

# MUNICIPAL ORDINANCES' RELATION TO TREES<sup>1</sup>

*Panel Moderator:* **Hal Robson**, Director of Parks, Forestry and Public Works, Lake Forest, Illinois

*Panel Members:* **John Morell**, City Forester, Park Ridge, Illinois

**Erwin Page**, Village Forester, Arlington Heights, Illinois

**Dennis Cephcha**, Municipal Arborist, Evanston, Illinois

This panel will discuss various ordinances enacted for the purpose of maintaining various arboriculture practices in a municipality. Panel members will discuss ordinances to control screening and landscaping of parking lots and private developments, removal of dead trees on private property, licensing of arborists, utility permits, eliminating visibility problems at intersections, control of pruning and removal on public property, insect and disease control within a municipality, and tree preservation. Each panel member has selected a segment of the subject matter to discuss.

The panel moderator will discuss the Lake Forest, Illinois, tree preservation ordinance. This ordinance was enacted in August of 1980 as a result of concern over the number of trees that are removed, damaged, or severely affected by the construction of home sites. Included in the ordinance is the landscaping of subdivisions which require special use permits, a spacing requirement for all trees planted on public property, and maintenance and replacement guarantees. A very unique part of the ordinance is the requirement for a building envelope to ensure the minimizing of damage to trees on the lot at the time of house construction.

## TREE PRESERVATION

by **Hal Robson**

The adoption of the tree preservation ordinance was supported by one long established garden club within the community. With the development of a number of subdivisions in the west portion of the City which are on properties that still retain a large number of very mature trees, the concern was that these trees should not be lost as a result of the development process. The staff, in conjunction with the garden club, proposed to the

City Council the ordinance, which after study for several months, was finally adopted.

Basically, the ordinance contains the following requirements: 1) A tree location plan for each new subdivision must be submitted at the time of application. The plan must be submitted at a 1" equals 50 foot scale and must show all existing trees 4" in diameter or larger, measured six inches above the ground, according to location, size, species and condition. 2) A landscape plan is required of all applications which have a special use permit, or as may be required by the City. It must be developed and implemented by a qualified landscape architect. It is required to show all existing trees plus all new plant material to be planted in the subdivision. The trees to be removed must be noted. The plan must be reviewed and approved by the Plan Commission and the City Council. Minor changes can be approved by the Director of Parks, Forestry and Public Works. A written statement from the landscape architect is also required indicating the environmental effect of the landscaping on the subdivision and surrounding area. This includes landscaping goals, reasons that specific plant materials are being selected and the time span that is required for the plant material used to achieve the desired environmental effect.

A section deals with the planting and maintenance policies that have been established by the City, that the subdivider must use. Tree planting spacing requirements are established on the basis of the three classifications of trees at maturity — small, medium and large. The requirements have been established for small trees — 15 to 20 foot spacing; medium trees — 25 to 30 feet; and large trees — 35 to 40 feet on centers. A tree is categorized on the basis of its ultimate height and spread. If the landscape archi-

<sup>1</sup>Presented at the annual conference of the International Society of Arboriculture in Louisville, Kentucky in August 1982.

tect can justify it, allowance is made for the spacing requirements to be varied by grouping trees to achieve a special landscape effect for parkway plantings. A landscape plan must be provided with a written statement justifying the change from the spacing requirements. All street trees must be a minimum of four inches in diameter unless they are unavailable from a nursery. Other plant materials required shall be the size specified in the landscape plan. A species and variety list of street trees which are permitted is available to the subdivider.

**Guarantees.** Once the trees have been planted the subdivider is required to provide the City with both a maintenance and a replacement guarantee. The maintenance guarantee is a full financial guarantee for a two year period to ensure the required maintenance will be provided in accordance with the requirements of the City. The City has the ability to perform all maintenance at the developer's expense or to require the developer to furnish the City a contract with a landscape contractor ensuring that the maintenance will be performed. A replacement guarantee for 5% of the cost of the materials planted is required to cover replacements for a period of five years.

