

# **BOARD OF SUPERVISORS**

## **Agenda Item**

<b>Meeting Date:</b>	February 21, 2017
<b>Title:</b>	Consider an Amendment to the County's Subdivision Ordinance, Chapter 22-118, "Water and Sewer" Regarding Capacity of Onsite Sewage Systems; and Consider an Ordinance Amendment to County Code Sec. 25-161, "When Required; When Prohibited;" Sec. 25-162, "Certificate Required Prior To Construction;" Sec. 25-165, "Type, Capacity, Location, Etc.;" and Sec. 25-166, "Inspection"
<b>Department:</b>	Planning and Zoning Utilities
<b>Staff Contact:</b>	Jeffrey A. Harvey, AICP, Planning Director Jason D. Towery, PE, Utilities Director
<b>Board Committee/ Other BACC:</b>	Community and Economic Development Committee; Planning Commission; Utilities Commission
<b>Staff Recommendation:</b>	Approval
<b>Fiscal Impact:</b>	N/A
<b>Time Sensitivity:</b>	N/A

### **ATTACHMENTS:**

1.	Background Report	5.	Resolution R16-366
2.	Proposed Ordinance O17-06	6.	PC Minutes dtd 1/11/2017
3.	Proposed Ordinance O17-09	7.	UC Minutes dtd 1/17/2017
4.	Resolution R16-365		

	<b>Consent Agenda</b>		<b>Other Business</b>		<b>Unfinished Business</b>
	<b>Discussion</b>		<b>Presentation</b>		<b>Work Session</b>
	<b>New Business</b>	X	<b>Public Hearing</b>		<b>Add-On</b>

### **REVIEW:**

X	County Administrator	<i>Thomas C. Foley</i>
X	County Attorney (legal review only)	<i>Charles A. Thomas</i>

<b>DISTRICT:</b>	N/A
------------------	-----

## **BACKGROUND REPORT**

In 2008, there were three amendments to the Stafford County Code affecting the Subdivision and Utilities Ordinances, 008-05, 008-06, and 008-07. Those amendments set minimum area requirements for on-site sewage disposal systems (drainfields). The Subdivision Ordinance requirements affect how new residential lots are created, and the Utilities Ordinance regulates requirements for new construction and repair of drainfields. Representatives from the development community expressed concerns about the ordinances, how they affect the design of the new drainfields, and ability to repair existing drainfields. Staff from the Departments of Utilities and Planning and Zoning met with industry representatives and the Virginia Department of Health (VDH) on several occasions to discuss the following concerns: (1) how the current Ordinance addresses drainfield size rather than drainfield capacity to treat septic tank effluent; and (2) how repairing failing drainfields built prior to 2008 is difficult because they may have limited area for reserve drainfields.

At its December 13, 2016 meeting, the Board referred Resolutions R16-365 and R16-366 to the Planning Commission and the Utilities Commission, respectively, to review amendments to the County Code. Proposed Ordinance 017-06 would amend the on-site sewage disposal standards in the Subdivision Ordinance for the creation of new lots and boundary line adjustments in order to facilitate repairs. The standards would be changed to reflect treatment capacity of the drainfields rather than surface area of where they would be located on a lot. Drainfields are proposed to have a minimum treatment capacity of 150 gallons per day (gpd) per bedroom for single-family detached homes on individual lots. Community drainfields would have a minimum treatment capacity of 300 gpd per dwelling unit on a peak flow basis. The minimum required areas of the drainfield and the reserve drainfield would be eliminated. They currently are 2,500 square feet for alternative systems and 4,000 square feet for conventional systems. The proposed amendment would also eliminate the minimum size requirements for onsite sewage disposal systems located on existing improved parcels where an existing on-site sewage disposal system has failed, is to be upgraded, or is subject to a boundary line adjustment.

Proposed Ordinance 017-09 would amend the on-site sewage disposal standards in the Utilities Ordinance for design, construction, inspection and repair of existing and proposed on-site sewage disposal systems. Like proposed Ordinance 017-06, the standards would be changed to reflect treatment capacity of the drainfields (150 gpd and 300 gpd) rather than surface area. The minimum required areas of the drainfield and the reserve drainfield would be eliminated. The proposed Ordinance amendment would also eliminate the acceptance of VDH conditional permits. Conditional permits may be used to circumvent the VDH minimum standards, and allow for deed restrictions to be placed on a property in order to reduce design requirements. Deed restrictions may include such things as limiting the dwelling to a certain number of occupants, or requiring that the residence be served by low flow fixtures for the life of the property. Stafford County and VDH do not have a reasonable means to enforce these deed restrictions. And finally, the proposed Ordinance amendment provides additional relief for properties with onsite sewage disposal systems which have failed, need to be repaired, or are to be upgraded, and where a boundary line adjustment is not permissible or would otherwise create a non-conforming lot. In these situations, property owners would be allowed to request a waiver for off-site easements. Easements may be permitted for both private and/or community sewage disposal systems. There are other minor updates for which the proposed Ordinance amendment provides such as a more clear definition for a community drainfield, a change to the burial depth, and separation thresholds for disposal fields required to disperse secondary, pretreated effluent, and other minor clarifications.

Staff shared the draft amendment with the Fredericksburg Area Builders Association (FABA), local Alternative On-Site Engineers (AOSEs), and VDH for review and comment. Overall, the development community has been in favor of modifying the current Code since it has been confusing and is overly burdensome. Treatment capacity is determined by the amount of effluent discharged into the soil, and the soil's ability to absorb the effluent rather than a predetermined square footage of land area. Drainfield systems that are located in areas with soils that have poor absorption capability require larger surface areas compared to systems located where soils have good or excellent absorption capability. State Code provisions limit the County's ability to adopt more restrictive standards for drainfield systems. Virginia Code § 32.1-164 stipulates that the State Board of Health *"...shall govern the collection, conveyance, transportation, treatment and disposal of sewage by onsite sewage systems and alternative discharging sewage systems and the maintenance, inspection, and reuse of alternative onsite sewage systems...."* <http://law.lis.virginia.gov/vacode/title32.1/chapter6/section32.1-164/> The statute does not delegate authority to localities to establish additional standards.

Virginia Code § 15.2-2157 <http://law.lis.virginia.gov/vacode/title15.2/chapter21/section15.2-2157/> specifically states that a locality cannot prohibit the use of alternative drainfields or require maintenance standards that are more rigorous than the State Board of Health.

The Planning Commission recommended approval on a 7-0 vote with a caveat that the proposed Ordinances should be amended to 360 gallons per day per bedroom. The Utilities Commission recommended approval on a 6-0 vote with no exceptions to the proposed language.

Staff recommends approval of proposed Ordinances 017-06 and 017-09, which would amend the County's Subdivision Ordinance, Sec. 22-118, "Water and Sewer" regarding capacity of onsite sewage systems; and the Utilities Ordinance, Sec. 25-161, "When Required; When Prohibited;" Sec. 25-162, "Certificate Required Prior To Construction;" Sec. 25-165, "Type, Capacity, Location, Etc.;" and Sec. 25-166, "Inspection."

PROPOSED

BOARD OF SUPERVISORS  
COUNTY OF STAFFORD  
STAFFORD, VIRGINIA

ORDINANCE

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 21<sup>st</sup> day of February, 2017:

-----  
MEMBERS:

Paul V. Milde, III, Chairman  
Meg Bohmke, Vice Chairman  
Jack R. Cavalier  
Wendy E. Maurer  
Laura A. Sellers  
Gary F. Snellings  
Robert "Bob" Thomas, Jr.

