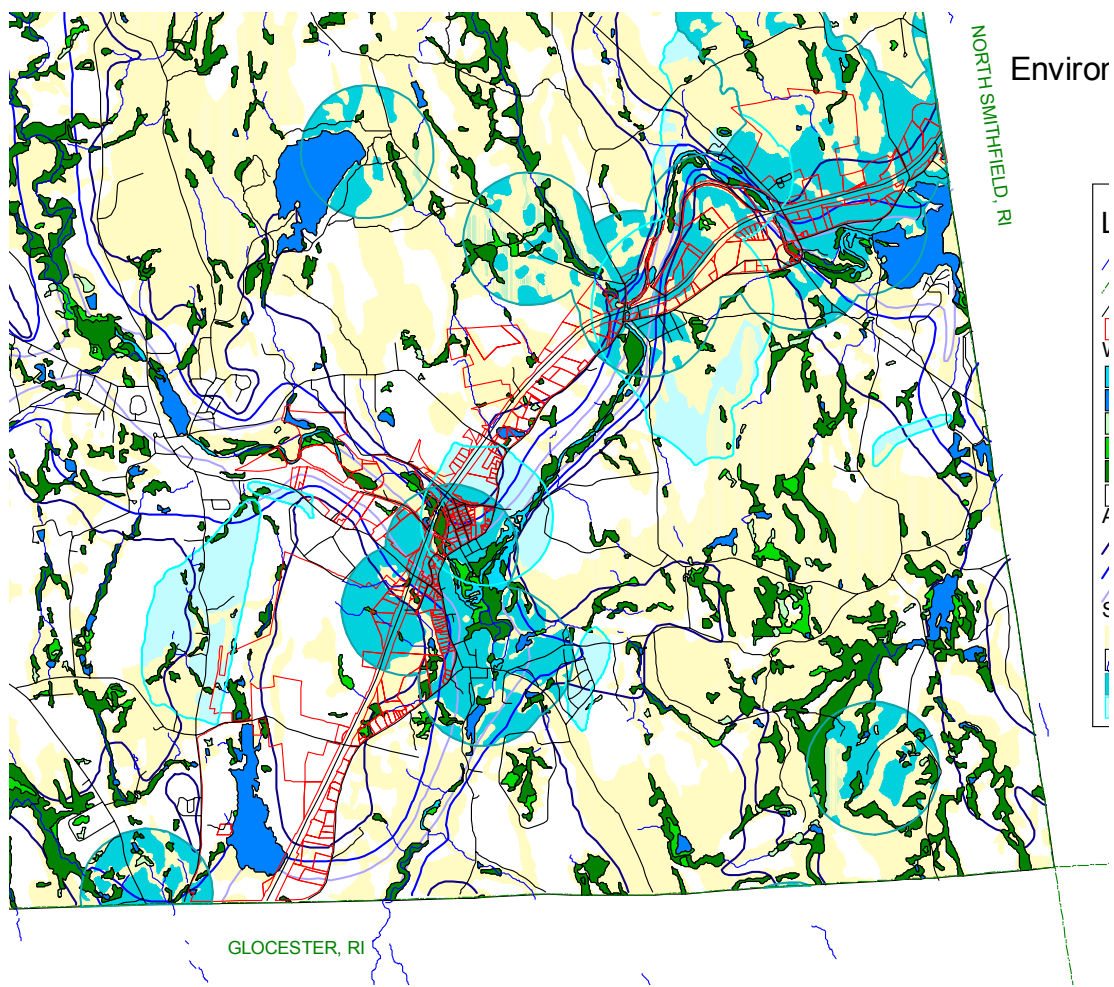




Figure 9: US Geological Survey 7.5 minute topographic survey