Planning Director.

Overview

The following is a summary of the activity for 2009. This data will allow the Staff, the Planning Commission, the Board of Commissioners and the general public insight into the amount of growth within the county.

Zoning Certificates

This form is the beginning of the planning process for both the general public and developers. For every inquiry, whether it be for a new home, an addition to an existing home, a swimming pool, a subdivision, or a non-residential development, a Zoning Certificate is required. This form serves two purposes. The first is to provide both the staff and the applicant with a written record of the required procedure to achieve an approval. Secondly, this written record can help alleviate any misunderstandings between the staff and the applicant.

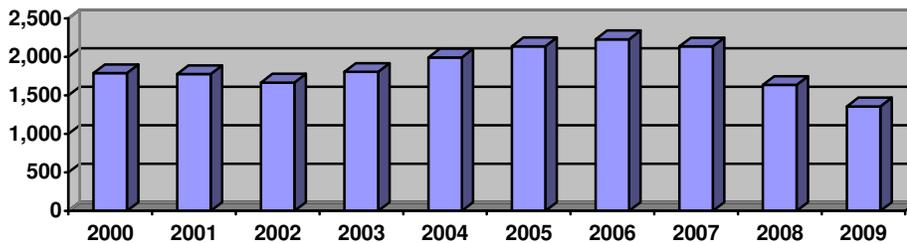
When a request for a Zoning Certificate is submitted, the staff obtains the property assessment card, confirms the zoning, the use that is currently on the property, and the floodplain status. Staff will determine if the requested use can occur on the property and, if it is allowed, the applicant may proceed. In some instances, the Plans Review process is required before the staff can grant approval to a use. Plans Review provides each department, i.e. Building Codes, Codes Compliance, Engineering, Highway, Planning, and Sewage Disposal an opportunity to review the request to ensure it meets their requirements as well. In 2007, the Community Development Department incorporated workflow software, Laserfische, into the building permit process, which has aided in a more effective and efficient review of plans. This software gives the Planning Department greater coordination and flexibility with other departments during the building permit process.

As a general practice, “same day service” is the goal. However, per section 9230 of the Zoning Ordinance, the Staff may take up to three (3) days to approve a request for a single lot development, and up to thirty (30) days for multiple lot developments. The Staff attempts to make the wait for approval as short as possible in all instances.

In 2009, the staff processed 1,357 Zoning Certificates. See Figure 1 below.

Figure 1

Zoning Certificates Issued 2000-2009



Map Amendments

There were no amendments to the zoning map made in 2009, i.e. requests to rezone property.

Text Amendments

In 2009, there were two (2) amendments to various regulations utilized by the Planning Department. Some of these amendments go hand in hand, i.e. if one regulation is amended, another might have to be amended in order to achieve the desired result.

- There were two (2) amendments to the Williamson County Zoning Ordinance.
- There were no (0) amendments to the Williamson County Subdivision Regulations.
- There were no (0) amendments to the Williamson County Stormwater Regulations.
- There were two (2) amendments to the Williamson County Wastewater Regulations.
- There were no (0) amendments to the Williamson County Planning Commission Bylaws.

Major Subdivisions

Major subdivisions are defined as those consisting of five (5) or more lots and include conventional subdivisions, Resource Conservation Developments (RCDs) and Planned Resource Conservation Developments (PRCDs). The following table details the activity for this year.

Table 1

	Name	Section	Lots
1	Saddle Springs Estates (Revision)		44
2	Brandon Park Downs (Revision)		43
3	Ridgeview Estates		7
4	Mystic Ridge (Stillwater) (Revision)		484
5	Silver Stream Farm	Phase 8	28
6	Stag's Leap (Re-Approval)	Section 2A	19
7	Meadowood Farms		5
8	Stetson Place		5
9	Brienz Valley, Addition to		13
10	Trace Creek Heights		5
11	Arrington Retreat (Waterbridge)	Section 1	48

Minor Subdivisions

Minor Subdivisions consist of no more than two (2) lots. Where there are no bondable improvements required, Staff has the discretion to review and approve these plats. In 2009, Staff approved 18 Minor Subdivisions consisting of 26 lots.

Plat Revisions

Plat Revisions that contain two (2) or fewer lots are subject to review and approval by the Staff. There are many different items that may be dealt with on a revised plat, including a lot line shift. In 2009, Staff approved revisions to 28 plats.

Non-Residential Site Plans

In 2009, there were nine (9) non-residential site plans reviewed with a total of 187,833 square feet. Table 2 outlines those plans reviewed.

Table 2

	Project Name	SF	Comments
1	Butterfly Meadows	9,832	Rural Retreat, Extensive
2	Fernvale Community Church	5,889	
3	Equestrian Club @ Saddle Springs	107,000	Revised
4	Grace Chapel	2 @ 840	Portable Classroom
5	Grace Chapel and Academy	NA	
6	Holy Trinity Evangelical Lutheran Church Montessori Preschool	14,097	
7	Franklin Christian Academy (Bethlehem United Methodist Church)	17,920	
8	Liberty Hills Church of Christ	3,415	Addition
9	Stillwater Golf Club	28,000	Revised

Conditional Uses

The Zoning Ordinance defines a conditional use as having some special or unique impact on the surrounding properties. Conditional uses are evaluated by the Planning Commission through the public hearing process. In 2009, the Planning Commission reviewed twenty (20) conditional uses. Table 3 illustrates those reviewed.

Table 3

	Project Name	SF	Comments
1	Southside Animal Hospital	3,633	
2	CNC Lawncare	3,264	
3	Furniture Doctor	2,437	
4	Schultz Heating & Air	576	
5	Mid American Distributors	N/A	Temp Firework Stand
6	Mid American Distributors	N/A	Temp Firework Stand
7	Bierly Stables	1,152	Commercial Stable
8	PePops Fireworks	N/A	Temp Firework Stand
9	Arno Storage	10,840	Light Industrial
10	Beech Creek Studios	1,830	Recording Studio
11	Saddle Springs Estates	NA	Mixed Use
12	Burcham Stables	14,000	Commercial Stable
13	Prolawns Landscaping	2,268	
14	We Care Lawncare & Landscaping	1,350	
15	Calloway Boxwood & Landscaping	1,084	Mixed Use
16	Freedom Reins, LLC	9,612	Commercial Stable
17	Roadkill Customs	1,296	
18	Tony's Garage	1,210	
19	The Woodshop	2,450	
20	Wildwood Construction, LLC	3,633	

Staff Level Site Plans

The Zoning Ordinance allows Site Plans for certain uses in certain Zoning Districts to be reviewed and approved by Planning Department staff, rather than by the Planning commission. Table 4 lists those Site Plans approved at the staff level.

Staff Level Site Plans

Table 4

	Type	SF/Lots	Comments
1	Lone Oak Day Camp, Inc		
2	Bethesda Elementary		
3	Berry's Chapel Church of Christ		Wall
4	Trinity Elementary		Portable Classroom
5	Grassland Middle School		Portable Classroom
6	Page Middle School		Portables
7	Silver Stream Farm Amenity Center		Revised
8	Daily Dish	423	Addition
9	FLC Landscaping	1088	
10	Locust Ridge Baptist Church		Lighting
11	Neena's Primitive/Gracie Maries		
12	Triune Saddle Shop	1,612	
13	Grassland Fire Hall		Addition
14	Waste Tech Services		
15	TWRA Skeet Shoot Range		

Update to the Williamson County Zoning Ordinance

One of the major goals of the Comprehensive Plan, which was adopted in 2007, is to update the County's Zoning Ordinance. Staff continued work, with assistance from the County's consultant, on the Zoning Ordinance update in 2009. During the year, a draft of the first two of three modules that will comprise the Ordinance were developed and discussed with the Zoning Ordinance Update Steering Committee. The Zoning Ordinance Update is expected to be completed in the fall of 2010.

College Grove Special Area Plan

In 2009, Staff completed the College Grove Village Special Area Plan, which was adopted by the Planning Commission and endorsed by the County Commission in October. In developing the Plan, Staff worked closely with an Advisory Committee and the College Grove Community in general. The Plan represents the community's vision for the future of the College Grove Village. The Plan's key themes, which represent the ideals most widely expressed by the community, include preserving small-town character, encouraging appropriate land uses, preserving open space, and addressing the village's transportation and infrastructure needs.

Update to the Major Thoroughfare Plan

Planning efforts for the Nashville Area MPO's Southwest Mobility Study, which will address current and future transportation needs in the southwest portion of the MPO region, were begun in late 2008. As a part of this larger study, the County's Major Thoroughfare Plan will be updated. This Plan will evaluate the County's long-range transportation needs along with the needs of portions of adjacent counties. It is anticipated that the Plan will be completed in 2010.

