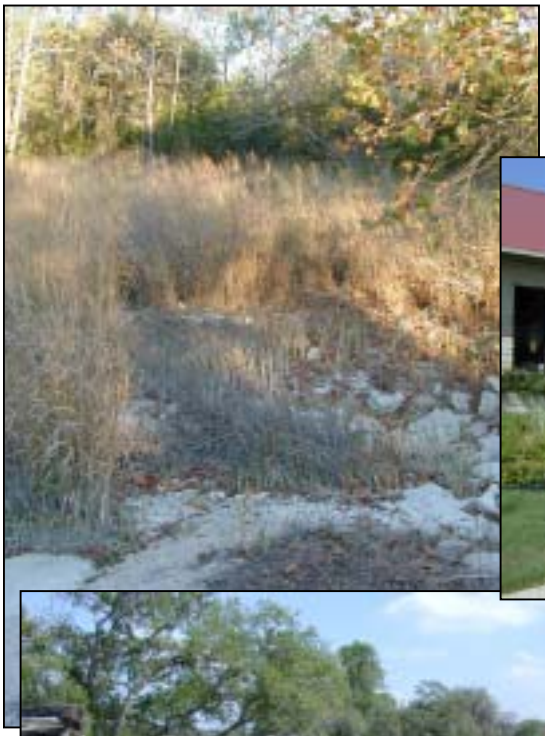
COMPREHENSIVE PLAN

VILLAGE OF BEE CAVE, TEXAS



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O V E R V I E W

Section One

Comprehensive Plan 2000

WHY PLAN?

Advance, or comprehensive, planning helps to ensure that, as size and population characteristics grow and change over time, the community continues to develop in a manner which reflects the objectives and values of the community's decision-makers, citizenry, and property owners. The product of a municipal advance planning program is generally a Comprehensive Plan document (and associated maps), which is sometimes referred to as the community's "Master Plan". The Comprehensive Plan shall function as a short- and long-range guide for the future growth, development and, in some cases, redevelopment of the community. It accurately reflects what is in the best interest for the Village of Bee Cave, as perceived by citizens and property owners within the community. The Plan illustrates and represents a comprehensive "vision" of what the community can become, and it is intended to be utilized as a short- and long-range statement of public policy.

The Comprehensive Plan serves several important roles in the community's decision-making process. Its primary purpose is to permit the Village to consciously consider and shape its own future. It serves as a response to existing problems that have been identified within the community, and as a means to address future issues in a more proactive way. It is intended to be used to identify areas or features that need to be protected or preserved, and it establishes a framework for setting priorities. Although the Comprehensive Plan focuses primarily upon the community's physical form and environment, it is closely tied to socio-economic factors as well. In many ways, the physical layout and design of the community affects the daily lives of those who live and work within it.

PURPOSE OF THE COMPREHENSIVE PLAN

As a vision of the Community's future physical form, the Comprehensive Plan sets forth a generalized pattern of land use areas and transportation corridors. It represents a long-range statement of public policy with respect to how the Village of Bee Cave should grow, develop and mature over time. It includes policies and recommendations relative to the development of various physical elements within the community such as transportation, land use, housing, parks and recreation, public facilities, and urban design. It provides for the distribution of and interrelationships between various land uses, as well as a basis for future development recommendations. These aspects of the Plan are supported by a set of goals and objectives drawn from the desires and aspirations of citizens and business leaders, and are intended to help the Village of Bee Cave maintain and encourage an attractive living and working environment. The primary objectives of the Comprehensive Plan are to:

- Coordinate public and private investment;
- Minimize conflict between land uses;
- Manage growth in an orderly manner;
- Increase the cost effectiveness of public investments;
- Provide a rational and reasonable basis for making decisions about the community; and
- Provide guidance for shaping and enhancing the community's image/identity.

The Comprehensive Plan, once adopted, becomes the official policy of the Village. It will help guide zoning and development decisions, and it will serve as a basis for future capital expenditures for public facilities. It is important to emphasize that the Comprehensive Plan is not a rigid policy, but rather a guide. It is intended to be flexible and to provide latitude for more detailed analyses that are commonly a part of zoning and development decisions; however, these decisions should be consistent with policies established within the Comprehensive Plan.

As previously stated, planning is not a single event but rather a continuous and ever-changing process. The Community will undoubtedly encounter future development proposals that are inconsistent with the Plan. Some of these proposals may well be in the best interest of the Community and worthy of further consideration. As community conditions and priorities change over time, the Village's Comprehensive Plan should be amended to take advantage of new opportunities and to respond to new needs and circumstances. Thus, the Comprehensive Plan itself is not intended to be a static document; it is intended to be a dynamic, adaptable guide to help citizens and officials shape Village of Bee Cave's future.

PLAN CONTENT AND ORGANIZATION

The Village of Bee Cave's Comprehensive Plan is divided into five major sections. Each section is designed to accomplish specific objectives within the planning process. The major sections are summarized as follows:

Overview

This section explains why it is important for a growing community to plan ahead of future growth and development, and describes the purpose and importance of the Comprehensive Plan in the community's decision-making process.

Baseline Analysis: A "Context" for Planning

In addition to providing basic information regarding Village of Bee Cave's historical development and the community's significance within the region, the Baseline Analysis section examines and summarizes existing conditions and trends that will likely affect the formulation of Plan goals, objectives and recommendations. This section also identifies important issues that should be considered in the formulation of the Plan and represents, in effect, a "context" for planning the Village of Bee Cave.

Goals and Objectives: A Vision for the Community

This section establishes the general direction the Village of Bee Cave wishes to take in its future physical development and outlines the community's basic planning goals and objectives, making it one of the most important components of the Comprehensive Plan. The goals and objectives establish the overall direction the Community will follow in making recommendations and decisions on development proposals, public infrastructure, urban design, finance and other issues.

Plan Recommendations

This section of the Comprehensive Plan includes analysis and recommendations on various components of the Community's physical development such as land use, transportation, parks and recreation, public facilities and urban design, with specific actions and policies that are recommended for implementation within each component.

Implementation Strategies

The implementation measures are suggested strategies that can be used to help the Community achieve its adopted goals, objectives and Comprehensive Plan recommendations. They are not the only possible actions that would achieve these goals, but they are intended to set an initial agenda for adopting regulatory and other programs that implement the Plan. The community may select some measures for implementation immediately following Plan adoption, while others may not begin for several years or more. Including a program or project on the list of implementation measures does not automatically create that program. The community will need to adopt budgets, consider new ordinances, and allocate staff resources before new programs can begin. Each of the implementation decisions will require input and specific action by the Planning and Zoning Commission and/or the Board of Aldermen.

Although each of the above sections serves a separate and specific purpose, the various sections are all interrelated in some manner and, collectively, they comprise the Comprehensive Plan for the Village of Bee Cave. Other documents created prior to (or separately from) the Comprehensive Plan process are also incorporated by reference, and thereby made an integral part of the community's overall "master plan" for growth and development.

B A S E L I N E
A N A L Y S I S

Section Two

Comprehensive Plan 2000

A "CONTEXT" FOR PLANNING

The Baseline Analysis section of the Comprehensive Plan is intended to provide a context of facts and documentation of the physical and socioeconomic (demographic) characteristics of the Village of Bee Cave. The following baseline sections are designed to facilitate the formulation of goals and objectives, and eventually the recommendations, of the final Comprehensive Plan document.

- Historical Background
- Relationship to the Region
- Physical Factors Influencing Development
- Existing Land Use
- Existing Population and Housing Characteristics
- Existing Zoning Characteristics

Each section contains information pertaining to the subject matter as well as graphic support, as appropriate. Also included within the Baseline Analysis element is the identification of other issues that should also be addressed in the formulation of the Comprehensive Plan. The Baseline Analysis provides documentation of basic information about the community, which then forms the context for the comprehensive planning process in the Village. It presents an overview of the area's physical, social and economic characteristics, as well as general insight into the community's urban pattern. The primary objective of the Baseline Analysis is to document current conditions, and to identify opportunities and constraints that the community must consider in addressing and shaping its future form and character. The secondary objective of the Baseline Analysis is to ensure that the information being used in the planning process accurately portrays the communities and their needs.

HISTORICAL BACKGROUND[2-1]

The Village of Bee Cave is rich in history. The Village, as we know it today, did not exist until 1987, but the idea of an area where people could live without the influence of "big city" government has been the area's "calling card" for over 140 years.

As early as the 1850s, Dietrich Bohls moved from Austin to his new home at the confluence of Barton Creek and Little Barton Creek. The population of Austin had reached 900 people, and Mr. Bohls was looking for a place to raise his family away from the confines of the city and its influence. At the time, the land west of Austin still had Indians roaming over it, and therefore, other settlers in the area were scarce. The Bohls family was one of the first families to settle on the land that would become the Village of Bee Cave. Some of the original structures still exist today.

In the 1860s, western Travis County was booming; it was becoming a popular place for families to establish their home. They cleared the land with a lot of hard work and sweat. The rocky cedar breaks beneath the Hill Country soil was not the best for farming. Most of the settlers, however, were proud, friendly people who wanted to be left alone on the quiet of their farms to raise their children. As more and more settlers like the Freitags, Ottens, and the Pechts moved to the region, it became known as "the Bee Caves area". The area derived its name from the colonies of Mexican honeybees that lived in the banks of Barton Creek and Little Barton Creek that encompassed a large area of Western Travis County.

In the early 1870s, Mr. Carl Beck arrived in the area and opened his general store at the crossroads of what are now State Highway 71 and Hamilton Pool Road. Settlers and travelers would stop in the Beck Store to buy supplies, mill their cotton, exchange news, and collect their mail. He also built a cigar factory and cotton gin. In 1873, Mr. Beck became postmaster and opened the post office in his store. Needing a name for his post office, Mr. Beck thought about the bees in the banks of the creek behind his property, and of the bee hives (or caves) that the bees would build in the eves of local buildings. As a lark, he named the post office for the surrounding area he called "Bee Cave".

2-1 This information was obtained from the Village of Bee Cave, courtesy of Mrs. Elaine Perkins.

Local people worked together to build a school building on land given to the Bee Cave community by the Freitag family. The area families were a close-knit group, and if a family needed help, the people were eager to assist their neighbor.

As the years passed and more families moved to the area, the Wallace Store was built across from the school, and later the Johnson Store was built to the south of the school. The core of the Bee Cave community was confined to a two-mile section of crossroads that provided connections to Marble Falls, Teck, the Hudson Bend area and several communities to the west. Over one hundred years later, in the 1980s, the community still retained its slow pace and friendly atmosphere.

In the 1980s, the City of Austin began to attempt numerous annexations. In order to avoid being annexed by Austin, several communities in outlying areas, areas such as Creedmoor, Bertram and Mustang Ridge, voted to become incorporated.

Many people who lived in the Bee Cave area were also concerned about possible annexation, and therefore, a group of local citizens formed a board known as the Concerned Landowners and Citizens Organization (CLACO). The five founding members were Judy Figer Allen, Gilbert Wallace, Kenneth Spell, Robert Baldwin, Sr. and Rodney Bohls. The board had to overcome many obstacles that were impeding the process of incorporation, but eventually, the Village of Bee Cave became incorporated in 1987.

With key support from State Representative Terrell Smith and State Senator Gonzales Barrientoes, the Village was allocated one-mile of extraterritorial jurisdiction, instead of the standard one-half mile ETJ that incorporated areas equal in size to the Village are allowed by state law. The additional ETJ area prevented the division of four old land grants. In 1987, the Village of Bee Cave administration had its humble, but proud, beginning in a nondescript portable building. The Village encompassed a two-square-mile area with 8,800 acres of extraterritorial jurisdiction. The 1990 population was approximately 214 people, and the establishment of the Village of Bee Cave was official.

RELATIONSHIP TO THE REGION

The Village is located in the region of Texas known as the Texas Hill Country, approximately 20 miles west of the City of Austin[2-2], which allows local residents to live outside of the "Big City", but at the same time to benefit from the amenities that a larger city can provide. Amenities like diversified employment opportunities, cultural opportunities, and major healthcare facilities. The fact that Bee Cave is located at the center of three major traffic corridors: R.M. 620, State Highway 71, and Bee Cave Road, which is also known as F.M. 2244, also provides local citizens with easy access to such amenities, as well as to other surrounding communities.

Lake Travis is also a significant regional feature of the Village. Located approximately 30 miles northwest of Austin, it was formed as a by-product of the Joseph J. Mansfield Dam, which was finished in 1942. This lake is monitored and managed by the Lower Colorado River Authority. The Colorado River, which borders the Village of Bee Cave's ETJ to the north, is the main water source which feeds Lake Travis, which is the fifth lake in the chain of Highland Lakes on the Colorado River. Starting in Austin, Lake Travis winds its way northwest through the central Texas Hill Country for over 60 miles. It is the longest of the seven Highland Lakes, and at its widest point is 4.5 miles wide. Lake Travis provides various recreational opportunities for locals and visitors, including fishing, sailing, water-skiing, jet skiing, and camping.

Little Barton Creek and Barton Creek are also considered significant regional features. Little Barton Creek is a critical natural resource due to its role as a feeder stream for both Barton Creek and Barton Springs. Watershed protection for this creek and the surrounding area is a significant environmental consideration for Bee Cave, as well as for the entire region. Barton Creek has significant presence in the area as an important source of habitat for many species, as well as an important water source for the Edwards Aquifer.

2-2 The distance between the City of Austin and the Village of Bee Cave varies depending upon the points from which the distance is calculated.

PHYSICAL FACTORS INFLUENCING DEVELOPMENT

Several of the physical factors in the Village of Bee Cave that have the potential to limit development are shown on the Physical Factors Map, **Plate 2-1**.

Natural Features

SURFACE GEOLOGY [2-3]

Names exist for the various geologic chapters of the earth's history. The area in which the Village exists is characterized by underlying marine limestone and clay formed during the Cretaceous period. Specifically, the Glen Rose Formation provides the basis for the vast majority of the area in and around the Village of Bee Cave, and the Fredricksburg Group underlies several small areas in the vicinity of the Village.

Glen Rose Formation

This formation is classified as the oldest and most extensive rock unit, and most of the outcrops in the Village of Bee Cave are Glen Rose. The formation consists of approximately 380 feet of mostly thinly interbedded hard and soft limestone, dolomite, and marl. These alternating beds vary in their resistance to erosion, and form a distinctive, stair-step topography. The upper and middle members of the formation are highly dolomitic, while the others are much less so. The oldest member outcrops are located in the steep ravines that lead to the Colorado River, and the younger members occupy areas that are successively higher in elevation. Soils developed on this formation are primarily thin, brownish-gray, gravelly clay loams and lesser amounts of yellowish brown, porous, fine-grained dolomite.

2-3 All data in this section was obtained from the Geologic Atlas of Texas' Austin Sheet, prepared by the University of Texas, Bureau of Economic Geology (reprinted in 1981), as well as from information in the Village of Bee Cave Comprehensive Plan, prepared by students in the Community and Regional Planning Program in the School of Architecture at the University of Texas at Austin in September of 1988.

Plate 2-1, Physical Factors Map

Fredericksburg Group

This group consists primarily of Edwards Limestone and Bee Cave Marl. The Edwards Limestone is characterized by limestone, dolomite and chert, and is described as being fine-grained and porous. Chert can be found in varied amounts throughout the formation, and is described as "honeycombed" and mostly white to light gray. The thickness of the Fredericksburg Group can be anywhere from 60 feet to 350 feet. Bee Cave Marl is characterized by being soft and white, with a tendency to exhibit marine megafossils. Its average thickness varies, but is usually between 25 and 40 feet.

SOILS[2-4]

The soils in and around the Village of Bee Cave can generally be described as shallow, calcareous, and moderately alkaline, and are shown on the Soil Survey Map, **Plate 2-2**. The most prevalent soil types in the area are of the Brackett and Tarrant Series, but others include Volente complex, mixed alluvial land, Purves silty clay, Speck clay loam, and Crawford clay.

Brackett Series

This soil series consists of shallow, well-drained soils with a mostly gravelly surface layer. These soils develop over imbedded limestone and marl, and occupy large areas of gently rolling to steep topography, with slope ranges from 10 to 20 inches. The texture of the surface layer is gravelly clay loam, gravelly loam, loam, or clay loam. Permeability is moderately slow, and the available water capacity is low. These soils are not well suited for crops, and are better utilized for ranging or wildlife habitat.

2-4 Data in this section was obtained primarily from information in the Village of Bee Cave Comprehensive Plan, prepared by students in the Community and Regional Planning Program in the School of Architecture at the University of Texas at Austin in September of 1988.

Insert Plate 2-2

Tarrant Series

This soil series consists of shallow, well drained, stony, clayey soils overlying limestone. Large limestone rocks cover 25 to 85 percent of the surface. The Tarrant Series occupies primarily nearly level to gently sloping ridges, rolling side slopes, and steep, hilly breaks. Slopes are complex and range from a slight slope of one percent to an extreme slope of 40 percent. The depth of this series ranges from four to 14 inches. Texture of the surface layer is clay loam, silty clay loam, clay, or silty clay. Permeability, like that of the Brackett Series, is slow, and the available water capacity is low. Suitable land uses are the same as those for the Brackett Series soils.

Volente Complex

This soil series consists of deep, well-drained soils that developed in slope alluvium, mainly in valleys. Slopes are concave and are predominately two to seven percent, with the thickness ranging from 34 to 50 inches. Permeability is slow and moderate, and the available water capacity is high. Volente soils are only marginally suitable for crops because of their high erosion factor. More suitable uses are improved pasture or range land.

Mixed Alluvial Land

This soil type is characterized by gravelly alluvium, beds of gravel, and exposed limestone beds and boulders interspersed with moderately deep to very deep calcareous alluvial materials. Slopes can be up to approximately seven percent, and soil depth ranges from two to four feet. These types of soils are best suited for ranging and wildlife.

Purves Silty Clay

This type of soil is characterized by being shallow and well drained, with slopes ranging from one to five percent, and with depth ranges from 10 to 20 inches. It is best suited for improved pasture, hay, or rangeland.

Speck Stoney Clay Loam

This is a shallow, well-drained soil overlying limestone, and it is characterized by being located in areas of smooth, gently undulating topography. Slopes range from one to five percent, and depth ranges from 14 to 18 inches. It is slowly permeable and the available water capacity is low. This soil is best suited to native grass range.

Crawford Clay

This is a well-drained, moderately deep, non-calcareous soil that developed over hard limestone. Slopes are smooth, usually only one to two percent. Soil depth ranges from 24 to 32 inches. This clay is very slowly permeable, and the available water capacity is high. It is best suited to crops, improved pasture, or hay.

VEGETATION[2-5]

A region of vegetation known as the Edwards Plateau characterizes the area of Texas in which the Village of Bee Cave is located. This region covers 24 million acres across the central to western central portion of Texas, from the middle of Travis County, northward approximately to Sterling County, and westward to Upton and Terrell Counties. The combination of grasses, weeds, and small trees is ideal for cattle, sheep, goats and deer. This area, as aforementioned in the Soils discussion, is well suited for rangeland.

2-5 The information for this section was obtained primarily from the 1998-1999 Texas Almanac, the Dallas Morning News.

Insert Plate 2-3

The principal grasses of the clay soils found in this region include cane bluestem, silver, bluestem, little bluestem, sideoats grama, Indiangrass, common curlymesquite, buffalograss, fall witchgrass, plains lovegrass, wildryes, and Texas wintergrass. Throughout the Edwards Plateau area, liveoak, shinnery oak, mesquite and cedar dominate the tree vegetation. A large portion of the Village of Bee Cave and its ETJ have an abundance of trees, and therefore, a mapping of tree clusters could be important in determining the proper locations for future development. These clusters can be seen in a generalized form on **Plate 2-3**, Tree Cover.

AQUIFERS

Major aquifers underlie about 80 percent of Texas. Approximately 56 percent of the water currently being used in the state is derived from underground sources that occupy nine major and 20 minor aquifers. There are two aquifers that affect Travis County, and therefore the Village of Bee Cave, and they are the Edwards (Balcones Fault Zone) Aquifer and the Trinity Aquifer.

The Edwards (Balcones Fault Zone) Aquifer

The Edwards Aquifer forms a narrow belt extending through nine counties from a groundwater divide in Kinney County through the San Antonio area northeastward to the Leon River in Bell County. A groundwater divide in Hays County hydrologically separates the aquifer into the San Antonio and Austin regions. Water in the aquifer occurs in fractures, honeycomb zones and solution channels in the Edwards Aquifer. More than 50 percent of the water from the aquifer is used for municipal purposes, supplying 1.5 million people in San Antonio and the surrounding area with water. However, irrigation is the primary use in the western segment. The aquifer also feeds several well-known recreational springs and underlies some of the most environmentally sensitive areas in the state of Texas. The Edwards Aquifer underlies Travis County in a thin band (in a north-south direction) across the central portion of the county. Barton Springs discharges into Barton Creek near its confluence with the Colorado River; this is a significant recharge zone for the Edwards Aquifer.

The Trinity Aquifer

This aquifer consists of formations that extend from the Red River in North Texas to the Hill Country of central Texas. Water from the Trinity Aquifer is used for multiple purposes, including irrigation in North and Central Texas, and domestic and municipal supply in other parts of the state. This aquifer underlies a large portion of Travis County, and therefore could impact growth in the Village of Bee Cave in the future.

SIGNIFICANT WATER BODIES

Each of the following bodies of water could have significant future land use implications for the Village of Bee Cave, and therefore, warrant discussion.

Barton Creek[2-6]

Barton Creek rises in western Travis County and flows eastward for about 35 miles to become a tributary of the Colorado River. The creek is normally an intermittent stream. However, during periods of heavy rainfall it has become considerably larger. Barton Creek flows through the Village of Bee Cave's ETJ in the Nature Preserve located to the east of the Village. As aforementioned, this creek has significant presence in the area as an important source of habitat for many species, as well as an important water source for the Edwards Aquifer.

Little Barton Creek

This small creek is located to the south of the Bee Cave primarily in the Village's ETJ, with a small portion of the creek within the Village limits. Little Barton Creek is a critical natural resource due to its role as a feeder stream for both Barton Creek and Barton Springs. Watershed protection for this creek and the surrounding area is a significant environmental consideration for Bee Cave, as well as for the entire region.

2-6 Information for this section was obtained through the Texas Parks and Wildlife Website.

The Colorado River

The Colorado is one of the principal rivers of Texas. It is actually the longest river in the United States that flows solely through one state, and is approximately 862 miles (1,390 km) long. Rising in the Llano Estacado region of northwestern Texas, the river flows across the state in a generally southeastern direction, through several counties, including San Saba, Llano, Burnet, Travis, Bastrop, Fayette, Colorado, Wharton, and Matagorda. Eventually, the Colorado River empties into the Gulf of Mexico at Matagorda Bay. The northernmost border of the Village's ETJ is actually a small piece of the southern edge of the Colorado River. As will be discussed later, such proximity to a major regional water body could have significant land use impacts on the Village of Bee Cave.

TOPOGRAPHY AND SLOPE ANALYSIS

An important factor to consider when making development decisions is the degree of variance in the topography of the land. The Village of Bee Cave, as aforementioned, is located in the Texas Hill Country. This part of Texas is known for its hilly terrain, and the area in and around Bee Cave is no exception. The topography varies greatly throughout the Village, from a low of approximately 740 feet above sea level along Little Barton Creek in the southeast area of the Village to a high of approximately 1100 feet above sea level in the northwestern part of Bee Cave. The terrain in the extra-territorial jurisdiction (ETJ) of the Village varies greatly near the Colorado River in the far northeastern corner of the ETJ. The steep declines are from approximately 860 feet above sea level to approximately 500 feet above sea level, where the land is directly adjacent to the Colorado River. There is an abundance of undeveloped land in the Village and in the ETJ, but whether portions of the remaining land can be developed at all may be dependent upon their topography. The Village of Bee Cave should establish guidelines relating to development that vary based on differing degrees of slope. This will be discussed further in the *Environmental Quality and Community Image* element of the Comprehensive Plan, however, it is important to note that development on slopes greater than 25 percent should be discouraged.

The amount of vacant land remaining within the Village limits is approximately 1,040 acres, and within the ETJ is approximately 4,238 acres; a total of 5,278 acres. **Plate 2-4** shows a slope analysis of the remaining vacant land, and is meant to give a visual representation of the amount of land that is developable within the Village of Bee Cave and its surrounding ETJ area. The amount of land with a slope ratio of less than 25 percent, the maximum allowable slope for residential development, is approximately 3,426 acres. Taken as a percentage of the total amount of vacant land, approximately 35 percent of the remaining vacant land is developable, and approximately 65 percent would be difficult to develop due to its topography. As **Plate 2-4** shows, this remaining developable land is located sporadically throughout the Village of Bee Cave and its ETJ, but a concentrated area of extreme slope is located along the northern portion of the ETJ along the Colorado River.

FLOODPLAIN

Another factor to consider when assessing the acceptability of a certain parcel of land for development is the history of flooding on and around that property. The Federal Emergency Management Agency has established areas throughout the United States that are historically flood-prone. In general, the designation of such areas can help municipalities to determine whether additional development restrictions are necessary to ensure the health, safety and welfare of local citizens.

Insert Plate 2-4

As **Plate 2-1**, the Physical Factors Map, shows, the floodplain areas in Bee Cave occur intermittently throughout the Village, with no obvious pattern. One such area can be found in the northwestern corner of the Village, and it continues southeast past Hamilton Pool Road. Another thin floodplain area occurs from the north central portion of the Village to the south central portion, and then continues outside of the Village limits into the ETJ.

The ETJ contains several areas that are considered to be floodplain as well. One notable area is shown on **Plate 2-1**, and is located along the Colorado River in the far northern portion of the ETJ, with multiple thin, arm-like areas of floodplain that stretch to the south toward the Village. Another significant area of floodplain traverses the entire southern portion of the Village ETJ. This area is long and thin, and follows Little Barton Creek. The primary floodplain has arm-like areas of floodplain (similar to the previously mentioned floodplain area) that stretch to the north, toward the Village, as well as to the south. Approximately 155 acres in the Village, and approximately 677 acres in the Village ETJ, have been designated as 100-year floodplain. Development should be closely monitored in, as well as adjacent to, these areas.

ENDANGERED SPECIES[2-7]

The following are endangered or threatened species for Travis County according to the Texas Parks and Wildlife, as of September, 1999:

Amphibians

Barton Springs Salamander
Edwards Plateau Spring Salamander
Jollyville Plateau Salamander
Pedernales River Springs Salamander

Birds

American Peregrine Falcon
Arctic Peregrine Falcon
Bald Eagle
Black-capped Vireo
Golden-cheeked Warbler
Henslow's Sparrow
Mountain Plover
Whooping Crane

Insects

Kretschmarr Cave Mold Beetle
Tooth Cave Blind Rove Beetle
Tooth Cave Ground Beetle

Vascular Plants

Basin Bellflower
Bracted twistflower
Canyon mock-orange
Correll's false dragon-head
Glass Mountain coral root
Texabama croton

Arachnids

A Cave Spider
Bandit Cave Spider
Bee Creek Cave Harvestman
Tooth Cave Pseudoscorpion
Tooth Cave Spider
Warton's Cave Spider

Crustaceans

An Amphipod
Bifurcated Cave Amphipod

Fishes

Guadalupe Bass
Smalleye shiner

Mammals

Cave Myotis
Plains Spotted Skunk

Reptiles

Spot-tailed Earless Lizard
Texas Garter Snake
Texas Horned Lizard

2-7 Information obtained from the Texas Parks and Wildlife, Annotated County Lists of Rare Species, last revision September 28, 1999.

Man-Made Features

MAJOR TRANSPORTATION ROUTES

Further discussion of transportation and thoroughfares will be included later in the Comprehensive Plan; this brief summary is included for the purpose of providing a context for such later discussion.

State Highway 71

This highway traverses Texas beginning in the town of Brady, Texas in the central portion of the state. It continues in a southeastern direction through the communities of Llano, Bee Cave, Bastrop, La Grange, and ending near the far southeastern tip of Texas in Midfield. State Highway 71 is mainly a four-lane, divided thoroughfare.

R.M. 620

This highway provides Village citizens with easy access not only to other surrounding communities like Lakeway and Jolleyville, but also to a major Texas interstate, Interstate Highway 35. This thoroughfare begins in the Village of Bee Cave and continues in a northeastern semi-loop to Interstate Highway 35 north of the City of Austin.

Bee Cave Road (F.M. 2244)

This is a relatively short road that serves mainly to provide local citizens with access to the City of Austin. Bee Cave Road has its origin in the Village, as the name suggests, continues through the City of West Lake Hills to the east, and ends when it intersects with Loop 1, west of the City of Austin.

Hamilton Pool Road (F.M. 3238)

Hamilton Pool Road is the Village of Bee Cave's connection to its southwestern neighbor, the town of Dripping Springs. It also serves the citizens of Bee Cave by providing a connection to U.S. Highway 290 to the south. Hamilton Pool Road intersects with Highway 71 from the south in the western portion of Bee Cave.

EXTRA-TERRITORIAL JURISDICTION

Extra-territorial jurisdiction (ETJ) can be defined as the land that an incorporated area may legally annex for the purpose of future development. The Texas State Legislature had established specific amounts of land for incorporated areas of various sizes. The vast majority of incorporated entities equal in size to the Village of Bee Cave have a one-half-mile ETJ. However, the advocates for incorporation of the Village of Bee Cave managed to secure a one-mile ETJ from the state legislature for the Village during the process of incorporation in 1987.

Another unusual characteristic of the Village's ETJ is that the City of Austin has set aside preservation land that borders the Village on parts of both its northern and southern boundaries. Another entity, the Nature Conservancy, has also acquired some of the land to the east of the Village of Bee Cave that is designated as preserve land. Due to these factors, much of the area surrounding the Village of Bee Cave will remain permanent open space in the future.

EXISTING LAND USE

The pattern of land use that exists today within the Village of Bee Cave has evolved to satisfy the requirements of a growing community. It is the result of the public/private decision-making process integrated with the area's natural and physical attributes and constraints. The activities of the residents of a city create a need for residential, retail, commercial, recreational, and office areas, as well as an efficient thoroughfare system.

The Village of Bee Cave was incorporated in 1987 with approximately 1,279.5 acres, and has now grown to over 1,600 acres. The relatively rapid growth and development occurring within the area is likely to continue, and therefore, the future will require the conversion of vacant and agricultural land to more intensified urban uses, as well as the infilling of certain areas. The conversion process and how it occurs will be very important to the Village and the surrounding area in that it is one of the factors that will determine the community's future urban form. It will not only have an impact upon how the area develops economically, but the relationships of existing and future land uses will shape the character and livability of the community for many years to come. Likewise, these relationships will have an impact on the provision of services and facilities throughout the community. An orderly and compatible land use arrangement can be served more easily and efficiently than a random and scattered association of unrelated uses. Providing for the orderly and efficient use of land should be a major planning consideration in the Village of Bee Cave. To more accurately assess the Village's future land use needs, an analysis of past land use trends and present land use patterns are very important.

In order to analyze current land use trends within Bee Cave, a land use survey was conducted during the preparation of this Plan. **Table 2-1** shows the existing land use pattern for the Village. As in most communities, development has been dependent primarily on location. For example, the majority of the commercial land uses are located along State Highway 71 and R.M. 620, while the majority of the residential land uses are located away from such major thoroughfares. **Plate 2-5** shows a general representation of the existing land use pattern in the Village of Bee Cave as of October 1999.

INSERT PLATE 2-5

Land Use Survey Methodology

In 1999, a parcel-by-parcel land use survey was conducted by automobile for all areas within the existing limits of the Village. **Table 2-1** shows the results of the 1999 existing land use survey. Each parcel was color-coded and documented according to the following categories:

RESIDENTIAL USES:

Single-Family Residences:

One-family dwellings and related accessory buildings,

Manufactured Homes:

A manufactured home located on a lot or parcel and used as a dwelling;

PUBLIC, SEMI-PUBLIC, AND RELATED USES:

Schools, Churches, Cemeteries and Public Buildings;

PARKS AND OPEN SPACES:

Parks, Playgrounds and Public Open Space;

OFFICE USES:

Professional/Administrative Offices, doctors, dentists, real estate, architects, accountants, secretarial service, etc.;

RETAIL USES:

Retail stores, shops and personal service establishments, shopping centers, service stations and any associated off-street parking facilities;

COMMERCIAL USES:

Commercial amusements, building materials yards, automobile garages and sales lots, automobile body repair, warehouses, telecommunications/broadcasting towers and facilities, wholesale establishments, sale of used merchandise and welding shops;

OPEN STORAGE:

Outside storage of equipment and materials on a permanent basis;

RIGHT-OF-WAYS:

Land dedicated to public use for street and alley rights-of-way whether open or closed to use; and

VACANT AND AGRICULTURAL USES:

Vacant land having no apparent use or land used for agricultural purposes (ranching or farming).

Another method of analyzing land use is relating the number of acres used for each type of land use category to the population. **Table 2-1** also shows this for the Village of Bee Cave.

Existing Land Use Analysis

Clearly, the majority of the developed land within the Village limits is used for residential purposes; this type of land use represents almost 17 percent of the total acreage. There are no multi-family or duplex residential land uses within Bee Cave, and manufactured homes account for less than one percent of the residential land use. The vast majority of the residential land use, specifically over 273 acres, is comprised of single-family units.

Retail uses represent the second-largest land use in the Village at almost 60 acres, or approximately 3.7 percent of the total land acreage. Land used for public purposes accounts for 43 acres, which is 2.7 percent of the land within the Village. The amount of

land with commercial uses is just below public land use, at just over 42 acres, and approximately 2.5 percent of the acreage within Bee Cave. All other land uses, specifically *Parks and Open Space* and *Open Storage* land uses, account for less than one percent of the total land acreage, and together comprise only 2.2 percent of the land within the Village limits.

