

Undergrounding Main Street Southborough

Additional Information for Southborough Residents

Q: What *is* "undergrounding"?

A: Undergrounding is the process of burying overhead power, telephone and cable lines and removing the utility poles which currently hold them.

Q: Why is Southborough considering "undergrounding" at this time?

A: "Undergrounding" the utilities along Main Street was recommended by Southborough's Master Plan Committee. With Main Street scheduled for a major State funded Road Reconstruction Project within the next 5 years, it was determined that this would be the only time that undergrounding made sense. It would piggyback on the Road Reconstruction Project, minimizing the disruption to the Main Street residents and businesses, reducing the costs of undergrounding to the Town, and maximizing the impact on Southborough as a community once the entire project was complete.

Q: What are the benefits of undergrounding?

A: Putting the utility wires underground serves many purposes. Some are purely aesthetic, some affect the system reliability, and others provide financial benefits. Here are some of the reasons to put the lines underground:

- **Aesthetics:** The overhead lines can only be described as ugly. The space they occupy is becoming increasingly congested with additional lines and equipment. Utility company practices frequently violate city and state ordinances. For example, double poles are left in place for more than the 90 days allowed, excess coils of cable are left dangling or tacked to a pole rather than being trimmed off or secured properly, and debris is left on the street.
- **Reliability:** Multiple studies have concluded that underground utilities are more reliable after the initial installation, with as few as one third the number of failures as are experienced with overhead lines on poles. An overhead system is more vulnerable to storm related outages, having poles downed by vehicles, and lines downed by tree limbs.
- **Safety:** Poles present hazards for motor vehicles and downed lines present electrical and fire hazards.
- **Value:** Property values increase when utility poles do not interfere with views and lines are put underground. A proof point is that nine out of ten new subdivisions opt for underground utilities even though they are initially more expensive. Also, realtors frequently have wires "air brushed" out of photos of houses that are on the market. This improves their appearance in pictures and, the realtor hopes, makes the asking price more palatable, but the buyer will be confronted by the existence of the wires upon visiting the home.
- **Trees:** Utility lines force unnecessary, unhealthy and improper pruning of trees solely at the discretion of the power company. This also contributes to the aesthetic issues surrounding overhead lines.
- **Efficiency:** Underground cables can use larger conductors resulting in less energy loss.

Q: What are the downsides of undergrounding?

A: Critics of undergrounding are quick to point out issues that accompany that effort. These are generally in the areas of cost and duration of outages.

- **Cost:** Undergrounding existing utility lines *is* very expensive. Cost estimates range as high as \$1 million per mile. A Feasibility Study is being completed by landscape design/engineering firm Beals & Thomas and civil engineering firm Tighe & Bond to determine the actual cost to Southborough. Undergrounding telephone and cable-television lines adds to the cost and will be included in the study.
- **Disruption:** Streets have to be excavated and conduit installed, although pairing undergrounding with Southborough's planned Road Reconstruction Project will minimize added inconvenience. Undergrounding on private property sometimes entails digging trenches in lawns or gardens but will be necessary to complete the project.
- **Repair:** It is generally acknowledged that while failures are less frequent with underground cables, the average time and cost to troubleshoot and repair each failure that does occur is significantly

higher. Estimates exist which suggest that the repair time is about 1.6 times longer and the cost can be as much as 4 times higher. The impact of repair can also be aggravated if it necessitates tearing up the road.

Q: Will undergrounding eliminate all above ground lines and equipment?

A: While undergrounding would eliminate all above ground lines, there would still be some equipment such as transformers that would have to be located above ground on concrete pads. There would also be some major feeders coming in to the Main Street area that would have to remain overhead.

Q: What happens to the streetlights when the poles are no longer needed because wires have been put underground?

A: Those currently mounted on the utility poles would have to be put on lampposts with the electricity fed from underground. Many communities elect to use decorative poles, especially in historic districts with flag poles or banners.

Q: Who bears the cost of connecting a property to the underground cabling?

A: This cost is usually borne by the property's owner. In some projects, multiple property owners join together to contract for the necessary private-property work; this makes it more efficient for the contractor and sometimes yields cost savings for each property owner.

Q: Does the entire Main Street have to underground all the lines at the same time?

A: No. Many towns have chosen to underground utilities in certain areas first. Southborough is planning on undergrounding from the new Main Entrance to the Fay School to Park Street in conjunction with the State Road Reconstruction Project. The second phase of undergrounding will be the downtown area from Park Street to Newton Street.

Q: How much will this Undergrounding Cost?

A: The exact cost of the Undergrounding Project is being determined by a Feasibility Study funded by The Main Street Council and provided to the Town. This expensive Study is being completed by a Southborough architectural design firm Beals & Thomas and a Worcester civil engineering firm Tighe & Bond. Once the Study is complete, the costs will be reviewed by the Planning Board, the Board of Selectmen, the Advisory Committee, and the Capital Budget Planning Committee to determine how the Town wants to proceed.

Q: Who pays for the cost of undergrounding?

A: The Town is responsible for securing funding for putting the utility lines along public ways underground and eliminating the utility poles. There are several means for providing that funding.

The Commonwealth of Massachusetts has a law on the books, www.mass.gov/legis/laws/mgl/166-22b , which allows the City to mandate that the electric and telecomm utilities collect a prescribed surcharge on the cost of delivering their services. All rate-payers have to pay the surcharge when this funding method is used. The funds generated by the surcharge are collected by each utility and *must be* used to pay that utility's costs of moving their infrastructure underground.

Other means of funding include bond issues and assessments to Business Improvement Districts. Significant savings can be achieved if the road is under construction and undergrounding is performed at the same time.

The Feasibility Study will recommend the best way to finance this undergrounding project.

Q: Does Southborough derive a financial benefit from undergrounding?

A: Yes, but for a surprising reason: underground lines are subject to taxation, while lines on poles are not.

Q: Have any other Massachusetts cities and towns been active in recent years in burying wires?

A: Yes. Other towns in Massachusetts including Concord, Wellesley, Bedford, Norfolk, Duxbury, Nantucket, Holden, Natick, and Needham have completed projects to bury wires. Other towns that currently have projects underway include Shrewsbury, Chelmsford, North Andover, and Westwood.