

# **Zoning Ordinance**

## **THE PURPOSE OF THE LOCAL ZONING ORDINANCE**

In the past, good access to major transportation routes fueled economic development and overall prosperity. While the role of roads and railroads remains important, the prosperity of a community is now more dependent on access to a dependable, high-quality digital technology and telecommunications network. A well-developed technology infrastructure can be used to revitalize declining rural areas and provide added opportunities in urban environments. However, careful planning supported by effective regulatory tools contained in a zoning ordinance is necessary to ensure measured, yet flexible, growth that responds to rapid changes in technology.

As Oakland County pursues a variety of initiatives related to technology and emerging business sectors, the County and local municipalities may struggle to find the appropriate mix of technologies required to provide accessible, high-quality technology to residents and businesses. This is a debate occurring in many communities across the nation, not only in Oakland County. The ultimate mix of technology infrastructure will likely be a combination of fiber or wireless solutions, depending in part on the urban-rural distinction.

There are essentially four tiers of technology infrastructure, underground, above ground, overhead, and towers. Underground infrastructure includes cable or fiber typically located within road rights-of-way or easements. Above ground facilities generally include equipment cabinets or similar structures that are essentially at eye level. Due to their size and location, the visual character of an area could be compromised by these. Overhead infrastructure refers to any type of cable, power line, antenna, or similar device installed above ground level (on poles or buildings). Due to their location and size, visual impact should be minor in most cases. Towers are the very large structures located throughout the rural-urban continuum. Due to their size, they can have significant impacts on surrounding land uses. Each tier of technology infrastructure is part of a larger network necessary to the successful deployment of technology to enhance economic development and quality of life in Oakland County.

Although different, each tier of technology may affect residents and businesses to some degree. For example, the siting of a telecommunication tower in a rural area or the placement of wireless access points (WAP) throughout an urban environment could affect the character of an area. However, the tradeoff in accepting certain impacts to a community is reliable, high-quality internet service. Proper planning and regulation through a community's zoning ordinance can reduce these potential negative impacts.

A zoning ordinance is the regulatory tool by which the community's goals, objectives, policies, and overall vision contained in their master plan are implemented. While a master plan functions to guide the future development of a community, zoning ordinance provisions regulate development of land in the present. Although sometimes viewed as restricting development, a zoning ordinance exists to ensure consistent and uniform development throughout the community to protect the character of a community and to promote aspects of the community that enhance the overall quality of life.

In general, zoning ordinances have many common elements, including but not limited to, sections on zoning districts, special land use standards and procedures, supplemental regulations, and site plan review. These particular sections of the zoning ordinance contain the bulk of regulations that would likely affect the implementation the four tiers of technology infrastructure. The following sections discuss how each tier of technology infrastructure is affected by zoning districts, special land use standards and procedures, supplemental regulations, and site plan review sections of a zoning ordinance.

## **RECOMMENDED REGULATIONS**

**Definitions – to be added**

### **Zoning Districts**

Zoning districts are specific geographic areas within a community that regulate land use activity in each district. Historically, zoning districts were created to separate land uses that were incompatible and fundamentally different to reduce potential conflicts and to protect public health and safety. Zoning districts can vary greatly between communities but are generally categorized under four (4) main headings: residential, commercial/business, industrial, and agricultural. Variations on these categories and the overall number of zoning districts are generally commensurate with the level of urbanization.

For each zoning district, there are land uses permitted by right and those classified as special land uses, as well as applicable development standards. Note that special uses are also referred to as conditional land uses. Permitted land uses are allowed by right because they are deemed to be consistent with the general land use character for that district. Special land uses on the other hand have certain characteristics that make them somewhat incompatible with the character of a particular district. Therefore, special uses are subject to more restrictive regulations and review to ensure they are harmonious with the character of the area. Special land uses and their relationship to the four tiers of technology is discussed later in this section.

The arrangement of zoning districts throughout a community generally reflects current land use patterns as well as the desired land use for a particular district. Although not required, zoning districts should also be consistent with a community's master land use plan as much as is possible. In addition, certain infrastructural elements must also be provided. For example, the four tiers of technology infrastructure and other necessary public services (i.e. sanitary sewer) should be available to support existing and future technology based businesses and traditional businesses as well.