Perhaps most significant to consider is the fact that the total developed land acreage in the Village of Bee Cave is actually less than half of the amount of vacant land within the Village. As **Table 2-1** shows, the amount of developed land is approximately 454 acres, or approximately 28 percent of the total land acreage, and the amount of vacant land is just over 1,000 acres, or 64 percent of the total land acreage within Bee Cave.

The number of vacant residential lots that are within previously subdivided neighborhoods in the Village of Bee Cave is also significant to consider; that number currently is 127 lots. The acreage upon which these lots lie is also calculated within the vacant number of acres within the Village limits. Due to the fact that these lots are already primed for the construction of residential structures, it can be assumed that

Table 2-1
EXISTING LAND USE – 1999
Village of Bee Cave, Texas

LAND USE CATEGORY	ACRES	PERCENT	ACRES/100 PEOPLE[1]
Residential Use	273.81	16.77	44.43
Single-Family	*258.84*	*15.85*	*41.71*
Manufactured Home	*14.97*	*0.94*	*2.72*
Parks/Open Space	14.80	0.93	2.69
Public/Semi-Public	43.11	2.71	7.82
Office	9.20	0.57	1.67
Retail	58.97	3.70	10.70
Commercial	42.35	2.46	7.69
Open Storage	11.48	0.72	2.08
Total Developed	453.72	27.80	77.08
Rights-of-Way	139.29	8.53	25.28
Vacant	1,039.16	63.67	188.71
Within Village Limits	1,632.17	100.0	——

[1] Based upon an estimated population of 551 in 1999.

Source: Dunkin, Sefko & Associates, Inc.

development on these acres will occur relatively soon. However, there is a significant differentiation in topography on the remaining vacant acres throughout the Village of Bee Cave, and therefore, all of the remaining vacant land may not be developable due to slope constraints.

As aforementioned, **Table 2-1** also shows land use related to population by acres per 100 persons for the Village of Bee Cave. By calculating the amount of acreage consumed by various land uses and comparing it to the present population, projected in the Village to be approximately 551 people[2-8], insight can be gained into future land use demand. Assumptions can be made regarding the future consumption of land use based upon these relationships, balanced with the community's own desired goals and objectives. Especially noteworthy is the relationship of retail uses to the overall land use pattern. The majority of the land use in the Village is residential, and therefore, comparatively the amount of land used for retail is minimal. In general, demand for retail land use ranges from 0.3 to 0.4 acres per 100 persons on the low end to 0.6 to 0.7 acres per 100 persons on the high end; 0.5 acres per 100 persons is generally accepted as average in the state of Texas. As Table 2-1 shows, the amount of retail land use in Bee Cave is far above average at 10.7 acres per 100 persons.

The type of land use that is occurring within the Village's extra-territorial jurisdiction (ETJ) is also important to consider. This is the land that the Village of Bee Cave may legally annex for the purpose of future development. One significant factor that affects the Village's ETJ is that the City of Austin has set aside preservation land that borders the Village on parts of both its northern and southern boundaries. Another entity, the Nature Conservancy, has also acquired some of the land to the east of the Village of Bee Cave that is designated as preserve land. Also significant in discussing the Village's ETJ is the fact that the Village was unique in 1987 when it was given a one-mile ETJ by the Texas State Legislature; all other cities in Texas that are equal in size to the Village of Bee Cave have a one-half-mile ETJ.

2-8 Further explanation of the methodology used to determine the number of residents currently with the Village of Bee Cave corporate limits is located on page 2-32 of the *Baseline Analysis*.

As **Plate 2-5** shows, the parcel-by-parcel survey that was conducted also included the Village's ETJ (although much of land is not accessible to the general public). Referring to **Table 2-2**, it is apparent that the Open Space category contains the majority of the land in the ETJ at approximately 2,664 acres, which is 37 percent of the total acreage within the ETJ. The reason for this large percentage is the fact that the City of Austin and the Nature Conservancy have bought a significant portion of the land that surrounds the Village and have designated this land as preserve land – land that will likely never be developed and that is not open to the general public for recreational purposes.

Table 2-2
EXISTING LAND USE – 1999
Extra-territorial Jurisdiction (ETJ) of the Village of Bee Cave, Texas

LAND USE CATEGORY	ACRES	PERCENT
Residential Use	487.00	6.72
Single-Family	*487.00*	*6.72*
Manufactured Home	———	———
Open Space	2,664.17	36.75
Public/Semi-Public	4.24	0.06
Office	7.00	0.10
Retail	4.00	0.06
Commercial	20.30	0.28
Total Developed	3,186.71	43.97
Rights-of-Way	232.00	3.20
Vacant	3,831.12	52.84
Within Jurisdictional Limits	7,249.83	100.0

Source: Dunkin, Sefko & Associates, Inc.

Residential land use accounts for the second largest amount of land acreage in the ETJ, at 487 acres, or seven percent of the total land in the ETJ. Single-family residential is the only residential land use that is currently occurring within the ETJ; no manufactured homes, duplexes, or multi-family dwelling units exist. All other land uses, including *Public*, *Office*, *Retail*, *Commercial* land uses, together only account for 0.5 percent of the developed land acreage in the ETJ.

As **Table 2-2** shows, the total developed acreage in the Village's extra-territorial jurisdiction, including that land that is used for preserve land, is calculated to be almost 3,200 acres, or almost 44 percent of the total land contained within the ETJ limits. The amount of land that remains vacant is approximately 3,831 acres, which is almost 53 percent of the total land; just over half of the land in the ETJ is vacant.

As in the Village itself, there are a significant number of residential lots in the ETJ that are currently vacant but are ready for construction to begin. Again, it is safe to assume that these will not remain in a vacant state for a long period of time. Also similar to the Village of Bee Cave itself is the fact that development on much of this land that is now vacant and is not already subdivided may be conditioned upon the limitations of the topography.

Existing Land Use Pattern

The following sections summarize features of the existing land use patterns within the Village of Bee Cave:

1. Land that is used for Residential purposes accounts for the majority of the land that is currently developed within the Village.

2. Inasmuch as the Village's residential land use is predominately single-family, the distribution of such units occurs toward the eastern, southern and western edges of the Village.

3. Manufactured homes comprise a small percentage of residential land use in Bee Cave, with almost 15 acres, and less than one percent, used for this purpose.

4. Parks and Open Space land uses constitute a minimal amount of acreage within the Village, at less than one percent of the total.

5. The amount of land being used for Public/Semi-Public purposes in Bee Cave, which includes activities such as Village services, churches, cemeteries, and schools, was calculated to be approximately 43 acres of land, or 2.7 percent of the Village's total land acreage.

6. As aforementioned, Retail land use in the Village of Bee Cave is far above the average retail land use in the State of Texas, at approximately 3.7 percent and over 10 acres per 100 persons.

7. The amount of land being used for Commercial purposes in the Village is approximately 2.4 percent of the total land acreage. The land that is used for these purposes is primarily located along State Highway 71 and R.M. 620. Some open storage land uses have located along some portions of both of these major thoroughfares.

8. A very small amount of land is used for the purposes of Office land use within the Village, at approximately nine acres, and less than one percent of the total land.

9. Vacant land is more than twice that of the developed land within the current Village limits, with approximately 26 percent developed, and 65 percent vacant.

10. There are a large number of residential lots that are currently calculated within the vacant category; these lots are primed for construction and are unlikely to remain vacant.

11. The Village of Bee Cave has a considerable amount of land contained within its extra-territorial jurisdiction that is currently vacant.

12. The Village is adjacent to large portions of land that are designated as preserve land and will never be developed; this land is located along parts of the Village's northern, eastern, and southwestern borders.

EXISTING POPULATION AND HOUSING CHARACTERISTICS

Quality of housing and the appreciation of housing values are very important planning considerations. Among the factors influencing the desirability of the Village of Bee Cave as a place to live is the condition of existing housing and the quality of the residential neighborhoods they form.

The quality of housing within Bee Cave and its ETJ is an important consideration in the evaluation of the adequacy of the existing housing stock, and in estimating future housing requirements. Many of the elements that are usually utilized to assess the housing characteristics in a community are not applicable to the Village of Bee Cave. The Village is a relatively young community, and its overall housing stock is, therefore, relatively new. Due to the fact that most of the housing units were built within the last two decades, a discussion of the current quality of the housing stock is simply not useful. The Village of Bee Cave does not have any blighted areas or aging neighborhoods that need to be addressed.

However, it is important to consider the current standards within the Village, and thereby determine the ways in which Bee Cave can continue to grow in a positive manner. The issues will be addressed further in later sections of the Comprehensive Plan. For the purposes of the Baseline Analysis, however, the current housing characteristics are as follows.

In 1990, it was determined by the U.S. Census that there were 80 housing units within the Village of Bee Cave. During the land-use survey, the current number, as shown in **Table 2-3**, was determined to be 199 units, with 184 single-family homes and 15 manufactured homes. This is an annual average compounded growth rate of over 10 percent.

It was also determined by the U.S. Census that there were 241 people living in the Village of Bee Cave, and that there were approximately 3.08 persons per household. Using the number of housing units counted during the survey, and assuming both that the number of people per household remains the same and that there is a 90 percent occupancy rate of the housing units in Bee Cave, the number of people currently living within the Village limits can be projected to be approximately 551 people.

Table 2-3
HOUSING UNITS – 1999
Village of Bee Cave, Texas

	The City		The ETJ	
Housing Type	Number	Percent	Number	Percent
Single-Family	184	92.5	641	100.0
Mobile Homes	15	7.5	—	—
Total:	**199**	**100.0**	**641**	**100.0**

Source: Dunkin, Sefko & Associates, Inc.

The number of housing units in the extra-territorial jurisdiction of the Village is also important in helping to determine future growth. There were 641 housing units counted during the land use survey, all of which were single-family dwelling units. Using the same number of persons per household for the ETJ that was determined for the Village, and assuming the same occupancy rate of 90 percent, it can be derived that the number of people currently living in the Village of Bee Cave's ETJ is approximately 1,776 people.

EXISTING ZONING CHARACTERISTICS

Zoning in the Village of Bee Cave is shown graphically on **Plate 2-6**. From this visual picture, it is apparent that the zoning category with the majority of the acreage within the Village of Bee Cave is the *Rural Residential* category. As **Table 2-4** shows, this category comprises almost 572 acres and over 35 percent of the total land acreage in the Village. This is the designation used for the vast majority of the residential zoning in Bee Cave. This is also an expected characteristic of zoning within the Village due to the fact that, as aforementioned, residential land use accounts for the majority of the developed land in the Bee Cave.

Another zoning category with a large amount of land designated is the *Community Commercial* category, with approximately 302 acres, and almost 19 percent of the total acreage in the Village. The current amount of land being used for this purpose within the Village, calculated as approximately 100 acres (including both retail and commercial land uses), is clearly much less than that designated by the *Community Commercial* zoning category. This is an important fact to consider when determining future land use needs within the Village.

Table 2-4
EXISTING ZONING – 1999
Village of Bee Cave, Texas

Zoning Category	Acres	Percent
Single-Family	1.23	0.08
Rural Residential	571.81	35.03
Manufactured Home	0.85	0.05
Historic	0.98	0.06
Utilities	11.78	0.73
Community Commercial	302.47	18.86
Office	2.02	0.13
Light Industrial	5.46	0.35
Research & Development	31.55	1.97
Agricultural	321.30	20.03
Development Reserve	242.58	14.86
Rights-of-Way	139.29	8.68
Within Village Limits	1,632.17	100.0

Source: Dunkin, Sefko & Associates, Inc.

Insert Plate 2-6

The *Agricultural* zoning category also has a significant amount of land designated as such. Specifically, over 320 acres of land, or 20 percent of the total acreage of the Village is zoned *Agricultural*. This is likely to be related to the large amount of vacant land that remains within the Village limits. As mentioned in the land use analysis, over 1,000 acres remain vacant, and a large portion of this land is zoned *Agricultural*.

The final category that has a large amount of land designated is the *Development Reserve* category. Again, the fact that a significant portion of the acreage within Bee Cave remains vacant is likely related to the significant portion of land within this category. The majority of the acreage zoned *Development Reserve* is located along State Highway 71, and therefore may eventually be used for some type of higher intensity land use, including uses such as Retail, Commercial, or Office land use.

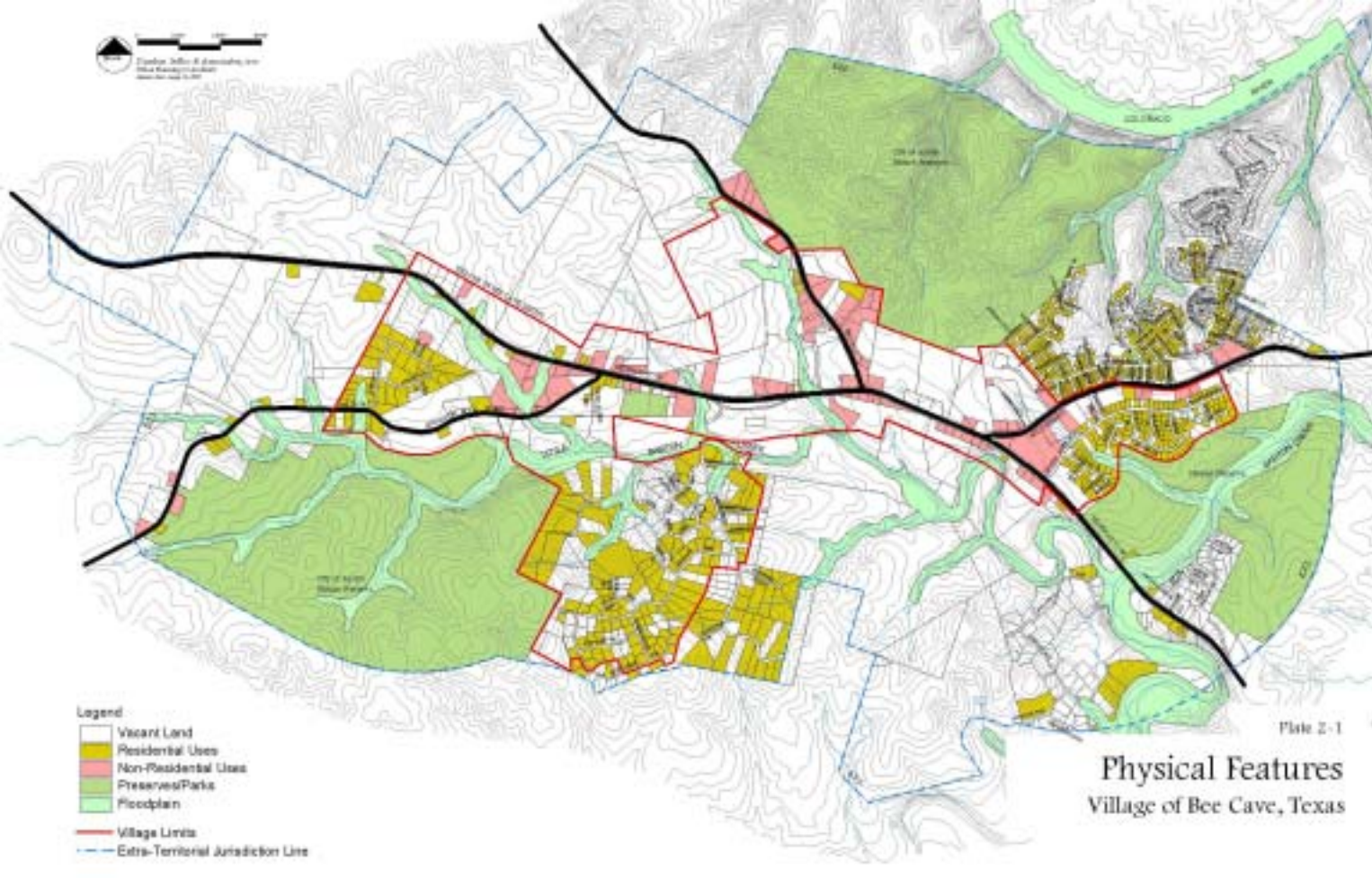


Plate 2-1

Physical Features

Village of Bee Cave, Texas

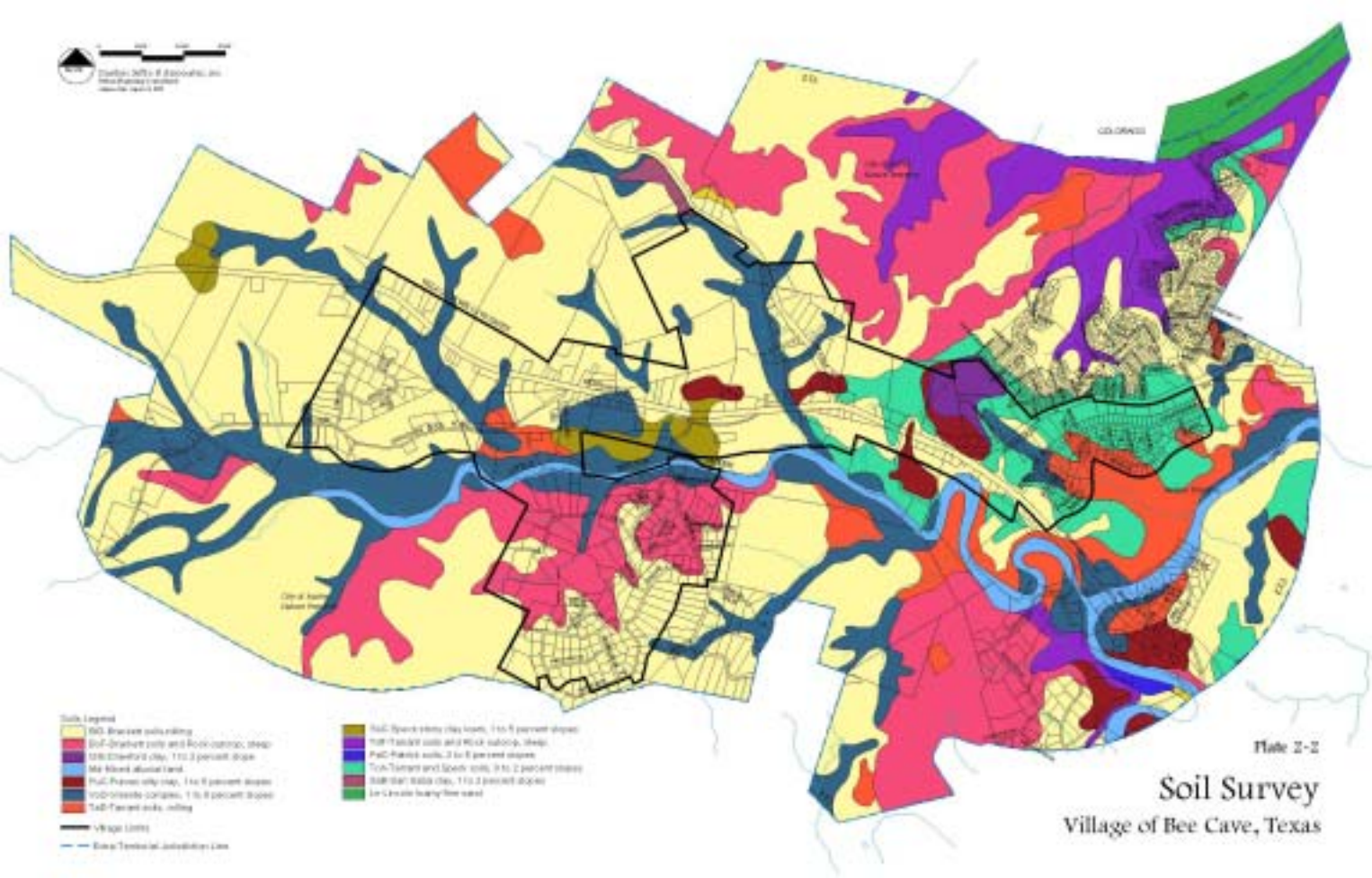


Plate 2-2

Soil Survey

Village of Bee Cave, Texas

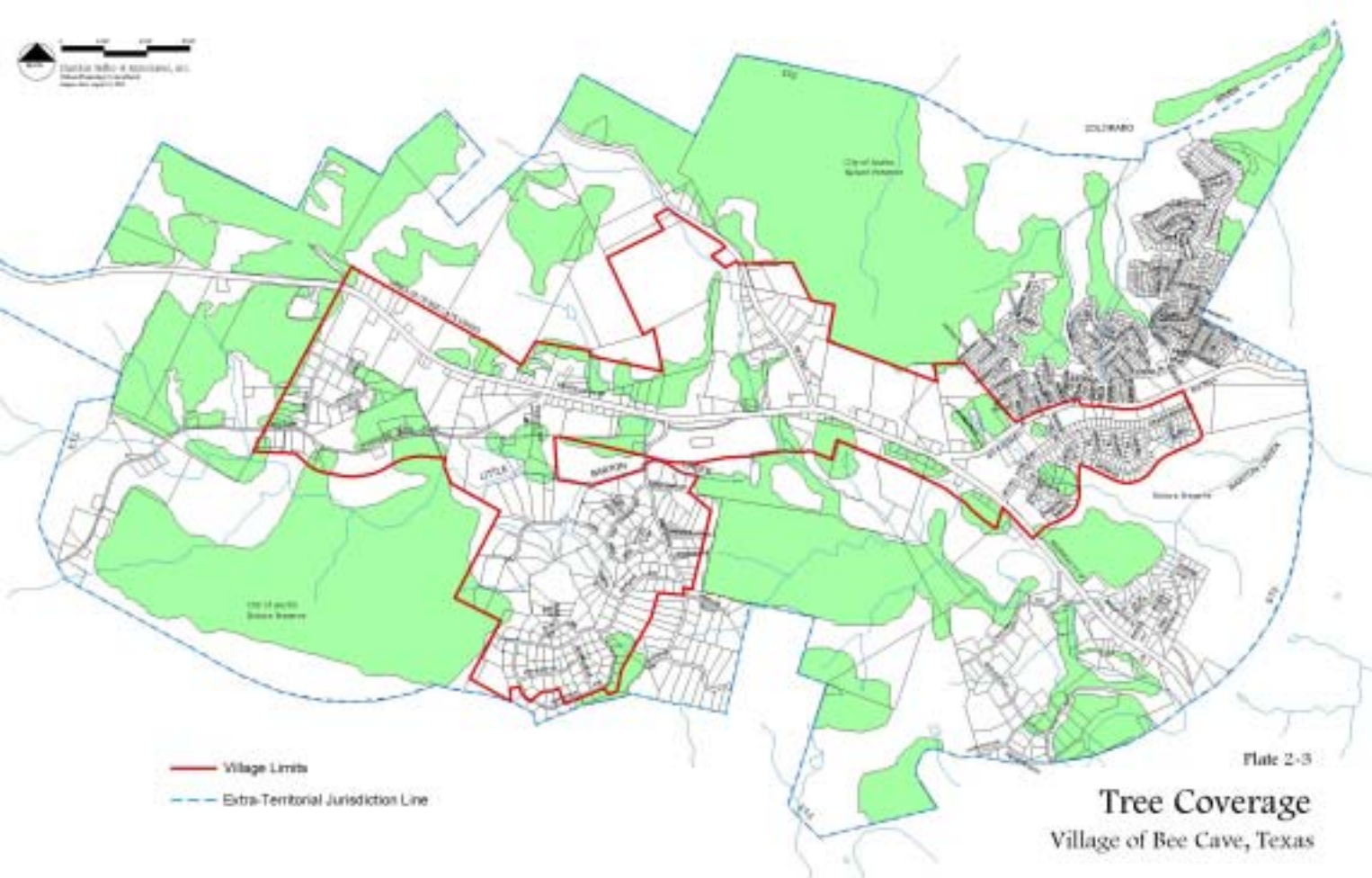


Plate 2-3

Tree Coverage

Village of Bee Cave, Texas

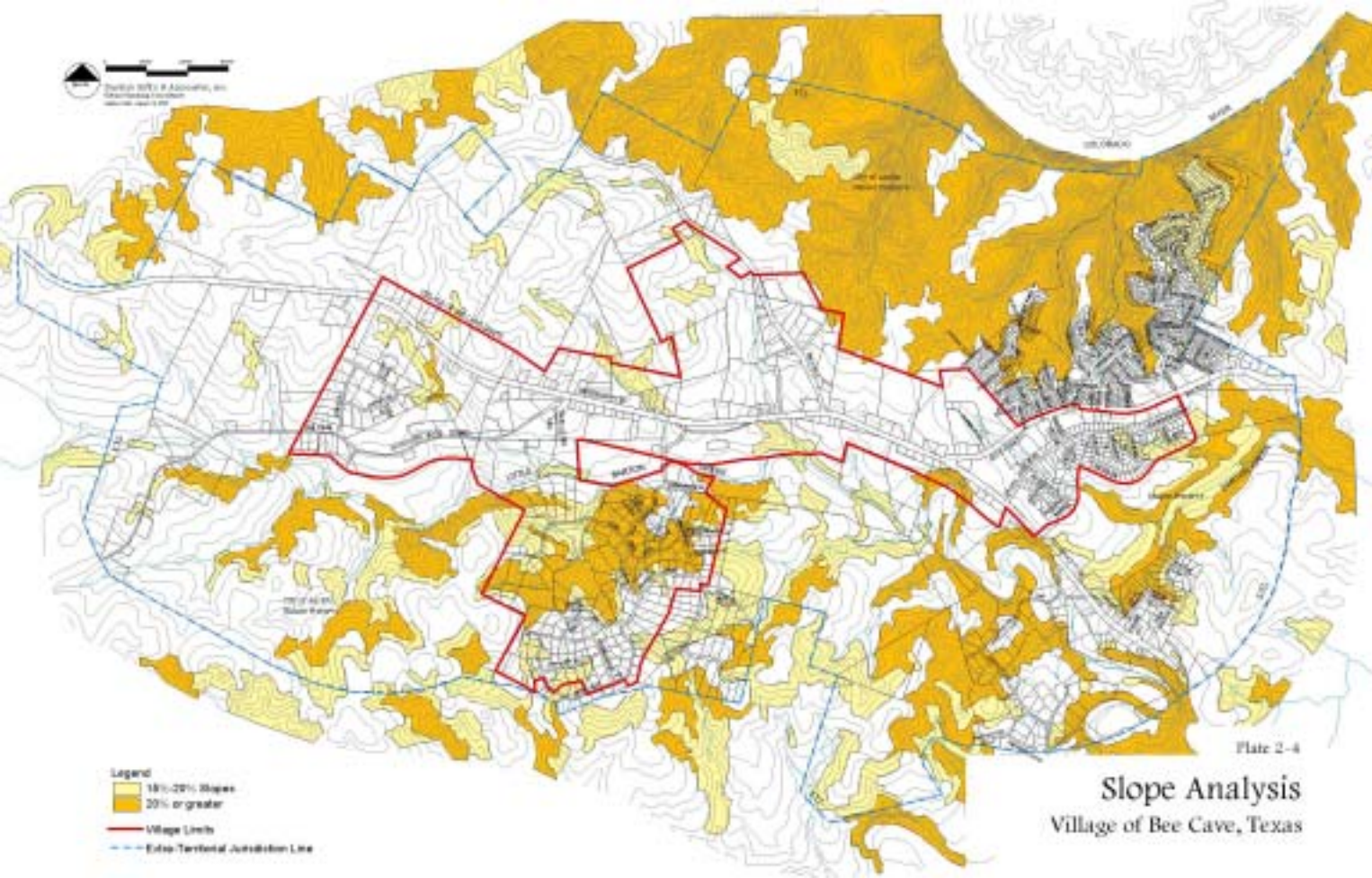


Plate 2-4

Slope Analysis

Village of Bee Cave, Texas

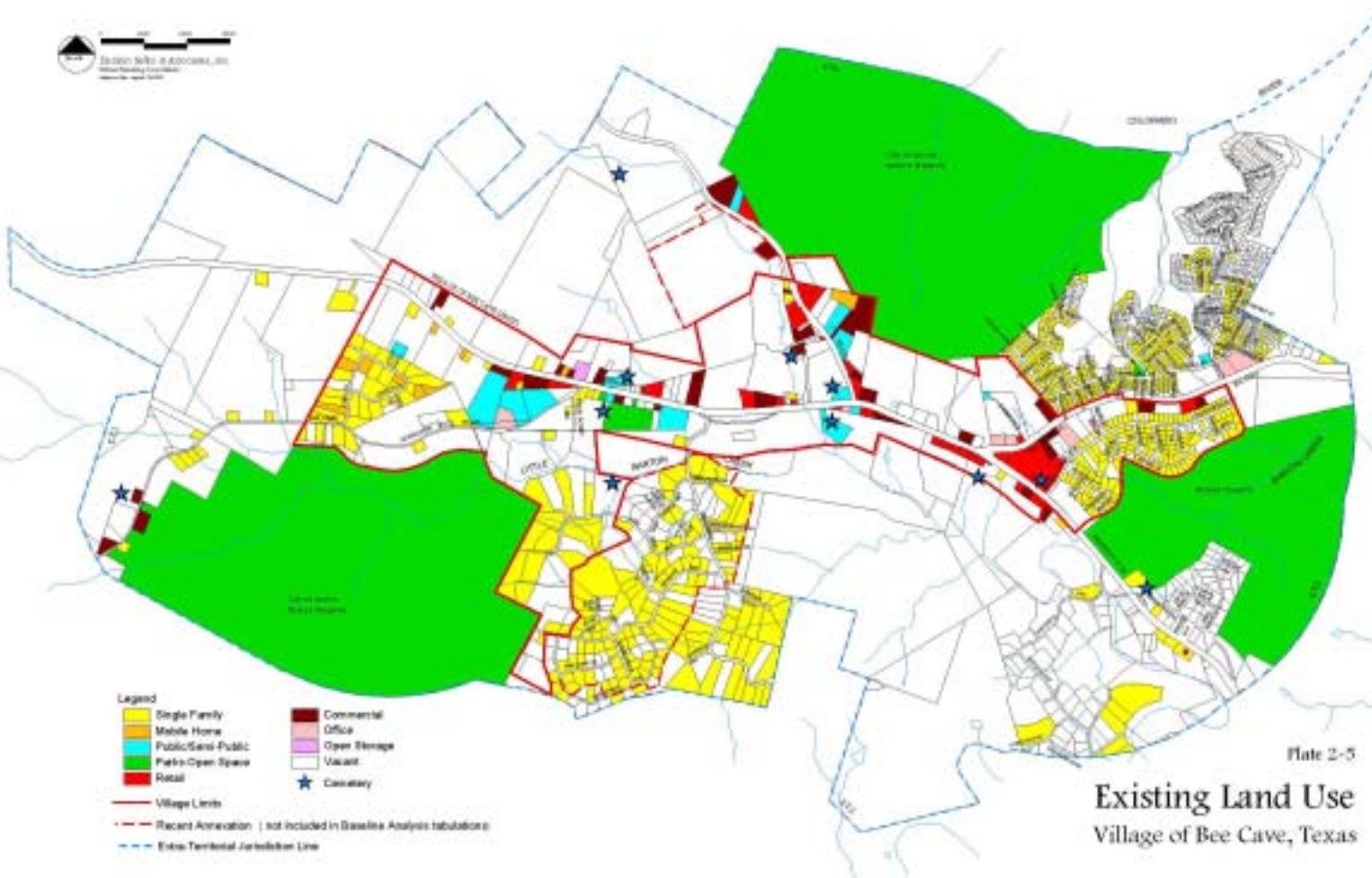


Plate 2-5

Existing Land Use

Village of Bee Cave, Texas

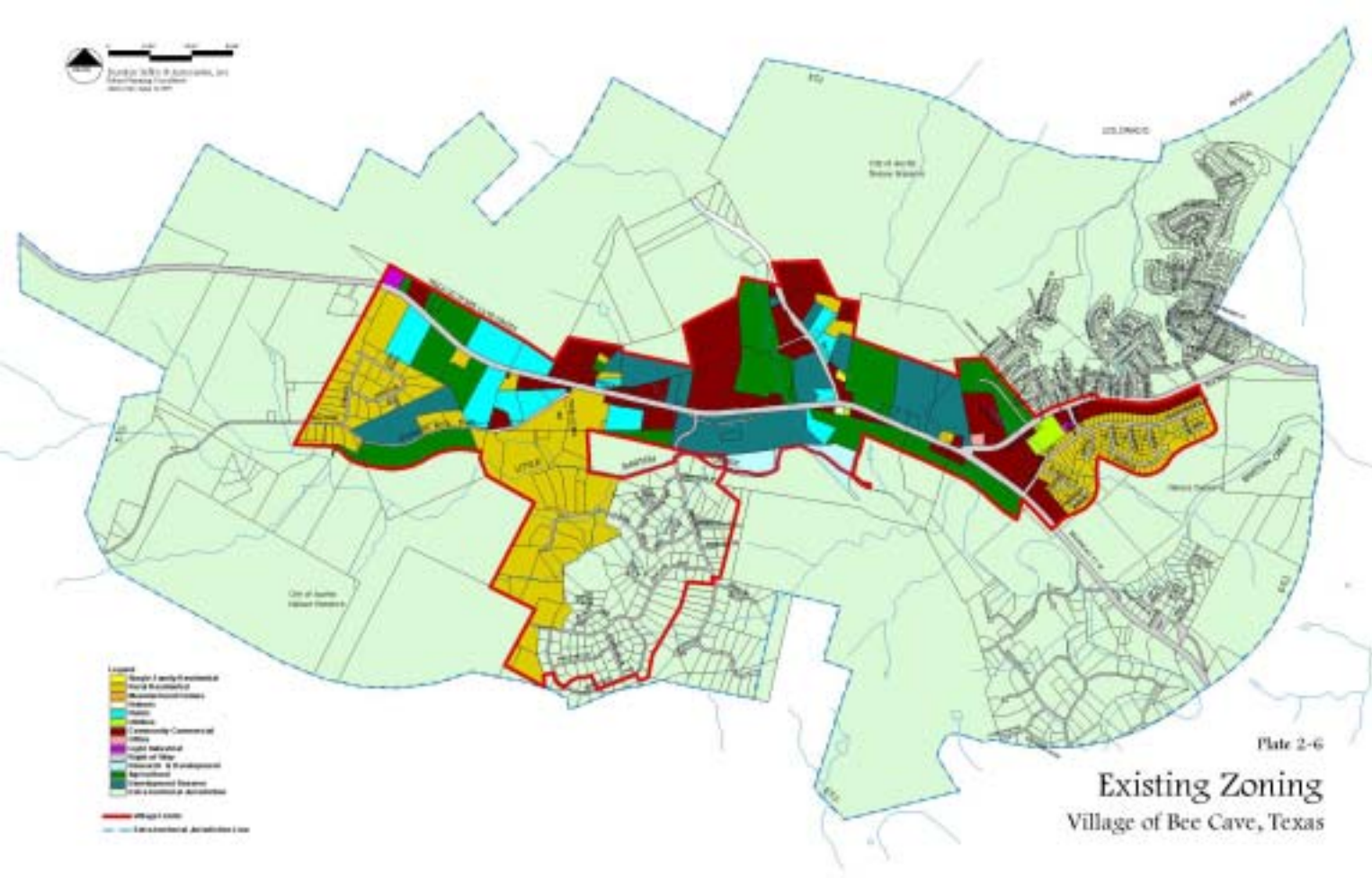


Plate 2-6

Existing Zoning

Village of Bee Cave, Texas

G O A L S &
O B J E C T I V E S

Section Three

Comprehensive Plan 2000

INTRODUCTION

What does the future hold for the Village of Bee Cave? What should the Village be like in the year 2008 or 2018? The Comprehensive Plan establishes goals and objectives that will help shape and direct growth and development for the next ten years and beyond. In addition, the Plan will ultimately contain implementation-oriented policies that are based on these goals and objectives, and that directly address how the desired direction of the community can be achieved. The Plan is premised upon a shared vision of the citizenry and the stakeholders of what the Village of Bee Cave should and will become, a vision in which:

> **The Village firmly establishes itself as a progressive community, noted for its scenic Hill Country surroundings complemented by a stable and skilled workforce, vast natural resources, and rich cultural heritage, as well as for its role in the region as a key transportation corridor, all of which enhances the Village of Bee Cave's ability to support and manage quality growth while maintaining the integrity and security of a family-oriented, rural community.**

GENERAL CONCLUSIONS

Discussions of citizen's views regarding the Village of Bee Cave were derived from a previous strategic planning process that involved Village officials, the appointed Comprehensive Plan Steering Committee, and other community stakeholders, all of whom assisted in formulating the goals and objectives for the Village's Comprehensive Plan. These discussions, along with a community-wide citizen survey[3-1] clearly indicated residents' views concerning quality of life issues in the Village of Bee Cave, the Village's strengths and weaknesses related to development, as well as other vital characteristics that helped to provide a basis for the goals and objectives. The following **General Conclusions** are determined to be of primary importance to the future of the community:

3-1 Conducted by Raymond Turco & Associates, Inc. in November of 1999; summary included in Appendix A.

