

**A**NYWHERE

**YOU SET  
YOUR  
SITES**



**E/ONE  
SEWER  
SYSTEMS**

**WILL SET  
YOU  
FREE**



**Environmentally Sensitive  
Economically Sensible™**





# E/ONE SEWER™ SYSTEMS GIVE YOU THE FREEDOM TO SEWER ANYWHERE –



**E/ONE SEWER™ SYSTEMS ARE COST-EFFECTIVE**, highly reliable central sewer systems that can be installed in any terrain flat, wet, rocky, even on sites with dramatic elevation changes. Plus, they are much more affordable than conventional gravity sewers, which require major excavation, and much safer for communities than septic systems, which can eventually fail, polluting ground and recreational water and endangering public health.

Front cover: E/One Sewer Systems  
installations (from  
top): Paradise Valley AZ,  
Wilder, KY, Kitsap  
Peninsula, WA  
This page: Oak Grove, MN  
Page 3: Canton, GA



# AT A FRACTION OF THE COST OF GRAVITY SEWERS.



**With E/One, you can set your sites higher – or lower.** In fact, you can site new homes in formerly infeasible locations – rugged hills, isolated flatlands, coastal areas, below grade, or sites with high water tables.

For the developer or prospective homebuilder, E/One frees you to utilize the best sightlines on any plot – regardless of the location of the sewer main or septic field. This means better sightlines, aesthetics, and views, as well as the possibility of utilizing “difficult” or orphan lots, and maximizing the density of any development.

E/One Sewer systems also feature a lighter “footprint.” That’s because they follow the contour of the land, so they can go anywhere without destroying the landscape. Even around existing features like mature trees, streams, and rock formations.

They’re easier to install than conventional gravity sewers, so they greatly reduce the high cost of sewerage. And they’re highly reliable. So they lower operating costs.

Environmentally sensitive. Economically sensible. Plus the freedom to build anywhere.

**Break the restrictions of gravity – and enjoy true freedom.**



# THE E/ONE SEWER SYSTEM.

## HERE'S HOW THE E/ONE SEWER SYSTEM WORKS:

The E/One system stores, grinds and pumps wastewater under pressure to a treatment site or central sewer, depending on the location. Because the output is pressurized, the wastewater can be transported horizontally up to a mile, or uphill some 185 feet vertically. Because the system does not rely on gravity to carry the waste, it provides more options for siting and building, as well as system renovations.

## WHY THE E/ONE SYSTEM IS BETTER THAN GRAVITY:

Both the gravity sewer and the E/One Sewer system are known as central sewer systems. Most cities and villages use central sewerage, which simply means that waste is transferred, usually by pipe or a main, to a central treatment plant.

Gravity sewers are the "original" central sewers, with origins in the Roman aqueducts. Unfortunately, the technology behind gravity sewers is also centuries old: they're bulky

systems using a large main and usually require major excavation to install. They must be accurately placed and bedded along a continuous downward grade and often involve large, costly lift stations. Plus they're expensive and not entirely efficient in transporting waste because they can tend to leak, and can be compromised by storm water infiltration.

## ENGINEERED TO DO ONE JOB PERFECTLY.

The Extreme series grinder pump, the heart of the E/One Sewer, is the industry leader in ruggedness, watertight design, serviceability and reliability. It provides wastewater storage, grinding, and pumping in a single unit. Translation: it lowers operating costs, the cost of waste collection, and reduces maintenance.

The E/One grinder pump is engineered to do one thing perfectly and in the process, provides the best value for homeowners, builders, developers and municipalities.

## THE LEADER IN RELIABILITY.

The technically superior E/One Sewer system employs highly sophisticated technology that results in a 10 year average mean time between service calls, and requires no preventive maintenance. Plus, low upfront costs, reduced operating expenses, and the ability to be installed at any site, regardless of the challenges of topography.



## DEFY GRAVITY WITH E/ONE.

The beauty of the E/One Sewer system is that, unlike conventional central sewers, it defies gravity. Because installation follows the natural contour of the land, it is ideal for all terrain, including land that is flat, wet, rocky, or hilly. It gives the freedom to sewer anywhere including sites where old septic systems have contaminated water and posed severe public health issues.





# HOW DOES IT WORK? WHY IS IT BETTER?



low-profile cover that blends seamlessly into the environment but provides easy access for servicing operations.



## HOW WILL IT LOOK?

Aesthetics are a major consideration for homeowners. The E/One Sewer system is virtually out of sight — the only visible part is a

The E/One Extreme series indoor unit was specifically designed for installation in a basement mechanical room or in the slab foundation. Its clean look fits unobtrusively into any environment.

