



GENUINE
— E/One-DRIVEN —
ALL-TERRAIN
SEWER[®]

Flat? Wet? Rocky? Hilly?
Get after it.

ALL-TERRAIN SEWER[™] systems from E/One
give you the freedom to sewer anywhere.

Environmentally Sensitive
Economically Sensible[™]




E/ONE SEWER™ SYSTEMS GIVE YOU THE FREEDOM TO SEWER ANYWHERE – AT A FRACTION OF THE COST OF GRAVITY SEWERS!



ALL-TERRAIN SEWER™ PRESSURE SYSTEMS FROM E/ONE

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.



BREAK THE RESTRICTIONS OF GRAVITY AND ENJOY TRUE FREEDOM

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, ALL-TERRAIN SEWER systems from E/One free 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.

ALL-TERRAIN 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 highly reliable and easier to install than conventional gravity sewers, greatly reducing the high cost of sewerage and operation.

Environmentally sensitive.

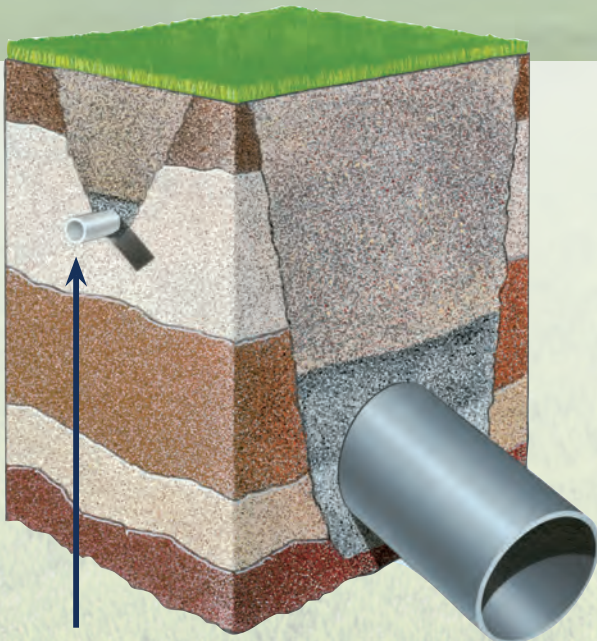
Economically sensible.

Plus the freedom to build anywhere.

HOW DOES IT WORK? WHY IS IT BETTER?

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. ALL-TERRAIN SEWER systems from E/One sharply reduce both front-end installation costs and overall life cycle costs.



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

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. ALL-TERRAIN SEWER systems use an unobtrusive, small-diameter 2-inch to 4-inch main installed just 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.

← **Gravity System:**
Large 24" main, installation requires deep excavation.



ATTRACTIVE, LOW-PROFILE LOOK THAT BLENDS IN

Aesthetics are a major consideration for homeowners. ALL-TERRAIN SEWER systems are virtually out of sight — the only visible part is a low-profile cover that blends seamlessly into the environment but provides easy access for servicing operations.

ALSO AVAILABLE AS AN **INDOOR UNIT**

The Extreme Series indoor grinder pump station from E/One was specifically designed for installation in a basement mechanical room or in the slab foundation. The clean look fits unobtrusively into any environment, virtually eliminating excavation.



MEET THE E/ONE SEWER SYSTEM.

E/One has perfected the most rugged, longest-lasting sewer system in the industry — an economical and highly reliable pressure sewer system that can be installed on any terrain: flat, wet, rocky or hilly. Because the output is pressurized, the wastewater can be transported horizontally two or more miles or 185 feet (56 meters) vertically.

ENGINEERED TO DO ONE JOB PERFECTLY™

The Extreme Series grinder pump, the heart of E/One's sewer system, 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.

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 earliest central sewer design, with origins in the Roman aqueducts. Unfortunately, the technology behind gravity sewers is also centuries old: bulky systems that use a large main and usually require major excavation to install. These sewers must be accurately placed and bedded along a continuous downward grade and often involve large, costly lift stations. Gravity sewers are expensive and not entirely efficient in transporting waste because they can tend to leak and can be compromised by storm water infiltration.

WHAT ABOUT REPLACING SEPTIC SYSTEMS?

Around the world, septic systems have degraded ground and recreational water, creating serious safety problems and unsafe drinking water. In addition, failing septic systems decrease real estate values. E/One has become the effective and economical solution of choice in septic tank abandonment and septic-to-sewer conversion programs. ALL-TERRAIN SEWER systems from E/One 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.

WHEN GRAVITY WON'T PULL YOU THROUGH



TRUST THE LEADER IN RELIABILITY

E/One's technically superior sewer system employs highly sophisticated technology, resulting in 8 – 10 years between service calls and requires no preventive maintenance. Additionally, low upfront costs reduce operating expenses and allow for the ability to be installed at any site, regardless of the challenges of topography.