Planning Goals for 2010

The Planning Department has established a number of goals for the coming year. Chief among these goals is completing the update to the County's Zoning Ordinance, which establishes rules and regulations related to land development in the unincorporated County. Additionally, the department will work to develop a Special Area Plan for the Leiper's Fork Village. Other key planning efforts will involve updating the County's Subdivision Regulations and the traffic shed methodology contained within the Zoning Ordinance.

Department of Codes Compliance

Introduction

Codes Compliance plays an integral role in maintaining the quality of life in Williamson County, assisting developers and the general public negotiating zoning and other regulations to the mutual benefit of both. This department is responsible for support of the Board of Zoning Appeals and other boards for the routine processes of administering and interpreting the Zoning Ordinance, issuing sign permits, zoning inspections, and for specific research as the need arises. Codes Compliance is the enforcement branch of the Community Development Office.

Codes Compliance is located on the 4th floor of the Administrative Complex, along with the Building Codes, Planning and Engineering Departments. Codes Compliance activities are directed by Lee Sanders, Codes Director, who is assisted by Linda Hodges, Michelle Jackson and Brenda Midgett.

Table 5

Board of Zoning Appeals Cases For	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009
Total Agenda Items	23	16	26	20	22
Variances	13	9	8	8	8
Appeals	2	2	4	0	3
Special Uses	7	2	8	9	6
Other	0	2	6	3	5

Special Uses By Category

Table 6

Mobile Home as Temporary Residence	2	0	0	0	0
Accessory Dwelling	0	0	4	5	1
Farm Employee Housing	0	0	1	0	0
Communications Tower	0	0	0	0	2
Events of Public Interest	5	2	3	3	3
Family or Adult Day Care	0	0	0	1	0

Members

Board of Zoning Appeals Members for 2009

Dave Ausbrooks - Chairman

Steve Wherley - Vice Chairman

Don Crohan – Secretary/Representing the Planning Commission

Sue Workman - Regular Member

Karen Emerson-McPeak – Regular Member

Inspections

The Codes Compliance Department is also responsible for numerous inspections and related enforcement. Some of these inspections are based on building permit activity and some are initiated from complaints received from the public. Compliance inspectors are expected to initiate inspections of violations and non-permitted construction as they patrol the county.

Table 7

Activity	2005	2006	2007	2008	2009
Complaints Logged	198	209	215	172	141
Complaints/ No Violation Cited	74	92	61	53	46
General Code Violations = Complaints - No violation	NA	117	154	119	95
Cases Closed This Year	205	195	197	188	180
Signs Removed	341	351	123	458*	401
Sign Violation Notices	97	62	46	162*	139
Sign Permits	96	69	71	70	67
Overgrown Lot Cases	13	10	6	15	25
Overgrown Lot Inspections	0	45	18	34	58
Pool Permits	NA	109	113	90	62
Pool Fence Inspections	299	317	375	215	185
Mobile Home Permits	NA	27	19	11	7
Mobile Home Inspections	62	133	72	82	63
Junk Car Cases	20	18	16	28	16
Junk Car Inspections	NA	76	62	66	42
Zoning Advisory Letters	21	16	14	32	NA
Department Phone Calls	1712	2420	2344	2038	1787
Permits Reviewed	1388	1386	912	885	537

*There were many signs placed in violation that were removed, but no notice was sent, either because of time limitations or inability to determine name/address of responsible party. Agreement was reached in 2008 allowing our office to administer the Williamson County Zoning Ordinance regulations in State rights-of-way. That, and the 2008 elections, resulted in a large increase in the number of unpermitted off-site signs picked up by staff.

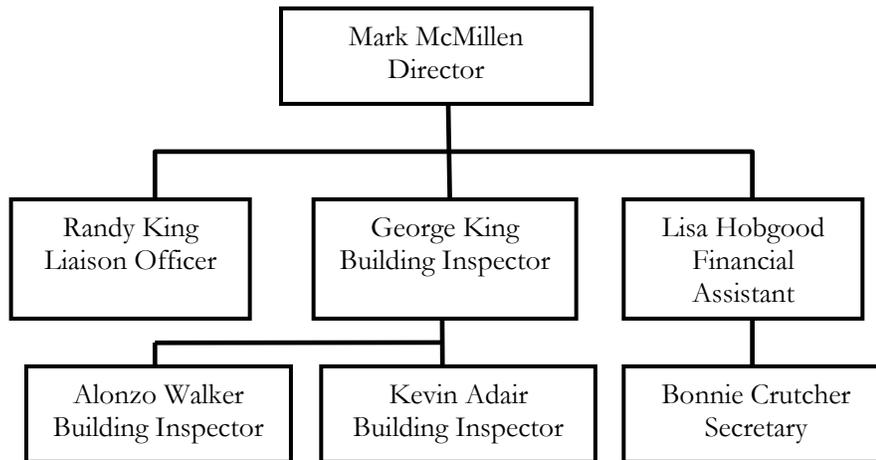
Building Codes

Introduction

Serving an integral role in the development of Williamson County, the Department of Building Codes insures that all construction within the unincorporated areas of the County meets current building codes adopted by the Board of Commissioners.

Organization

Grouped under Community Development with Codes Compliance, Engineering, Sewage Disposal Management, and Planning, the Building Codes Department is directed by Mark McMillen.



Building Permits

Building permits for new single-family dwellings declined drastically in the last quarter of 2009. Three of the last five months had only five or less new single-family permits issued. Homebuilders are optimistic that by the second quarter of 2010 building will return to a steady growth rate. The following Table 8 shows Building Permits and valuation issued in the unincorporated area of Williamson County for the past four years. See Figures 2 and 3 below.

Table 8

Year	New SFR	Valuation	Total Permits	Valuation
2009	139	\$53M	483	\$91M
2008	193	\$79M	636	\$131M
2007	322	\$157M	781	\$187M
2006	448	\$188M	865	\$221M

Figure 2

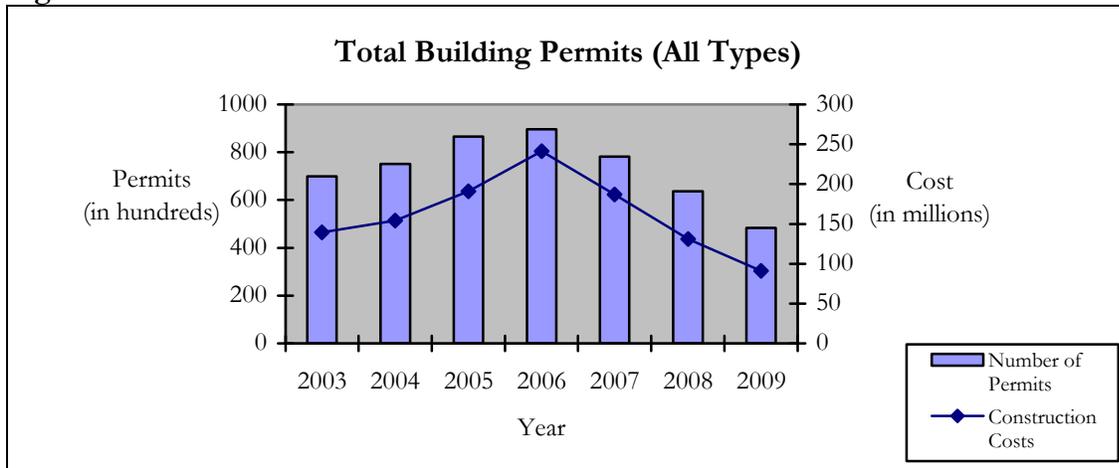
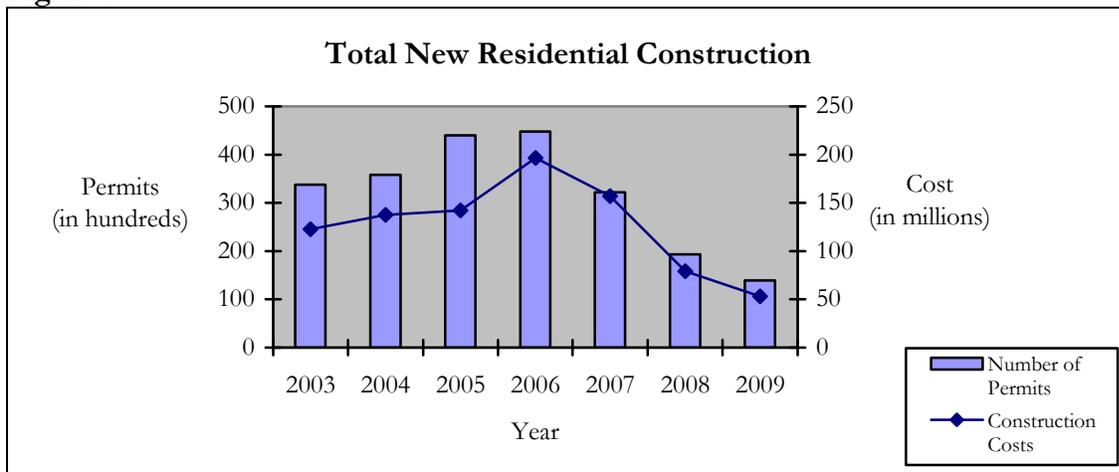


Figure 3



Adequate Facilities Tax

Officially referred to as Privilege Tax, this tax is assessed on new residential and commercial structures to offset the cost of growth on the County’s infrastructure.