map of project area



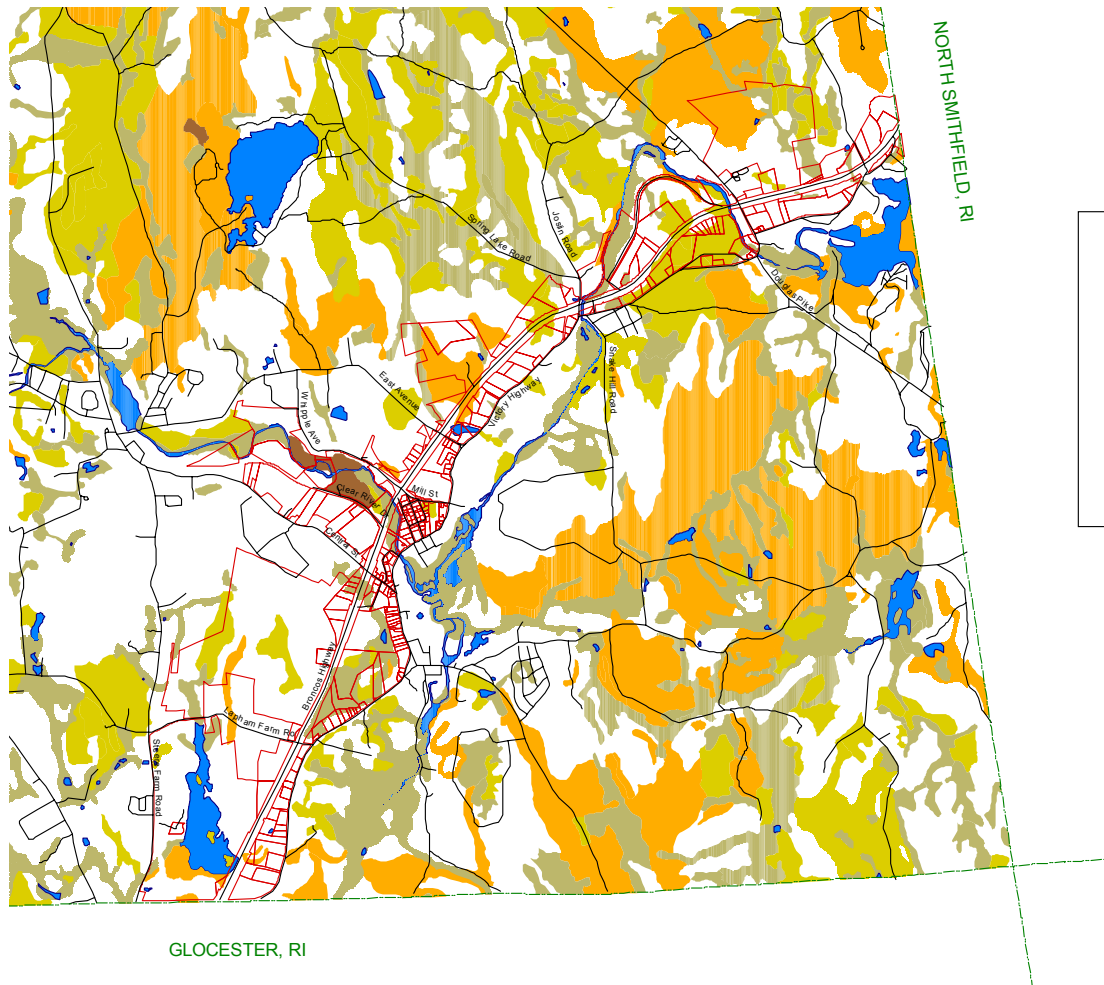
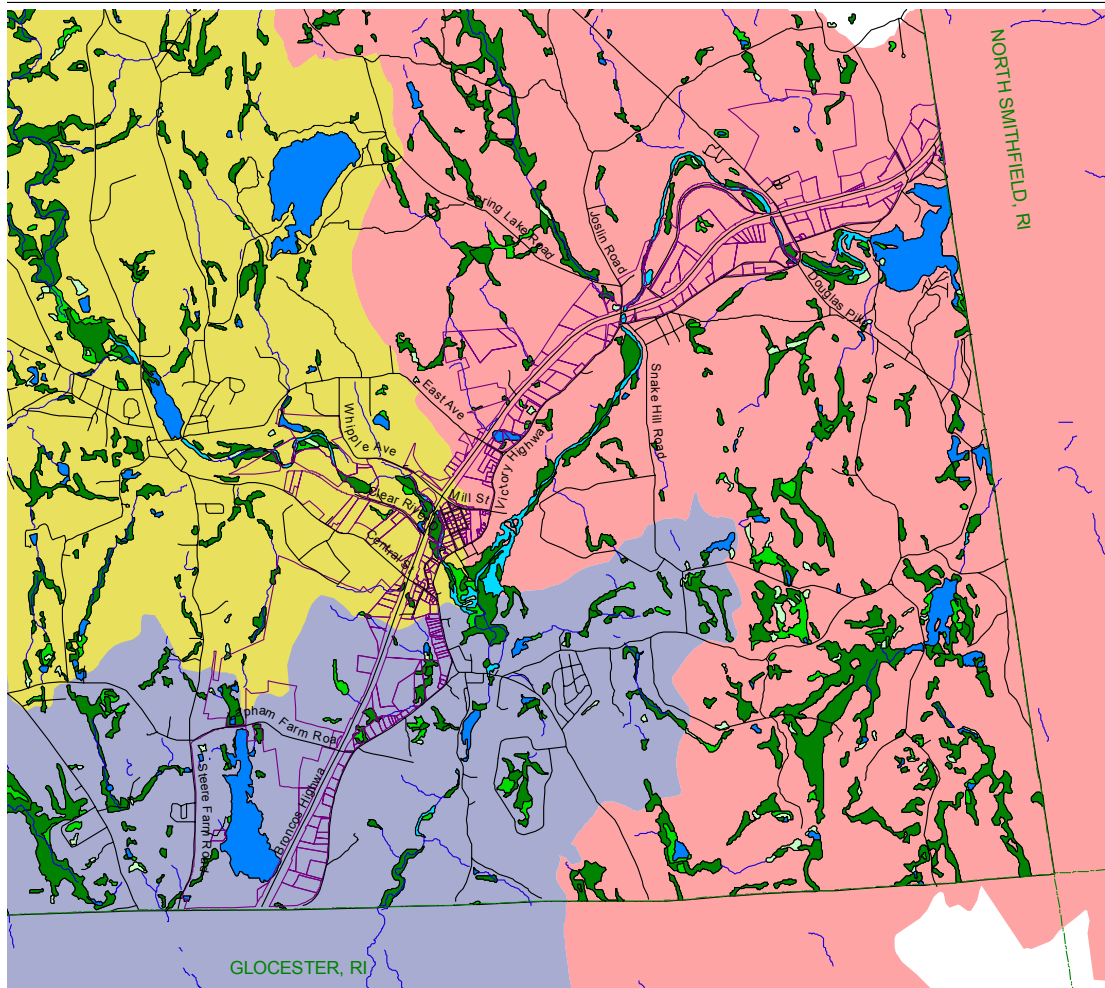