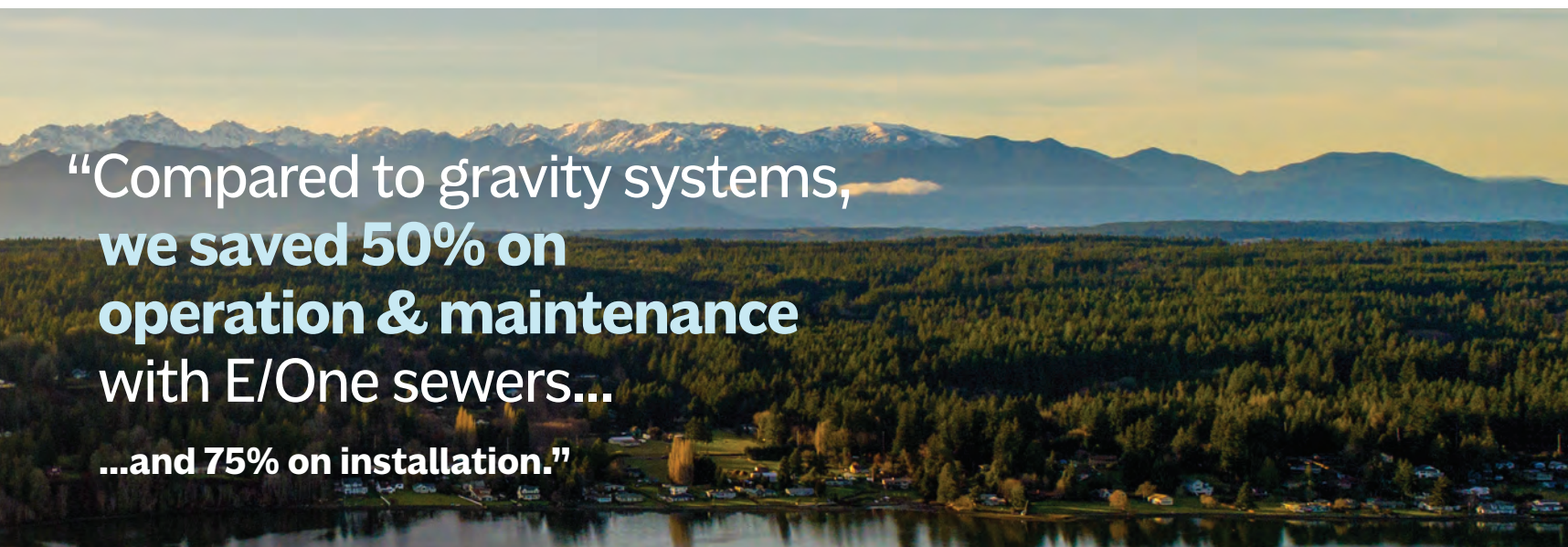


“The low pressure model is a much more viable, long-term solution.”

In Indianapolis, dense clay soil and tightly packed homes on narrow lots pose challenges during heavy rains. When the ground becomes oversaturated, it causes thousands of septic tanks to fail, releasing sewage into neighborhoods and threatening public health.

The city's initial septic tank elimination program (STEP) with gravity sewers proved disruptive and costly. In 2016, a broad-based utility service company reorganized this program by leveraging E/One's ALL-TERRAIN SEWER™ system, which is designed for horizontal directional drilling.

With a savings of 46% in total cost for the construction, and a reduced construction cost of 60% for homeowners, E/One's pressure sewer system expanded the program to areas that may have been out of reach and connected more people in existing neighborhoods where there was not an affordable solution. This cost-effective central sewer program has become one of the largest and most comprehensive endeavors of this type in a major metro area to date.



**“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. 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 the E/One pressure system came out on top. 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. 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% less than projected.

CASE STUDIES

“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 – with considerable sewerage challenges.

To help him engineer an elegant, simple solution, the developer turned to E/One – a trusted resource. By using pressure sewerage, only shallow, contour-hugging small-diameter lines were needed to carry wastewater – even uphill. Powered by reliable E/One