**Building envelopes.** Tree preservation on special use situations requires that the development be designed to avoid the removal of trees that are twelve or more inches in diameter. The technique developed to preserve these trees is known as a building envelope. A building envelope is defined as that area of the lot needed for the movement and placement of equipment and materials to be used in construction. It shall be as small as possible but include the entire area affected by the building and grading.

The building envelope includes the area where the house will be built, plus a 20 foot wide area around the house. No activity is permitted outside

of this area. The process by which a building envelope is established is the builder submits to the City plans showing the location of the house. An on-site inspection is made of the trees to determine if there are certain trees which are significant and should be saved. If so, the builder is told to relocate the house to save the trees. Once the site for the house has been approved by the Director of Parks, Forestry and Public Works, the envelope area is roped off. The driveway is established and roped off also. All the utilities are placed in the driveway right-of-way. The builder is then permitted to remove the trees using a chainsaw and stump grinder. No bulldozer is permitted on the site at the time of clearing. None of the fill and spoil can be stored on the property outside of the building envelope. If there is excess it must be hauled off the site. Foundation backfilling must be completed within the confines of the envelope.

Once the building is completed, the City has established no further requirements on the new owner to maintain the trees. The intent of the ordinance is to ensure trees are not damaged during the construction process. This ordinance has been in effect for two years. The first lot requiring a building envelope is currently being developed. Building has been so slow in the City due to the economy that no one is building houses, so our experience with the envelope is limited. We have a number of subdivisions that have been platted that will be opening up as soon as the economic climate improves. These subdivisions have a number of lots that require the building envelope.

In the long term this requirement is expected to save a large number of trees which are normally lost due to construction activity. There is a community close to Lake Forest that has implemented this procedure in developing subdivisions and has found it to work very well. The same is expected here.

## SCREENING AND LANDSCAPING ORDINANCE

by John D. Morell

In the fall of 1975 the Park Ridge City Council adopted a new zoning ordinance. The intent of this document was to establish a comprehensive land-use regulation ordinance to serve the City of

Park Ridge. The regulations are based upon the community's adopted development plans and overall City policies and objectives which are intended to serve the City of Park Ridge as it deals

with future growth. As a result of the newly adopted zoning ordinance, a new section pertaining to off-street parking facilities, including the screening and landscape section, was incorporated into the zoning ordinance.

The screening and landscape ordinance applies to all zoning districts in Park Ridge except for the R1-A, R1, and R2 districts. R1-A and R1 are single family districts and the R2 is the two-family district. The ordinance provides that off-street parking facilities shall be suitably screened on each side and along the rear lot line by a fence or wall not less than 4 feet high, plus a planting strip of 4 feet minimum width. In accordance with the following, or on the alternate arrangement, as per the Planning and Zoning Commission, suitable landscaping and ground cover shall be provided and maintained on a continuing basis within the planting strip.

On the street lot line, a fence or wall not less than 3 feet in height shall be installed; such wall or fence shall not be any closer than 4 feet from the street line right-of-way (Fig. 1). Suitable landscaping and ground cover shall be provided and maintained on a continuing basis between the fence or wall and the curb line. At least one tree not less than 3 inches in diameter shall be provided for every 1500 square feet of paved area up to 6000

square feet, and then at least one tree of not less than 3 inches in diameter shall be provided for every additional 3000 square feet. The selection of trees, hedges, shrubs, ground cover, and other plant materials shall be reviewed and approved by the City Forester.