### **Modifications to Existing Districts**

As the role of technology in economic development continues to grow, Oakland County communities should periodically review their zoning districts with regard to overall flexibility to accommodate technology related businesses. Typically, land uses that are permitted by right or as a special use are not specific (e.g. professional office, research and development). Therefore, a technology related business could be considered a particular land use such as research and development. For this reason, a specific technology related land use (i.e. software development) would not have to be incorporated as a permitted or special land use. However, due to the fluidity of technological changes, communities should continually evaluate whether specific technology related land uses may be required.

While existing zoning districts may encompass the broad range of technology related businesses, use of an overlay zone is a technique that communities could use to specifically target development of technology related businesses.

### **Overlay Zoning Districts**

Although establishing new land uses unique to technology businesses may not be necessary, the use of overlay zoning districts could be helpful to attract desirable technology related development. Conventional zoning has long been viewed as a means of promoting the "health, safety, and general welfare" of the community by establishing districts and land uses permitted within each district. Each zoning district has certain regulations for the use of buildings, structures, and land. Other requirements may determine location, height, bulk, parking, and right-of-ways. These boundaries can be modified as requests for rezonings are approved.

Over the years, the rigidity of traditional zoning has been criticized for not responding to economic, social, environmental, cultural, and real estate market changes. As a result, various techniques such as overlay zoning have been developed that increase the flexibility of zoning in an effort to more effectively manage land development.

## **What Are Overlay Zones**

An overlay zone is an area that is superimposed over the existing district(s) and establishes additional regulations, or reduces or extends the existing uses. While the underlying district(s) identify permitted land uses, the overlay zone might also provide design restrictions, additional setbacks, or other exceptions to the base district regulations.

## **How Are Overlay Zones Most Commonly Used**

There are a number of reasons why a community would consider an overlay zone. Overlay districts are used to achieve various planning objectives, such as economic development, preservation of unique characteristics or physical amenities, or management of health and safety issues. Examples of overlay zoning districts follow:

- *Economic Development* – protect, enhance, or develop an Enterprise Zone or downtown district.
- *Natural Resources* – conservation of view corridors, recreation corridors, wildlife corridors, hillside preservation, extractive resources area regulations, and watershed protection guidelines.
- *Open Space Preservation* – allowing the use of cluster units to minimize alteration to views, maximize areas to be left open or undeveloped, or maintain lifestyle expectations. Recreation linkages can also be addressed.
- *Historic Preservation* – architectural criteria are developed to address design, materials, and special uses to enhance or protect historic districts or culturally significant areas. In addition, special control of signage is usually addressed.
- *Specific Plans* – Planned Unit Developments (PUD) specify certain standards that could deviate from the underlying zoning district.

## **Is It Possible to Have More Than One Overlay Zone in an Area**

Yes, but as the number of overlay zones increases, the complexity of compliance also increases. Therefore, single overlays are suggested to decrease the potential of regulatory and administrative complications.

### **Example of an Overlay District**

Overlay zones typically provide an extra layer of regulation. However, overlay zones can also be used to provide exceptions to the underlying zoning district(s). For example, an enterprise overlay district in a central business district may allow for additional floor area ratios, parking waivers, and additional uses not otherwise allowed.

### **What if There is a Conflict Between the Requirements of the Overlay Zone and Those of the Underlying Zoning**

In such cases, the requirements of the overlay zone apply. For instance, if a restaurant is located in a commercial district with a Historic District overlay zone, there might be a conflict in signage requirements. The Historic District overlay zone might be more flexible in that it could allow signs that are otherwise not permitted in the underlying zoning district, if they reflect the heritage of past years.

### **Are There Size Restrictions To Overlay Zones**

No, there are no restrictions on the size of an overlay zone. Boundaries of an overlay zone are determined by criteria. Boundaries may cover several zoning districts or only small portions of one (1) zone. For example, a Historic District overlay zone may encompass a residential neighborhood immediately adjacent to the town center with commercial zoning along roadway corridors. This overlay may cover just a few blocks while a natural resource overlay zone may encompass several acres.