VOTE:

-----  
On motion of , seconded by , which carried by a vote of , the following was adopted:

AN ORDINANCE TO AMEND AND REORDAIN STAFFORD  
COUNTY CODE SEC. 22-118, "WATER AND SEWER"

WHEREAS, on March 18, 2008, the Board adopted Ordinance O08-05 which established minimum standards for on-site sewage disposal systems for lots to be subdivided, including boundary line adjustments; and

WHEREAS, since the adoption of Ordinance O08-05, designers of sewage disposal systems have raised concerns about the disparate size requirements for sewage disposal systems because the ordinance sets minimum size requirements rather than minimum capacity requirements for such systems; and

WHEREAS, the Board believes that the effect of Ordinance O08-05 does not meet its intended purpose of preventing drainfield failures because it does not address absorption capacity of sewage disposal systems, and imposes unreasonable standards on existing homeowners that are attempting to repair failed systems; and

WHEREAS, the Board carefully considered the recommendations of the Planning Commission and staff, and public testimony, if any, received at the public hearing; and

WHEREAS, the Board finds that public necessity, convenience, general welfare, and good subdivision practice require the adoption of such an ordinance;

NOW, THEREFORE, BE IT ORDAINED by the Stafford County Board of Supervisors on this 21<sup>st</sup> day of February, 2017, that Stafford County Code Sec. 22-118, "Water and Sewer" be and it hereby is amended and reordained as follows, with all other provisions remaining unchanged:

**Sec. 22-118 - Water and sewer**

The following requirements apply to the provision of water and sewer:

(4) ~~On-site~~ Onsite sewage disposal systems:

- a. No subdivision plat, including boundary line adjustments, shall be approved where individual or community ~~septic tanks~~ onsite sewage systems are to be used until the developer has submitted documented proof to the satisfaction of the agent that the soils and parent materials are such that ~~on-site~~ onsite waste disposal methods for all lots are satisfactory, that no well pollution shall occur from the systems, ~~and that the useful life of the system shall not be less than twenty (20) years;~~ and written approval from the ~~health department~~ Virginia Department of Health shall also be submitted.
- c. The minimum ~~disposal area for~~ design capacity of each onsite sewage systems proposed to serve an individual lot in a residential subdivision comprised of single-family detached homes dispersing septic tank effluent shall be at least 150 gallons per day (gpd) bedroom on a peak daily flow basis. A community onsite disposal system shall be defined as a treatment works that serves more than three attached or detached single-family dwellings with a combined average daily sewage flow greater than 1,000 GPD or a structure with an average daily sewage flow in excess of 1,000 GPD. The minimum design capacity for community onsite sewage systems shall be at least 300 gpd per dwelling unit on a peak flow basis. four thousand (4,000) square feet of primary drainfield and a In all cases, a reserve area in accordance with subsection (4)e. below shall also be provided for each lot or community system. Larger primary drainfield areas Alternative design capacity may be required depending on soil type and the proposed use or intensity of use, as determined by the Virginia Department of Health. Stafford County will not accept conditional permits for systems that do not meet the minimum capacity requirements outlined above.
- d. ~~The minimum disposal area for systems dispersing secondary effluent or better shall be at least two thousand five hundred (2,500) square feet of primary drainfield and a reserve area in accordance with subsection (4)e. below. Larger primary drainfield areas may be required depending on soil~~

~~type and proposed use, as determined by the Virginia Department of Health.~~

- ed. For lots to be served by individual or community ~~septic tanks onsite sewage systems~~, a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site shall be identified and provided in accordance with Virginia Department of Health regulations. Stafford County will not accept conditional permits for systems that do not meet the minimum capacity requirements outlined above. In all cases, except as specified in subsection (4)~~f.e.~~ below, there shall be a reserve drainfield ~~area~~ that is equal to ~~one hundred (100)~~ percent of the primary drainfield capacity, ~~but in the case of a system dispersing secondary effluent or better, the reserve area shall be no less than two thousand five hundred (2,500) square feet. This percentage is based on both absorption capacity and land area.~~
- fe. Lots served by non-community ~~on-site onsite~~ sewage disposal systems shall have the disposal site located on the lot which they serve. No easements shall be permitted for non-community ~~on-site onsite~~ sewage disposal systems. Easements may be permitted for community sewage disposal systems. In no case, shall a boundary line adjustment reduce or give away the absorption capacity of a primary or reserve drainfield. All such lots shall have a primary and reserve drainfield of equal absorption capacity.
- gf. These standards are in addition to those contained in section 25-165 of the county Code regulating utilities.
- g. The requirements contained in subsection (4)(c) and (d) of this section shall not apply to existing improved parcels where an existing onsite sewage system has failed or is to be upgraded. Notwithstanding the provisions of this subsection, boundary line adjustments, which may be required to facilitate the repair or upgrade of an onsite sewage system shall not have the effect of reducing the primary drainfield (or reserve) capacity of an existing onsite sewage system. For the purpose of the subsection, upgrades include voluntary enhancements to improve the level of treatment or system performance, but shall not include system changes that result in an increase in the permitted capacity of the system.

PROPOSED

BOARD OF SUPERVISORS  
COUNTY OF STAFFORD  
STAFFORD, VIRGINIA

ORDINANCE

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 21<sup>st</sup> day of February, 2017:

-----  
MEMBERS:

Paul V. Milde, III, Chairman  
Meg Bohmke, Vice Chairman  
Jack R. Cavalier  
Wendy E. Maurer  
Laura A. Sellers  
Gary F. Snellings  
Robert "Bob" Thomas, Jr.

VOTE:

-----  
On motion of , seconded by , which carried by a vote of , the following was adopted:

AN ORDINANCE TO AMEND AND REORDAIN STAFFORD COUNTY CODE SEC. 25-161, "WHEN REQUIRED; WHEN PROHIBITED;" SEC. 25-162, "CERTIFICATE REQUIRED PRIOR TO CONSTRUCTION;" SEC. 25-165, "TYPE, CAPACITY, LOCATION, ETC.;" AND SEC. 25-166, "INSPECTION"

WHEREAS, on March 18, 2008 and on April 1, 2008, the Board adopted Ordinances O08-06 and O08-07, which established minimum standards for the design, capacity, location, permitting and construction of private sewage disposal systems; and

WHEREAS, since the adoption of Ordinances O08-06 and O08-07, designers of sewage disposal systems have raised concerns about the disparate size requirements for sewage disposal systems because the ordinance sets minimum size requirements rather than minimum capacity requirements for such systems; and

WHEREAS, the Board believes that the effect of Ordinances O08-06 and O08-07 does not meet the intended purpose of preventing drainfield failures because they do not address absorption capacity of sewage disposal systems, and impose unreasonable standards on existing homeowners that are attempting to repair failed systems; and

WHEREAS, the Board carefully considered the recommendations of the Utilities Commission and staff, and public testimony, if any, received at the public hearing; and

WHEREAS, the Board finds that public necessity, convenience, general welfare, and good design and construction practices require adoption of such an ordinance;

NOW, THEREFORE, BE IT ORDAINED by the Stafford County Board of Supervisors on this the 21<sup>st</sup> day of February, 2017, that Stafford County Code Sec. 25-161, "When required; when prohibited;" Sec. 25-162, "Certificate required prior to construction;" Sec. 25-165, "Type, capacity, location, etc.;" and Sec. 25-166, "Inspection;" be and they hereby are amended and reordained as follows, all other portions remaining unchanged:

**Sec. 25-161. - When required; when prohibited.**

- (a) Where a public sanitary sewer is not available under the provisions of section 25-22, the building sewer shall be connected to a private onsite sewage disposal system complying with the provisions of this article. When such a public sanitary sewer is available, it shall be unlawful for any person to construct or ~~maintain~~ repair any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.

**Sec. 25-162. - Certificate required prior to construction.**

A private onsite sewage disposal system may not be constructed within the county, unless and until a certificate is obtained from the ~~director~~ Director of Utilities stating that a public sewer is not accessible to the property and no such sewer is proposed for construction in the immediate future. No certificate shall be issued for any private onsite sewage disposal system ~~employing subsurface soil absorption facilities, where the area is less than specified by the county health department~~ unless and until a valid construction permit is issued by the Virginia Department of Health. Stafford County will not accept conditional permits for systems that do not meet the minimum capacity requirements of 150 gallons per day (GPD) per bedroom for private onsite sewage disposal systems and 300 GPD per equivalent dwelling unit for community onsite sewage disposal systems except in cases where an existing onsite sewage system has failed or is to be upgraded. For the purpose of this section, upgrades include voluntary enhancements to improve the level of treatment or system performance, but shall not include system changes that result in an increase in the permitted capacity of the system for an expansion of the structure.