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

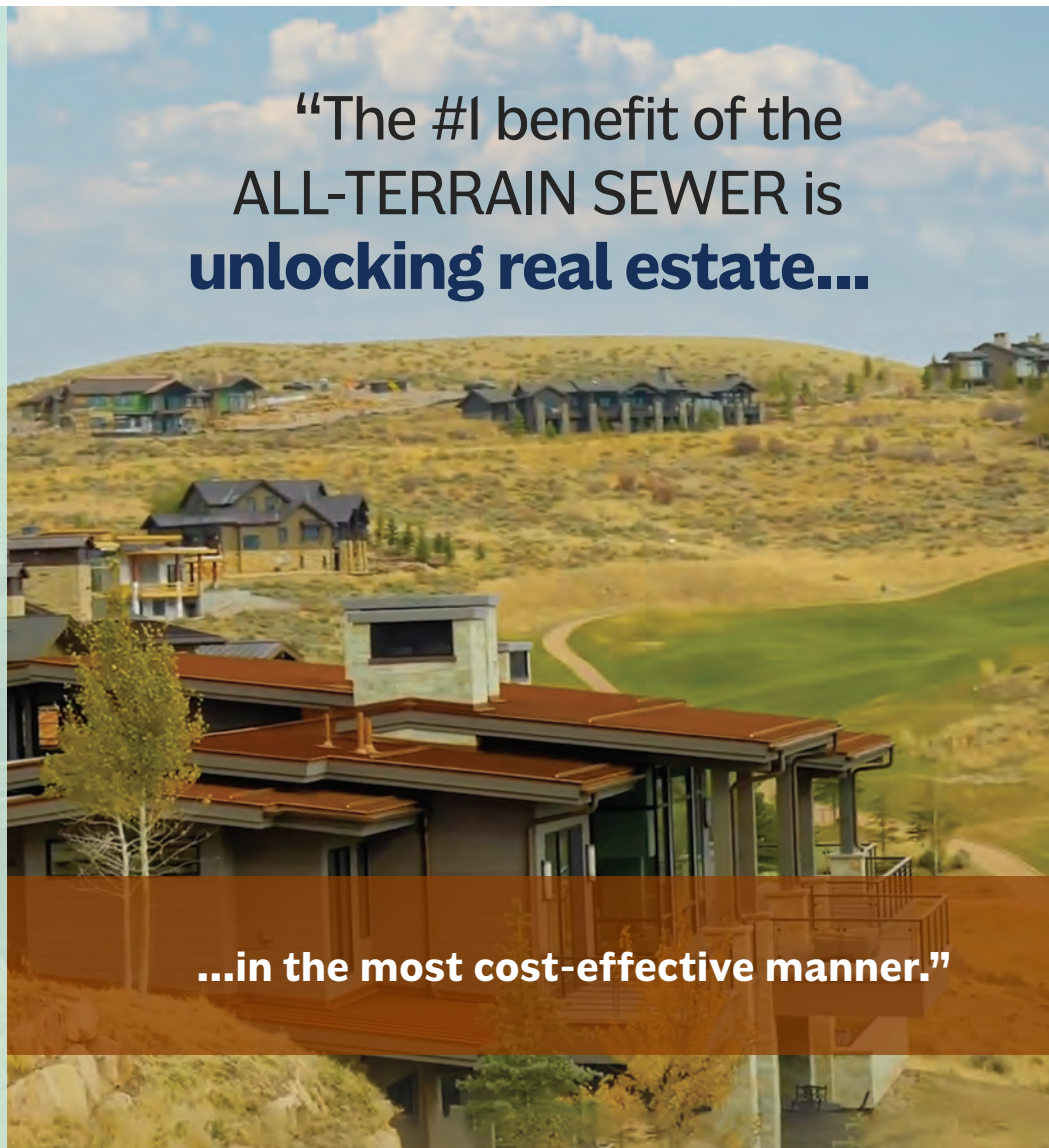
The beautiful and desirable mountain views around Park City, Utah have made the area a popular destination for home buyers. While the population is expected to double in the next twenty years, the incredibly valuable real estate identified by land planners is often facing the wrong direction for existing gravity sewers or lift stations. The hard, rocky geology of Promontory Park makes the development extremely challenging and expensive to excavate.

When reviewing plans to install a new sewer system for untouched, prime lots, the Snyderville Basin Water Reclamation District opted for the E/One ALL-TERRAIN SEWER system to serve this more difficult terrain where gravity was not an option – enabling the builder to maximize the use of all the land.

ALL-TERRAIN SEWER has been a viable tool for extending service to remote and/or below grade lots: it required less excavation, tied into the existing gravity sewer, and it eliminated the need for the district-owned and operated lift stations for a handful of customers.

“The #1 benefit of the ALL-TERRAIN SEWER is unlocking real estate...

...in the most cost-effective manner.”