## **Special Land Use Standards and Procedures**

Special land uses possess characteristics that are not entirely compatible with existing and permitted land uses in a district therefore must meet additional regulations. During the review process, a special land use must meet a set of general (discretionary) standards applicable to all special land uses, specific (non-discretionary) standards for a particular special land use, and any applicable provisions of the zoning ordinance prior to approval. General standards are typically broad standards that encompass a wide range of potential impacts that deal with compatibility with the master (comprehensive) plan, adjacent land uses, impacts on traffic, roads, environment/natural features, and public services, and compliance with zoning ordinance standards. Specific standards

vary greatly between specific special land uses depending on their intensity; but generally regulate lot size, setbacks, parking, access, hours of operation, noise, lighting, and environmental protection.

### **Purpose of the Special Land Use Designation**

Although special land uses may have aspects that are undesirable, they can be very important to a community. For example, gravel extraction operations are common in rural areas and play an essential role in contributing to the overall economic health of that community. However, potential impacts can be significant, therefore they are usually highly regulated. Telecommunications towers also provide a community with key services that support business activity and overall quality of life. However, the sheer size of telecommunication towers makes them visually intrusive and potentially dangerous to surrounding land uses should it fall, hence their classification as a special land use. For reference, Appendix \_\_\_ contains a comprehensive model telecommunications towers ordinance. In general, the model ordinance specifies maximum height, separation distance, setbacks, materials of construction, landscaping and screening, location, performance standards, and other applicable standards. These standards would be in place of or in addition to existing provisions of the zoning ordinance.

It is important to note that there are two very different aspects of telecommunication towers: new towers discussed above and collocation. Collocation involves mounting antennas to existing towers or structures such as tall buildings, water towers, power lines, or even trees. Structures used for collocation are essentially shared facilities that can dramatically reduce cost for public and private access. From a community's standpoint, collocation is preferred because it involves far less impact to the character of existing land uses. Due to the relatively minor impact, fewer standards and a simpler review process such as administrative review may be warranted. Whether a collocation is a special land use is an essential question that may depend on the type of community (i.e. urban vs. rural). Consider a scenario in which a large antenna is mounted to the top of a building in an urban area. This situation certainly reduces visual impact and reduces costs; however, higher wind speeds experienced at the top of a building is a factor that could compromise public safety. In this instance, this particular type of collocation should be listed as a special land use. Alternatively, a community could establish stringent permitting requirements related to the design and engineering of a tower located on top of a building.

In most cases, the remaining tiers of technology infrastructure, underground, above ground, and overhead, do not possess the undesirable characteristics of a

special land use. Underground public services such as gas, electric, and telephone lines are state regulated utilities located in the road right-of-way and are not subject to municipal review. Some regulation of underground infrastructure may be required if road rights-of-way are under the jurisdiction of a local municipality, however special land use status is not advisable. Underground infrastructure is also found within easements, some of which could be regulated through the site plan review or construction plan review process. Any regulation should be consistent with the goals, strategies, and recommendations of a road right-of-way master plan or other applicable strategic plan or study.

Generally, above ground and overhead facilities are not substantially visually intrusive, nor do they do not possess undesirable characteristics that warrant added regulation that accompanies a special land use. However, there are certain instances where above ground and overhead facilities can affect the visual integrity of a unique area; in these cases a special land use classification may be warranted. For example, historic districts or downtown areas rely in part on their aesthetic appeal. Constructing an equipment cabinet or attaching an antenna to the side of a low-rise historic building would be visible to the public and not very appealing unless screened appropriately. Additional regulatory controls for above ground and overhead infrastructure are discussed further in the following sections.

### **Supplemental Regulations**

Supplemental regulations, which can also be referred to as general provisions, contain standards that apply to all uses, buildings, and structures within all zoning districts. This section of the zoning ordinance contains standards that regulate a wide variety of topics including but not limited to, accessory structures and uses, landscaping and screening, protection of natural resources, and general development regulations. Note that all four tiers of technology infrastructure would be subject to the supplemental regulations; however, it is expected that the standards for accessory structures and uses and landscaping and screening would be most applicable.