**Sec. 25-165. - Type, capacity, location, etc.**

The type, capacity, location and layout of a private onsite sewage disposal system shall comply with the ~~recommendations~~ regulations of the ~~state and county health~~



~~departments~~ Virginia Department of Health. No septic tank or cesspool shall be permitted to discharge effluent into any natural outlet.

(b) Minimum standards for private onsite sewage disposal systems on all lots shall be as follows:

- (1) All disposal fields installed ~~deeper than sixty (60)~~ shallower than 18 inches below the original ground surface or installed closer than 18 inches to a limiting feature in the soil, as defined by the Virginia Department of Health regulations, shall disperse secondary pretreated effluent or better and the system shall provide a 50 percent total nitrogen reduction as compared to a conventional onsite sewage disposal system. This requirement shall apply to new and expanded drainfields, but not to repairs unless secondary effluent or better is otherwise required.
- (2) All new septic tanks and pump chambers shall be provided with an a ~~precast~~ at-grade access over the outlet structure. The access shall have a minimum open space of eighteen (18) inches by eighteen (18) inches and shall be fitted with a tamper proof child resistant cover at grade. Access shall be added to existing septic tanks and pump chambers at the time of repair or expansion requiring a Virginia Department of Health permit.
- (3) All effluent from new, expanded or repaired ~~on-site~~ onsite sewage disposal systems dispersing septic tank effluent, shall pass through an effluent filter meeting NSF International Standard 46. Effluent filters shall be added to existing septic tanks at the time of repair or expansion requiring a Virginia Department of Health permit. A reduced-maintenance septic tank or septic tanks in series may be used in place of an effluent filter.
- (4) No permanent structure or land disturbance shall be permitted within the setbacks established by ~~VDH~~ the Virginia Department of Health for any primary or reserve drainfield or dispersal field.
- (5) The requirements contained in subsections (b), (c), and (d) below shall not apply to existing improved parcels where an existing onsite sewage system has failed or is to be upgraded. For the purpose of this section, upgrades include voluntary enhancements to improve the level of treatment or system performance, but shall not include system changes that result in an increase in the permitted capacity of the system for an expansion of the structure.
- (6) A community onsite sewage disposal system shall be defined as a treatment works that serves more than three attached or detached single-family dwellings with a combined average daily sewage flow greater than 1,000 gallons per day (GPD) or a structure with an average daily sewage flow in excess of 1,000 GPD. The minimum design capacity for community onsite sewage systems shall be at least 300 GPD per dwelling unit on a peak flow basis. In all cases, there shall be a reserve drainfield

that is equal to 100 percent of the primary drainfield capacity. Alternative design capacity may be required depending on the proposed use or intensity of the use as determined by the Virginia Department of Health.

- (7) Lots served by non-community onsite sewage disposal systems shall have the disposal site located on the lot which they serve. No easements shall be permitted for onsite sewage disposal systems except where permitted by a waiver. A request for a waiver shall be submitted in writing with sufficient justification to the Director of Utilities and shall only be permitted in cases of existing improved parcels where an existing onsite sewage system has failed, needs to be repaired, or is to be upgraded and where a boundary line adjustment is not permissible or would otherwise create a non-conforming lot. Requests for waivers must be accompanied by a statement from an Authorized Onsite Soil Evaluator that there are not adequate soils within the confines of the lot to meet the capacity requirements. Easements may be permitted for private and/or community sewage disposal systems. In no case, shall a boundary line adjustment or easement reduce or give away the absorption capacity of a primary or reserve drainfield.

- (c) Minimum standards for private sewage disposal on all lots recorded prior to August 19, 1997, utilizing ~~drainfields~~ onsite sewage disposal systems shall be as follows:

- (1) Provided that sufficient soils are area is available on a particular parcel, a reserve drainfield areas equal to or greater than 100 percent of the capacity of the primary drainfield area shall be provided as part of the process of securing an approval for an onsite sewage system from the Virginia Department of Health. If a reserve drainfield is provided, it shall be equal to one hundred (100) percent of the primary drainfield area. This percentage is based on both absorption capacity and land area.
- (2) Where there is insufficient room on a particular parcel for two secondary effluent onsite sewage disposal systems, a secondary effluent system may be utilized to accommodate a reserve area equal in capacity to the primary drainfield, and any unused drainfield area shall be designated as a the reserve drainfield area. The amount of reserve drainfield area available shall comply with the Virginia Department of Health requirements. The reserve drainfield area shall be identified and documented as part of the process of securing an approval for an onsite sewage system from the Virginia Department of Health.
- (3) Wherever technically feasible, the size volume of effluent generated of the structure shall be compatible with an the capacity of the on-site onsite sewage disposal system. that This includes a the primary drainfield and a the one hundred (100) percent reserve drainfield area, based on both

~~absorptive capacity and land area.~~ The number of bedrooms in a residential structure shall not exceed the design capacity of the available onsite sewage disposal site using the Virginia Department of Health's recommended rate of 150 gallons per day per bedroom. Non-residential structures shall be determined on a case by case basis determined by the Virginia Department of Health ~~number that complies with this paragraph unless.~~ If there is an inadequate amount of suitable soil on a lot to provide a primary drainfield and a reserve drainfield area for a one-bedroom residence, ~~in which case only~~ a primary drainfield may be provided and any additional area reserved for future repairs.

(d) Minimum standards for private sewage disposal on all lots recorded after August 19, 1997, and before the effective date of Ordinance O08-07, utilizing ~~drainfields~~ onsite sewage disposal systems shall be as follows:

- (1) To the maximum extent possible, the reserve drainfield area shall be equal to or greater than one hundred (100) percent of the capacity of the primary drainfield area. ~~This percentage is based on both absorption capacity and land area.~~
- (2) Where ever technically feasible, the ~~size~~ volume of effluent generated of the structure shall be compatible with ~~an~~ the capacity of the onsite sewage disposal system. ~~that This includes a the primary drainfield and a the one hundred (100) percent reserve drainfield area, based on both absorptive capacity and land area.~~ The number of bedrooms in a residential structure shall not exceed the design capacity of the available onsite sewage disposal site using the Virginia Department of Health's recommended rate of 150 gallons per day per bedroom. Non-residential structures shall be determined on a case by case basis determined by the Virginia Department of Health. ~~the number that complies with this paragraph unless~~ If there is inadequate suitable soils on a lot to provide both a primary drainfield and a reserve drainfield area for a one-bedroom residence, ~~in which case, only~~ a primary drainfield may be provided and any additional area reserved for future repairs, ~~in which case only a primary drainfield may be provided and any additional area reserved for future repairs.~~

(e) Minimum standards for private sewage disposal on all lots recorded after the effective date of Ordinance O08-07, utilizing onsite sewage disposal systems shall be as follows:

- (1) The minimum design capacity of each onsite sewage system proposed to serve an individual lot in a residential subdivision comprised of single family homes shall be at least 150 gallons per day (GPD) per bedroom on a peak daily flow basis. The number of bedrooms in a residential structure shall not exceed the design capacity of the available onsite sewage disposal site using the Virginia Department of Health's recommended rate of 150 GPD per bedroom. Non-residential structures shall be determined

on a case by case basis determined by the Virginia Department of Health. A reserve in accordance with subsection (2) below shall also be provided for each lot. A higher design capacity may be required depending the proposed use, as determined by the Virginia Department of Health.

- (2) For lots to be served by individual or community onsite sewage systems, a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site shall be identified and provided in accordance with Virginia Department of Health regulations. In all cases, there shall be a reserve drainfield that is equal to at least 100 percent of the primary drainfield capacity.