Building Codes has the responsibility of assessing and collecting this tax for both the unincorporated area of the county as well as for the cities of Brentwood, Franklin, Nolensville, and Spring Hill.

These funds, once collected, are deposited with the County Trustee.

Effective July 1, 2007, the County Board of Commissioners enacted a new “Adequate Facilities Tax” (AFT) in schools. This additional \$1.00 per square foot is devoted solely to construction of new schools and is collected on new residential structures only.

All new County residential construction is assessed at \$2.00 per square foot, including areas that may be completed at a later date. Areas not included are unfinished basements, garages, carports, porches and accessory structures. All County commercial structures under roof are computed at \$0.34 per square foot. This includes areas such as bank drive thru, covered service station islands and material

storage areas. City residential construction is also assessed at \$2.00 per square foot. The distributions of residential and commercial revenues are listed in Table 8, and Figures 4 and 5 below.

Table 9

County Residential Revenue Distribution		Commercial Revenue Distribution		City Residential Revenue Distribution	
Purpose	Amount	Purpose	Amount	Purpose	Amount
Schools*	\$0.70	Roads	\$0.30	Schools*	\$0.92
Roads	\$0.20	Fire Protection	\$0.04	Parks/Rec	\$0.08
Parks/Rec	\$0.08				
Fire Protection	\$0.02				

*Does not include \$1.00 per square foot for the new Adequate Facilities Tax (AFT).

Figure 4

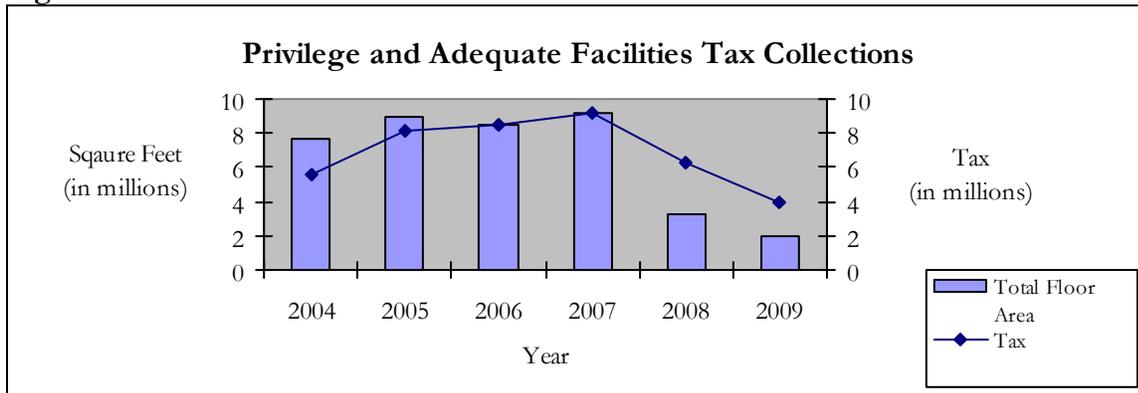
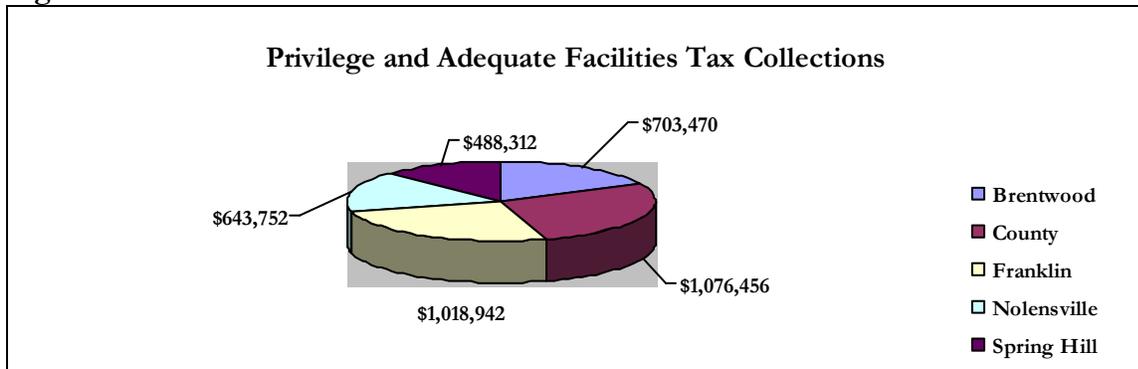


Figure 5



Goals

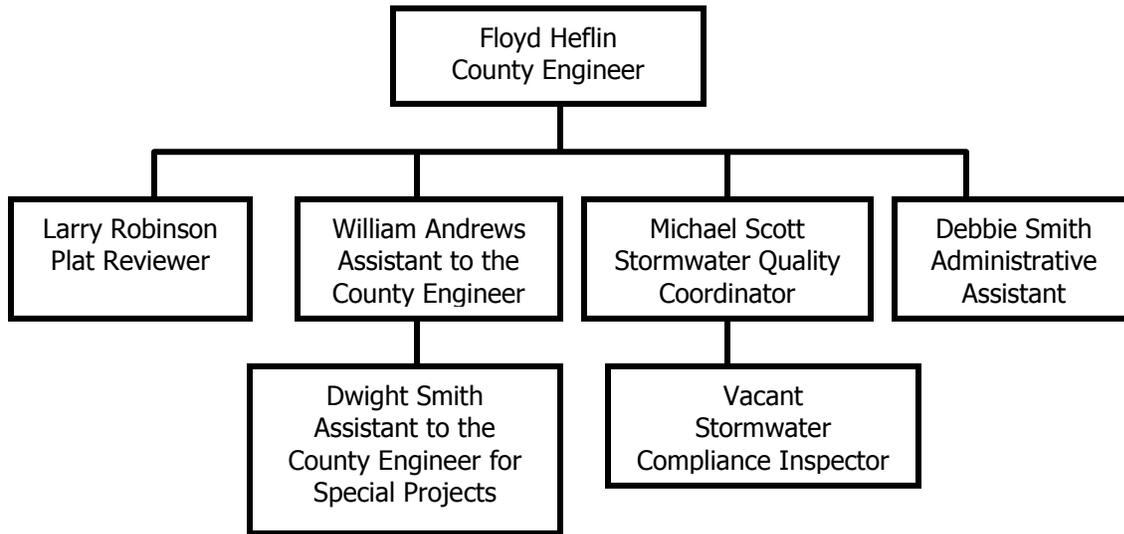
2010 brings new challenges in meeting new State Laws passed that require not only Building Inspectors to be certified and maintain certification hours, but Plumbing Inspectors must also be certified and maintain certification hours. The State Fire Marshal’s office has officially adopted the 2006 International Building Code for all commercial construction, including schools and churches. We will now need to start the process of adoption of the 2006 IRC.

Engineering

Introduction

County Engineering works to maintain the quality of development in Williamson County while assisting developers and the general public in interpreting development regulations and implementing associated requirements. This Department is responsible for support to the County Commission, Storm Water Appeals Board, Highway Commission, Planning Commission, and other boards for the routine processes of administering and interpreting the Storm Water Management Regulations, Subdivision Regulations, Zoning Ordinance, FEMA (Federal Emergency Management Agency) Regulations, engineering practices, and for specific research as the need arises.

County Engineering is located in Community Development along with Building Codes, Codes Compliance, Sewage Disposal Management, and County Planning. Engineering activities are directed by Floyd Heflin, P.E., County Engineer.



Overview

The Engineering Department is an integral part of the Community Development team. One of the main duties of the Department is to review and approve all construction plans for new development. This review now includes storm water quality requirements imposed by our Municipal Separate Storm Sewer System (MS4) permit with the Tennessee Department of Environment and Conservation (TDEC), Division of Water Pollution Control. Delineation and platting of areas required for on-site sewage systems is also coordinated with Sewage Disposal Management. Letters of credit for approved construction projects are estimated and established. When on-site storm water detention is neither possible nor practical for these developments, funds in-lieu-of detention are estimated, levied, and placed in an account for use on community storm

water management projects of greater magnitude. Surety for public improvements is reviewed and field inspections are performed on work in progress to assess compliance.