Figure 11
Soil Constraints to Development
Bronco Highway (Route 102)
Burrillville, Rhode Island



Source: Town of Burrillville &
Rhode Island Geographic Information System (RIGIS)



Source: Town of Burrillville &
Rhode Island Geographic Information System (RIGIS)

1. Wetlands

Some parcels along Route 102 contain wetlands, particularly in the vicinity of the proposed Clear River Drive and Lapham Farm Road. Wetlands in the project area are shown in Figure 12. Wetland types associated with the area include Emergent, Scrub-shrub, and Forested wetlands (palustrine) as classified in accordance with the Rhode Island Department of Environmental Management (RIDEM).

2. Groundwater

A review of the Town's Aquifer Overlay District and Wellhead Protection areas was conducted through the use of the Town's GIS data layers as well as existing ordinance documentation, see Figure 13. Aquifers are soil strata, which are capable of storing large volumes of water. Groundwater resources within the area are classified as GAA, indicating groundwater resources known or presumed to be suitable for drinking without treatment, according RIDEM Ground Water Classification.

II. Land Use and Development Controls

A. Comprehensive Plan

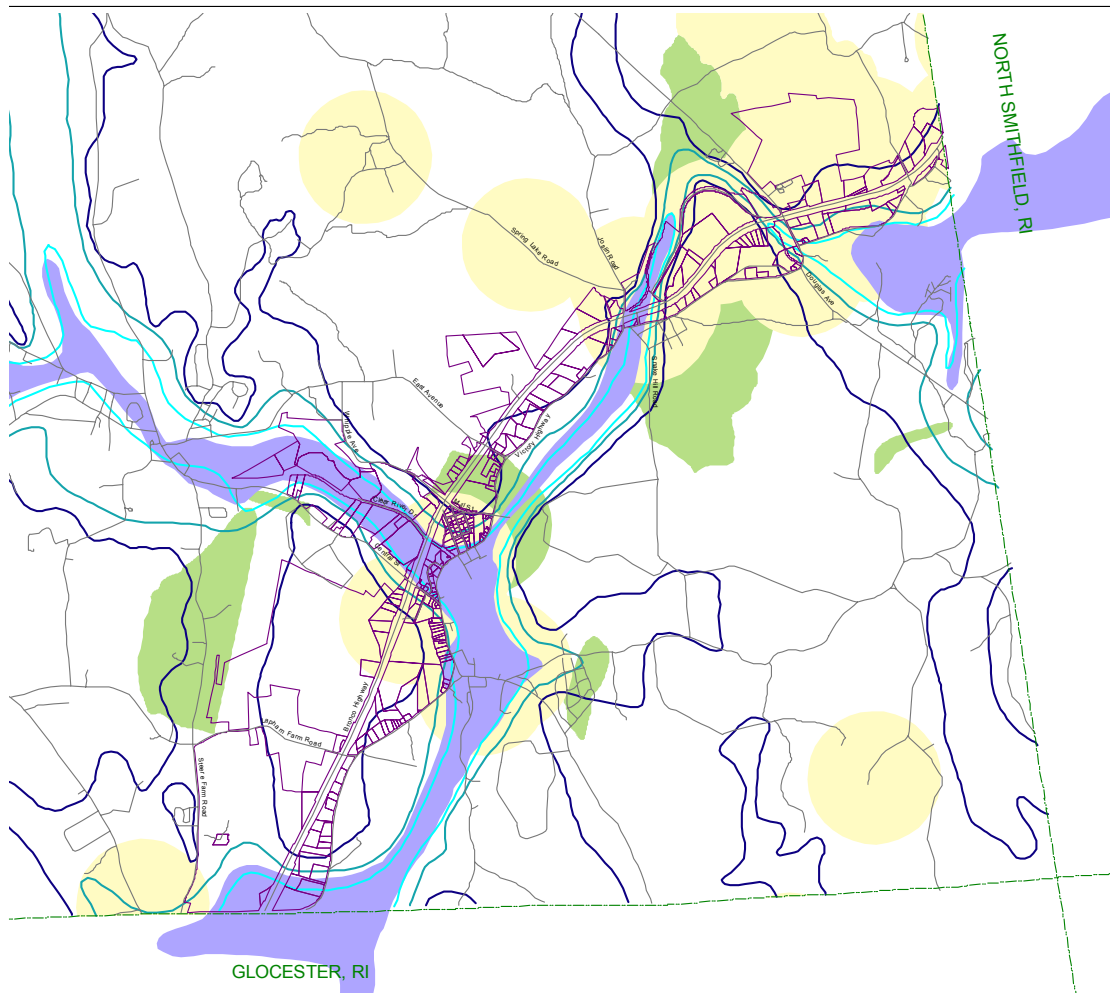
The Comprehensive Plan is a tool mandated by the State of Rhode Island, subject to approval, to guide development in municipalities. The Town of Burrillville Comprehensive Plan was approved in 1998. There are six elements of the plan that address the study area: economic development, circulation, natural resources, community services and facilities, housing and land use.

1. Economic Development

The citizen survey conducted for the plan advocates for economic development activities to primarily take place within the study area. Approximately half of the residents (48%) prefer future retail development along Route 102 as well as manufacturing businesses. The Comprehensive Plan states the Town should target activities that are tourism-related, mixed commercial and industrial uses and recreation-related businesses. Office development was considered less important than retail, but if it were to occur, it should be directed toward the study area. The Blackstone River Valley National Heritage Corridor is currently working with our Historical Commission in developing maps, signage and literature for areas within Burrillville.

