



**To:** Members of Dublin City Council  
**From:** Dana L. McDaniel, City Manager   
**Date:** August 6, 2015

**Initiated By:** Megan O'Callaghan, PE, Public Works Director  
Paul Hammersmith, PE, Director of Engineering/City Engineer  
Barbara Cox, PE, Engineering Manager  
Todd Garwick, PE, Senior Civil Engineer

**Re:** Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Policy

## **Background**

Staff developed a draft policy framework for the extension of public water and sanitary sewer services to existing developed areas that do not have access to these public services (hereinafter referred to as "Extension Areas") (see attached memo dated October 23, 2014). This draft policy framework was presented for discussion during the June 15, 2015 City Council Work Session (see attached memo dated June 12, 2015, presentation slides, and meeting minutes). City Council generally concurred with the framework and instructed staff to bring forward the formal policy for adoption at a future City Council meeting. There was further discussion during the July 1, 2015 City Council meeting and Staff was instructed to bring forward the formal policy for adoption as well as an implementation plan for the extensions at the August 10, 2015 City Council Meeting.

In preparation for this policy and implementation discussion, Staff has completed the following:

### *General Location Map*

Staff has updated the *General Location Map* of the Water/Sanitary Sewer Extension Areas (see attached map dated August 3, 2015). A few of the areas have been divided into subareas for planning purposes. Additionally, but not attached, Staff has developed a series of detailed maps to gain an understanding of potential routes and required lineal footage and to determine preliminary estimated cost.

### *Inventory of Existing Household Sewage Treatment Systems (HSTS) and Health Risk Assessment*

In 2013, the City partnered with two Franklin County agencies, the Soil and Water Conservation District (FSWCD) and Public Health (FCPH). Their expertise was utilized to inventory and assess the quality of existing HSTS in the City, resulting in the cataloguing and evaluation of 378 HSTS in Dublin. A breakdown of the inventory is as follows:

- Aeration Treatment Units (ATU) on-lot – 195
- Septic to leach systems – 131
- Mound Systems – 49
- ATU on-lot to Leach – 2
- Holding Tank – 1

The Health Risk Assessment took into consideration the following variables:

- age of the system,
- failure rate of the system,
- ground water pollution potential, and
- soil suitability.

Overall, the findings indicate a majority of the systems within Dublin are in working condition. The findings further indicate aeration treatment units had the majority of issues. These units are found with many of the older homes along the Scioto River corridor and are of greater concern from a public health perspective as they discharge directly to watercourses, storm sewers or drainage tiles. Typically, these locations have few alternatives available for repair or replacement, especially, if the soils are unsuitable or shallow bedrock is present.

There are also several areas that utilize soil-based systems that raise concern. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glencree Place, and Trails End Drive. Many of these systems were installed when the houses were built and may be toward the end of their useful life. Replacement of failing soil-based systems can be difficult due to poor soils, shallow bedrock, and other factors.

Please reference the attached memo to City Council dated September 18, 2014 regarding "Utility Extension Policy Update – Inventory of Existing Household Sewage Treatment Systems (HSTS) and Health Risk Assessment Summary" for detailed information and maps.

The inventory of existing HSTS and health risk assessment information produced by this study are used as a primary basis for the utility extension policy and implementation program that are discussed in later sections of this memo.

#### *Cost to Extend To Extension Areas*

Extension of the public water and sanitary sewer main lines to areas not currently served by the public systems would require significant financial investment. Staff has reviewed and updated the preliminary estimated costs for extensions to the Extension Areas. The current total estimated cost is \$18,400,000 -- with sanitary sewer estimated to cost \$12,450,000 and water estimated to cost \$5,950,000.

#### **Developed Parcels Currently within 100' of Public Sanitary Sewer and/or Water Main Lines**

While researching and developing the policy, Staff identified the need to update our records regarding developed properties that currently have access to public sanitary sewer and/or water but are not presently connected.

Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio stipulate that once the City extends these public services to within 100 feet of the property line, property owners are required to connect to the public systems at their expense within 90 days after the date of official notices to do so. In the event that a property owner proves hardship or extraordinary circumstances or excessive costs to make the required connection, the City Manager, with concurrence of City Council, may grant relief. (see attached)

Staff recently obtained billing data from the City of Columbus which enabled us to identify those developed parcels that are currently within 100 feet of public sanitary sewer and water services but are not presently connected. Based on this data, it appears there are 158 parcels currently located within 100 feet of public water service and 105 parcels currently located within 100 feet of sanitary sewer service. Detailed information is provided on the attached maps as well as in list format.

With the exception of the areas where the City extended public service in the early 2000s, Staff has been unable to locate documentation of an official notice having been sent to these property owners notifying them that the services are accessible and communicating the connection requirement. City Council granted a series of waivers from connecting into the public water and/or sanitary sewer systems in the 2002-2003 timeframe for several properties located on Hanna Hills Drive, MacDuff Way, Dublin Road, Avery Road, Limerick Lane, Dan-Sherri Avenue, Bellaire Avenue, Riverside Drive, and Manor Court East. The durations of these waivers varied from 1 year, 5 years, to full waivers. The basis was on the cost of connection, recent sale of property, financial hardship, and recent investment in new well or HSTS.

There are a number of reasons why these properties are not connected to the public utility systems. Some property owners may not be aware that the systems are accessible. On the other hand, Staff has heard from some property owners that are not interested in connecting due to the initial connection costs as well as the monthly usage bills that are associated with using these public utility services.

In the interest of reducing any potential health risk to the community as a whole, Staff recommends the City do its due diligence to work with these property owners to address the existing situations prior to investing the funds and creating additional situations that must be similarly addressed. It is Staff's recommendation that the City initiate the connection process with these property owners by sending them a letter notifying them that public sanitary sewer and/or water services are accessible and communicating the connection requirement. The required timeframe for connection is discussed in a later section of this memo.

### **Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Policy**

In preparation for this policy development, Staff spent significant time reviewing the Inventory of Existing HSTS and Health Risk Assessment information, City Council meeting minutes dating back to 1999, the results of surveys of property owners in the Extension Areas in 2004 and 2006, and best practices of other public entities. Taking into account all this information, Staff developed the attached comprehensive policy for water and sanitary sewer utility extensions to existing developed properties that do not currently have these services.

The proposed policy is intended to outline a process by which the City would identify, prioritize, program, and implement the design and construction of public utility service extensions. This proposed policy is intended to be consistent with Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio.

This policy retains City Council's ultimate decision-making control to determine what extension projects are programmed, if any, as well as the timing for project implementation. Council

reserves the right, without setting precedence, to extend public water and sanitary sewer services for the health, safety, and welfare of residents by the means it deems necessary.

**Purpose**

The purpose of this policy is to establish an equitable, written, uniform, and systematic mechanism by which the City of Dublin can plan and extend its public water and/or sanitary sewer services to those developed areas not currently served by the same and are within the City of Dublin corporation limits. City Council has determined that this Policy serves a public purpose and will benefit the citizens of the City of Dublin.

The process to extend public sanitary sewer and water services to an Extension Area may be initiated either by the City or by the property owners within an Extension Area as follows:

**1. City's Five-Year Capital Improvements Program (CIP) Planned Extensions**

City Council may decide to extend public utility mains to provide public sanitary sewer and/or water services to an Extension Area. City Council's decision to extend utility services would typically be based on protecting the health, safety, and welfare of the community as well as the opportunity to leverage a planned capital improvement project.

In the case of a CIP planned extension, the City will fund 100% of the design and construction of the public utility main extensions. Property owners will be responsible to pay for the installation of service lines from the public main lines to their structure and any modifications to existing interior plumbing necessary to connect to the water and/or sewer main lines. As an incentive to connect, property owners will be eligible for a waiver of fifty percent (50%) of the City of Dublin's current tap fees and capacity charges so long as connection is made within the required connection timeframe. The City of Columbus' connection charges will not be eligible for the waiver.

Staff has reviewed and prioritized the extensions by taking the following factors, as set forth in the policy, into consideration:

- Health and Safety
- Future Development Potential
- Potential to Leverage a Programmed Capital Improvement Project
- Cost Effectiveness
- Cost Estimate and Available Resources
- Other Factors

Staff recommends leveraging the transportation and utility CIP projects that are being proposed. Staff further recommends implementing the extensions in the areas identified as having greater potential for health risks along the east side of the Scioto River. As a result of this prioritization effort, Staff will propose the following extensions as a part of the 2016-2020 CIP:

CIP YEAR	Area	Sanitary Sewer	Water	Criteria
2016	-	-	-	The design of extensions to areas 13 and 11A will occur in 2016 as well as any necessary land acquisition.
2017	13	\$34,000	-	Opportunity to leverage the ET1406 Avery

				Road/Brand Road Intersection Improvement Project.
	11A	\$239,000	-	Opportunity to leverage the EF0201 Limerick Lane Stormwater Improvements Project.
2018	12	-	\$174,000	Opportunity to leverage the AW1001 Waterline Replacement Project.
	3A	\$1,319,000	-	Area has higher potential for health risks and extension would benefit greater number of parcels, Area 3 must be constructed prior to Area 2.
2019	8A	\$288,000	\$377,000	Opportunity to leverage the ET0103 Tuttle Crossing Blvd. Extension Project.
2020	-	-	-	No construction planned due to funding availability.

These preliminary cost estimates include detailed engineering and surveying. Costs not included in the estimates are any potential land acquisitions, private utility relocation, landscaping, rock excavation, permits, capacity fees, and lateral connections. These estimates are in 2015 dollars.

In the event City Council programs an extension project in the Five-Year CIP, Staff would send correspondence to the property owners in the Extension Area notifying them of the City's intent to proceed with the main line extensions, and reminding them of the City's requirement for connection to the utility systems.

Staff continued this prioritization effort past the five year CIP horizon in an effort to develop a conceptual citywide build out of the sanitary sewer and water service extensions. Using the potential for health risk information as the guiding criteria and reserving those areas that have future development potential, a conceptual build out plan for the sanitary sewer and water service extensions is as follows. This conceptual plan is based on what Staff knows at this time and will be reevaluated on an annual basis. Additionally, this plan may be adjusted based on any changes in potential for health risk, opportunities to leverage CIP projects, available resources, property development, and any petitioned areas.

YEAR	Area	Sanitary Sewer	Water	Criteria
2021	3B	\$822,000	\$556,000	Continue north along east side of Scioto River as area has higher potential for health risk.
2022	4A	\$285,000	\$752,000	Continue south along the east side of Scioto River as area has higher potential for health risk.
2023	15	\$43,000	-	Opportunity to leverage the potential Stormwater Improvements Project.
2024	2B	\$655,000	\$660,000	Continue north along east side of Scioto River as area has higher potential for health risk. Area 2 must follow construction of Area 3.
2025	-	-	-	No construction planned due to funding availability.

2026	10A	\$932,000	\$383,000	Begin west side of Scioto River as area has higher potential for health risk and extension would benefit greater number of parcels.
2027	10B	\$655,000	\$174,000	Continue north along west side of Scioto River as area has higher potential for health risk.
2028	-	-	-	No construction planned due to funding availability.
2029	10C	\$173,000	-	Continue north along west side of Scioto River as area has higher potential for health risk.
	10D	\$243,000	-	Continue north along west side of Scioto River as area has higher potential for health risk.
	6C	\$135,000	-	Area has higher potential for health risk.
2030	-	-	-	No construction planned due to funding availability.
2031	9	\$244,000	\$682,000	Area has medium potential for health risk.
2032	2A	\$716,000	-	Area has medium potential for health risk.
2033	1B	\$371,000	-	Area has medium potential for health risk. It is cost effective to construct 1B and 1C together.
	1C	\$347,000	-	Area has medium potential for health risk. It is cost effective to construct 1B and 1C together.
2034	4C	\$493,000	\$603,000	Area has medium potential for health risk.
2035	8B	\$277,000	-	Area has medium potential for health risk.
	7	\$198,000	-	Area has medium potential for health risk.
	4B	\$150,000	\$305,000	Area has medium potential for health risk.
2036	8C	\$149,000	\$259,090	Area has medium potential for health risk.
	6B	\$119,000	-	Area has medium potential for health risk.
2037	5	\$30,000	\$28,000	Area has medium potential for health risk.
	11B	\$292,000	-	Area has medium potential for health risk.
	1D	\$170,000	-	Area has medium potential for health risk.
2038	14	\$67,000	-	Area has lower potential for health risk.
	4D	\$156,000	\$140,000	Area has lower potential for health risk and development potential.
	3C	\$751,000	-	Area has lower potential for health risk.
2039	6A	\$269,000	-	Area has lower potential for health risk.
	20	\$63,000	\$230,000	Area has lower potential for health risk.
	21	\$75,000	-	Area has lower potential for health risk.
	2C	\$573,000	\$433,000	Area has lower potential for health risk.
2040	1A	\$372,000	-	Area has development potential.
2041	16	\$234,000	-	Area has development potential.
	18	\$35,000	-	Area has development potential.
	19	\$44,000	\$169,000	Area has development potential.
	17	\$94,000	-	Area has development potential.

**2. Petition for Extension by Property Owners**

Owners of property within an Extension Area desiring to obtain access to public sanitary sewer

and/or water services may submit a Utility Extension Application consisting of a cover letter, identification of the Extension Area, petition signed by no less than 85% of the property owners in the Extension Area (hereinafter referred to as Petitioners), and an affidavit to the City prior to March 1<sup>st</sup> of any given year. The affidavit will indicate the property owners' commitments to connect to the utilities as well as donate, at no expense to the City, all necessary easements for the placement of the public sewer and/or water utility services.

The City will evaluate the Utility Extension Application and all associated information based on eligibility criteria and determine if the application is complete and valid. If the application is deemed complete and valid, the extension will be evaluated for prioritization with the Five- Year CIP Planned Extensions described above.

The City Manager will prepare a recommendation report for City Council's consideration as a part of the annual review and update of the Five-Year CIP.

In the event City Council programs an extension project in the Five-Year CIP, Staff would send correspondence to the property owners in the Extension Area notifying them of the City's intent to proceed with the main line extensions, and reminding them of the City's requirement for connection to the utility systems.

In the case of a petitioned extension, the City will fund 100% of the design and construction of the public utility main extensions. Property owners will be responsible to pay for the installation of service lines from the public main lines to their structure and any modifications to existing interior plumbing necessary to connect to the water and/or sewer main lines. Petitioners must pay Dublin's current tap fees and capacity charges prior to the City advertising the construction contract for the installation of utility main lines. The City will withdraw funding for the project in cases where all Petitioners fail to pay the required tap fees and capacity charges prior to the City advertising the construction contract. Remaining property owners must connect within the required connection timeframe. As an incentive to connect, property owners will be eligible for a waiver of fifty percent (50%) of the City of Dublin's current tap fees and capacity charges so long as connection is made within the required connection timeframe. The City of Columbus' connection charges will not be eligible for the waiver.

### ***Monitoring and Reporting***

Staff will maintain a list of areas not served (Extension Areas) by public sanitary sewer and/or water systems. A report will be submitted annually to City Council as a part of the annual review of the City's Five Year CIP and will include:

- Number and quantity of known private HSTS in the City;
- Updated list of properties that are located within 100 feet of public sanitary sewer and water services but are not connected;
- Updated map of extension areas;
- Updated preliminary estimated cost for the design and construction of public sanitary sewer and water utility service extensions;
- Recommendation reports related to any petition for extension of public utility services received prior to march 1 of that year;
- Recommended Extension Areas to program for the next Five-Year CIP update; and

- Communications providing notices to property owners located within Extension Areas proposed to receive extensions during the upcoming CIP period.

In addition, condition assessments of private HSTS will be performed periodically and a report will be provided to Council.

### **Financial Considerations**

Water and Sewer Funds are enterprise funds and, by definition, self-supporting. As a result, user fees and capacity charges have been established to eliminate the use of income tax revenues for system operations, including capital costs. However, income tax revenues are a permissible revenue source to fund main line extensions, if Council chooses to do so. Beginning in 2014, as part of the 2014 – 2018 CIP, and again in 2015 as part of the 2015 – 2019 CIP, income tax revenues were allocated from the Capital Improvements Tax Fund to both the Water and Sewer Funds, each in the amount of \$200,000 annually, in order to begin providing an additional revenue stream to help fund these extensions. The funds will be encumbered so that they can be used for this purpose. Staff is proposing to continue the allocation of income tax revenues to the Water and Sewer Funds as part of the 2016 – 2020 CIP. However, it is important to point out that there are many other capital infrastructure needs such as roadways, parks, and storm water improvements that are 'competing' for the same income tax revenues.

The extensions proposed as part of the 2016 – 2020 CIP (as outlined above) are funded using existing Water and Sewer Fund balances as well as the annual allocation of income tax revenues from the Capital Improvements Tax Fund. Staff will also present to Council during the fall of 2015, the proposed changes to the water and sewer user fees for the upcoming years. These rates will take into consideration ongoing repair and maintenance costs in each of the funds as well as future capital infrastructure needs, beyond the extensions of the lines.

### **Required Connection**

Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio currently stipulate once the City extends sanitary sewer and water public services to within 100 feet of the property line, property owners are required to connect to the public systems at their expense within 90 days after the date of official notices to do so. In the event that a property owner proves hardship or extraordinary circumstances or excessive costs to make the required connection, the City Manager, with concurrence of City Council, may grant relief.

Staff believes it is important the City require property owners to connect to the public utility systems once they are accessible to ensure the City receives a return on its investment. The act of extending the main lines by itself does not further the overarching goal of protecting the health, safety, and welfare of residents if property owners are not connected.

With regard to the required connection timeframe, Staff performed some benchmarking to see how other communities handle these matters and found examples ranging from 90 days to 5 years.

<b>Entity</b>	<b>Timeframe</b>
Franklin County, Ohio	1 year
Chapel Hill, North Carolina	90 days
Olympia, Washington	2 years
Westerville, Ohio	6 months or 5 years if annexed
Grove City, Ohio	90 days
Upper Arlington, Ohio	required connection, no timeframe specified
Gahanna, Ohio	90 days
Tacoma, Washington	2 years
Portland, Oregon	3 years

In an effort to provide residents with as much of an opportunity to plan and budget for the costs associated with connecting to the public sanitary sewer and water services, Staff recommends providing as much advanced information and notification as possible to residents. The policy and program will be shared on the City's website for residents to reference. Staff also recommends correspondence be sent as a part of the annual CIP process to property owners in Extension Areas that are programmed within the Five-Year program notifying them of the City's intent to proceed with the main line extensions, and reminding them of the City's requirement for connection to the public utility systems. This communication would provide residents with between one and five years of advanced notification.

In addition, Staff recommends amending Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio to require property owners to connect to the public systems within **two years** after the date of official notices to do so.

Taking into account the advanced notification that will occur as a part of the annual CIP process as well as amending the Codified Ordinances connection timeframe to two years, residents would be provided between three and seven years notification, in total, to plan for connecting to the public systems.

### **Recommendation**

Staff recommends City Council take the following actions:

1. Direct Staff to bring forward an Ordinance amending Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio to require property owners to connect to the public systems within two years after the date of official notices to do so.
2. Direct Staff to initiate the connection process with those property owners of developed parcels that are currently within 100 feet of public sanitary sewer and/or water services by sending them a letter notifying them that public sanitary sewer and/or water services are accessible and communicating the connection requirement. In the interest of reducing any potential health risk to the community as a whole, Staff recommends the City do its due diligence to work with these property owners to address the existing situations prior to investing the funds and creating additional situations that must be similarly addressed.
3. Adopt the attached Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Policy.
4. Direct Staff to propose the aforementioned Five-Year Capital Improvements Program Planned Extensions as a part of the 2016-2020 CIP process.



**Office of the City Manager**  
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# Memo

**To:** Members of Dublin City Council  
**From:** Marsha I. Grigsby, City Manager   
**Date:** October 23, 2014  
**Initiated By:** Megan O'Callaghan, PE, Public Service Director  
**Re:** Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Draft Policy Framework

## Background

City Council has expressed an interest to continue its discussion regarding a comprehensive policy for the extension of municipal water and sanitary sewer services to existing developed areas that do not have access to these municipal services (hereinafter referred to as "Affected Areas"). In preparation for this discussion, staff has completed the following:

### *General Location Map*

Staff has validated the *General Location Map* of the Affected Areas (attached). Additionally, but not attached, staff has developed a series of detailed maps in order to develop an understanding of potential routes and linear footage that will be required and to determine preliminary estimated cost.

### *Inventory of Existing Household Treatment Systems (HSTS) and Health Risk Assessment*

In 2013, the City partnered with two Franklin County agencies, the Soil and Water Conservation District (FSWCD) and Public Health (FCPH). We utilized their expertise to inventory and assess the quality of existing HSTS in the City. 378 HSTS were catalogued and evaluated. A breakdown of the inventory is as follows:

- Aeration Treatment Units (ATU) on-lot – 195
- Septic to leach systems – 131
- Mound Systems – 49
- ATU on-lot to Leach – 2
- Holding Tank – 1

The Health Risk Assessment took into consideration the following variables:

- Age of the system
- Failure rate of the system
- Ground water pollution potential, and
- Soil suitability

Overall, the findings indicate a majority of the systems within Dublin are in working condition. The findings further indicate aeration treatment units had the majority of issues. These units are found with many of the older homes along the Scioto river corridor and are of greater concern from a public health perspective as they discharge directly to watercourses, storm sewers or drainage tiles. Also, these locations have few alternatives available for repair or replacement; especially, if

the soils are unsuitable or shallow bedrock is present.

There are also several areas that utilize soil-based systems that raise concern. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glen Cree Place, and Trails End Drive. Many of these systems were installed when the houses were built and may be toward the end of their lifespan. Replacement of failing soil-based systems can be difficult due to poor soils, shallow bedrock, and other factors.

[Please reference the attached Memo to City Council dated September 18, 2014 regarding "Utility Extension Policy Update – Inventory of Existing Household Sewage Treatment Systems (HSTS) and Health Risk Assessment Summary" for detailed information and maps.]

#### *Cost to Extend To Affected Areas*

Extension of the municipal water and sanitary sewer main lines to areas not currently served by the public systems would require significant financial investment. Staff has reviewed and updated the preliminary estimated costs associated with these extensions to the Affected Areas. The current total estimated cost is \$18,400,000 with sanitary sewer estimated to cost \$12,450,000 and water estimated to cost \$5,950,000.

#### *Summary of Council Discussions*

Staff has reviewed City Council meeting minutes relevant to this topic dating back to 1999. This review provided insight into decisions regarding past utility extensions as well as guidance for policy framework. Dublin City Council has continuously expressed concern for the safety, health, and welfare of Dublin residents who may be impacted by the Affected Areas that do not have access to municipal sanitary sewer and water services. While not precedent setting, City Council has demonstrated a willingness to extend these municipal services to Affected Areas that have experienced system failures and which residents expressed a high percentage of willingness to connect once the system was made available. Extensions have been made wherein the City absorbed 100% of the cost to extend the municipal system's main lines to the Affected Area; residents in the Affected Area were required to connect and to pay associated connection fees; residents in the Affected Area were required to pay for their own service laterals to the system main lines; residents in the Affected Area were to donate the necessary right of way; and Council gave consideration to requests for hardship waivers.