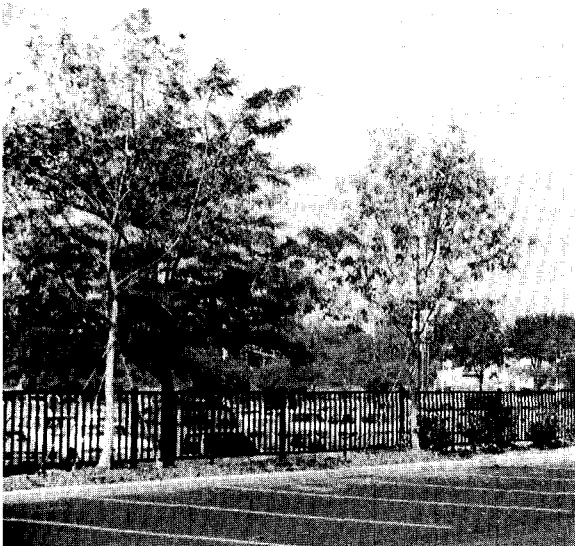
Fences or walls may be constructed with any of the following types of materials: fences can be wood, which is board panel or picket. Other accepted types of fence include concrete panel and wrought iron walls; the concrete can be plain or textured, and walls can either be brick walls, plain or glazed tile of architectural block, natural block, or rubble stone.

The basic intent of the screening and landscaping section of the zoning ordinance was to break up the large expanse of paved surface by requiring the planting of trees and plant materials within the parking lot. Also the screening and landscape ordinance helps to soften the appearance of the parking lot as seen by adjacent property owners and the general public.

Before a developer or property owner can obtain a building permit they must submit detailed landscape plans for the site including the parking lot (Fig. 2). The city forester has the responsibility to approve these landscape plans prior to the issuance of a building permit.

After the passage of the revised zoning ordinance in 1975, the first thing the City did was to look at the City's own parking lots, and over a period of several years brought their parking lots into conformance with the zoning ordinance, even though they were not required to do so. They felt that they should set an example for others.

Let's follow a typical request for a permit to the construction of a parking lot or the expansion of a current parking lot. The South Park Church in Park Ridge, which is located in a single family zoning district, requested a permit to remove existing single family homes that they owned in order to construct a paved parking lot. In addition to a paved surface plan for the parking lot, they also must prepare a landscape plan that is submitted to the City Forester for review and approval prior to the issuance of the building permit. The required number of trees, which is based on the square footage of the paved parking lot, must be placed in the parking lot area. The perimeter of the park-

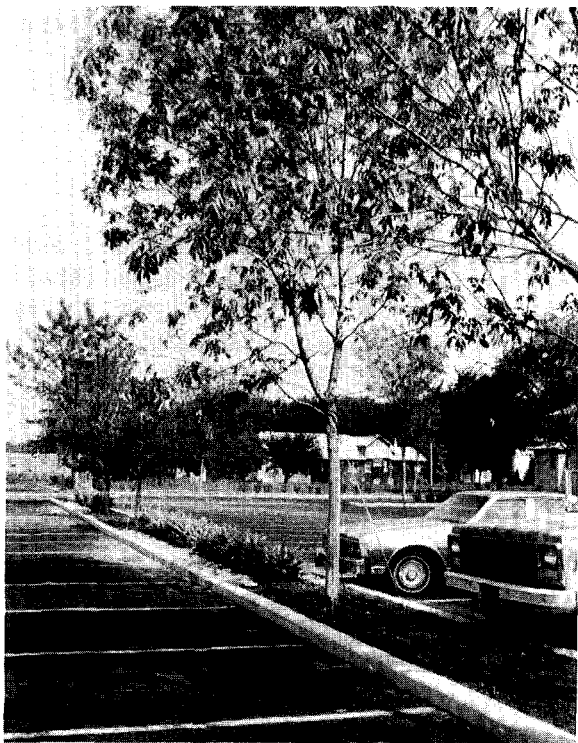


**Fig. 1. Tree planting and fence installation as required by the screening and landscape section of our zoning ordinance.**

ing lot must be completely landscaped with a 4-foot planting strip and fence. We also require a detailed drawing of the installation of both the trees, fence, and plant materials. Further, we require prior to the issuance of the building permit, that the trees and shrubs be identified as to species, size, and quantity. In this particular landscape plan there was approximately 52,000 square feet of paved surface which required, under our guidelines, 19 three-inch diameter trees.