Other responsibilities vary from coordination of infrastructure testing and outside consultants to assisting County residents with drainage and erosion control issues. Additionally, traffic and roadway issues, floodplain management, storm water enforcement, and various engineering-related concerns are addressed daily. The Engineering Department coordinates with the Highway Department, as required, concerning new development affecting County maintained roadways. Land Disturbance permits are also issued from the Engineering Department after review and approval of grading, drainage, and erosion control plans.

Surety

The Engineering Department establishes surety amounts for roads, drainage, and erosion control. Letters of credit for new development are received at the final plat stage as required by the Planning Commission. Letters of credit help insure proper performance during construction, and high infrastructure quality upon completion. Currently, the Engineering Department administers letters of credit totaling **\$17,096,102** for roads, drainage and erosion control. In 2009, **1.845** miles of roadway were released from surety and accepted by the Highway Commission and County Commission for addition to the County road system. William Andrews coordinates the assessment and review of infrastructure surety.

Land Disturbance Permits

2009 was the fourth full year of fee collection under the Storm Water Management Regulations that went into effect 01/01/05. Any activity disturbing more than one acre of land must provide a site-specific erosion control plan and obtain a land disturbance permit. Additionally, individual lots less than one acre in size, which are part of a larger plan of development, are also regulated if the entire development disturbs more than one acre of land. During 2009, 95 permits were issued for individual lots at a cost of \$150 per permit, while 17 permits were issued for subdivisions or non-residential site plans at a cost of \$300 per permit. Total Land Disturbance Permit fees equaled **\$19,350**.

Blasting Information

Although no permit is issued by the County, applicants are required to disclose the purpose and extent of blasting activity, when the blasting will occur, and how the blasting will be supervised. Relevant safety measures required to protect the surrounding property owners from sustaining damages should also be discussed. The applicant is also required to provide this office with a certificate of insurance stating the extent of their coverage. Blasting is regulated by the State Fire Marshall's Office.

Floodplain Management

A continuing effort is being made to address and improve challenges associated with floodplain management. The Engineering Department now has two Certified Floodplain Managers (CFMs) on staff to assist the public on a daily basis concerning floodplain inquiries. On July 18, 2007, FEMA conducted a Community Assistance Visit to assess County compliance with the National Flood Insurance Program. The visit found no violations, and cleared the way for future participation in the Community Rating System. In November 2008, the County was notified by FEMA that

Williamson County had been approved as a Class 9 community under the Community Rating System. The County was subsequently recertified in 2009, providing a **5% discount** on flood insurance premiums paid after October 1, 2008. Finally, the County has engaged AMEC as a consultant to conduct and update flood studies on Cartwright Creek and Lynwood Branch. These studies will be finalized in 2010 to help define mitigation needs and planning strategies for future activities.

Storm Water Quantity

The Zoning Ordinance and Storm Water Management Regulations require the identification and evaluation of potential storm water impacts from increased run-off associated with new development. It is often necessary for the designer to incorporate facilities that provide for the attenuation of storm water discharges to pre-development levels. Detention facilities are engineered devices that insure that the rate (and to some extent the volume) of storm water run-off is no greater after development than it was prior to proposed construction. There are occasions where detention is not advantageous at a particular site within a drainage basin. When it is determined that detention at the project site is not a suitable Best Management Practice (BMP), funds in-lieu-of detention are levied against the development, or in-kind storm water improvements are provided. When funds are collected, they are placed into an escrow account to be used on regional projects that benefit the County as a whole. Examples of areas where these funds could be utilized are summarized as follows:

- Federal cost sharing programs with the Corps of Engineers to study potential locations for regional detention facilities, flood gages, or other storm water management facilities.
- Professional fees for verifying data, establishing floodplain information, and developing storm water management programs.
- GIS and watershed modeling
- Maintenance of existing regional storm water facilities.

In 2009, the Department of Community Development continued work with AMEC, funded through “in-lieu-of” funds, to update watershed models and establish a framework for reviewing the impacts of future development scenarios.

Storm Water Quality and Erosion Control

Williamson County is required by the Tennessee Department of Environment and Conservation to have a Phase II National Pollutant Discharge Elimination System (NPDES) MS4 permit for storm water. Requirements of the permit include controlling construction site runoff and illicit discharges. Other components involve public education, community involvement, and enforcement. While compliance is the goal of the program, **\$26,500** in storm water penalties were collected during 2009.

Permit compliance is managed by Michael Scott who also coordinates the agenda of the Storm Water Appeals Board. This Board meets monthly as needed to hear appeals of the Storm Water Management Regulations. Six appeals were heard in 2009 representing **\$600** in application fees. Three additional appeals were processed by the County Engineer.

The County has employed a consultant to develop new guidance and revise existing guidance concerning storm water quality controls. This will include a new guidance manual and computer program to be used in meeting storm water regulations. The manual and computer program will be completed in 2010.

Department Goals for 2010

It is the desire of the Engineering Department to work in a cooperative effort with other Departments, elected officials, and County residents to continue to promote and protect the health, safety, and welfare of all citizens and to enhance the environment and infrastructure of Williamson County. Specifically, we hope to improve our storm water detention requirements, complete our storm water quality guidance to supplement the regulations, and seek additional premium discounts for the residents of Williamson County under the Community Rating System.

Sewage Disposal Management

Introduction

The Department of Sewage Disposal Management is charged with the task of ensuring that the laws of Williamson County regarding the use and placement of individual, on-site subsurface sewage disposal systems (i.e., septic systems), are fairly implemented and enforced so as to protect:

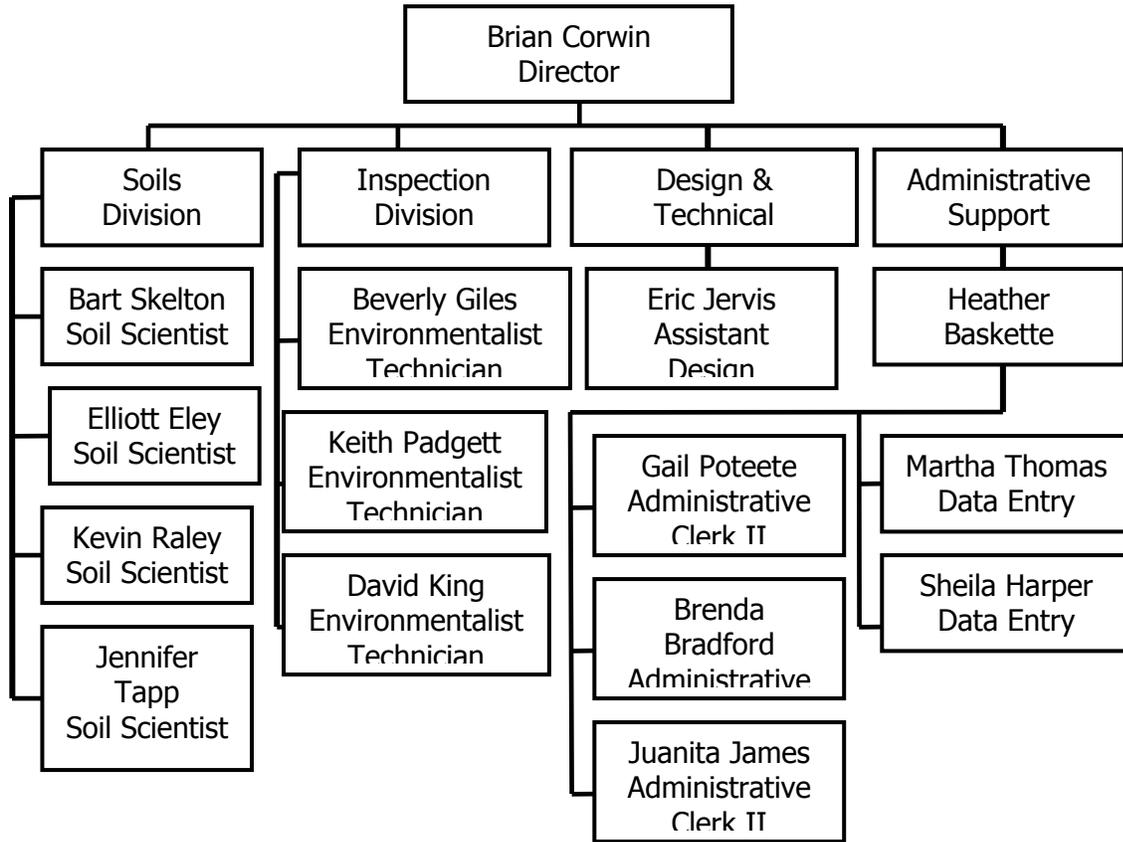
- the health and well-being of the general public;
- the irreplaceable groundwater and surface water resources of the County; and
- the quality of the environment which the citizens of the County enjoy.