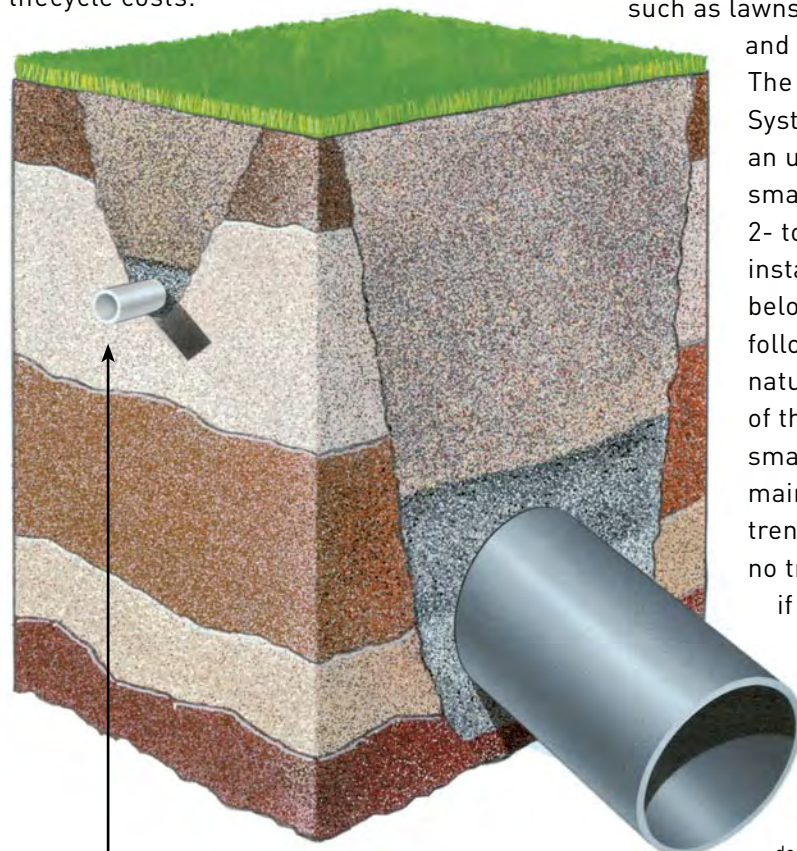
## PRICED RIGHT FOR INSTALLATION. AND FOR THE LONG TERM.

E/One can solve sewer problems and replace failing septic systems at a fraction of the cost of conventional gravity sewers. E/One Sewer systems sharply reduce both front-end installation costs and overall lifecycle costs.

## WHEN IT COMES TO SEWER SYSTEM TECHNOLOGY, BIGGER ISN'T BETTER.

Conventional gravity sewers can use up to a 24-inch large-diameter pipe, or main, which requires major excavation and severely disrupts the landscape and any built structures

such as lawns, driveways, and plantings. The E/One Sewer System uses an unobtrusive, small-diameter 2- to 4-inch main installed right below the frostline, following the natural topography of the land. The small-diameter mains mean small trenches — or, no trenches at all if directional boring is used.

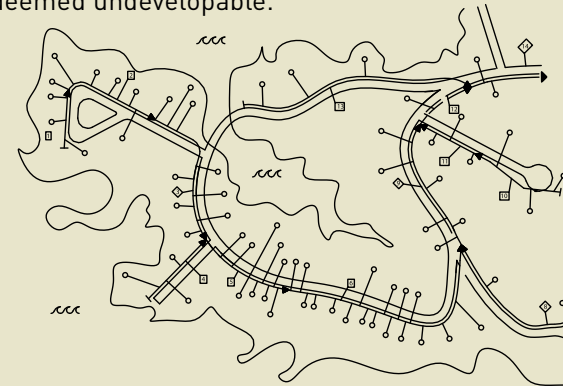


E/One Sewer System: 2-4" main, installed to follow the contour of the land.

Gravity system: large 24" main. Installation requires deep excavation.

## SET YOUR SITES ANYWHERE

Multi-branch E/One Sewer systems serve the entire community and give engineers, developers, community planners, and homeowners the freedom to sewer anywhere, on any kind of site. Even sites that – to date – have been deemed undevelopable.



## SEPTIC SYSTEMS – POTENTIAL TIME BOMBS IN OUR MIDST

While septic systems may be a common way of disposing of residential sanitary waste, they are, at best, a temporary solution and come at a high cost to public health. Around the world, septic systems have degraded ground and recreational water, creating serious



safety problems. Because of failing septic systems, water is not safe to drink. In addition, failing septic systems decrease real estate values. E/One Sewer systems can go wherever septic systems were initially used, reclaiming water quality and quality of life while providing an efficient, cost-effective solution to wastewater disposal and treatment.