- Establishing the feeling that the Village of Bee Cave and its ETJ are a "*Hometown Community*" by ensuring that they are:
  - Rural in character;
  - Safe;
  - Family-oriented;
  - Recreational;
  - A community with a "helping-one-another" attitude; and,
  - Longevity, meaning that citizens want to spend their entire lives here.

- The Village of Bee Cave should be a *gateway* to the Hill Country, and can achieve this through:
  - A "little village" atmosphere;
  - The establishment of a Village Center – a place to associate with other people in the community; and,
  - Cohesion – ensuring that things in Bee Cave look like they belong, like they fit together and blend into the natural environment.

- The Village of Bee Cave should be a *unique* place, and therefore should:
  - Be structured for people who live, work, and shop within the Village;
  - Be maintained with up-scale, low-density housing and compatible land uses;
  - Have a strong sense of community;
  - Be a community with a balance between commercial and other land uses;
  - Emphasize homeowners needs;
  - Be established as a place to "get away from it all", a bedroom community; and,
  - Emphasize development for pedestrian and bicycle traffic, and de-emphasize the automobile.

- Traffic within and through the Village should be closely monitored, considering that:
  - Traffic flows within the community have historically been heavy due to the crossing of the Colorado River and,
  - Better planned areas for housing and commercial development may help this.
  - Proactive involvement with applicable entities, for example CAMPO and TxDOT may also help this.

- The Village of Bee Cave should be an upscale, low-density, rural community, with amenities like
  - Shopping;
  - Parks and open spaces for recreation and sports activities;
  - Family-orientation; and,
  - Extensive pedestrian linkages throughout the Village to provide an alternative to short automobile trips.

- Maintaining a rural atmosphere with a unique, hometown feeling is of the utmost importance.

- Honoring the history of the Village of Bee Cave by:
  - Showing pride in the history and establishment of the community and,
  - Preserving and protecting sites of historic importance and significance (such as historic buildings and cemeteries).

- Ensuring that the Village does not become "Anywhere, U.S.A." by:
  - Establishing it as a model for excellent small-town planning and community livability;
  - Maintaining its uniqueness through its history and its people;
  - Designing the Village on a human-scale by emphasizing pedestrian traffic;
  - Limiting the size of non-residential buildings and the density of residential development;
  - Continually ensuring the existence of adequate opportunities to live and work in the community; and,
  - Encouraging small, independent businesses.

- Ensuring that the Village of Bee Cave is convenient for local citizens by:
  - Making it "inclusive" in nature; allowing people to get what they need within the community.

- Preserving and protecting the health and safety of the local community.

- Preserving and protecting the ecological health of this area – trees, trees, trees!

- Encouraging and promoting responsible commercial growth in order to support local economic development.
- Establishing a community of parks for local families.
- Protecting watershed areas of the Village of Bee Cave, especially Little Barton Creek.
- Establishing a greenbelt system along the local creeks.
- Establish and maintain *scenic* roadways throughout the Village of Bee Cave.
- Enforcing the use of additional landscaping along medians and in parking lots throughout the Village.
- Establishing a mixed-use development area within the Village.
- Ensuring that building design guidelines reinforce the ideals described in the above statements.

CRITICAL ISSUES

In addition, the discussion helped to identify **Critical Issues** that the citizens and leaders of the Village of Bee Cave feel are currently important to consider, as well as issues that may have an impact on the community in the future. Those issues discussed are as follows:

- Maintaining a low density environment.
- Managing local traffic.
- Protecting the environment, specifically:
  - Trees
  - Watersheds

- View corridors
- Wildlife

- Ensuring the compatibility of commercial and residential uses and development, with the consideration of:
  - Current, as well as pending, development;
  - The necessity of ordinances with updated implementation mechanisms; and,
  - The importance of buffering practices and adjacency standards.

- Ensuring that building size and height limitations exist for each category of land use:
  - Especially in terms of "large box retail" and,
  - Specifically limiting "big box" retail.

- Beginning the "greenbelt" idea with extensive hike-and-bike trails throughout the Village that will:
  - Provide an alternative to short automobile trips within the Village and its ETJ and,
  - Provide convenient linkages between retail, office, schools and residential areas.

- Establishing neighborhood-oriented land uses for the people who live in the Village, for instance, things like:
  - Restaurants;
  - Coffee shops;
  - Bookstores; and,
  - Local retail shops.

- Ensuring that a sense of inclusion in the community exists for local residents.

- Ensuring the maintenance of a hometown focus that reflects the desires of the local people.

- Assessing the "tools" that are currently lacking and altering the current Zoning Ordinance accordingly by:
  - Specifying development requirements, especially in terms of overlays and compatibility standards for differing land uses;
  - Specifically revising the review/approval process currently contained within the Ordinance; and,
  - Incorporating the requirement of a Traffic Impact Analysis and developer financing of required off-site improvements for any new development.

- Recognizing the importance of the history of the Village of Bee Cave.

- Recognizing the fundamental relationships between the environment, quality of life, economics, property values, and land uses.

- Ensuring the consideration of water and wastewater utilities in terms of current and future use.

- Ensuring the consideration of parking and access requirements during the development process, especially in terms of the Americans With Disabilities Act requirements.

CITIZEN ATTITUDE SURVEY

In order to ensure that this Comprehensive Plan was written based on the desires of citizens of Bee Cave, and on their views regarding various issues within the Village, a citizen survey was conducted by Raymond Turco & Associates, Inc. The survey addressed many of the significant elements affecting Bee Cave now, and many of those which may affect it in the future, including residential and nonresidential growth, minimum lot sizes, urban design, major traffic corridors, provision of services, and annexation issues. Citizen response to the survey was an integral part of the formulation of each section of the Comprehensive Plan, as expressed in the following goals and objectives. A summary of this survey is included in Appendix A of this Comprehensive Plan.

Goals and Objectives

The Comprehensive Plan goals and objectives were formulated using results of the previous discussions among the strategic planning committee as well as input received from Village staff, members of the Steering Committee, elected and appointed officials, other interested individuals, and the citizen survey conducted in November of 1999. In a broad sense:

Goals are **general statements** concerning an aspect of the City's desired ultimate physical, social and/or economic environment. Goals set the tone for development decisions in terms of the citizens' desired quality of life.

Objectives express the kinds of **action** that are necessary to achieve the stated goals without assigning responsibility to any specific action.

Policies will clarify the **specific position** of the Village regarding a specific objective, and will encourage **specific courses of action** for the community to undertake to achieve the applicable stated objective. Policies are often associated with Plan recommendations, and they will be developed during that phase of the comprehensive planning process.

Goals and objectives have been developed for the following areas:

- The Environment;
- Physical Form of the Community;
- Transportation and the Roadway Network;
- Public Facilities and Services;
- Fiscal Responsibility and Economic Development; and,
- Community Livability and Character

The following goals and objectives have been developed to reinforce this statement of the community's vision of itself as it grows, matures, and ultimately attains its anticipated build-out configuration. They establish a framework for specific actions (i.e. policies) to be conceived during later phases of the comprehensive planning process, that will help the citizens and stakeholders of the Village achieve their shared vision of the community's future.

The Environment

Goal 1: To promote respect, conservation, enhancement and protection of important natural features and resources within the Village.

Objectives:

1.01 Conserve and protect ecologically sensitive areas. The City should develop guidelines that continue to allow water infiltration within areas that are characterized by floodplains (e.g., maximizing permeable surface areas, minimizing paving and building coverage, etc.). The Village of Bee Cave should also develop guidelines to ensure the protection of watershed areas, especially the area in and around Little Barton Creek

1.02 Conserve natural areas of vegetation, especially those along flood plains.

1.03 Promote and provide public access to open space and natural areas.

1.04 Conserve and respect areas with steep slopes and scenic views.

1.05 Maintain high standards for ground and surface water quality.

1.06 Restrict development in flood prone areas.

1.07 Establish and/or enhance green space and natural areas along existing floodways and within the 100-year flood plain.

1.08 Encourage and promote water conservation through use of native plant materials, xeriscape techniques, and other methods.

1.09 Encourage public and private streetscape enhancement strategies (i.e., medians with street trees, etc.).

Physical Form of the City

Goal 2: To provide opportunities for coordinated, well-planned growth and development that are consistent with the Comprehensive Plan, while retaining the rural and "small-town" character of the Village.

Objectives:

2.01 Maintain a continuous and coordinated planning process that involves citizens, stakeholders, the Board of Aldermen, the Planning and Zoning Commission, other municipal boards/commissions, municipal departments, and local public and private entities in policy development and decision-making.

2.02 Facilitate quality future development of a variety of land uses.

2.03 Develop companion policies and guidelines to assist in the review of zoning and development requests.

2.04 Utilize the Comprehensive Plan and the Future Land Use Plan in daily decision-making regarding zoning, land use and development proposals. Determine appropriate locations for future residential and non-residential development, while considering existing neighborhoods and natural features.

2.05 Separate and/or create transitions or buffer areas between conflicting or incompatible land uses.

2.06 Develop design guidelines for non-residential frontage along State Highway 71, R.M. 620, and Bee Cave Road.

2.07 Develop separate zoning districts for non-residential uses that will allow the Village of Bee Cave to better utilize its highway frontage.

2.08 Establish clear guidelines and regulations for future development.

Goal 3: Preserve the existing rural character of the Village, and encourage the development of high quality, low density residential neighborhoods that promote public health, safety and welfare and that meet the various housing market needs of the community.

Objectives:

3.01 Formulate design guidelines for future residential developments to encourage the provision of safe, attractive places for people to live, and to ensure that each new project makes a positive contribution to its neighbors and to the Village of Bee Cave as a whole.

3.02 Identify areas on the Future Land Use Plan that are appropriate for a variety of residential densities (e.g., low, medium, and high).

3.03 Preserve and protect single-family neighborhoods from high traffic volumes, congestion and through traffic and promote narrow streets and/or lanes where appropriate.

3.04 Reinforce the Village's neighborhood concept, in the emotional and sociological sense as well as the physical sense, in the design of new residential areas (e.g., connections between neighborhoods, pedestrian linkages to schools, parks, neighborhood retail areas, and between neighborhoods, inclusive neighborhood design techniques, maximizing social interaction between neighbors, the provision of a limited number of neighborhood-oriented shopping areas, etc.).

3.05 Encourage the use of vacant lots located within areas that are currently available within the Village of Bee Cave, as opposed to the development of additional residential subdivisions in the outskirts of the Village or in the ETJ area.

3.06 Develop design guidelines (and possibly overlay zoning districts) for non-residential properties fronting along major thoroughfares, specifically State Highway 71, R.M. 620, and Bee Cave Road (e.g., addressing signage, landscaping, parking, building orientation and setbacks, etc.).

3.07 Identify areas suitable for future retail and non-residential, and/or business park development within the Village.

Goal 4: Provide for coordinated growth and physical expansion of the Village of Bee Cave.

Objectives:

4.01 Plan for continued growth and development that improves the community's overall quality of life and economic viability.

4.02 Plan for future development that is compatible with the Village's natural features and existing residential neighborhoods.

4.03 Consider the establishment of new programs and/or ordinances, as well as enhancement of existing ones, related to the enforcement of municipal codes which are intended to protect the public health, safety and welfare and to keep the community attractive (e.g., removal of hazardous/unsightly structures and junk, mowing high grass and weeds, litter control, etc.), especially along State Highway 71, R.M. 620, Bee Cave Road and other highly visible areas within the Village.

Transportation and the Roadway Network

Goal 5: Provide a balanced transportation system that will effectively serve the existing and projected travel needs of the Village in a safe, expeditious, economical and environmentally sensitive manner.

Objectives:

5.01 Maintain a continuous, coordinated transportation planning process which addresses long-term needs while emphasizing short-term problem solving.

5.02 Develop plans and/or initiate studies to improve the safety of heavily traveled roadways.

5.03 Define "adequacy" standards (i.e., acceptable levels of service) for the transportation system in the Village.

5.04 Plan the thoroughfare system such that roadways have sufficient capacity for anticipated traffic volumes generated by future development densities and land uses (e.g., traffic impact analysis for larger projects, provision of a continuous left turn lane along certain major roadways, etc.).

5.05 Promote compatibility between roadway alignments/improvements and land use patterns, community character, and the environment.

5.06 Minimize disruption of residential areas in the Village of Bee Cave by minimizing traffic volumes and by planning for the efficient diversion of traffic from neighborhoods.

5.07 Develop a unifying theme or other visual concept for the consistent and attractive treatment of appropriate roadway rights-of-way and/or medians.

5.08 Consider design standards for street construction to ensure durability, safety, lower maintenance, and long-term cost efficiency in roadway facilities, as well as to ensure that such facilities are consistent with the Hill Country character of the Village.

Goal 6: Encourage the organization and development of land uses in a manner that facilitates an efficient and cost-effective transportation system.

Objectives:

6.01 Promote both on-site and off-site transportation efficiency in new development proposals.

6.02 Include transportation system considerations in the development review process for the planning and alignment of future roadways, and to promote safe, efficient on- and off-site access and vehicular circulation.

Goal 7: Recognize the impact of the regional transportation system upon the Village of Bee Cave, and the importance of maintaining improved coordination with the various entities involved in planning and/or improving the system.

Objectives:

7.01 Develop a local transportation planning process that ensures coordination with the regional planning goals.

7.02 Initiate regular dialogue and coordination with surrounding municipalities, CAMPO, and the Texas Department of Transportation (TxDOT) on roadway planning issues.

Goal 8: Optimize mobility and decrease dependency upon the automobile by encouraging multi-modal alternatives in order to reduce travel demands.

Objectives:

8.01 Decrease dependency upon the automobile by encouraging multi-modal and other alternative transportation options (e.g., pedestrian, bicycling, equestrian, etc.), wherever possible.

8.02 Encourage pedestrian-oriented design in new residential and non-residential development.

8.03 Ensure that transportation systems address and, wherever possible, accommodate pedestrians, children and people with special needs.

Public Facilities and Services

Goal 9: Ensure that public services and facilities will adequately serve the needs of residents and businesses within the Village of Bee Cave, and that such services and facilities are adaptable to future growth.

Objectives:

9.01 Define standards for adequate response/service levels for public services and facilities, such as:

1. Municipal government;
2. Cultural growth;
3. Recreational opportunities;
4. Community assembly; and,
5. Utilities/infrastructure and solid waste management.

9.02 Develop a coordinated public facilities plan that addresses future community service needs (such as the possible addition of library services, sanitation service, and/or a police department).

9.03 Provide public services and facilities for all residents and businesses in a manner that is efficient, equitable and fiscally responsible.

9.04 Use the Future Land Use Plan and future land use projections to aid in determining locations where public service and/or administrative facilities will be needed.

9.05 Encourage new development to occur within areas that are already served by necessary public services and facilities, or where services can be realistically provided by other entities.

9.06 Encourage off-site wastewater treatment for new development to ensure the health, safety and welfare of local citizens, as well as to protect the local and regional environment.

9.07 Ensure that public utility and infrastructure systems (e.g., water supply, storm drainage, etc.) will adequately serve the health, safety and general welfare of residents and businesses within the Village.

9.08 Encourage the commitment to maintain, improve and upgrade the existing water distribution system, and to promote informed citizen involvement on utility-related issues.

9.09 Utilize recycling and other solid waste management techniques which are financially feasible and environmentally responsible.

Goal 10: Realize that the character of the Village is primarily that of a small town, and that public facilities should provide a sense of community identity, both functionally and aesthetically.

Objectives:

10.01 Provide adequate office and administrative space for the regular business conducted by the municipal government.

10.02 Encourage the preservation of the small-town character of the Village in the planning, design, construction and/or remodeling of community facilities.

Fiscal Responsibility and Economic Development

Goal 11: Ensure that future community facility and service needs are met through sound long-range and fiscal planning.

Objectives:

11.01 Utilize recommendations contained within the Comprehensive Plan to assist in decision-making on short- and long-range capital improvement projects (e.g., streets, water, storm water management, purchase of major equipment, construction of public facilities, etc.).

11.02 Ensure that administrative staffing, real property acquisitions, infrastructure improvements, and facility construction/maintenance are based upon priorities set forth within the Comprehensive Plan and upon fiscal practicality.

11.03 Strive for a fiscal balance of land uses that will create a positive impact upon the Village of Bee Cave's budget and overall tax base.

11.04 Preserve the integrity of existing property values, and help to ensure the future economic stability of the community by encouraging the attraction of targeted non-residential land uses to help support and subsidize the overall tax base.

11.05 Develop an economic development strategy that is consistent with land use objectives, environmental protection and the Village's desire to manage local growth.

Community Livability and Character

Goal 12: Be a full life-cycle community.

Objectives:

12.01 Provide housing and residential facilities for people to live their entire life span within the Village of Bee Cave, if they so desire.

12.02 Ensure the provision of a variety of housing types within the Village that will meet the needs of all age, physical acuity, household size, and economic groups.

12.03 Encourage home ownership and long-term residency.

12.04 Establish areas within the Village that would be appropriate for the development of age-specific land uses that fulfill a variety of social needs, such as daycare facilities for children and mature adults and retirement/assisted-living dwellings.

12.05 Develop a neighborhood enhancement/integrity program that bolsters civic pride and encourages reinvestment within the Village of Bee Cave.

12.06 Develop a policy that encourages "infill" development of vacant residential lots.

12.07 Where possible, protect and retain the community's existing stock of affordable housing.

Goal 13: Preserve the existing low density (i.e., "small-town"), rural character of the community.

Objectives:

13.01 Develop density and locational criteria for new single-family residential uses within the Village of Bee Cave which recognize the potential effects on land use compatibility, traffic generation, noise levels and aesthetics.

Goal 14: Promote a more livable community and high quality of life through good urban design practices and through a proactive approach to the visual image of the community.

Objectives:

14.01 Create and promote a stronger sense of community through urban design criteria. Also reinforce the Village of Bee Cave's charm and integrity as that of a small town in spite of the Big City (i.e., Austin), and continue efforts to instill a stronger sense of civic pride and involvement among citizens.

14.02 Consider development of streetscape/urban design guidelines to enhance the community's visual and aesthetic appeal (e.g., landscaping, signage, building facades, entryway treatments, special streetscape amenities such as holiday decorations, sidewalks in business areas along major arterials, and screening visually unattractive uses and outside storage areas).

14.03 Develop a design theme for visual gateways at principal entry points into and throughout the community.

14.04 Enhance neighborhood streets and other pedestrian ways to be more pedestrian-oriented.

14.05 Encourage public/private participation and cooperation in beautification efforts. Explore assistance that may be available from private/volunteer groups to perform urban design related projects and to help maintain enhanced public areas (e.g., street medians, small landscaped areas, etc.).

14.06 Use the development review process to evaluate private projects and their contributions to the Village's image and quality of life initiatives.

14.07 Increase enforcement of municipal codes and regulations pertaining to property maintenance, upkeep and appearance (e.g., mowing high grass and weeds, removal of clutter and inoperative vehicles, etc.).

14.08 Consider the creation of a central focal point and activity center for the community to increase opportunities for social interaction among residents, for instance a Village Center that would serve as a central place to shop, eat, conduct business, relax, and be entertained. This could not only provide a sense of place within a special area of the community for residents, but could also assist in orientation and wayfinding for visitors, and could increase opportunities for commerce and tourism.

Goal 15: Local residents and visitors should feel safe from crime, injury and other physical and psychological harm.

Objectives:

15.01 Ensure that there are adequate law enforcement and fire protection services within the Village, and encourage the design of safe neighborhoods.

15.02 Provide adequate lighting and visibility to enhance safety in public places.

15.03 Make provisions for persons with special needs through careful design of public places and facilities.

15.04 Encourage the establishment of a healthcare facility that could provide local citizens with emergency care.

Goal 16: Provide a comprehensive system of greenbelts and open space that is compatible with the environment and conducive to residential neighborhoods.

Objectives:

16.01 Develop a comprehensive Parks & Open Space Plan that not only meets a variety of needs at the neighborhood level, but also is applicable at to the Village of Bee Cave and its ETJ as a whole.

16.02 Encourage greenbelt and open space dedication during the development review process.

16.03 Continue exploring new recreational and social opportunities for all age groups, especially for the younger age groups within the Village of Bee Cave.

Goal 17: Create pedestrian, equestrian and bicycle linkages between residential neighborhoods, linear greenbelts, schools, public administrative facilities, non-residential centers, and other activity centers, wherever physically and financially possible.

Objectives:

17.01 Utilize trails, wherever possible, to connect residential areas with non-residential centers, schools and parks.

17.02 Encourage the provision of pedestrian, equestrian and/or bicycle pathways within private developments.

T H O R O U G H F A R E P L A N

Section Four

Comprehensive Plan 2000

INTRODUCTION

One of the most important aspects of a community's urban structure is the efficient movement of people and goods. An essential tool cities can use to accomplish this goal is a comprehensive, carefully conceived thoroughfare plan which shows the existing roadway network as well as future thoroughfares that will be needed to ensure efficient movement of traffic within and through the community. The Thoroughfare Plan is designed and intended to provide an efficient, structured framework for the smooth flow of traffic throughout the area in and around the Village of Bee Cave that will result from future growth and development. It also ensures that existing traffic movement can be accommodated by improving certain aspects of the system. The Thoroughfare Plan is an overall guide that will enable individual developments and roadways within the Village to be coordinated into an integrated, unified transportation system. The Plan encourages the creation of neighborhoods with a minimal amount of through traffic, while providing high capacities for routes that are intended to move both regional and local traffic through the community. In addition, because of the relationship the Village has to various regional roadways, including State Highway 71, R.M. 620, and F.M. 2244 (Bee Cave Road), people live in surrounding areas and travel into or through the Village of Bee Cave to work, to conduct business, or to buy goods and services. While this relationship benefits the community in a number of ways, it also tends to have a tremendous impact upon the area's traffic circulation system.

The thoroughfare system is one of the most visible and permanent elements of the urban structure. The alignments and rights-of-way of the major transportation facilities are already established and adjacent properties are developed, therefore it will be a continuing challenge for the Village of Bee Cave to make significant changes to the thoroughfare system. It is important that the roadways in the Village are interconnected in order to provide local citizens with alternative routes, thereby allowing local people to bypass the major thoroughfares and ensuring that the majority of the traffic generated along the major thoroughfares is comprised of regional traffic. In addition, in making transportation decisions, consideration should be given to the preservation of scenic vistas, as well as to the fact that the Village of Bee Cave desires a pedestrian-oriented community.

Particular attention should be given to preserving and enhancing the overall system's capacity and efficiency. In many ways, Bee Cave's regional circulation system is already established and, primarily due to existing physical factors, will likely not be able to substantially change. A significant element to maintaining the integrity of the Village of Bee Cave as a rural, Hill Country community will be the ability to work within the parameters set by these major roadways – to make them assets to the community, not barriers to the Village's growth and vitality.

It is essential that a comprehensive thoroughfare system be developed for the Village of Bee Cave that is capable of accommodating the expanding vehicular traffic volumes which future local and regional growth will create, and also provide for alternative routes between various areas within the Village in order to allow local people to bypass regional roadways.

The Thoroughfare Plan also considers multi-modal transportation options, such as bicycles and pedestrians. It is the intention of the Thoroughfare Plan to provide safe and enjoyable circulation for vehicles, bicyclists and pedestrians alike.

FUNCTIONS OF THOROUGHFARE PLANNING

The Thoroughfare Plan defines a hierarchy of roadway functions that provide for both traffic movement and property access. The Plan also provides a clear statement of future roadway alignments, capacities (i.e., number of lanes), and right-of-way requirements within the Village and its extraterritorial jurisdiction (ETJ). It has been developed to support the Future Land Use Plan by providing adequate capacity on the Village's roadways to move both people and goods.

The Thoroughfare Plan is the basic element for ensuring the orderly implementation of roadways in conjunction with economic growth, and it facilitates the preservation of necessary rights-of-way during the development review process. It is one of the few planning elements communities in Texas can implement in their ETJ. The Plan provides guidance for determining appropriate land uses by identifying the ultimate configuration of the thoroughfare network. It also serves as a guide for the programming of projects

and allows for rational and systematic provision of roadway capacity. The Plan should reflect community goals, provide efficient, continuous traffic routes, complement expected land use patterns and characteristics, integrate with both the regional freeway/highway and arterial system, as well as the roadway systems of surrounding local jurisdictions, be sensitive to topographical features and constraints; and be adaptable to accommodate changing conditions and trends.

The Thoroughfare Plan creates a comprehensive approach by which the various departments and agencies responsible for thoroughfare development can coordinate their individual efforts. Examples of these agencies include the Texas Department of Transportation (TxDOT), CAMPO, Travis County, and the Village of Bee Cave itself. The standards and criteria contained within this element are intended to ensure consistent design practices in new roadway development or the redevelopment of certain roadways, as may be appropriate. This element was prepared by analyzing the existing system of thoroughfares and by proposing changes and recommendations for future thoroughfares based upon goals and objectives formulated during the comprehensive planning process.

The Regional and Local Traffic Circulation System

Four major highways provide nearly all of the access to and through the Village of Bee Cave. State Highway 71 serves as the major regional travel corridor through the area in an east-west direction, R.M. 620 provides access in a northwestern direction, and F.M. 2244 (Bee Cave Road) provides access in a northeastern direction. Hamilton Pool Road provides access for the southwest from the city of Dripping Springs.

The Colorado River is one of the region's greatest treasures. It is the reason that many people are attracted to the Austin area. While the river is a tremendous asset, it is also a physical barrier to roadway construction. Because few, if any, possibilities are foreseen to cross the river in the west Austin area, R.M. 620 and Bee Cave Road are important roadways that will continue to support growth. The confluence of roadway networks in the Village is similar in form to an hourglass – all regional accesses must flow through Bee Cave. This condition exists because there are many environmental and physical constraints to roadway construction in the region. Consequently, traffic

through Bee Cave will certainly increase, not solely because of the growth in Bee Cave, but because of regional growth. Therefore, the Village of Bee Cave must resign itself to addressing regional traffic concerns while ensuring the least amount of negative impact on Bee Cave residents. Taking all of these factors into account, the area has a sufficient number of major thoroughfares that provide transportation for regional traffic. The main challenges, therefore, are to ensure that the existing thoroughfares continue to provide adequate regional access through the Village of Bee Cave, and to provide additional roadways in order to accommodate local traffic.

THE FUNCTIONAL CLASSIFICATION SYSTEM & THOROUGHFARE STANDARDS

To prevent functional obsolescence of the transportation facilities, the area's hierarchical system, which defines the role of each major thoroughfare, needs to be updated. This system, called a functional classification system, in turn translates into physical design features concerning thoroughfare cross-sections, pavement standards, pavement widths, and access management. The Thoroughfare Plan element within this Comprehensive Plan is based upon this system. These functional classifications are intended to reflect the role or function of each roadway within the overall thoroughfare system (see **Table 4-1**).

This commonly used functional classification system consists of a hierarchy of streets that range from those which provide for traffic movement to those whose function is access to adjacent properties. **Illustration 4-1** helps to depict the functional street classification system, or hierarchy, for the community as a whole. The ***mobility and movement function*** refers to the accessibility of adjacent properties from a particular street or thoroughfare. As the illustration indicates, local streets provide the most access to the adjacent properties, but function very poorly in mobility. Principal arterials or major thoroughfares function very well mobility-wise but, because of speeds and volumes, they serve very poorly as access to adjacent roads and properties. With this in mind, streets that carry a higher volume of traffic should have a limited number of intersections and "curb cuts" (driveway openings) so traffic movement will not be impeded. This concept is referred to as the ***property access function***. Collectors are

intended to distribute traffic between the arterial system and individual land uses within the area. Arterial or major thoroughfares carry longer trips and should, therefore, form continuous links to carry traffic throughout areas. Collectors supplement the arterial system and should not be continuous for long distances.

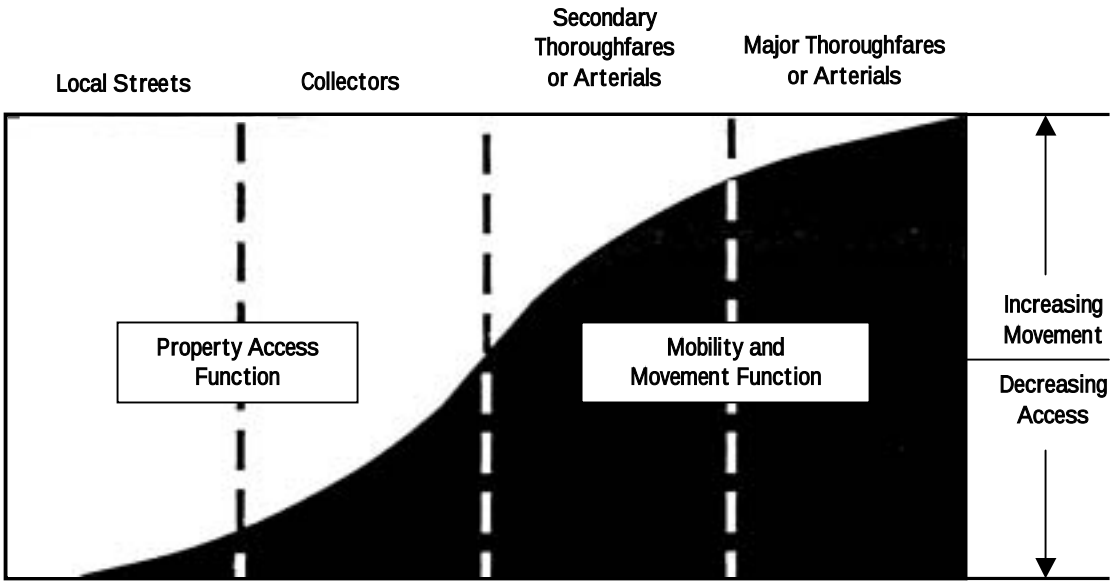


Illustration 4-1
FUNCTIONAL CLASSIFICATION SYSTEM

Neighborhoods should be developed between arterials and major collector streets so that traffic is routed around, not through, these areas. In order to further the vision of a pedestrian-oriented community, the Village of Bee Cave should ensure the incorporation of the trail system in non-residential development (refer to the Parks and Open Space Plan), and walkways should be included within the rights-of-way of most public streets. Minor collectors should penetrate the neighborhoods to collect and distribute traffic, but not provide convenient cut-through routes. Land use planning efforts should attempt to encourage compatible land uses adjacent to streets. Commercial and retail activities should be developed in such a manner that the primary mobility function of arterial or major thoroughfares is not compromised due to poor access management.