Similar to other public utilities and essential services, underground technology infrastructure will likely be located within road rights-of-way and/or private easements. Because of society's increasing dependence on technology, underground technology infrastructure could arguably be considered an essential service, on par with public sanitary sewer and water, and telephone. Note that it is not uncommon for public utilities and non-building essential services to be made exempt from provisions of the zoning ordinance, including supplemental regulations. Therefore, underground infrastructure could be given the same level of regulatory oversight at the local level as electrical transformer or other relatively small-scale utility equipment.

Above ground technology infrastructure is usually contained within a utility cabinet or other similar structure and will vary in size and location. The cabinets are essentially at eye level and could negatively impact the visual landscape unless they are made to be less obtrusive. To lessen the potential impact, a screening treatment could be required by the community. However, the specific type of screening would depend on the area and should be evaluated on a case-by-case basis. Discretion for the specific screening treatment should be given to local decision makers. For example, a cabinet along a road in a new neighborhood would be quite unsightly unless it was appropriately screened with landscaping. In an urban environment such as an historic district, it may be more appropriate to screen an above ground structure with a masonry wall that is consistent with the character of the area.

Overhead infrastructure should also be evaluated on an individual basis to determine potential impacts and the appropriate mitigation measure. Technology that utilizes cable or power lines strung on utility poles seems rather benign because it would blend in with existing telephone and power lines. However, proliferation of this technology may result in visual clutter. As utility poles are typically in the road right-of-way or easement, regulatory options to lessen the degree of visual impact may be limited. Other overhead structures such as antenna mounted to the side of a building can be relatively small but they could affect the visual character of an area. Again, this is particularly important in an historic district or other area such as a pedestrian oriented downtown where visual character is a key component to the success of that area. In this particular situation, screening could be accomplished with architectural features or simply using a paint color as camouflage. As before, municipalities should have the latitude to determine the type of screening.

Various aspects of telecommunications towers or collocations would be subject to applicable sections of the supplemental regulations as well as all other provisions in the zoning ordinance. However, communities usually regulate telecommunications towers under a separate and comprehensive section of the zoning ordinance. This ordinance could be nested within the supplemental regulations or in the special use section of the zoning ordinance. Please refer to the model ordinance on telecommunications towers in Appendix \_\_\_.

### **Accessory Structures and Uses**

Accessory structures and uses is a typical subsection of the supplemental regulations that address structures and/or uses that are customarily incidental and subordinate to, the structure or building or principal use on a lot. Garages or sheds for a single-family home is a common example of an accessory structure. Often times a homeowner that desires to construct a garage or shed is limited in

maximum height of the structure, the overall number permitted on a lot, overall square footage, and placement relative to required setbacks.

Because of their location, underground telecommunications infrastructure would likely not be subject to any regulations regarding accessory structures or uses. However, above ground structures such as utility cabinets that were discussed previously should be regulated. Their placement relative to surrounding land uses is perhaps most important. Ideally, these structures would be located in areas that are less visible, yet accessible for service. Limiting their placement within rights-of-way or on a corner that would obstruct intersection visibility is a public safety concern and should be regulated as well.

Overhead structures, in particular, small antenna could be considered an accessory structure. Although small, antenna could impact unique areas such as historic districts or vibrant pedestrian oriented downtowns unless properly controlled. There is a high potential for small antenna to proliferate in an urban setting therefore it would be important to regulate their location and perhaps the overall number of antenna permitted in a particular zoning district or area. For example, the minimum distance between small antennas within an urban environment could be limited to two hundred (200) feet or five (5) antennas within a two hundred (200) foot radius. The actual siting distance and overall number of antenna is dependent on the technology. As such, technical experts should be consulted when developing these criteria.

### **Landscaping and Screening**

Landscaping and screening requirements are a common component of the supplemental regulations, but can also be a stand-alone chapter within a zoning ordinance or part of a subsection that addresses environmental protection. Ideally, landscaping and screening requirements are consolidated in one (1) section of the zoning ordinance. However, other sections such as the PUD ordinance or an overlay zoning district may require additional landscaping or screening. Specific landscaping and screening requirements vary greatly between communities but can include provisions for screening and buffering, parking lot landscaping, greenbelts, and plantings along buildings. The degree of specific provisions can also vary. As previously noted, underground telecommunication infrastructure would not require screening or landscaping. Screening and/or landscaping for all other levels of telecommunication infrastructure may require screening and/or landscaping to reduce their potential visual impact; however, they should be evaluated on an individual basis.