The plan calls for business and industry development to be consistent with the rural character of the community through sensitivity to the surrounding environment, visual quality, natural resources and adjacent land uses. This includes sufficient buffering to neighbors, particularly residential uses. Additionally, industrial development should be limited to areas served or likely to be served by water and sewer that have access to Route 102. All developments must adhere to existing Subdivision and Land Development Regulations, which include Design Guidelines.

The implementation strategy for the economic development element of the plan incorporates changes to subdivision and zoning regulations, some of which the Town has already put into



Source: Town of Burrillville &
Rhode Island Geographic Information System (RIGIS)

effect. One area highlighted in the plan is to prohibit the spread of strip commercial development along major arterials, like Route 102, through zoning. This will maintain the Town's rural character and inhibit sprawl-like development. In addition to zoning changes, the plan further supports this effort by advocating for site plan review with accompanying design guidelines for new commercial and industrial development. Through design review, the Town can ensure that new development is compatible with surrounding neighborhood appearances and also can mitigate conflicts between commercial and industrial developments and other uses. As the plan states, this can be through buffers, landscaping, compliance with State and federal air and water quality standards, and maintenance of acceptable noise levels. One approach discussed is a planned unit development (PUD) that promotes mixed-use commercial and residential developments on large tracts of land having certain zoning designations.