Table 4-1

ROADWAY FUNCTIONAL CLASSIFICATIONS AND GENERAL PLANNING GUIDELINES

CLASSIFICATIONS	FUNCTION	CONTINUITY	SPACING (MILES)	DIRECT LAND ACCESS	MINIMUM ROADWAY INTERSECTION SPACING	SPEED LIMIT (MPH)	PARKING	COMMENTS
Freeeway and Expressway	Traffic Movement	Continuous	4	None	1 mile	45 to 55	Prohibited	Supplements capacity and arterial street system, and provides high-speed mobility.
Arterial or Major Thoroughfare	Moderate distance inter-community traffic movement. Minor function - land access should primarily be at intersections.	Continuous	1/2 to 1 1/2(1)	Restricted - some movement may be prohibited; number and spacing of driveways controlled.	1/8 mile 1/4 mile on regional route.	35 to 45	Prohibited	"Backbone" of the street system.
Collector	Primary - collect/distribute traffic between local streets and arterial systems. Secondary - land access. Tertiary - inter-neighborhood traffic movement.	Not necessarily continuous; may not extend across arterials	1/4 to 1/2(2)	Safety controls; limited regulation. Residential access prohibited; commercial access allowed with shared driveways.	300 feet	30	Limited	Through traffic should be discouraged.
Local	Land Access/Sidewalk	None	As needed	Safety controls only.	300 feet	30	Permitted	Through traffic should be discouraged.

(1) Spacing determination should also include consideration of travel projections within the area or corridor based upon anticipated development.

(2) Denser spacing needed for commercial and high density residential districts.

Wherever concentrations of traffic occur on collector streets, consideration should be given to prohibit houses from fronting on these types of streets or thoroughfares. Good cluster subdivision design can allow ample lot yield while orienting houses to local streets and not to collectors (refer to the "Cluster Design" concepts described in the *Environmental Quality and Community Image* element of the Comprehensive Plan).

The Village street system should consist of arterials (the major thoroughfares are already in place), collectors and local streets. Freeways and highways are generally under the jurisdiction of the Texas Department of Transportation (TxDOT). Application of a functional classification system and design principles can help produce an optimized traffic circulation system. Major advantages include preservation of residential neighborhoods, long-term stability of land use patterns, increased values of nonresidential properties, fewer traffic accidents, and a decreased portion of urban land devoted to streets. **Table 4-1** describes the most important characteristics of functional classifications. The arterial classification includes major arterials and major secondary thoroughfares. The collector classification system includes major and minor collector streets.

The following recommended cross-sections have been developed to reduce the chance of obsolescence of the area's thoroughfare system. The sections outline the various recommended standards of streets and thoroughfare cross-sections appropriate for the Village of Bee Cave, as well as for the region.

Freeways and Highways

Freeways are high capacity highways in which direct access from adjacent properties is eliminated or significantly reduced, and where ingress and egress to the traffic lanes is controlled by widely spaced access ramps and interchanges. No new freeways/highways are expected to be constructed within the Village of Bee Cave and its ETJ in the near future.

Major Thoroughfares or Arterials

The primary urban traffic carrying system is made up of principal arterials or major thoroughfares. The primary function of major thoroughfares is to provide for continuity and high traffic volume movement between major activity centers (neighborhoods, commercial centers, etc.). These thoroughfares are usually spaced at approximately one-mile intervals unless terrain or other physical barriers create a need for deviation. The minimum major thoroughfare cross-section contains four moving lanes, two in each direction. Right-of-way requirements for major thoroughfares typically range from 100 to 120 feet.

Often, four lanes are constructed within the full right-of-way, leaving a wider median than for a six-lane thoroughfare. This concept allows for an interim solution until traffic volumes warrant the construction of the additional two inside lanes. Due to the fact that these thoroughfares will carry high traffic volumes (15,000 to 40,000 vehicles per day), it is essential that they have continuous and direct alignment and that they interconnect with highways.

TYPE AA: MAJOR REGIONAL ARTERIAL

A "Type AA" major regional arterial provides three twelve-foot wide lanes in either direction with a fourteen-foot wide median, with a total right-of-way of 120 feet. **Illustration 4-2** shows an example of this type of thoroughfare. Although the existing State Highway 71 is labeled a "highway", its local function is termed "major regional arterial". Currently, however, State Highway 71 provides two lanes in either direction with a turning lane in the center that is not divided with a median. The efficiency of this thoroughfare would be increased with the addition of one lane in both directions, and with a median dividing the three lanes, thereby providing for additional control of where and when left turns are allowed. It should be noted that landscaping within this median would greatly contribute to the overall community image of the Village of Bee Cave, especially due to the fact that there are numerous travelers on this thoroughfare on a daily basis (refer to the "State Highway 71 Corridor Streetscape Treatments" section within the *Environmental Quality and Community Image* element of the Comprehensive Plan).

The primary concern in regard to State Highway 71 is that if ingress and egress is not controlled in the future, the Texas Department of Transportation may feel it necessary to expand the thoroughfare in such a way that would likely have an adverse affect on the Village of Bee Cave, especially in terms of the desired aesthetics and atmosphere of the community. The most recent traffic counts in the vicinity of F.M. 2244 (Bee Cave Road) and State Highway 71 show that there are approximately 40,000 vehicles per day in this area. It will be significant, therefore, for the Village of Bee Cave to address this roadway, and to ensure that adequate, efficient access controls are provided along State Highway 71. Another thoroughfare of this type is not anticipated in the future.

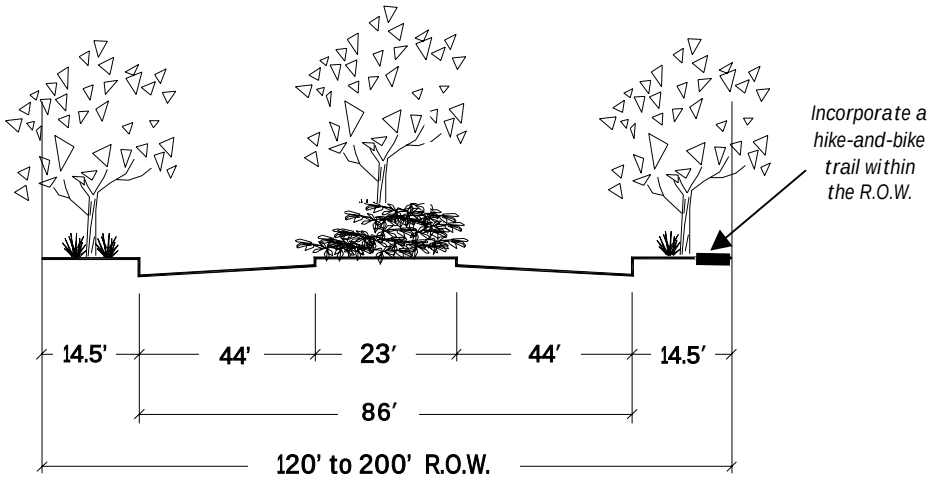


Illustration 4-2

TYPE AA: MAJOR REGIONAL ARTERIAL

TYPE A: MAJOR ARTERIAL

Existing R.M. 620 and F.M 2244 (Bee Cave Road) are the thoroughfares that would be considered "Type A" in the area. In addition, the existing Hamilton Pool Road, as well as its proposed extension (refer to **Plate 4-1**), are considered Major Arterials. A Type "A" major arterial (see **Illustration 4-3**) also provides three lanes in either direction (i.e., six lanes total) with a center median, with a total right-of-way of 116 feet. The median should also be raised (i.e., with a curb and a landscaped center) to create a divided roadway. Currently, both R.M. 620 and F.M. 2244 are roadways with two lanes in either direction and with painted center medians. Hamilton Pool Road is a roadway with one lane in either direction, also with a painted center median. However, with the additional growth that is expected, these thoroughfares should be expanded to provide for more efficient traffic flow, and for safer, more controlled turning.

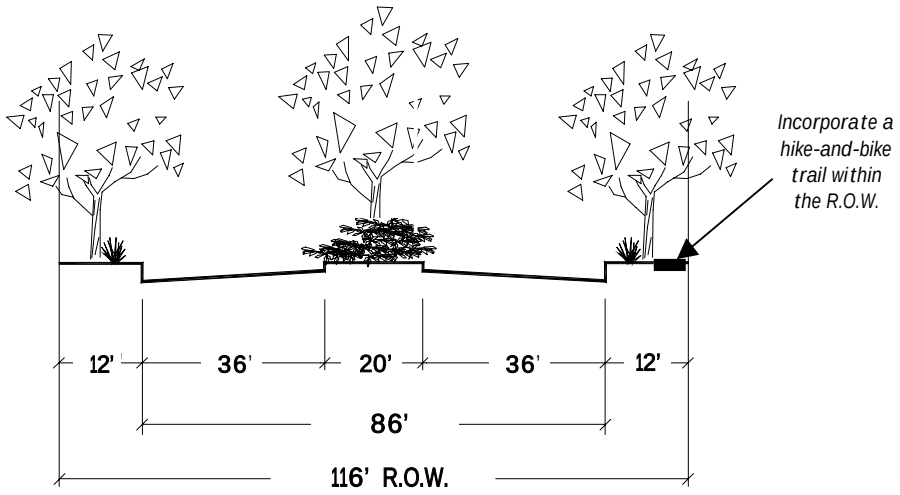


Illustration 4-3

TYPE A: MAJOR ARTERIAL

Divided roadways are generally considered safer than undivided roadways due to the fact that a raised median tends to minimize the number of potential head-on traffic conflicts in the middle of the roadway. As previously mentioned, raised medians also provide an opportunity for landscaping or other aesthetic enhancements within the road right-of-way. The minimum right-of-way for a principal arterial is 116 feet, and 120 feet is preferred; these widths would allow either a divided or undivided street cross-section.

TYPE B: MINOR ARTERIAL

Where traffic volumes are expected to be more moderate (less than 20,000 to 25,000 vehicles per day), it should be possible to use a four-lane, divided or undivided thoroughfare, indicated as Type "B". This arterial has 26-foot wide pavement sections and a 14-foot wide median that can either be raised (i.e., with a curb) or painted to serve as a dual (i.e., flush) left-turn lane, with a total right-of-way of 92 feet. The Type "B" standard may also be utilized for divided minor arterials or major collector streets that may be appropriate for a specific area with special parkway and landscape treatments. **Illustration 4-4** shows the cross-section for Type "B" minor arterials with 92 feet of right-of-way.

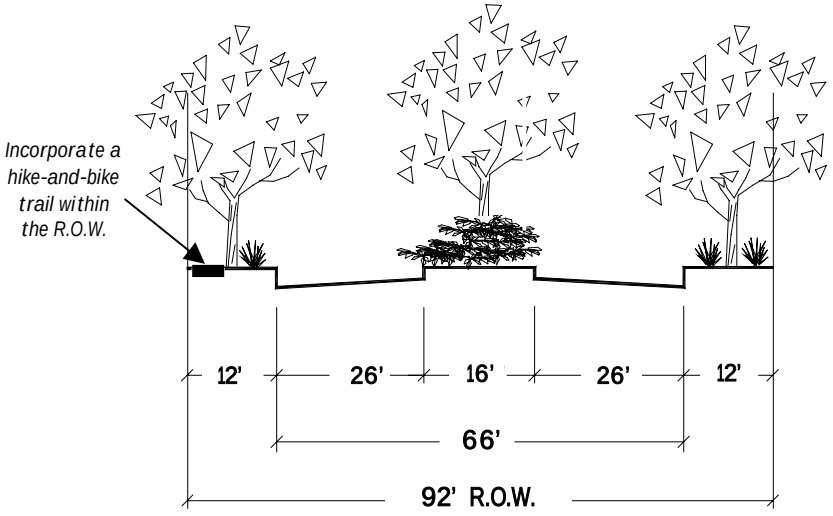


Illustration 4-4
TYPE B: MINOR ARTERIAL

Two proposed minor arterials are within the Village. One is the proposed roadway located south of State Highway 71, which is intended to provide for alternative access for local citizens. Specifically, this road intersects State Highway 71 between Hamilton Pool Road and R.M. 620, and then intersects State Highway 71 again east of F.M. 2244 (Bee Cave Road). The other is the Hamilton Pool Road extension north of State Highway 71, and connecting to R.M. 620.

Collector Streets

A collector street's primary function is to collect and distribute traffic from local access streets, as in residential neighborhoods, to a major arterial or the major street system. Collector streets should be located in a manner that discourages through traffic movement. To discourage such movements, these traffic-collecting streets are typically disrupted at some point by offsetting intersections or by incorporating curvilinear design. The collector street may also be used as a local street internal to nonresidential areas or adjacent to multiple-family areas, as well as an access route to amenities such as neighborhood playgrounds.

For these types of developments, 60 to 80 feet is the minimum right-of-way requirement with a minimum pavement width of 48 feet. The minimum right-of-way requirement for collectors within a typical residential neighborhood setting is 60 feet, which will generally accommodate two moving lanes of traffic plus any on-street parking.

TYPE "C" MAJOR COLLECTOR

Type "C" major collector streets are low to moderate volume facilities whose primary purpose is to collect traffic from smaller streets within an area and to convey it to the nearest principal or secondary arterial. The average daily traffic volumes for these types of streets should not exceed 10,000 trips per day. Hamilton Pool Road is an example of a major collector street. The Type "C" major collector street provides for 80 feet of right-of-way with 48 feet of paving. This standard may be used as a traffic collection facility within nonresidential areas. **Illustration 4-5** shows the cross-section for Type "C" major collectors.

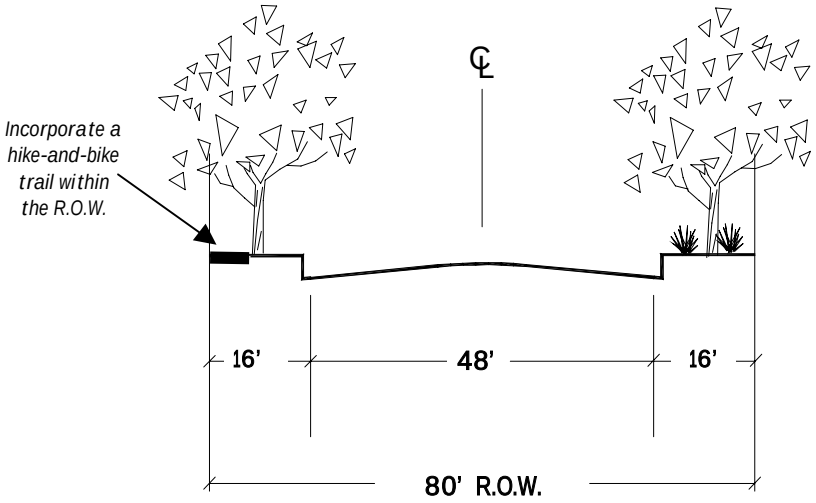


Illustration 4-5
TYPE C: MAJOR COLLECTOR

TYPE "D" MINOR COLLECTOR

Type "D" minor collector streets are low- to moderate- volume facilities whose primary purpose is to collect traffic from residential streets and to transport it to the nearest principal or secondary arterial. The Type "D" street standard generally provides for two moving lanes of traffic and incidental on-street parking on 36 to 40 feet of pavement, with 60 feet of right-of-way. In general, minor collector streets should be shorter than one mile in length, and are expected to collect moderate volumes (less than 10,000 vehicles per day) of traffic from the internal neighborhood and convey it to a principal or secondary arterial on the neighborhood periphery. Uplands Ridge Boulevard (in the Uplands development) and Great Divide Drive (in the Homestead development) are examples of minor collectors.

As with the Type "C" collector, the Type "D" collector street may also be used as a "local" street within nonresidential areas. Where heavy turning movements can be expected at intersections with principal or secondary arterials, the right-of-way width could be flared at intersections (and then transitioned back down to the normal width) to provide for a short length of greater pavement width to accommodate higher traffic volumes and/or larger vehicles through the intersection. **Illustration 4-6** shows the cross-section for Type "D" minor collector streets.

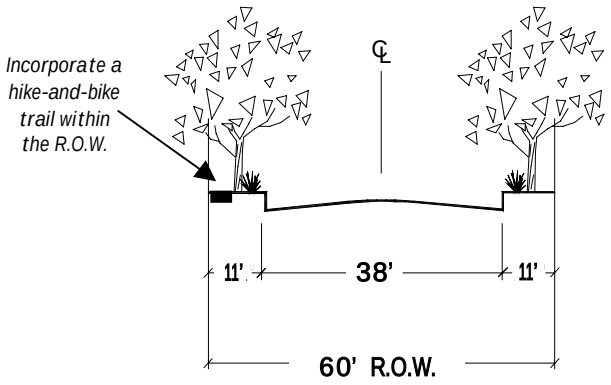


Illustration 4-6
TYPE D: MINOR COLLECTOR

TYPE "E" LOCAL/RESIDENTIAL STREET

The internal streets within a neighborhood which provide access to residential lots and building sites should be arranged to discourage most through traffic, except that which is directly related to the area. The alignment of residential streets should be either of a curvilinear, discontinuous, looped, cul-de-sac or court configuration. Because only limited traffic is attracted to residential streets, they may have more narrow rights-of-way and pavement widths than other types of streets. The usual minimum paving width of a residential street is 30 feet, and the right-of-way requirements are usually a minimum of 50 feet of right-of-way. Residential streets are usually designed to accommodate up to 500 vehicles per day.

Streets no smaller than 22 feet in paving width may be approved by the Village in areas that utilize special residential design concepts that put specific emphasis on environmental integrity. This width should not be approved unless it contributes to the clustering technique, or to sound planning concepts such as Traditional Neighborhood Design and New Urbanism (these concepts are described in further detail within the Environmental Quality and Community Image element), and must be based on sound traffic engineering analysis (i.e., traffic impact analysis).

TYPE "F" RURAL STREET

The Village should consider a rural street standard cross section for large-lot residential areas. The following standards should be followed to determine if rural streets are appropriate:

- Minimum lot size of 30,000 square feet;
- Runoff coefficients of 5 cubic feet per second or less;
- Proper swale design; and,
- No curb-and-gutter.

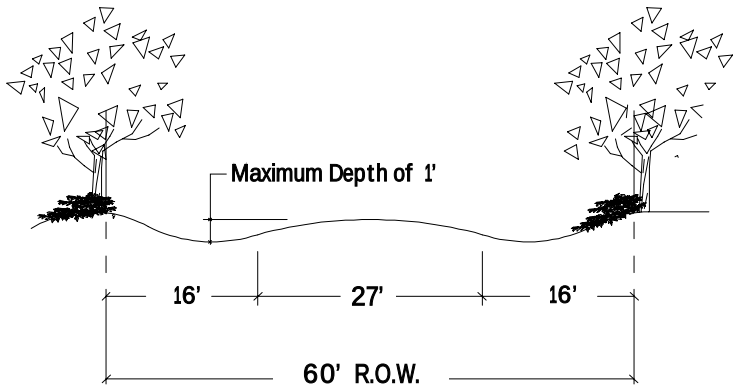


Illustration 4-7
TYPE F: RURAL STREET

Other Transportation Elements

Roadways should be designated to include extra pavement and/or right-of-way width to accommodate bicycle lanes/routes/walkways. The Village of Bee Cave has several natural drainage and creek areas that could be used for an off-street trail system, but it will likely be necessary to utilize roadway rights-of-way in many locations in order to create a trail system that connects various areas of the community. In many areas, the use of street pavement and/or right-of-way for bicycle transportation purposes will be possible in the future if the roadways are properly sized and designed. For collectors or arterials that are designated as part of the bicycle route system, extra right-of-way may be required to accommodate bike lanes. These types of amenities will be further discussed in the *Parks and Open Space* element of the Comprehensive Plan.

Illustration 4-8:
TYPE A: EXCLUSIVE BIKEWAY

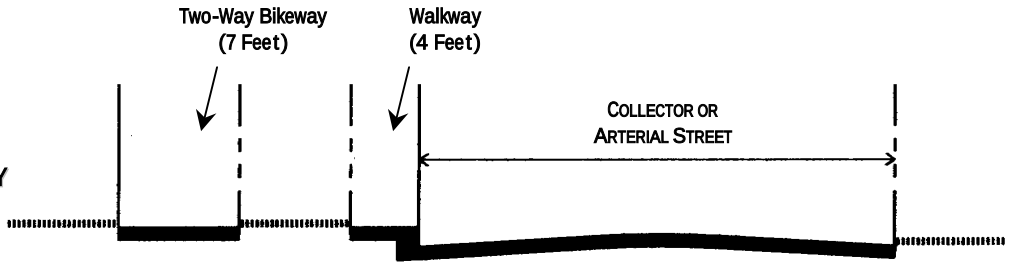


Illustration 4-9:
TYPE B: SIDEWALK BIKEWAY
(Separated by curb & grade change)

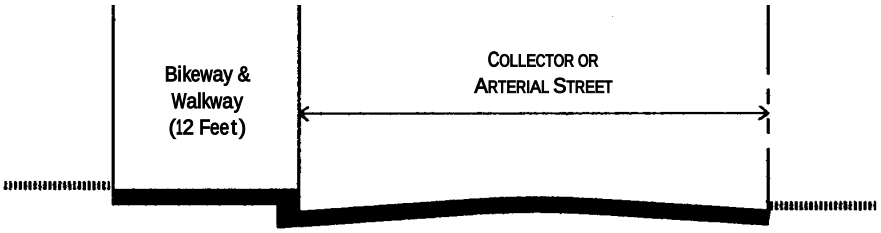
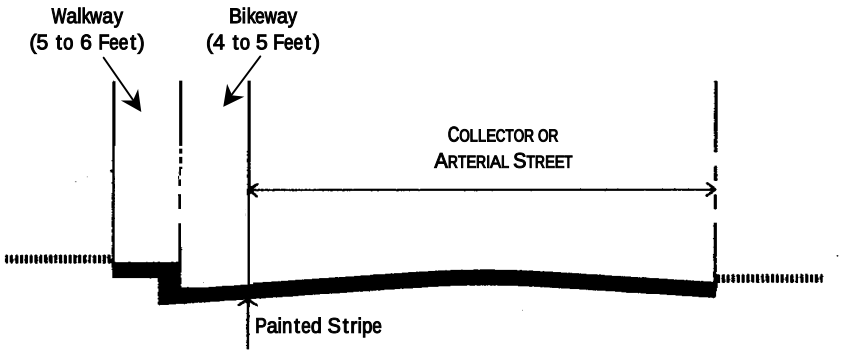


Illustration 4-10:
TYPE C: BIKELANE
(On same grade as roadway)



LEVEL OF SERVICE AND TRAFFIC CAPACITY

Capacity is the measure of a street's ability to accommodate the traffic volume along the street. *Level of service* (LOS) is a phrase representative of several factors, including speed, travel time, traffic interruptions, and operating costs of a traffic facility (roadway), used to measure the quality of the facility. In addition, a roadway link refers to a specific length of a roadway, usually between two intersections. Levels of service "A" through "F", from best scenario to worst scenario, are defined on the following table.

Table 4-2
DEFINITION OF LEVEL OF SERVICE FOR ROADWAY LINKS

LEVEL OF SERVICE (LOS)	DESCRIPTION	EXAMPLE
A and B	Light, free-flowing traffic volumes. Virtually no delays with smooth progression of traffic, and speed is generally unaffected by other vehicles. Slight decline in the freedom to maneuver from A to B.	Residential or rural streets.
C	Basically satisfactory to good progression of traffic, but at that point where individual drivers become affected by interactions with other vehicles. Light congestion, and speed is affected by the presence of other vehicles.	Urban thoroughfares at off-peak hours
D	High density, but stable, traffic flow. Speed and freedom to maneuver are restricted. Small increases in traffic flow will cause significant operational problems. This LOS is generally used to justify thoroughfare improvements.	Secondary CBD streets at peak hours).
E	Operating conditions at or near capacity level. All speeds are reduced to low, but remain relatively uniform, meaning generally not stop-and-go. Operations at this level are usually unstable, because small increases will cause severe speed reductions.	Primary CBD streets at peak hours
F	Forced flow. Heavy congestion. Total breakdown with stop-and-go operation. Queues (i.e., vehicle stacking) at intersections on these lengths may exceed 100 vehicles.	Downtown areas usually in larger cities at the A.M. or P.M. peak hours.

Level of service "C" is generally the recommended minimum level of service in most communities, and is also the recommended level for roadway design purposes. With the exception of roadway intersections on State Highway 71 (i.e., Bee Cave Road and R.M. 620) that are congested during peak time periods, most other thoroughfares within the Village of Bee Cave presently fall within the level of service category of "C". In deciding an acceptable level of service, safety should also be included as an important design consideration.

THE THOROUGHFARE PLAN

A number of elements must be considered in the process of developing a Thoroughfare Plan, including the Future Land Use Plan, regional travel demands, traffic movement and access requirements, and existing physical constraints to roadway construction (e.g., major topographical features, floodplains, slope constraints, etc.). The types of land uses that are existing and planned for an area affect the roadway capacity and access needs for that area. Moreover, special efforts will be required in the thoroughfare planning process to ensure that the integrity of residential neighborhoods is protected from unwanted and undesired vehicular traffic.

Balancing the movement and access functions of the thoroughfare system is another consideration in the planning process. Roadways serve two competing functions: the movement of traffic and access to individual properties; these functions are graphically described in **Illustration 4-1**. Inherent conflict exists where ingress and egress maneuvers from individual properties impede the efficient movement of traffic on major roadways, and where high traffic volumes impede turning movements into and out of private driveways. Controlling access so that these two competing functions occur on separate sections of the thoroughfare system is a primary objective of the planning process.

The primary purpose of the Thoroughfare Plan is to provide a long-range plan to assist in thoroughfare facility planning and the dedication of needed rights-of-way to implement such a plan. Due to the fact that the major roadways that traverse the Village have basically established the thoroughfare system, the majority of the recommendations

made are intended to promote and protect the integrity of local transportation needs. The recommended Thoroughfare Plan is shown on **Plate 4-1,** for both the Village of Bee Cave and its ETJ. One of the benefits of the Thoroughfare Plan is the identification of areas of need, upon which resources can be concentrated for additional roadways or expansions of existing roadways, therefore ensuring that these monies are spent efficiently. The Thoroughfare Plan is designed to identify the proposed location of collector and arterial streets with the intent to facilitate movement and serve higher volumes of traffic that will occur with future development.

Thoroughfare Planning Issues

The following five broad issues have been considered in developing policies for the Village's Thoroughfare Plan:

(1) Maintaining an adequate, appropriate and efficient roadway network.

Increased regional population, as well as increased single-person trips, will increase traffic on existing roadways, especially as growth continues in the areas surrounding the Village of Bee Cave, throughout Travis County, and along the major thoroughfares. A carefully planned network of streets with access standards can help maintain adequate circulation without sacrificing the community's development potential. The roadway network should include a hierarchy of streets, with each class of street being designed to serve an appropriate function. Standards for each class of street must balance the volume and speed of traffic, public safety, roadway construction and maintenance costs, as well as impacts upon adjacent development. The challenge to provide adequate transportation improvements will continue with increased development.

Insert Plate 4-1 –Thoroughfare Plan

(2)Coordinating roadways and adjacent development.

Land use and thoroughfare planning are closely linked. Just as inappropriate land uses can dramatically reduce the effectiveness of adjacent roadways, poorly planned roadways can reduce the viability of adjacent land uses. Transportation planning in the Village of Bee Cave has been impacted by zoning and development activity, by previously established roadways that now carry higher traffic volumes than they were originally designed to carry, as well as by changing traffic patterns. By coordinating land use and roadway decisions within Bee Cave and its ETJ area and with other communities in the vicinity, future compatibility problems between roads and adjacent land uses can be minimized. The Village should work closely with CAMPO, TxDOT and other agencies to solve regional transportation issues which affect Bee Cave.

(3)Cost-effective infrastructure investment.

Building and maintaining an efficient street network requires significant investment of local resources. Careful planning is needed to ensure that the most cost-effective investments in the street network are made for the community as a whole. Funding is usually based upon general obligation funds and impact fees. Other sources of funding should be considered in the future.

(4)Network for non-automotive (multi-modal) transportation.

America's heavy reliance upon automobiles has led many communities to forget about or ignore other alternative modes of transportation. Through appropriate design and planning, a low-cost system of trails and paths that encourage residents to travel by foot or bicycle can be developed throughout the community. Increased use of other modes of transportation would improve the health of local residents, and would have a positive impact upon the environment and community character. This will be further discussed within the *Parks and Open Space* element of the Comprehensive Plan.

(5)Local access within the Village of Bee Cave.

Regional access throughout the area has already been established by such roads as State Highway 71, R.M. 620, and F.M. 2244 (Bee Cave Road). Therefore, the challenge is to provide alternative access for local citizens, in order to allow the majority of the traffic generated along these roadways to be through-traffic.

Thoroughfare System Recommendations

The Village of Bee Cave will face two basic challenges in improving its overall traffic circulation system. First, the Village will need to upgrade existing streets while addressing right-of-way constraints and minimizing the disruption of existing residential neighborhoods. The second challenge will be the provision and protection of needed rights-of-way for roads, and the timing and construction of new roadways in developing areas. The majority of the proposed roadways are intended to facilitate future movement around and within the Village of Bee Cave. Therefore, several linkages between and extensions of existing roadways within Bee Cave are recommended. **Plate 4-1** shows the recommended Thoroughfare Plan for the Village of Bee Cave and its ETJ area. It will be extremely important for the Village to work with CAMPO and TxDOT to solve major transportation issues as growth in the area continues.

The area currently within the ETJ that is located north of State Highway 71 and west of R.M. 620 is likely to develop in the near future. Therefore several roadways are proposed that would allow residents or visitors to this area to bypass the major thoroughfares in favor of more localized routes. A major arterial is recommended, which is actually an extension of the existing Hamilton Pool Road that currently is able to serve traffic south of State Highway 71. The construction of such a connection would allow residents an alternative access to R.M. 620 from State Highway 71, and would allow them to avoid the intersection of State Highway 71 and R.M. 620. The other recommended thoroughfare is a minor arterial, is located south of State Highway 71, and is another area within Bee Cave's ETJ that is likely to develop in the near future. Again, this thoroughfare is intended to provide for alternative access for local citizens, allowing

them to avoid both the intersection between State Highway 71 and R.M. 620 and the intersection between State Highway 71 and F.M. 2244 (Bee Cave Road). Other recommended roadways that are shown on the Thoroughfare Plan consist primarily of collector streets and residential streets in the western portion of the Village of Bee Cave. Connections have been provided between these roadways and all major thoroughfares, with the exception of F.M. 2244 in the eastern portion of the Village.

In addition, an optional "bypass" has been shown adjacent to the nature preserve between R.M. 620 and Bee Cave Road. Until a more detailed engineering analysis can be conducted to determine the need for such a bypass, the Village should retain the option to establish this road.

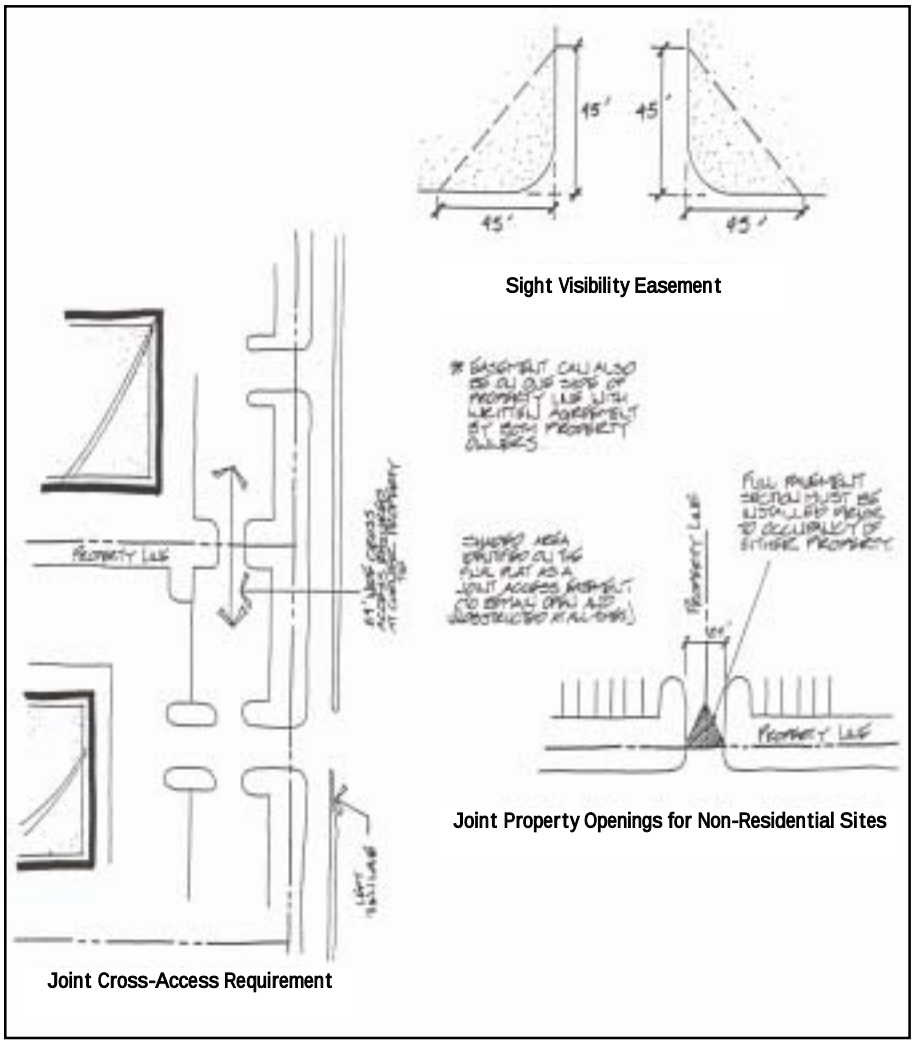


Illustration 4-11

DRIVEWAY OPENINGS

Access Standards

In order to protect the integrity of the existing major thoroughfares in Bee Cave, access design standards should be developed and (often approved by TxDOT) adopted in a separate thoroughfare standard ordinance. **Illustrations 4-11**, **4-12**, and **4-13** on the following pages are graphic representations of basic guidelines that should be included in such an ordinance. Others should be added as deemed appropriate using current transportation engineering practices.