The Department is empowered to regulate subsurface sewage disposal in accordance with Tennessee Code Annotated Title Sixty-Eight (68), Chapter Two Hundred Twenty One (221), Part Four (4). In January of 1993, pursuant to provisions outlined in said code, Williamson County chose to enter into and executed an agreement (i.e., contract) with the Tennessee Department of Environment and Conservation (TDEC) to implement the provisions of this part of the state code in its area of jurisdiction. Additionally, the Department is governed by the Board of Health of Williamson County. The ten members of the Board of Health have the power to promulgate all regulations, rules and policies of the Department, and grant variances of such rules when deemed appropriate and necessary.

Williamson County Government has jurisdiction over all proposed or existing septic system installations within the boundaries of Williamson County. In addition to the lands governed by the County, this jurisdiction also includes all land areas contained within the boundaries of the incorporated cities and towns, which lie within the County. Thus, the Department of Sewage Disposal Management is the agency charged with the implementation, interpretation, and enforcement of the regulations. In addition to the State of Tennessee's *Rules of the Department of Environment and Conservation, Division of Groundwater Protection (TDEC-GWP); Chapter 1200-1-6: Regulations to Govern Subsurface Sewage Disposal Systems*, the County adopted its own set of rules in May 2000. Effective in October of the same year, the *Regulations Governing On-Site Sewage Disposal Systems of the Williamson County Department of Sewage Disposal Management* are no less stringent, and in many respects are more stringent, than the state regulations.

Our office is located on the fourth floor of the Williamson County Administrative Complex in Suite 411. Brian K. Corwin is the Director and is assisted by Office Manager, Heather Baskette. The department staff is divided into four groups: Soil Scientists, Inspectors, Design Review, and Clerical.

Department Organizational Chart



Board of Health Members

The Williamson County Board of Health is composed of ten members, including Chairman and County Mayor Rogers Anderson, Dr. Charlie Beauchamp, Becky Brumley, Cyndy Howes, Martin Myers, III, Dr. Gary Owen, Jeanna Roush, Dr. C.A. Stillwell, Jorja Trocino, and Dr. Joseph Willoughby.

Department Overview & Quantitative Data

In order to carry out our mission, the Department is directly involved and oversees every aspect associated with on-site subsurface sewage disposal within the County limits. This “cradle-to-grave” approach begins with the earliest phases of property development, continues through final system installation and on throughout the life of the system. The implementation of this process encompasses much more than simply permitting systems. It involves every aspect associated with the permitting process and in essence has evolved into a form of quality control to ensure the protection of public health and the environment with regard to sewage disposal. These Departmental responsibilities and processes, and their statistics, are further explored in the following paragraphs.

Soil Assessment

Soil assessment involves the processes, practices and techniques utilized to evaluate the soils on a parcel of land to determine whether or not those soils will support the installation of a subsurface sewage disposal system. These soil assessment methodologies include soil mapping, percolation tests and general soil surveys. The Department's soil scientist staff manages this aspect of the program. Part of this responsibility includes the review and approval of all soil maps and percolation tests submitted by independent consultants for conformance with the regulations, as well as with accepted soil science standards.

Soil Maps

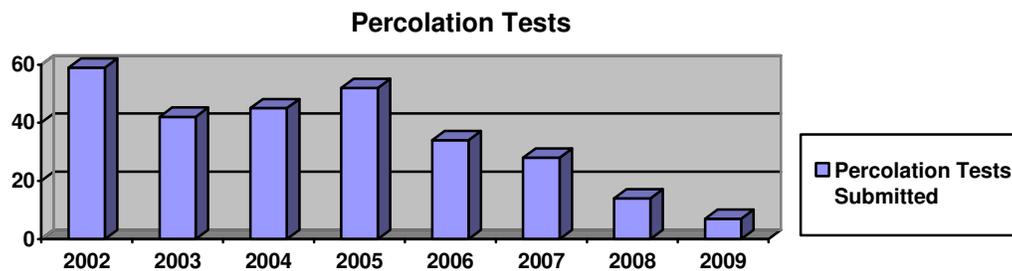
In 2009, the Department received four (4) applications for preliminary soil investigations. According to fees collected, the soils division completed seven (7) soil maps totaling 5.25 acres in 2009. The Department also completed seven (7) soil maps in 2008.

Responsibilities of Department Soil Scientists also include on-site verification of soil maps submitted by private soil consultants. In 2009, 77 soil maps were verified by Department staff, 39 less than were reviewed the prior year.

Percolation Tests

Although much more sophisticated and accurate methodology is available for soil evaluation, percolation tests are still accepted in limited situations for property development. In 2009, only seven (7) percolation tests were received for evaluation by the Department versus fourteen (14) in 2008. As noted in Figure 7 below, the use of percolation tests is continuing to decline.

Figure 6



Property Development

Utilizing the soil assessment information, a land parcel can then be evaluated for suitability for the use of subsurface sewage disposal systems. Department staff oversees this process for both platted and un-platted parcels of land. This involves working with independent consultants (e.g., surveyors, engineers, etc.) on everything from lot configuration, to the determination of system type, to area sizing and setback requirements, among a multitude of other things. These responsibilities include the review and approval of subdivision plats (and their revisions) for adherence to all applicable laws and regulations.

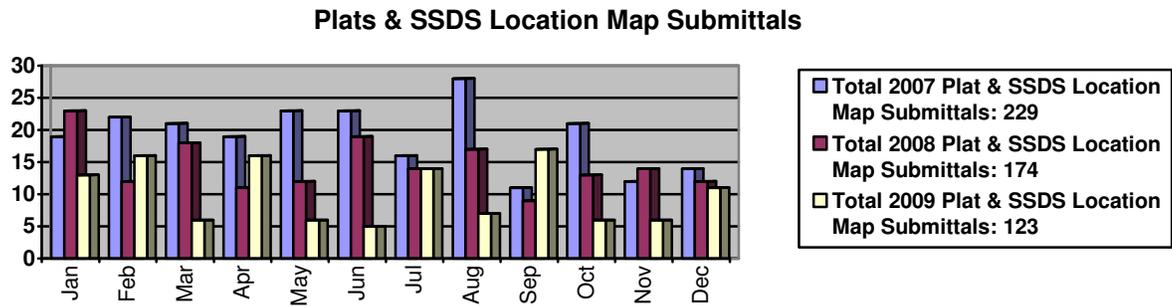
Subdivisions and SSDS Location Maps

Any proposed subdivision of land which requires the use of subsurface sewage disposal systems, or any individual lot of any size which requires location of suitable septic areas in order to be deemed buildable, must be reviewed and approved by the Department. The resulting

Subdivision Plat (which also requires concurrent review and approval by the Planning Department) or Subsurface Sewage Disposal System Location Map must be recorded in the Register of Deeds Office before septic system *Construction Permits* can be issued.

The Department realized a sharp drop in Plat and Location Map submittals in 2009, due to a slowdown in real estate development and construction. Based upon processing fees of \$23,750.00 collected in 2009, the Department received and reviewed approximately 123 Final Plat and SSDS Location Map submittals, depicting approximately 190 subdivision and individual lots. This represents a decrease in reviews of individual lots of approximately 44% from the previous year's 341. These statistics do not include Preliminary Plat reviews, Sketch Plan reviews, or reviews of re-submittals required to rectify errors and omissions. See Figure 8 below.

Figure 7



Alternative & Experimental System Designs

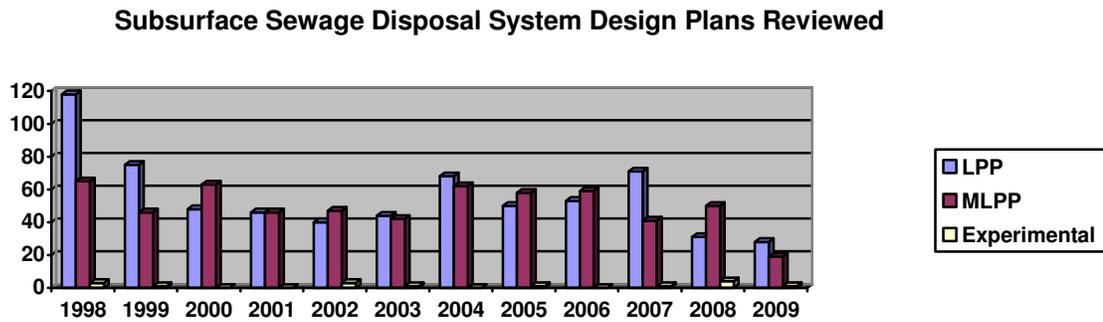
All alternative and experimental on-site wastewater systems are required to be designed by a licensed engineer. The Department’s design review staff oversees the review and approval of all system design plans for conformance with the regulations, as well as with accepted engineering practices and standards.