ENGINEERS/ OPERATORS

- Proven technology for more than 55 years
- Ideal for any 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 an absolute minimum



MUNICIPALITIES

- Permits freedom to sewer anywhere in any kind of terrain
- Significantly decrease I&I
- Low initial costs make central sewers economically feasible
- Operation costs are significantly lower than gravity sewer
- High reliability – maintenance is minimal and predictable, simplifying asset management plans
- Permits regulatory compliance
- Protect public health by using a sealed system
- Central sewers increase the value of land, increase tax base, and promote economic development



THE ADVANTAGES OF THE E/ONE SEWER SYSTEM



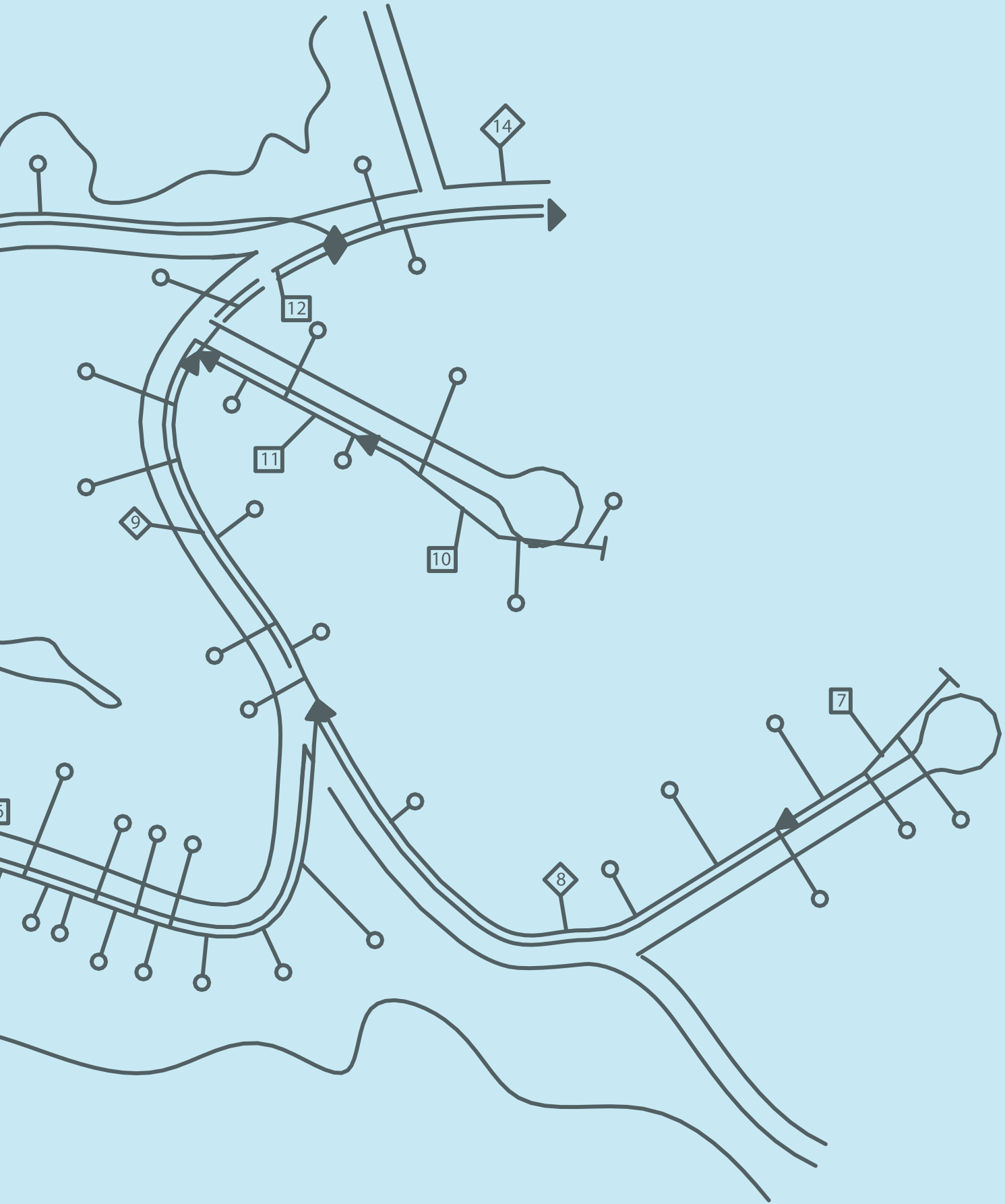
BUILDER/ DEVELOPERS

- Sewer flat, wet, rocky, or hilly terrain
- Installation follows contour of the land – does not require major excavation and avoids damaging vegetation and landscaping
- Needs only shallow trenches – increases ease and safety of installation procedures
- Flexibility in construction saves upfront capital costs and can defer infrastructure costs over time
- Enables marginal land acquisitions
- Central sewer increases value of development units



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 existing built structures
- Virtually no preventive maintenance required of homeowner
- Pressure sewer increases value of your home



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

Many communities have been made possible because of ALL-TERRAIN INFRASTRUCTURE™ pressure sewer systems from E/One 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.

Contact us regarding a free system design analysis to see how an ALL-TERRAIN SEWER system from E/One can save you 50 percent or more on your next project.

eone
SEWER SYSTEMS

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