One variation to our zoning ordinance that we permit is the use of landscape earth mounds in lieu of the fence requirement. We require that the mounded areas be suitably landscaped. The earth-mound area with landscaping is a very effective way to adequately screen a parking lot from an adjacent road or property.

The problems that the contractor or developer faces in the landscaping of parking lots varies. Tree and shrub mortality in parking lots is much greater than in other areas where they are

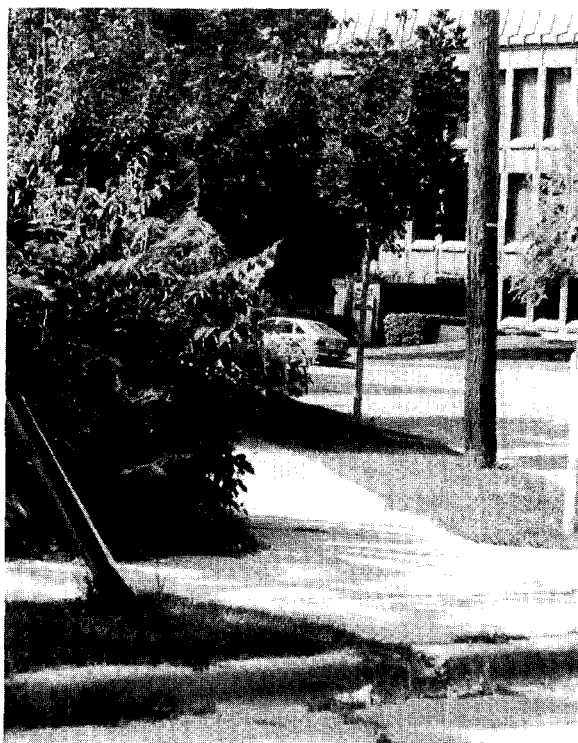


**Fig. 2.** Beautification of private parking lots in accordance with the screening and landscape section of our zoning ordinance.

planted. The key factors for successful planting in parking lots is the selection of the right species for the particular location, providing sufficient space for the root growth as well as plant development, and most importantly, providing good drainage.

The maintenance of landscape plants is required by our zoning ordinance. A problem that we have in Park Ridge with our ordinance is the proper maintenance of the plant material once it has been planted, established, and no longer under guarantee. The property owner does not understand the need to continue to provide adequate maintenance for the landscape plant material in and around the parking lot. This maintenance should include weed control, insect and disease control, and the control of debris.

Maintenance of these areas should be done on a regular schedule (Fig. 3). We suggest to the property owners that if their organization does not have experienced grounds maintenance personnel on staff, they should contract with a private landscape service that will provide the care that is



**Fig. 3.** Tree and shrub growth causing a site visibility problem for motorists using this intersection.

needed to properly maintain the plants.

Often a property owner is reluctant to sacrifice parking to provide adequate room for trees and plant materials in the islands within the parking lot. We are sympathetic to their needs; however, we are very concerned about the aesthetic appearance and the continued beautification of our community. If the owner refuses to plant the trees within the parking lot, as we suggest, we refuse to approve the permit. If the property owner does not plant and install the plant material, fence, etc., in accordance with the approved landscape plan then we do not issue an occupancy permit until the landscape materials conform to the plan. We inspect the completed work, in the field, after it has been installed.

If, after the installation and guarantee period ends, the plant materials die, the City will notify the property owner of their obligation to replace the plants.

Often the property owner asks us why we require both landscape screening, such as continuous hedge of honeysuckle shrubs, and a fence along the perimeter of the parking lot. We feel that in almost all situations the fence helps to

control pedestrian traffic that may be trespassing through the parking lot, possibly creating a hazardous situation. Also the fence, in combination with the plant material, does add to the aesthetic value.