#### *Resident Demand for Services within Affected Areas*

In 2004 and 2006, City Council directed staff to conduct surveys of residents in the Affected Areas to determine the overall level of interest in connecting to the municipal sanitary sewer and water systems. A May 3, 2007 Memo to Dublin City Council (attached) reported that:

1. The 2006 survey responses for sanitary sewer reflected that a total of 104 property owners out of a total of 423 or 24.6% expressed an interest in connecting to the municipal sanitary sewer system. One area reflected an interest rate of 100%, but only included two addressed properties. The two next highest rates were 80% and 50%, respectively, after which the level of interest dropped to 41% and ranged to no interest or 0%.
2. The 2006 survey responses for water reflected a total of 64 property owners out of a total of 252 or 25.4% of property owners expressed an interest in connecting to the municipal water system. One area had a positive response rate of 86%; the two next highest rates

were 67% and 43% respectively. The remaining area responses range from 32% to 0%.

Staff has no reason to believe the demand for service has increased since previous discussions. Since this survey, staff has not received a significant increase in complaints or concerns expressed by residents in the Affected Areas that would suggest a change in attitude or need that would warrant a new survey.

#### *Best Practices Policies*

Staff has reviewed several best practices policies provided by the *Alliance for Innovation/Transforming Local Government* and those of other communities staff believe are comparable to the City of Dublin. Cities included in this review included: Chesapeake, Virginia; Town of Aberdeen, North Carolina; Town of Cary; North Carolina; Chapel Hill, South Carolina; Keller, Texas; Lunenburg, Massachusetts; Olympia, Washington; Cobb County, Georgia; Charlotte-Mecklenburg County, North Carolina; Hamilton County Wastewater District (City of Cincinnati); and Carmel, Indiana. In all cases, cities require participation by residents in the Affected Area to include petitions and required connection. In many cases, assessments are levied beyond the normal connection fees.

#### **Draft Policy Framework**

The proposed draft policy framework is intended to outline a process by which the City would identify, prioritize, program, and implement the design and construction of municipal utility service extensions.

This proposed draft policy framework is intended to be consistent with Chapters 51 and 52 of the Codified Ordinances of the City of Dublin, Ohio (attached). The Code stipulates once the City extends these municipal services to within 100 feet of the property line, property owners are required to connect to the municipal systems at their expense within 90 days after the date of official notices to do so. In the event that a property owner proves hardship or extraordinary circumstances or excessive costs to make the required connection, the City Manager, with concurrence of City Council, may grant relief.

#### *Purpose*

The purpose of this policy is to establish an equitable, written, uniform, and systematic mechanism by which the City of Dublin can plan and extend its municipal water and/or sanitary sewer utility services to those residential areas not currently served by the same and that are within the City of Dublin corporation limits. City Council has determined that this Policy serves a public purpose and will benefit the citizens of the City of Dublin.

The process to extend municipal sanitary sewer and water services to an Affected Area may be initiated either by the property owners within an Affected Area or City Council as follows:

#### *1. Petition by Affected Property Owners*

Owners of property within an Affected Area desiring to obtain access to municipal sanitary sewer and/or water services will submit a Utility Extension Application consisting of a cover letter, identification of the Affected Area, petition signed by no less than 85% of the property owners in the Affected Area (hereinafter referred to as Petitioners), and an affidavit to the City prior to March

1<sup>st</sup> of any given year. The affidavit will indicate the property owners' commitments to connect to the utilities as well as donate, at no expense to the City, all necessary easements for the placement of the municipal sewer and/or water utilities.

The City will evaluate the Utility Extension Application and all associated information, based on eligibility criteria and determine if the application is complete and valid. If the application is deemed complete and valid, the City will review and prioritize the extensions by taking the following factors into consideration:

- Health and Safety – Although interest in extensions expressed by property owners is part of the decision-making process, a greater goal of an extension policy is the protection of the health, safety, and welfare of the community.
  - Whether any environmental and/or public health issues may arise by extending or failing to extend public water and/or sanitary sewer;
  - Whether there is any potential for depletion or contamination of groundwater at or near the Affected Area;
  - Whether any of the Affected Properties in the Affected Area contain any failing household sewage treatment systems or non-functioning and/or contaminated drinking water wells as the result of changes to the aquifer from which the well draws water;
  - Priority based on health and safety concerns for addressing Projects under consideration;
  - Whether there are any other factors or issues that may negatively impact the health, safety and welfare of Dublin residents.
- Future Development Potential – In areas where future development can occur and, as a result, will extend the water and/or sanitary sewer main lines, the City should allow the future development to extend the lines. Establishing reimbursement districts may be considered as a mechanism to reimburse the developer.
- Potential to Leverage a Planned Capital Improvement Project – In areas where a capital project is planned (e.g. transportation) and, as a result, efficiencies could be realized to extend the water and/or sanitary sewer main lines as a part of that project, the City should coordinate the timing of such extension with the capital improvement project.
- Cost Effectiveness – Whether there are other remedies to repair or otherwise extend the life of the Owner's on-site household sewer treatment system and/or water source or to replace it as a more cost effective means than extending public utilities.
- Cost Estimate and Available Resources – The City will develop a preliminary design in order to estimate the costs and any significant issues associated with the potential extensions. This is a key factor that must be considered. Extensions are to be funded from the reserves in the Water and Sewer Funds. City Council may determine that it is appropriate to utilize income tax revenues to fund, or partially fund, the extensions of the main lines. Participation by the property owners via special assessment is an option that can be considered.
- Other Factors - Whether there are any other factors or issues that may negatively impact the environment or the public utility system.

The City Manager will prepare a recommendation report for City Council's consideration as a part of the annual review and update of the City's Five Year Capital Improvement Program (CIP).

Should City Council choose to fund a petitioned project in the Five-Year CIP, correspondence will be sent to the property owners in an Affected Area notifying them of the City's intent to proceed with the main line extensions, and reminding them of the City's requirement for connection to the utility systems.

Petitioners must pay their connection charges prior to the City advertising the construction contract for the installation of utility main lines. The City may withdraw funding for the project in cases where all Petitioners fail to pay the required connection charges prior to the City advertising the construction contract. Remaining property owners must pay their connection charges within six months from the date the utility is made available for use. [As an incentive, all property owners within an Affected Area will be eligible for a waiver of fifty percent (50%) of the City of Dublin's connection charges so long as payment is made prior to the City advertising the construction contract for the installation of the main lines.] The City of Columbus' connection fees will not be eligible for the waiver. Property owners will be responsible to pay for all lateral service lines and interior plumbing necessary to connect to the water and/or sanitary sewer main lines. The City will fund 100% of the design and construction of the municipal utility main extensions.

## *2. City Council Initiated Extensions*

In lieu of the aforementioned petition process, City Council may also decide to extend municipal utility mains to provide municipal sanitary sewer and/or water services to an Affected Area. City Council's decision to extend utility services would typically be based on either health and safety concerns (whether proactive or reactive) or the opportunity to leverage a planned capital improvement project. Examples of instances where City Council may choose to initiate extensions in conjunction with planned capital transportation projects include:

- sewer and water to Cara Road and Cara Court with the Avery Road widening project between Rings Road and Woerner-Temple Road,
- sewer extensions in the Bellaire subdivision with the Limerick Lane storm sewer improvement project, and
- sewer extension for the northeast corner of Avery and Brand Roads with the intersection improvement project.

In the case of a City Council initiated extension, the City will fund 100% of the design and construction of the municipal utility main extensions. Per Code requirements, property owners in the Affected Area must connect to the municipal systems within 90 days after the date of official notices to do so. [As an incentive, property owners will be eligible for a waiver of fifty percent (50%) of the City of Dublin's connection charges.] The City of Columbus' connection fees will not be eligible for the waiver. Property owners will be responsible to pay for the installation of all lateral service lines and any modifications to existing interior plumbing necessary to connect to the water and/or sewer main lines.

### *Monitoring and Reporting*

Staff will define, assess, monitor, and maintain a list of areas not served (Affected Areas) by municipal sanitary sewer and/or water systems. A report will be submitted annually to City Council as a part of the annual review of the City's Five-Year CIP and will include:

- number and quantity of private HSTS in the City,
- updated list of Affected Areas,

- updated preliminary estimated cost the for design and construction of municipal utility main extensions, and
- recommendation reports related to any petition for extension of utility services received prior to March 1 of that year.

In addition, condition assessments of private HSTS will be performed periodically and a report will be provided to Council.

This policy framework retains City Council's ultimate decision-making control to determine what extension projects are programmed, if any, as well as the timing. Council reserves the right, without setting precedence, to extend municipal water utility and sanitary sewer utility services for the health, safety, and welfare of residents by the means it deems necessary.

### **Recommendation**

Staff recommends City Council use this draft framework from which to discuss and develop a "Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Policy" for the City of Dublin. Staff hopes City Council finds this draft framework helpful in its ongoing discussion and development of a policy. Staff looks forward to Council's guidance on this matter.



**Office of the City Manager**  
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# Memo

**To:** Members of Dublin City Council  
**From:** Dana L. McDaniel, City Manager  
**Date:** June 12, 2015  
**Initiated By:** Megan O'Callaghan, Director of Public Works  
**Re:** Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property - Draft Policy Framework

## Summary

The City periodically receives inquiries from residents who are requesting municipal water and/or sanitary sewer services. City Council has scheduled a work session on June 15, 2015 to continue the discussion regarding a comprehensive policy for the extension of municipal water and sanitary sewer services to existing developed areas that do not currently have access to these municipal services.

A memo to City Council dated September 18, 2014 provided information regarding a significant project that was undertaken in 2013 in partnership with the Franklin County Soil and Water Conservation District and Franklin County Public Health agencies. The scope of this project was to determine the location of privately maintained household sewage treatment systems as well as the quality of the individual systems in the City, and assess the potential for any health risks. (see attached) The findings from this project were provided in both data and map format and will be invaluable for the policy discussion. Overall, the findings indicate a majority of the systems within the City are in working condition. An overview of this information will be presented at the upcoming Council work session.

Following the completion of the above-referenced project, staff reviewed the inventory and health risk assessment information in detail; City Council meeting minutes; the results of surveys of residents in the affected areas in 2004 and 2006; best practices; and updated the cost to extend to affected areas. Taking into account all this information, staff developed a draft policy framework for water utility and sanitary sewer utility extensions to existing developed properties that do not currently have such services. This policy framework was provided in a memo to City Council dated October 23, 2014. (see attached) Staff will also present this draft policy framework during the upcoming Council work session.

## Recommendation

This memo is provided as information in preparation for the policy discussion on June 15, 2015. Staff looks forward to Council's guidance on this matter.

June 15, 2015

Public Works Department



# City Council Work Session

Water and Sanitary Sewer Utility  
Service Extension Policy

## Water and Sanitary Sewer Utility Extensions

# Topics

1. Overview of Existing Developed Areas that Do Not Have Access to Municipal Water and Sanitary Sewer Services
2. Regulatory Overview
3. Inventory and Assessment of Existing Household Treatment Systems  
Project Overview
  - a) Inventory Results
  - b) Health Risk Assessment Results
4. Draft Policy Framework



# General Location Map

Existing developed areas that do not have access to municipal water and/or sanitary sewer services



## Water and Sewer Utility Extensions

# Cost to Extend Main Lines to Affected Areas

## Estimated Costs:

Sanitary Sewer: \$12,450,000

Water: \$5,950,000

**TOTAL: \$18,400,000**



## Water and Sewer Utility Extensions

# Connection Costs

Estimate Example (as of January 2015):

### Capacity Charges

<i>Estimate based on .75" water service</i>	Dublin	Columbus	TOTAL
Sanitary Sewer Service	\$2,360	\$3,044	<b>\$5,404</b>
Water Service	\$1,890	\$1,749	<b>\$3,639</b>

Meter - \$304

Service construction costs – varies depending on site



## Water and Sewer Utility Extensions

# Regulatory Overview

## Dublin City Code

Chapter 51 Sewer Regulations

Chapter 52 Water

Once the City extends these municipal services to within **100 feet** of the property line, property owners are required to connect at their expense within **90 days** after the date of official notices to do so. In the event that a property owner proves hardship or extraordinary circumstances or excessive costs to make the required connection, the City Manager, with concurrence of City Council, may grant relief.



Water and Sewer Utility Extensions

## Regulatory Overview

### **Ohio Revised Code**

Chapter 3718 Sewage Treatment Systems

### **Ohio Administrative Code**

Chapter 3701-29 Household Sewage Disposal Systems



Charlie Broschart, RS  
Environmental Health  
Division Manager



Josh Garver, GISP  
Assistant Director



**Franklin Soil and Water  
Conservation District**  
*Creating Conservation Solutions for Over 60 Years*



## Water and Sewer Utility Extensions

# FCPH Annual Operation and Maintenance Program and Future Requirements

## FCPH currently performs annual inspections:

- Aeration Treatment Units
- Evapo-Transpiration Systems

## Now required by OAC to perform O/M inspections on all HSTS

- Currently developing a plan to expand inspections
  - All HSTS system types
  - Operational permit terms
  - Frequency of inspections
  - Costs for operational permits and O/M inspection fees



## Water and Sewer Utility Extensions

# FCPH Annual Operation and Maintenance Program

Total Number of Aerators in Dublin: 184 (As of May 2015)

### 2013-14 Aerator Operation/Maintenance Program

*(Permit Period: Sept – Aug)*

1 <sup>st</sup> Observations	Results	Percentage
<b>190 Total</b>	159 No Corrective Action Needed	84%
	22 Corrective Action Needed	12%
	8 Unable to Inspect	4%
	1 Vacant House	<1%
2 <sup>nd</sup> Observations	Results	Percentage
<b>27 Total</b>	19 No Corrective Action Needed	70%
	5 Referred for Enforcement	19%
	3 Unable to Inspect	11%



## Water and Sewer Utility Extensions

# FCPH Annual Operation and Maintenance Program

Total Number of Aerators in Dublin: 184 (As of May 2015)

### 2014-15 Aerator Operation/Maintenance Program

*(Permit Period: Sept – Aug)*

1 <sup>st</sup> Observations	Results	Percentage
<b>183 Total</b>	165 No Corrective Action Needed	90%
	11 Corrective Action Needed	6%
	2 Unable to Inspect	1%
	5 Vacant House	<3%
2 <sup>nd</sup> Observations	Results	Percentage
<b>11 Total</b>	8 No Corrective Action Needed	73%
	3 Referred for Enforcement	27%



## Water and Sewer Utility Extensions

# Inventory and Assessment of Existing Household Treatment Systems Project Overview

Partnered with two Franklin County agencies, the Soil and Water Conservation District (FSWCD) and Public Health (FCPH)

### Project Scope Included:

- field verify, locate, and inspect known HSTS within Dublin;
- assess the functional status and public health risks of the HSTS;
- use a data-driven approach to evaluate each unserved area for the potential of public health risks and to rank these areas based upon this risk assessment; and
- if requested, continue the assessment of HSTS, until sanitary sewers are available and accessible.



## Water and Sewer Utility Extensions

# Inventory of HSTS

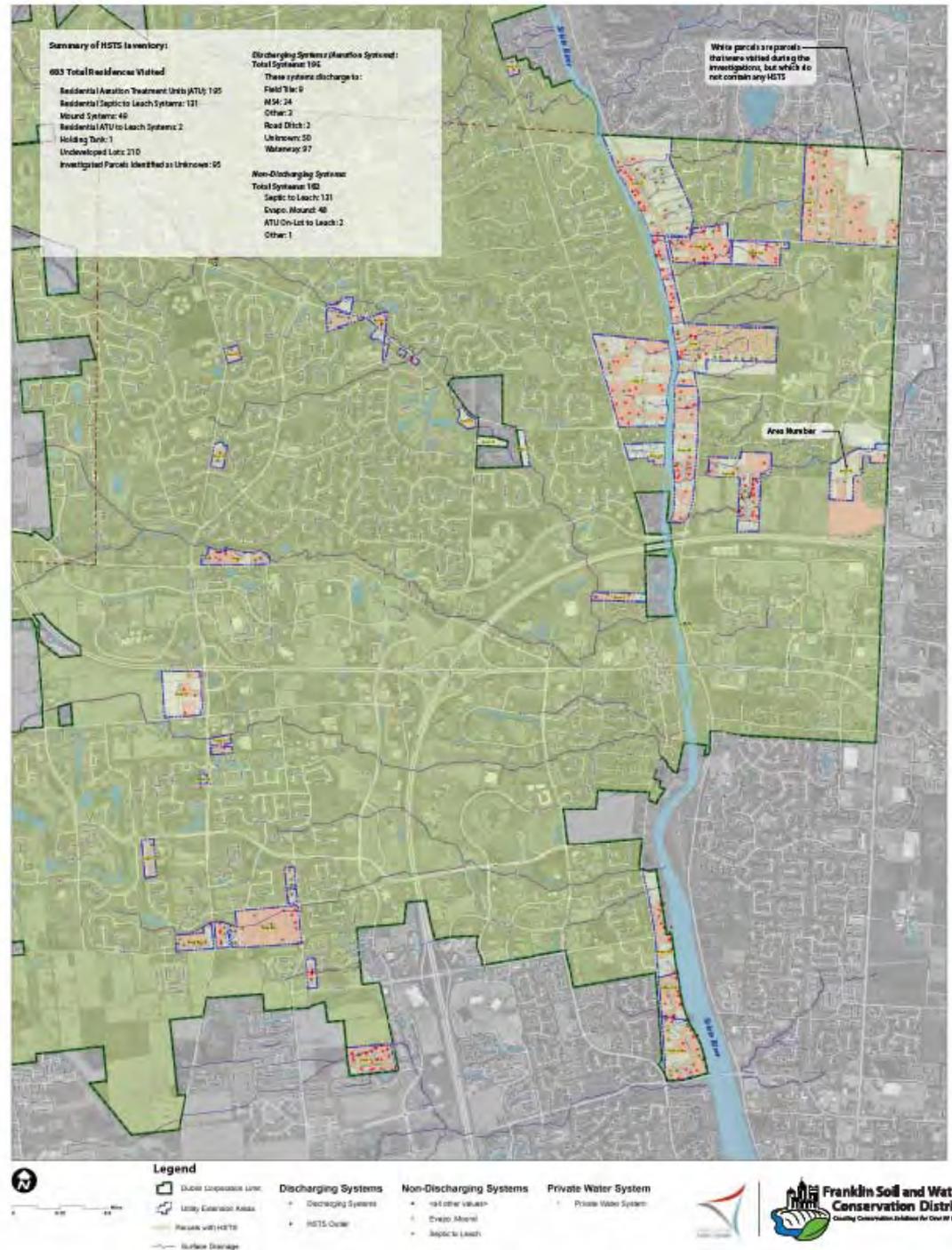
## 378 HSTS were catalogued and evaluated

- Aeration Treatment Units (ATU) off-lot – 195
- Septic to leach systems – 131
- Mound Systems – 49
- ATU on-lot to Leach – 2
- Holding Tank – 1



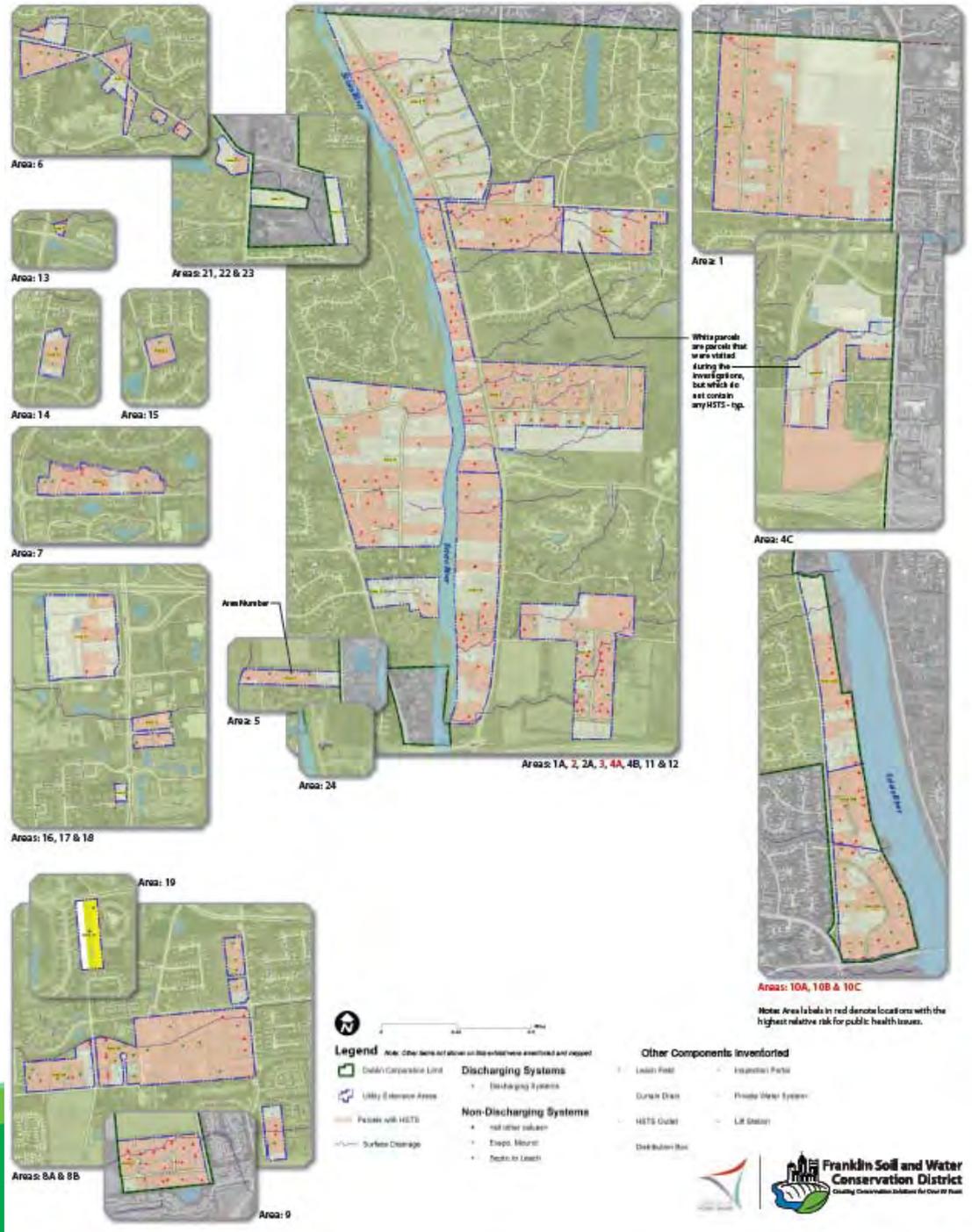
# Inventory of Existing Household Treatment Systems

Entire Study Area



# Inventory of Existing Household Treatment Systems

## Affected Areas



## Health-Based Risk Assessment

- FCPH and FSWCD considered the following variables:
  - age of the system,
  - failure rate of the system,
  - ground water pollution potential, and
  - soil suitability



## Health-Based Risk Assessment

- Overall, the findings indicate a majority of the systems within Dublin are in working condition.
- 37 of the 378 parcels that have an HSTS demonstrated nuisance conditions ranging from non-functioning to basic maintenance needs. FCPH worked with system owners to remedy the nuisance conditions