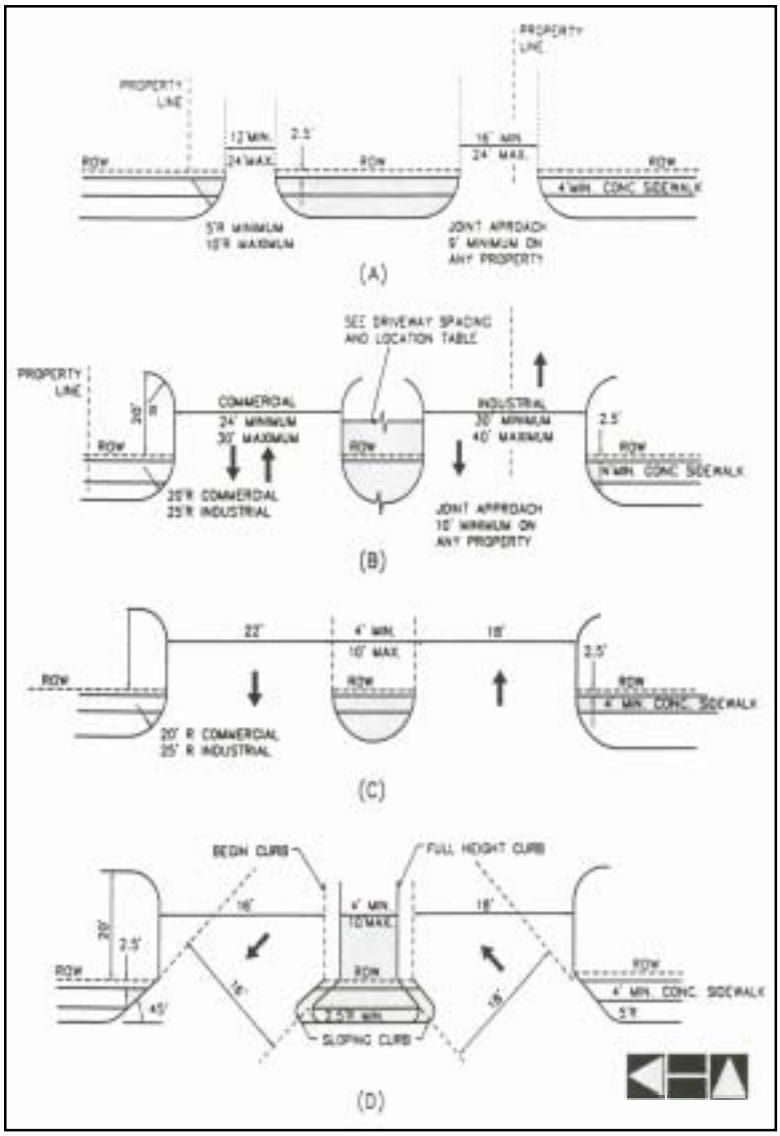
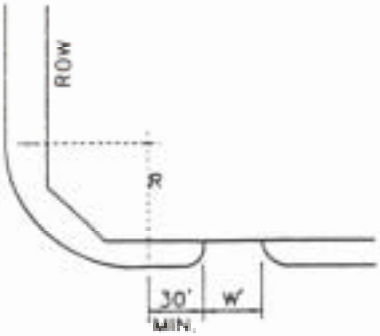
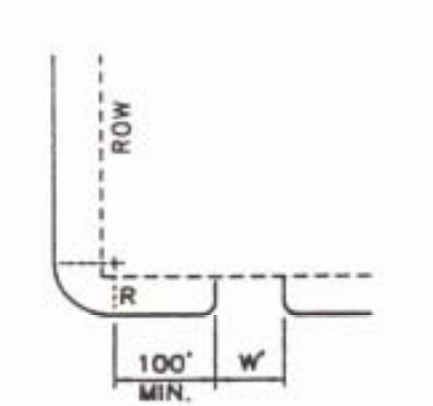


Illustration 4-12

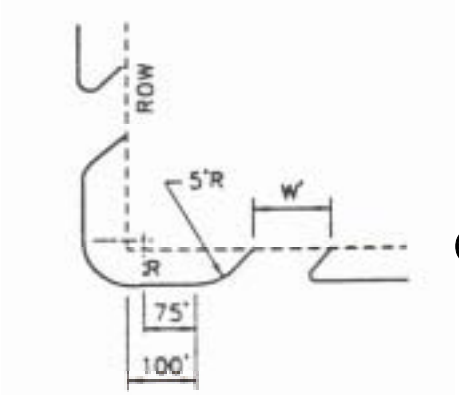
WIDTHS, RADII AND SPACING OF DRIVEWAYS



(A) 90° Drive Intersecting a Residential or Secondary Street



(B) 90° Drive Intersecting a Major Street



(C) Angle Drive

Illustration 4-13

DRIVEWAY CONFIGURATIONS

Relationship Between Thoroughfares and Neighborhoods

The importance of the major thoroughfare system is providing the skeletal framework within which logical residential neighborhood areas can be developed, as has been previously mentioned. A "neighborhood" usually results from the assembly of a series of subdivisions into a logical, functional unit. The major thoroughfares shown on **Plate 4-1** have primarily been designed to allow for the formulation of residential areas.

A neighborhood park, and other neighborhood amenities such as swimming pools, are generally located near the center of the neighborhood area, and should be made accessible from all parts of the neighborhood by a system of collector streets. The internal neighborhood streets should be arranged to be discontinuous and curvilinear, and thereby discourage through traffic movements, while providing alternative choices, such as TND. Guidelines should be developed which require a minimum percentage of residential streets within a new residential subdivision to be curvilinear in form. In addition, pedestrian linkages to such amenities should be provided, in order to decrease the amount of traffic within residential areas.

When retail/service uses (e.g., a neighborhood-serving shopping center) adjacent to neighborhood areas are appropriate, such retail/service uses should be located at the edge of the neighborhood, preferably at the intersection of major thoroughfares. Likewise, churches, when an integral part of the neighborhood, should be located on major thoroughfares or near the intersection of major thoroughfares. Both the shopping center and the church will serve a larger area than the immediate neighborhood, and both involve periods of heavy traffic and parking concentrations that, unless properly handled, can adversely affect the adjacent residential areas.

The basic major thoroughfare system shown on **Plate 4-1** should be considered as the structuring framework for future neighborhoods and as the framework for any redevelopment and rehabilitation of existing areas within the Village of Bee Cave, as well as within the neighborhoods located within the Village's ETJ.

The preponderance of vehicular traffic movement within the community should be concentrated upon the major arterial roadway system and, to a lesser extent, on major collector streets, while the internal (i.e., local/residential) street system should have only very light vehicular traffic when it is related to local access of property and homes. Through careful preplanning of neighborhood areas and with developer cooperation, it will be possible to achieve the basic major and secondary thoroughfare system arrangement recommended by the Thoroughfare Plan for the community as a whole. The roadway system should be designed to provide a choice of alternative routes for area residents to the furthest extent possible.

To achieve the thoroughfare system envisioned by the Plan, it will require the cooperation of all levels of government responsible for highway and thoroughfare development as well as that of private developers. The significant thoroughfare facilities provided in and near the Village of Bee Cave have resulted mainly by the combined efforts of County, State and Federal agencies. Continued local efforts will be necessary to finance future thoroughfare development and, in some cases, require widening of rights-of-way at the time of subdivision platting and development. State laws (i.e., Chapter 395 of the Texas Local Government Code) now affect developer participation for off-site facilities such as roadways, and Bee Cave should seriously consider re-evaluating roadway construction participation policies in the near future in areas which are primarily vacant.

Transportation Planning Policies

The following sections describe the recommended policies to guide the Village of Bee Cave's transportation planning efforts:

(1) **Plate 4-1** shows the proposed major Thoroughfare Plan for both the Village of Bee Cave and its ETJ area. The Plan shows the location of existing or planned roadways other than local streets. The Village should use this Plan to determine the classification of planned roadway segments. Additional collector streets may be needed to serve traffic within new developments. The alignment and capacity of these streets should be determined as part of any action on a preliminary plat, final plat, site plan or zoning case, and they should also be based upon the Thoroughfare Plan. Construction standards and design guidelines enforced in the area, as well as the subdivision regulations of Bee Cave, provide detailed standards for roadway design and construction. Any plat, site plan or zoning change request not in conformance with the Thoroughfare Plan should not be approved unless an acceptable alternative is developed and approved.

(2) General planning guidelines for roadways within the Village of Bee Cave, and throughout the area, including the function of each type and key design characteristics, are included in illustrations in this Thoroughfare Plan. The Village should use these illustrations in conjunction with design guidelines established within the Community Image element of the Comprehensive Plan, and with detailed specifications found in the Subdivision Ordinances to determine the appropriate design standards for planned roadway improvements.

(3) The Village should seek to maintain a minimum level of service (LOS) standard of "C", as described in **Table 4-1**, on its roadways. This standard should be used in reviewing the transportation needs of development proposals. In addition, TxDOT should be involved if the Level of Service on State Highway 71 is less than "Level C".

(4) The Village should prioritize, phase and schedule transportation system improvements in accordance with the Comprehensive Plan and the ability of the community to fund such improvements.

(5) On-site local and collector streets that are constructed by developers must be in accordance with the Village of Bee Cave's regulations. Bee Cave may also require construction of off-site streets or street improvements needed to provide adequate access to the development. This policy should be implemented through specific provisions of the Subdivision and Zoning Ordinances.

(6) The Village of Bee Cave should coordinate with TxDOT and other local jurisdictions, such as surrounding communities and Travis County, when planning transportation improvements.

(7) Streets should be designed in a comprehensive fashion considering street trees, ADA-accessible pedestrian walkways and bike lanes, signage, lighting and air quality whenever any of those factors are applicable. Citizen involvement in major street-widening projects should be sought.

(8) Retail and other nonresidential uses that generate high volumes of traffic should be limited to locations where major arterial roadways provide sufficient access for non-local/regional traffic.

(9) Except as specifically approved by the Village, all development should provide adequate on-site parking for normal operations. Exceptions to this condition can be made for specific areas, especially environmentally sensitive areas. Shared parking areas for non-residential land uses are encouraged in order to reduce the amount of impervious surface within the Village. This policy should be implemented through specific provisions in the Village's Subdivision and Zoning Ordinances.

(10) A bicycle and pedestrian system should be established on an area-wide basis, with involvement from the Village of Bee Cave, as well as private developers, thereby promoting alternative means of travel within the area by non-motorized modes where possible.

Thoroughfare Implementation

The existing thoroughfare system within the Village of Bee Cave has been established by three primary entities: (1) County or State participation; (2) local construction of facilities; and (3) developer participation. Due to changes in State law (Impact Fees, Chapter 395 of the Texas Local Government Code), the Village will still be able to require assistance from developers in building thoroughfares (as well as water and wastewater facilities), but will require different administrative techniques.

Monies for capital improvements in communities across Texas are generally becoming more difficult to secure each year. It is necessary, therefore, for Bee Cave to carefully manage its available funding resources in the implementation of not only the thoroughfare system, but other public facility systems as well.

The proper administration of the Thoroughfare Plan will require the following actions:

- ***Coordination of Capital Improvements***

  Many of the major thoroughfares that are improved in the Village of Bee Cave, as well as its ETJ area, will involve cooperation with TxDOT, Travis County and, in some cases, will involve some financial participation by the Village itself. Bee Cave will likely have to assume the responsibility for constructing a reasonable portion of its thoroughfare system for its residents as it expands its physical boundaries. The responsibility of accommodating regional traffic should be primarily lie with TxDot, with input and help from the Village. It must be recognized that the thoroughfare system will be built at an increment-at-a-time basis over an extended period, perhaps 20 or 30 years. **It should be of prime importance for the Village to work with CAMPO and TxDOT on major improvement projects.**

- ***Subdivision Control***

  The subdivision of land into building sites represents the first step in the development of urban land uses and the creation of traffic generators. Reasonable land (i.e., right-of-way) must be set aside at the time of subdivision platting so that adequate thoroughfares can be created without adversely affecting the value, stability, and long-range character of the area being developed. ***Specifically, right-of-way must be dedicated in accordance with the Thoroughfare Plan as each plat is approved.*** Right-of-way protection and reservation within the Village's ETJ is particularly significant.

- ***Zoning and Land Use Control***

  The adequacy of existing and planned thoroughfares must be taken into consideration in all changes of zoning and land use. When such changes occur, the space allocated for street use (i.e., right-of-way) should be provided commensurate with the overall use contemplated within the area.

- ***Building Lines***

  Where widening of an existing thoroughfare right-of-way is contemplated, buildings should be set back to allow for the planned widening to ensure that the uses function properly with the new thoroughfare after the proposed improvement is made. In some cases, it will be desirable to establish building lines by ordinance to help ensure the orderly and uniform development of thoroughfare frontage.

- ***Other Considerations***

  Certain aspects of the Plan, such as access controls along major arterials, should be implemented through other design and technical standards that may or may not be included in the Village's respective Zoning or Subdivision Ordinances. Examples of other standards that need to be implemented are sight and visibility standards and joint (i.e., shared) access standards. Impact fees should also be established under separate process.

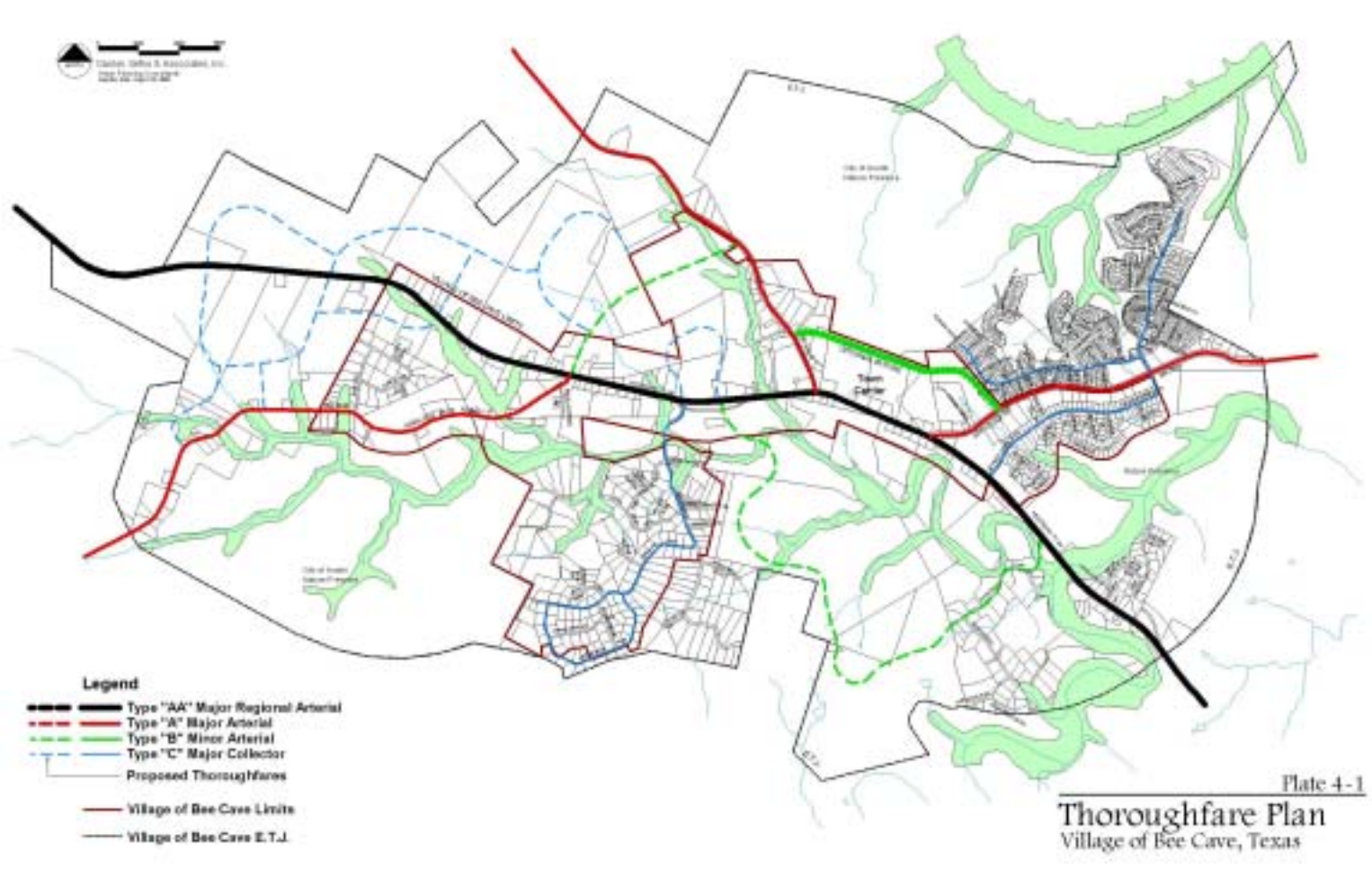


Plate 4-1

Thoroughfare Plan

Village of Bee Cave, Texas

P A R K S
A N D
O P E N S P A C E P L A N

Section Five

Comprehensive Plan 2000

INTRODUCTION

A vital component of any community is the space devoted to satisfying active and passive recreational needs – the need to relax and play. The quantity and type of park facilities and open space areas should be a direct reflection of the quality of life enjoyed by residents. The purpose of this element of the Comprehensive Plan is to examine and analyze existing recreational opportunities within the Village of Bee Cave, and to provide a master plan for the open space system that is consistent with present and future community needs.

The Comprehensive Plan Steering Committee was charged with the responsibility of assisting in the drafting of the Comprehensive Plan, and of adopting goals and objectives for the parks/open space system (see Goals 3, 8, 14, and 17, and corresponding objectives, in the Goals & Objectives element). A preliminary set of goals and objectives were drafted, reviewed and accepted by the Steering Committee, and these goals and objectives should, therefore, represent an accurate cross-sectional opinion from the community regarding recreational opportunities and the future open space system.

EXISTING PARK AND OPEN SPACE AREAS

A small amount of active park space (less than 15 acres) currently exists within the Village, but it also currently has a small population (estimated at 551 people within the Village limits). The major facility is the athletic fields/park area of approximately 15 acres that is operated by the local youth association, located on the southern side of State Highway 71 between Hamilton Pool Road and the Village Municipal Hall. The other park space in the Village was created by land developers and is a small, private neighborhood park, and is maintained by a homeowners association. The park is located in the ETJ area of the Village in the Lake Pointe development off of F.M. 2244, or Bee Cave Road.

PRESERVATION AREAS

The Village of Bee Cave currently has very little land within the Village limits designated as "preservation area". However, the Village ETJ has a large amount of acreage with this designation, approximately 2,655 acres, which is 29 percent of the total acreage within the Village and the ETJ. The primary reason for this large percentage is the fact that the city of Austin and the Nature Conservancy have bought a significant portion of the land that surrounds the Village and have designated this land as preserve land – land that will never be developed, but is not generally accessible to the public. These areas have never been developed and still exist in a highly vegetated, natural state. Due to the fact that this land is not available to residents or visitors to the area, it cannot be classified as usable "open space". Therefore, the Village may need to consider the acquisition of additional land to be designated as "local preserve" or other passive use to which residents are permitted access.

PARK TYPES AND RECOMMENDED STANDARDS

Most municipal park systems have a hierarchy of park areas that defines the various types of activities that are to be furnished by each type of park in the system. When a functional classification system is used, parks can be broadly identified by their type, size and service area. Application of this process and approach to drafting and formulating the Parks and Open Space Plan results in parks placed within the appropriate areas of the community, as well as maximizing their cost of improvement. The following describes a commonly used classification system that follows guidelines similar to those set forth by the National Recreation and Park Association (NRPA).

Each park type is discussed below in order to: (1) identify the function of the park; (2) identify recreational activities associated with each park; and (3) define the general service area and the physical relationship of each park to the population residing within its service area.

Mini-Park

A mini-park is a small area used as a children's playground or for use as a passive or aesthetic area by citizens.

- Mini-parks are designed to serve a very small population area. Appropriate size standards range from 0.25 to 0.3 acre per one thousand persons. These parks normally serve a population base of 500 to 1,000 persons, and they generally range in size from 0.125 to 0.25 acres per park.
- If used, the primary function should be to provide recreational space for preschool-age children and elementary school-age children near their residences.
- Where substantial development of high-density housing is proposed, it is appropriate that the mini-parks be provided as an integral part of the residential development.
- Because of maintenance costs that are required to maintain a mini-park, the future development of any park of this type should be private in nature, if possible, as they are generally not feasible for cities to own.

Neighborhood Park

The neighborhood park, sometimes referred to as a playground, is considered to be one of the most important features of a park system, and is often considered to be one of the major cohesive elements in neighborhood design. Its primary function is the provision of recreational space for the entire neighborhood that surrounds it.

- When it is possible to combine an elementary school with this type of park, the two features further enhance the identity of the neighborhood by providing a central location for recreation and education, and by providing a significant open space feature within the neighborhood.
- A neighborhood park should be located near the center of the neighborhood, and should have a service area of approximately one-half mile to three-fourths mile.
- Safe and convenient pedestrian access (walkways or hike-and-bike trails) is important to a neighborhood park location.

- Generally, the location should not be adjacent to a heavily traveled major thoroughfare.
- Facilities normally provided at a neighborhood park consist of:
  - Playground equipment for small children;
  - A multiple-purpose, surfaced play area;
  - An athletic area (non-lighted) for games such as baseball, football and soccer, and a surfaced area for such sports as volleyball, basketball and similar activities;
  - Pavilions for picnics with tables and grills are desirable, as well as restrooms and drinking fountains;
  - Tennis courts for casual play are considered a desirable feature of a neighborhood park;
  - A passive area is a desirable part of the playground facility and should include landscaping, trees and any natural areas; and,
  - It is not desirable to light larger athletic facilities due to the fact that lighting is often objectionable to nearby residents.
- Neighborhood parks are designed to serve a small population area. These parks ideally range in size from five to 10 acres.

Community Park

A community park, sometimes referred to as a play field, is usually a larger area than a neighborhood park, and is oriented primarily to have active recreational facilities for all ages.

- A community park serves several neighborhood areas; therefore, it should be conveniently accessible by automobile, and it should include provisions for off-street parking.
- Activities provided may include:
  - Practice fields for baseball, football and soccer;
  - A community building;
  - Tennis courts;
  - A surfaced multiple purpose play area;
  - Some play apparatus;

  - A passive area for picnicking; and,
  - Other special facilities, such as frisbee and golf, if space is available.
- The service radius of a play field is one-half to two miles, and a location adjacent to, or as an integral part of, a junior high or high school is considered desirable.
- Community parks are designed to serve a medium local population area. They generally range in size from 10 acres to 60 acres.

Large/Regional Parks

Areas that are 60 to 100 (or more) acres in size, which provide both passive and active recreational facilities as listed under community parks, are usually classified as large parks (sometimes called athletic fields). It is desirable that a balance of active and passive recreational facilities be provided in a large park. Such facilities may include picnicking, fishing, water areas, camping and hiking and natural areas. Dependent upon location, need, and possibly topography, some community park features may be placed in the large park. These parks are often lighted and have multi-purpose functions

Special Park Areas

Golf courses, historic areas or sites, linear parks/greenbelts, country clubs, zoos, botanical gardens and special athletic and community centers, including civic centers, are considered to be special types of recreational facilities. These park areas can be of any size, and standards for this type of facility are variable and dependent upon the extent of services provided by the special facility.

Parkways and Ornamental Areas

Plazas, street medians, scenic drives and grounds of public buildings and similar facilities are important aspects of the overall park system and should receive careful attention for their development and maintenance.

Reservations, Preserves & State Parks

The use of the automobile has made reservations and preserves increasingly important to urban communities. Large recreational areas on reservoirs which provide camping, picnicking, hiking, boating, fishing and similar activities are often supported in state parks. Areas that are provided in the region for the purpose of protecting wildlife and open space are classified as reservations and preserves.

Open Space

These areas are natural and are generally left undisturbed, but are not necessarily characterized as preserves. No active uses are usually accommodated in these areas.

NEEDS ASSESSMENT

The recreational facilities the cities offer its residents should generally be in accordance with the current needs of the Village of Bee Cave, as well as with the anticipated or expected of needs that may arise in the future. Anticipated needs can be forecasted based on sound standards and development guidelines that are related to the population to be served. Expectation of needs is usually determined through the analysis of material and data furnished by persons actively engaged in some type of recreational activity. When both are considered and set forth in a logical plan and program for implementation, a sound Parks and Open Space Master Plan for active and passive uses can evolve within the community.

This section of the study sets forth the needs assessment for determining future facilities. This assessment and evaluation utilizes two approaches for determining park and recreation needs: (1) demand-based and (2) standard-based.

Demand-Based

This approach, used to assist in assessing future needs, relies on information and data from citizens and user group sources, or other sources familiar with the wants for certain types of facilities. The method used to attain input for this phase of the needs assessment is to consider requests from citizens and user groups, separated by respective activities.

Based on the input gained from a public workshop during which parks were discussed, the following needs were expressed by citizens of the Village of Bee Cave.

- A hiking-and-biking trail system, with opportunities for equestrian activities, linking residential areas to other areas throughout the Village, including the proposed Town Center;
- Local open space for passive recreation located in areas within the Village where residents and visitors would be able to enjoy scenic views and picnicking; and
- Neighborhood Parks.

Standard-Based

This approach is used to assist in assessing future recreational needs by following established, recognized standards for assessing the quantity of park land needed, as well as the number of facilities needed, in order to meet the needs of a given population.

PARK AREA STANDARD

The types of parks previously discussed identified various park and open space areas that may be applicable to the Village of Bee Cave's future park and trail system. Recommended standards are summarized in **Table 5-1**, and are compared to the existing available park and open space areas currently within the Village and its ETJ.

Table 5-1

PARK AREA STANDARDS[1]

Village of Bee Cave and the ETJ Area

Park Type	Recommended Standard	Current Acreage[2]	Acreage for 10,000 Persons	Acreage for 13,500 Persons
Neighborhood	0.25 acre	0.04 acres (total 1 acre)	25 acres	34 acres
Community	0.55 acre	0.64 acres (total 15 acres)	55 acres	75 acres
Perpetual Open Space	Variable	–	Variable	Variable
Area Per 100 Persons	**0.80 acres**	**0.68 acres**	**80 acres**	**110 acres**

Source: Dunkin, Sefko & Associates, Inc.

[1] Based on the National Recreation and Park Association (NRPA) Standards

[2] Based on the current estimated population of the Village and ETJ area, approximately 2,327 people.

PARKS AND OPEN SPACE CONCEPTS AND RECOMMENDATIONS

Few facilities and sites are provided within the Village of Bee Cave to meet the recreational needs of residents. The Parks and Open Space Plan (see **Plate 5-1**) does not reflect a system of urban-style parks. Instead, the Plan attempts to depict a network of hiking/biking/equestrian trails that would be more useful (and enjoyable) to residents in a semi-rural community. The following sections describe each component of the community's parks and open space system along with recommendations for the long-term use and development of each one. During the formulation of goals and objectives for the Comprehensive Plan, many members of the Steering Committee and local citizens expressed the opinion that the Village should develop a pedestrian-oriented system in order to reduce dependence on the automobile within the Village. In furthering this objective, it is necessary to establish a conceptual plan to consider where and how this can be integrated into future development decisions. The principle elements and recommendations shown on the attached Parks and Open Space Draft Plan (**Plate 5-1**) are the following:

• Additional Neighborhood Parks

ILLUSTRATION 5-1

Example of a Neighborhood Park

As aforementioned, the Village of Bee Cave currently has one park of this type. As **Table 5-1** shows, however, the Village only has 0.18 acres per 100 persons, and this is below the accepted ratio of 0.25 acres per 100 persons. More parks of this type are needed in Bee Cave. It is important for residents of the Village to be able to easily walk to a park space. Locating small parks intermittently throughout residential areas will help to ensure their accessibility. Recommended locations are shown in a generalized way on **Plate 5-1**.

Insert Plate 5-1: Parks and Open Space Plan

View Parks

ILLUSTRATION 5-2:
View of the Village of Bee Cave and the Colorado River

The concept of this park is to provide the residents of and visitors to the Village of Bee Cave with access to the scenic Hill Country views in and around the Village. In addition, the preserve areas that are located within the Village's ETJ are not accessible to the public, however, the natural views that these areas provide should be. By establishing view parks at various high points throughout Bee Cave, such views will be able to be enjoyed by everyone, and not reserved for enjoyment by a single landowner or by residents of a single neighborhood. In addition, the establishment of these parks at the high points would protect ridgelines from intense development that would harm the integrity of these areas. Several parks of this type are shown in recommended locations on **Plate 5-1**, primarily in the western portions of the Village and the ETJ.

Linkages Throughout the Village

Due to the fact that large areas of the Village are not yet developed, opportunities exist to create an integrated, continuous "necklace" of trails and pathways throughout the community. Developing a trail system in Bee Cave is likely the best way to allow residents multi-modal access to the various areas throughout the Village. Important areas to consider in terms

of locations to provide access to include old and new residential neighborhoods, park and open space areas, retail and office areas, the new Town Center, and the Village Municipal Hall. Hike-and-bike trails should be at least eight feet wide and should be composed of crushed stone (compacted to ensure ADA compliance) or similar material. Equestrian trails should be included wherever possible. In many cases, equestrian trails can parallel

ILLUSTRATION 5-3:

Example of a Natural Trail

(NOTE: Trails within the Village of Bee Cave will be of compacted crushed gravel material)

hike-and-bike trails.

The ideal location for these trails would be running alongside the preserve areas that surround Bee Cave. This would allow residents and visitors to enjoy these areas without directly impacting them. In addition, such a trail system would give people a chance to experience the significant environmental features of the Village, including Little Barton Creek, Barton, Creek and the Colorado River (in the ETJ). However, there are several places, particularly along Little Barton Creek in certain areas of Bee Cave, which have already been developed, are privately owned, and therefore may not be available for the incorporation of a trail system. The Village should attempt to overcome this limitation by using other areas for the trail system, such as street rights-of-way, and by working closely with landowners and business owners in order to eventually create an integrated, if not continuous, trail throughout Bee Cave. Participation in the hike-and-bike trail system will not be mandatory in areas already developed.

Due to the fact that the Village is located at the confluence of several high-traffic thoroughfares, the construction of a usable, safe trail system that would not only provide an alternative to the automobile, but would also provide pedestrian access to either side of State Highway 71, is a challenge. Pedestrian access across State Highway 71 will require either an over pass or preferably an underpass, in the form of a raised bridge or a pedestrian tunnel.

The Village of Bee Cave may be able to acquire funding for this expensive venture through requirements such as impact fees and dedication programs. In addition, due to the fact that State Highway 71 is a state-supported thoroughfare, the Texas Department of Transportation will have to be involved in such a venture. However, regardless of the challenges, the implementation of a trail system is a significant quality-of-life issue, and therefore it is an objective that should be pursued in the Village of Bee Cave.

PARKS AND OPEN SPACE PLAN IMPLEMENTATION

The community's approach to implementing the Parks and Open Space Plan should be to develop a strategy for securing some funding from the annual budget, starting a mandatory park/open space dedication program for new development, and making applications for any applicable grants (such as from the Texas Parks & Wildlife Department) after the completion of the Parks and Open Space Plan. In addition, a Capital improvement Program could be established specifically for the purpose of developing a park and trail system.

A Capital Improvement Program (CIP) identifies projects, establishes their cost, prioritizes each project by need and year for completion, and identifies the sources of funding. This approach is designed to allow annual review and a reassessment of projects to determine if rescheduling is required because of need or possibly funding. The program does make a statement of intent to accomplish improvements in an orderly manner as funds are foreseen to be available.

The Village of Bee Cave should also ensure that the Village's Subdivision Ordinance requires mandatory park and/or trail dedication by developers. The amount of parkland dedicated should be based on the number of housing units within the development, and should be required of all developers establishing new residential areas within either the Village Bee Cave. This would help the Village reach the recommended standards for the provision of neighborhood parks, and would contribute to the cost involved in the construction of parks and/or the trail system.

Establishing an integrated open space/greenbelt system within the Village will likely not occur overnight – rather it will probably take a long period of time and will require the cooperation of private developers. It is recommended that the Plan be reviewed annually (in conjunction with periodic Comprehensive Plan reviews or on its own) to ensure that its recommendations remain applicable for the community and appropriate in meeting residents' recreational and open space needs.