The varieties of trees commonly planted in our parking lots are *Fraxinus pennsylvanica* 'Marshall's', *F. americana* 'Autumn Purple', and *Gleditsia triacanthos* 'Skyline.' The most commonly planted shrub around the perimeter of parking lots is *Lonicera tatarica* 'Zabelii.' The use of *Tricuspidata veitchi* to cover plain brick or concrete walls of buildings is permitted and encouraged.

**Removal of dead trees.** In our community we remove dead trees located on city property. Dead trees standing on private property present a problem for us as well as adjacent property owners, because we presently, like many other communities, do not have an ordinance that requires property owners to remove their dead tree(s). It is my opinion that the removal of dead trees from private property at the property owner's expense should be included in any comprehensive municipal tree ordinance. There is nothing attractive about standing dead trees.

## THE TREE ORDINANCE IN ARLINGTON HEIGHTS

by Erwin Page

One of the most important ordinances on the books at the Village of Arlington Heights is the landscaping ordinance. This ordinance states that all construction which comes into our village for a permit must also include a landscape plan which must be reviewed and approved by the Forestry Department. They chose the Forestry Department because it is the one most qualified and knowledgeable about plant material. We work with plants, we know how to make them survive, and we know how to keep them maintained. We draw on our own experience and, hopefully, we have good taste. We are respected by most of the individuals we deal with.

What we are attempting to do is to keep all new construction at an aesthetically high level. We review the plan with the thought that there should be low maintenance; because maintenance costs money and very few businessmen like to spend

money. When we review a plan we select plant material that not only will survive in our climatic zone, but also plants that have low maintenance requirements and a good aesthetic appearance.

The Village plants all parkway trees. We use a dollar figure based on what the trees cost us and we charge so much a front foot. We try to put in a tree every 50 feet. This will vary depending upon utilities and driveways. The only exception for a landscape plan review is for single family residences. All other construction plans must come through the Forestry Department.

Foundation plantings are important because they break up the monotony of the building lines and add to the landscaping. Sometimes we use upright plants and sometimes we use evergreens, remembering that the more evergreens we use, the more effect the landscaping will have in the winter. We have a serious problem with salt injury

on evergreens on both the village streets and in parking lots. Salt is used extensively and much damage is done. In addition to foundation plantings, we try to screen all parking from the street. Parking is also broken up with landscaped islands. The object is to get away from the asphalt and concrete jungle and to break it up with greenery.

One of the main features which is frequently used in construction around large buildings is berms. Rather than haul soil away, builders use it to create berms. This creates a barrier screen. Our ordinance specifies that all parking must be separated from the street with a three-foot screen, which could be either hedge, berm, or fence. Fences are used when there is not enough room to use either the hedge or the berm.

One of the largest buildings in our town is a 400-room Hilton. They recently completed an extensive job of landscaping. They have landscaped the inside islands, the perimeter, and the foundation using trees, shrubs, and annual flowers.

Next door to the Hilton we have an office building that was recently constructed. It's in the process of being landscaped. They have created a berm that will flow into the landscaping at the Hilton, but the berm is going to be bare of plant material; it will be restricted to grass. To go from a plain screen to something as elaborate as the screen at the hotel is a big contrast. At present I'm in arbitration with the office building officials to get them to upgrade the landscaping on the grass berm. It was not approved as constructed. Politics will play a part in attempting to force them to match the aesthetics of the area. They state that they will do what they want on their property. One of the factors is dollars. Dollars spent on landscaping cuts into profits, which doesn't make their shareholders happy.

We have used evergreens in foundation plantings along village buildings to break up the monotony of brick walls. The brick wall itself may be beautiful, but evergreens add to the architecture and enhance the appearance of the property. Arbor-vitae planted in front of a cyclone fence not only creates a screen, but also gives a softer appearance. Screens are not necessarily a solid row of evergreens. You can break them with ornamental trees. Flowers and ornamental trees also are frequently used to break up the monotony of the

solid row of evergreens. We try to create as much diversity as possible.