## Water and Sewer Utility Extensions

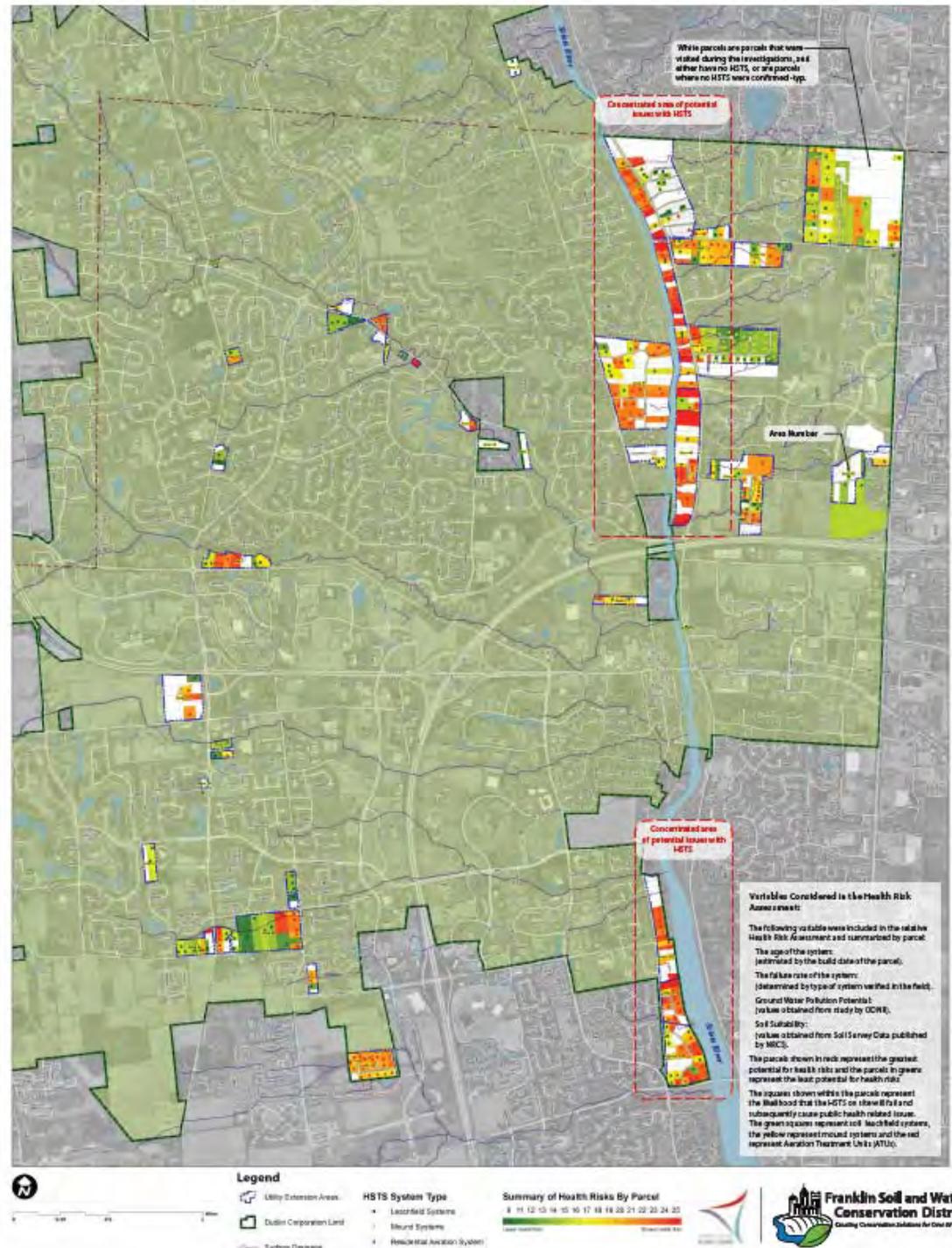
# Health-Based Risk Assessment

- Aeration treatment units had the majority of issues. These units are found with many of the older homes along the Scioto River corridor and are of greater concern from a public health perspective as they discharge directly to watercourses, storm sewers or drainage tiles.
- There are also several areas that utilize soil-based systems that raise concern. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glencree Place, and Trails End Drive.



# Health-Based Risk Assessment

Entire Study Area



# Health-Based Risk Assessment

## Affected Areas



## Water and Sewer Utility Extensions

# Resident Demand for Services within Affected Areas

## 2006 Survey of Property Owners in Affected Areas

### Question:

Understanding that you will be responsible for the costs associated with connecting to the public **water** system and that you would be required to connect to the public **water** system if a main water line is extended to your street, do you want a main water line extended to your street?

- 64 out of 252 or **25.4%** expressed interest in connecting
- One area had a positive response rate of 86%; the two next highest rates were 67% and 43%. The remaining area responses range from 32% to 0%.



## Water and Sewer Utility Extensions

# Resident Demand for Services within Affected Areas

## 2006 Survey of Property Owners in Affected Areas

### Question:

Understanding that you will be responsible for the costs associated with connecting to the public **sanitary sewer** system and that you would be required to connect to the public sanitary **sewer system** if a main sanitary sewer line is extended to your street, do you want a main **sanitary sewer** line extended to your street?

- 104 out of 423 or **24.6%** expressed interest in connecting
- One area had a positive response rate of 100% but only included two addressed properties. The two next highest rates were 80% and 50% after which the level of interest dropped to 41% to 0%.



## Water and Sewer Utility Extensions

# Previous Main Line Extensions

- Dublin levied special assessments in the 1970s and 1980s to provide for improvements (including extensions) to the water and sewer systems
- Dublin funded the extensions of water and sewer main lines in the early 2000s to address health and safety issues



## Water and Sewer Utility Extensions

# Benchmarking

### Carmel, IN

- Property owners along the main extension are required to pay the pro rata share for main extensions. Customers are not required to connect but they must pay the pro rata share with a main extension surcharge.

### Mason, OH

- Property owners pay for their share of the main extensions with an extension line charge.

### Chapel Hill, NC

- Special assessment district.

### Olympia, WA

- City funds the cost of main extensions to areas with highest public health concern, property owners pay for their connection fees.



## Water and Sewer Utility Extensions

# Draft Policy Framework

## Purpose

- Establish equitable, written, uniform, and systematic mechanism for planning

## Process may be initiated either by:

1. Petition by Affected Property Owners
2. City Council via CIP Process



## Water and Sewer Utility Extensions

# Petition by Affected Property Owners

- Property owners submit Utility Extension Application including petition signed by no less than 85% of property owners in the Affected Area
- Affidavit indicates property owners' willingness to connect and donate easements
- City evaluates and determines if application is complete and valid



## Water and Sewer Utility Extensions

# Petition by Affected Property Owners

- City prioritizes extensions using following factors:
  - Health and safety
  - Future development potential
  - Potential to leverage planned CIP project
  - Cost effectiveness
  - Cost estimate and available resources
  - Other factors
  
- City Manager provides recommendation to City Council as a part of annual CIP process



## Water and Sewer Utility Extensions

# Petition by Affected Property Owners

- If petitioned project is funded the property owners are notified
- Petitioners must pay connection charges prior to City advertising construction contract for the installation of main lines – City may withdraw funding for the project if petitioners don't pay
- As an incentive, property owners would receive a waiver of 50% of the City of Dublin's connection charges so long as payment made prior to advertising
- Property owners would be responsible to pay for all lateral service lines and interior plumbing necessary to connect to main lines
- City would fund 100% of the design and construction of the municipal utility main extensions



## Water and Sewer Utility Extensions

# Initiated by CIP Process

- Typically this process would be utilized in the event of health and safety concerns or opportunity to leverage a planned capital improvement project
- Property owners would be required to connect within 90 days after official notices to do so
- As an incentive, property owners would receive a waiver of 50% of the City of Dublin's connection charges so long as payment made prior to advertising
- Property owners would be responsible to pay for all lateral service lines and interior plumbing necessary to connect to main lines
- City would fund 100% of the design and construction of the municipal utility main extensions



## Water and Sewer Utility Extensions

# Connections

- Identifying those properties that are currently within 100' of public water and sewer and not connected
- Updating maps
- Researching the status of waivers previously granted by City Council
- Will determine follow up action to be taken with any property owners who have not connected to the public system(s) and do not have a current waiver



## Water and Sewer Utility Extensions

# Monitoring and Reporting

- Report submitted to City Council annually as a part of the CIP process:
  - Number and quantity of private HSTS in the City,
  - Updated list of Affected Areas,
  - Updated preliminary estimated cost for design and construction of main line extensions, and
  - Recommendation reports related to any petition for extension of services received prior to March 1 of that year.



Thank you!



Dublin City Council Work Session  
Monday, June 15, 2015

Minutes of Meeting

Mayor Keenan called the Monday, June 15, 2015 Study Session of Dublin City Council to order at 6:30 p.m. at the Dublin Municipal Building.

Members present were: Mayor Keenan, Vice Mayor Gerber, Ms. Chinnici-Zuercher, Mr. Lecklider, Mr. Peterson and Mr. Reiner. Ms. Salay was absent (excused).

Staff members present were: Mr. McDaniel, Ms. Mumma, Ms. O'Callaghan, Ms. Cox, Mr. Garwick, Mr. Langworthy, Mr. Earman, Mr. Ashrawi and Ms. Wawszkiewicz.

Also present were:

Charlie Broschart, Division Manager, Franklin County Public Health Water Quality Division  
Josh Garver, Franklin County Soil and Water Conservation District  
Joelle Angel-Chumbley, Kolar Design

• **Water and Sewer Extension Policy**

Staff Presentation

Ms. O'Callaghan stated that the City receives requests from citizens who are interested in receiving City sanitary sewer and/or water service. Staff has also heard the reverse from citizens – that they are not interested in receiving those services. This is a very important topic for many reasons.

1. It could be a public health and safety issue should residents not maintain their systems.
2. It is an environmental issue and could, potentially, affect property values.
3. It is also a complicated issue due to the number of areas involved; costs to the City and property owners; potential equity issue; and prioritization challenges.

These are the topics for tonight's discussion. Detailed information was provided in Council's packets in preparation for this discussion.

Several years ago, there was an effort to identify all of the areas within the City that currently do not have connection to or access to public water and sanitary sewer services. A comprehensive data set was developed and an analysis of 22 areas (depicted on the map) was done of the properties currently not connected. These areas are located throughout the City with a higher concentration around the river. Most of the areas are comprised of existing single-family homes and some commercial businesses, as well. The costs of potential extensions of the main line were then calculated after creating preliminary designs of water and sewer extensions to the affected areas. Because the total cost is significant, it is important to ensure there is a real benefit to the City from the expenditure. Prioritization of the work will be necessary, as it is impossible to complete over \$18 million of work at one time, should the City decide to fund the main line extensions.

Information has been assembled regarding the current capacity charges for a single-family home. Those charges are associated with tapping into water and sanitary sewer. Total capacity charges for extending 3/4-inch water lines and 6-inch sanitary sewer lines are approximately \$9,000 per home. This includes the actual capacity charges, as well as the meter. There are also additional charges to construct the lateral service from the main line to the home and for any plumbing necessary to the house. For lateral extension of a typical 6-inch gravity sewer service, the costs would range from an additional \$3,000 - \$5,000, depending on the length of that extension. If it

involves a grinder pump or lift station force main, it could be between \$7,000 - \$12,000, depending on the length of the line and elevation of the home.

Dublin City Code regulates the provision of sewer (Chapter 51) and water services (Chapter 52). The Code sets forth the requirements for building sewer and water main lines, as well as connection, usage restrictions, fees/charges, administration and enforcement. The Code requires that once the City extends either sewer or water services to within 100 feet of the property line, property owners are required to connect at their own expense within 90 days after receipt of notice. The Code also provides for a hardship waiver process.

Sewage treatment is regulated by the State, and Ohio Revised Code Chapter 3718 requires the Director of Health to adopt rules that require Boards of Health to approve installation and operation of sewage treatment systems, conduct site evaluations, and prescribe standards and specifications related to sewage treatment systems. The State provisions requiring connection are similar to the City's provisions. To develop a policy, the City recognizes that it is necessary to understand the location of all the privately maintained systems throughout the City, as well as the condition of those systems. To do this, the City has partnered with two County agencies, representatives from whom are present tonight -- Charlie Broschart, Franklin County Public Health Department, and Josh Garver, Franklin Soil and Water Conservation District.

Charlie Broschart, Division Manager, Franklin County Public Health, Water Quality Division, stated that this division oversees household sewage septic systems, as well as water quality of wells and private water systems. They conduct annual inspections of two types of systems within the City of Dublin and the County:

- aeration treatment units, which treat onsite all the waste produced, after which the effluent is discharged off site.
- evapo transpiration systems, a soil-based treatment system.

Ohio Administrative Code now requires all health departments to begin to inspect all household sewage treatment systems (HSTS) within a certain period of time, so the department is in the process of developing a plan to expand that inspection process. They have to look at all types of HSTS, operational permit term, frequency of inspections, costs of the inspections and permit fees. At some point, they will be looking at all systems within the City of Dublin that are not connected to the City sanitary sewer. In 2013 and 2014, the annual operation maintenance program for aeration treatment units inspected 184 discharge systems within the City. A total of 190 inspections were conducted on the first round. Findings were that 84% of the systems required no corrective action; 12% required some corrective action; 4% were unable to be inspected; and the remainder were vacant properties. The 12% rate of corrective action needed was lower than the County average of 14-15% failure rate. The following year, 90% of the 184 systems were in compliance. At this point, no aeration treatment units are in need of correction.

Josh Garver, Franklin County Soil and Water Conservation District, stated that their agency deals with natural resource issues throughout Franklin County. In recent years, they have become involved in the NPDS (stormwater discharge) permits. With the new opportunity, they have been partnering closely with Franklin County Public Health. The process will involve two parts: a detailed field inspection with documentations, and a health-based risk assessment based on environmental variables found during the field inspections. He reviewed the results of the field inspections, conducted on a voluntary basis, which included:

- Types of systems;
- Documentation of where the systems discharged – into storm sewer systems, ditches, streams, or tiles;
- Assessment of where there was the greatest potential for problems.

Currently, all the systems are functioning well but need to be maintained on a consistent basis, and all are prone to failure.

Mr. Broschart stated that in the field inspections, they did find issues on 37 of the 378 parcels they inspected. Those were referred to Code Enforcement and resolved. Aeration treatments units are mechanically driven, and therefore can fail. There are a number of these units within the Scioto River corridor. Because of the limitations of the soil and the proximity of bedrock to the surface, they are the only kind of systems that can be installed in the corridor. They directly discharge into water courses, storm sewers, or directly into the Scioto River. This is a concern, because when these systems do fail, there are between 300 – 600 gallons of untreated sewage discharged per day into the waterways. That is the area of greatest health risk.

There are also areas of soil-based systems – Grandee Cliffs, Summit View Road, Glenree Place and Trails End Drive. In those areas, there is very poor soil, and there are limited ways in which to modify or correct systems that begin to fail. [Maps were shown depicting areas of less risk in green and areas of greater risk in red.]

Mr. Garver stated that they summarized the areas of risk by parcel. Closer to the river corridor, there is significant limestone and cracks in that limestone, which permit deeper penetration. Because there are also wells in this area, there is concern about contamination of those wells. Contamination can be either surface or subsurface, infiltrating into the water courses.

Ms. O'Callaghan stated that this study provided information that is important in relation to prioritization discussion. In the areas denoted on the maps as areas of greater risk, there are no current problems, but they have the greatest potential for risk.

#### Policy Development

One factor to consider is the level of property owner demand that currently exists for the City to extend those services. In 2004 and 2006, Council requested that staff survey property owners in affected areas to assess interest in utility extensions.

Water service extension. Property owners completing the survey were aware that if service was extended, they would be required to connect and would be responsible for the costs associated with connecting. Across the 20 areas referenced, 25% of the homeowners expressed interest in having water service extended. There was only one area in which there was an 86% positive response rate. That is significant, because the draft policy proposes a requirement of at least 85% of the property owners in an area to petition the City for extension of the main line. In 2006, only one area met that threshold.

Sanitary sewer service extension. Across these areas, the overall interest in sanitary sewer extension was 25% with only one area meeting/exceeding the 85% threshold. The reason they are presenting the 2006 data is that the City has not received a significant increase in complaints or concerns expressed by residents in the affected areas since that survey, which would indicate there would not be much change in desire should the residents be surveyed again.

### History

Research showed examples of special assessments that were levied in the late 1970 – 1980s. In early 2000, there are examples where the City funded and extended water and sewer main lines to a few areas. In those cases, the residents were required to connect at their own expense or to obtain a hardship waiver from Council. One example of that was for Indian Run.

### Funding options

Staff researched other cities regarding funding options. The tool most often used was assessment of individual land owners for the entire cost of installing the main line. In all cases, cities required connection of the properties in the affected areas once lines were available; it was not an option.

### Draft Policy

Staff has taken all of the following information into account:

- Inventory and health risk assessment information
- Results of resident surveys in 2004 and 2006
- Best practices from around the country and cost to extend to affected areas

It is important to have a written policy that provides parameters but also provides some flexibility, because there is a significant cost associated with extensions. Annual funding and prioritization discussions would be necessary. She noted that the policy would apply only to developed property.

There are two different processes for utility main line extension:

- Petition by affected property owners
- Funding through the City CIP process

### Petition Process

- There must be a significant property owner commitment to justify the expenditure of extending the main lines. The extensions that occurred in the early 2000s required a range of 80-95% positive property owner response.
- Property owners would submit a utility extension application including a petition signed by no less than 85% of the property owners in the affected area.
- Affidavit indicating property owners' willingness to connect and donate easements.
- City evaluates and determines if application is complete.

This policy provides the City with flexibility in terms of prioritization and timing, taking into account the following factors:

- Health and safety
- Future development potential
- Potential to leverage a planned CIP project
- Cost effectiveness
- Cost estimate and reliable resources

Each year, as part of the CIP process, the City Manager would then provide a recommendation to Council. Should Council choose to fund a petitioned project in the 5-year CIP, correspondence would be sent to the property owners in the affected area.

### Petition by Affected Property Owners:

- If petitioned project is funded, property owners in the affected area are notified.

- Property owners must pay connection charge prior to City advertising the construction contract for installation of the mainline. City may withdraw funding for project if property owners do not pay.
- For the connection, there is a fee that must be paid to Dublin and another fee that must be paid to Columbus. As an incentive, property owners would receive a waiver of 50% of the City of Dublin's connection charges if that payment is made prior to advertising.
- Property owners would be responsible to pay for all lateral service lines to the home and interior plumbing necessary to connect to main lines.
- City would fund 100% of the design and construction of the utility main extensions.

Mr. Lecklider asked for clarification. If that incentive of payment made prior to advertising is deducted from the estimated cost of \$10,000 per property owner to connect, the average cost would be \$5,000?

Ms. O'Callaghan responded that the \$10,000 estimate amount includes both the Dublin and the Columbus capacity charges. The incentive would reduce only Dublin's capacity charges by 50%. For the sanitary sewer, Dublin's charge is \$2,300; for water service, Dublin's charge is \$1,890. Those charges would be reduced by 50% -- not the Columbus charges.

Mayor Keenan stated the cost could be affected by the property topography.

Ms. O'Callaghan responded that the topography would impact the lateral connection costs. The incentive applies only to the capacity charges.

#### CIP Process

- This process would be utilized in the event of health and safety concerns or opportunity to leverage a planned capital improvement project.
- Property owners would be required to connect within 90 days after official notices to do so.
- As an incentive, property owners would receive a 50% waiver of the City's connection charges if payment is made prior to advertising
- Property owners would be responsible to pay for all lateral service lines and interior plumbing necessary to connect to main lines.
- City would fund 100% of the design and construction of the municipal utility main extensions.

#### Connections

- Identify those properties that are currently within 100 feet of public water and sewer but not connected.
- Update maps.
- Research the status of waivers previously granted by Council.
- Determine follow-up action to be taken with any property owners who have not connected to the public system and do not have a current waiver.

Mr. Peterson stated that there are 22 areas identified in the City with no utility service. There are also properties that have services available but are not connected. Are those within the 22 areas identified or in other areas?

Ms. O'Callaghan responded that staff is not certain at this point. Staff believes there are some properties within the 100 feet of an available line, but that information is being verified.

Mr. Peterson inquired if it is possible these are outside of the 22 specified areas.

Ms. O'Callaghan responded that is correct.

Mr. Lecklider inquired if there are some properties that are within the 100 feet required connection area that have not connected for some reason.

Ms. O'Callaghan indicated that is correct.

Mr. Lecklider inquired if that number is unknown.

Ms. O'Callaghan confirmed it is unknown at this time.

Mayor Keenan asked if temporary waivers were granted previously, but no follow-up occurred.

Ms. O'Callaghan responded that some waivers were for one year, five years, etc. Staff is checking on the status of those.

Ms. Cox stated that there are two separate issues involved. There are some areas where a sewer was constructed to serve a developing property, and the property owner was never notified that they needed to connect. There are also some properties on Indian Run, MacBeth and MacDuff where the owners requested waivers, and they are not connected. The focus on the 22 areas was with the intent of determining where the City needed to invest capital dollars for extensions, not looking at areas where the sewer already is extended but properties are not connected.

Ms. O'Callaghan added that staff needs to review those areas, as well, and determine what options exist for connecting those homes.

Mr. Lecklider stated that for any policy Council adopts to have integrity, property owners within 100 feet need to be required to connect.

#### Monitoring and Reporting

A report would be submitted to City Council annually as part of the CIP process, containing:

- o Number and quantity of private HSTS in City
- o Updated list of affected areas
- o Updated preliminary cost estimates for design/construction of main line extensions
- o Recommendation reports related to any petition for extension of services received prior to March 1 of that year

#### Discussion

Mr. McDaniel stated that the inspections and data provided tonight are very helpful. He believes there are also septic systems within the area that are not typically inspected, because there is no inspection requirement.

Mr. Boschart responded that is correct.

Mr. McDaniel stated that is possible to have crisis situations with those systems. As part of this neighbor-initiated policy, there could be a property owner who indicates that he/she has a crisis situation. It is incumbent on the homeowner to inform the City of what alternatives they have considered, if any, and then to submit a petition. Council always has the option to consider such cases outside of the process, but staff is attempting to have a predictable budget and curb crisis situations. Proactively inspecting the systems better formulates the decision process and helps to better understand what the crisis is, if any. It puts the onus on an area that wants to be served to demonstrate that they have an issue. A petition process with an affidavit, which is modeled off some other cities, seems to be a good way to include that within the budget process. In regard to the CIP process, in a couple of years, Council will begin to see some debt issues roll off, such as the West Bank sewer. There will be more capacity within the sewer budget/capital budget to

address some of these areas, such as in the river corridor. Staff will look at potentially proposing that in a five-year CIP. That would be a CIP-initiated process.

Mayor Keenan inquired if the resident approval percentage is needed in the affected areas.

Mr. McDaniel responded that is required. Council could also address it as a policy to gradually extend utility lines through the CIP process. Property owners within 100 feet would be required to connect.