2. Land Use

The land use element of the Comprehensive Plan is another priority associated with the study area. As the plan indicates, development should be compact, attractive and compatible with the ability of the land and water resources and other natural features. Development should also occur in areas where public facilities and services are available, or planned to be available. Implementation strategies suggested in the plan support the site plan review process previously mentioned by requiring commercial and industrial developments to meet a series of performance standards regarding layout and design, landscaping, parking, lighting and other related site elements. Furthermore, these performance standards along with other development controls should be used to mitigate conflicts that may occur between commercial and industrial development with other uses and activities.

In addition to areas zoned for commercial and industrial uses, many parcels within the study area are zoned for residential as well. The housing element of the Comprehensive Plan designates residential areas along Route 102 for suburban development. This is in contrast to the rural or village centers of the Town. An analysis of trends in the Comprehensive Plan indicates that single-family dwelling construction is most favorable and multi-family dwelling development is limited. The Comprehensive Plan encourages the continuation of requiring two to five-acre minimum lot requirements in outlying areas where services and amenities are not available or planned for. However, this does not include the entire study area, as some areas are designated for increased sewer and water services. The plan also advocates for a PUD provision for residential development within certain zoning districts.

3. Circulation

Regarding circulation, Route 102 is a rural principal arterial with a portion of a fixed bus route. The plan encourages the highest density development to take place along bus routes. Implementation strategies advocate coordination with RIPTA and RIDOT to conduct a needs assessment and preliminary feasibility study of providing a Park and Ride lot in Burrillville.

4. Natural Resources

Implementation strategies to protect natural resources reflect actions from land use, such as development that is compatible with natural features of a site, site plan review and limiting intense development to areas serviced, or intended to be serviced, by public sewer systems. In addition, the Comprehensive Plan also calls for mitigation of water quality impacts of stormwater runoff and drainage controls for new development, pre-treatment of sewage by industrial operations where appropriate, and requiring the recycling of industrial wastes to be undertaken whenever possible to conserve resources and reduce treatment problems.

5. Community Services

Finally, the plan recommends extending community services to commercial and industrially zoned land along Route 102 not currently served as new development occurs. Large industrial water users should be identified and encouraged to implement recycling of water, and, where possible, the use of local groundwater supplies for industrial processing.

B. Zoning Ordinances

Overall, the Zoning Ordinances support the Comprehensive Plan, as the consistency aspect of the State Enabling Act requires. Areas that are consistent and inconsistent are identified in the following discussion.

1. Economic Development

There are four zoning districts that support commercial and industrial activity associated with the economic development element of the Comprehensive Plan. The general commercial district will be smaller developments with a broader mix of uses dominated by services. Examples include general retail, specialty services, package stores, office buildings and banks.

The highway commercial district specifically identifies Route 102. “It is seen as an area for large-scale modern commercial development with large parking lots, usually in front of the buildings. These businesses will be of commercial varieties often clustered together in shopping centers or strip malls” (page 11-4.1). This definition of the district is inconsistent with Comprehensive Plan and the strategy to minimize the effects of sprawl-like development, which includes strip malls. Current zoning regulations have not been revised to date to reflect the latest updates to the Subdivision regulations.

The limited industrial district is characterized as a “business incubator,” where small light industrial uses will take place. It is anticipated that businesses within this district will grow and move to an area zoned as general industrial. Potential uses for this district include light manufacturing, storage, wholesale and assemblage.

The general industrial district will be the location for modern manufacturing businesses on large landscaped lots. It is anticipated that the traffic generated by these businesses will be substantial. Examples include storage, manufacturing of all sorts, and machinery repair.

The Zoning Ordinance requires a site plan review for large-scale development and development in environmentally sensitive areas. Large-scale development and development in an environmentally sensitive area are defined in Section 11-8.1.2 of the Special Use Regulations of the Zoning Ordinance.

