



77th Street/Dean Road

Septic Tank Elimination Program (STEP)
Project Public Information
September 2020

Today's Agenda

- Septic Tank Elimination Program (STEP) Overview
 - Program Background
 - Program History
 - Current Installation Program
- Enrollment/Payment Options
 - Enrolling vs. Not Enrolling
- Project Specific Information
- Additional Resources





Why STEP?

• The Problem:

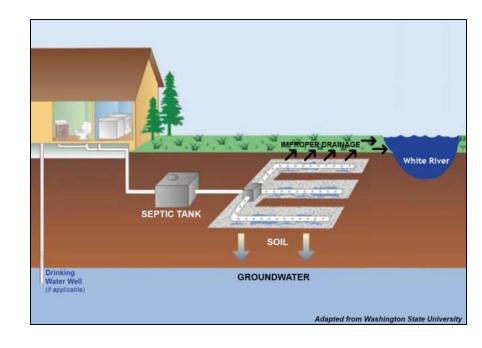
- Currently thousands of homes in Indianapolis are served by private septic systems
- Septic systems are effective wastewater disposal systems, when used in the correct environment and maintained; however, they pose a health and environmental risk when they fail or are not maintained properly
- Indianapolis' soil is primarily a dense, non-porous clay that can become oversaturated easily, which can restrict a septic system's ability to drain properly in smaller lots (i.e. < 1 acre)



Why STEP?

• The Problem:

- When septic systems fail, sewage works its way to the surface and begins to pool, creating a public health hazard
 - When sewage pools, private drinking water wells are at a higher risk for contamination
- When it rains, the raw sewage pool is then able to run off into the streams and ditches throughout the neighborhood, thus polluting large areas very quickly





Why STEP?

• The Solution:

- STEP is intended to improve water quality by connecting neighborhoods currently served by septic systems to the sewer system
- This program helps support achievement of Citizens' federally mandated <u>Consent</u> <u>Decree</u>





STEP Project Identification

- How was your neighborhood selected for a STEP project?
 - To identify STEP areas, Citizens uses a project prioritization methodology that involves three criteria outlined below:
 - Housing density
 - Proximity to a floodplain
 - Presence of residential drinking water wells
 - This neighborhood scored very highly on the priority list



STEP Project Identification

Housing density

Housing Density involves how close properties are to one another. A smaller property (< 1 acre) means less space for septic systems to function as designed. It also means more septic systems attempting to function in close proximity, thus leading to shorter life spans. Further complicating things, smaller properties provide little to no extra room to replace a septic system, making repair options limited and expensive.

Proximity to a floodplain

- When septic systems fail, raw sewage is typically present on the ground surface. Anytime
 there is rain or flooding, an area's proximity to a floodplain can allow for that raw sewage to
 spread out and pollute a large area very quickly.
- Presence of residential drinking water wells
 - If raw sewage is present on the ground surface, your drinking water well is more likely to become contaminated.



History of STEP

 STEP has been around for a long time, but in 2016, Citizens significantly revised the program to be more customer service oriented and more cost effective.



History of STEP

- Old STEP (Pre-2016)
 - Format no longer used
 - Gravity sewers were installed
 - Large open trenches, very messy and disruptive, extremely expensive
 - Property owner responsible for hiring a contractor to construct their lateral, obtain proper permits, connect to sewer, and abandon the septic tank
 - Total property owner cost: \$3,000 \$10,000+
 - Financial Assistance Plan (FAP) based on need







History of STEP

- STEP Today (2016-Today)
 - Format currently used
 - Low Pressure Sewers are installed
 - Horizontal directional drill installation, minimally intrusive, cost effective
 - Citizens connects each property owner who enrolls in project by deadline (optional)
 - Install all components of a low-pressure system in the public right-of-way, perform all work on property and connect to the sewer system, abandon septic tank, and restore yard
 - Total property owner cost: \$2,739
 - Plus any applicable plumbing or electrical modifications

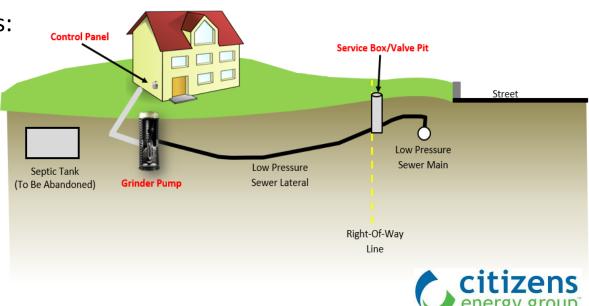






What is a Low Pressure Sewer?

- Sewer that uses a pump at each connection to force wastewater through small diameter pipes
- Three major components:
 - **Grinder Pump**
 - Control Panel
 - Service Box/Valve Pit





Ground Level Flow In Normal Operating

Pictured above: E/One Grinder Pump Section View

Grinder Pump

- Pump provides the pressure needed for the low pressure sewer to function
- Pump is housed inside a large basin with 70 gallons of storage capacity
 - E/One grinder pumps will be used
 - Pump is similar to an industrial garbage disposal in that you should not flush or put anything down the drain that you would not normally put down a garbage disposal
- Pump is controlled by the Control Panel



Pictured above: Control Panel with Generator Receptacle

Pictured below: Installed Control Panel



Control Panel

- Tells the pump when to turn on, turn off, and if there are problems
 - Visual and Audio alarm if pump issue occurs
- Runs on electricity
 - Grinder pump will not run during power outage without secondary power
 - Generator receptacle included on each control panel
 - Most water-producing appliances will not be powered, thus not producing additional water. Used water will be stored in the tank until power is restored.
 - Requires property to have a minimum 100-amp main electrical panel with room for a 30-amp double breaker
 - 240-volt wire is included with grinder pump