Mr. Reiner stated that when this was previously reviewed, there were some residents aggressively pursuing extension of water and sewer main lines. That direction was anticipated until resident surveys indicated a greater number did not want the extensions due to the costs of connection. If the City pursues this again, it is important that the City ensure that the entire costs of connection are shared with the homeowners. Previously, a good amount of time was spent on the effort only to learn later that the property owners did not want the extensions due to costs of connection.

Ms. Chinnici-Zuercher stated that, given the excellent statistics provided that indicate any needed remedies were taken care of, the next step would be to send a personal letter to each household sharing what the cost would be for the extension. A form would be included for the property owner to return indicating his desire. In reviewing the statistics, there isn't an overwhelming reason to move forward with a main line extension, unless the citizens are interested and willing to bear a reasonable cost for connection.

Mayor Keenan stated that he has also heard from some residents that they don't want a monthly water and sewer bill. When this was discussed five-six years ago, neighbors were pitted against neighbor. Although some passionately wanted these services, the majority did not. In regard to the suggestion that the lines be extended gradually over a number of years, would that be accomplished in a prioritized manner?

Mr. McDaniel responded that staff would look into that, perhaps using the river corridor as a starting point where there are a cluster of these systems. The City could begin with that corridor, with the goal of protecting the City's waterways. The City would extend the main line and require the property owners to connect.

Mayor Keenan stated that is a large amount of money, and for those nearing retirement age or senior citizens in those areas, it can be very difficult to pay the costs of \$15,000-\$20,000.

Mr. McDaniel stated that there would be a distinction between a Council-initiated effort versus resident petition. With the former, the City's cost is greater due to the cost of easement acquisition. If the residents petition for the extension, they would be asked to donate the easements as part of the process.

Ms. O'Callaghan stated that the City does have a few transportation projects in the proposed CIP where some utility extensions could be leveraged. Staff would anticipate having those discussions as part of this year's CIP process.

Mr. Lecklider stated that surveys of like communities indicate that the majority of the cities assess the expense of the main line extensions to the residents, as well, but that is not staff's recommendation.

Mr. McDaniel that in the past, there has been much discussion about what the City would be willing to take responsibility for in this regard. The policy decision that was made is that the City

would take responsibility for extending the main line. Some cities handle it in that manner, but most use an assessment district and/or assess in some manner for the main line, as well. A previous Council determined that before the City would assume the responsibility for the cost of extending the main line, 85% resident commitment was needed.

Ms. O'Callaghan noted that all the communities that were benchmarked required connection.

Mr. Lecklider inquired if the systems are being maintained, can they avoid any "crisis" situations. Mr. McDaniel responded that is true for the most part. Different systems can be used, however, and there may be some systems that reach a failure point and the resident has no options.

Mr. Broschart stated that maintenance is effective, but these systems all have limited life. The discharging systems -- the aeration treatment units -- now are required to have NPDS EPA permits to discharge. They are complicated mechanical devices that have to reach and meet certain discharge requirements. The average cost of installation of those units is about \$17,000. The cost range is \$12,000 to \$27,000, depending on what is needed. They do not last forever. The concrete tanks degrade over time. The motor can be replaced, but not the concrete tank, baffles, etc. that are the "bones" of the system. Eventually, they will need to be replaced. The costs of soil-based systems are a little lower, but can be as high as \$30,000, depending on whether they are complicated drip type systems. Installers require full payment.

Mayor Keenan noted that was an issue in the past. A number of the homeowners had recently replaced their systems requiring a significant financial investment.

Ms. O'Callaghan stated that the records indicate that was the basis for granting many of the previous waivers.

Mr. Reiner stated that was also the situation with some wells. The owners had recently replaced shallow wells, digging down to 200 feet for a new well.

Mr. Lecklider stated that the City has the responsibility of maintaining a certain level of water quality and that is a consideration, as well. How is that measured/analyzed? Is that an area overseen by the EPA, and would they report any such need to the City?

Ms. Cox responded that it is one of the minimum control measures in the NPDS permit process with the EPA. The City is required to have mapping, monitoring of the systems, and a plan to address any issues. The City's program contains a basic framework for that, but it is being updated. If Council adopts a policy that requires connection for water/sewer extensions, that will be part of the plan that is submitted to the EPA.

Mr. Lecklider asked if the EPA or the City is required to regularly submit samples of the Scioto River within City limits for testing.

Ms. Cox responded that practice is in the process of changing, but the City is working with Franklin County Soil and Water on that effort. Dry weather screening is performed. The creeks are walked to view what discharges are occurring, and then, identify if it is good or bad water. If there are illicit discharges, which is water that should not discharging in a location, these are indications of systems that have failed. Those are reported, and the City works with Franklin County Public Health to have that corrected.

Mr. Lecklider stated that he assumes that if the inspection indicated anything on the verge of a violation, the EPA would mandate that the City address it.

Ms. Cox responded that the effort to check the systems and work with homeowners to achieve corrections has been effective. Dry weather screening indicates that there are no issues of concern.

Mr. McDaniel stated that staff would recommend that this proposed policy be memorialized. If Council approves the policy in regard to the petitioning process and CIP process as presented, it could be treated as an administrative policy. He does not know if it should be a codified ordinance – legal guidance could be obtained. As an administrative policy, Council direction tonight would memorialize that.

Mayor Keenan stated that there do not appear to be any changes in the percentages or in the existing process.

Mr. Peterson inquired if it adopted as an administrative policy, when would public input be obtained.

Mr. McDaniel responded that the draft administrative policy could be scheduled for consideration at a Council meeting, where the public could testify.

Mayor Keenan inquired if an ordinance would be preferred versus an administrative policy.

Mr. McDaniel responded that some cities have codified the policy; some have not. Staff will look into that and provide a recommendation.

Mayor Keenan requested that an ordinance be drafted, based on tonight's discussion.

Mr. McDaniel responded that the draft policy could be revised to reflect tonight's discussion, and provided for discussion at a future Council meeting.

Ms. Chinnici-Zuercher stated that scheduling either a policy for adoption or an ordinance on Council's agenda for consideration should be acceptable.

Mr. McDaniel responded that staff would draft the policy in keeping with tonight's discussion and provide it to Council.

For benefit of the audience, Ms. Chinnici-Zuercher summarized that Council is generally leaning toward retaining the existing policy. The public is encouraged to look for a future Council agenda on which this will be scheduled, and to attend that meeting to share their affirmation of the process or request any changes. That would be helpful to Council in its decision-making process.

Mr. McDaniel clarified that there is no adopted, existing policy in place -- neither an administrative policy nor an ordinance that addresses this process. There is an existing policy for extension of lines, with the City paying for the main line and the 85% resident interest in connection required. However, the process by which that action is arrived at -- either initiated by the neighborhood, an affidavit process or CIP process -- is not address in a policy or through legislation. To date, the process has been more crisis-driven. This action will formalize the process.

Mr. Reiner requested that he wants to ensure, through survey or otherwise, that sufficient citizen interest and willingness to financially participate exists. With the last three efforts, it was eventually determined that the residents did not want the water and sewer extensions because of the expense of connection.

Mr. McDaniel stated that the petitioning process would ensure that.

- Wayfinding

Mr. Langworthy stated that following a brief presentation, Council will be asked to consider four specific items:

- Street name signs and traffic control signs (mockups on display)
- Historic Dublin wayfinding and entry signs
- Standard wayfinding outside the District
- Overhead wayfinding and traffic control signs at Riverside Drive/SR 161 roundabout

Mr. Gerber inquired what the reference to federal standards indicates.

Ms. Wawszkiewicz responded that the Manual of Uniform Traffic Control Devices (MUTCD) is a federal document that standardizes the appearance of all traffic control signs. Those standards are adopted by the state, and therefore the state's standards are exactly the same as the federal standards. They govern the size, mixed case and color of the letters.

Mr. Gerber stated that cities have used different colors of letters. Will the letters now used on signs be the same color throughout the country?

Ms. Wawszkiewicz responded that green, brown, blue and this version of black and white are allowed, but not Dublin's current reversed colors.

Joelle Angel-Chumbley, Kolar Design, stated that the purpose of using the black letters on white background is to provide better integration with the new streetscape language that is being introduced within the Bridge Street District.

Mr. Lecklider inquired what is required. What would be the consequences of not making this change?

Ms. Wawszkiewicz responded that there is no timeframe mandated to replace existing signage. However, repairs of damaged signs must comply with the new federal and state standards.

Mr. Lecklider stated that he assumes this is a community-wide requirement. What will occur with Muirfield signage?

Ms. Wawszkiewicz responded that the Muirfield Association maintains the street name signs in Muirfield. The City of Dublin does not have that responsibility.

Mayor Keenan inquired if they are subject to the same guidelines.

Ms. Wawszkiewicz responded affirmatively.

Mayor Keenan inquired how the City would know if Muirfield is complying with these new requirements when repairs are needed.

Mr. McDaniel responded that they are not complying. He is not advocating one way or another.

Ms. Chinnici-Zuercher noted that the City should make the Muirfield Association aware of this requirement, however.

Mr. McDaniel stated that when he was the Service Director, the City responded to this as an unfunded mandate, and did not implement the new state standard. However, it is now a federal and state mandate. It is typical, however, to have a period of years allowed for implementation.

Ms. Wawszkiewicz stated that a period of time was part of the initial standards, but it has since been rescinded. Currently, there is no time frame established.

Mr. McDaniel noted that therein lies the flexibility – no mandated timeframe for implementation.

Mr. Lecklider inquired if Dublin is developing a city-wide plan. Mayor Keenan stated that many cities do not have the resources to implement new standards. Ms. Wawszkiewicz stated that is the reason the timeframe was removed. Dublin's current signage, which is brown with white lettering, meets the criteria for 25 mph roadways. What is being discussed is updating letter sizes on the higher speed roadways, in mixed case, over a period of time – when those signs lose their normal serviceable life.

Ms. Chinnici-Zuercher stated that from a visual standpoint, she likes the City's current practice of using all capital letters. Driving at any speed, it is easier for the driver to view all capital letters. Do the federal standards prohibit that?

Ms. Wawszkiewicz responded affirmatively.

Mayor Keenan stated that these standards are required, so he is confused about what Council direction is being requested.

#### Street Name Signs and Traffic Control Signs (mockups on display)

Ms. Angel-Chumbley stated that their recommendation includes a change to the City's standard pole system. Consistent with the Bridge Street District streetscape language, a new round pole system would be implemented in the Bridge Street District only. A black frame would be applied around the street identification signs to provide a more upscale quality to the signature streets. An additional frame panel would be added on the backside of the regulatory signs.

#### Historic Dublin Wayfinding and Entry Signs

Mr. Langworthy stated that the second item relates to replacement of the Historic District obelisk markers. Kolar's recommendation is a simple, highly legible sign replacing only four of the eight markers; the other four are not in highly visible areas. Instead of two on each side of the street, four new markers would be placed on the inbound side of the road. Because they are not street signs, they do not need to conform to federal standards.

Mr. Langworthy stated that the wayfinding within the Historic District would have a similar type of print, but a finial also would be located at the top of the sign pole. Standard wayfinding in the City would not have the finial. The finial is distinctive, reflecting Celtic symbology. (Graphics shown)

Ms. Angel-Chumbley stated that because the City is undergoing so many changes, they have designed the structures with flexibility. The sign panel can slide in and out, permitting replacement. The finial is an element that can be applied or not applied. It will provide distinction in the Historic District versus the Bridge Park area that will have a more contemporary aesthetic.

#### Standard Wayfinding outside the District

Mr. Langworthy noted that there are some sign panel limitations, including weight and number. Ms. Angel-Chumbley stated there is a limit of four messages per panel.

Mayor Keenan inquired if the wind-load issue has been addressed.

Ms. Angel-Chumbley responded that is part of the next step – engineering. The signs will then be integrated into some of the existing streetscape projects.

Mr. Gerber inquired if the material is vinyl, because vinyl fades due to weather conditions.

Ms. Angel-Chumbley responded that the prototypes on display reflect two options. The one at the top has a painted background with the letters on top; the bottom portion is vinyl. In terms of life

expectancy, both are similar. Most sign systems will not show any change in the colors for ten years. As part of the CIP, the City will develop a maintenance scenario, which would include replacement costs that could occur within a 10-15 year period. As the City grows, the system will grow, as well.

Mayor Keenan stated that there was information shared that the City's sign shop could maintain the vinyl sign.

Ms. Angel-Chumbley responded that not only would the fabrication cost of the vinyl be lower, but the City would be able to maintain it. The recommendation is that the City order a certain amount of overage as part of the initial bid purchase, to provide some inventory to use for future replacements.

#### Overhead Wayfinding and Traffic Control Signs at Riverside Drive/SR 161 Roundabout

Mr. Langworthy showed the graphics for two panels: the top panel identifies the various highway navigation; the bottom panel shows lane assignment and wayfinding. These will be placed in four locations.

Ms. Angel-Chumbley stated that with the implementation of these elements, many of the existing signs will be removed from that environment. This combined system will reduce the number of signs needed. Lane assignment, wayfinding and the ODOT sign are incorporated into one unit.

This places much of the signage up in the air, keeping most of the signs off the ground.

Aesthetically and for safety reasons, it will be a better solution.

Mr. Langworthy stated that this solution will reduce the clutter.

Mr. McDaniel requested confirmation that after viewing the prototype, Council's direction is to use the bottom panel.

Council consensus was to use the bottom panel.

#### Implementation and Phasing

Ms. Angel-Chumbley stated that implementation would be phased in over two years, which would be programmed in the CIP.

Phase 1 - they are working with EMHT, Structure Point and MKSK to integrate this system into the existing Riverside Drive/SR 161 roundabout project that is currently under construction.

Phase 1A – Implementation by 2016 would include 20 wayfinding signs. A series of temporary signs would allow for street closures during construction and some multimodal kiosks with pedestrian material panels.

Phase 1B – Includes the remainder of the Bridge Street District, including Historic Dublin, and some surrounding areas on Riverside North and around City Hall/Coffman Park. If all of that area is not implemented, some of the sign messaging will be broken in its path.

Completion of Phases 1A and 1B will provide a full path system of 57 signs incorporating all of the Bridge Street District and some of the adjacent areas.

#### Phase 2

Implementation by the end of 2017 would provide a full, city-wide sign system.

Mr. Lecklider inquired the cost.

Ms. Angel-Chumbley responded that the total cost for all three phases will be \$1.3 million. That includes all of the vehicular directional, multimodal kiosks, the Historic District banners, replacement of the traffic control signs and street identification signs.

Mayor Keenan inquired where this project is budgeted.

Mr. McDaniel responded that it would be included for review in the CIP process.

Mayor Keenan inquired if any of it is currently budgeted in the road projects, such as the Riverside Drive signage.

Mr. McDaniel responded that signage for the roundabout was included in that project.

Mayor Keenan asked what the additional cost would be, beyond what is currently programmed?

That information can be provided to Council at a later date.

Ms. Angel-Chumbley stated that in Phase 1, all of the sign foundations would be installed as part of the roadway project, but the signage poles and sign panels would be a separate cost. The goal is to integrate these signs with any new roadway projects to avoid tearing up the new streetscape later.

Mr. Lecklider inquired the cost breakdown by phase.

Ms. Angel-Chumbley stated that the breakdown is:

Phase 1A - \$278,815; Phase 1B - \$674,000; Phase 3 - \$398,000.

Combined cost of the phases is \$1.3 million.

Mr. McDaniel stated that this cost covers replacements and additions due to planned construction projects. There will be ongoing costs, as well, related to later construction projects. He inquired if the gateway entries are included.

Mr. Langworthy responded that they are not, as some details are continuing to be worked out. The gateway entries will be brought back to Council at a later date.

Ms. Angel-Chumbley stated that a conceptual master plan phase was completed earlier. Tentative locations to demarcate the edges of the City have been identified – the primary entries off the I-270 interchange and the entry into Historic Dublin.

Mr. McDaniel stated that there may be additional costs with the gateway signs, the timing for which is uncertain. This item will be covered later with the CIP discussion.

Mr. Langworthy stated that there was a need to get the earlier phases underway due to the construction projects that are beginning.

Ms. Chinnici-Zuercher requested that copies of the cost sheet and PowerPoint be provided to Council.

Mr. Langworthy requested Council approval of the four wayfinding components.

Mayor Keenan moved approval of the Bridge Street District signs, street name signs and traffic control sign designs, as outlined in Item #1.

Mr. Reiner seconded the motion.

Vote on the motion: Mr. Lecklider, yes; Mayor Keenan, yes; Ms. Chinnici-Zuercher, yes; Mr. Reiner, yes; Mr. Peterson, yes; Vice Mayor Gerber, yes.

Mayor Keenan moved approval of the Historic Dublin wayfinding entry sign design, as outlined in Item #2.

Vice Mayor Gerber seconded the motion.

Vote on the motion: Mr. Reiner, yes; Ms. Chinnici-Zuercher, yes; Mr. Peterson, yes; Vice Mayor Gerber, yes; Mayor Keenan, yes; Mr. Lecklider, yes.

Mayor Keenan moved approval of the standard wayfinding sign design, as outlined in Item #3. Vice Mayor Gerber seconded the motion.

Vote on the motion: Mr. Peterson, yes; Vice Mayor Gerber, yes; Ms. Chinnici-Zuercher, yes; Mayor Keenan, yes; Mr. Reiner, yes; Mr. Lecklider, yes.

Mr. Reiner commented that he finds the zoo sign on the right side of the post, with an arrow pointing north through town, to be distracting to the driver. Normally, a driver would look up on a freeway sign to see the direction they are headed. Perhaps the zoo directional arrow should be included at the top. Reading the center directional arrows at the top while traveling 45 mph, then diverting your eyes to the right to read the side sign board is distracting.

Ms. Angel-Chumbley stated that they have studied the options and worked through the design process with City Planning and Engineering staff. An earlier content consideration incorporated the information on the right into the top panel, but it was too much information. Studies indicated that some people are looking primarily for the route direction. From a further distance back, they will be able to read the information on the green panel, but they will not see the smaller text information until their approach is closer to the sign. There will be a hierarchy of experience at different distances. At 100 feet, the driver will read the content on the green sign and get lined up in the correct lane. As they move closer, they will delineate that content down to specific destinations within that direction. The idea is that by changing the hierarchy of the topography, the information will be understood at different times in the path.

Mr. Reiner stated that he understands that but was curious about not having that information on the center board above.

Ms. Chinnici-Zuercher stated that when she is traveling, she looks up at the green sign only to determine the roads. She does not want to know what the ancillary activity possibilities are. For those who travel, that is universally consistent on the green signs. The question she has is why the Columbus Zoo is being advertised, when it is not within the City's jurisdiction.

Ms. Angel-Chumbley responded that there currently is a zoo sign inside the Historic District and at this intersection. It is a regional attraction. The messaging hierarchy they have developed for Dublin includes guidance to regional attractions on the edge of the City. Because zoo attendance brings value to the City, they believe it is an important destination to include.

Mr. McDaniel noted that some zoo visitors stay in Dublin hotels.

Mr. Langworthy noted that there are other zoo signs within the City jurisdiction.

The green overhead signs are illuminated.

Mayor Keenan moved approval of the overhead wayfinding traffic control sign design, as outlined in Item #4.

Vice Mayor Gerber seconded the motion.

Vote on the motion: Mr. Peterson, yes; Ms. Chinnici-Zuercher, yes; Mayor Keenan, yes; Mr. Reiner, yes; Mr. Lecklider, yes; Vice Mayor Gerber, yes.

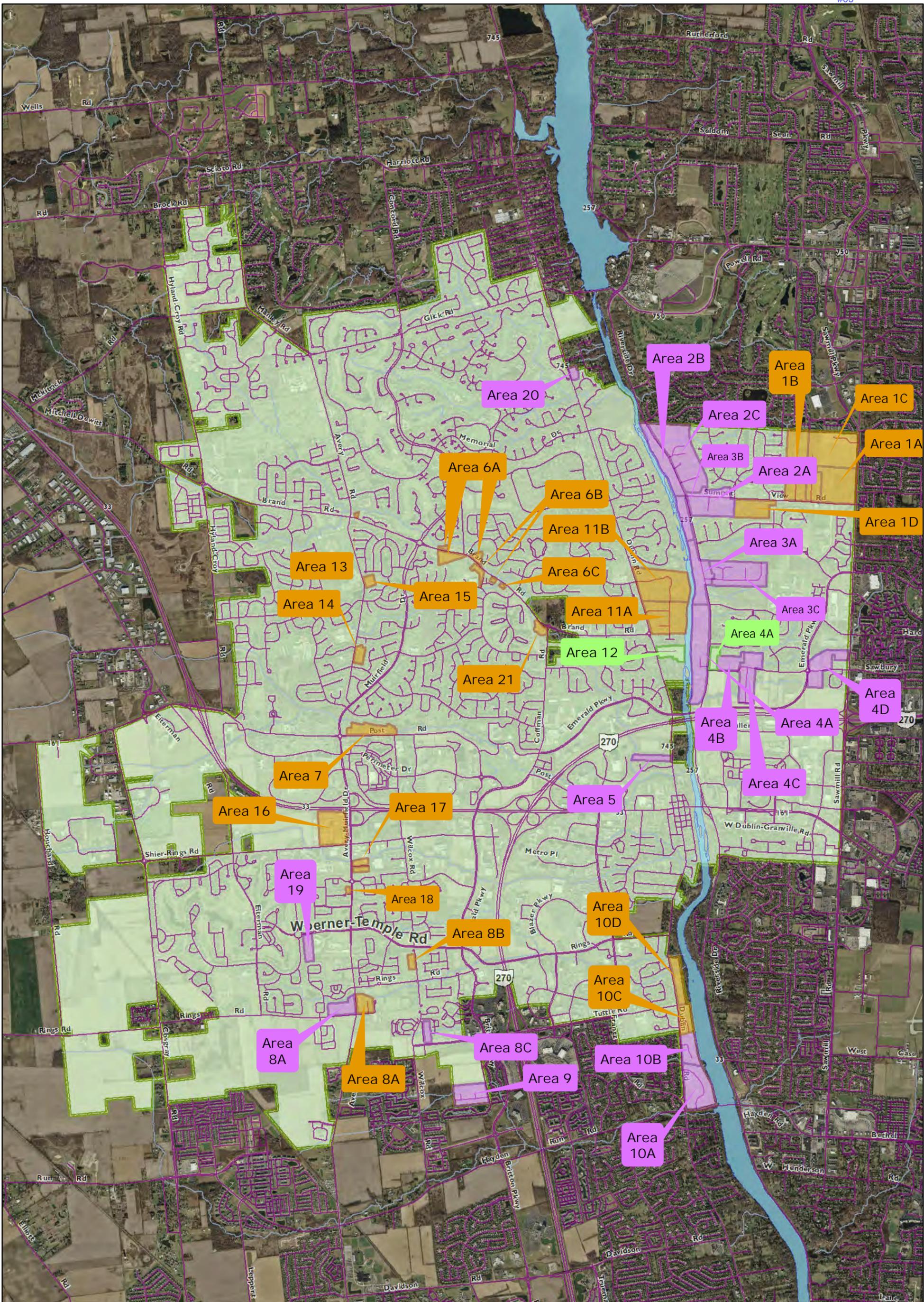
Ms. Chinnici-Zuercher requested confirmation that what was presented tonight would be implemented by the end of 2017.

