

WHITE PAPER / **ENCROACHMENT MITIGATION AND ASSET PROTECTION**

# EASING THE WAY FOR SAFE AND EFFECTIVE INFRASTRUCTURE

BY Chad Melton

Facing rising costs and expansion needs, many utilities cut funding during the past 20 years for monitoring their routes for encroachments.

During that time, landowners crossed into easements, adding everything from sheds to pools. What do easement holders do now?



When one party wants to use or pass through another party's property, it typically obtains an easement to do so. Electric and gas utilities, for example, frequently acquire easements when they install power and gas lines on private property. Departments of transportation (DOTs), likewise, sometimes need easements when constructing new roadways.

These easements typically "run with the land," passing from one property owner to the next, sometimes without a new owner even realizing they exist. An encroachment occurs when a landowner introduces an obstruction — a road, picnic table, dirt pile or shed — that crosses into an easement. The structure, in other words, is encroaching on the easement holder's rights. Easement holders can then enforce their rights by requiring the landowner to remove the encroaching structure.

This is an expensive, thorny problem easement holders wish to avoid. In fact, many utilities and DOTs introduced encroachment monitoring programs decades ago with the specific intention of preempting these problems.

Over the past two decades, however, budgets for many of these programs have been slashed, with utilities and DOTs reallocating large portions of their encroachment monitoring funds to other, more urgent priorities. The result has been the discovery of hundreds — sometimes thousands — of previously unidentified encroachments along routes of a service area's planned upgrades and expansions.

### WHY IT MATTERS

For an easement holder, the presence of encroachments creates a number of long-term security, liability and reliability concerns. In addition to impeding maintenance, creating safety hazards and hindering new construction, encroachments along existing routes can put easement holders at risk of noncompliance with regulatory standards, such as those of the power industry's such as those of the power industry's North American Electric Reliability Corporation (NERC), the Federal Energy Regulatory Commission (FERC) and the Occupational Safety and Health Administration (OSHA).



Encroachments also create special risks for oil and gas pipelines — especially those that run through heavily populated "high consequence areas." Heavy machinery, digging and other human activity within an easement can damage underground pipes, resulting in dangerous leaks that affect public health, contaminate the environment and result in lost revenue and regulatory fines.

For DOTs, encroachments may put motorists at risk and create other safety threats. A person injured by an illegal highway encroachment may have a claim for damages against the party deemed accountable for the encroachment.

The time and money spent identifying infringements, communicating with abutting landowners, defending easement boundaries and correcting encroachments can, therefore, be significant. But it can be even more time-consuming and costly not to. Good customer and community relations and a safe and effective infrastructure system depend upon it.

## MANAGING EXPECTATIONS

An effective encroachment management program is built on a foundation of communication with impacted landowners.

When landowners first purchase property, it is their responsibility to learn of existing utility easements. Challenges often arise when a landowner loses sight of such easements over time, does not know how to navigate the process of requesting permission to encroach upon a right-of-way, or is unfamiliar with restrictions and limitations contained within the easement document.

Proactive communication to abutting landowners and municipal officials should explain the importance of respecting property lines and the process for requesting permission to use a right-of-way on their property. Rights-of-way often are used for alignments of roads, highways and electric transmission lines. Utilities should seek to manage expectations for what landowners can and cannot do on any property where a utility has a right-of-way.

It is important to frame these communications in terms that are meaningful to the affected parties. For example, public education programs can be designed to demonstrate why easements are critical to the maintenance, operation and safety of a transmission line. To a landowner with a swimming pool, for example, they might focus on the dangers associated with electric current coming into contact with the pool's water line. Clear, direct communication of risks can help build understanding and quell dissatisfaction, developing stronger customer relationships.

## STATUTORY CONSIDERATIONS

From a customer relations perspective, it is valuable to communicate regularly with landowners on easement-related matters. But there are legal benefits as well. A failure to stay on top of encroachments can potentially lead to an easement's termination.

Consider a utility that built transmission lines many years ago without any objections or easements. Every state has a land rights statute that designates a statutory period — usually seven to 20 years — during which landowners can object to such land use. If they do not object, utilities can continue to use that property for that use. Many utilities have done just that.



The reverse of that situation, however, is also possible. A utility may approach a landowner and purchase a power line easement that requires the landowner to keep the area free and clear of structures.

Later, the landowner may decide to construct a swimming pool near where the power line is buried. If the landowner contacts the utility to obtain a permit to build the pool on the property, the utility can exercise its right to permit or deny the construction.

If the owner builds the pool without permission, however, the utility must respond within the statutory period to be able to protest the landowner's improper use of that area and require the removal of improvements. If a utility fails to enforce an easement, the owner has an argument for keeping the encroachment in place. If an easement holder fails to enforce an easement, but insists on moving the aforementioned pool, for example, it will likely be liable for expenses and litigation. Some utilities are combating



this challenge by adding language to their easements stating that failure to exercise the rights conveyed therein shall not constitute a waiver or abatement of those rights.