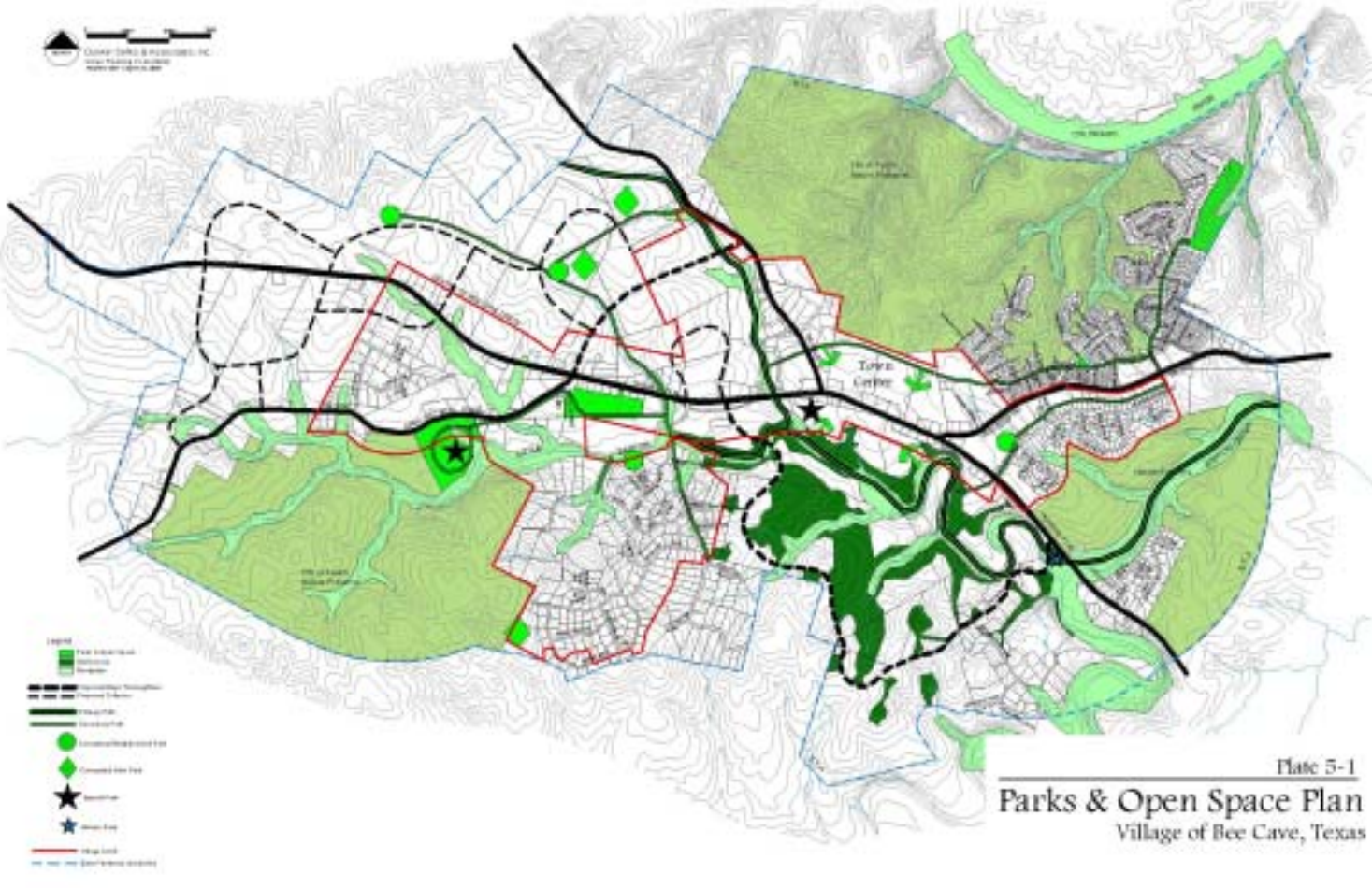


Plate 5-1

Parks & Open Space Plan

Village of Bee Cave, Texas

P U B L I C F A C I L I T I E S P L A N

Section Six

Comprehensive Plan 2000

INTRODUCTION

The Public Facilities element of the Comprehensive Plan addresses the expectations a community's residents have regarding certain public services and the facilities that are needed to provide these services. Public buildings that house the various governmental and service functions of a municipality are generally of two types:

(1) Those requiring a nearly central or common location and which serve the entire municipal area; and

(2) Those serving segments of the community on a service area basis.

The Village Municipal Hall is an example of a governmental building that serves the entire community, while a fire station represents a public building that has a service area relationship to the community.

The demands for public building space at all levels of government normally increase as the population served grows, and as the level of service expands. As a general rule, as communities grow in size, increased levels of service are generally required by its citizens. The Village now has 5 full-time municipal employees, with a current estimated population of 551. When the Village reaches a population of 10,000, approximately 60 employees and/or service providers, including independent contractors, may be required to accommodate the essential municipal functions, including fire, police and emergency services. The service level that exists today will likely need to be increased in the future. Generally, increases in the population lead to increases in the demand for higher levels of service. At the Village's ultimate capacity (refer to the Future Land Use Plan) of 13,500 people, the Village will likely need 120 employees and/or service providers in order to provide the same level of service. Additional office space will be needed to accommodate the additional employees and to replace or expand existing municipal facilities as the Village grows and continues to reach its ultimate capacity.

EXISTING PUBLIC BUILDINGS AND FACILITIES

It is appropriate to review the status of existing structures that the Village has allocated for the provision of serving citizens as a basis for determining the future changes and additions that will likely be required in the future. **Plate 6-1** shows the location of the Village Municipal Hall and the fire station within the Village of Bee Cave. The following sections are a general evaluation the existing buildings and facilities.

Village Municipal Hall

ILLUSTRATION 6-1

Existing Village Municipal Hall

The present building wherein the Village of Bee Cave's daily municipal business is addressed is located south of State Highway 71 just to the west of the intersection between State Highway 71 and R.M. 620. This facility contains all of the Village's administrative offices, including Village Administration and Building Inspection Services. In addition, the facility hosts all Board of Aldermen meetings, Planning and Zoning meetings, and all related meetings related to Village business. This building is approximately 5,200 square feet.

Volunteer Fire Department

The Village of Bee Cave has one central fire station, Hudson Bend Station 3, located next to the Village Municipal Hall. The Hudson Bend Volunteer Fire Department through a contract with the Village provides fire protection for the residents of Bee Cave. Currently, there are 6 full-time firepersons employed at Station 3, with 26 volunteers available to respond to any emergency situation in the Village of Bee Cave or the surrounding area.

Police Protection Services

The Village of Bee Cave currently has police protection that is provided by the Travis County Sheriff Department; Bee Cave has no police protection of its own.

Waste Disposal Services

The Village of Bee Cave currently has no provision for these types of services. Each individual neighborhood/subdivision provides these services independent of the Village.

Historical Sites[6-1]

The Village of Bee Cave has many historical areas. It is important for these sites to be documented and acknowledged in order to ensure their protection from any adverse affects from development in the future. Following is a description of these sites.

BOHLS CABINS

ILLUSTRATION 6-2

Bohls Cabins as They Exist Today in the Village of Bee Cave

The Bohls family was one of the first families to settle on the land that would become the Village of Bee Cave. Dietrich Bohls purchased forty acres at the confluence of Barton Creek and Little Barton Creek, and some of the original structures built in the mid-1800's still exist today. The original group of cabins consisted of a kitchen, sleeping quarters (one building), a double crib barn, and a granary. Later, a two-room cabin was built that served as the family home.

6-1 Information for this section was provided by the Village of Bee Cave and courtesy of Mrs. Judy Allen.

LALLIER STORE (THE OLD POST OFFICE)

Carl Beck built this store at the corner of what are now State Highway 71 and Hamilton Pool Road. This was done in 1873 in order to provide settlers with necessary supplies. The store also served as the local post office; needing a name for his post office, Mr. Beck thought about the bees in the banks of the creek behind his property, and of the bee hives (or caves) that the bees would build in the eves of local buildings. As a lark, he named the post office for the surrounding area he called "Bee Cave". Other business ventures conducted on this property included the operation of a cotton gin and the establishment of a cigar factory. Mr. Beck's daughter and son-in-law (Carl Lallier) later bought the store, renamed it for their own family, and continued to run it until the late 1940's.

BEE CAVE SCHOOLHOUSE

One of the first schools in the area was a rock schoolhouse built in 1882, and had only about 5 or 6 students at one time. This original rock schoolhouse still remains on Hamilton Pool Road. It was determined, however, that the area needed a more substantial building in order to provide education to local children. Mr. Fredrick Freitag donated a piece of property expressly for this purpose in 1880. In the 1890's, a small frame yellow-painted school was built at the intersection of what are now State Highway 71 and R.M. 620. This schoolhouse became known around the area as the "Yellow Schoolhouse". The first families that settled in the Bee Cave area, namely the Pechts, Lalliers, Longs, Bohls, and Heffingtons, sent their children to this school.

A new schoolhouse was constructed in 1926 on the same piece of property, facing a different direction. Classes continued to be held within this facility until the area schools were consolidated in with the Dripping Springs School District in 1947. The Bee Cave Association cared for the building until the 1970's, during which time it served various civic purposes, including a citizen center, community center, and polling location. It has been restored and is now under the care of the Western Historical Society.

BEE CAVE BAPTIST CHURCH

The Bee Cave Baptist Church was established in 1925, although services were held in the "Yellow Schoolhouse" until the permanent building was available for services on January 16, 1927. A new structure was built around the existing church in 1948, with the significant addition of a bell tower. In 1984, the church was remodeled, and the bell tower was replaced with the steeple that can be seen there now. The Bee Cave Baptist Church continues to have a strong presence within the Village of Bee Cave today.

FUTURE BUILDINGS AND PUBLIC FACILITIES

Most public buildings tend to be fairly long-term investments, and therefore, they should be initially scaled to meet the needs of the community, however, the need for future expansion of these facilities should be anticipated and therefore incorporated into their development. The following is an estimate of future public building and service facility needs projected for the future based upon the estimated potential population of the Village of Bee Cave.

Village Municipal Hall

Based upon the estimated ultimate capacity of 13,500 people, which could be reached by 2020 if growth continues (see the *Future Land Use* element), the Village of Bee Cave could eventually employ close to 90 employees (if the current ratio of employees to citizens continues), of which one-quarter could be located in the Village Municipal Hall. In addition, the existing Village Municipal Hall may need to be expanded as Bee Cave grows over the next 20 years. Based on the current ratio of square footage to population, the eventual square footage of such a facility would need to be approximately 12,000 square feet, or another 7,000 square feet added to the current facility.

Police Protection Services

As previously mentioned, currently police protection is provided by the Travis County Sheriff Department. However, an increase in population to the projected 10,000 people, as well as the fact that the Village could reach ultimate capacity within the next 20 to 30 years, would mean an increased need for local police protection either by expanding the contract with the County or creating the Village's own police force. With this growth, Bee Cave will likely need a local police department capable of enforcing Village rules and regulations within the Village itself. Therefore, the Village should consider constructing a separate police facility or expanding the existing Village Municipal Hall to provide a location for the provision of police services. The number of officers needed per 1,000 people often varies according to the characteristics of the community, but for planning purposes, approximately 1.5 officers per 1,000 persons is a reasonable standard. Therefore, the Village will need approximately 15 officers to accommodate 10,000 people, and 20 officers to accommodate 13,500 people.

Fire Protection Services

As with police protection, with continued growth within the Village, additional fire protection may become necessary. The area able to be served by one fire station is generally accepted to be a radius of approximately one-and-one-half miles from the fire station itself. Referring to **Plate 6-1**, areas of the Village's ETJ would benefit from the construction of another fire station along Hamilton Pool Road due to the fact that western portions of the Village ETJ area are out of the accepted range of service. Village officials should closely monitor the areas of development, and should work closely with the Hudson Bend Fire Department to establish any necessary additional facilities in locations that provide easy accessibility to residential land uses.

Municipal Barn Facility

If police protection and/or fire protection services are added to the existing services provided by the Village, it is likely that the Village will need a facility in order to support the provision of such services (i.e., storage of vehicles, roadway maintenance equipment). The Village will need to consider the cost of both buying property for and the construction of such a facility.

Waste Disposal Services

As the Village of Bee Cave grows in population, it will become increasingly important for the municipality to directly ensure the cleanliness of the Village. Due to the fact that the Village is relatively small in terms of geographical size, it may be uneconomical for the Village of Bee Cave to have its own sanitation department. Therefore, it is recommended that the Village of Bee Cave, in the future, execute a contract with a waste disposal company that could provide such services, including recycling, on a Village-wide basis.

Emergency Services

Currently, there are no emergency services available in the Village of Bee Cave or in the immediate vicinity. Emergency needs (i.e., car accident victims) often must be responded to by Life Flight, which transports those in need to facilities in the city of Austin that are capable of handling emergency care. In addition, due to the fact that the Village is located at the confluence of several major thoroughfares, Life Flight often must restrict the flow of traffic on one of these roadways in order to respond to an emergency because there is currently nowhere to land in the area except on the roadways themselves.

Insert Plate 6-1: Public Facilities

In the near future, the Village of Bee Cave should actively pursue locating a small 24-hour emergency care facility within the Village itself in a central location, or should act in cooperation with surrounding communities in order to establish such a facility within close proximity to the Village of Bee Cave. Additionally, the Village and the immediate area would benefit from the construction of a helipad on the roof of a structure or other appropriate place, preferably an emergency care facility. The public, health, safety and welfare would also be served by the construction of a helipad in the area.

Public Library Facility

The standard typically recommended by the American Library Association (ALS) is 0.75 square feet per library patron. There currently is not a library facility for public use located within the Village or ETJ area. In order to accommodate the projected population of 10,000 people, a facility of approximately 7,500 square feet will be needed. A location that will be accessible to all areas of the Village, and therefore would be a good location for such a facility, is within the new Town Center area (refer to the Future Land Use Plan, **Plate 8-1**). A facility able to accommodate the ultimate population of Bee Cave, approximately 13,500 people, would be a facility of approximately 10,000 square feet.

Community Center

A public facility that could be utilized for meetings of local interest groups such as volunteer organizations, neighborhood organizations, and senior citizens will likely be needed with future growth. Currently, the existing Village Municipal Hall is used by some of these types of groups. However, as the need for additional municipal services expands, space in the existing Village Municipal Hall will increasingly be used for the provision of such services. Therefore, an additional facility, or gathering place will be needed. As with the Public Library, the Town Center area will be a good location for such a facility, which could be designed to serve a variety of civic and social purposes.

CONCLUSION

It should be noted that rapidly changing technology and operation methods often modify the spatial needs of municipal employees as time progresses. These recommendations are intended to provide general guidance, however, citizen opinion should be taken into account, and detailed architectural evaluation should be undertaken prior to initiating the design of any new facility or modification of any existing public facility. It is recommended that in approximately five years (unless population growth occurs more rapidly than projected and therefore the need for a more specific study arises sooner than expected), the Village establish a detailed public facilities plan and architectural evaluation of municipal services and buildings to determine if the expansion of existing services, or provision of additional services is necessary, and if expansion of existing facilities, or construction of new facilities is necessary, in order to accommodate increasing population growth. Some communities have jointly developed certain public buildings and services, such as fire protection services, police protection services, and animal shelters. The Village of Bee Cave should also consider this option because of its many advantages, including the lower initial cost for the establishment of services and the fact that the Village of Bee Cave is not likely to require the provision of some services solely within the Village itself; emergency service is an example of this type of service.

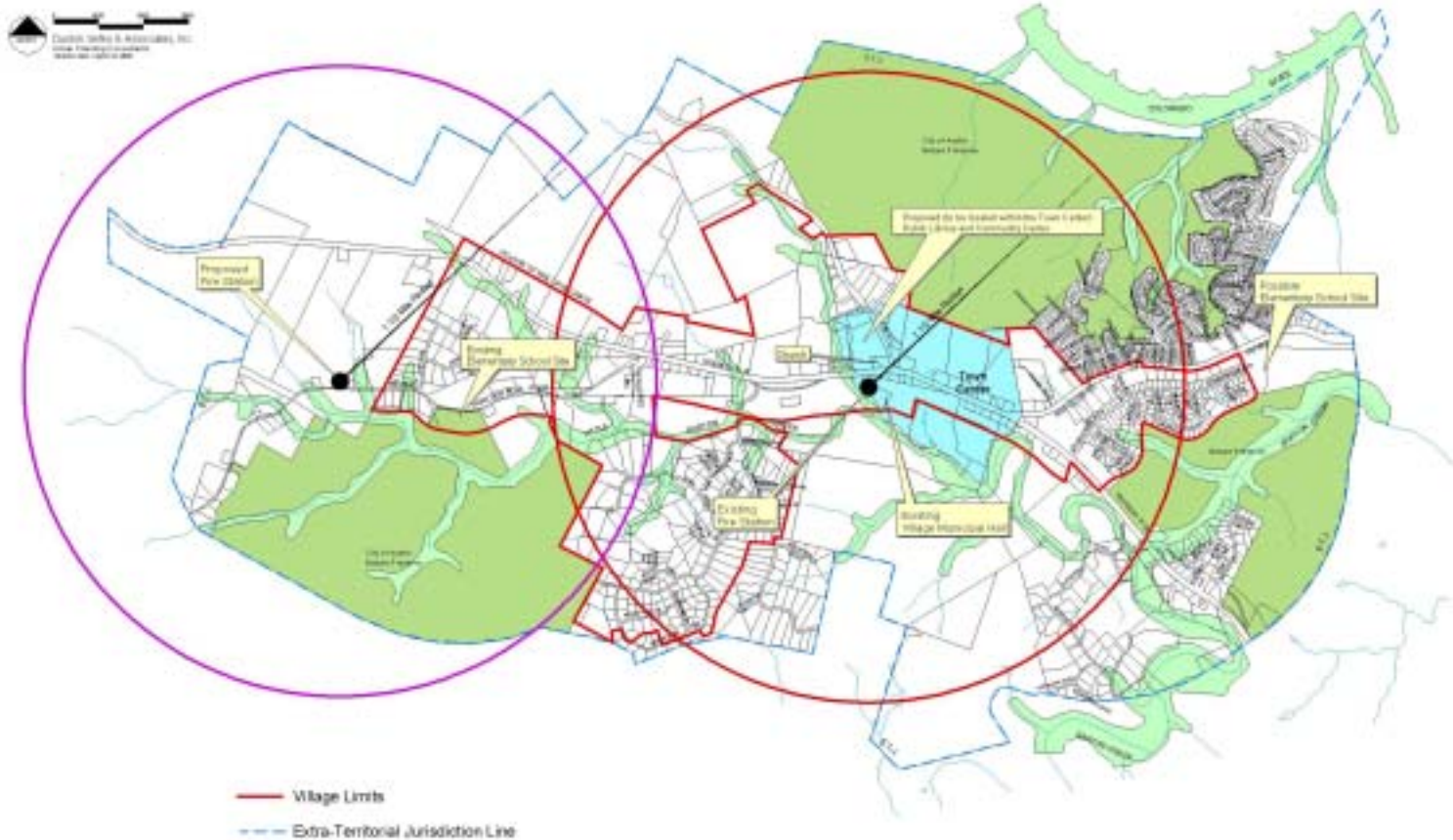


Plate 6-1

Public Facilities

Village of Bee Cave, Texas

I N F R A S T R U C T U R E P L A N

Section Seven

Comprehensive Plan 2000

INTRODUCTION

Comprehensive land use planning is influenced by several components of municipal services that are provided via capital-intensive infrastructure. Water and wastewater service, often referred to in the parlance of "wet utilities" are critical to the overall health, safety and welfare of municipalities and their populations. Historically, provision of those wet utilities in the Bee Cave area has been extremely limited to non-existent. For many years, potable water service was limited to those areas of Bee Cave included within either the corporate boundary or in the CCN service area of Travis County Water Control and Improvement District Number 14 (WCID No.14). That situation changed when the Lower Colorado River Authority (LCRA) purchased the Uplands Water Supply Corporation from the Resolution Trust Corporation. It then became possible for properties that were in Bee Cave, but outside the control of WCID No.14, to receive potable water service. Initial Bee Cave area customers of this water system included the Uplands subdivision and West Travis County Municipal Utility Districts Numbers 3 and 5 (the Lake Pointe Community).

Concurrent with the establishment of the Bee Cave water utility, the Village applied for a Certificate of Convenience and Necessity (CCN) to provide potable water service to the corporate limits of the Village and its extra-territorial jurisdiction (ETJ), as well as to other properties that had requested to be included in the service area. WCID No.14 opposed the Village of Bee Cave's application, but Bee Cave prevailed. Subsequently, WCID No.14 was absorbed by the City of Austin water utility. Bee Cave and Austin have entered into an agreement by which Bee Cave will acquire the portion of the former WCID No.14 water system within Bee Cave and its ETJ. This will allow the Village of Bee Cave to have a unified water system that can be reasonably and logically expanded as demand and economic feasibility dictate.

Until the advent of Lake Pointe, collective wastewater treatment and disposal service had never been available in the Bee Cave area. All development and structures, whether residential or non-residential in nature, utilized on-site wastewater treatment and disposal systems. These systems ranged from cesspools, to septic tanks, to treatment and irrigation systems. Currently, Lake Pointe and a limited number of properties outside

of the Municipal Utility District (MUD) are the only areas of Bee Cave that receive collective wastewater service. More areas of the Village, including the older non-residential areas located along State Highway 71 and R.M. 620, are anticipated to receive collective wastewater service as part of the proposed LCRA regional wastewater system. **Plate 7-1** shows graphically the infrastructure elements for the Village of Bee Cave.

THE VILLAGE OF BEE CAVE WATER SYSTEM

The Village of Bee Cave is currently a wholesale customer of the LCRA-West Travis County Regional Water system. The primary components of this system include a raw water intake structure on Lake Austin (located in the Lake Pointe community), raw water transmission main, Upland water treatment plat, and potable water transmission and storage system. While each of these components is a critical element of the overall system, it is the potable water transmission and storage system that is most directly related to development and land use in Bee Cave and the ETJ. The existing transmission system runs from the Upland water treatment plant to: the Bee Caves West, Lake Pointe, and Uplands subdivisions. This system has been designed to connect to and serve virtually all areas of Bee Cave, and areas west of the Village along Interstate Highway 71 and Hamilton Pool Road. It has also been designed to connect to the existing WCID No.14 system after it has been physically separated from the City of Austin facilities, and deliver much improved service to those customers.

Expansion of the Bee Cave water system is anticipated to be driven by development projects in the Village of Bee Cave and its ETJ. Installation of water systems in existing subdivisions, such as Homestead, will be dependent upon economic feasibility. The Village of Bee Cave has entered into a contract to sell its water system to the LCRA after Bee Cave closes the purchase of the Austin water system. LCRA will then become the retail provider of water service to all Bee Cave area water customers. This action will remove Bee Cave from direct control of the provision of water service. However, the Village and LCRA have agreed to coordinate and cooperate on providing appropriate levels of water service for the various zoning districts and land uses included in the Comprehensive Plan. Fire protection will also be designed into all system expansions.

INSERT PLATE 7-1

THE VILLAGE OF BEE CAVE WASTEWATER SYSTEM

Currently collective wastewater service is available only in Lake Pointe and in certain non-residential properties that have secured out-of-district service from the MUD. Wastewater is processed at a treatment plant located near the center of the Lake Pointe community and is disposed of via land application on the Spillman Ranch. The Lake Pointe wastewater system has excess capacity available to provide service to other areas of Bee Cave. The Village of Bee Cave initiated discussions concerning the potential acquisition of this access in 1996. Financing of the acquisition proved to be insurmountable for Bee Cave at that time. However, the LCRA has now reopened those discussions and is poised to become the regional wastewater service provider in the same manner as the water system.

The primary Bee Cave wastewater collection system will be on a gravity system with collection pipelines that will run parallel to State Highway 71 and R.M. 620. These lines will be able to serve virtually all of the property that is available and able to be developed, as well as all of the existing developed properties within reasonable economic constraints.

Source: Malone/Wheeler, Inc.

Based upon information contained within the Future Land Use Plan and other elements of the Comprehensive Plan, it is recommended that the Water & Sewer Master Plan be updated after the Comprehensive Plan is adopted by the Village of Bee Cave.

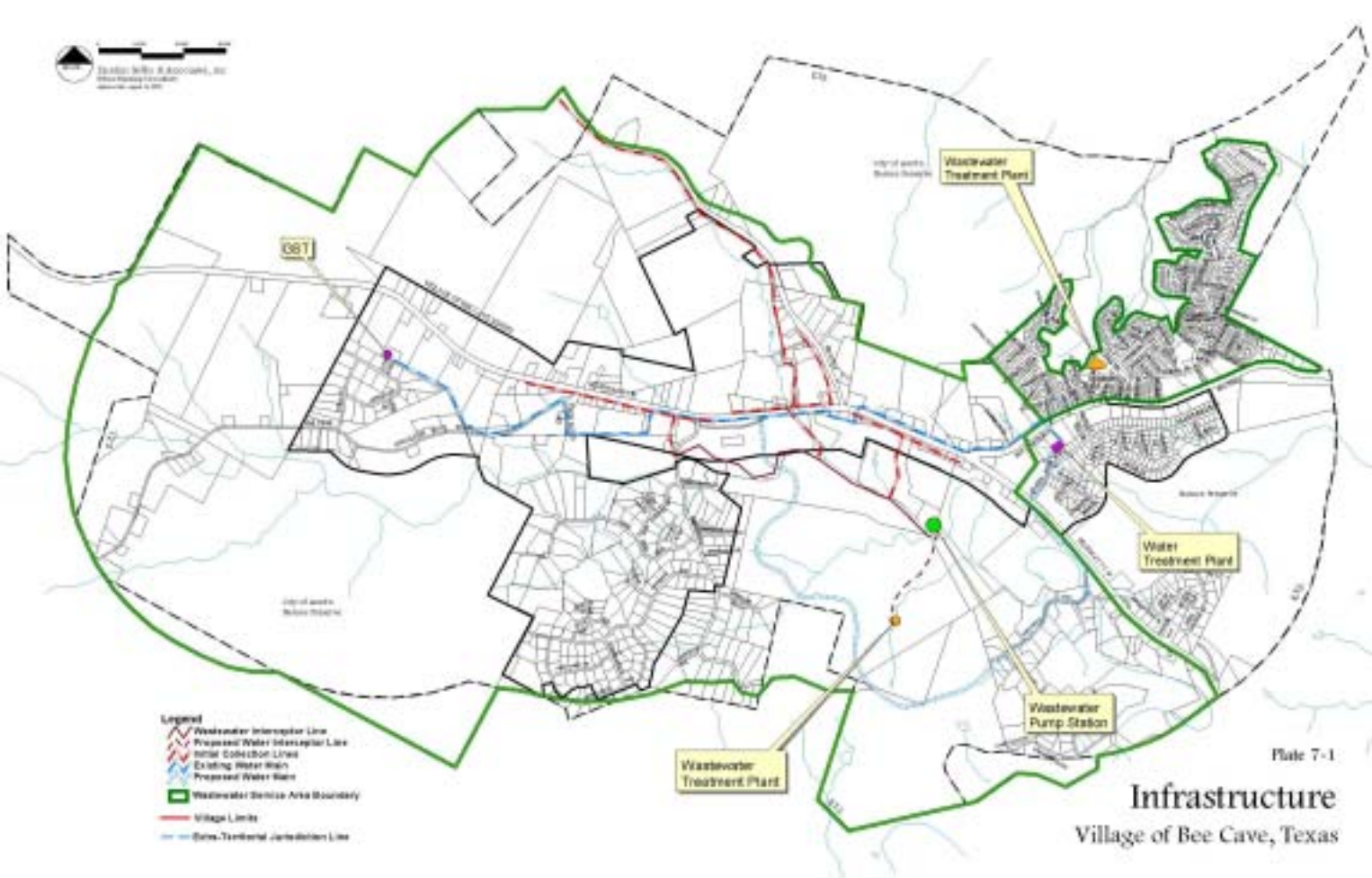


Plate 7-1

Infrastructure

Village of Bee Cave, Texas

F U T U R E
L A N D U S E P L A N

Section Eight

Comprehensive Plan 2000

INTRODUCTION

Land use planning, like any type of planning activity, is a process. It is the process that provides the means by which a community can determine change and, in a sense, can control its own destiny. The purpose of the Comprehensive Plan is to serve as a guide for future development or redevelopment, and therefore, the Future Land Use element is perhaps the most important Plan element because it essentially is a collection of the various components that make up the Comprehensive Plan. The Plan is intended to provide overall guidance to areas that are vacant, as well as to areas that have already developed and need specific action.

The Future Land Use element of the Comprehensive Plan is intended to be a short- and long-range, general guide for the development and use of all land within the Village of Bee Cave and its extraterritorial jurisdiction (ETJ). It is based upon a vision of the Village as a livable community that maintains its individuality, but also has a regional identity in the Texas Hill Country.

In addition, the Future Land Use element describes the planning process used by Bee Cave in relating development decisions to the community's ultimate vision of what it can and will become. A series of policies defines how these decisions are to be made.

The Future Land Use Plan is not the community's official zoning map. Although the Future Land Use Plan is not a zoning map, it will be used as a guide in considering new zoning and zoning change requests. It is a guide for future land use patterns. The Future Land Use element and all other aspects of the Comprehensive Plan are implemented primarily through development regulations (zoning and subdivision ordinances), or through programs that fulfill other policy objectives, such as programs that establish capital improvement priorities/plans or raise revenues to finance public facilities and services. The Village of Bee Cave's Zoning Ordinance text and map determine which specific development requirements apply to a particular property.

The graphic component of the Future Land Use element is the Future Land Use Plan Map (**Plate 8-1**). The Plan shows, in map form, a generalized view of land use within the Village. The Future Land Use Plan is intended to be used in conjunction with the policies contained within this and other elements of the Comprehensive Plan to guide public and private development in Bee Cave. The Comprehensive Plan is the foundation for standards contained in the Village's development regulations.

PLAN DEVELOPMENT AND ALTERNATIVE ANALYSIS

The Village of Bee Cave's regional and geographic setting in the heart of the Texas Hill Country makes it a beautiful place to live and work. Collectively assessing and developing plan alternatives for the various areas of the Village can enhance the existing quality of life that residents of the Village enjoy. In addition, future development should make a positive contribution to the community in order for Bee Cave to truly evolve, and to make the ultimate vision of the Village into a reality. This element not only brings together the information in the previous elements and the Baseline Analysis of the Plan, but also the input on land use alternatives provided during Steering Committee meetings. These meetings were designed to allow community leaders and citizens the opportunity to contribute to the planning process and were intended to facilitate discussion regarding the various recommendations of the Plan.

During initial Comprehensive Plan Steering Committee meetings, issues important to Bee Cave were identified which needed to be addressed by the Comprehensive Plan. In response to these issues, goals and objectives were prepared and used to formulate policies and recommendations contained in the Comprehensive Plan. In addition, during Land Use Workshops with the Steering Committee, various future land use alternatives were discussed, and a preferred Future Land Use Plan was formulated. The following sections include discussion of the highlights of important aspects of the Future Land Use Plan, as well as certain parts of the Plan that could not be reflected graphically, but are nevertheless equally important.

Some of the recommendations are reflected as policies for reviewing development or interpretation of the Future Land Use Plan. The Future Land Use Plan, as illustrated by **Plate 8-1**, is the composite of all the structuring elements of the Comprehensive Plan, such as the Thoroughfare Plan and the Parks and Open Space Plan, which form the framework upon which the future land use pattern of the Village can develop.

LAND USE COMPATIBILITY

The issue of compatibility between environmentally sensitive areas and residential and non-residential uses has become increasingly important. Although many of the zoning decisions in the Village of Bee Cave reflected specific conditions related to individual parcels of land, their cumulative effect has led to the present character and mixture of certain types of land uses that may not be compatible or consistent with the future vision for Bee Cave. Consequently, as new uses are developed, land use compatibility will almost certainly become an issue. Examples of this are the patterns and locations of land uses along State Highway 71, R.M. 620, and F.M. 2244 (Bee Cave Road). These conditions are a result of non-residential land uses seeking the best visibility along continuous major thoroughfares. These concentrations of land use, combined with residents and travelers seeking to use the major ingress and egress routes into and out of the Village of Bee Cave, to areas within and around the Village itself, have contributed to the traffic conditions that now exist. The Future Land Use Plan has attempted to allocate the various land uses in a pattern that will yield a greater chance for better community-wide land use compatibility. The Urban Design and Community Image element will further describe techniques that can make land uses more compatible with each other. The treatment of the "edges" of various land uses, to a large degree, can have a dramatic effect upon the compatibility of land uses. This buffer, or transition, treatment between residential and non-residential uses, for example, can help to determine whether the residential area will be a quality neighborhood in which to reside.

LAND USE COMPOSITION

The following table shows the recommended composition and type of future land use for the Village of Bee Cave, both within the existing Village limits and the existing ETJ area. The acreages listed correspond with and are graphically portrayed by the Future Land Use Plan, **Plate 8-1**. These land uses reflect a reasonable balance for meeting local and regional needs.

Table 8-1
FUTURE LAND USE
Village of Bee Cave and ETJ

LAND USE CATEGORY	GROSS ACRES	PERCENT
Residential Use	4,500	50.66
Low Density	*2,734*	*30.78*
Planned Density	*1,597*	*17.98*
Medium Density	*27*	*0.30*
High Density[1]	*135*	*1.52*
Mixed Use[2]	192	2.16
Public/Semi-Public	97	1.09
Office	180	2.03
Retail	173	1.95
Town Center[2]	305	3.44
Neighborhood Service	259	2.92
Commercial	9	0.10
Golf Course	392	4.41
Open Space[3]	118	1.33
Preserve Land[4]	2,664	29.99
TOTAL ACREAGE (as of May 2000)	8,882	100.00

(1) Actual amount is 135 acres, with approximately 53 acres developable.
(2) Categories represent areas that may have multiple land uses, including residential, public, office, retail, and park space.
(3) Approximate amount of acreage used for parks and trail system.
(4) Permanent open space within the ETJ area not owned by the Village of Bee Cave.

Source: Dunkin, Sefko & Associates, Inc.

Table 8-2
FUTURE LAND USE
Village of Bee Cave – Village Limits

LAND USE CATEGORY	GROSS ACRES	PERCENT
Residential Use	779	47.73
Low Density	*503*	*30.82*
Planned Density	*250*	*15.32*
Medium Density	*26*	*1.59*
High Density[1]		
Mixed Use[2]	78	4.78
Public/Semi-Public	74	4.53
Office	135	8.27
Retail	95	5.82
Town Center[2]	232	14.22
Neighborhood Service	171	10.48
Commercial		
Golf Course	6	0.37
Open Space[3]	62	3.80
Preserve Land[4]		
ACREAGE (as of May 2000)	1,632	100.00
RECENT ANNEXATION (AUGUST 2000)	346	
TOTAL ACREAGE WITHIN THE VILLAGE	**1,978 acres**	

(5) Calculated within the Mixed Use category and the Town Center category.

(6) Categories represent areas that may have multiple land uses, including residential, public, office, retail, and park space.

(7) Approximate amount of acreage used for parks and trail system.

(8) Permanent open space.

Source: Dunkin, Sefko & Associates, Inc.

Table 8-3
FUTURE LAND USE
Village of Bee Cave – ETJ Area

LAND USE CATEGORY	GROSS ACRES	PERCENT
Residential Use	3,692	50.92
Low Density	*2,388*	*32.94*
Planned Density	*1,226*	*16.91*
Medium Density		
High Density[1]	78	*1.08*
Mixed Use[2]	116	1.60
Public/Semi-Public	23	0.32
Office	43	0.59
Retail	79	1.09
Town Center[2]	71	0.98
Neighborhood Service	88	1.21
Commercial	9	0.12
Golf Course	392	5.41
Open Space[3]	73	1.01
Preserve Land[4]	2,664	36.74
ACREAGE (as of May 2000)	7,250	100.00
RECENT ANNEXATION (AUGUST 2000)	(-) 346	
TOTAL ACREAGE WITHIN THE VILLAGE ETJ	**6,904 acres**	

(9) Calculated within the Mixed Use category and the Town Center category.