Even in our public parking lots we create screens. In some combinations we use railroad ties with a euonymus hedge on top, and we break up the monotony of the euonymus with concrete planter boxes. If a flowering crab is used in the planter, it is 1½ inches in diameter. We will probably get eight or ten years out of it before it is replaced. Once they become root-bound you can move them out of the box and they do very well in soil alongside some of our public highways. Screening has been very effective. People seem to appreciate it when they don't have to look at a concrete jungle.

One of my pet gripes, which is covered by the ordinance, is the posting of signs on public property. When people put a garage sale sign on a wooden utility pole, or even on a concrete light pole, I don't say too much, but when they start nailing them on to trees I get upset. Once we get metal in the tree, we can lose lots of saw chains when we're forced to cut it down. Even children like to use the trees for sign posts; they are easy to nail to. I usually take the sign off the tree and give it back to the people. When I give it back, I also give them a printed handout which shows the ordinance governing putting signs on trees. It contains the words "God did not create a living tree to be a sign post."

Another ordinance that we have governs dangerous branches over the public right-of-way. Our ordinance states that we can inform the property owner that they have to use their own resources to remove dead branches and eliminate hazards which could hurt somebody using the public right-of-way.

Another ordinance states that you cannot do anything in the parkway without a permit from the Director of Public Works. This means that you can't trim trees without a permit.

One way of trimming trees is with a car. Through the course of the year we lose approximately \$20,000 worth of trees due to cars. Some of the culprits have been caught, and with others it's hit and run. Often the younger generation of today feels that it's a game to see how many trees they can knock down. Unfortunately, a couple of drinks at the wrong time and dumb things are done.

Another ordinance controls the planting of trees in the parkway. Plantings must be approved by the Director of Public Works. I have an example of where there are six trees planted on the parkway of a 70-foot lot. I can't do anything about it, but one of these days they are going to have a problem and they will ask for my help. The homeowners do have to be controlled and a lot of PR is needed in a situation like this.

We also have ordinances covering the control of Dutch elm disease. Our ordinance states that if a tree is diseased, it has to be removed even if on private property. A big problem today is elm firewood. Many individuals are bringing elm firewood into town and selling it. The homeowners are not knowledgeable in identifying logs so when someone says to them it's hardwood, they accept it. The following summer when the scouts find it, and the people are notified, I give them two options. Either they can take off all the bark or they can haul it out of town. Also you have some situations where the people take down their own diseased trees and utilize the wood. They find it cheaper to throw the logs in the fireplace than to haul them out of town to a landfill.

There are a few ordinances that I wish we could have on our books: one is a preservation ordinance. Many existing trees in cities should be preserved. Not many towns are going to put in such an ordinance because the village fathers try to stay away from regulating private property. Somehow we have to get to the public to show them that professional help is needed to make sure that valuable trees are not destroyed.

Another ordinance that I wish we could have is one that would stop our village officials in the winter time from dumping salt on our streets. Another desirable ordinance is one that would stop animals from chewing our trees. Unfortunately, this ordinance we will never see.

In conclusion, we have many ordinances on our books; some are good and some are bad. The bad ones hopefully will be changed. Ordinances are changed. At present we do not have gypsy moth in our town but we do have quite an infestation of the eastern tent caterpillar in the spring. We are in the process of recommending to our Board of Trustees a revision in our ordinance which will cover this situation. What we are looking for is an ordinance that will give us the right to go onto private property to look for the gypsy moth and, once it is found, to make the homeowner responsible for eliminating the problem. We don't say how he has to do it, it's up to him as to which methods he uses. He is to be responsible for eliminating the problem which could spread to his neighbor's property or to village property. Gypsy moth is an insect nuisance that must be controlled, and legally the only way we can do it is with revisions in our ordinance.

There are many ordinances, and I'm not saying that all of them are right. What I am saying is that the best ordinance is the one that takes care of your situation. An ordinance can be revised to fit particular situations. With new ordinances politics are involved. You must have the backing from your superiors as well as your elected officials to get them approved. They must be made aware of the need before they attempt to change it or make the addition.