## **Site Plan Review Process and Criteria**

Site plan review is the process by which certain development projects are evaluated to ensure that a proposed land use or activity complies with local ordinances, and state and federal statutes. Developments that undergo site plan review must be approved if all standards in the zoning and ordinance and applicable laws are satisfied. In general, standards for reviewing a site plan typically encompass site design characteristics, buildings, preservation of natural areas, privacy, emergency vehicle access, ingress and egress, vehicular and pedestrian circulation, traffic impact, drainage, soil erosion, and public services. As previously noted, the goals and objectives of a master plan or other studies are not enforceable when reviewing a site plan. However, the zoning ordinance is the regulatory tool by which the goals, objectives, policies, and overall vision contained in the master plan or other studies are achieved. Therefore, it is important that the strategies in various community plans be integrated into the zoning ordinance, where possible, so they become enforceable standards.

As a special land use, new telecommunication towers and collocations, in certain circumstances, would undergo site plan review in addition to the required procedures for special land uses. Depending on the location and the community, underground, above ground, and overhead telecommunication infrastructure may also be subject to site plan and special land use review. It is likely that these three tiers of telecommunication infrastructure will be reviewed as part of a larger project.

### **Consistency with Community and Road Right-of-Way Master Plans and Telecommunications Strategic Plans**

During site plan review, a community should encourage applicants to design development plans to be consistent with the goals and strategies outlined in the applicable Road Right-of-Way Master Plan and Telecommunications Strategic Plan (if developed) in addition to plans developed for that community. Where possible, it is advisable to incorporate specific criteria/strategies from these plans into the zoning ordinance so they become enforceable standards.

Development plans that are consistent with the applicable Road Right-of-Way Master Plan will ensure that adequate space is available for the implementation of technology infrastructure within the right-of-way. Note that plans should also be consistent with road right-of-way master plans developed by individual communities. Future provision of technology infrastructure would be more probable if the plans align with the strategies identified by the applicable Telecommunication Strategic Plan.

### **Community Development Standards**

Community development standards refer to provisions in the zoning ordinance that regulate a wide variety of areas that can affect the overall character of a community. The intent of these standards is to ensure development within the community is consistent and promotes the desired character of the community. For example, a zoning ordinance can include standards for landscaping/screening, architecture, lighting, environmental preservation, vehicular/pedestrian access, stormwater, and utilities. Often times the Planned Unit Development (PUD) section of the zoning ordinance will contain its own development regulations. The four tiers of telecommunication infrastructure would be subject to all development standards during site plan review. Telecommunication towers, as a special land use, are likely to be subject to most development standards in the zoning ordinance. Above ground infrastructure is also subject to several development standards due to its high visibility.

### **Standards for Advanced Technology Buildings and Developments**

As society becomes increasingly reliant on technology, it is critical that communities keep pace with this demand by planning for the County-wide deployment of an advanced technology infrastructure. Important to this overall effort should include outfitting existing and new buildings for advanced technology to support high tech and traditional businesses. Implementing policies and strategies to encourage advanced technology buildings should be a high priority in Oakland County; however, realization of this lofty goal may be difficult because many of the currently accepted standards for technology ready buildings may not comply with the State building code or local ordinances. From a political standpoint, revision of the State building code would be an uphill battle. Revising local codes and ordinances; however, may be relatively straightforward. Zoning ordinances could be amended to require that developments meet minimum standards regarding advanced technology infrastructure for site development, and existing and new buildings. These standards should also include specifications such as but not limited to location, design, and materials for the four (4) tiers of telecommunications technology. To ensure the additional requirements do not discourage growth in Oakland County, municipalities should consider offering economic incentives such as expedited review and permitting, or waving of application/permit fees.

### **Planned Unit Development Regulations**

A Planned Unit Development (PUD) is a development tool used by Michigan municipalities that is authorized by the State of Michigan. Used mostly for larger projects, a PUD allows negotiation between the community and developer that usually results in mutual benefits. For example, a community may request that the PUD contain a wide range of housing opportunities. This helps to diversify the community by

attracting individuals and/or families with different incomes. In return, the developer would be allowed a density greater than what is normally permitted in the existing zoning district, which generally translates to greater profits. Often times the negotiation process yields a distinct set of standards (i.e. setbacks, landscaping). The flexibility inherent to the PUD process provides much latitude to the community to ensure high-quality development that is beneficial to residents, businesses, and overall quality of life.