**Sec. 25-166. - Inspection.**

A An operations permit for a private ~~on-site~~ onsite sewage disposal system shall not become effective nor occupancy permitted until the installation is completed to the satisfaction of the Virginia Department of Health ~~county health department~~. Health department personnel shall be allowed to inspect the work at any stage of construction and, in any event, the owner shall notify the health department when the work is ready for final inspection and before any underground portions are covered. The inspection shall be made within a reasonable period of time after the receipt of such notice by the health department.

TCF:JDT:sd

R16-365

BOARD OF SUPERVISORS  
COUNTY OF STAFFORD  
STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 13<sup>th</sup> day of December, 2016:

<u>MEMBERS:</u>	<u>VOTE:</u>
Robert "Bob" Thomas, Jr., Chairman	Yes
Laura A. Sellers, Vice Chairman	Yes
Meg Bohmke	Yes
Jack R. Cavalier	Yes
Wendy E. Maurer	Yes
Paul V. Milde, III	Yes
Gary F. Snellings	Yes

On motion of Ms. Bohmke, seconded by Mrs. Maurer, which carried by a vote of 7 - 0, the following was adopted:

A RESOLUTION TO REFER TO THE PLANNING COMMISSION AN  
ORDINANCE TO AMEND AND REORDAIN STAFFORD COUNTY  
CODE SEC. 22-118, "WATER AND SEWER"

WHEREAS, on March 18, 2008, the Board adopted Ordinance O08-05, which established minimum standards for on-site sewage disposal systems for lots to be subdivided, including boundary line adjustments; and

WHEREAS, since the adoption of Ordinance O08-05, designers of sewage disposal systems have raised concerns about the disparate size requirements for sewage disposal systems because the ordinance sets minimum size requirements rather than minimum capacity requirements for such systems; and

WHEREAS, the Board desires to investigate whether Ordinance O08-05 meets the intended purpose of preventing drainfield failures; and


WHEREAS, the Board with Resolution R16-320 previously referred proposed amendments to the Planning Commission but desires to consider additional amendments; and

R16-365  
Page 2

WHEREAS, the Board desires to refer these proposed amendments to the Planning Commission for its review and recommendation;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 13<sup>th</sup> day of December, 2016, that amendments to Stafford County Code Sec. 22-118, "Water and sewer," pursuant to proposed Ordinance O16-42, be and they hereby are referred to the Planning Commission for its review, to hold a public hearing, and to provide its recommendation.

A copy teste:

  
C. Douglas Barnes  
Interim County Administrator

CDB:JAH:ss

R16-366

BOARD OF SUPERVISORS  
COUNTY OF STAFFORD  
STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 13<sup>th</sup> day of December, 2016:

<u>MEMBERS:</u>	<u>VOTE:</u>
Robert "Bob" Thomas, Jr., Chairman	Yes
Laura A. Sellers, Vice Chairman	Yes
Meg Bohmke	Yes
Jack R. Cavalier	Yes
Wendy E. Maurer	Yes
Paul V. Milde, III	Yes
Gary F. Snellings	Yes

On motion of Ms. Bohmke, seconded by Mrs. Maurer, which carried by a vote of 7 - 0, the following was adopted:

A RESOLUTION TO REFER TO THE UTILITIES COMMISSION AN ORDINANCE TO AMEND AND REORDAIN STAFFORD COUNTY CODE SEC. 25-161, "WHEN REQUIRED; WHEN PROHIBITED;" SEC. 25-162, "CERTIFICATE REQUIRED PRIOR TO CONSTRUCTION;" SEC. 25-165, "TYPE, CAPACITY, LOCATION, ETC.;" AND SEC. 25-166, "INSPECTION"

WHEREAS, on March 18, 2008, and on April 1, 2008, the Board adopted Ordinances O08-06 and O08-07, which established minimum standards for design, capacity, location, permitting, and construction of private sewage disposal systems; and

WHEREAS, since the adoption of Ordinances O08-06 and O08-07, designers of sewage disposal systems have raised concerns about the disparate size requirements for sewage disposal systems because the ordinance sets minimum size requirements rather than minimum capacity requirements for such systems; and

WHEREAS, the Board desires to investigate whether Ordinances O08-06 and O08-07 meet the intended purpose of preventing drainfield failures; and

WHEREAS, the Board with Resolution R16-321 previously referred proposed amendments to the Utilities Commission but desires to consider additional amendments; and

R16-366  
Page 2

WHEREAS, the Board desires to refer these proposed amendments to the Utilities Commission for its review and recommendation;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 13<sup>th</sup> day of December, 2016, that amendments to Stafford County Code Sec. 25-161, "When required; when prohibited;" Sec. 25-162, "Certificate required prior to construction;" Sec. 25-165, "Type, capacity, location, etc.;" and Sec. 25-166, "Inspection," pursuant to proposed Ordinance O16-43, be and they hereby are referred to the Utilities Commission for its review, to hold a public hearing, and to provide its recommendation.

A copy teste:

A handwritten signature in blue ink, appearing to read "C. Douglas Barnes", is written over a horizontal line.

C. Douglas Barnes  
Interim County Administrator

CDB:JDT:sd



*Planning Commission Minutes*  
*January 11, 2017*

1. Amendment to Subdivision Ordinance - Proposed Ordinance O17-06 would amend Stafford County Code Sec. 22-118, "Water and sewer," to modify standards for on-site sewage disposal systems by removing the minimum size of 4,000 square feet and 2,500 square feet in area for a drainfield to disperse septic tank effluent and secondary effluent, respectively. The proposed Ordinance would establish a new standard requiring on-site sewage disposal systems serving an individual, single-family detached dwelling unit in a residential subdivision to have a design capacity of at least 150 gallons per day per bedroom on a peak flow basis. Additionally, the minimum design capacity for community on-site sewage systems would establish at least 300 gallons per day per dwelling unit on a peak flow basis. The proposed Ordinance would also eliminate the minimum size requirements for onsite sewage disposal systems located on existing improved parcels where an existing on-site sewage disposal system has failed, is to be upgraded, or is subject to a boundary line adjustment. **(Time Limit: February 11, 2017)**

Mr. Harvey: Thank you Mr. Chairman. Mr. Jason Towery, who is our Director of Utilities, will be making this presentation for staff.

Mr. Towery: Computer please. Okay. Good evening Mr. Chairman, members of the Commission; Jason Towery, Director of Utilities. Thank you for having me over here. I don't get to come across the street too often, so thank you. This evening I'll be discussing the amendment to the Subdivision Ordinance for onsite sewage disposal systems. In 2008 there were three amendments to the Stafford County Code affecting subdivisions and utilities. Ordinances 08-05, 06, and 07, respectively, set minimum area requirements for onsite sewage disposal systems or, as they're more commonly known, drainfields. Recently, representatives from the development community expressed concerns about the Ordinances and how they might be affecting... or how they might affect the design of new drainfields and the ability to repair existing drainfields that might be failing. At its December 13<sup>th</sup> meeting, the Board of Supervisors referred R16-365 to the Planning Commission to review amendments to County Code Section 22-118. The standards that are proposed with this new Ordinance would be changed to reflect the treatment capacity of the drainfields, rather than surface area. Minimum treatment capacity for a single-family home on an individual lot would be 150 gallons per day per bedroom. And for community drainfields, it's recommended to have a minimum treatment capacity of 300 gallons per day per equivalent dwelling unit. Again, the minimum required areas of the drainfield and the reserve drainfield would be eliminated. Currently they're set at 4,000 square-foot. The proposed amendment would also eliminate the minimum size requirements for onsite sewage disposal systems located on existing improved parcels where an existing onsite sewage disposal system has failed, is to be upgraded, or is perhaps subject to a boundary line adjustment. Staff shared the draft amendments with the local building community, FABA, the Virginia Department of Health, as well as local AOSEs for their review and comment. Overall, the development community has been in favor of modifying the current code since it's often confusing and overly burdensome. Using surface area requirements for drainfields is an additional requirement beyond state standards, and can sometimes be in conflict with the state requirements. Specifically, I'll point out three... well, two sections of State Code and then an Attorney General's Opinion that references this; Section 32.1-164 stipulates the County's ability... I'm sorry, stipulates that the State Board of Health "shall govern the collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and alternative discharging sewage systems, and the maintenance, inspection, and reuse of alternative sewage systems." The statute does not delegate any authority to localities to establish additional standard. Also, I would reference Section 15.2-2157, which is more explicit. It says that a locality cannot prohibit the use of alternative drainfields or require maintenance standards that are more rigorous than the State Board of Health. And then, I believe in your packages, you received the Attorney General's Opinions also referencing this fact. To boil this down, I would probably say that there are three