Ms. Angel-Chumbley responded that some of it will be sooner, but all would be completed by the end of 2017.

The meeting was adjourned at 8:15 p.m.

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Clerk of Council



**Water/Sewer Extension Areas  
General Location Map  
August 3, 2015**



- Utility Extension Areas**
- Sewer Only
  - Sewer and Water
  - Water Only



City of Dublin

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# Memo

**To:** Members of Dublin City Council  
**From:** Marsha I. Grigsby, City Manager   
**Date:** September 18, 2014  
**Initiated By:** Megan O'Callaghan, PE, Public Service Director  
Barbara Cox, PE, Engineering Manager - Development  
**Re:** Utility Extension Policy Update - Inventory of Existing Household Sewage Treatment Systems (HSTS) and Health Risk Assessment Summary

## Background

The City periodically receives inquiries from residents who are requesting City public water and/or sewer services. As such, City Council has expressed an interest to continue the discussion regarding a policy for the extension of public sewer and water to areas that do not have access to the public utility systems. To date, significant time has been invested in creating a comprehensive data set and analysis of 22 developed and partially developed areas of the City that currently are not connected to public utility systems. A general location map is attached to the memo to provide an overview of the 22 areas.

In order to develop a policy, it is important to understand the location of privately maintained systems as well as any on-going issues with such systems. Accordingly, in 2013, the City partnered with two Franklin County agencies, the Soil and Water Conservation District (FSWCD) and Public Health (FCPH). We wanted to utilize their expertise to inventory existing Household Sewage Treatment Systems (HSTS) and analyze the quality of individual HSTS in the City. Septic tanks, leach fields, aerators, and evapo-transpiration systems are forms of onsite treatment systems. The scope of this project included:

- field verify, locate, and inspect the known HSTS within Dublin;
- assess the functional status and public health risks of the HSTS;
- use a data-driven approach to evaluate each unserved area for the potential of public health risks and to rank these areas based upon this risk assessment; and
- if requested, continue the assessment of HSTS, until sanitary sewers are available and accessible.

FCPH and FSWCD staff previously developed methods to prioritize unsewered areas for the potential of health risks in order to assist the Franklin County Commissioners in the development of policies to extend public sewer. These same methods were applied to this project.

See attached Project Scope of Work and Phases for detailed information.

Memo re. Inventory of Existing HSTS and Health Risk Assessment Summary  
September 18, 2014  
Page 2 of 3

## **Summary**

Franklin County and Dublin staff met earlier this summer to review the results of the site visits performed, Health Risk Assessment, and the mapping that was created from this effort. FCPH's evaluation is attached to this memo. A summary of their evaluation follows.

### *Inventory of Existing HSTS*

At the request of Dublin, FCPH and FSWCD staff visited 683 total properties. The attached flyer was provided in advance of the site visits to provide property owners information about the data collection efforts. Of these 683 properties, 305 did not have an HSTS as they are undeveloped/vacant properties.

378 HSTS were catalogued and evaluated. A breakdown of this inventory is as follows:

- Aeration Treatment Units (ATU) on-lot – 195
- Septic to leach systems – 131
- Mound Systems – 49
- ATU on-lot to Leach – 2
- Holding Tank - 1

See the attached "Household Sewage Treatment Systems (HSTS) Inventory – Entire Study Area" and "Household Sewage Treatment Systems (HSTS) Inventory – Utility Extension Areas" maps for more details.

### *Health Risk Assessment*

FCPH and FSWCD considered the following variables in its relative Health Risk Assessment:

- age of the system,
- failure rate of the system,
- ground water pollution potential, and
- soil suitability.

FCPH and FSWCD report that of the 378 parcels that currently have an HSTS, 37 of these systems demonstrated nuisance conditions ranging from non-functioning to basic maintenance needs. FCPH worked with system owners to remedy the nuisance conditions.

Overall, the findings indicate a majority of the systems within Dublin are in working condition. Referencing the attached "Household Sewage Treatment Systems (HSTS) Health-Based Risk Assessment – Entire Study Area" and "Household Sewage Treatment Systems (HSTS) Health-Based Risk Assessment – Utility Extension Areas" maps:

- The parcels shown in **green** represent the least potential for health risks and parcels shown in **red** represent the greatest potential for health risks.
- The squares shown within the parcels represent the likelihood that the HSTS on site will fail and subsequently cause public health related issues.
- The **green** squares represent soil leachfield systems, the **yellow** represent mound systems, and the **red** represent aeration systems.

Memo re. Inventory of Existing HSTS and Health Risk Assessment Summary  
September 18, 2014  
Page 3 of 3

The findings further indicate aeration treatment units had the majority of issues. These units are found with many of the older homes along the Scioto River corridor and are of greater concern from a public health perspective as they discharge directly to watercourses, storm sewers or drainage tiles. Also, these locations have few alternatives available for repair or replacement; especially, if the soils are unsuitable or shallow bedrock is present.

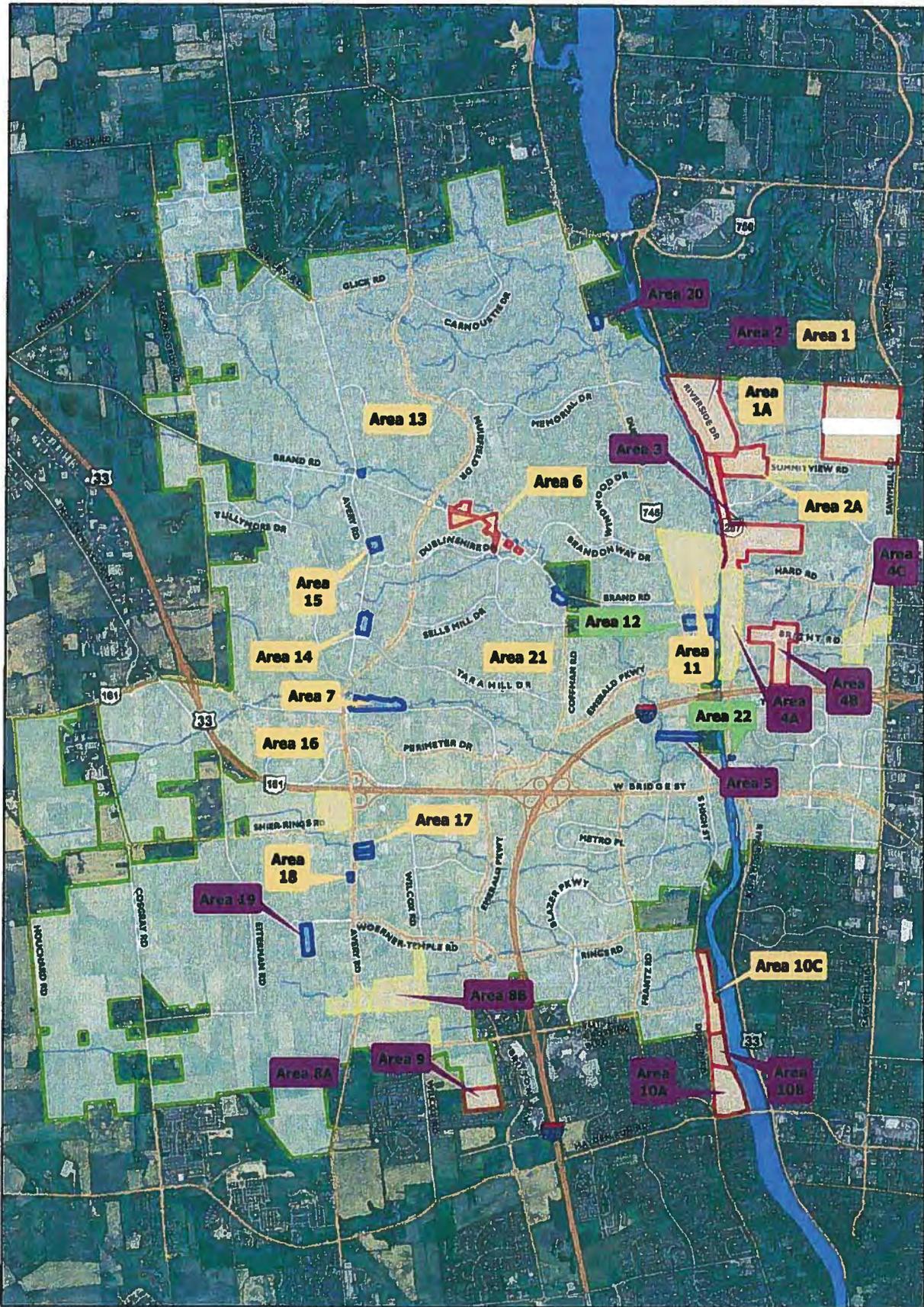
There are also several areas that utilize soil-based systems that raise concern. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glencree Place, and Trails End Drive. Many of these systems were installed when the houses were built and may be toward the end of their lifespan. Replacement of failing soil-based systems can be difficult due to poor soils, shallow bedrock, and other factors.

### **Recommendation**

This is an informational memo. A draft policy will be provided for City Council's consideration at the October 27, 2014 City Council meeting. The purpose of the draft policy will be to establish a written, uniform, systematic, and calculable approach to providing City water and/or sewer utilities to properties that are currently unserved.

#### **Attachments:**

- Water/Sewer Extension Study, General Location Map
- Project Scope of Work and Phases
- FCPH Summary of HSTS Evaluation
- Utility Extension Program Site Visits Flyer
- Household Sewage Treatment Systems (HSTS) Inventory – Entire Study Area map
- Household Sewage Treatment Systems (HSTS) Inventory – Utility Extension Areas map
- Household Sewage Treatment Systems (HSTS) Health-Based Risk Assessment – Entire Study Area map
- Household Sewage Treatment Systems (HSTS) Health-Based Risk Assessment – Utility Extension Areas map



**Water/Sewer Extension Study  
General Location Map  
October 2012**

Used for labels	Utility Extension Areas
Utility Extension Type	Priority
Sewer Only	High
Sewer and Water	Medium
Water Only	Low



### **1. Project Scope of Work and Phases**

The following is a proposal to: 1) catalog, locate, and describe all of the known HSTS within Dublin, 2) assess the current functional status and public health risks of HSTS, 3) use a data-driven approach to evaluate each unsewered area for the potential of public health risks and to rank these areas based upon this risk assessment, and 4) to continue the assessment of HSTS if requested until sanitary sewers are available and accessible. Franklin County Public Health (FCPH) and Franklin Soil and Water Conservation District (FSWCD) staff developed methods to prioritize unsewered areas for the potential of health risks to assist the Franklin County Commissioners in the development of policies to extend public sewer and will apply these same methods to this project. **The involvement of FCPH and FSWCD in the project is conditioned upon funding and staffing levels, the negotiated scope of the project, and expected timeframes.**

#### **Phase I**

- FCPH, FSWCD, and Dublin officials (hereafter referred to as "Dublin") will determine the boundaries of the project as corporation limits, service area, or other areas of inclusion or exclusion. The areas to be included in this study are: 1, 1A, 2, 2A, 3, 4A, 4B, 6, 8A, 8B, 9, all 10s, and 11.
- FCPH and FSWCD will collect all available electronic and paper data of the parcels that contain all known HSTS within the boundaries of the project.
- FCPH and FSWCD will collect all available reports and data that have been collected prior to this project on surface and ground water public health risks, sewage nuisance complaints and storm water pollution, unsewered areas, and existing sewer extension policies, including but not limited to annual inspections of aeration systems, existing private water system records, dry weather screening results (if completed) as required by Dublin's OEPA National Pollution Discharge Elimination System (NPDES) Storm Water Permit and existing reports and minutes of Dublin's Council and its special committees related to this issue.
- FCPH will summarize the findings of Phase I in an interim report to refine the scope of work for the proposed second phase of the project.
- **Timeframe: June 15, 2012 to July 20, 2012**

#### **Phase II**

- Based upon the findings in Phase I, FCPH, FSWCD, and Dublin will determine the extent of additional data that will be necessary to complete the project's original scope of work.
  - If additional data is necessary, FCPH, FSWCD, and Dublin will re-negotiate the scope of work and attach a written addendum to the contract agreeable to all parties.
- FCPH and FSWCD will provide: 1) a site-specific location of all HSTS using electronic and paper records and field investigations, 2) a detailed description and mapping of the HSTS using GPS coordinates and data collected on HSTS type, tank location(s), effluent discharge pipe location, curtain drain discharge pipe location, inspection box location, soil absorption field location, and 3) a current assessment of the function of all HSTS in Dublin and summarize its findings in an interim report.

- o This assessment will be a survey and will not include any enforcement actions against individual property owners, unless agreed upon by FCPH and Dublin.
- FCPH and FSWCD will collect additional field data if necessary and summarize the findings in an interim report.
- **Timeframe: July 23, 2012 to November 16, 2012 (based upon +/- 300 HSTS to be located, described, and assessed)**

### Phase III

- FSWCD will present to Dublin the evaluation method and metric used to prioritize unsewered areas for the potential of health risks for the Franklin County Commissioners.
- FSWCD, FCPH, and Dublin will review this metric and determine if it is appropriate for the Dublin project.
- FCPH and FSWCD will use those data and the agreed upon evaluation metric to prioritize and rank unsewered areas for potential public health risks<sup>1,2,3</sup> and summarize the findings in a draft final report.
  - o Dublin will be given the opportunity to review and comment on the draft final report prior to publication. The draft final report will be a public record and subject to public records requests. FCPH will provide to the City of Dublin a priority ranking of unsewered areas for potential public health risks. This ranking data will be one of several factors used by the City of Dublin to prioritize the deployment of sanitary sewer infrastructure.
- **Timeframe: January 1, 2013 to March 8, 2013**

### Phase IV

- FCPH will continue the assessment of all existing HSTS within Dublin and provide an annual report if requested.
  - These "assessments" will be considered investigations to determine the existence of public health nuisances and could result in enforcement actions, with consideration given to the timeframe of the extension of sanitary sewers and the effectiveness of repairs and upgrades of the HSTS to abate the public health nuisance<sup>3</sup>.
  - Phase IV will include the assessment of Septic Tank and Leach Field HSTS, the only HSTS currently NOT inspected annually by FCPH. An annual \$50 operation permit paid by the HSTS owner to FCPH will fund this inspection program. Dublin will need to adopt an ordinance to require owners of septic tank and leach field HSTS to purchase an annual operation permit, because the Franklin County Board of Health's Sewage Treatment Systems Regulation 720 does not require the annual inspection of this type of HSTS.

## 2. Project Budget

The project's budget takes advantage of state match dollars awarded to FSWCD. Dublin will contract with FSWCD, who will subcontract with FCPH for services. Table 1 is a summary of project personnel, material, and supply costs by Phase. Table 2 summarizes the personnel, material, and supply costs by agency. Table 3 summarizes the estimated additional costs in Phase II factoring per HSTS unit costs (see \*\* below Table 1) and the total project cost.



1404 Goodale Blvd, Suite 100  
Columbus, Ohio 43212  
Telephone: (614) 486-9613

September 17, 2014

City of Dublin  
Engineering  
Attn: Barb Cox, PE  
5800 Shier-Rings Road  
Dublin, Ohio 43016-1236

**Re: Summary Findings for the 'Dublin Health Risk Assessment of HSTS and Sanitary Sewer Extension Priority Evaluation' performed by Franklin Soil and Water Conservation District and Franklin County Public Health**

The 'Dublin Health Risk Assessment of HSTS and Sanitary Sewer Extension Priority Evaluation' was a combined effort by Franklin Soil and Water Conservation District and Franklin County Public Health. The goal of the project was to field verify, inspect, and record the locations of HSTS sites within the defined utility extension areas provided by the City of Dublin. This data was compiled and delivered to Dublin for incorporation into their GIS.

Upon completion of the inventory and assessment of the HSTS, a Health Risk Assessment was conducted to prioritize/rank the parcels according to their relative health risk. The following variable were included in the relative Health Risk Assessment and summarized by parcel:

The age of the system: (estimated by the build date of the parcel)

The failure rate of the system: (determined by type of system verified in the field)

Ground Water Pollution Potential: (values obtained from study by ODNR)

Soil Suitability: (values obtained from Soil Survey Data published by NRCS)

During the course of this project, 378 HSTSs in the defined areas were catalogued and their function evaluated. By far, the majority of the failing HSTS's were aeration treatment units (ATU) that discharge their effluent to storm drains, drainage tiles or directly to watercourses. The remaining failures were septic to leach and a mound type system. Aeration treatment units are prone to failure because of the mechanical design used to treat the sewage, and homeowners need to be attentive to the system and implement routine maintenance. In many cases, we were able to work with the homeowners to have the systems repaired and make them functional. Most of the ATUs in these areas are older units, and their functionality and life span may now be limited.

As the data reflects, there are areas along the Scioto River corridor that have a high concentration of ATUs, poor soils, shallow depth to bedrock, coupled with advanced age of the ATUs. These units also discharge directly to watercourses, storm sewers, and drainage tiles which increase the risk of pollution, and human exposure to untreated sewage and pathogens. This scenario is of greatest concern from a public health perspective. There are also several areas that utilize soil based systems that raise concern as well. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glencree Place and Trails End Drive. Many of these systems were installed when the houses were built and may be toward the end of their lifespan. In some instances, a soil based replacement system may be an option, but for many, due to poor soils, shallow depth to bedrock and other limiting factors, ATUs may be the only option remaining. In the past several years, FCPH has already been involved with homeowners in these areas as they now are beginning to replace systems as they fail.

## Dublin City Council

### Council Members

- Mayor Tim Lecklider
- Vice Mayor Amy Salay
- Cathy A. Boring
- Marilee Chinnici-Zuercher
- Richard S. Gerber
- Michael H. Keenan
- John G. Reiner

### City Manager

Marsha Grigsby

### For your information:

- An estimated 25% of the US population relies on onsite wastewater system to treat and dispose of their household water (USPEA).
- Pollution concentrations from failing HSTS discharges could exceed public health nuisance standards.
- A number of factors can cause HSTS to fail:
  - Unsuitable soil conditions
  - Improper design and installation
  - Inadequate maintenance practices
  - The age of the system
- When an HSTS fails, untreated sewage is discharged into the environment. Any contact with untreated human waste can pose health risks. Untreated wastewater from a failing HSTS can contaminate your drinking water supply, your neighbor's drinking water supply, and contaminate streams, drainage ditches, rivers and lakes. There is a potential that untreated sewage from failing systems could carry disease-causing organisms.
- These health risks are directly tied to your exposure to and ingestion of untreated sewage. The young, the old, and persons with ongoing chronic health conditions or immune system problems are at higher risk for getting sick if exposed. If you are in an area where failing HSTS may be located, do not ingest the surface water from ditches or streams, wash your hands thoroughly with soap and water and do not allow kids or pets to play in the water looks and smells like it is contaminated with sewage. This common sense approach will protect you and your loved ones.
- City of Dublin Codified Ordinances provides regulations regarding Private Wastewater Disposal in Chapter 51: Sewer Regulations.

# Utility Extension Program Site Visits

**The City of Dublin is planning for the future and we need your help. We have partnered with two Franklin County agencies, the Soil and Water Conservation District (FSWCD) and Public Health (FCPH), to create an inventory of existing household sewage treatment systems in the city.**



### What is a household sewage treatment system?

A household sewage treatment system, or HSTS, treats household wastes in areas without access to public sewers. Septic tanks, leach fields, aerators and evapo-transpiration systems are forms of onsite treatment systems.

### Why is a site visit needed?

Properties in your area are currently served by HSTS. The type, location and condition of these systems need to be inventoried and mapped using GPS coordinates.

### What will happen during the site visit?

You do not need to be at home for the site visit. The site visit will include:

- Representatives (2 or 3 staff members) of FSWCD and FCPH will visit your property. They will have identification with them.
- They will knock on the front door to notify you that they are on your property.
- They will ask you to secure your pets and unlock any gates.
- They will need access to all sides of your property (front, side and rear).
- They will be taking notes regarding your HSTS and water well location (if applicable).
- They will also be walking near any streams and waterways adjacent to your property.
- They will not need to enter your home.

### What will happen if the representatives cannot access your property?

If access to your property is not possible at the time of the initial site visit, the representatives will leave a notice at your front door requesting that you contact FCPH directly to arrange at time to have the site visit performed.

### When will the site visit be performed?

The site visit will occur during normal daytime working hours. The site visits need to occur on a clear day and are being done on an area by area basis. The representatives will be in your area within the next two to three weeks.

### What happens with the information gathered during the site visit?

The purpose of this inventory is for FSWCD and FCPH to provide their expertise to the City of Dublin in characterizing the existing functionality and mapping of these HSTS. This will aid the City in determining priority areas for public sanitary sewers extensions. The City anticipates that this effort will be on-going until all areas of the City are provided with public sanitary sewer service.

This inventory is also a requirement of the City's National Pollutant Discharge Elimination System (NPDES) permit. The inventory will be used to map the locations of the HSTS.

If the site visit reveals any concerns with the operation of your HSTS, FCPH will contact you directly to discuss the findings.

### Who to contact with questions?

Please contact the City of Dublin with any questions regarding the City's Utility Extension Program:

Sara Ott, Senior Project Manager  
Phone: 614.410.4448  
Email: [sott@dublin.oh.us](mailto:sott@dublin.oh.us)

Please contact FCPH regarding your HSTS and specifics of the site visits:

Gary Young, Supervisor  
Water Quality Program  
Phone: 614.525.3909

### Definitions and websites:

- FSWCD : Franklin Soil and Water Conservation District  
[www.franklinswcd.org](http://www.franklinswcd.org)
- FCPH: Franklin County Public Health  
[www.myfcph.org](http://www.myfcph.org)
- HSTS: household sewage treatment system  
Franklin County Public Health website:  
[www.myfcph.org/wqs.php](http://www.myfcph.org/wqs.php)
- Ohio Department of Health website:  
[www.odh.ohio.gov/odhprograms/eh/sewage/sewage1.aspx](http://www.odh.ohio.gov/odhprograms/eh/sewage/sewage1.aspx)
- NPDES: National Pollutant Discharge Elimination System  
[epa.ohio.gov/dsw/permits/GP\\_MS4StormWater.aspx](http://epa.ohio.gov/dsw/permits/GP_MS4StormWater.aspx)

# Household Sewage Treatment Systems (HSTS) Inventory and Health-Based Risk Assessment



CITY OF DUBLIN.

## Relative Health-Based Impacts - Entire Study Area

### FCPH Summary of HSTS Evaluation:

During the course of this project, 378 HSTSs in the defined areas were catalogued and their function evaluated. By far, the majority of the failing HSTS's were aeration treatment units (ATU) that discharge their effluent to storm drains, drainage tiles or directly to watercourses. The remaining failures were septic to leach and a mound-type system. Aeration treatment units are prone to failure because of the mechanical design used to treat the sewage, and homeowners need to be attentive to the system and implement routine maintenance. In many cases, we were able to work with the homeowners to have the systems repaired and make them functional. Most of the ATUs in these areas are older units, and their functionality and life span may now be limited.