(10) Categories represent areas that may have multiple land uses, including residential, public, office, retail, and park space.

(11) Approximate amount of acreage used for parks and trail system.

(12) Permanent open space.

Source: Dunkin, Sefko & Associates, Inc.

Insert Plate 8-1 - The Future Land Use Plan

RECOMMENDED LAND USE DISTRICTS

It is important to note that all of the land uses established in the Future Land Use Plan would have design standards that must be met by any new use. These will be further discussed within the Urban Design and Community Image section of the Comprehensive Plan, and will be implemented accordingly by ordinance. The overall contribution that each of these districts makes to the community character of the Village should be a significant factor related to how they are allowed to develop, especially in terms of their density, aesthetic appeal, compatibility with adjacent land uses, and interaction with the environment. It should be noted that one of the key objectives established during the comprehensive planning process was the fact that in order to maintain the rural atmosphere of the Village, as much of the natural landscape as possible should be preserved. The Future Land Use Map, **Plate 8-1**, is a graphical representation of the various locations of each land use. The land use districts that are used as the basis of the Future Land Use Plan for the Village of Bee Cave include the following:

Preserve Land:

The City of Austin has set aside preservation land that borders the Village on parts of both its northern and southern boundaries within the Village's ETJ area. Other entities, such as the Nature Conservancy, have also acquired some of the land around the Village of Bee Cave that is designated as preserve land. Due to these factors, much of the area surrounding the Village of Bee Cave, and within its existing ETJ, will remain permanent open space in the future.

Open Space Areas:

These areas are intended to provide the residents of Bee Cave with recreational opportunities, generally including small neighborhood parks, view parks (allowing for scenic views of the surrounding Texas Hill Country and preserve areas), and a comprehensive trail system. These areas will be discussed further in the *Parks and Open Space Plan* element of the Comprehensive Plan.

Residential Land Uses:

Describes land used for one-family dwellings and related accessory buildings. The majority of the land within the Village and the ETJ (with the exception of preservation areas) has been designated as residential land use. The following uses describe the different types of residential areas:

LOW DENSITY RESIDENTIAL:

These areas are intended for large lot, low density residential (minimum one-acre lots) dwellings, characterized by single-family detached homes; minimum lot widths should be approximately 140 to 150 feet, and minimum lot depths should be no more than two times the lot width to ensure maximum separation of dwelling units and preservation of country/rural atmosphere.

PLANNED DENSITY RESIDENTIAL:

These areas provide for a mixture of residential lot sizes, characterized by single-family detached homes. The average density of these areas is one dwelling unit per acre, but smaller lot sizes are permissible if clustering techniques are utilized, ensuring the preservation of open space. Other types of dwellings may be appropriate as part of the planned development; in addition, various types of land uses that are compatible with residential uses may be included, such as golf courses and small retail or office establishments.

MEDIUM DENSITY RESIDENTIAL:

These areas provide for smaller residential lot sizes, possibly including dwelling units such as patio homes, town homes, zero-lot line homes or condominiums. Up to ten dwelling units per acre are permitted within these areas.

HIGH DENSITY RESIDENTIAL:

This area provides for apartment dwelling units or condominiums, with an allowable density of over 10 units per acre. Apartment dwellings should be located along major thoroughfares due to the larger number of people accommodated.

Public/Semi-Public Land Uses:

This type of land use includes uses such as schools, churches, cemeteries and public buildings; these areas include properties owned/used by the municipal government (i.e., the Village Hall, fire stations, water storage sites, etc.) and by other government entities, such as the Texas Department of Transportation. It should be noted that there are nine historical cemeteries that exist within the Village of Bee Cave and its ETJ area. These cemeteries should be protected, and any adjacent development should observe a reasonable setback and should provide public access to these cemeteries.

Office Land Uses:

Appropriate uses within these areas include, but are not limited to, professional/administrative offices, doctors, dentists, real estate, architects, accountants, secretarial service, etc.; in addition, such uses are intended to be low-intensity and designed in a manner that is compatible with residential land use.

Retail Land Uses:

A small amount of land has been designated for retail land use within the Village. The Village of Bee Cave is located at the confluence of three major regional thoroughfares (State Highway 71, R.M. 620, and F.M. 2244), and therefore, retail land uses will be in demand and are designated on the Future Land Use Plan. In

addition, it is intended that these retail uses be small-scale in terms of size, and designed in a similar manner to Traditional Neighborhood Design areas – pedestrian-friendly, compatible with residential land uses, and with natural areas preserved (refer to the *Environmental Quality and Community Image* element for more details). The two types of retail land use are as follows:

NEIGHBORHOOD SERVICE LAND USES:

These areas allow for low-intensity, limited retail activity, and are intended to serve neighborhoods in close proximity. In addition, such uses are intended to be located at specified major roadway intersections near residential areas. Service uses that may be appropriate in such areas include small grocery stores, pharmacies, personal service shops (i.e., hair salons, dry cleaners, tailors, florists, etc.), day care centers, medical/dental and general offices, smaller banks/financial institutions, small restaurants (not including restaurants with drive-thru capability) and cafes, a farmers market, a car wash, and similar establishments. Building sizes within these areas should be limited to a footprint (the amount of the structure that is actually on the ground) of 15,000 square feet per occupancy use.

LOCAL RETAIL LAND USES:

These areas also allow for low-intensity, limited retail activity, but are intended to serve local needs. In addition, such uses are intended to be located along major roadways. Service uses that may be appropriate in such areas include retail stores, shops, personal service establishments, restaurants (not including restaurants with drive-thru capability) and small shopping centers. Building sizes within these areas should be limited to a footprint of 20,000 square feet.

Town Center Land Use:

This land use designation is intended to provide the Village with a central, mixed-use "focal point" and center of business/government; such an area is designated in the Village along either side of State Highway 71, east of R.M. 620 and south of Bee Cave Road. This area is also intended to provide the community with local and retail services as well as jobs that are close to residents. A mixture of land uses is appropriate for the Town Center, as it is also intended to become a place for local residents to shop, conduct personal and government-related business, live in the same place as their business (i.e., loft dwellings or apartments located on the second floor above retail shops), meet neighbors to eat in a restaurant (not including restaurants with drive-thru capability) or café, enjoy arts/cultural facilities (such as a local museum), gather for community events and festivals, and other similar activities. The Village should require the integration of outdoor sitting areas. Additionally, public plazas, open space areas, and landscaping should be encouraged within this development, and open storage should be prohibited in order to ensure an attractive appearance from the road and from neighboring residential properties. The Village should also consider developing a comprehensive streetscape program in order to create a special theme and identity for the district. Structures within the Town Center should be smaller in scale in order to ensure consistency with a pedestrian-oriented environment. Specifically, nonresidential structures should be designed at a minimum of 1,500 square feet (total footprint) and a maximum of 85,000 square feet (total footprint). Also in order to ensure consistency with small-scale development, only a limited number of these large structures should be permitted, and small pockets of parking areas that incorporate pedestrian traffic are encouraged, while large, expansive parking areas are discouraged.

Mixed-Use:

Occasionally, a mixed-use area is needed in order to help buffer low-density residential land uses from higher intensity uses, such as non-residential land uses, as well as from major thoroughfares. However, in order to ensure the maintenance of the "small town", rural atmosphere of the Village, the predominant land use for any Mixed-Use area should be residential.

Commercial Land Uses:

These areas allow for uses such as commercial amusements, building materials yards, automobile garages and sales lots, motels, automobile body repair, warehouses, telecommunications/broadcasting/cell towers and facilities, wholesale establishments, and the sale of used merchandise and welding shops. Often, retail and commercial land uses are thought to be similar, however, the intensity of these uses is often different. This fact should be taken into consideration when assessing the compatibility of these uses with surrounding areas.

The previously discussed land uses provide the Village of Bee Cave with the necessary variety of uses significant to ensuring positive growth in the future.

ULTIMATE CAPACITY

In order for growth to occur within a community, sufficient land area must be available, specifically residential land area. It is important to note that the developable residential land within Bee Cave and the ETJ area is limited. Much of the ETJ is consumed by preserve areas, floodplain areas or areas with restrictive slopes that cannot be used for residential development. As mentioned in the Baseline Analysis, the preservation land borders Bee Cave on parts of both its northern, southern, and eastern corporate boundaries. Due to these factors, much of the area surrounding the Village of Bee Cave will remain permanent open space, and therefore will not be developed. In addition, the Village's ETJ boundaries will probably not be able to expand in the future in relation to population growth, due to the surrounding ETJ of the city of Austin. Bee Cave has been successful in negotiating an agreement with the city of Austin for its current ETJ area; the agreement includes a provision for no ETJ growth in the future. Therefore, essentially the Village of Bee Cave will not be able to accommodate population growth beyond what its current land area, within the Village and ETJ, will allow.

Presently within the Village of Bee Cave's corporate limits and ETJ area, there are approximately 8,882 acres. Of the 9,100 existing acres, 4,500 acres are designated residential (refer to **Table 8-1**). Approximately 1,300 acres of the 4,500 acres are developable for residential land use, meaning that these acres are not currently developed and are not constrained by extreme topography. In addition, there are approximately 582 vacant developed lots within the Village and its ETJ, and there are several potential developments that will likely become a reality in the near future. Based on these factors, the ultimate holding capacities for the Village of Bee Cave and its ETJ are described in **Table 8-2**.

The remaining acreage has either been previously developed (by other land uses or rights-of-way), has been designated with another type of land use, or is not developable, due to flood plain, drainage, slope restrictions, or other constraints. Communities in Texas rarely develop at full capacity (with exceptions such as Bellaire in Houston and University Park in Dallas and similar areas), and in general, some of the acreage in a community will remain vacant indefinitely. For planning purposes, it is assumed that approximately 10 percent of the developable land area will be vacant even at full capacity or build-out.

The information in **Table 8-2** describes the developable number of acres, the approximate density assigned to those acres based on the Future Land Use Plan, as well as two developments that are currently in the conceptual stage, but that have the potential to be constructed in the near future. Taking into account these densities, and the number of people presently within Bee Cave and its ETJ, the projected ultimate capacity of the Village is approximately 13,500 people. It is important to recognize that this number could be larger or smaller in the future, depending upon several variables, including changes in density, land use and/or zoning, or number of people per housing unit.

It is significant to recognize that the housing market, and therefore the increase in population, is market driven. Meaning, for example, that the market for new residential housing is currently expanding at a rapid rate, and such growth may not continue without fluctuation in the future. In addition, it is not in Bee Cave's best interest to wait until undesired growth is occurring to annex, due to the fact that municipalities have limited regulation in ETJ areas. The Village should adopt a policy to not provide water and wastewater treatment in the ETJ unless annexation is requested. Programs that help cities to assess annexation and growth issues are often referred to as "growth management strategies", and a discussion of such strategies will be included in the *Implementation* element of the Comprehensive Plan.

Table 8-4
ULTIMATE CAPACITY
Village of Bee Cave, Texas and ETJ Area

TYPE OF DEVELOPMENT	DEVELOPABLE ACREAGE/ REMAINING UNITS	FIRST POTENTIAL DEVELOPMENT	SECOND POTENTIAL DEVELOPMENT	NUMBER OF DWELLING UNITS PER ACRE	NUMBER OF PERSONS PER UNIT (2)	NUMBER OF PEOPLE
Low Density Residential	1,007.4 acres	✦	✦	1	2.73	2,625
Planned Density Residential	175.9 acres 582 units	288 units	323 units	1	2.73	3,620
Medium Density Residential	118 acres	280 units	69 units	8	2.73	3,420
High Density Residential	12 acres	840 units (1)	19.9 acres	10	2.73	3,008
Number of People in the Village (3)	✦	✦	✦	✦	✦	551
Number of People in the Village ETJ (3)	✦	✦	✦	✦	✦	1,776
NUMBER OF PEOPLE	→					15,000
ULTIMATE CAPACITY	→ Less 10 % (Estimated Vacancy)					13,500

(1) Based on an average unit of 1,000 square feet, from a total of 840,000 square feet.
(2) Based on the State of Texas average, according to the 1990 Census.
(3) Based on the estimate made by Dunkin, Sefko & Associates in the Baseline Analysis.

Source: Dunkin, Sefko & Associates, Inc.

It is important to realize that the ultimate capacity for the eventual land area (the Village and ETJ) of the Village of Bee Cave will take many years to achieve, and is not likely to be met at any time in the near future. For planning purposes, however, it is expected that the ultimate capacity of the Village will be met in approximately 20 years.

PROJECTED FUTURE POPULATION INCREASE

The population growth of the Village of Bee Cave will likely be regulated to a great extent by the rate at which the housing inventory can be expanded in price ranges that will permit and encourage persons to reside within the community. In general, the increases in housing costs will, however, tend to be a factor in moderating any rapid expansion of the population. As aforementioned, Bee Cave will be limited in its ability to increase in population after a certain point – that is, the point at which the Village can no longer expand its jurisdictional limits. Housing activity throughout the Austin Hill Country area will likely continue to increase, as will the number of proposed housing developments, and therefore, continued population gains can probably be expected for at least the next several years in Bee Cave. In the past few years, the Village has been experiencing a marked increase in population, due mainly to the area's healthy economy, an increased interest in a rural lifestyle, the aesthetic appeal of the Hill Country, and the limited amount of remaining opportunities for a quality residential lifestyle in the Austin area.

It should also be recognized that nearly all the changing characteristics of the general population are tending to reduce the number of persons per dwelling unit. This is a general trend nationwide as families are basically becoming smaller, and is likely to be occurring in the Village of Bee Cave as well. In the future, it can be expected that more dwelling units will be required to house each 100 persons than have been needed in the past.

Population projections are significant to the process of assessing how much land should be allocated to each land use and how intensely land should be used in order to support a dynamic, growing population. As previously discussed in the Baseline Analysis, based on the land use survey conducted as part of the comprehensive planning process an estimated 1999 population was established. Due to the fact that residential growth

within the existing corporate limits of Bee Cave is extremely limited, both the Village itself and the ETJ area will be used to calculate the projected population. The number of people living within the limits of Bee Cave is estimated at approximately 551 persons, and within the ETJ is approximately 1,776 persons, which is a total of 2,327 people living in the Village of Bee Cave area. Using these population numbers as the 1999 base year population for the Village and its ETJ, a series of projections were made for planning purposes. Based upon the assumed ability to expand the Village's housing inventory as well as its land area at least to the existing ETJ limits, the population forecast scenario shown in **Table 8-3** was developed.

Table 8-5
POPULATION PROJECTIONS
Village of Bee Cave, Texas

Existing Population Estimate of The Village of Bee Cave	551
Existing Population Estimate of The ETJ Area	1,776
TOTAL	2,327

Year	Plan A 5.5% GROWTH RATE	Plan B 7% GROWTH RATE	Plan C 9% GROWTH RATE
1999[1]	2,327	2,327	2,327
2000	2,400	2,500	2,600
2005	3,100	3,500	3,900
2010	4,000	5,000	6,000
2015	5,200	7,100	9,200
2020	6,800	10,000	13,500[3]
Residential Building Permits Per Year[2]	64	112	160

Source: [1] Established by the land use survey conducted by Dunkin, Sefko & Associates, Inc.
[2] Based on 3 persons per household and a 90% occupancy rate.
[3] Based on the assumed ability of the Village and current ETJ area to be able to accommodate this number of people.

The growth scenarios shown in **Table 8-3** represent a reasonable range of growth rates for the Village of Bee Cave. The higher projection ("C") would require the relatively aggressive housing response and influx of population that has occurred in the Village and ETJ since 1990, when a growth rate of approximately 9.6 percent was experienced; this is a high amount of growth and may not be able to be maintained over the next 20 years. However, the growth in population represented in "Plan C" could occur if all of the anticipated development projections are built. Based on these projects, between 1,800 and 2,200 units could be constructed in the Village during the next five to ten years, depending on the local, regional and national economy. In addition, it should be noted that the number of people projected under "Plan C" for the year 2020 matches the ultimate capacity of the Village and ETJ area. As mentioned previously, it is not anticipated that the Village will meet its ultimate capacity in the near future.

The seven percent growth rate used in calculating Plan "B" is slightly less than the population increase that occurred in the Village of Bee Cave from 1990 to 1999. To achieve the forecasted growth for scenario "B", it will require an average of 112 residential building permits per year for the Village. The lower projection ("A") represents a growth rate that is lower than what is anticipated to occur, but negative fluctuations in the economy could contribute to a slower growth rate than is expected. For planning purposes, the medium estimate ("B") of seven percent growth is recommended as the most appropriate for the near term.

The Village of Bee Cave will be limited in its growth beyond its existing ETJ due to both jurisdictional limitations and environmental constraints. Within the current Village limits (not including the ETJ), there are approximately 1,600 acres of land, and approximately 700 acres of this land area is available for residential development. The remaining acreage within the Village has either been previously developed or is not designated as "residential" on the Future Land Use Plan (refer to **Plate 8-1**). Specifically, 600 acres have been designated as either *Low Density Residential* or *Planned Density Residential*, and the future population of this land area can be calculated using a density of one unit per acre. 27 acres have been designated as *Medium Density Residential* on the Future Land Use Plan, and the future population of this area can be calculated using a density of eight units per acre. In addition, it can be assumed that 40 acres of the 65 acres designated as *Mixed Use* within the Village will be residential, and will be developed at a density of one unit per acre.

Taking all of these facts into account, and assuming that there will continue to be three persons per household unit, the Village of Bee Cave could eventually have an additional 2,570 people living within its current corporate limits. If the Village of Bee Cave does not annex any additional land area within its ETJ, it is not likely to have enough land within today's corporate limits to allow it to reach a population of over 3,000 persons (depending upon the densities at which individual parcels actually develop).

In addition, there are not many large parcels of land left to be developed within Bee Cave itself; such development is the primary catalyst for substantial increases in population numbers. It is recommended, however, that the Village be proactive in terms of growth. It is not in the Village's best interest to wait until growth is occurring to annex. Prior to development occurring, the Village has the opportunity to affect growth, and to ensure that such development is in the best interest of the community and is in accordance with the rules and regulations of the Village. Bee Cave will be in a better position to make decisions pertaining to growth issues if the area is within its corporate limits. The only authority that the Village has within its ETJ areas must be implemented through subdivision ordinances, and decisions made cannot be based on the land use that is desired by the municipality.

FUTURE LAND USE REQUIREMENTS

Another important aspect in planning for the Village of Bee Cave's future is the relationship of the projected population in relation to future land use requirements. An assumption which has been valid in other communities throughout the State is that the ratio, or percentage, of land use acres consumed relative to the future population may be generally the same as is consumed today. A major goal for the Village of Bee Cave is to maintain the low-density community that exists today, while allowing for quality growth in the future.

Table 8-6
LAND USE PROJECTIONS
Village of Bee Cave, Texas

LAND USE CATEGORY	ACRES PER[1] 100 PERSONS	FUTURE ACRES REQUIRED 10,000 Persons	13,500 Persons
Residential Use	33.33	3,300	4,500
Low Density	20.27	2,055	2,737
Medium & High Density	0.60	60	80
Planned Density	11.85	1,185	1,600
Mixed Use	1.86	186	251
Public/Semi-Public	0.75	75	101
Office	1.65	165	223
Retail	1.70	170	230
Town Center	✦	226	305
Neighborhood Service	✦	200	270
Commercial	0.12	5	6
Golf Course	✦	290	392
Parks/Open Space	✦	148	200
Preserve Land[2]	✦	2,655	2,655
TOTAL ACREAGE		7,423	9,135

(1) Based upon the estimated number of acres per 100 persons, established by the Ultimate Capacity and the total number of acres within the Village and ETJ.

(2) These areas will remain preserve areas and will never be developed.

✦ Additional land use included based on anticipated future need.

Source: Dunkin, Sefko & Associates, Inc.

Table 8-4 shows the future land use requirements for the Village of Bee Cave, as related to the population projections. The comparisons shown in **Table 8-4** are intended to facilitate a better understanding of the land use relationships shown on the Future Land Use Plan. It should be noted that the total amount of acres needed for a population of 10,000 persons is approximately 7,420 acres, and the total amount of acres needed for a population of 13,500 persons is the total number of acres currently within the Village and its ETJ, approximately 9,135 acres. As previously mentioned, the Village of Bee Cave currently has 1,600 acres within its corporate limits, and therefore, population growth is limited.

INCONSISTENCIES BETWEEN DEVELOPMENT PROPOSALS AND THE FUTURE LAND USE PLAN

At times, the Village will likely encounter development proposals (inside their corporate limits) that do not directly reflect the purpose and intent of the land use pattern shown on the Future Land Use Plan. Careful consideration should be given to any development proposal that is inconsistent with the Plan. When such a proposal is presented to Bee Cave, it should be reviewed based upon the following considerations:

- Will the proposed change enhance the proposed site and the surrounding area?
- Is the proposed change a better use than what is shown on the Future Land Use Plan?
- Will the proposed use impact adjacent residential areas in a negative manner? Or, will the proposed use be compatible with, or even enhance, adjacent residential areas?
- Are conforming uses adjacent to the proposed use similar in nature in terms of appearance, hours of operation, and other general aspects of compatibility?
- Does the proposed use present a significant benefit to either the respective city or the community as a whole in terms of public health, safety and/or welfare (i.e., would it address a physical or social need of the community or its citizens; would it be to the Village's economic advantage; etc.)?

Development proposals that are inconsistent with the Future Land Use Plan (or which do not meet its general intent) should be reviewed based upon the above questions. It is important to recognize that proposals contrary to the Plan could be an improvement over the uses shown on the Plan for a particular area. This may be due to changing market, development and/or economic trends that occur at some point in the future after the Plan is adopted. If such changes occur, and especially if there is a significant benefit to the Village of Bee Cave, then these proposals should probably be approved unless they would have a negative impact upon the Village and/or its ETJ.

Each development proposal should be reviewed on its own merit, and it should be the applicant's responsibility to provide evidence that the proposal would enhance the community based upon the policies in the Comprehensive Plan and upon community objectives and values.

FUTURE LAND USE MAP INTERPRETATION POLICIES

Rezoning or other development approvals for land uses not consistent with the Future Land Use Plan (or Comprehensive Plan) should not be approved until the Plan has been amended, as appropriate, to provide for such land uses.

If a rezoning proposal is consistent with the Plan (i.e., is the same or very similar to the use(s) shown on the Plan map), then the request should be processed as any other request is processed. A statement/determination should be made in a municipal staff report that the proposed request is consistent with the Plan. This should not mandate approval by the either Village's Planning and Zoning Commission and/or the Board of Aldermen, but it should be the first prerequisite in the review process. The request should still be reviewed on its merit based upon additional criteria, such as traffic impact, compatibility with surrounding uses and adjacency standards, among others.

If a rezoning proposal is not consistent with the Plan, then an amendment to the Plan should occur prior to approving the request. It should be the applicant's responsibility to provide evidence proving that the proposed rezoning is better or more consistent with land uses in the surrounding area than what is shown on the Future Land Use Plan map. If this is the case, then Village of Bee Cave could initiate Plan amendment proceedings. To expedite the process, Plan amendments could be processed simultaneously with rezoning change requests as long as action on the Plan map precedes action on the rezoning requests. The Plan Map should be updated at least once or twice annually to ensure that it reflects any Future Land Use Plan amendments.

FUTURE LAND USE POLICIES

The following sections describe recommended policies that should guide the Village of Bee Cave's future land use planning efforts:

1. The Village of Bee Cave should use the Future Land Use Plan and the associated policies in this report to establish the general pattern of development within the community. This pattern of development should be implemented through the Village's development regulations.

2. The Future Land Use Plan provides the general description of land use categories, and the text in this report provides explanation of key components of the Plan. The Village of Bee Cave should maintain its Future Land Use Plan in order to provide areas for different types of land uses and intensities, and should plan for public services and facilities appropriate for the planned land uses. The Plan establishes the general pattern of future land use, as appropriate, to achieve the community's goals and objectives.

3. The Village of Bee Cave should identify sufficient locations for residential and non-residential development in order to accommodate projected growth with provision of additional land use capacity for market choice and flexibility.

4. The Village of Bee Cave should continue in its tradition of supplying low-density residential housing.

5. The Village of Bee Cave should plan areas for a variety of residential housing types and densities.

6. The Village of Bee Cave should use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities, or from land uses that may have a negative impact upon a residential living environment.

7. Residential developments adjacent to a park or to public open spaces should be designed to facilitate public access to and use of the park/trail, while minimizing potential conflicts between park users and residents of the neighborhood.

8. In reviewing development proposals, the Village should consider issues of community character, compatibility of land use, residents' security and safety, and efficient service provision, since these are important qualities of any community and should be emphasized in the Village of Bee Cave.

9. The Village of Bee Cave should encourage future patterns of development and land use that would reduce infrastructure construction costs and would make efficient use of existing and planned public facilities.

10. The official copy of the Future Land Use Plan map will be on file with the Village of Bee Cave. The boundaries of land use categories as depicted on the official map should be used to determine the appropriate land use category for areas that are not clearly delineated on the smaller scale Future Land Use Plan (**Plate 8-1**) contained in the Comprehensive Plan document.

11. A rezoning proposal's density should be consistent with the Future Land Use Plan and related density assumptions. The actual density approved should take into consideration the parcel zoning, adjacent conforming land uses, the nature of the proposed development, and other relevant policies of the Comprehensive Plan.

12. Non-residential development proposals should be evaluated according to the types of uses proposed, their compatibility with surrounding uses, and the ability of existing or planned infrastructure to provide adequate services to these uses. In addition, the Village of Bee Cave should work closely with the Lower Colorado River Authority (LCRA) in order to ensure the provision of water and wastewater services to new development.

13. The Village of Bee Cave should establish design standards and guidelines for development within areas that are planned for non-residential uses to ensure that these areas develop with high quality, compatible design. Standards and guidelines should address elements including, but not limited to, minimum lot size, building scale, building setbacks, lighting, landscaping, screening and fencing, signage, internal circulation, and building materials. (These elements are further discussed in the *Environmental Quality and Community Image* element of the Comprehensive Plan.)

14. The Village of Bee Cave should periodically evaluate the development review and approval process, and should revise these processes as needed to ensure the following: (1) that adequate opportunity is provided for public input in appropriate development projects; (2) that consistency and predictability are maximized for all parties involved in the process; and (3) that the process helps to achieve the goals and implement the policies of the Comprehensive Plan.

15. Rezoning requests (or other development approvals) for land uses that are not consistent with the Future Land Use Plan should not be considered until the Comprehensive Plan has been amended as necessary to provide for such land uses. In those cases where development requests are not consistent with the Plan, the Village should process such requests and Plan amendments concurrently.

The Future Land Use Plan is not the Village's official zoning map. Rather, it is intended to be used as a guide in making decisions regarding Bee Cave's future land use patterns. In essence, the Future Land Use Plan is intended to provide an overall framework for guiding the actions of the different entities responsible for determining the Village of Bee Cave's future. It will be important that the Plan be used on a daily basis, and that it be kept updated and current with respect to changing conditions and trends, in order for the Village to enjoy the benefits of coordinated development over a long period of time.

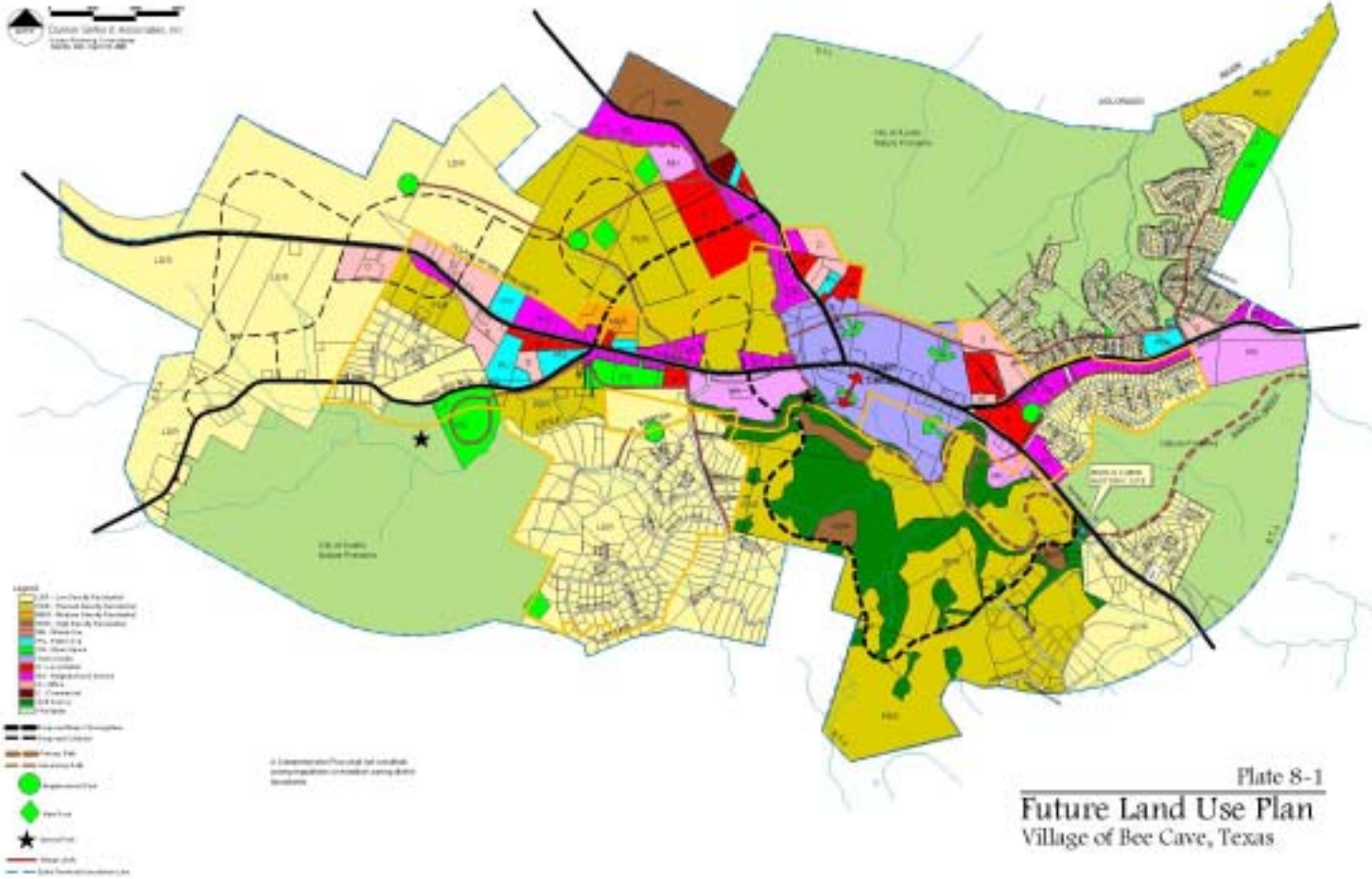


Plate 8-1

Future Land Use Plan

Village of Bee Cave, Texas

ENVIRONMENTAL QUALITY AND COMMUNITY IMAGE

Section Nine

Comprehensive Plan 2000

INTRODUCTION

Often thought of as mere beautification of a community, “community image” elements really contribute to a much more complex process of ordering a community's natural and man-made features to establish a distinct visual image and identity – a "sense of place" – for the community. Urban design principles strive to improve the quality of life, or "livability", within a community by enhancing the man-made environment and by creating new opportunities for social interaction among residents. Good urban design practices also help to create a legible development pattern that makes the community understandable to residents and visitors alike. They often deal with the sensory response of people to the community's physical environment: its visual appearance, its aesthetic quality, and its spatial character. Good urban design practices can be used to bolster people's sense of well being and civic pride, their awareness of different places within the community, and their behavior toward one another. In short, the careful application of urban design principles in urban planning may help to protect the quality of the environment (both natural and man-made), and the corresponding quality of life enjoyed by residents and visitors, as a community or town changes over time.

Communities and regional areas continually change in response to both positive and discordant economic and social forces. Reinforcement of positive changes and mitigation of less desirable trends are important civic and planning objectives. The practice of good urban design does not typically attempt to resolve a community's challenges directly. Instead, it tries to mitigate possible negative effects resulting from these challenges, hopefully in a proactive way, and it builds upon the positive aspects of the community to improve the overall quality of social life and to enhance feelings of civic pride and accomplishment among residents. The creative application of specific urban design improvements, no matter how large or small they may be, should result in a more aesthetically and functionally stable community which is a happier and healthier place to live, not only in the physical sense, but in the psychological and emotional sense, as well.

The *Environmental Quality and Community Image* element of the Comprehensive Plan provides a foundation for the creative application of good urban design principles and practices in the Village of Bee Cave. It integrates urban design considerations into the Village's growth and development processes to create an attractive and recognizable physical environment that complements the functional organization of Bee Cave, and to reinforce a sense of "community" among the people who live here. In addition, this element discusses various types of design (i.e., traditional neighborhood design, new urbanism) that may help the Village of Bee Cave realize its vision regarding the integration of residential and retail areas, along with the proposed system of trails. The desired residential housing densities will also be discussed. The intent of *Environmental Quality and Community Image* element is to provide recommendations for maintaining and strengthening both the Village's image as a community of excellence and leisure, as well as its identity as a small town in spite of it proximity to the expanding city of Austin.

THE "LIVABLE" COMMUNITY

Many factors contribute to the "livability" of a community. The overall impression that a community imparts to residents and visitors is a good indication of the livability of a community. The community's physical appearance is one aspect that can be encouraged or promoted to enhance this livability factor.