## DEFENDING LAND RIGHTS

When landowners request permission to add an encroachment, easement holders have the option of negotiating or denying permission, depending on how it would impact the utilities' operation and maintenance needs. If permission is granted, utilities should follow best practices to protect and defend any future land rights. An agreement that grants the landowner permission for an encroachment should be formalized in writing. This way, landowners who are granted permission to encroach on an easement cannot later claim an easement by prescription. In other words, the agreement gives them permission to use the land for the purpose requested, but the easement holder still retains the easement itself.

Giving permission to a property's current owner also prevents future owners from claiming they have inherited an easement because this permission is a nontransferable license or consent. With this approach, a new landowner must take down the encroachment (such as a shed) and go through the encroachment request process again. A new landowner's rights can then be negotiated as part of the right-of-way agreements between the utility and the landowner. This approach enables a utility to maintain control of the process over time.

In some situations, utilities can take on the challenge of defending their land rights. Such time and money might be better spent, however, hiring a third party to manage the entire process for them.

## ENCROACHMENT MANAGEMENT PROCESS

While it is virtually impossible to keep easements completely clear, easement holders can establish, or re-establish, a reporting system to help minimize encroachments. An effective encroachment management process involves four steps:

- 1. Identification and data collection** — Identify existing encroachments through inspections of existing transmission lines. Using a combination of technology and boots on the ground, identify obstacles, collect data, take photographs and make notes detailing potential safety and reliability issues.
- 2. Categorizing encroachments** — Categorize encroachments by type and upload data into a program management system. Some are categorized by their permanence, while others are categorized by responsible party. Encroachments can also be categorized by the party responsible for them (residential, commercial, government or nonprofit), or the extent to which the encroachments cross into the easements. A corner of a small shed may be classified differently than an inground swimming pool constructed directly in line with a future route. The best systems allow this information to be integrated with other databases and accessed in real time for constructability reviews and environmental, wetland, cultural and ecological analyses. These details can later support landowner communications, community relations, political considerations, zoning ordinances and permits.
- 3. Evaluation and tracking** — Research existing permits, licenses and leases to determine the legality of each encroachment, and then develop a plan to address issues individually. Be aware that not all encroachments are violations. For example, consider a utility that built an electric pole on empty property decades ago without a formal agreement. After the property changes hands, subsequent owners did not complain. What began as an encroachment could become legal possession through adverse possession. Known informally as "squatter's rights," adverse possession is a legal principle that allows a person who does not have legal title to a piece of property to acquire legal ownership based on continuous occupation of the land without the legal owner's permission. Note that this is different from easement by prescription, which gives the landowner permission to use the land, with the easement holder still retaining possession of the easement itself.

**4. Mitigation and follow up** — Encroachment mitigation is often the most labor-intensive step in the process. Work with landowners and surrounding municipalities to rectify encroachment issues and coordinate permissions, permits and road closures. Follow up with documentation and verification of encroachment removal. Enter photos and field notes in the project management system.

## TECHNOLOGIES TO FACILITATE ENCROACHMENT MANAGEMENT

Inspecting hundreds — even thousands — of miles of decades-old transmission line is time-consuming work. Technologies make the process itself, as well as long-term information management, more efficient and effective. These technologies include:

**Lidar survey support** — This high-resolution light detection and ranging laser technology makes it possible to illuminate and survey transmission lines to identify encroaching obstacles and vegetation in any terrain and geographic location. Lidar results are often used for primary inspections and later verified by field technicians on the ground.

**Online database management** — Project management tools can streamline aspects of the encroachment management process. For example, OneTouchPM® is an integrated, 3D geospatial tool that reduces data duplication, shares information in real time and reduces the complexity of and time required for encroachment management.

**Digital archiving** — Encroachment data can be uploaded to these systems, coordinated with the owner’s computer-aided design (CAD) files, and overlaid with data in a 3D environment. Encroachments can then be monitored using GPS tags in combination with integrated street views and 3D topographical site information. Some project management systems also can create virtual models of a completed project.

## CONCLUSION

Communication alone is not enough to keep easements and rights-of-way clear. Utilities need to engage field workers who report issues as they arise. If encroachments have already been made, utility representatives must contact those landowners, explain the issue and work toward a resolution. This is rarely easy. As many utilities are learning, preventing encroachments generally costs much less and is more effective than mitigating them.

## BIOGRAPHY

**CHAD MELTON** is a right-of-way specialist at Burns & McDonnell. He is a detail-attentive, pragmatic, problem-solving land and real estate professional with a background in right-of-way acquisition, real estate litigation and title and settlement. His contributions to projects in electric transmission and distribution, natural gas transmission and distribution, solar development and industrial development, include routing and siting, title and ownership research, survey reviews, permitting assistance, land value opinions, right-of-way negotiation and acquisition, construction support, due diligence/rights research, public outreach and right-of-way management and asset protection.