As the data reflects, there are areas along the Scioto River corridor that have a high concentration of ATUs, poor soils, shallow depth to bedrock, coupled with advanced age of the ATUs. These units also discharge directly to watercourses, storm sewers, and drainage tiles which increase the risk of pollution, and human exposure to untreated sewage and pathogens. This scenario is of greatest concern from a public health perspective. There are also several areas that utilize soil based systems that raise concern as well. These areas are on and around Grandee Cliffs Drive, and the areas of Summit View Road, Glencree Place and Trails End Drive. Many of these systems were installed when the houses were built and may be toward the end of their lifespan. In some instances, a soil based replacement system may be an option, but for many, due to poor soils, shallow depth to bedrock and other limiting factors, ATUs may be the only option remaining. In the past several years, FCPH has already been involved with homeowners in these areas as they now are beginning to replace systems as they fail.

White parcels are parcels that were visited during the investigations, and either have no HSTS, or are parcels where no HSTS were confirmed -typ.

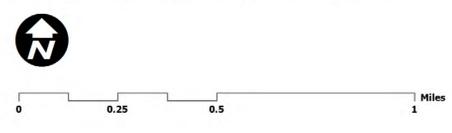
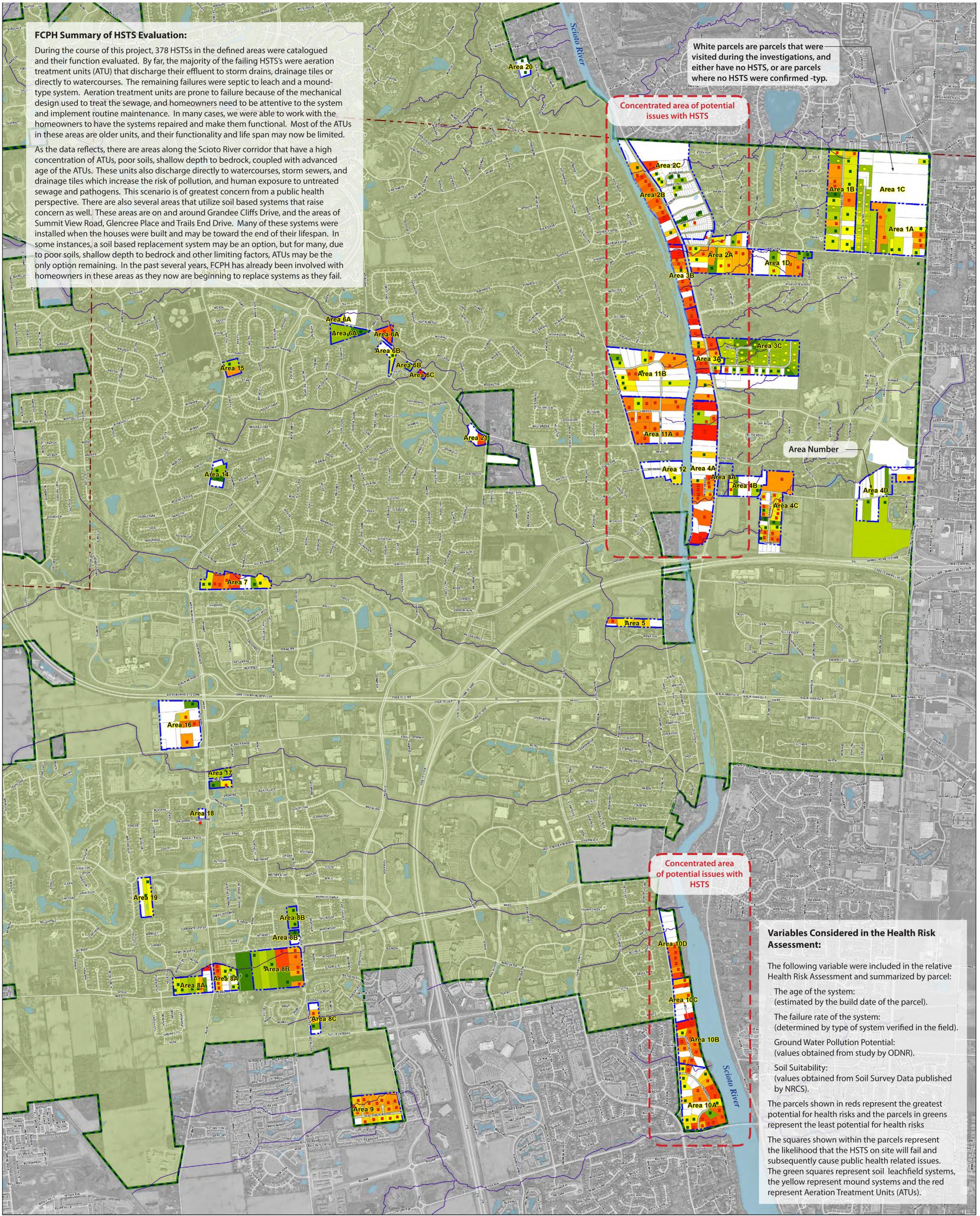
Concentrated area of potential issues with HSTS

Concentrated area of potential issues with HSTS

### Variables Considered in the Health Risk Assessment:

The following variable were included in the relative Health Risk Assessment and summarized by parcel:

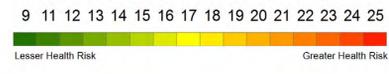
- The age of the system: (estimated by the build date of the parcel).
  - The failure rate of the system: (determined by type of system verified in the field).
  - Ground Water Pollution Potential: (values obtained from study by ODNR).
  - Soil Suitability: (values obtained from Soil Survey Data published by NRCS).
- The parcels shown in reds represent the greatest potential for health risks and the parcels in greens represent the least potential for health risks
- The squares shown within the parcels represent the likelihood that the HSTS on site will fail and subsequently cause public health related issues. The green squares represent soil leachfield systems, the yellow represent mound systems and the red represent Aeration Treatment Units (ATUs).



### Legend

- Utility Extension Areas
- Dublin Corporation Limit
- Surface Drainage
- HSTS System Type
  - Leachfield Systems
  - Mound Systems
  - Residential Aeration System

### Summary of Health Risks By Parcel

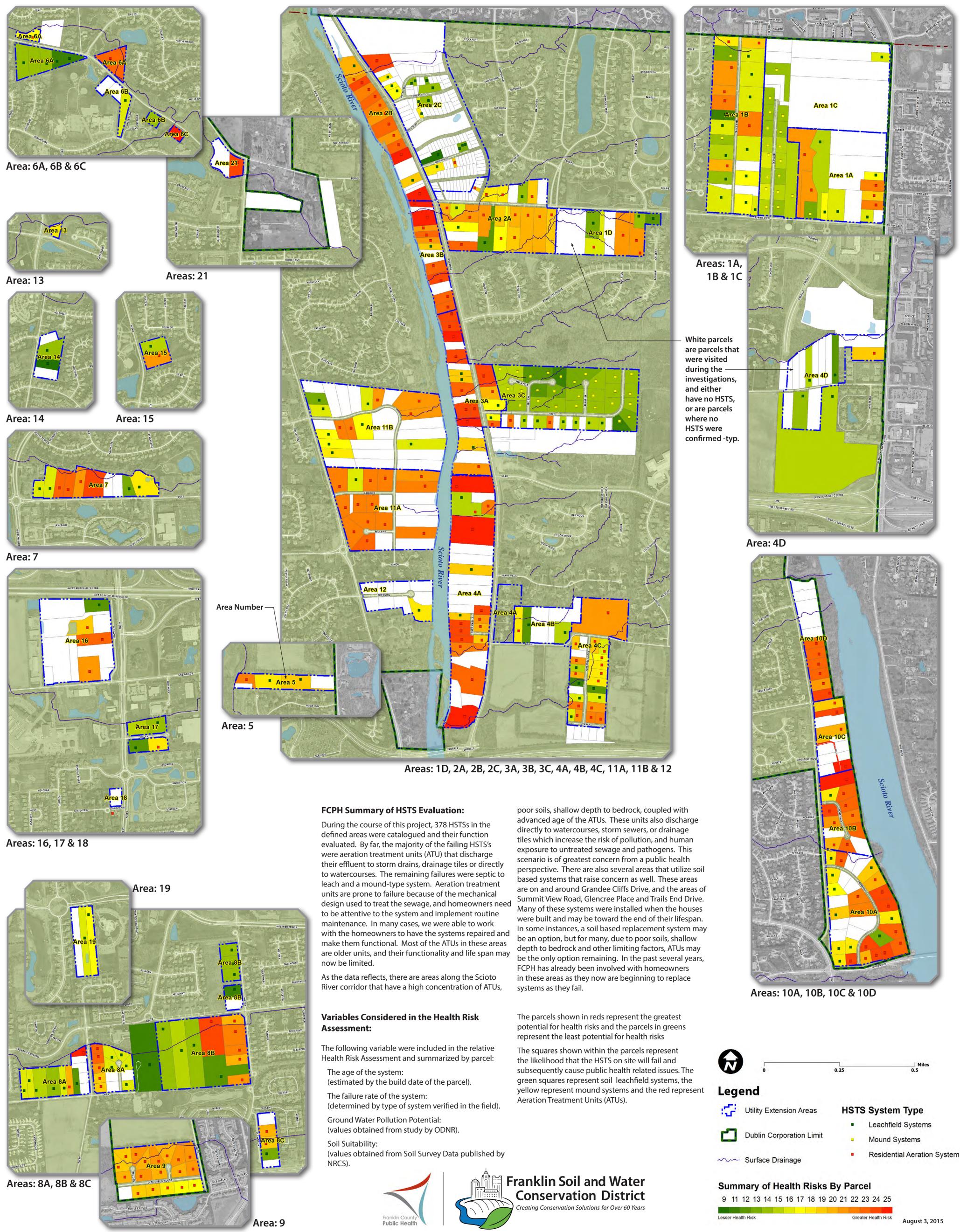


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# Household Sewage Treatment Systems (HSTS) Inventory and Health-Based Risk Assessment

## Relative Health-Based Impacts - Utility Extension Areas



White parcels are parcels that were visited during the investigations, and either have no HSTS, or are parcels where no HSTS were confirmed -typ.

**FCPH Summary of HSTS Evaluation:**  
 During the course of this project, 378 HSTSs in the defined areas were catalogued and their function evaluated. By far, the majority of the failing HSTSs were aeration treatment units (ATU) that discharge their effluent to storm drains, drainage tiles or directly to watercourses. The remaining failures were septic to leach and a mound-type system. Aeration treatment units are prone to failure because of the mechanical design used to treat the sewage, and homeowners need to be attentive to the system and implement routine maintenance. In many cases, we were able to work with the homeowners to have the systems repaired and make them functional. Most of the ATUs in these areas are older units, and their functionality and life span may now be limited.  
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**Variables Considered in the Health Risk Assessment:**  
 The following variable were included in the relative Health Risk Assessment and summarized by parcel:  
 The age of the system: (estimated by the build date of the parcel).  
 The failure rate of the system: (determined by type of system verified in the field).  
 Ground Water Pollution Potential: (values obtained from study by ODNR).  
 Soil Suitability: (values obtained from Soil Survey Data published by NRCS).

The parcels shown in reds represent the greatest potential for health risks and the parcels in greens represent the least potential for health risks  
 The squares shown within the parcels represent the likelihood that the HSTS on site will fail and subsequently cause public health related issues. The green squares represent soil leachfield systems, the yellow represent mound systems and the red represent Aeration Treatment Units (ATUs).

**Legend**

- Utility Extension Areas
- Dublin Corporation Limit
- Surface Drainage
- HSTS System Type**
  - Leachfield Systems
  - Mound Systems
  - Residential Aeration System

**Summary of Health Risks By Parcel**

9 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

August 3, 2015

# Household Sewage Treatment Systems (HSTS) Inventory and Health-Based Risk Assessment



CITY OF DUBLIN.

## HSTS Inventory - Entire Study Area

### HSTS Inventory:

The Dublin HSTS Inventory was a combined effort from Franklin County Public Health and Franklin Soil and Water Conservation District. The goal of the project was to field verify, inspect, and GPS HSTS locations within defined utility extension areas. This investigation was completed to better understand existing conditions for consideration during planning for sanitary sewer extension projects.

### Summary of HSTS Inventory:

#### 683 Total Residences Visited

- Residential Aeration Treatment Units(ATU): 195
- Residential Septic to Leach Systems: 131
- Mound Systems: 49
- Residential ATU to Leach Systems: 2
- Holding Tank: 1
- Undeveloped Lots: 210
- Investigated Parcels Identified as Unknown: 95

### Discharging Systems (Aeration Systems):

#### Total Systems: 195

These systems discharge to:

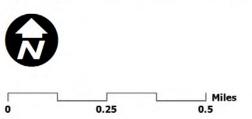
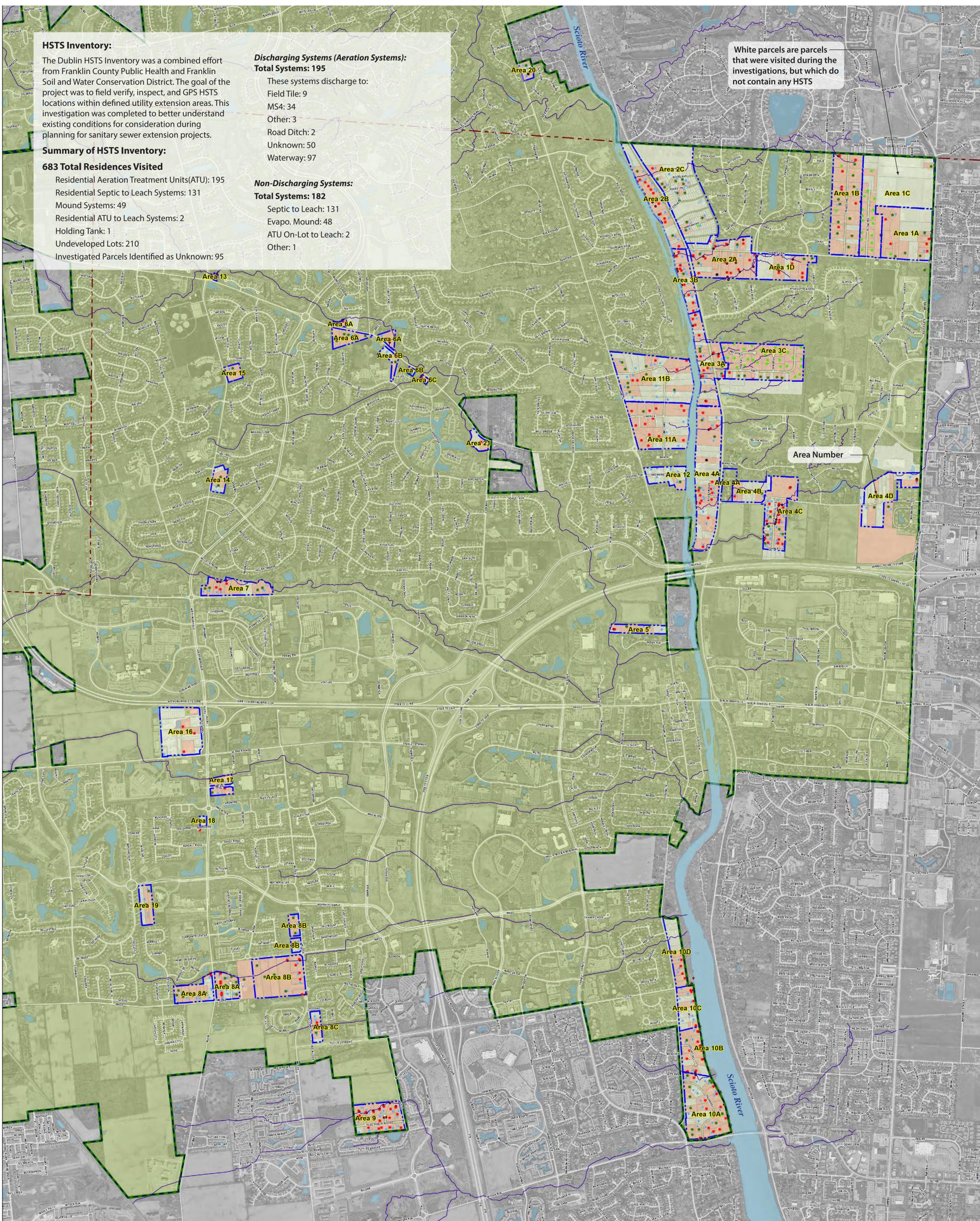
- Field Tile: 9
- MS4: 34
- Other: 3
- Road Ditch: 2
- Unknown: 50
- Waterway: 97

### Non-Discharging Systems:

#### Total Systems: 182

- Septic to Leach: 131
- Evapo. Mound: 48
- ATU On-Lot to Leach: 2
- Other: 1

White parcels are parcels that were visited during the investigations, but which do not contain any HSTS



### Legend

- Dublin Corporation Limit
- Utility Extension Areas
- Parcels with HSTS
- Surface Drainage
- Discharging Systems**
  - Discharging Systems
  - HSTS Outlet
- Non-Discharging Systems**
  - <all other values>
  - Evapo. Mound
  - Septic to Leach
- Private Water System**
  - Private Water System



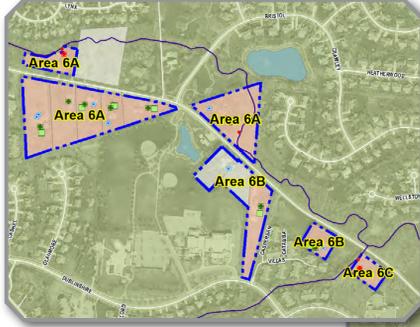
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# Household Sewage Treatment Systems (HSTS) Inventory and Health-Based Risk Assessment



CITY OF DUBLIN

## HSTS Inventory - Utility Extension Areas



Area: 6A, 6B & 6C



Area: 13



Area: 14



Area: 15



Area: 7



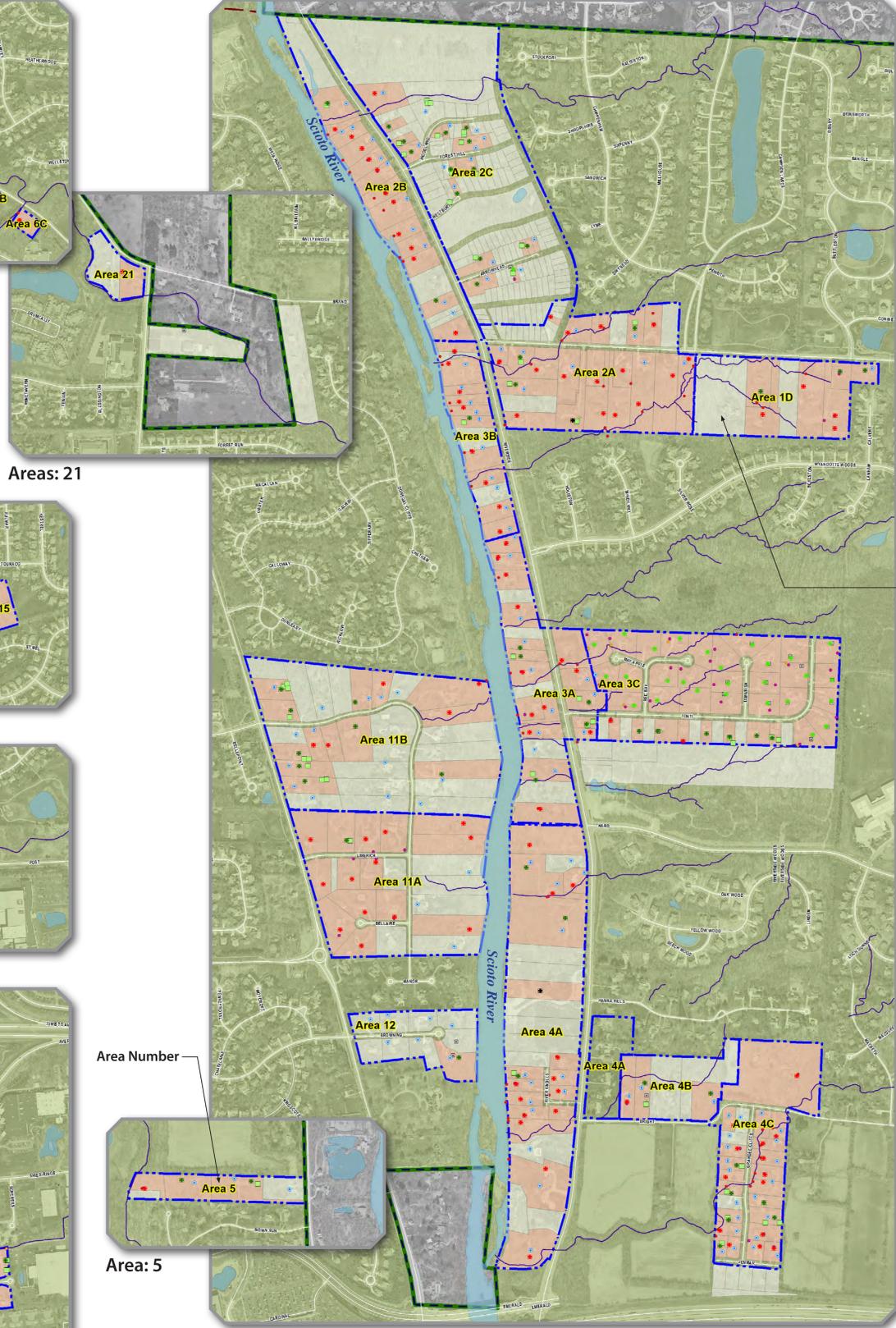
Areas: 16, 17 & 18



Areas: 8A, 8B & 8C



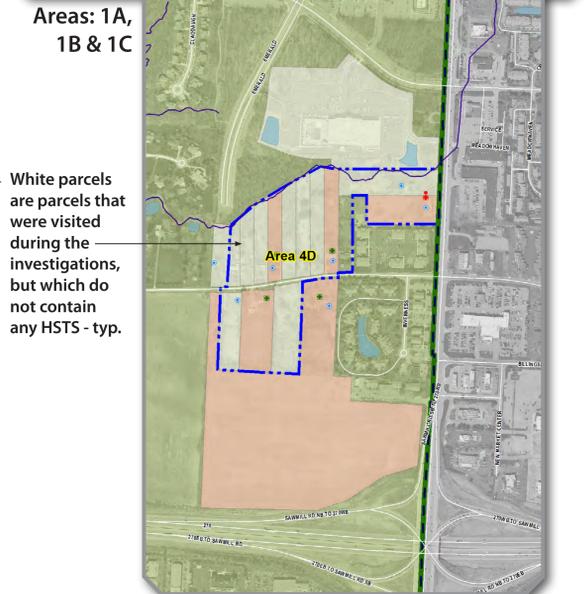
Area: 9



Areas: 1D, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C, 11A, 11B & 12



Areas: 1A, 1B & 1C



Area: 4D



Areas: 10A, 10B, 10C & 10D

White parcels are parcels that were visited during the investigations, but which do not contain any HSTS - typ.

### HSTS Inventory:

The Dublin HSTS Inventory was a combined effort from Franklin County Public Health and Franklin Soil and Water Conservation District. The goal of the project was to field verify, inspect, and GPS HSTS locations within defined utility extension areas. This investigation was completed to better understand existing conditions for consideration during planning for sanitary sewer extension projects.