Three types of alternative systems are utilized in Williamson County; standard Low Pressure Pipe (LPP) systems not requiring soil modification; Modified Low Pressure Pipe (MLPP) systems requiring soil modification; and Mound systems. The use of experimental systems is rare and restricted to repair purposes only, where proper soil conditions do not exist for installation of a code compliant system.

Relative to the dearth of activity in real estate development and the building industry, construction of new septic systems requiring design plans in Williamson County has continued to decline from a three-year high of 112 in 2007. Only 48 design plans were reviewed in 2009, with 28 of those being LPP, 19 MLPP, and one being an experimental system. See Figure 9 below. Those 48 design plans represent a 44% decrease from the 86 design plans reviewed in 2008.

It is interesting to note that of the 48 design plans reviewed in 2009, 43 (approximately 90%) required revisions and, of those, 33% required at least a second round of revisions. Each set of revised design plans had to then be re-reviewed by staff. This “revision” trend has been fairly stable over the last few years.

Figure 8

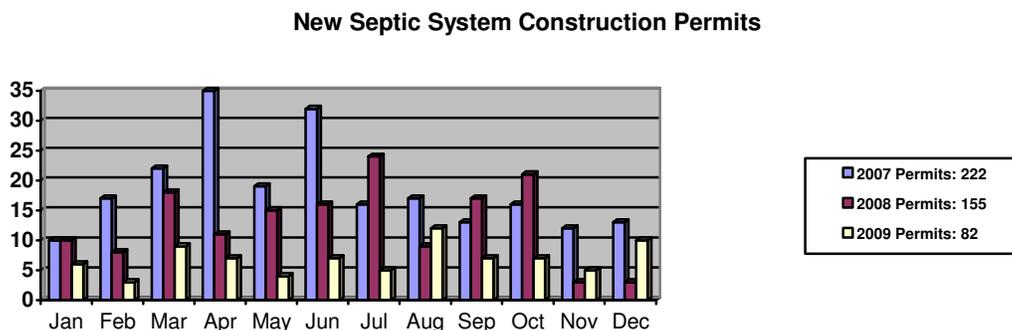


Construction Permits

The Department not only issues permits for the construction of new subsurface sewage disposal systems, but also for the upgrade or enlargement of existing systems, as well as for the repair and/or replacement of malfunctioning and failing systems. In addition to the above-noted processes associated with permitting new systems, Department personnel are also involved with the evaluation of individual site plans and building floor plans to ensure that a proposed structure is in compliance with applicable rules, regulations and approvals. For existing systems that are failing and malfunctioning, the Department personnel are charged with investigating, evaluating and prescribing remedies to fix those problems.

Anyone constructing, altering, extending, modifying, or repairing, either alternative or conventional subsurface sewage disposal systems within Williamson County, must hold a valid *Construction Permit* issued by the Department. The recipient of a permit for construction of a system (i.e., the property owner or builder) is held responsible for adhering to the construction requirements of the *Regulations*. In 2009, the Department issued a total of 82 permits for the construction of new subsurface sewage disposal systems in the County, a 47% decrease from the 155 permits issued in 2008. See Figure 10 below.

Figure 9

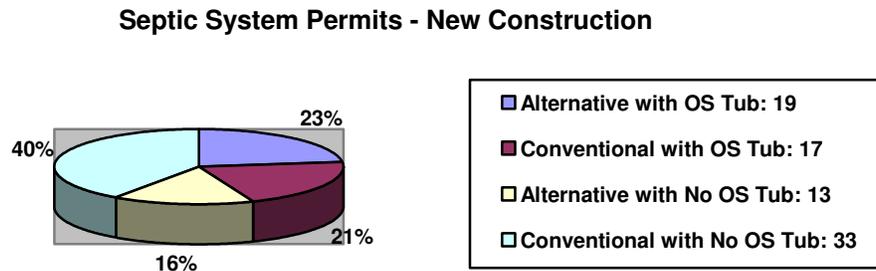


Through a series of steps, the department determines the type of septic system that is appropriate for use with the construction of a new structure, and for expansion or modification of an existing structure. System type is determined by the soil conditions of the property, number of bedrooms in the structure, and whether or not oversized bathing fixtures will be included in residential

construction; commercial structures are evaluated by proposed use and other factors. In 2009, conventional permits represented 61% of all new septic system construction.

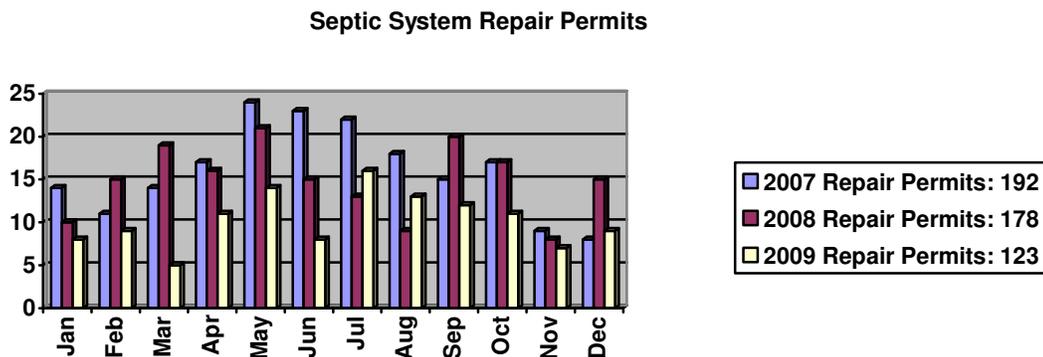
The consumer affinity for oversized Jacuzzi or garden tubs continued to trend down in 2009, with only 44% of new construction permits including an oversized bathing fixture. Permits with oversized tubs represented 52% in 2008 and 68.5% in 2007. See Figure 11 below.

Figure 10



The Department has equal authority over the repair of existing systems, which may be required for a variety of reasons, including upgrading non-conforming systems due to remodels and expansions of structures and repairing failing systems which may be a threat to public health and/or the environment. Three year figures show a sustained reduction in repair permits issued in Williamson County. In 2009, 71 repair permits were written for septic system failures versus 52 system repairs for other reasons, totaling 123 repair permits, a 31% reduction from 2008. In 2007 and 2008, repair permits issued numbered 192 and 178 respectively.

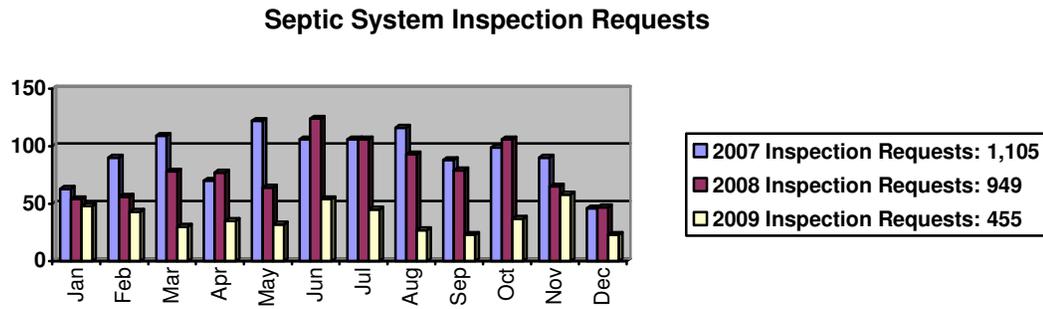
Figure 11



System Inspections

During the actual installation of new systems and the repair, modification or upgrade of existing systems, the Department’s inspection personnel oversee all construction related activities. System installations must be supervised from start to finish and the County *Regulations* detail a very rigorous inspection process at various stages throughout the installation to ensure adherence to all applicable regulations, permit details and construction standards. The number of inspections required depends upon the complexity of the system or repair. In 2009, approximately 455 inspections were requested versus 949 in 2008, and 1,105 in 2007. Thus in 2009, an average of 1.83 inspections were requested per day, a decrease of 52% from the prior year. See Figure 13 below.