Pictured above: Service Box/Valve Pit Lid

Pictured below: Inside of Service Box/Valve Pit



Service Box/Valve Pit

- Installed on the right-of-way line
- Houses a shut off valve and check valve
- Looks very similar to a water meter pit
- Provides a visual marker for the separation line for ownership and responsibility once the system is installed
 - Property Ownership and Responsibility: Service Box to the house
 - Citizens Energy Group Ownership and Responsibility: Service Box to the street

Low Pressure Sewer Overview



- Property owners are responsible for operating and maintaining all components from the service box to the house once installed
- Grinder pump is equivalent to a major appliance, like an air conditioner or furnace
 - Will require service calls over time and eventual replacement
 - Comes with a three-year warranty
- Answers to frequently asked questions can be found in the <u>STEP Program Guide</u> and the <u>Owners Guide</u>

Am I Required to Connect?

- Requirement According to Indiana State Law (IC 13-26-5-2) and the Marion County Health Ordinance (Section 14), properties within 100 feet of an available sewer must connect to it.
 - Once the sewer is installed, this law will apply to all properties within 100 feet of the sewer.
- 1. Marion County Health Department (MCHD)
 - Possess authority to require property owners to connect to the sewer
 - Notifies property owners when they must connect to the sewer



Am I Required to Connect?

2. Citizens Energy Group (Citizens)

- Constructs sewers and oversees the Installation Program and Enrollment Agreement
- Does **not** have the authority to require property owners to connect to the sewer; however, Citizens does provide a financial incentive to participate now, rather than waiting on the MCHD to enforce the connection
 - Citizens cannot keep a contractor onsite until all properties connect; therefore, if a property
 owner does not enroll by the dates listed in the STEP Enrollment Agreement, that property
 owner will be responsible for connecting the properties themselves independently when the
 MCHD enforces the connection
 - Connecting independently involves paying the \$2,739 Connection and Permit Fee in lump sum, hiring a licensed contractor, and purchasing your own grinder pump, control panel, and any necessary materials (valve pit, lateral, etc.) that comply with <u>Citizens' Sanitary Standards</u>
 - In total, property owners can expect to pay anywhere from \$9,000 to \$15,000+ with no monthly payment plans available through Citizens when connecting independently



How to Enroll

- Sign STEP Enrollment Agreement*
 - All deeded owners must sign
 - Allows access to property/house for defined scope of work with a right-of-entry
 - Payment option selection (next slide)
 - Commits property owner to connect to the sewer system
- Fill out the property questionnaire to the best of your ability

^{*} Must enroll by dates listed in the STEP Enrollment Agreement. Additional charges and ineligibility may apply after that date.

Payment Options

- STEP Enrollment Cost: \$2,739
 - 1. Lump sum, or
 - 2. Pay over 60 months (5 years) with no interest
 - \$45.65/month
 - All property owners are eligible
 - Will be included on monthly sewer bill
- Any plumbing or electrical modification is the responsibility of the property owner



77th Street/Dean Road STEP Project Information

- Design/Build Team
 - TSW Utility Solutions, Inc.
 - 7NT Engineering, Inc.
- Anticipated Schedule
 - Fall 2020 Spring 2021
- Estimated Project Cost
 - \$2,400,000

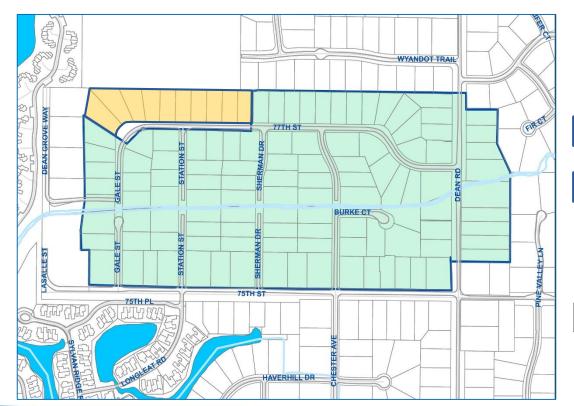






Project Area Map





Legend:

- STEP Project
 Boundaries
 - Potential STEP
 Project
 Boundaries
 (if not already
 connected to a
 sanitary sewer)
 - Parcels



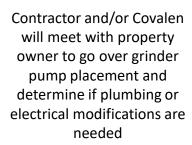
General Project Timeline

(from property owner's perspective)

STEP
Enrollment
Agreement is
signed and
submitted to
Citizens Energy
Group

Any needed plumbing or electrical modifications are completed by property owner

Grinder Pump is installed and septic tank is abandoned



Control Panel, lateral, and service box/valve pit are installed Property restoration occurs



Project Phases



- During construction
 - Contractor will notify property owners in advance of any work taking place on private property
 - Roads will be open and passable
 - Contractor will notify property owners regarding any road closings or signs will be provided
 - This will be an active construction site, so please keep safety in mind



Project Phases

- During Restoration
 - Dirt, seed, and straw will be applied
 - Please water the restored area (if rain is not in the forecast) to encourage seed germination
 - The three year warranty applies to restoration
 - If settlement occurs, please contact Citizens Energy Group
 - Restoration is typically the longest lasting and most difficult phase of the project; please be patient with Mother Nature

Next Steps

- Please review all documents provided within your packet
- Read and complete the STEP Enrollment
 Agreement and Questionnaire if you would like to enroll in the project
 - Return using the Business Reply envelope provided in your packet



For additional questions, please reach out to:

Design:

Joe Nagy (317) 927-4330 JNagy@CitizensEnergyGroup.com

This presentation and other project documentation can be found online at: www.CitizensEnergyGroup.com/77th-Dean

Construction:

Jamie Schultz (317) 429-3929 JSchultz@CitizensEnergyGroup.com