### Summary of HSTS Inventory:

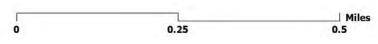
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- These systems discharge to:
- Field Tile: 9
- MS4: 34
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- Total Systems: 182
- Septic to Leach: 131
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### Legend

- Dublin Corporation Limit
- Utility Extension Areas
- Parcels with HSTS
- Surface Drainage
- Discharging Systems
- Non-Discharging Systems
- <all other values>
- Evapo. Mound
- Septic to Leach

### Other Components Inventoried

- Leach Field
- Curtain Drain
- HSTS Outlet
- Distribution Box
- Inspection Portal
- Private Water System
- Lift Station



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## **Dublin, Ohio Code of Ordinances**

### **§ 51.40 USE OF PUBLIC SEWERS REQUIRED.**

(A) The owners of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes, situated within the municipality and abutting on any street, alley, or right-of-way in which there is now located, or may in the future be located, a public sanitary sewer of the municipality, is hereby required at the owners' expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this chapter, within 90 days after the date of official notice to do so, provided that such public sewer is within 100 feet or 30.5 meters of the property line.

(Ord. 59-74, passed 11-18-74)

(B) In the case of proven hardship or extraordinary circumstances or proven excessive costs to make the required connection to sanitary sewerage facilities, the Manager, with concurrence of Council, may grant relief from such required connection to the sanitary sewerage facilities.

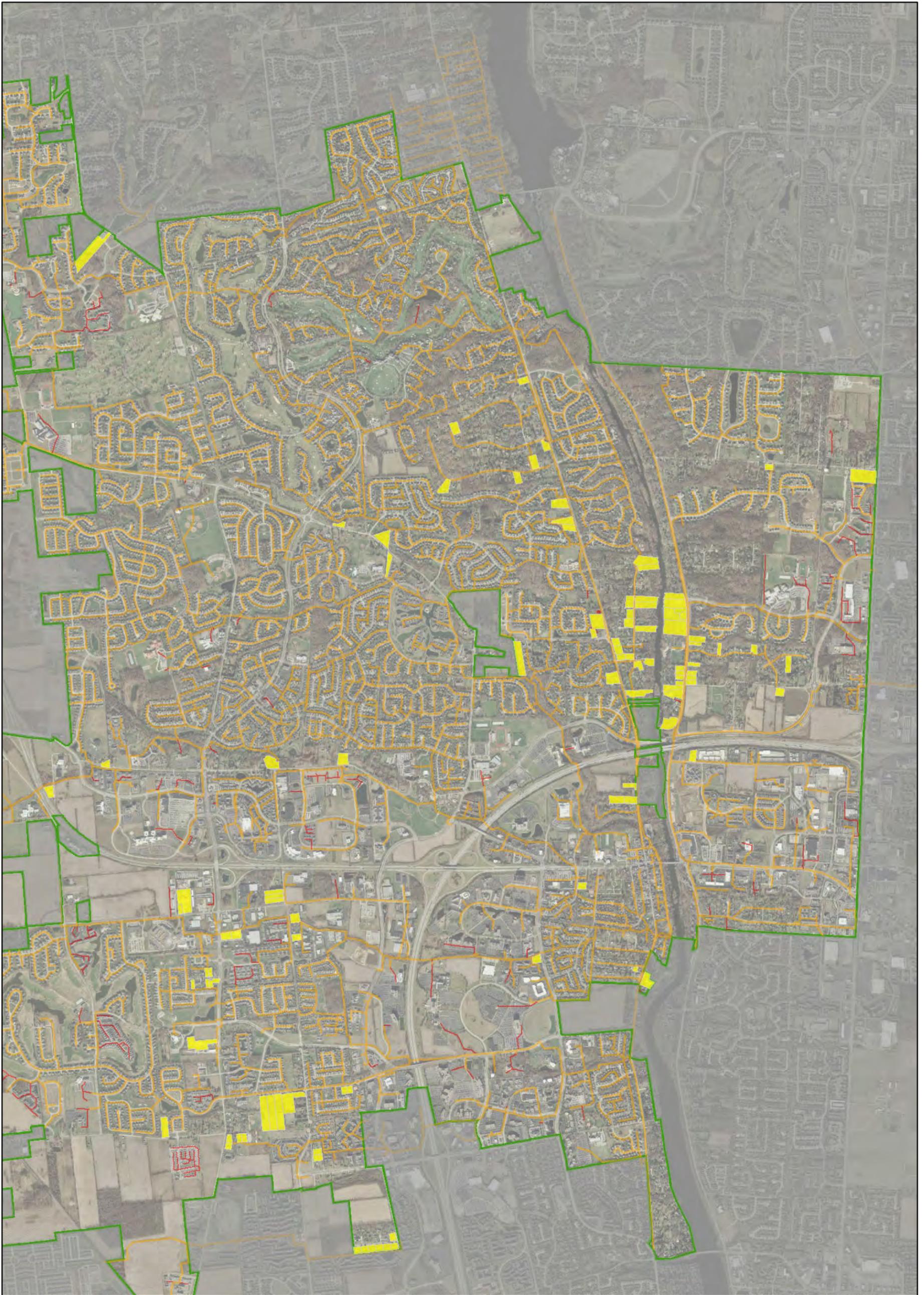
('80 Code, § 921.02(d)) (Ord. 32-78, passed 5-1-78)

### **§ 52.00 USE OF PUBLIC WATER SYSTEM REQUIRED.**

(A) The owners of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes, situated in an area of the municipality where the city, through use of city revenues, has extended the public water system, is hereby required at the property owners' expense to connect to the public water system, within 90 days after the date of official notice to do so, provided that such public water system is within 100 feet or 30.5 meters of the property line.

(B) In the case of proven hardship or extraordinary circumstances or proven excessive costs to make the required connection to the public water system, the City Manager, with concurrence of City Council, may grant relief from such required connection to the public water system or allow for an extension of time in which to connect into the public water system.

(Ord. 146-01, passed 12-10-01)



# Developed Parcels Within 100' of Public Sewer

- Exclusions:
- Parcels containing Columbus Billing data
  - City-Owned parcels
  - Apartments or Condos
  - Golf Courses
  - Muirfield Reserves
  - Right-of-Way parcels
  - Parcels consisting mainly of ponds
  - Parcels without existing buildings

- Parcels < 100' Sewer (105)
- Sewer Ownership**
- Public
- Private

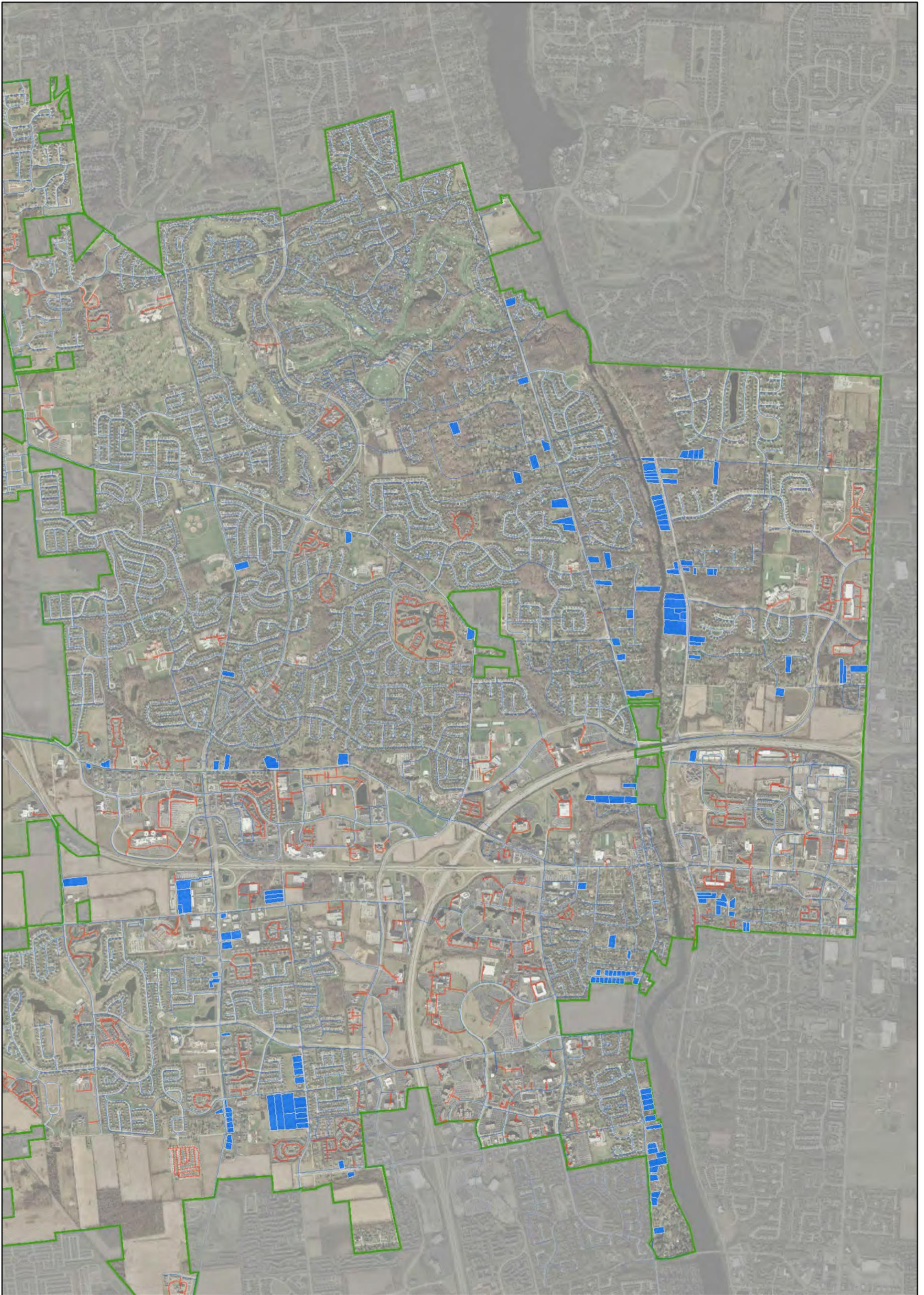
8/3/2015



## Developed Parcels Within 100 feet of Public Sanitary Sewer

Parcel ID	Owner Names	Address List
273001922	SHUBERT PHILLIP J & MARY C	105 BROWNING CT
273001918	UCKER ROBERT J & ANDREY J	20 BROWNING CT
273000182	BOND MARY N	37 LONGVIEW DR
273009092	CHURCH OF THE REDEEMER MORAVIAN CHURCH	3883 SUMMIT VIEW RD
273008654	STEPHENS CHARLES E STEPHENS ALYSSA	3961 ORCHARD CREST CT
273008598	JOHNSON CHARLES R JR TOD	4163 BRIGHT RD
273008430	KUHN SUSAN R	4171 SUMMIT VIEW RD
273008885	CARVOUR HELEN M	4191 MACDUFF WY
273008975	BERTSCH STEVEN A & JILL M	4256 HANNA HILLS DR
273000598	COLEY ELIZABETH R F TR COLEY BRIAN D TR	4370 LIMERICK LN
273000610	KLEIN CAROLYN K	4377 LIMERICK LN
273008691	OLESIK JOHN W & SUSAN V	4410 HANNA HILLS DR
273008908	THOMAS DAVID A & JOELLEN	4444 TULLER RD
273000883	SOMMER ANNEMARIE	4700 BRAND RD
273004536	HERRON PATRICIA A	505 BRAND RD
273005437	FELLER BARBARA A TOD	5173 HIRTH RD
273000538	HUBER G SCOTT HUBER DONNA E	5175 RIVER FOREST RD
273000501	MIRICK C WESLEY & SHARON L	5184 ASHFORD RD
273001919	MASSENELLI LOUIS F	52 BROWNING CT
273005444	KIMLY BO L @(2)	5241 HIRTH RD
273000496	NORRIS DAVID M TR	5263 ASHFORD RD
273005438	ODORIZZI EDWARD W & LYNNE D	5393 OLDE DUBLIN WOODS DR
274000144	CRAMER CROSSING LLC	5424 AVERY RD
273005439	GUESS DENNIS R GUESS MICHELE M	5437 OLDE DUBLIN WOODS DR
273005415	VERTICAL REAL ESTATE MANAGEMENT INC	5450 OLD WILCOX RD
273005413	TATTERSON KATHERINE A TR	5472 OLD WILCOX RD
273005440	DAVIS LARRY L & LORI A	5481 OLDE DUBLIN WOODS DR
273000556	WOLFE JOHN S II & CLAIRE V	5521 INDIAN HILL RD
273000485	RUSSELL EDWARD J & SHIRLEY J	5525 ASHFORD RD
273005441	NOVOTNY DAVID J & CAROL J	5525 OLDE DUBLIN WOODS DR
273000419	EGER MICHAEL L & SUSAN K	5545 BRAND RD
273005442	TAYLOR SCOTT J TAYLOR STACY P	5579 OLDE DUBLIN WOODS DR
273000587	GEESE RONALD L & ANNE F	5584 BRAND RD
273005457	MARTIN STEVEN S	5685 RINGS RD
273005463	SIMMERMAN DAVID R & MARLENE M	5695 RINGS RD
274000069	PARMET CO INC	5745 AVERY RD
273001307	RAND STEVE D & CAROLYN R	5790 BRAND RD
273005376	JOHNSON LISA A	5851 RINGS RD
273005383	CURRIE TOM P & SALLY J	5927 RINGS RD
273005393	ERWIN SUSAN K	5965 RINGS RD
273005380	OHIO DISTRICT LUTHERAN CHURCH EXTENSION FUND INC	6001 RINGS RD
274000050	MARCUS R STEVEN MARCUS DOROTHY J	6009 AVERY RD
273001933	CRAWFORD BRENT D CRAWFORD ELIZABETH J	6028 DUBLIN RD
273005381	OHIO DISTRICT LUTHERAN CHURCH EXTENSION FUND INC	6041 RINGS RD
273000413	CLINE CHRISTOPHER T & DEBORAH P	6060 POST RD
274000109	KUNZE JOHN S & DEBRA L	6109 CARA RD
274000104	FARM & POWER EQUIPMENT RETAILERS	6124 AVERY RD
273000350	HAWORTH REALTY CO	6125 FRANTZ RD
274000110	KATONA DANIEL M KATONA ANGELA M	6129 CARA RD
273011341	STAUCH STEVEN STAUCH LAURA L	6136 WILCOX RD
273011551	DISBENNETT CARRIE A	6136 WILCOX RD
274000113	LONG KATHY L	6169 CARA RD
273000431	DRISCOLL WILLIAM F TRUST	6230 POST RD

273005587	BALMERT KATHLEEN A TR	6275 WILCOX RD
273005588	WISE MARK T	6301 WILCOX RD
274000061	LIEB JOHN M FEE ET AL	6316 DAN SHERRI AV
274000103	6324 IRELAN PLACE LLC	6324 IRELAN PL
274000055	MORGAN CHERI L	6325 DAN SHERRI AV
274000060	KALTENBACH LINDA S & EVELYN K & JO E	6328 DAN SHERRI AV
273005589	ACHTNER JOSEPH	6345 WILCOX RD
274000051	HUTCHISON R DENNIS & CAROL B	6363 DAN SHERRI AV
274000108	COSIMATI JAMES V COSIMATI ROSEMARY	6368 RINGS RD
273000258	MOON MERLIN D & CYNTHIA K	64 CORBINS MILL DR
273000317	I A COMPANY	6430 SHIER RINGS RD
273000304	MONSKA NORMAN L TR	6480 SHIER RINGS RD
273001894	HOFFER DENNIS J	6611 LIGGETT RD
273010753	FRANKLIN SCOTT B & MARIE E	6725 DUBLIN RD
273010752	DEUTSCHE BANK NATIONAL TRUST CO TR	6729 DUBLIN RD
273002893	SMITH JONATHAN P	6805 DUBLIN RD
273008600	WARD ERIC J WARD MARA T	7049 RIVERSIDE DR
1470000013001	NEVILLE DORIS M	7090 POST ROAD
273001787	KINCAID RODNEY L KINCAID TERESA	7118 DUBLIN RD
273008611	GELPI PAUL A SU-TR	7195 RIVERSIDE DR
273008804	GELPI PAUL A	7195 RIVERSIDE DR
273001792	WAGNER KATHRYN L TOD	7199 DUBLIN RD
273008762	CLARK HARRIETT S AFDT	7200 RIVERSIDE DR
273008653	FREEMAN MARLENE D	7225 RIVERSIDE DR
273008730	BROWN TAMARA L	7230 RIVERSIDE DR
273008652	BEAHM MARTHA A BEAHM HARVEY L	7241 RIVERSIDE DR
273008411	RICHARDS JAMES E & CLARA J	7250 RIVERSIDE DR
273008651	RUOFF HERBERT F RUOFF KATHLEEN L	7281 RIVERSIDE DR
273008665	DEMATTEO JOHN P & MARLENE G	7322 RIVERSIDE DR
273001794	SEGNER MARY O	7340 DUBLIN RD
273001789	COMPTON JACK T & ELIZABETH L	7350 DUBLIN RD
273000603	MCCAFFREY WILLIAM F & SHIRLEY N	7400 BELLAIRE AV
273008717	TEDESCHI TONY R & SHIRLEY	7402 RIVERSIDE DR
273008663	LANEY BILLY G LANEY MAXINE	7410 RIVERSIDE DR
273000615	MAURER A E WALLACE TOD	7451 DUBLIN RD
273000609	SULLIVAN MICHAEL J SULLIVAN SALLY	7455 BELLAIRE AV
273008888	CARROLL RICHARD J & SUSAN L	7457 RIVERSIDE DR
273001924	CANDELA RICHARD CANDELA SANDRA R	75 BROWNING CT
273000600	MADISON DAISY Z	7500 BELLAIRE AV
273008602	KRAMB ROBERT J & SHARON L	7501 RIVERSIDE DR
273009033	KRAMB AMY	7511 RIVERSIDE DR
273000599	MOUGEY DOUGLAS S MONGEY KETKI P	7516 BELLAIRE AV
273008968	CHAFFIN SCOTT E CHAFFIN KRISTANN	7525 RIVERSIDE DR
273008433	HUMPHREYS GLORIA L	7575 RIVERSIDE DR
273008595	KAYE FRANCEEN D	7591 RIVERSIDE DR
273010612	MYERS ALLISON C MYERS ALBERT O III	7630 BELLAIRE AV
273010613	SZABO LAJOS L TR SZABO EMILY W TR	7640 BELLAIRE AV
273000591	LUTZ GREGORY R LUTZ RICHARD D	7805 DUBLIN RD
273002587	STAVROFF DESIREE N STAVROFF JEFFREY D	7815 DUBLIN RD
273000585	BERLIN DALE T BERLIN SUSAN L	7897 DUBLIN RD
273000449	WICK MACDONALD P & CHERYL A	8351 DUBLIN RD
1370000020001	LORENZ DANIEL E & MELISSA A	9341 JEROME RD



# Developed Parcels Within 100' of Public Water

- Exclusions:  
Parcels containing Columbus Billing data  
City-Owned parcels  
Apartments or Condos  
Golf Courses  
Muirfield Reserves  
Right-of-Way parcels  
Parcels consisting mainly of ponds  
Parcels without existing buildings

- Parcels < 100' Water (158)
- Public
- Private

8/3/2015



## Developed Parcels Within 100 feet of Public Water

Parcel ID	Owner Names	Address List
273000238	DANFORTH DOUGLAS R	110 GRANDVIEW DR
273000249	JEAN ALLAN D JEAN MELODY A	111 GRANDVIEW DR
273000248	HORWITZ TED D HORWITZ SANDRA E	121 GRANDVIEW DR
273000239	KENDRACH MEGAN M	122 GRANDVIEW DR
273000240	NEER VERLE W & BETTY JO	134 GRANDVIEW DR
273000220	WISTNER VIVIAN S	140 MARION ST
273000247	VOORHIES KATHY I & LAURA M PERNICE	141 GRANDVIEW DR
273000254	MEYER PHILIP	15 GRANDVIEW DR
273000246	FIEBIG DANIEL J & PATRICIA L	155 GRANDVIEW DR
273000078	EGER CALVIN & JOANNA	156 S HIGH ST
273000242	FECZKO FRANK L & GRACE A	164 GRANDVIEW DR
273000245	SCULLY SHAWN SCULLY LOREN	173 GRANDVIEW DR
273000244	NICOL WILLARD H TR NICOL MILDRED TR	187 GRANDVIEW DR
273001918	UCKER ROBERT J & ANDREY J	20 BROWNING CT
273008320	HAGAN NICHOLAS E HAGAN MICHELLE N	3285 MARTIN RD
273008319	MEHL JAMES F MEHL CATHLEEN M	3301 MARTIN RD
273008365	CARTOLANO JOSEPH A CARTOLANO DIANE M	3390 MARTIN RD
273000234	BEATTY TYSON W @(2)	34 GRANDVIEW DR
273008711	JENKINS JEFFREY M & ANN F	3693 TONTI DR
273008710	ROWE FAMILY LLC	3741 TONTI DR
273008676	WILSON SHARON K TR MOZEK LINDA S TR	3870 BRIGHT RD
273008619	PUSECKER WILLIAM C & JULIA M	3876 BRIGHT RD
273008598	JOHNSON CHARLES R JR TOD	4163 BRIGHT RD
273008885	CARVOUR HELEN M	4191 MACDUFF WY
273008765	QUINN PAUL A & CATHY S	4315 SUMMIT VIEW RD
273000610	KLEIN CAROLYN K	4377 LIMERICK LN
273008716	HAY-WILLIAMS LINDA	4430 SUMMIT VIEW RD
273010617	WALTERS JACK D TOD WALTERS SHIRLEY M TOD	4434 BELLAIRE AV
273008726	ROBERTS THOMAS J II	4436 SUMMIT VIEW RD
273008908	THOMAS DAVID A & JOELLEN	4444 TULLER RD
273008638	GARBER THERESA L	4466 SUMMIT VIEW RD
273008671	CHILCOTE K ALAN	4500 SUMMIT VIEW RD
273001737	LANGEN KEVIN E	5020 DUBLIN RD
273001764	KOLB SUSAN M	5120 DUBLIN RD
273001765	MURNANE THOMAS D & KATHRYN S	5150 DUBLIN RD
273000538	HUBER G SCOTT HUBER DONNA E	5175 RIVER FOREST RD
273000501	MIRICK C WESLEY & SHARON L	5184 ASHFORD RD
273000496	NORRIS DAVID M TR	5263 ASHFORD RD
273000428	KEELER ANDREW P KEELER JANINE J	5281 BRAND RD
273001768	CATTANEO STEPHEN M & JEAN N	5281 LOCUST HILL LN
273001728	LYNN EILEEN R LYNN HOMER S	5300 DUBLIN RD
273001769	SPERANZA DEAN A	5300 LOCUST HILL LN
273001720	LUKEMAN VALLI F	5336 DUBLIN RD
273001732	HEIN ROBERT M	5354 DUBLIN RD
273000235	EVERETT JOSEPH P EVERETT DIANE A	54 GRANDVIEW DR
273001731	MOLONEY WILLIAM TOD	5400 DUBLIN RD
274000144	CRAMER CROSSING LLC	5424 AVERY RD
273001776	MCCUEN JOEL M TR	5456 DUBLIN RD
273001777	TROIANO TIMOTHY S TOD	5480 DUBLIN RD
274000082	FISHER DAVID FISHER BONNIE	5498 AVERY RD
274000081	HOUSER P MICHAEL & JUDY F	5504 AVERY RD
273000556	WOLFE JOHN S II & CLAIRE V	5521 INDIAN HILL RD
274000080	HALL DAVID O	5522 AVERY RD