*Planning Commission Minutes*  
*January 11, 2017*

takeaways with this Ordinance, specifically in regards to Chapter 22. First, it removes the minimum square-footage requirements and promotes the Virginia Department of Health's capacity based approach. Again, we're recommending 150 gallons per day per bedroom for single-family detached dwellings, and 300 gallons per day per equivalent dwelling unit on community systems. Secondly, it restricts the Virginia Department of Health's conditional permit process. And this is something that maybe hasn't been asked to discuss, but currently the Virginia Department of Health offers a conditional permit on drainfields that would perhaps allow for, I suppose you would say, loopholes to get around some of the capacity requirements it states of the 150 gallons per day. So, Stafford County would not, with this proposed Ordinance, would not allow for those conditional permits. And thirdly, it eliminates the minimum size requirements for onsite sewage disposal systems located on existing improved parcels. Where an existing onsite sewage disposal system has failed, it's to be upgraded or subject to a boundary line adjustment. In closing, staff recommends approval of the proposed Ordinance O17-06. And the deadline for the Planning Commission action is February 11, 2017. I'd be happy to answer any questions at this time. Also, I do note we have a couple representatives from the Virginia Department of Health, as well as a local AOSE here who may be able to clarify if there are other questions.

Mr. Coen: Oh, thank you sir. Are there any questions for him? Yes, Mr. Apicella.

Mr. Apicella: Mr. Chairman, just to clarify, the actual 150 gallons comes from the Virginia Administrative Code, and that's 12VAC5-610-670. So it's not something we made up.

Mr. Towery: That's correct.

Mr. Apicella: That's not a vague state standard, it's very explicit in that Administrative Code.

Mr. Towery: That's correct.

Mr. Apicella: The state or regulatory bodies often change parameters and with that potential in mind, I'm wondering if tweaking the language to say something along the lines of this might be helpful, at least with respect to what is now the 150 gallons. The minimum density standard shall provide peak daily flow that is no less than prescribed amount under state regulations. Does that kind of basically cover it?

Mr. Towery: Yeah, I think that would be a reasonable suggestion, yes.

Mr. Apicella: Okay, thank you.

Mr. Towery: And a good point. Add if it changes then we'd want to make sure (inaudible).

Mr. Apicella: We'd probably be back here again to change it to 125, we'd have to go through this whole process.

Mr. Towery: That's right.

Mr. Coen: Okay. Mr. English?

Mr. English: I guess what my question is, is this for like even... do you have to be in a subdivision for these ordinances to follow through? Or is it going to be you're out in rural areas and your drainfield collapses or whatever, are you required by these standards?

*Planning Commission Minutes*  
*January 11, 2017*

Mr. Towery: Well, there's two parts in the County Code that refer to drainfields, or discuss drainfields. This section in the Subdivision Ordinance specifically deals with cases of a subdivision of land. And then Chapter 25, which is also the sister ordinance amendment that's going right now to the Planning... or I'm sorry, to the Utilities Commission next week, that's where the section of the code is that deals with any time you build a drainfield or repair a drainfield, what the standards are in those cases. So, the Code has both areas covered.

Mr. Coen: Any other questions?

Mrs. Vanuch: I have a question.

Mr. Coen: Yes, Mrs. Vanuch.

Mrs. Vanuch: And you'll have to bear with me because drainfields are not my area of expertise. So, let's say that you have an older home who did not meet the 150 gallons per day per bedroom threshold. But they met the 4,000 square-foot threshold. They technically could have gotten a drainfield previously, right? With a permit?

Mr. Towery: And perhaps the gentleman from the Department of Health could speak up to this, but generally speaking, the 150 gallons per day so I would say ultimately the County doesn't regulate the design of the drainfields per se. The drainfields still have to be designed and permitted to the Virginia Department of Health standards ultimately. So, if they could design it to the 150 gallons per day per the Virginia Department of Health standards, if they could design it and get it approved by the Department of Health then they could implement it and construct it. So, the 4,000 square-foot does not mean that they've necessarily met the Virginia Department of Health requirements. And this is an important point of clarification -- what the Stafford Code, with the minimum square footage is I believed sought to do in 2008 was to kind of set a baseline or kind of a protection zone if you will. But all along, all of the AOSEs and Department of Health, the design community, have always designed based on capacity, not a minimum square area.

Mrs. Vanuch: Okay. So, the reason I'm asking is, because let's say that you have an older home. And you somehow got it approved, you know, with the 4,000 square-foot and maybe didn't use the 150 gallons per day per bedroom. But then your drainfield fails so you have to create a new one on your property. Would they now have to do the 150 square feet a day, is there a grandfather clause?

Mr. Towery: Right. So in Chapter 25, which again is the sister ordinance to this, there is language that deals with cases of failing... there is actually some language in Chapter 22 that also deals with that, but primarily that would fall under Chapter 25 in that case, in which case there are some ways that those drainfields could be repaired. Specifically, actually we, at Ms. Maurer's request, we added a waiver process for allowing offsite easements to be obtained. In the case of you have a lot with a failing drainfield, but they could get perhaps some capacity on a separate lot. Right now there's no way to do that within the code. So, in those situations, we've provided some relief.

Mrs. Vanuch: Okay, thanks.

Mr. Coen: Alright, thank you sir.

*Planning Commission Minutes*  
*January 11, 2017*

Mr. Towery: Thank you.

Mr. Coen: Alright, now we open up the public hearing on this matter. This is an opportunity for the public to comment on this item. Please direct your comments to the Planning Commission as a whole, not to any specific member. You have up to 3 minutes to speak. Please state your name and address when the green comes on. The yellow light indicates you have 1 minute left. And the red light means that you need to quickly wrap up your comments. If you'd like to speak, please come forward at this time. Alright, seeing none, that ends the public hearing. Since we have some people from the state, I didn't know if we wish to have them say anything. They don't have to but I just thought I'd... you came all the way up here; I was just being polite.

Mr. McCord: I'm Brent McCord, I'm the Environmental Health Manager for the Rappahannock Area Health District. And I would like to bring... the 300 gallons per day is a little bit low as a minimum standard for mass drainfields. When we design a drainfield, we always have a safety factor in there. And generally, for individual houses with their own drainfield, we have a safety factor of about 63%. That's how we arrive at that 150 gallons per day. We don't expect the house is going to deliver 150 gallons per day, but they'll probably do somewhere between, you know, 180, 200; some might do 300. We don't know what house is going to do what amount, that's why we have to design on the largest one. With a mass drainfield we can balance out or average out our things a little bit. And if we use like 225 for an average for a house on flow and do a 63% safety factor, it comes to be about 360, somewhere in there. So we think that's a more appropriate minimum target for a mass drainfield to use instead of the 300. It gives a safety factor equivalent to what we use with 150 gallons per day.

Mr. Apicella: Mr. Chairman?

Mr. Coen: Yes, Mr. Apicella?

Mr. Apicella: So there's not a state standard equivalent for alternative drainfields as there are for regular drainfields?

Mr. McCord: Not for mass drainfields.

Mr. Apicella: Okay.

Mr. McCord: That 150 is for you own your house, you have your own separate drainfield. The mass drainfield really doesn't have that standard in our regulations. Like if you were going to do a mass drain... ten houses on a mass drainfield, you would probably want to do maybe a little bit more than 360, compared to if you had fifty houses on it because you... the number of houses gives you a better average.