The purpose of this review process is to avoid or minimize impacts on the natural and built environment of the Town. The objectives address internal circulation and egress; adequate access to each structure for fire and service equipment; reasonable use of building location, grading and vegetated screening to reduce visibility of parking; exterior lighting; siting of drainage; and buffering of commercial and industrial development from adjacent residential neighborhoods. Additional information required includes a traffic study, hydrogeologic study, hazardous materials study, and air quality study. This review is consistent with the recommendations outlined in the Comprehensive Plan.

2. Land Use

To meet the land use goals of the Comprehensive Plan, the Town had renamed and redefined zoning districts that would identify uses better suited for the parcels. As previously discussed, the site plan review process allows the Town to promote development controls and performance standards on new commercial and industrial development that will mitigate conflicts with adjacent land uses. The process also lets the Town ensure activities related to the natural features of the site and its suitability for development.

Additional components of the Zoning Ordinances that support the land use objectives of the Comprehensive Plan are the special use regulations of aquifer zoning, wellhead protection areas and cluster zoning. Aquifer zoning and wellhead protection areas are overlay districts intended to prevent adverse impacts to the Town's wetlands and water resources in order to maintain water quality and supply. These areas have been identified by the Rhode Island Department of Environmental Management and incorporated by the Town into their Zoning Ordinances. Parcels located within these areas are subject to restrictions, as identified below:

Overlay District	Permitted Uses
A-80	Single-family and multi-family residential, commercial and industrial only if sewered; recreation/open space; and farming by special permit
A-100	Single-family and duplex residential; recreation/open space; farming by special permit; and commercial and industrial if compliant with maximum wastewater flow requirements
A-120	Single and multi-family residential; recreation/open space; farming by special permit; and commercial and industrial if compliant with maximum wastewater flow requirements

Cluster zoning has objectives that reflect several components of the Comprehensive Plan. For land use, it encourages a more effective, aesthetic and desirable use of a parcel by incorporating open space and preserving natural features. Developments are more compact and compatible with the landscape. Clustering is restricted to residential development in areas zoned F-2, R-40, and R-20.

3. Housing

There are two farming districts, F-5 (5-acre minimum lots) and F-2 (2-acre minimum lots), and two suburban districts, R-40 (40,000 square feet minimum lot) and R-20 (20,000 square feet minimum lot), in the study area. The farming districts contain large lots to preserve the Town's rural heritage and landscape. The suburban districts support conventional and cluster subdivisions in areas not serviced by public water and sewer. These districts are found within the study area and are consistent with the housing element of the Comprehensive Plan.

4. Circulation

Circulation is addressed in the Zoning Ordinances through the traffic study required in the site plan review process. The study is necessary for projects that are expected to generate 250 vehicle trips per day. Existing traffic volumes should be taken into account as well as traffic volumes under "built out" conditions.

5. Natural Resources

Natural resources are protected by the Zoning Ordinances through site plan review, aquifer zoning and wellhead protection areas, and cluster zoning, all discussed above. They support the implementation strategies outlined in the Comprehensive Plan.

The site plan review process applies to development in environmentally sensitive areas, see 11-8.1 Site Plan Review for thresholds.

As previously mentioned, the purpose of the review process is to avoid or minimize impacts on the natural and built environment of the Town. This allows for mitigation of adverse impacts on water quality.

C. Subdivision and Development Regulations

In addition to applying to residential subdivisions, the Town's Subdivision and Land Development Regulations also apply to non-residential land development projects. The regulations allow the Town to control land development and subdivision projects through an orderly and timely process. The regulations are established to protect existing natural and built environments, promote a high quality of design standards and best management practices, and mitigate adverse impacts, among other purposes.

1. Economic Development

To promote the objectives for economic development stated in the Comprehensive Plan, the Subdivision and Land Development Regulations outline design standards and procedures for development projects. The goal is to maintain a high quality of life along with the Town's character while increasing economic vitality through higher property

values and increased commercial activity. The regulations state that the Town has decided to focus future commercial and economic activities along Route 102 to decrease the effects of sprawl-like development outside the historic village centers, which is also reflected in the zoning classifications of the area. This demonstrates the consistency through the Comprehensive Plan.

The regulations establish guidelines for all aspects of site design from landscaping and building layout to mitigating nuisances and criteria for hazardous material storage and use. As the Comprehensive Plan advocates, the regulations establish development controls and performance standards to mitigate conflicts between commercial and industrial development and other uses as well as encourage development design to be compatible with surrounding areas.