Preparation is essential before you can start ordinance changes. Get an example of an ordinance from another town or organization that will be similar to what you need. Revise the ordinance to your specific needs. If possible, discuss it with all the people who are going to have to make a decision on it and inform them of the necessity for the ordinance before it comes to a vote. Once it comes to a vote you are in the background and you can do little about it.

## TREE ORDINANCES IN EVANSTON

by Dennis W. Ceplecha

I want to discuss not only the definition of an ordinance but to cover the planting of material in that area commonly known as the parkway area. We should consider not only what can be planted in

the parkway area but how much is too much. There is also the question of who is permitted to take care of this material and how do we protect the public from the misdirected good intentions of

others. There is also the need for utilities to maintain their structures on right-of-ways where trees are located and in order to maintain some semblance of order for this work, we should consider the need for ordinances.

The American College Dictionary defines an ordinance as, "An authoritative rule or law; a decree or command." This is rather heavy stuff, it may seem, when it comes to trees and plant material but most of us will agree that there exists the need to rule, command and direct people as to what they can or cannot do with the public area known as the parkway. While some people are opposed to specific ordinances, the public generally does not disagree with the basic concept of parkway tree ordinances.

Ordinances will prevent people from doing things that are not traditional on the parkway. Unacceptable tree species, close spacing, poor arboricultural practices, unnecessary exposure of the public to pesticides, and unauthorized removal of valuable trees are some items ordinances can prevent.

Any ordinance is useless if its existence is not made known and if it only exists as some typed material in a book tucked away on some shelf or in a file. It will be up to those in charge of various ordinances to assure that the word is spread, or that the information is readily available to those who require it. The manner in which this is done is a subject in itself. It is often said, however, that, "Ignorance of the law is not any excuse," but consider the private tree owner, as an example, who works in six, eight, ten, or more communities. How can such an individual, who wants to do a professional job, remember the specific ordinances for your particular community. Therefore, it is up to you to make this material readily available to them. It is your job to inform him and keep him informed.

Ordinances also develop a system of permits to allow for things that are acceptable. This might be the species of trees that can be planted, the distance between trees and from other structures, or what acceptable standards must be met when performing tree work on public property.

In our community we require local licenses of tree companies who want to work on parkway trees. We issue a permit for each job a licensed

tree company is to perform. The licensing of the company permits us to determine if the company has the proper state license, has insurance and a bond, and if they know what they are doing when they are working on trees. The permit allows us to know who is doing what to the trees for which we are responsible. Properly licensed companies do not always assure you, however, that their work will be in accordance with your programs. The licensing/permit system also enables us to protect the public by requiring proper posting, barricading, and other accepted safety standards that will minimize hazards or conflicts with the public that uses the right-of-ways.

Ordinances can go from basic to very complex and lengthy. To some extent the complexity of your ordinance is a function of your tree care program. If your community is old and established and has a comprehensive tree care program that includes such items as an aggressive planting program, followed by regular and frequent care, including, but not limited to, insect and disease control; cabling when needed; and which fulfills the needs of the citizens, then a rather simple ordinance will suffice. If the municipality does not have a comprehensive program for the parkways and the trees on them, it will be necessary to develop rather comprehensive ordinances. Those communities in the former category probably have advanced means of communicating with citizens and tree companies and well established policies that describe the tree care program. If the community is timely, responsive, thorough and extensive in its programs, then the need for the citizen to do anything on the parkway is diminished and elaborate ordinances are not essential. The work of private tree companies on the parkway trees will be minimized.

Utility company operations are generally regulated by ordinances. These ordinances, again, may range from simple to elaborate. Both overhead and underground installations and maintenance of the facilities are usually described and a permit system established.

The recent, rapid expansion of cable TV has required reexamination of some of these ordinances. If you have not had any experience yet with cable TV, then you might prepare yourself; some of us have found it very traumatic. This will



