



# UNDERGROUND PROPANE TANK SYSTEM PROVES A CONVENIENT SOLUTION FOR A MARYLAND BUSINESS PARK

## A PROPANE CASE STUDY

### EFFICIENT PROPANE-FUELED SPACE HEATING PROVIDES SIGNIFICANT COST SAVINGS FOR WAREHOUSE TENANTS

**H**eadquartered in Laytonsville, Md., Ruppert Properties is a commercial real estate company that develops flex and warehouse properties throughout the mid-Atlantic region.

One of the developer’s properties, Stanford Business Park, is located in Frederick, Md. This facility is comprised of three trading centers that are used primarily as contractor warehouses and distribution facilities. Stanford Trading Center I, II, and III were built in 2004, 2006, and 2008, respectively.

#### CHALLENGE

Prior to breaking ground on Stanford Business Park in early 2000, Ruppert Properties encountered a challenge. The building site was located off the municipal natural gas line and Ruppert Properties faced extreme costs if it opted to extend the pipeline to heat the proposed 175,000-square-foot industrial park.

Doug MacMaster is the regional vice president of ThompsonGas, a national propane company with a location in Frederick. MacMaster notes that the cost of extending a natural gas pipeline to an off-grid location often proves cost prohibitive for many developers—and for this site in particular, costs could have

reached upwards of \$500,000. This cost deterrent created an opportunity for propane to be used in place of natural gas.

“Even if the natural gas line is just on the other side of the road from a property, there is still a developer cost that ranges from \$50,000 to \$70,000 to tie into that main,” MacMaster said. “Natural gas companies don’t run service to an industrial area free of charge and many companies are realizing the economic and environmental benefits of propane. To date, the commercial sector accounts for almost 20 percent of the overall propane market.”

#### SOLUTION

To avoid the sky-high costs of extending the natural gas line to Stanford Business Park, Ruppert Properties reached out to ThompsonGas for propane tank installation assistance during the construction of Stanford Trading Center I. Because ThompsonGas became involved after the start of construction, it was too late to install MacMaster’s recommendation of one centralized

#### COMPANY

Ruppert Properties  
Laytonsville, Md.

#### CHALLENGE & SOLUTION

Faced with prohibitive costs to extend the natural gas line to its commercial construction site, Ruppert Properties worked with ThompsonGas to install an underground propane tank system free of charge to the developer.

#### RESULT

The 16-tank underground propane system reduces tenants’ space-heating costs when compared with electric heat and also reduces their overall carbon footprint.

*Using propane saves tenants money while reducing their carbon footprint.*

**Doug MacMaster**  
ThompsonGas

30,000-gallon tank. This centralized tank would have been able to serve the entire industrial park through a series of gas mains running along the main road through the park.

Without the option of installing a centralized tank, ThompsonGas was still able to provide Ruppert Properties with a turnkey solution at no cost to the developer. Used primarily for space heating, a 16-tank underground propane system, comprised of twelve 1,000-gallon and four 1,990-gallon propane tanks, was installed next to each trading center. The propane tanks serve five units of the company's three-center complex.

"We could have opted to purchase the tanks and pay to have the trenches dug and pipeline laid," Dean Rasco, development and construction manager for Ruppert Properties, said. "By working with ThompsonGas we had zero upfront costs to bear. The propane system offering was a solution from which we simply couldn't walk away."

Ensuring a faster return on its investment, ThompsonGas maintained ownership of the 16 propane tanks at Stanford Business Park. It also created a right-of-way agreement with Ruppert Properties that secured its position as the only company allowed to transport propane gas onto the property. In addition, the units were fitted with meters to allow ThompsonGas to measure individual tenant propane use. In their service agreement with the propane provider, tenants are billed directly for their monthly propane usage. These agreements offered

convenience and consistency to Ruppert Properties.

## RESULTS

### UNDERGROUND TANKS PROVIDE ADDED VALUE

It is common for commercial properties to have 1,000-gallon propane tanks dedicated to each building, but in many cases, the tanks are positioned above ground and in the parking lot. By having its propane tanks installed underground, Ruppert Properties didn't need to spend money on creating additional parking spaces.

"Developers are required to have a certain number of parking spaces available based on the square footage of their building," MacMaster said. "Land is currently at such a premium that developers don't want to give up parking spaces to house their propane tanks. If they do, they'll need to secure another parking outlet and spend more money on a cost that is easily avoidable."

Aside from their space-saving benefits, underground propane tanks can also help improve building and property aesthetics.

"Underground propane tanks make for a cleaner-looking, more presentable, and premium-quality property," MacMaster continued. "Aesthetically pleasing properties are easier for developers or site owners to lease out, resulting in faster and more stable income."

### EFFICIENT PROPANE HEATING PROVIDES COST SAVINGS

Commercial spaces at Stanford Business Park range from 4,800 to 39,600 square feet with 24-foot ceilings. The buildings feature loading docks with large overhead

doors that are frequently open, letting cold air in during the winter. Heating large buildings such as Stanford Business Park can prove expensive if done with electricity, rather than propane.

"If you're trying to heat an area of this size with electric heat, you're going to put yourself out of business," MacMaster said. "Using propane saves tenants money while reducing their carbon footprint. Propane produces half as many greenhouse gas emissions when compared with an equivalent amount of electricity generated from the U.S. grid."

*The propane system offering was a solution from which we simply couldn't walk away.*

**Dean Rasco**  
Ruppert Properties

### AUTOMATIC REFUELING SYSTEM ADDS CONVENIENCE

ThompsonGas manages propane tank refueling at Stanford Business Park with a cellular monitoring system. When propane levels reach a certain low, ThompsonGas is alerted through email which tanks need refueling. The system requires no involvement from Ruppert Properties, which is a level of service that Rasco appreciates.

"By working with a company that has a personal relationship and investment in our property like ThompsonGas, it's easier to accommodate our needs and keep our tenants happy," Rasco said.

## FOR MORE INFORMATION

For more information about Ruppert Properties, visit [ruppertproperties.com](http://ruppertproperties.com).

To learn more about propane heating, building with propane, or the Propane Education & Research Council, visit [buildwithpropane.com](http://buildwithpropane.com).

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*The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.*