### **PUD Criteria**

Public Act 110 of 2006 requires a PUD ordinance to identify criteria, which a proposed development must meet to become eligible to be reviewed as a PUD. These criteria can include factors such as minimum site area, adequate public infrastructure, environmental protection, and consistency with the Master Plan. Common to all criteria is the recognizable benefit to the community and to the ultimate users of the project. The intent of a PUD ordinance is to encourage innovation in land uses and excellence in design, layout, and type of structures.

### **Design Flexibility of the PUD Process**

As noted, design standards are often found in a PUD ordinance. Compared to the standards that would be needed for advanced technology infrastructure, these are general, regulating things such as setbacks, external architecture features, and environmental protection. Standards regarding technology infrastructure for entire developments and more specifically buildings could be added to a PUD ordinance. However, given the rapid pace at which technology changes it may be prudent to create a separate document for technology ready development so recent advances could be incorporated administratively without the need for the state mandated amendment review and approval process. Meeting the design standards by reference in the PUD ordinance would be required. Note that satisfying the design standards could be a requirement for all developments, not just a PUD. The design standards should be very specific; however, the community should apply the standards with flexibility to ensure technology ready development does not become burdensome and a barrier to achieving the ultimate goal of a tech ready development. The design guide should provide detail on the preferred design, materials, layout, construction, and implementation for all four tiers, including buildings, of telecommunication and other technology infrastructure.

### **Clustering Regulations**

In general, clustering is a development concept, the intent of which, historically, is to preserve natural features. As such, these types of project are typically proposed for rural areas where the development site contains larger amounts of natural features. In

general, cluster proposals consolidate development in one or more areas of a site in order to preserve natural features in other areas of the site. Note that cluster development can be used interchangeably with open space preservation development, which is a residential development tool Michigan municipalities must provide for in their zoning ordinance. Clustering of any type of land use, residential, commercial, office, or a mix, is beneficial not only from an environmental standpoint, but also from a financial aspect. For example, as development is concentrated instead of spread out, a project would require less lineal feet of roads and public utilities, thereby reducing overall costs.

As noted in the master plan section of this report, campus-like developments adjacent to natural features, at least for larger companies, can be very attractive to businesses and their employees. A desirable campus-like development usually contains a mix of uses set within a natural area; however, the location should not be isolated. Many companies rely on easy access to main transportation routes, as well as proximity to housing and shopping, dining, and other services. Communities that have a suburban or rural character would likely be able to accommodate a campus like development. Urban environments are much less likely to contain a significant amount of natural features for a cluster development, but may possess large contiguous areas designated as brownfields, which represent good opportunities for non-residential development. Although clean up of these sites may present difficulty in re-development, financial resources can be obtained from many sources for this purpose.

While every community in Michigan must allow for residential cluster developments, communities should encourage the concept of clustering for any type of development including commercial, office, research and development, and light industrial. A community could express their desire for cluster over conventional developments in different areas of the zoning ordinance. It could be integrated into site plan review criteria, PUD eligibility criteria, within the development regulations for individual zoning districts, or expressed as the intent of any development in a particular zoning district. Standards that guide cluster development could be incorporated into the supplementary regulations as well.

## **FINAL THOUGHTS ON ZONING**

The rapid pace of technological change continues to transform our society in how and where we work and in our personal lives. In addition, the technology infrastructure needed to fuel our economy and make our lifestyle possible will impact our physical environment. As noted in the preceding sections, the zoning ordinance can be used to mitigate potential negative impacts on our communities. However, it should be noted that overly restrictive regulatory barriers could lead to limited availability of technology, which in turn could inhibit economic growth and reduce overall quality of living in Oakland County. Therefore, a community should carefully evaluate the technology

infrastructure needed to achieve social and economic goals, and review and revise their zoning ordinance accordingly to enhance the local economy, while simultaneously maintaining public health, safety, and welfare.