## “Without the E/One Sewer System...



**...we wouldn't be standing here today.”**

Situated on a steep Kentucky hillside overlooking the Ohio River and Cincinnati beyond is a breathtaking piece of real estate. But difficult terrain, uncertain easements, and expensive gravity sewerage solutions made it unattractive to prospective developers. Until recently.

The developer chose the E/One Sewer system to provide a simple, effective, and inexpensive solution for this problematic parcel. Only shallow, contour-hugging, small-diameter lines are needed to carry wastewater, which is critically important due to the extensive bedrock at this site. Best of all, the E/One system cost a fraction of the other alternatives.

## “Compared to gravity systems, we saved 50% on Operation & Maintenance with E/One Sewers



**...and 75% on installation.”**

Nestled between the Cascade and the Olympic Mountain ranges, the Kitsap Peninsula boasts 300 miles of scenic coastline in the Puget Sound. So when failing septic threatened that pristine coast, municipal engineers found a cost-effective solution – and an ally – in E/One Sewer systems.

They compared the construction and O&M costs of four distinct sewer collection systems, and E/One's pressure system came out on top – in both categories. Compared to a gravity system, the E/One system was less than a quarter of

the cost to install, and less than half projected O&M.

Nearly 350 E/One grinder pumps and six miles of high-density polyethylene pressure main were installed along the waterfront. A careful analysis of the operating and maintenance costs revealed that after seven years, only 16 service calls per year were required – less than half the number projected. And the mean time between service calls was 22 years – more than double the pre-project estimate of 10 years. The cost of those repairs came in at 68 percent less than projected.



## “People pay a premium for this natural setting.”

### E/One showed us how to preserve it... and our capital.”

This 2,200 site development is nestled in the rugged, hilly north Georgia terrain. A dramatic setting that offers fresh air, pristine forests, and breathtaking views. Plus considerable sewerage challenges.

That’s why the developer turned to E/One, a trusted resource, to help him engineer an elegant, simple solution. By using pressure sewerage, only shallow, contour-hugging small-diameter lines

were needed to carry wastewater – even uphill. Powered by E/One’s reliable grinder pumps, the system carries waste offsite, and away from the community reservoir. And, at a fraction of the cost of gravity sewers. This solution minimized the number of unsightly and expensive lift stations from 20 – to just three!

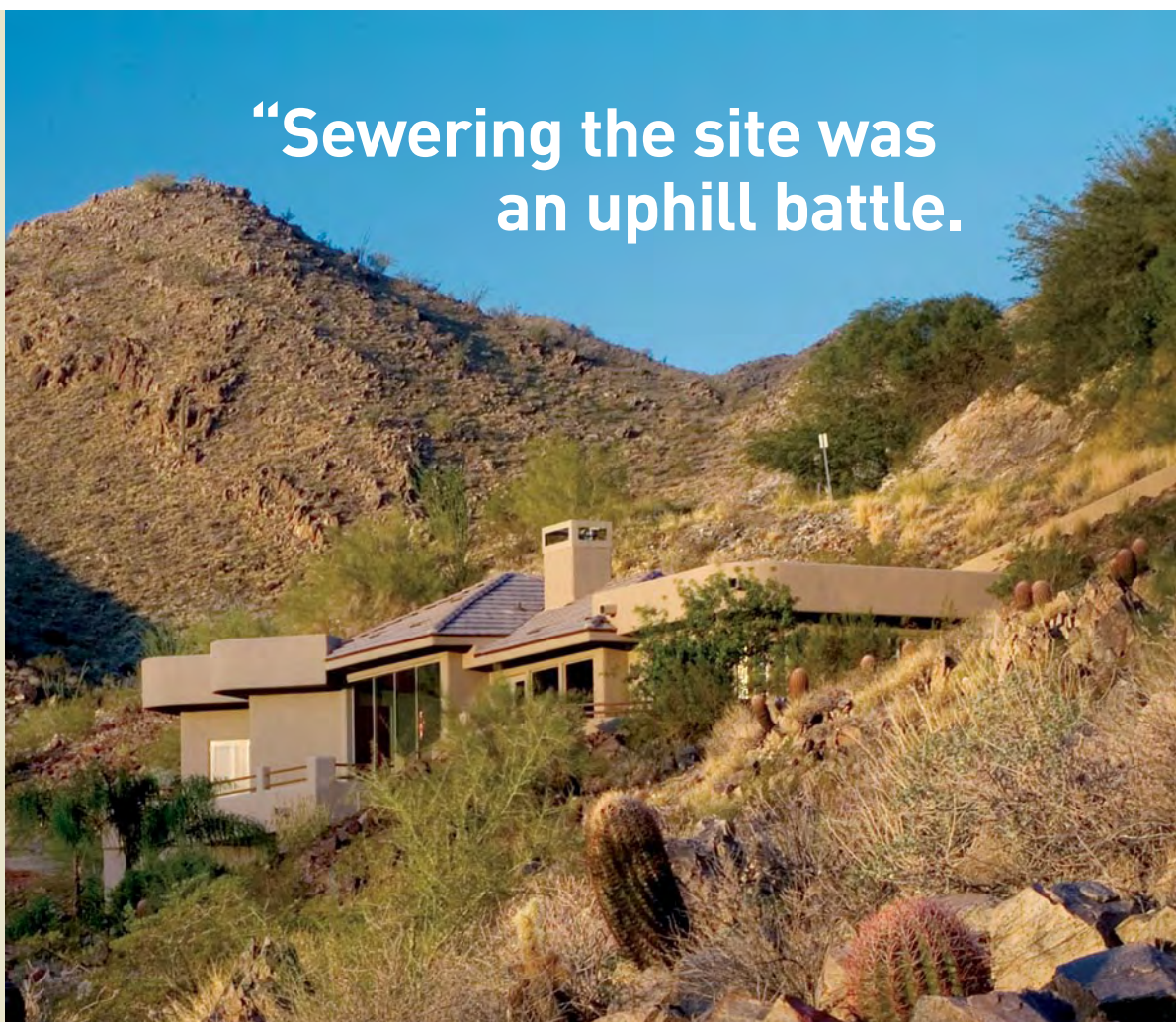
The developer says it best: “The E/One system allows us to offer the best environmental quality of life in a most attractive new community.”