Mr. Apicella: So, at what... this is kind of the question I had last time this was in front of us... how would somebody who's trying to build a mass drainfield know what their minimum requirement would be based on the circumstances? So, if the floor is 360, at whatever amount of homes...

Mr. McCord: They would look at water use data. EPA has a book on water use data, and you get ranges for the, you know, house data you use. And you can base it on occupancy; the US Census says there's 2.7 people per bedroom. In this area, it's about 3 people per bedroom. So you can go back and say well, there's 60 gallons per person per bedroom times 3 people and then put you safety factor in it. The only way the Health Department can add a safety factor under our regulations is with a design factor. We

*Planning Commission Minutes*  
*January 11, 2017*

can't... say someone gives it an estimated permeability rate; we can't require them to adjust that rate or anything like that. The only avenue we have to put in a safety factor is at the design flow level.

Mr. Apicella: And you're comfortable that the 360 is sufficient?

Mr. McCord: Yes, that's as a minimum. Yeah, 360 would be good for all sort of situations.

Mr. Apicella: Alright, thanks.

Mr. Coen: Thank you Mr. McCord. Mr. Towery did you... normally we go back to staff and see if they have anything they'd like to respond.

Mr. Towery: Sure. The... I think the original ordinance that was proposed and that came in front of the Commission originally, we were looking at a 400 gallon per day threshold for the community drainfields. And certainly the Board can set the threshold wherever they'd like. There was some question from the AOSE community... actually there was a suggestion of 250 gallons per day, which we felt was probably not reasonable. So, the 300 kind of came out of more of a compromise. And again, I would just say that again that's a minimum. Ultimately, the design is going to be required to be approved... reviewed and approved by the Department of Health. So there's some room there for them to add in those factors at that point. But 300, 360, 400 -- it's a minimum threshold.

Mr. Apicella: So, again, the Virginia Department of Health regulates it. Would it not be fair to go with the minimum that they're recommending? I'm just... we want to set the right floor and I'm just trying to figure out what it is. So, if... you guys are the experts. You're an expert and I would expect that the gentleman from VDH is even more of an expert, so (inaudible).

Mr. Towery: That would be fair, yes. Again, the 300 was what staff thought we heard during the process. We believe that's where it had landed. The 360 has kind of been suggested since and that's, you know, another reasonable number. I wouldn't say that, you know, it's got to be 300 or it's got to be 400. I think...

Mr. Apicella: Right, the numbers should be based on some science, not... in my view it should be based on some science, not on a compromise in a room.

Mr. Towery: Right.

Mr. Apicella: So, again, I'm just trying to figure out, what is the right floor to set in this case.

Mr. Towery: I think 360 is reasonable.

Mr. McCord: The signs... I mean, I'm getting my data from the EPA onsite sewage, and I have copies if anyone wants to look. You can look at the studies they've done on water use. And 350, 360 is we think is more appropriate. It includes that safety factor that we normally get with individual homes; 300, you know, is just a little bit low we feel. We'd rather see 350 but we can, you know, whatever you all decide we'll work with it.

Mr. Apicella: Thank you.

*Planning Commission Minutes*  
*January 11, 2017*

Mr. Coen: Thank you. Alright, and so the public hearing has ended; so, now we come back and see how the Commission would like to proceed on this.

Mr. Apicella: Mr. Chairman, before we take a vote, I think we ought to change the language in front of us. I think we have the authority to do that. And so...

Mr. Coen: Wait a minute, Ms. McClendon is shaking her head.

Ms. McClendon: Mr. Chairman and Commissioner Apicella, the Board did not give the Planning Commission the authority to make changes to the proposed Ordinance.

Mr. Apicella: Really? Okay.

Ms. McClendon: However, you can include your changes in your recommendation to the Board and it can be communicated to the Board for their potential change.

Mr. Coen: Thank you. Alright, so, is there any feel? Ms. McClendon, do I understand we sort of have three, and Mr. Harvey, three options? We can either approve it as written, approve it with a recommendation of changing certain language, or we can deny it with a recommendation of changing certain language? And actually a fourth, we can just deny it outright. Is that basically the four options we have?

Mr. Harvey: Mr. Chairman, I think you summarized it, yes.

Mr. Coen: Well that's good, thank you. Alright, is there a desire by the Commission to do anything on this item?

Mr. Rhodes: Mr. Chairman?

Mr. Coen: Yes Mr. Rhodes.

Mr. Rhodes: I make a motion to recommend approval of the amendment to the Subdivision Ordinance, also as a caveat to that that we suggest that they consider a higher minimum gallons per day for the community onsite sewage system.

Mr. Coen: Alright. I'm just writing down your language. Minimum per day...

Mr. Rhodes: Increase the minimum gallons per day per dwelling unit for the onsite sewage systems, 360 as was discussed tonight.

Mr. Coen: Okay. So I have a motion to approve with consideration that the Board should consider an increased minimum per day per dwelling unit... do you want to say by state minimum or do you want to say the actual 360?

Mr. Rhodes: I would just take the 360; I don't think there was a state minimum.

Mr. Coen: Okay. Per dwelling of 360. Is that what you like, Mr. Rhodes?

*Planning Commission Minutes*  
*January 11, 2017*

Mr. Rhodes: Yeah, right now we say that the community onsite sewage system would establish at least 300 gallons per day per dwelling unit. From the discussion tonight, I would suggest they consider something closer to 360 gallons per day per dwelling unit.

Mr. Coen: Alright. So, we have a motion on the floor; is there a second?

Mr. English: I'll second it.

Mr. Coen: Alright, it has been motioned by Mr. Rhodes, seconded by Mr. English. Mr. Rhodes, you have the floor.

Mr. Rhodes: No further discussion Mr. Chairman, thank you.

Mr. Coen: Okay, Mr. English?

Mr. English: No sir.

Mr. Coen: Alright, any other member wish to make any comments? Seeing none, we will call for a vote. Everybody understands that the motion on the floor is for approval with the recommendation of a higher minimum per day per dwelling unit of 360. Alright. Alright, and it passes unanimously (7-0). Thank you sir, thank you Mr. Towery. And thank you for the nice chart you did that we had asked at our last meeting; that was very much helpful.

**Stafford County Utilities Commission  
Meeting Minutes**

January 17, 2017

**A. CALL TO ORDER**

Mr. Towery called to order the regular meeting of the Utilities Commission (UC) at the George L. Gordon, Jr. Government Center on January 17<sup>th</sup>, 2017 at 7:00 pm in the ABC Conference Room and asked Ms. Dyson to call the role.

**B. ROLL CALL**

Members present: Joyce Arndt, Bill Tignor, Mickey Kwiatkowski, Alan Glazman, DaBora Lovitt, and Mike Makee.

Members absent: The Hartwood seat is still vacant.

Staff present: Jason Towery, Dale Allen, Jason Pauley, Bryon Counsell, Julie Elliott, and Sylvia Dyson

Guests: Tommy Thompson (VDH), Curtis Moore (M&M Soil Consultants), and Alex McCallister (developer)

**C. ELECTION OF OFFICERS**

**1. Election of Chairman**

Mr. Tignor nominated Mr. Glazman, which was seconded by Ms. Arndt. Mr. Glazman was elected as Chair with a 5-0 vote. Mr. Glazman abstained.

**2. Election of Vice-Chairman**

Ms. Kwiatkowski nominated Mr. Tignor, which was seconded by Ms. Lovitt. Mr. Tignor was elected as Vice-Chair with a 6-0 vote.

**3. Election of Secretary**

Mr. Tignor nominated Mr. Makee, which was seconded by Mr. Glazman. Mr. Makee was elected as Secretary with a 6-0 vote.

**D. APPROVAL OF MINUTES**

November 15, 2016

Mr. Tignor made a motion to approve the minutes as written. The motion was seconded by Ms. Kwiatkowski. The motion passed 6-0.

**E. PRESENTATIONS BY THE PUBLIC**



There were no presentations by the public.