Figure 12

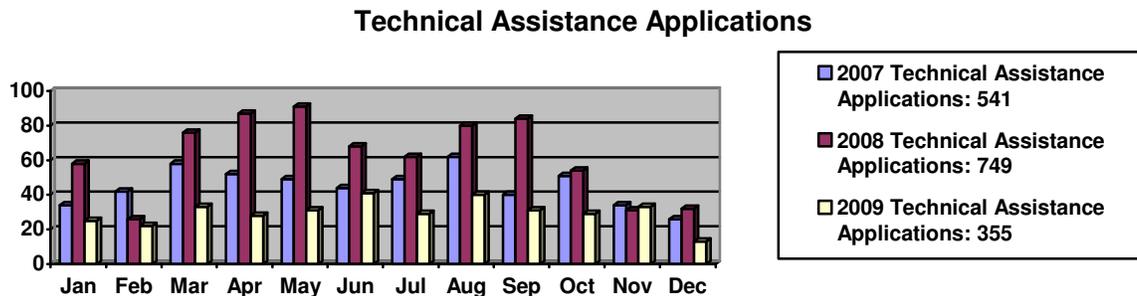


After all inspections are completed and final approval is granted to a system installation, whether new or repaired, the Department will issue a *Certificate of Completion*. In 2009, approximately 187 *Certificates of Completion* were issued by the Department versus approximately 296 in 2008, a decrease of approximately 37%. Only after issuance of such certificate may a property owner receive a *Certificate of Occupancy* for that structure from the Building Codes Department.

Other Department Services

Any modification to a property serviced by a subsurface sewage disposal system in Williamson County automatically triggers the completion of a *Technical Assistance Application* with the Department, an on-site inspection by a Department staff member, review of pertinent documentation, and approval by the Department, whether or not an actual septic permit is required. Typical modifications include projects such as swimming pools, attached or detached garages, out buildings (e.g., sheds, barns, etc.), sunrooms, patios, decks, porches, and other minor external or internal remodeling or cosmetic improvements. In 2009, the Department processed approximately 355 *Technical Assistance Applications* versus 749 in 2008, a 53% decrease; although, applications had shown an increase from 2007 to 2008 of 38%.

Figure 13



Included in the Technical Assistance group are two community services the Department provides for the convenience of the public. One of these, system recertification, has become increasingly important and numerous in the past few years because of recent state legislation placing liability on realtors, or sellers of real estate, for the misrepresentation of compatibility of a home’s size (i.e. number of bedrooms) with its septic system permit restrictions. In 2009, the Department made 40 recertification inspections versus 30 in 2008, a 33% increase. The second service, collecting and processing water samples for the purpose of identifying various contaminants in wells, springs and other private drinking water sources, requires the on-site collection of a sample by a Department

Inspector. Processing of the specimen is completed by a state laboratory within 7-10 days, which is followed by written notification of the results to the applicant. Only three water samples were gathered by the Department for analysis in 2009, no change from 2008 figures.

The Department provides a number of services that do not have fees directly associated with them, and therefore, have not been reported in previous annual reports. Homeowners who have suffered losses due to burnouts or tornadoes are not charged fees to process permits to repair or rebuild their homes. The Department processed 5 applications in 2009 for repairing burned homes and/or tornado damage from the February 5, 2008 storm.

Additionally, homeowners hooking to sewer and abandoning their septic systems must comply with County Regulations specifying the manner in which the tank is rendered unusable, in order to address public health concerns. Although verification of proper abandonment procedures is required, no fees are assessed to homeowners for inspections of abandoned tanks.

Finally, lot checks, flagging of existing systems, field sketches of sites, etc., are services often required during the review of Plats or SSDS Location Maps; and, soil surveys are performed by the Department for landowners who meet certain criteria and want to build a residence for themselves on their own properties. Fees for these services are not charged individually, but rather are included as a portion of permit or plat review fees. In 2009, the Department completed approximately 68 lot checks and 31 soil surveys.

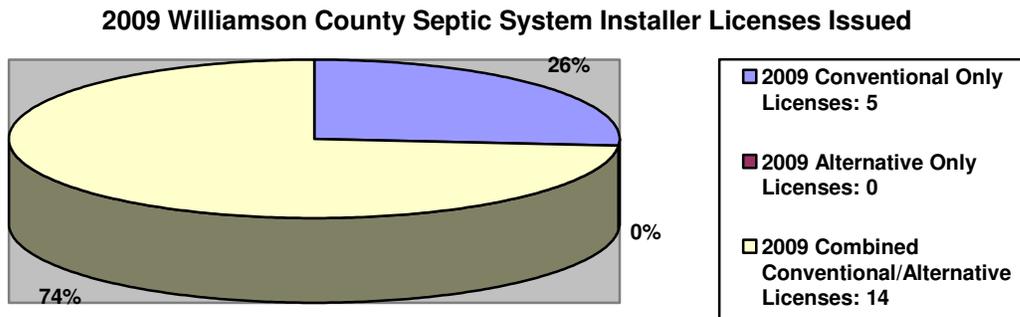
Licensing of Septic System Installers

Construction, modification, or repairs of subsurface sewage disposal systems within Williamson County may only be conducted by persons holding a valid installers license and identification card issued by the Department of Sewage Disposal Management. The Department issues three types of installer licenses: Conventional, Alternative, and Conventional and Alternative. Persons wishing to be licensed in Williamson County must:

- Obtain the corresponding licenses through the Tennessee Department of Environment and Conservation, Division of Ground Water Protection;
- Provide a Letter of Credit or Surety Bond;
- Pay an annual license fee;
- Demonstrate thorough knowledge and understanding of the Department's *Regulations Governing On-Site Sewage Disposal Systems*; and
- Successfully complete a probationary period under the direct supervision of the Department.

Installers must renew their licenses with TDEC-GWP and the Department annually. In 2009, the Department issued 19 installer licenses, 14 of which were Conventional and Alternative, 5 Conventional only, and no Alternative only. Total installer licenses issued decreased 3% from the prior year total of 27 installer licenses.

Figure 14



Pumpers

The Department has regulatory authority over all septic tank pumping contractors conducting business in Williamson County. This includes the permitting of individuals allowed to conduct such operations as well as oversight to ensure the proper disposal of all collected septage. Although the Department does not require a separate County license for pumping contractors to operate in Williamson County, they are required to provide the Department with a valid copy of their state *Septic Tank Pumper Permit* issued by TDEC Division of Ground Water Protection. Additionally, they are required to file with the Department a valid copy of their *Wastewater Discharge Permit for Wastewater Haulers* with a wastewater treatment facility approved by the TDEC Division of Water Pollution Control.

Miscellaneous

The Department also has regulatory authority over all product and technology approvals proposed for use in conjunction with on-site wastewater systems in Williamson County. Department staff reviews such proposals on an individual, case-by-case basis.

Technology Initiatives - Z-Miscellaneous Receipts

On January 2, 2009, the Department successfully converted its antiquated Paradox based receipt system to Local Government Corporation's *Z-Miscellaneous Receipts* system. The software, purchased in 2008, upgraded the Department's internal bookkeeping and accounting processes and procedures. The new accounting system meets specific needs for receipting, record keeping, and report writing, and complies with auditors' security requirements.

Department Checklists

At the end of 2007, the Department committed to develop a series of written guidelines for distribution to the public. Development of the checklists began in 2008 with the completion of the first three, and continued into 2009. A total of nine different guidelines were finalized and put into use by the end of last year. These checklists, although not necessarily all-inclusive, are intended to guide applicants through the Department's various and sometimes daunting processes required to obtain approval for modification of parcels of land serviced by subsurface sewage disposal systems. Forms now available at the Department Service Counter include:

- *Steps to Obtain a Septic Permit for New Construction*
- *Steps to Obtain a Septic Permit for a New Single Family Residence on 5 Acres or More Based on a Percolation Test*

- *Steps to Obtain a Septic Permit Based on Soil Mapping*
- *Steps to Obtain a Septic Permit for a New Single Family Residence on Five Acres or More Based on a Soil Survey by Sewage Disposal Management*
- *Steps to Obtain Approval by Technical Assistance*
- *Soil Assessment Options*
- *Application Requirements for Commercial Structures*
- *Checklist for Subdivision Plat & SSDS Location Map Submittals*
- *Pre-Application Meeting Summary.*

Continuing the process at the end of last year, the Department began a tedious review of inspection guidelines for septic system installations in the County Regulations, in order to re-write the inspection checklists used on site by staff for each type of system installation (*i.e.*, Conventional, LPP, MLPP, Experimental, and Repair). This endeavor was initiated to streamline and standardize inspection procedures, provide an instrument for more detailed and thorough recording of information, and to increase staff accountability. All necessary inspection checklists will be completed, tested in the field, and fully implemented in 2010.

Regulations – Amendments & Review

In 2009, the State of Tennessee Department of Environment and Conservation, Division of Ground Water Protection (*i.e.* TDEC-GWP) enacted numerous new regulations related to subsurface sewage disposal systems, of which only two impacted the regulations promulgated by this Department. As a contract county with TDEC-GWP, Williamson County's regulations must be at least as stringent as theirs. Therefore, the Department had to make adjustments to the county regulations to reflect changes in the state regulations. On December 15, 2009, the Williamson County Board of Health adopted the new regulations and imposed an effective enforcement date of January 1, 2010.