Arizona’s Paradise Valley is no picnic for builders. These exclusive home lots present daunting challenges with steep grade, rocky terrain and restrictive land use covenants. No wonder other builders walked away from this challenging infill lot – except one.

This builder turned adversity into profit with E/One’s proven pressure sewage system. Instead of the expensive and disruptive lift station system proposed, he saved lots of money – and got an elegantly simple, cost-effective solution. He preserved the environment as well as his budget, with pumps mounted at grade and low impact, small diameter piping installed just below the surface.

The bottom line: E/One defied both gravity and conventional wisdom and rescued an “unbuildable” lot – for a lot less.

## “Sewering the site was an uphill battle.”



**With E/One I found gold in these hills”**





# THE ADVANTAGES OF THE E/ONE SEWER SYSTEM



## HOMEOWNERS

- Safe – protects water quality and enhances quality of life
- Reduces costs of housing – both initial and ongoing
- Visually pleasing – only evidence is a low-profile cover that is easily camouflaged
- Does not disrupt the beauty of the landscape or damage built structures
- Virtually no preventive maintenance required of homeowner
- Central sewer increases value of home

## CONTRACTORS/CONSTRUCTION MANAGERS

- Installation follows contour of the land – does not require major excavation
- Needs only shallow trenches – increases ease and safety of installation procedures
- Labor and material costs are much less than gravity sewer systems



## MUNICIPALITIES/DEVELOPERS

- Permits freedom to sewer anywhere in any kind of terrain
- Low initial costs make central sewers economically feasible
- Low initial costs make development economically feasible
- Central sewer increases value of development units
- High reliability – no preventive maintenance
- Reduces operating costs
- Protective of public health
- Permits regulatory compliance
- Closed system – not compromised by stormwater infiltration – plus zero exfiltration

## ENGINEERS/OPERATORS

- Proven engineering and design
- Ideal for every terrain and building environment
- Cost-effective central sewerage solution for new construction or retrofits
- Engineering and technical support during design, construction, installation, and operation
- Reliable performance means reduced O&M costs – up to 50% or more savings over gravity
- When needed, E/One pumps are easy and safe to access and service
- Designed to keep maintenance to absolute minimum








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[eone.com](http://eone.com)





# **E/ONE SEWER SYSTEMS ARE MAKING BETTER COMMUNITIES ALL OVER THE WORLD**

Many communities have been made possible because of E/One Sewer System technology and hundreds more have been made safe once again after failing septic systems created serious public health problems by contaminating ground and recreational water.

The E/One Sewer system delivers safe, cost-effective, reliable performance and enables controlled growth, permitting communities to maintain their quality of life at a cost they can afford.



**SEWER SYSTEMS**

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