## F. PUBLIC HEARING

### 1. Proposed draft Ordinance O17-09 regarding On-Site Sewage Disposal

Mr. Towery reiterated that the UC was to consider amendments to County Code Secs. 25-161, 25-162, 25-165, and 25-166. He explained that in 2008 three amendments (O08-05, O08-06, and O08-07) were made to the Code effecting the Subdivision as well as the Utilities Ordinances. He further elaborated that the amendments had set minimum area requirements for on-site sewage disposal systems (drainfields).

Mr. Towery stated that representatives from the development community had expressed concerns about the ordinances and how they affected the design of new drainfields as well as the ability to repair existing drainfields. He added that at the Board of Supervisors (BOS), at its December 13<sup>th</sup>, 2016 meeting, referred R16-366 to the UC to review the proposed amendments, which would change the standards to reflect the treatment capacity of the drainfields rather than surface area. Mr. Towery added that currently the minimum square footage for an alternative system was 2,500 square feet, and 4,000 square feet for conventional systems. He further explained that a minimum treatment capacity of 150 gallons per day, per bedroom was proposed for single family detached homes on individual lots, while community drainfields were proposed to have a minimum treatment capacity of 300 gallons per day, per dwelling unit, based on a peak flow basis.

Mr. Towery stated that the Planning Commission (PC), at their January 11<sup>th</sup>, 2017 public hearing, voted to recommend to the BOS that a minimum threshold of 360 gallons per day for community drainfields be considered, based on additional testimony given by local Department of Health (VDH).

Furthermore, Mr. Towery explained, the amendment would eliminate the acceptance of VDH conditional permits. He explained that conditional permits were used to circumvent VDH minimum standards and allow for deed restrictions to be placed on a property in order to reduce design requirements, such as limiting to a certain number of occupants or requiring that a residence be required to be served by low flow fixtures for the life of the property. Mr. Towery stated that Stafford County as well as VDH did not have reasonable means to enforce the restrictions. The proposed amendments would further provide relief for failed systems, or systems in need of repair or upgrades, by allowing property owners to request waivers for off-site easements to gain additional drainfield capacity, according to Mr. Towery. Further, minor updates were also proposed, such as more clear definitions for community drainfields, change to burial depth and separation thresholds for disposal fields required to disperse secondary, pretreated affluent. Mr. Towery stated that staff shared the draft amendment with the Fredericksburg Area Builders Association (FABA), Local Alternative On-site Engineers (AOSE), and VDH for their review and comment. Mr. Towery felt that overall, the development community was in favor of the proposed amendments.

Mr. Towery stated that Stafford County's surface area requirements were additional requirements beyond state standards and in some cases were even in conflict with state requirements. He explained that state code provisions limited the County's ability to adopt more restrictive standards for drainfield systems, specifically Sec. 32.1-164, which stipulated that the State Board of Health "shall govern the collection, conveyance, transportation, treatment, and disposal of sewage by on-site sewage systems and alternative discharging systems, and the maintenance inspection and reuse of alternative on-site

sewage systems.” He further explained that the statute did not delegate any authority to localities to establish additional standards. Mr. Towery pointed out the opinion from the Attorney General’s Office which was included in the packet, which furthermore confirmed previously mentioned findings regarding additional restrictions.

Mr. Towery stated that, due to the current County Ordinance being out of date, staff recommended approval of proposed Ordinance O17-09. He added that a public hearing was tentatively scheduled with the BOS on February 21<sup>st</sup>, 2017 to consider the UC’s recommendations.

Mr. Tignor inquired whether the proposed amendment was essentially repealing the 2008 changes and bringing Stafford County into compliance with state regulations. Mr. Towery confirmed.

Mr. Makee asked if Stafford County was allowed to prohibit conditional permits from VDH. Mr. Towery replied that in talking with the County Attorney, it was staff’s understanding that Stafford County could. Mr. Glazman inquired whether there were other localities who did not accept the conditional permits. Mr. Towery was not aware of any. He added that Stafford County’s Code was more developed than other localities’.

Ms. Kwiatkowski inquired as to why the PC decided to recommend 360 gallons vs. 300 gallons. Mr. Towery referred to Mr. Thompson. Mr. Thompson stated that VDH did not feel 300 gallons were sufficient and was more comfortable with 360 gallons.

Mr. Thompson asked to speak on the matter of the conditional permits previously mentioned. He explained that state regulations allowed for the conditional permits, however VDH had no way of restricting the number of occupants in a dwelling, and felt that it was a fault with the state regulations to allow the permits. Mr. Thompson stated that VDH was very much in favor of prohibiting conditional permits.

Mr. Makee was concerned that prohibiting the conditional permits would put Stafford back in violation. Mr. Towery reiterated that since no additional requirements were being added, the County Attorney was comfortable with this change.

Mr. Tignor inquired whether Stafford County had ever been legally challenged due to its more restrictive regulations. Mr. Towery stated that to his knowledge it had not.

Mr. Makee asked if reserve drainfields would be affected by the removing the size requirements. Mr. Towery explained that the reserve requirement would remain 100% capacity. He further pointed out that the current code did not allow for conventional drainfields to use an alternative reserve, or vice versa, which would be possible once the size requirement was removed.

Ms. Arndt expressed her concern with the off-site drainfield easements and felt it was likely that this would create issues. Mr. Towery stated that in cases where a boundary line adjustment was not possible to increase the lot size in order to accommodate the drainfield expansion, the easement would be the only other option. He added that a waiver process would be put in place which would require confirmation from an AOSE that the soils were no longer proper for a drainfield, and staff would have to make sure that a boundary line adjustment could not occur. He added that it would serve as a last resort to prevent a home from having to go to a pump and haul situation. Ms. Kwiatkowski added that the easement would be recorded and was a legal document.

Mr. Glazman felt that there would not be a legal issue and that it was just a matter of re-drawing the property lines. Mr. Towery clarified for the Commission that with an easement the shape of the properties would not change, but there would be a plat showing the easement along with a deed which would record the rights granted to the person purchasing the easement. Mr. Counsell added that this may be the only option in order to allow a house to remain occupied if it would otherwise have to be condemned.

Mr. Glazman inquired whether anyone had taken advantage of the easement option before. Mr. Moore stated that the code currently did not allow off-site easements. Mr. Thompson stated that VDH was very much in favor of the off-site easements.

Mr. Makee inquired if allowing the easements could potentially benefit current pump and haul customers. Mr. Towery stated that he was not familiar with each pump and haul situation, but he felt it was likely that some could benefit. Mr. Allen added that it was very possible, however hadn't been evaluated due to how the code was currently written. He too felt, that it might be a solution for some of the pump and haul customers.

Mr. Towery asked if there were any questions from the public.

Mr. McCallister introduced himself as a member of the development community. He stated that his understanding that the amendments were supposed to bring Stafford County back into compliance with state code. He felt that if state code did not provide a minimum square footage for community drainfields, adding the 300 or 360 gallon minimum to the Stafford County Code would mean that Stafford County was once again not in compliance.

Mr. Moore stated that with community drainfields the flow was typically a lot less on an average home basis, because there were 50 to 100 homes on one system which was comparable to a County water and sewer setup. He added that when setting up a community drainfield, developers were looking at the accumulation of flow data and that number tended to be somewhere between 250 and 325 for a regular, 4-bedroom single family home. Mr. Moore stated that before proposing such drainfield, they would have to sit down with the Health Department and provide water flow data that might be available from similar developments. He explained that essentially there would be a conversation about what would be sound engineering practice for the given situation.

Mr. Glazman asked if Mr. Moore knew what the requirements for community drainfields were in Spotsylvania. Mr. Moore responded that other than 100% reserve, there were no other requirements. He added that Spotsylvania had not really embraced the concept of community drainfields yet, but were getting ready to look at their first one for a townhome development at Lake Anna. Typically, Mr. Moore stated, community drainfields could likely be found in second homeowners and retiree communities.