1. First, new regulations were adopted requiring rodent guards, meeting minimum regulatory requirements, to be placed at the end of outlet pipes associated with drainage improvement practices (*i.e.*, curtain drains, interceptor drains and drawdown drains).
2. The second change to the regulations impacts the design and construction of large conventional systems, defined as those serving a structure with a wastewater flow in excess of 750-gpd. These large systems must now be dosed systems designed by a licensed engineer. Said design plans are subject to all of the parameters currently in place for alternative systems in Williamson County.

Recently, the Tennessee Department of Agriculture enacted new regulations and requirements regarding domestic kitchen facilities. Since passage of those new requirements, the Department has had numerous applications from county residents wanting to operate domestic kitchens out of their homes. In order to address any concerns, and to protect the integrity of affected septic systems, the Department enacted new regulations to address these situations.

Thus, the third and final amendment to the regulations in 2009 defines a domestic kitchen and sets forth requirements for same to process non-potentially hazardous foods for commercial sale. It requires the use of grease traps, or alternatively, the following procedures:

- Proof of pumping of septic tank(s) and pump tank(s) by a licensed contractor within past 3 years;
- Annual septic tank effluent tests for specific constituents by a qualified laboratory;
- Specific septic tank effluent sampling levels of BOD, TSS, and FOG shall not be exceeded. If any one of the maximum levels is exceeded, a grease trap must be installed;
- Submission of septic tank effluent sampling results in writing to the Department within 30 days of expiration of one year of the issuance of the zoning certificate, or within 30 days of each annual anniversary date thereafter.

The current Departmental *Regulations* have now been in place for over nine years. During that time, only a few minor edits and revisions have been made. There are numerous areas of the *Regulations* in need of revisions and adjustments. While some of these are minor, others may be more involved.

In 2009, the Department began the process of identifying and addressing any immediate needs associated with the *Regulations*, with the subsequent intentions to transform it into more of a “working” document with ongoing annual reviews and revisions. The first step was the issuance of a *Request for Qualifications*, and the subsequent selection of the consulting firm, Smith Seckman Reid, Inc. (SSR), to conduct a thorough review and the associated outreach in order to critique the *Regulations*. During 2009, the firm identified stakeholder groups with which they held public meetings, and completed the outreach process to critique the regulations. They also began the comparison of Williamson County *Regulations* with state regulations, and with regulations of other entities across the country. The next step for SSR is to compile their findings and recommendations into a report to present to the Department and BOH in 2010. After which, the actual revision process to the *Regulations* is expected to take place the following year.

Meadowgreen/Grassland Area Sanitary Sewer Construction Project

In April 2009, the County partnered with the City of Franklin to coordinate the Meadowgreen/Grassland Area Sanitary Sewer Construction Project. This project was begun earnestly to provide relief to neighborhoods sustaining continued septic system failures. The subdivisions designated in the sewer project include Farmington, Hillsboro Acres, East Side of Berry’s Chapel Road, and Meadowgreen in Franklin. Coordinated by Smith Seckman Reid, Inc., the consulting firm, the 18 month public infrastructure construction started in July 2009. Homeowners connecting to sewer are required to properly abandon their existing subsurface sewage disposal systems according to Williamson County Regulations. Proper abandonment requires a final inspection by the Williamson County Department of Sewage Disposal Management to ensure all conditions are met. All work is expected to be completed with connection to City of Franklin sewer by December 31, 2010. The Department of Sewage Disposal Management is working with all parties involved with the sewer construction project to ensure a smooth transition from septic to sewer.

Commendations

In 2009, several Department employees reached goals, participated in activities, and received industry recognition worthy of acknowledgement.

Jennifer Tapp successfully completed training necessary to obtain Tennessee Erosion Prevention & Sediment Control Program Level I certification by the Tennessee Department of Environment and Conservation.

Kevin Raley served as Southeast Region Representative to the National Society of Consulting Soil Scientists Board of Directors, completing his second of a two-year appointment as a member of the Board of Directors. In December 2009, he renewed his status as Registered Professional Soil Scientist through the National Society of Consulting Soil Scientists, and as Certified Professional Soil Scientist and Certified Professional Soil Classifier through ARCPACS/ASA. He also began serving a 3-year term on the Council of Soil Science Examiners (CSSE) for the development of the ARCPACS-CPSSE exam required for national certification of soil scientists. Mr. Raley continued to fulfill his responsibilities as Secretary/Treasurer of the Soil Scientists Association of Tennessee, and was elected to a three-year term as Director Representing Soil Scientists to the Tennessee On-site Wastewater Association (TOWA). During the year, he also obtained his level I Certification in Tennessee Erosion Prevention & Sediment Control.

Department Director Brian K. Corwin continued to serve as Treasurer on the Tennessee On-Site Wastewater Association (TOWA) Board of Directors. This is his tenth consecutive year serving on the TOWA board, with past positions including Secretary, President and Regulator Representative. Mr. Corwin remained the Secretary and Treasurer for The Tennessee Section of the American Society of Agricultural and Biological Engineers, a position he has held since 1999. The Department Director received certification from the Consortium of Institutes for Decentralized Wastewater Treatment as a High-Strength Wastewater System Trainer in 2009. Brian fulfilled his fourth stint as guest lecturer for the Florida On-Site Wastewater Association's continuing education programs for Florida septic system contractors. He returned as guest lecturer for the Career Opportunities Class at the University of Tennessee Department of Biosystems Engineering and Soil Science, a class he has taught every fall since 1998.

Office Manager Heather Baskette has completed 70 hours of training in the County Officials Certificate Training Program, a program administered by the University of Tennessee County Technical Assistance Service. The COCTP offers comprehensive knowledge of the inner workings of county government to afford graduates a better understanding of the county as an entity, and provides specialized administrative, management and leadership training to help them run their offices more effectively. Heather plans to attend the 2010 Capstone Event, the final requirement for her to receive the Certified Public Administrator designation.

Department Goals for 2010

The Department of Sewage Disposal Management has established a number of goals for the upcoming year. Department management and staff will continue to evaluate the Department's internal organizational structure and to improve utilization of the technology initiatives begun previously. In addition, the Department will continue to review and update its practices and procedures, and maintain its focus on providing friendly, efficient and effective customer service.

In 2007, Sewage Disposal Management, along with all other departments under the Community Development umbrella, took part in the design, testing, and initial roll-out of *Laserfiche*, an innovative work-flow and document storage program. Throughout 2008 and 2009, Department staff continued to work with the *Laserfiche* software development team with expectations that the goals we had originally envisioned would have already been accomplished. The Department is hopeful that the next phase of *Laserfiche* implementation will begin in 2010, and will encompass the following goals:

- Designing electronic forms, which would allow information about a parcel to be keyed at the time of collection into a shared database electronically, improving clerical efficiency and allowing instant interdepartmental access.
- Converting and transferring existing electronic database information into *Laserfiche* to preserve historical data on parcels.
- Developing procedures to begin scanning and electronically archiving newly created and existing property information into the *Laserfiche* system to reduce physical storage requirements and improve records retention and retrieve-ability.
- Developing the Department's own workflow tracking unit to track projects through its unique processes and services.

High speed, sophisticated *Laserfiche*-compatible scanning equipment, which will accommodate various paper formats, is already in place in anticipation of implementing the above electronic filing, archiving, and records retention goals.

In 2010, the Department hopes to work with the County Attorney to develop an official Records Retention Policy in accordance with Williamson County Public Records Commission guidelines. That process will define the procedures required to begin identifying, preparing, and processing qualifying documents into the *Laserfiche* archiving system. Specific laws and regulations must be followed with regard to the archiving and disposal of various government documents and records. Due to the ever decreasing storage space for paper records and files, coupled with the implementation of new electronic storage technology, this issue is of critical importance to the Department.

In 2009, full implementation of global positioning system (GPS) equipment and AutoCAD (Computer Aided Drafting) software was realized, allowing the Department to gather precise information in the field, view and manipulate the data electronically, and memorialize it in permanent electronic files, enabling Department staff to make more informed decisions with a greater degree of certainty. In 2010, the Department plans to develop additional applications for this technology including the design and implementation of an electronic version of the *As-Built* drawing and *Certificate of Completion* for septic system installations, site inspection sketches, and *Technical Assistance* drawings, which are currently hand-drawn.

Finally, in the upcoming year, the Department pledges to continue its core work of administering the County's *Regulations Governing On-Site Sewage Disposal Systems* in a thorough and equitable manner in order to protect the health and well-being of the public, the groundwater and surface water resources, and the quality of the environment of Williamson County. Additionally, the department staff will strive to improve technology, procedures, and services to ensure processing of septic system related projects is a timely and pleasant experience for its customers.