273001779	GERACE PHYLLIS A	5522 DUBLIN RD
273005386	DUEMMEL RUSSELL DUEMMEL CAROL L	5529 TUTTLE CROSSING BL
274000079	SENA DONNA J	5544 AVERY RD
273001780	OBRIEN MARIANNE C	5544 DUBLIN RD
274000070	SHARP KAREN M SHARP MICHAEL R	5555 AVERY RD
274000078	SHEPHERD GINGER SHEPHERD JAMES L	5556 AVERY RD
273005379	SINGH BILLA KAUR NARINDA P	5565 WILCOX RD
273001781	STECHSCHULTE ELIZABETH A	5566 DUBLIN RD
273005432	CAPITAL CITY LODGE TEMPLE CORP	5570 TUTTLE CROSSING BL
273005375	BELL WILBERT M & CHRISTINE S	5585 WILCOX RD
273001782	HAID TIMOTHY B HAID GWENDOLYN J B	5590 DUBLIN RD
273005374	SIMCOX GREGORY L & ELIZABETH A	5611 WILCOX RD
273005373	HANEY KEITH H	5627 WILCOX RD
273005370	YODER WILLIAM J & JUDITH C	5661 WILCOX RD
273005464	BIGGS JEFFREY & SANDRA	5677 WILCOX RD
273005461	HAGERTY BRIAN M TR	5687 WILCOX RD
273005460	KRZYKOSKI STEPHEN H & LYNNE L	5695 WILCOX RD
273005459	BOWMAN MARC D FINCHUM DONNA L	5699 WILCOX RD
273000437	HALEY ANGELA TOD	5705 BRAND RD
273008239	MID-STATES DEVELOPMENT CORP	5750 AVERY RD
273005383	CURRIE TOM P & SALLY J	5927 RINGS RD
273005393	ERWIN SUSAN K	5965 RINGS RD
273005380	OHIO DISTRICT LUTHERAN CHURCH EXTENSION FUND INC	6001 RINGS RD
274000050	MARCUS R STEVEN MARCUS DOROTHY J	6009 AVERY RD
274000049	LOW R THOMAS	6017 AVERY RD
273000413	CLINE CHRISTOPHER T & DEBORAH P	6060 POST RD
274000099	CONNOLLY JAMES P & DONALD A DELEWESE	6100 AVERY RD
274000104	FARM & POWER EQUIPMENT RETAILERS	6124 AVERY RD
274000113	LONG KATHY L	6169 CARA RD
274000036	ST JOHNS LUTHERAN CHURCH	6177 RINGS RD
273000431	DRISCOLL WILLIAM F TRUST	6230 POST RD
274001113	GIOFFRE ANTHONY GIOFFRE JOHN	6262 EITERMAN RD
273005587	BALMERT KATHLEEN A TR	6275 WILCOX RD
273005588	WISE MARK T	6301 WILCOX RD
273008336	DAVID-BROWN LIMITED	6310 RIVERSIDE DR
273000370	CRUZE ROLLIE L	6316 POST RD
274000103	6324 IRELAN PLACE LLC	6324 IRELAN PL
273008359	HITESMAN PATRICK W	6332 RIVERSIDE DR
273000886	S & R PROPERTIES OF COLUMBUS LLC	6344 POST RD
273005589	ACHTNER JOSEPH	6345 WILCOX RD
273008267	HITESMAN PATRICK W	6350 RIVERSIDE DR
274000120	DOLAN INVESTMENTS INC	6385 AVERY RD
273000258	MOON MERLIN D & CYNTHIA K	64 CORBINS MILL DR
273008372	COOK EMILIE A COOK NEAL N JR	6400 MARTIN PL
273000317	I A COMPANY	6430 SHIER RINGS RD
273008368	WOOD JAMES L	6449 MARTIN PL
273008371	KROMER THOMAS R & DANA M	6450 MARTIN PL
273008369	GRIFFITH DONN W & GAYLE P	6465 MARTIN PL
273000304	MONSKA NORMAN L TR	6480 SHIER RINGS RD
273010751	KINZER KENT W KINZER SUSAN K	6717 DUBLIN RD
273010755	KINZER GLENN W TR	6721 DUBLIN RD
273010753	FRANKLIN SCOTT B & MARIE E	6725 DUBLIN RD
273010752	DEUTSCHE BANK NATIONAL TRUST CO TR	6729 DUBLIN RD
273002893	SMITH JONATHAN P	6805 DUBLIN RD
273000443	GARDNER GAYLORD E JR	7050 AVERY RD

147000013001	NEVILLE DORIS M	7090 POST ROAD
273001787	KINCAID RODNEY L KINCAID TERESA	7118 DUBLIN RD
273008682	TEMPLE BRUCE E & KITTY L	7304 RIVERSIDE DR
273008761	DOGWOOD ENTERPRISES LP	7315 SAWMILL RD
273001789	COMPTON JACK T & ELIZABETH L	7350 DUBLIN RD
273000236	HERBOLTZHEIMER MICHAEL J	74 GRANDVIEW DR
273008717	TEDESCHI TONY R & SHIRLEY	7402 RIVERSIDE DR
273008663	LANEY BILLY G LANEY MAXINE	7410 RIVERSIDE DR
273000298	SCHMIDT ALLAN J & LINDA M	7422 AVERY RD
273008888	CARROLL RICHARD J & SUSAN L	7457 RIVERSIDE DR
273000103	ROGERS BRETT TR ROGERS DAMARIS TR	75 GRANDVIEW DR
273000152	GOSHE BRIAN J	75 MARION ST
273008602	KRAMB ROBERT J & SHARON L	7501 RIVERSIDE DR
273009033	KRAMB AMY	7511 RIVERSIDE DR
273008968	CHAFFIN SCOTT E CHAFFIN KRISTANN	7525 RIVERSIDE DR
273010609	MALAND PETER J & MICHELLE G	7560 BELLAIRE AV
273008433	HUMPHREYS GLORIA L	7575 RIVERSIDE DR
273010697	SHOEMAKER HARRIETT L	7586 DUBLIN RD
273008595	KAYE FRANCEEN D	7591 RIVERSIDE DR
273010620	WALTERS MITZI H	7652 DUBLIN RD
273008378	SOLOVE DEBORAH A	7693 RIVERSIDE DR
273008667	MCCULLUM ROBERT J & CYNTHIA L	7700 RIVERSIDE DR
273008758	LILLARD SAMUEL N SZONN-LILLARD MONICA M	7720 RIVERSIDE DR
273008757	ONEIL WILLIAM J & PENELOPE F	7721 RIVERSIDE DR
273000591	LUTZ GREGORY R LUTZ RICHARD D	7805 DUBLIN RD
273002587	STAVROFF DESIREE N STAVROFF JEFFREY D	7815 DUBLIN RD
273008407	WHITE CHINA WHITE ROBERT W	7845 RIVERSIDE DR
273008732	HADJARPOUR AKBAR HADJARPOUR MINOO	7859 RIVERSIDE DR
273008725	RINALDI DAVID A RINALDI JULIE B E	7871 RIVERSIDE DR
273008768	PARKHILL J MACK & COLLEEN W	7879 RIVERSIDE DR
273008669	KANG MOON S KANG CAYE H	7887 RIVERSIDE DR
273000585	BERLIN DALE T BERLIN SUSAN L	7897 DUBLIN RD
273008722	FOX JULIE A BAKER STEPHEN	7901 RIVERSIDE DR
273008723	FOX JAMES L LA ROCHELLE KIM S	7915 RIVERSIDE DR
273008724	FLEMING MARVIN E	7960 RIVERSIDE DR
273008388	JOHNSON RICHARD D	7961 RIVERSIDE DR
273008621	KIRSNER JOHN M & LISA G HAN	7971 RIVERSIDE DR
273008623	MCCOSKER SUSAN P & JEANNE R HEALD	7979 RIVERSIDE DR
273008622	TAYLOR BRETT A TAYLOR GRETCHEN E	7985 RIVERSIDE DR
273008763	WHITAKER ROGER T TR	8000 RIVERSIDE DR
273008406	STERTZ JOHN C & ANGELA W	8007 RIVERSIDE DR
273008613	MORRISH MARTYN	8015 RIVERSIDE DR
273001940	GRANT DUNCAN M	83 S HIGH ST
273000449	WICK MACDONALD P & CHERYL A	8351 DUBLIN RD
60043308011000	BUI TRANG T	8644 DUBLIN RD
273000250	SAUNER STEPHEN G SAUNER THERESA M	93 GRANDVIEW DR
273000237	HELSEBY ANDREW HELSEBY KRISTEN	98 GRANDVIEW DR
273005597	ANDERSON CONCRETE CORP.	OLD AVERY ROAD
147000018000	GLK PROPERTIES LTD. AN OHIO LIMITED LIABILITY	POST ROAD
273008708	DOHN-MEIER SHELLE S	7710 TONTI DRIVE

**Public Water Utility and Sanitary Sewer Utility Extensions to Existing Developed  
Property Policy  
City of Dublin, Ohio, USA  
As adopted by Dublin City Council on August 10, 2015**

**I. Background**

Dublin City Council desires to protect the health, safety, and welfare of the Dublin community. The majority of Dublin's developed properties are serviced by public water and sanitary sewer services; yet, there are developed areas within the City of Dublin that are not serviced by public water and sanitary sewer services. Furthermore, it is the intent of City Council to provide residential properties with reasonable access to safe drinking water and minimize the potential threat to public health and welfare that may be associated with private household sewage treatment systems (HSTS). Public health concerns may arise with regard to failing septic tanks, failing aeration systems, possible water well contamination and/or poorly functioning private on-site water and sanitary sewer systems.

**II. Purpose**

The purpose of this policy (hereinafter referred to as "Policy") is to establish an equitable, written, uniform, and systematic mechanism by which the City of Dublin can plan and extend its public water and/or sanitary sewer utility services to those developed areas not currently served by the same that are within the City of Dublin corporation limits. City Council has determined that this Policy serves a public purpose and will benefit all citizens of the City of Dublin.

This policy replaces all previous policies related to the extension of water or sanitary sewer services to existing residential neighborhood and/or individual private parcels or properties.

**III. Definitions**

*Affected Property* shall mean each individual lot, parcel of record, or dwelling unit within the Extension Area that would benefit from public utility service.

*Affected Property Owners* shall mean the title holders and record owners of Affected Property within the Extension Area that is recorded by the County Auditor of the appropriate county.

*Extension Area* shall mean an area of parcels, subdivision, or development defined by the City of Dublin and located wholly within the City of Dublin that does not have public water and/or public sanitary sewer services. An Extension Area shall include all lots

bordering a public street as shown on the General Location Map of the Water/Sanitary Sewer Extension Areas as identified in Exhibit “A”.

*Petition Representative* is an owner of an Affected Property for which a Utility Extension Application and Utility Extension Petition is being submitted and who is responsible for the circulation and submission of the Utility Extension Application and Utility Extension Petition.

*Private Connection Costs* means the costs to Affected Property Owners for pipes, labor, connection fees (current tap fees and capacity charges), and other appurtenances that may be necessary to properly connect a dwelling unit to the public water and/or sanitary sewer system.

*Project* shall mean the design, construction, installation, and extension of the public water and/or sanitary sewer facilities and all action necessary to administer the same.

*Utility Extension Application* shall mean a written request to extend public water and/or sanitary sewer services to an Extension Area, which shall in every case include a Utility Extension Petition signed by no less than eighty-five percent (85%) of the Affected Property Owners.

*Utility Extension Petition* shall be submitted by the Petition Representative and shall contain the printed name, address, signature and date of at least eighty-five (85%) of the Affected Property Owners who desire to have public water and/or sanitary sewer utilities extended to their Affected Property by the City of Dublin, Ohio. The Utility Extension Petition will provide a list of terms with which the Petitioners acknowledge and agree. If an Affected Property Owner controls more than one Affected Property in the Extension Area, s/he must sign for each Affected Property separately on the Utility Extension Petition.

#### **IV. Extension of Only Water or Sanitary Sewer**

The extension of public water or sanitary sewer utilities, but not both, is applicable only when the City Manager determines that the Affected Property is served by one utility and not the other. Any Affected Property Owner who does not have both public water and sewer shall not be eligible to receive just one (1) utility service.

#### **V. Initiation Processes**

##### **a. City’s Five-year Capital Improvements Program (CIP) Planned Utility Extensions**

Dublin City Council may decide to extend public utility mains to provide public water and/or sanitary sewer services to an Extension Area. City Council’s decision to extend

utility services would typically be based on protecting the public health, safety, and welfare of the community as well as the opportunity to leverage a planned CIP project.

**b. Petition for Extension by Affected Property Owners**

Affected Property Owners may request the City Council to extend public utilities to and within an Extension Area. The request shall be initiated by the Petition Representative submitting a signed Utility Extension Application to the City Manager.

Affected Property Owners may submit a Utility Extension Application to the City Manager no later than March 1 of each year for consideration and possible inclusion in the City's next update of the Five-Year CIP, which is generally adopted in September of each year. The completed Utility Extension Application must include:

- a cover letter outlining the request for the public utility extension;
- a completed Utility Extension Petition supporting the request, signed by no less than eighty-five percent (85%) of the Affected Property Owners;
- a properly executed Affidavit by the Petition Representative indicating the Affected Property Owners' commitments to connect to the utilities as well as donate, at no expense to the City, all necessary easements for the placement of the public water and/or sanitary sewer utility services.
- Identification of the Extension Area desiring extension of public utility services with a list of all Affected Property addresses; and
- an indication whether an extension of public water or sanitary sewer services is requested, or both.

**VI. Utility Extension Prioritization Factors**

The City Manager shall take the following factors into consideration when prioritizing public utility extensions:

- a. **Public Health and Safety Risk Potential** – Although interest in utility extensions expressed by Affected Property Owners is part of the decision-making process, a greater goal of this Policy is the protection of the public health and welfare of the community.
- i. Whether any environmental and/or public health issues may arise by not extending public water and/or sanitary sewer services;
  - ii. Whether there is any potential for depletion or contamination of groundwater at or near an Affected Property;
  - iii. Whether any of the Affected Properties in the Extension Area contain any failing HSTS or non-functioning and/or contaminated domestic water wells as the result of changes to the aquifer from which the well draws water;
  - iv. Whether there are any other factors or issues that may negatively impact the public health, safety, and welfare of Dublin residents or the community at large.

- b. **Future Development Potential** – In areas within Dublin where future development can occur and, as a result, will require the extension of public water and/or sanitary sewer utility lines, the City would typically expect the future development to extend the lines.
- c. **Potential to Leverage a Planned Transportation or Utility CIP Project** – In Extension Areas where a planned transportation or utility CIP project is programmed and, as a result, efficiencies could be realized to extend the public water and/or sanitary sewer lines as a part of that project, the City should coordinate the timing of such utility extension with those CIP projects.
- d. **Cost Effectiveness** – Whether there are other remedies to repair or otherwise extend the life of the Affected Property Owner’s on-site HSTS and/or private domestic water source system, or to replace said system, as a more cost effective means than extending public utilities.
- e. **Cost Estimate and Available Resources** – The City will develop a preliminary design in order to estimate the project costs and any significant issues associated with potential utility extensions.
- f. Whether there are any other factors, issues, or considerations that may negatively impact the environment, public health, or public utility systems; and

## VII. Annual Monitoring and Reporting Requirements

The City Manager will submit a Public Water Utility and Sanitary Sewer Utility Extensions to Existing Developed Property Policy Report to City Council as a part of the annual review of the City’s Five-Year CIP and will include:

- Number and quantity of known private HSTS in the City;
- number and quantity of known private domestic water wells in the City;
- updated list of properties that are located within 100 feet of public sanitary sewer and water services but are not connected;
- updated map of Extension Areas;
- updated preliminary project cost estimate for the design and construction of public water and/or sanitary sewer utility service extensions;
- recommendation reports related to any Utility Extension Applications received prior to March 1 of that year;
- recommended Extension Areas to program for the next Five-Year CIP update; and
- copies of communications providing notices to Affected Property Owners located within Extension Areas proposed to receive utility extensions during the upcoming CIP timeframe.

In addition, condition assessments of private HSTS will be performed periodically and a report will be provided to Council.

#### **VIII. Advanced Notification to Affected Property Owners of Programmed Utility Extension Projects**

In the event City Council programs a utility extension project in the Five-Year CIP, Staff shall send correspondence to the Affected Property Owners in the Extension Area notifying them of the City's intent to proceed with the utility extensions, and reminding them of the City's requirement for connection to the utility systems.

#### **IX. Implementation of Programmed Utility Extension Projects**

- a. City Design of Public Utility Extensions** - The City will fund and prepare plans to extend public water and sanitary sewer utility services into the Extension Area. The timing and funding will be determined by City Council.
- b. Affected Property Owners' Connection to the Public Utility Lines** – Affected Property Owners shall be responsible for all Private Connection Costs including payment of tap fees and capacity charges to the City of Dublin and City of Columbus. Affected Property Owners shall also be responsible for all expenses necessary for the installation of all private service lines from the public utility main lines to their structure and any modifications to existing interior plumbing necessary to connect to the public utility lines. All connections to the public systems must be made in accordance with City of Dublin Codified Ordinances.
  - i. Petitioning Property Owners
    1. Property owners petitioning for utility extensions shall pay their required tap fees and capacity charges in full, prior to the City advertising the construction contract for bids for the utility extension.
    2. The City shall withdraw funding for a utility extension in cases where petitioning Affected Property Owners fail to pay the required tap fees and capacity charges prior to the City advertising the construction contract for bids.
  - ii. As an incentive to connect, Affected Property Owners will be eligible for a waiver of fifty percent (50%) of the City of Dublin's current tap fees and capacity charges so long as connection is made within the required connection timeframe. The City of Columbus' connection charges will not be eligible for this waiver.
- c. City Construction of Public Utility Extensions** - The City will fund and construct utility extensions into the Extension Area. The timing and funding of the Project will be as determined by City Council.

- i. Alignment and Location of Proposed Utility Extensions - The City reserves the right to choose the alignment and location of the requested utility extensions. The City shall not be obligated to replace landscaping, irrigation systems, or any other privately owned obstructions within the existing right-of-way or utility easement at the time of construction, nor will the City be obligated to compensate property owners for the removal of such obstructions.
- ii. Once the construction of a Project is complete, the City will notify the Affected Property Owners in writing that the Project is complete and the public utility services are available. Affected Property Owners are required to connect to the public utilities as required by Section 51.40 and 52.00 of the Dublin Codified Ordinances.

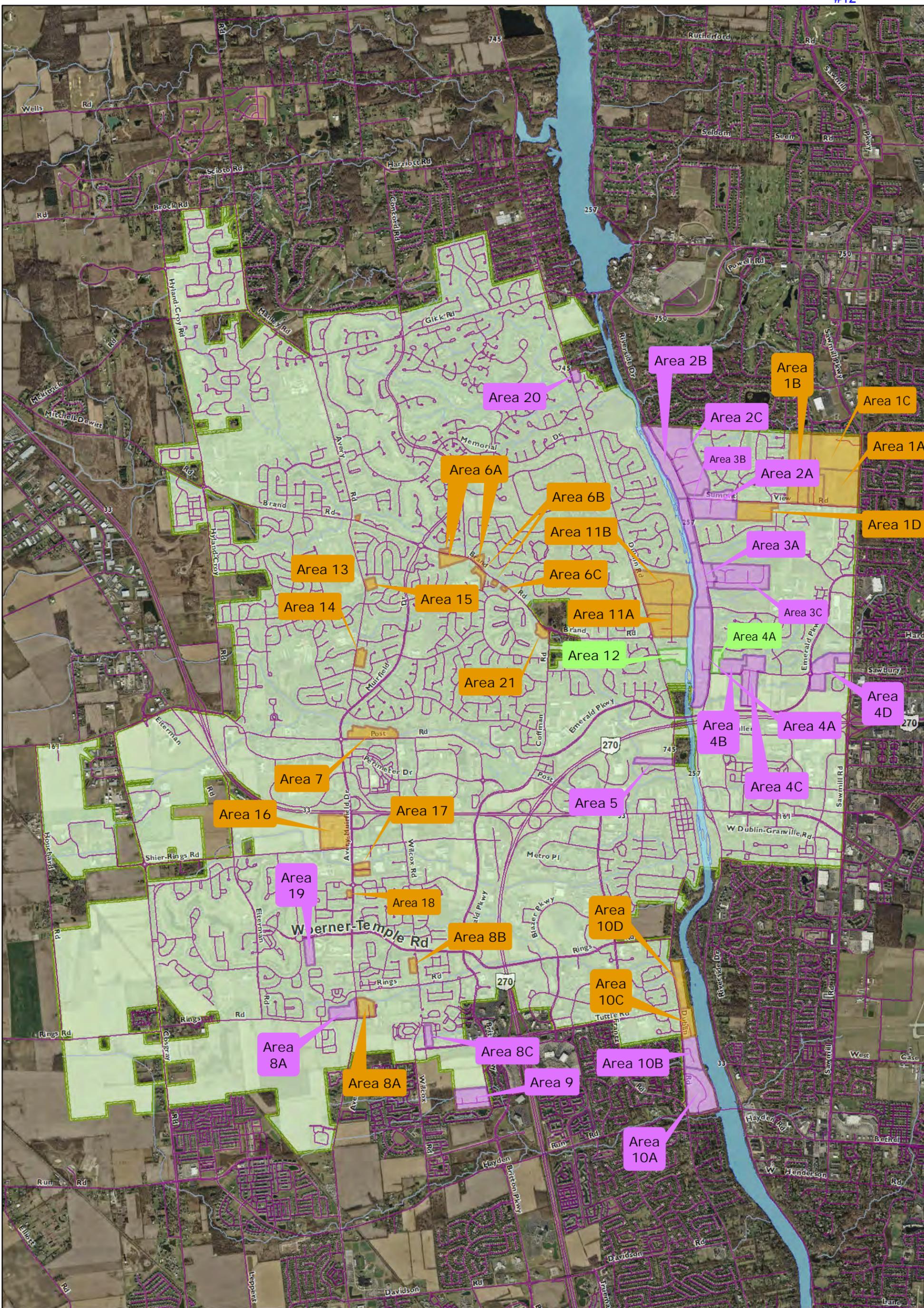
## **X. Other**

At any time, City Council reserves the right, without setting precedence, to extend public utility services for the public health, safety and welfare of residents or the community at large by the means it deems necessary.

Nothing in this Policy shall be deemed to abridge the authority and powers granted unto the City of Dublin and its City Council by law.

### Exhibits Listing

A – General Location Map of the Water/Sanitary Sewer Extension Areas



**Water/Sewer Extension Areas  
General Location Map  
August 3, 2015**

- Utility Extension Areas**
- Sewer Only
  - Sewer and Water
  - Water Only