Mr. Makee understood that the minimum would be potentially less for a community drainfield, than for a single family home. He did not understand why, since the developer knew the numbers of bedrooms that would go into the development.

Mr. Towery stated that homeowners would get benefits from there being multiple homes in terms of the overall gallons. Mr. Makee felt that this would put private homeowners at a disadvantage compared to developers.

Mr. Moore clarified that the cost for a community drainfield was anywhere between 1.5 to 2.5 million dollars, which is why there weren't very many out there. Mr. McCallister added that a conventional drainfield ran about 10,000 - 15,000 dollars install, compared to 25,000 dollars per lot for a community drain field.

Mr. Towery stated that even if a minimum was established for community drainfields, each drainfield would still be subject to review from VDH and may end up being larger than required.

Mr. Glazman asked for clarification what the Commission would be voting on. Mr. Towery explained that the UC could accept the package as is and send it forward to the Board of Supervisors, or the Commission could make other recommendations.

Mr. Tignor felt that according to the Attorney General's opinion, it was not permissible for Stafford County to add a minimum threshold.

Mr. Tignor made a motion to refer the package as is to the BOS. Ms. Arndt seconded the motion. The motion passed 6-0.

#### G. REPORTS BY COMMISSION MEMBERS

There were no reports.

#### H. DIRECTOR'S REPORT

Mr. Towery updated the Commission on current items that were scheduled to go to the January 24, 2017 BOS meeting.

The following items were on the agenda:

- A request for public hearings for two lease agreements for cell towers on the Moncure as well as the Ferry Road water tank. Public hearing likely to take place on February 21<sup>st</sup>, 2017.
- Execution of a contract for the construction of the Ebenezer Church pump station replacement. (lowest bid just over 1 million dollars)
- A request for a public hearing to vacate a portion of a sanitary sewer easement.
- Authorizing a low pressure sewer system on tax map parcel no. 30-144C.
- Authorize condemnation and quick take powers to acquire a permanent water-sanitary sewer easement as part of the Truslow Road neighborhood project.

#### Update on neighborhood projects

- Truslow Road Neighborhood Project:  
Easement acquisition still in progress
- 3 additional projects:  
Snellings Lane (see new business), Cedar Lane (see new business), and Mt. Olive Road large water extension project:

37 applications for water extension have been received for Mt. Olive, due to well issues. Currently there are no funds allocated in the CIP for large water extension projects (projects over \$500,000). Project would have to be approved by the BOS. The UC will have to make recommendations to the Board of Supervisors. Staff will present preliminary cost estimate and analysis at the February UC meeting.

#### Pump and Haul update

- Final report delayed due to consultant's illness.
- Two temporary customers have been connected to Ethel Lane sewer line.

#### Master Plan Update

- Staff working with O'Brien and Gere to analyze data received from Planning Department.

#### December Operations and Customer Service Update

- Number of Active Accounts is up about 2% since previous year
- Lake Mooney and Smith Lake have treated 1.697 billion gallons of water since July 1<sup>st</sup>
- Little Falls and Aquia Waste Water Treatment Plants have treated 1.455 billion gallons of water since July 1<sup>st</sup>

#### Construction Project Update

- Celebrate Virginia Water Tank – completion delayed due to contractor related issues, expected completion in February or sooner
- 342 Phase II Waterline – Construction complete
- Courthouse Water Tank, Butler Road Force Main, Falls Run I-95 Crossing, and Centreport Sewer Extension have been issued NTP and are expected to begin in short order
- Currently awaiting bids on the Claiborne Run Sewer Interceptor Replacement

#### Personnel Changes

- Dale Allen will be retiring end of January
- Two offers have been extended for Construction Project Coordinator and Engineering Manager
- Jason Pauley, new Assistant Director of Operations

#### Overbillings and Returned Funds

- Three commercial customers were incorrectly billed due to malfunctioning meters.
- Funds have been returned to the customers.

## I. NEW BUSINESS

### 1. Snellings Lane Neighborhood Sewer Project

According to Mr. Allen, eleven applications for sewer extension had been received. Mr. Allen explained that the proposed neighborhood project would extend along a short portion of Truslow Road and along Snellings Lane, discharging to an existing manhole on the Falls Run Interceptor sewer. He added that the total length was approximately 2,700 feet and the estimated construction cost was \$400,000. Under consideration of all evaluation criteria as per Resolution R04-217, staff recommended approval, pending availability of funds.

Mr. Tignor inquired how sewer only customers would be metered. Mr. Allen explained that they would be billed based on the average sewer demand since there was no way to measure the sewer flow.

Mr. Kwiatkowski asked if the applicants had already paid the 500 dollar fee. Mr. Allen explained that payment of the fee was not due until construction and was not a requirement for approval of the project.

Mr. Tignor made a motion to approve a public hearing for this project. Ms. Kwiatkowski seconded the motion. The motion passed 6-0.

## 2. Cedar Lane Neighborhood Water Project

Mr. Allen stated that nine applications for water extension had been received. He further stated that the proposed neighborhood project would extend along a short portion of Courthouse Road and along Cedar Lane with a total length of approximately 3,170 feet and an estimated construction cost of \$250,000. Mr. Allen added that the portion along Courthouse Road was tied up with VDOT and the 630 widening project.

Mr. Allen pointed out that this was the second submission from property owners on Cedar Lane and that the first submission was turned down as it was not economical at that point, due to the fact that they could not be served from existing water lines. He stated that since water had been extended as part of the Embrey Mill development, it would now be possible.

Under consideration of all evaluation criteria as per Resolution R04-217, staff recommended approval, pending availability of funds.

Mr. Tignor inquired about the length of the extension along Cedar Lane and how many fire hydrants would be put in place along the extension. Mr. Allen estimated about 800 feet and roughly 5-6 hydrants.

Mr. Glazman asked if others could connect to the water line once it was established and whether it was optional to connect once it became available. Mr. Allen affirmed that the line would become public water and would be available to anyone. He further explained that connecting to the line would only become mandatory, if the property owner experienced a well failure and was within 300 feet of the line.

Mr. Makee inquired how the County prioritized the different projects. Mr. Allen explained that it was ultimately up to the UC and BOS. Mr. Towery added that most of the funds were currently already spoken for.

Mr. Glazman asked if staff could provide some type of criteria to help evaluate the projects. Mr. Towery stated that staff had not developed any specific criteria, other than level of severity of health risks. Mr. Allen added that staff would make recommendations.

Ms. Kwiatkowski made a motion to authorize a public hearing for this project. Mr. Makee seconded the motion. The motion passed 6-0.

3. Low Pressure Sewer System (LPSS) TM 30-144C – Resolution R17-36

Mr. Allen explained that the owner was in the process of selling the parcel, but the buyer requested the seller seek approval for a reliable sewer system first. He added that County Code required a parcel be connected to public water and sewer. Mr. Allen pointed out that water was available for this parcel on Hope Road, but there was not a gravity sewer system available, requiring the sewer to be pumped to the nearest line at Willow Park.

Mr. Allen stated that construction would be solely at the property owner's expense, and he would also have to maintain a service contract for the grinder pump system.

Staff recommended approval of the LPSS for this parcel.

Mr. Tignor inquired if the LPSS was backed up by a generator. Mr. Allen explained that a backup power source was required, which would likely be a generator.

Mr. Makee asked if the parcel could be subdivided. Mr. Allen stated that the purpose for this application was to be able to subdivide the parcel and develop it as a residential subdivision.

Mr. Glazman asked what the cost would be for the County. Mr. Allen explained that there was no cost to the County other than maintenance of the line.

Ms. Kwiatkowski made a motion to approve the LPSS. The motion was seconded by Mr. Tignor. The motion passed 6-0.

J. ADJOURNMENT

Mr. Tignor made a motion to adjourn, which was seconded by Mr. Makee. The motion passed 6-0.

There being no further business, Mr. Glazman adjourned the meeting at 8:37 PM.

Minutes submitted by,

Michael Makee,  
Recording Secretary