This element of the Comprehensive Plan is intended to identify those aspects of the urban fabric which are intended to be enhanced or improved, thereby increasing the community's pride and commitment in working toward quality physical growth and development. The perception and character of the Village that people "feel" as they travel through Bee Cave is one of the most important issues regarding urban design as used within the context of this Plan.

Several major aspects of the community's physical design have been identified which can enhance the image the public has of the Village, and which can contribute toward making it a better place to live, work and play:

- Site Design Criteria for Residential Development:
  - Residential Lot Densities,
  - Typical New Neighborhood/Subdivision Design
  - Clustering Principles;
- New Urbanism and Traditional Neighborhood Design (TND): Town Center Guidelines;
- Design Criteria for Non-Residential Development:
  - Site Design Criteria;
  - Building Materials;
  - Articulation of Building Facades;
  - Signage;
  - Landscaping;
  - Screening of Refuse Containers;
  - Screening and Location of Outside Storage, Loading Areas, and Utility Equipment;
- Major Corridor Design Guidelines; and
- Gateway Treatments.

The physical design goals referenced within the Goals and Objectives component of the Comprehensive Plan, located primarily within the "Physical Form of the Community" section and the "Community Livability and Character" section, are based upon input from the Comprehensive Plan Steering Committee and from public workshops, and they identify the specific elements which need to be either maintained or addressed in order to preserve and enhance the existing physical quality and appearance of The Village. By considering the design of the community as a whole and by considering the design of specific sites or locations, enhancement of the overall image of the community can be achieved. This element of the Plan serves as a guide for achieving such community design goals and objectives.

URBAN DESIGN ELEMENTS

The following is a discussion of various elements that, when implemented either separately or in combination, can greatly contribute to establishing a positive community image in the Village of Bee Cave. These elements have been determined to be important to residents of Bee Cave, and therefore further discussion of their potential contribution to the overall character of the Village of Bee Cave is warranted and should be integrated into the Comprehensive Plan.

Site Design Criteria for Residential Development

The design and character of residential neighborhoods is an important component of the community's overall urban design. As more property is developed into residential subdivisions, such design factors as the provision of open space, adjacency issues, screening, and landscaping, as well as the design layout of the subdivision itself, will be critical to the perception of the Village's residential neighborhoods. While the community clearly must provide developers with options appropriate to the marketing of their subdivisions, the community must also strive to maintain some continuity between different residential subdivisions; this is also addressed within the Comprehensive Plan.

Older residential neighborhoods will need continued maintenance in such areas as streets and utility service, while newer residential subdivisions offer the potential of embracing and including positive design elements that will add value, both aesthetic and monetary, to the homes constructed within them. The vast majority of the existing homes and residential areas in the Village of Bee Cave are characterized by high-quality development. The enhancement and maintenance of these high-quality areas is of the utmost importance.

SINGLE-FAMILY RESIDENTIAL LOT DENSITIES FOR NEW DEVELOPMENT

The existing Village Ordinances have provisions for smaller lot sizes than have come to characterize the housing market within the Village of Bee Cave. During the Comprehensive Planning process, a citizen survey was conducted[9-1], and the residents of Bee Cave and the ETJ were asked what their preferred lot size was for the Village of Bee Cave. The majority of the citizenry was of the opinion that the average lot size should be approximately one-acre. Based on this input, as well as input provided during public workshops, members of the Comprehensive Plan Steering Committee adopted objectives (within the Goals and Objectives element of the Comprehensive Plan) to respond to the desired density. Therefore, it is recommended that the Village of Bee Cave examine its Subdivision and Zoning Ordinances to ensure that they include the following elements:

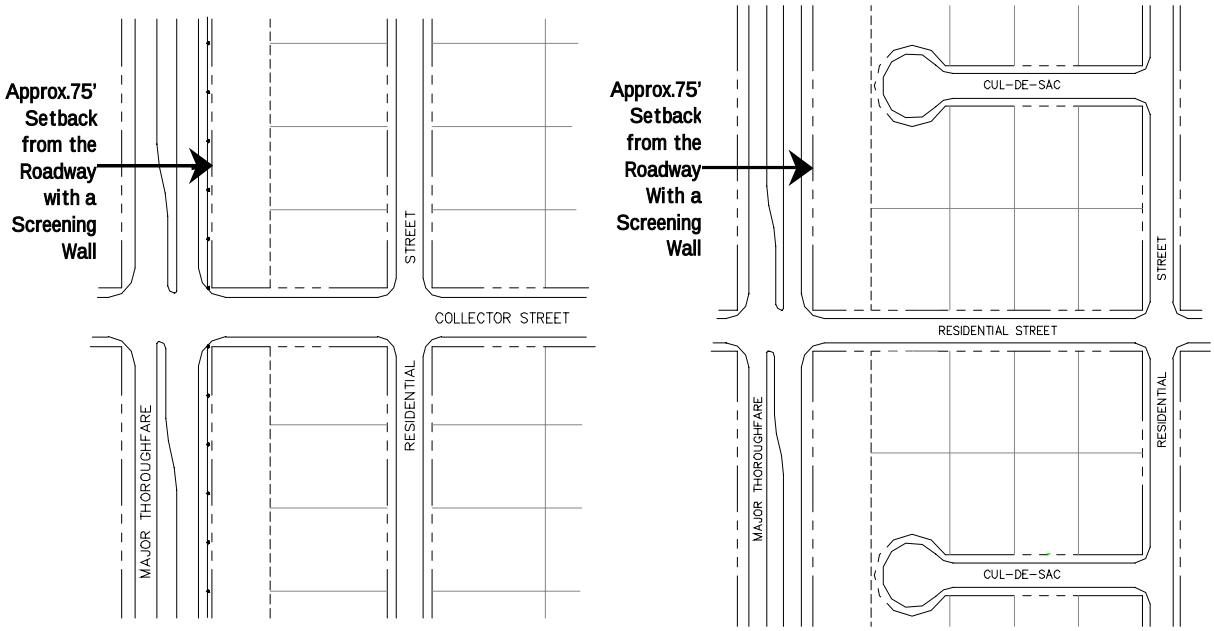
- Residential areas designated as "Low Density" on the Future Land Use Plan should have a single-lot average of one-acre; and
- Base-lot size must not be less than one-half-acre, unless clustering concepts are utilized. (This concept is to be discussed later within the *Environmental Quality and Community Image* element.)

For example, a neighborhood constructed with these density characteristics could have an equal number of ½-acre lots and 2-acre lots, and an equal number of ¾-acre lots and 1-and-¾-acre lots; another neighborhood could have all one-acre lots. It is important to note that however these residential areas are designed, they should have a one-acre lot average. Flexible single-family lot alternatives allow variation of lot-size within subdivisions, but establish a base density with which all developers must comply. The following various types of neighborhood design alternatives should be considered within the Village of Bee Cave.

9-1 Conducted by Raymond Turco & Associates, Inc. in November of 1999; summary included in Appendix A.

TYPICAL NEW NEIGHBORHOOD/SUBDIVISION DESIGN (BASE DENSITY)

Major thoroughfares typically attract large volumes of traffic; therefore, it is not desirable to front residential lots directly onto these streets. Fronting residences on major thoroughfares will reduce efficiency of the thoroughfares due to the number of driveways, curb cuts and cross-streets, as well as the possibility of on-street parking in front of the houses. Also, when a subdivision's layout produces lots fronting onto a major thoroughfare, there is ultimately pressure later on to convert these residences



Lots Rearing on Major Thoroughfare

Lots Siding on Major Thoroughfare and Fronting on Cul-de-Sacs

ILLUSTRATION 9-1
Single-Family Residential Lot Layouts Adjacent to Major Thoroughfares

into retail or commercial land uses. The frontage of all major thoroughfares within the community should be used for retail and commercial purposes. As stated within the Future Land Use Plan element, the preponderance of retail uses should be along and adjacent to State Highway 71, R.M. 620 and F.M. 2244 (Bee Cave Road).

The general appearance and image of residential neighborhoods and the community as a whole are also greatly affected by the orientation of development along the major streets. Fronting lots onto major roadways tends to present aesthetic and noise problems for area residents due to large amounts of traffic passing in front of homes. Of equal importance is the safety factor when area residents must back their vehicles into the arterial to leave their homes. No space is typically provided along arterial streets for parking which would serve the needs of visitors, deliveries, etc.

ILLUSTRATION 9-2

Example of a Residential Hill Country Development

A preferred approach is to side residential lots onto major streets since this allows more visibility into the neighborhood with views of pleasing elements like home fronts and landscaped yards. This tactic also enhances neighborhood security and minimizes negative traffic impacts upon the surrounding major thoroughfares. The careful treatment of subdivision design adjacent to future major thoroughfares will contribute to the safety and capacity of the thoroughfares. Also it will help to protect adjacent residential properties from the negative influences of these roadways, and from pressures to convert residences into nonresidential land uses in the future.

Illustration 9-1 shows residential lot arrangements that are designed to protect not only the residences, but the capacity and function of the adjacent thoroughfares. One method of accomplishing a desirable thoroughfare/residential relationship is to design residential lots fronting onto a parallel residential street and backing onto the major thoroughfare. By restricting access and by providing screening and suitable landscaping with an adequate setback between the residential development and the major thoroughfare, it is possible to avoid problems that would be created if all abutting lots had direct access onto the major thoroughfare. A setback of 75 feet should be required for developments adjacent to State Highway 71; this 75-foot should also be required for those adjacent to either R.M. 620 or F.M. 2244. Intersections of collector streets or

other subordinate roadways should be spaced as shown on the Thoroughfare Plan (see **Plate 4-1** in the Thoroughfare Plan element). Street spacing such as this will result in an interior subdivision design permitting access to the neighborhood, but discouraging the movement of through traffic within a residential area.

Illustration 9-1 also shows how short, "open" ended cul-de-sac streets may be used to create lots that do not have direct access onto a major thoroughfare. This technique offers a practical and economical way to protect the capacity of the major thoroughfare, and it also helps to preserve the integrity of the residential neighborhood. This method of "siding" residential lots generally does not require screening walls; therefore, it is one of the more desirable options utilized by developers in subdivision design. Cul-de-sac streets can be efficient methods in developing land, and they are very desirable for residents due to minimal traffic flows. The use of cul-de-sac streets alternated with through collector streets that intersect with a major thoroughfare tends to yield an efficient lot layout design, and this practice also maximizes thoroughfare capacity and efficiency.

Illustration 9-3 shows comparative examples of pavement (impervious cover) versus lot yield for several suggested residential street configurations adjacent to major thoroughfares. All lots should have at least 24 feet of frontage on a residential, public street.

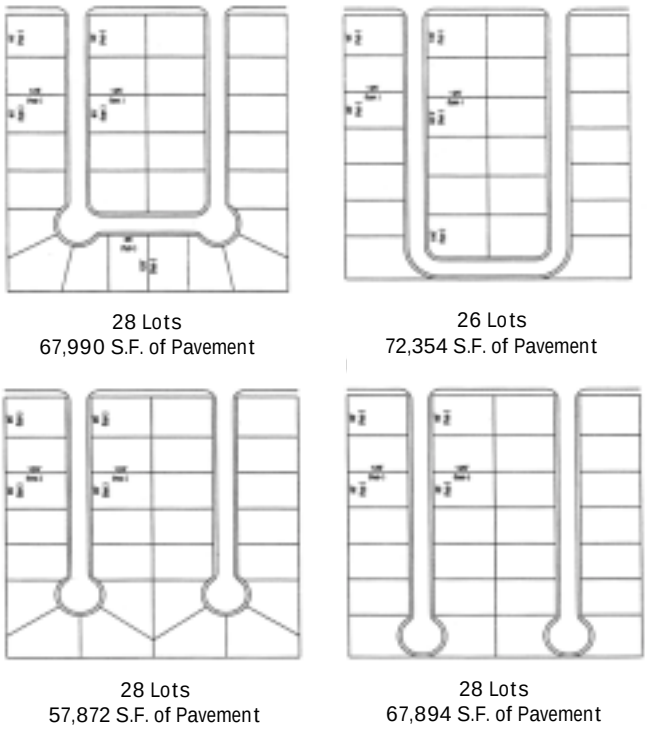


ILLUSTRATION 9-3
Comparison of "Pavement" vs. "Lot Yield" For Suggested Residential Street Configurations Adjacent to Major Thoroughfares

A neighborhood should be predominantly residential in nature. It is usually bounded by thoroughfares or collector streets, or by some other natural or manmade features such as creeks, or topographic features. A neighborhood should contain some park or open space features, and should have

some convenient retail areas and various other facilities, such as churches, are also appropriate as part of a typical neighborhood. It is also defined in more abstract terms by the sense of "community" and the quality of life enjoyed by the people who live and play there. Well-designed neighborhoods provide a setting for residents to develop a strong sense of belonging, which is promoted by their interactions with one another. The quality and livability of the Village's neighborhoods are integral components of the overall character. The key to a successful neighborhood is creating a sustainable environment where the ongoing investment in property is supported by public investment in parks and greenbelt areas; opportunities for social interaction; accessibility for pedestrians, bicyclists and vehicles; and distinctive characteristics which give an area a unique identity. In summary, neighborhood viability may be quantified in terms of the following characteristics:

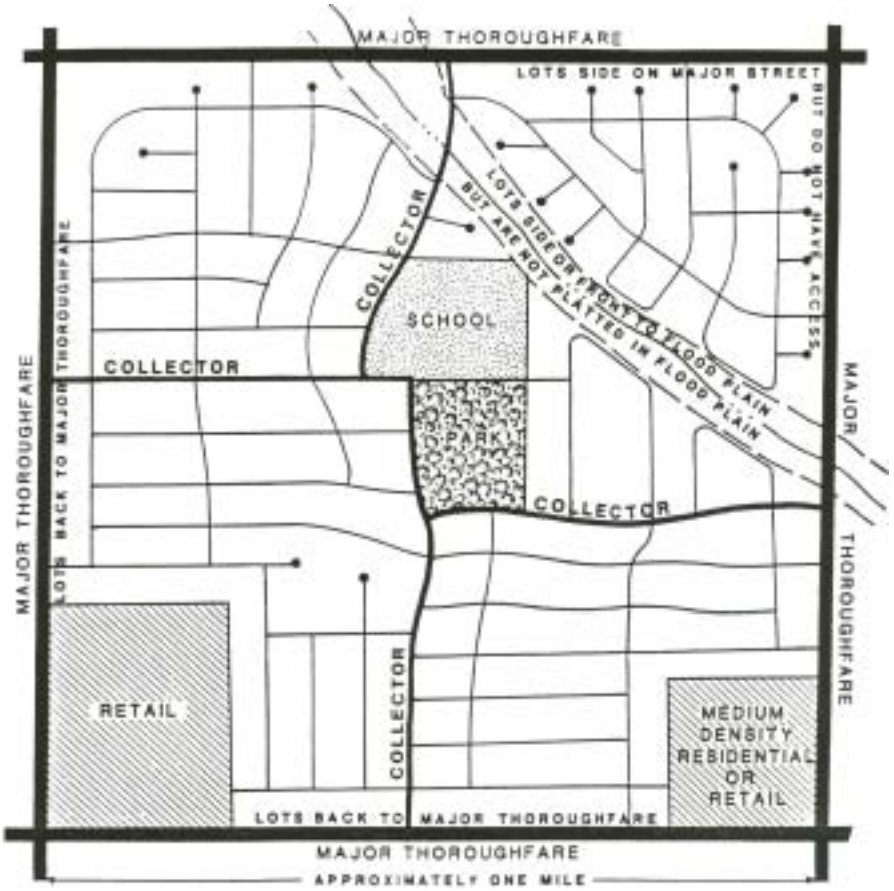


ILLUSTRATION 9-4
Typical Residential Neighborhood Layout

- Opportunities for social interaction;
- Careful and strategic placement of retail uses and other appropriate non-residential uses within the neighborhood area;

- Continued investment in public and private property to stabilize property values;
- Condition of public facilities and infrastructure serving the area;
- A sense of "community" and "belonging" among residents; and,
- Access to amenities such as open space and trails.

The Village of Bee Cave should strive to ensure that these elements are present in all neighborhoods within the Village, in both existing and new developments. These characteristics should also be considered vital to the quality of life within the Village of Bee Cave as a whole. **Illustration 9-4** shows a typical, generalized neighborhood layout and how the proposed subdivision treatments and thoroughfare standards may be used.

ILLUSTRATION 9-5

Residential Development With Ribbon Curbs and Landscaping Elements

The most important aspects of **Illustration 9-4** are that major thoroughfares bound the residential neighborhood area and residential lots are not allowed to front directly onto these roadways. Lots should back to the major thoroughfares, and cul-de-sacs are used to open up the neighborhood and to provide access to residences from interior streets rather than directly from the major roadways. Collector streets are generally not continuous, but are instead offset within the interior of the neighborhood, which discourages cut-through traffic. In addition, the Village should require a creek setback protection zone in order to protect sensitive drainage areas, particularly Little Barton Creek.

It is essential that Bee Cave develop additional design criteria for typical subdivision developments, such as:

- Continue enforcement of the Tree Preservation Ordinance, thereby limiting where and when trees may be removed;
- Require trees to be planted at a distance of 30 to 40 feet along both sides of residential subdivision streets in order to mitigate any tree removal;

- Require all units to have a two-car garage with off-street parking provisions in driveways, and ensure that side- or rear-facing garages are encouraged;
- Develop a street cross section for use within neighborhoods for rural density (refer to the "Type 'F' Rural Street" section within the *Thoroughfare Plan* element);
- Require the construction of ribbon curbs instead of raised curbs for drainage purposes, whenever possible (refer to **Illustration 9-5**);
- Require sidewalks or connections to the Village trail system; these could be further enhanced with streetscape elements such as decorative lamps, benches, and planters in all new developments;
- Require the construction of neighborhood entrance signs that are constructed primarily of masonry materials and that incorporate landscaping elements (refer to **Illustration 9-6**);

ILLUSTRATION 9-6

Residential Development With Entrance Sign and Landscaping Elements

- Require that all lighting elements (i.e., street lighting, trail lighting) in these neighborhoods must be low-intensity, in order to ensure that no resident is adversely affected.
- Require formation of neighborhood associations, which would be responsible for maintenance of the neighborhood for all new residential developments.
- Require connections and access to the Village's trail system (refer to the *Parks and Open Space* element and **Plate 5-1**).

CLUSTER DESIGN

The most important aspect of cluster design in subdivisions is the conservation of open space, thereby helping to create rural character in communities and neighborhoods. A cluster design creates large pockets of planned open space by allowing clustering of development. Incentives, such as allowing smaller lot sizes, can be developed in order to encourage developers to use this concept. This method of neighborhood development utilizes increased development densities in some areas of the subdivision by decreasing the density of development in other areas; permanent open space is set aside, while the overall density of the subdivision remains the same.

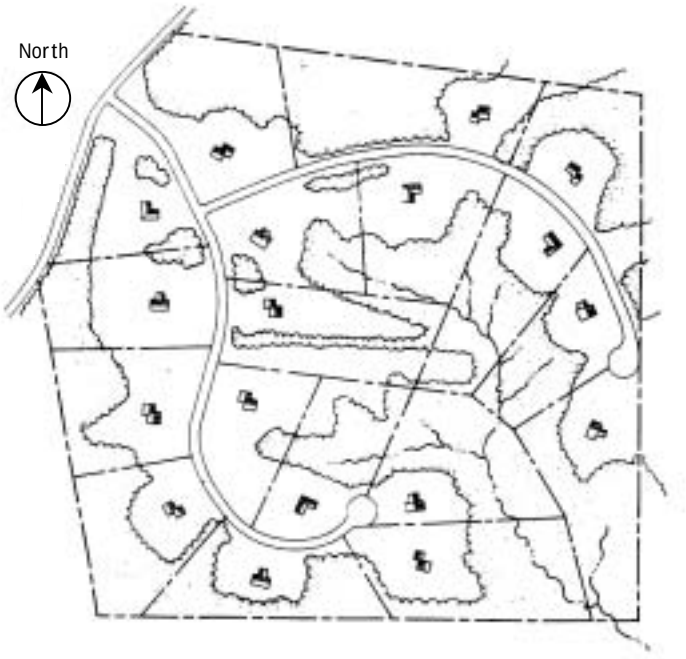


ILLUSTRATION 9-7

Typical Large-Lot Subdivision Design Without Provision of Open Space

This type of development can be encouraged in areas where the base density is relatively low. This is the case in the Village of Bee Cave, with a desired average density of one dwelling single-family unit per acre. The Village should provide developers with incentives to utilize this design technique. One way in which the Village can do this is generally referred to as a "density bonus", whereby a developer is allowed higher density levels in exchange for the provision of open space. Another incentive is to allow smaller street widths and cul-de-sac radii, as well as allowing the developer to reduce development costs. This would also help to create more pedestrian friendly streets, with street grading designs using varying materials (i.e., brick, cobbled stones) and creating interesting street patterns.

It is recommended that the Village of Bee Cave maintain the aforementioned one-acre-lot average for single-family homes, however, the base density of one-half-acre could be reduced to the individual lot size to a minimum of 20,000 feet. The following is an example of the clustering concept as it is intended to be implemented in the Village of Bee Cave:

> A landowner with a 100-acre tract would be allowed to develop 100 lots, which is no different than what is allowed when developing a typical neighborhood design. However, the reduction of lot size to 20,000 square feet provides a monetary incentive to the developer (less initial cost for roadways and improvements), and allows the community to benefit from the perpetual open space that is the result of the clustering concept. The result could be 100 lots on less total acreage than the typical development with a 1-acre lot minimum.

ILLUSTRATION 9-8

Preservation of Open Space Through Cluster Design

Several important criteria should be established for the use of the clustering technique within the Village of Bee Cave. First, it should not be permitted on development tracts of less than 20 acres. Tracts that are 20 acres or less do not provide the Village of Bee Cave with enough open space to warrant the reduction in lot size. In addition, clustered developments of 20 acres or less would not result in a neighborhood with a rural, small-town character and design. When the clustering technique is used, it should be buffered from adjacent major roadways and existing or proposed large-lot development.

As previously mentioned, this type of residential neighborhood design could be especially valuable for the Village of Bee Cave due to its various environmental concerns. It is important to note, however, that the calculation of open space should not include areas that are previously protected by Village Ordinance or by other legal constraints, including elements such as creek setbacks and floodplain areas. However, the clustering

technique does allow for the conservation of other environmentally sensitive areas that may not be otherwise protected, such as ridgelines and view areas with great variations in topography. Utilizing and encouraging this design technique within the Village of Bee Cave would allow the area to develop residential areas, as it likely will due to high demand, but in a positive way that recognizes the significant environmental concerns while ensuring the maintenance of the existing rural character of the Village.

MULTI-FAMILY RESIDENTIAL DESIGN GUIDELINES FOR NEW DEVELOPMENT

Certain within the Village of Bee Cave suitable for multi-family development, as designated on the Future Land Use Plan. Multi-family land uses can be designed in such a way that they are assets to the community, and are integrated within the residential fabric of the community. The following outlines a list of guidelines that should be included in the Village's Subdivision and Zoning Ordinances, intended to ensure the development of high-quality multi-family land uses, within the areas designated by the Future Land Use Plan:

ILLUSTRATION 9-9
Multi-Family Land Use

- Establish a limit of 10 dwelling units per acre;
- Require 80 percent masonry exterior finish;
- Require façade offsets of at least 5-foot in depth for every 50-foot length of flat surface.
- Develop options for a secured-access gate around the entirety of the development;

- Ensure that adequate landscaping standards are met within the current Village Landscaping Ordinance;
- Require one covered and enclosed parking space (i.e., a garage) for each dwelling unit;
- Provide a "density bonus" incentive for garages which are directly attached to the dwelling unit, for example:
  - Allow an increase of up to a total of 12 units per acre when 50 percent of the dwelling units are constructed with attached garages;
  - Allowed an increase of 16 units per acre when 100 percent of the dwelling units are constructed with attached garages.
- Require usable open space and protection of natural areas.
- Require integration of the Village trail system within the multi-family development.

ILLUSTRATION 9-10

Landscaping Enhances Multi-family Land Use

ILLUSTRATION 9-11

Garages Directly Attached To Multi-Family Units

New Urbanism & Traditional Neighborhood Design (TND): Town Center Guidelines

New Urbanism and Traditional Neighborhood Design (TND) are different terms used to describe the same end result – a community that fosters social interaction and mixed use pedestrian-friendly areas. The core idea behind the New Urbanism movement is the intent to revive a sense of community in today's increasingly urbanized culture. The main characteristics of a traditional neighborhood design are grid layouts, tree-lined streets, alleys, public squares, mixed use neighborhood centers, and varying residential densities; the pedestrian, often ignored in the typical urban area, is a significant element in the overall design. In other words, the "new urbanism" and "traditional neighborhood design" concepts strive to resurrect the early twentieth century American towns.

ILLUSTRATION 9-12

Pedestrian-Friendly Elements Within a Town Center

During the comprehensive planning process, the citizens expressed interest in creating a central area within Bee Cave that would become the core of the Village. The Town Center land use designation was established to further this objective. As was stated within the Future Land Use element of the Comprehensive Plan, a mixture of land uses is appropriate for the Town Center, as it is also intended to become a place for local residents to shop, conduct personal and government-related business, live in the same place as their business, meet neighbors to eat in a restaurant or café, enjoy arts/cultural facilities, gather for community events and festivals, and other similar activities. The Town Center is an area within the Village wherein TND concepts should be utilized. Following are concepts that typically characterize TND areas, and that are applicable within the Village of Bee Cave within the Town Center:

- **PEDESTRIAN-ORIENTED ENVIRONMENT**

  The entire area should be able to be experienced by an approximate 5- to 10-minute walk at an easy pace. Within the Village of Bee Cave, it is envisioned that the Town Center will be pedestrian-oriented, and will be connected to adjacent land uses by the Village trail system.

ILLUSTRATION 9-13

A Pedestrian-Oriented Development

- **HUMAN-SCALE DEVELOPMENT**

  Structures within the Town Center should be smaller in scale in order to ensure consistency with a pedestrian-oriented environment. Specifically, nonresidential structures should be designed at a minimum of 1,500 square feet and a maximum of 85,000 square feet.

- **NARROWER STREETS**

  A network of interconnecting streets and alleys that are smaller than conventional streets and are varied in size and form – intended to help control traffic and provide character in the neighborhood;

- **DENSITY**

  Higher densities than the typical density of conventional developments are encouraged, with structures that have lesser street setbacks, thereby creating a more distinct street edge and defining the border between public and private spaces;

- **REGIONAL VERNACULAR ARCHITECTURE AND LANDSCAPING**

  These types of developments should recognize and relate to the surrounding area. In the Village of Bee Cave, this would translate into a "Hill Country" design. Such design standards should include (within the Zoning Ordinance), but should not be limited to:

  - Use specific "Hill Country" building materials (outlined later within the *Environmental Quality and Community Image* element),
  - Structures should be finished on all sides with the appropriate building material, and the building material should be consistent around the entirety of the structure.

ILLUSTRATION 9-14

"Hill County" Building Materials

  - Offset building facades by requiring façade offsets of at least 5-foot in depth for every 50-foot length of flat surface, both vertically and horizontally,
  - Regulate distance between structures by requiring a distance of at least 30 feet between structures, and
  - Regulate structure height by limiting structures within the Town Center to 50 feet in height;

- **MIXED USES**

  Differing land uses in close proximity to one another, including a variety of housing types, retail opportunities, services, and public facilities mixed together in order to meet the daily needs of the community's residents; these uses could be arranged around a public square;

- **A CENTER OR FOCAL POINT**

  An example of a focal point would be a public square or public building serving as the main element of a community. In the Village of Bee Cave, the Town Center itself will likely be regarded as such once it is developed;

ILLUSTRATION 9-15

Focal Point and Pedestrian-Friendly Elements Within a Town Center

- **VARIETY OF HOUSING TYPES**

  Mixed residential housing, which may include single-family attached homes, townhouses, condominiums and multi-family units;

- **OUTSIDE SPACES**

  The availability of outside spaces such as courtyards, outdoor seating areas, small squares, pocket parks, and greenbelts, helps to promote a higher level of pedestrian activity and serves to enhance a pedestrian-oriented environment. Where possible, both residential and nonresidential land uses should be oriented to these outside spaces.

The traditional neighborhood design (TND) is oriented towards reducing urban sprawl while facilitating efficient use of existing and future services. It is important to note that the Village of Bee Cave, with its numerous environmentally sensitive areas, should allow this type of design to be utilized generally in conjunction with the clustering concept, primarily due to the fact that neighborhoods developed on the basis of TND tend to have higher densities and less permeable service area that what is generally desired within the Village of Bee Cave. It is therefore envisioned that the only area in which this type of development should be allowed is within the proposed Town Center area. The Town Center has been proposed within the Future Land Use Plan (refer to **Plate 8-1** for graphic support) with the intent that it be designed in keeping with the guidelines of TND, and therefore, to incorporate many of the characteristics of a TND area. The Village of Bee Cave should limit the availability of residential TND design in other areas of the Village in order to prevent it from becoming the predominant type of development within the Village.

While this type of design is more likely to promote the desired small town environment within the Village of Bee Cave, it is important to stress that the intent of this neighborhood design within Bee Cave is to create a rural, small town environment. The "new urbanism" and TND concepts should not be exploited in order to create higher density areas and small-lot subdivisions without the benefits and design concepts embraced by New Urbanism. A way in which to ensure that the purpose and intent of these concepts is upheld within the Village is through careful and thorough enforcement of zoning and subdivision regulations, as well as any other applicable Village ordinances.

Design Criteria for Non-Residential Design

One of the factors that will determine the ultimate efficiency of Bee Cave's thoroughfare system is the manner in which properties adjacent to major thoroughfares are developed and used; the integrity of State Highway 71 is especially critical, as is that of R.M. 620 and F.M. 2244 (Bee Cave Road). By regulating points of access into adjacent properties, by encouraging shared access, and by providing for wider spacing of intersecting streets, it becomes possible to maximize the traffic capacity and the efficiency of each thoroughfare. Another important consideration will be the manner in which public and private landscape improvements occur within, and adjacent to,

thoroughfare rights-of-way. By coordinating and guiding both of these factors, the community can create a safe and efficient thoroughfare system that projects a positive image for the community and for adjacent land uses.

Today the Village of Bee Cave is primarily residential in nature, however, due to its location at the confluence of three major regional roadways, State Highway 71, R.M. 620 and F.M. 2244, non-residential land uses will likely seek to locate within the Village along these roadways. In order to preserve the Hill Country, small-town atmosphere of Bee Cave, the establishment of design guidelines for these non-residential land uses will become increasingly significant as growth continues. The following discussion of such guidelines is intended to establish a framework of key elements that should be considered when addressing the criteria for non-residential design practices. It is also important to note that these guidelines should be included within the Subdivision Ordinance or the Zoning Ordinance of the Village of Bee Cave.

SITE DESIGN CRITERIA

There are many specific site design items that can be addressed by the private sector during site development. Often, much of what creates a better view from the street is simply better site design. Site design review can be incorporated into the Village's normal project review of site plans. The following sections discuss site design elements that could enhance non-residential developments, especially along State Highway 71, R.M. 620 and F.M. 2244.

ILLUSTRATION 9-16

Retail Area With Wide Setback & Landscaping Enhances the "View from the Road"

Building Setbacks

PURPOSE:

- Provide a positive visual image of the Village of Bee Cave along all major thoroughfares.

SUGGESTIONS:

- All non-residential buildings and related accessory buildings constructed on any tract within the Village that is located along any of the three major thoroughfares, State Highway 71, R.M. 620 and F.M. 2244, should be setback from the roadway at a distance of approximately 75 feet. Any required landscaping and/or screening elements should be constructed within this 75-foot setback.

Placement of Parking Areas

PURPOSE:

- Provide a positive visual image of the Village of Bee Cave along all major thoroughfares.

SUGGESTIONS:

- Related parking areas/facilities for all non-residential uses located along any of the three major

ILLUSTRATION 9-17

Parking Behind Office Land Use: Not Visible From the Road, and Screened From Adjacent Residential Land Uses

thoroughfares, State Highway 71, R.M. 620 and F.M. 2244, should be placed either at the side or at the rear of the primary structure and away from the major thoroughfares (thereby ensuring that they are not visible from the major thoroughfares) whenever possible. An exception to this may occur when protection of natural vegetation or site constraints make such design impractical. The Village may also require any additional landscaping and/or screening elements necessary to further shield parking areas from the view of those traveling on major roadways.

Edge Treatments

PURPOSE:

- Provide a positive visual image of the Village of Bee Cave along all major thoroughfares.
- Provide a buffering element between residential and non-residential land uses.

ILLUSTRATION 9-18

Masonry Wall and Landscaping Treatments Provide Screening

SUGGESTIONS:

- Require all non-residential uses located along any of the three major thoroughfares, State Highway 71, R.M. 620 and F.M. 2244, to implement landscaping elements along the length of any major thoroughfare frontage within the setback area.

ILLUSTRATION 9-19

Stone Wall and Trees Provide Screening Between Retail Land Uses and A Major Thoroughfare

- Between non-residential and residential land uses, a screening wall should be required. (It would be the responsibility of the non-residential land use to construct and maintain the screening wall). The following three alternatives should be provided to the developer:
  - **MASONRY WALL WITH LANDSCAPING** – 6 feet in height, constructed of rock, stone or other material similar in appearance and quality;
  - **WROUGHT-IRON WALL WITH LANDSCAPING** – 6 feet in height with Village-approved "Hill Country" landscaping materials;
  - **NATURAL SCREEN** – 6 feet in height with Village-approved "Hill Country" landscaping materials.

  It should be noted that each of the three alternatives must provide a continuous, opaque screen within two years of initial planting, and that earth berms may be used to further shield the view from the road.

Graduated Setbacks

PURPOSE:

- Provide a positive visual image of the Village of Bee Cave form all areas within the Village, as well as from the major regional thoroughfares.

SUGGESTIONS:

- Implement a "graduated setback" ordinance, which would require non-residential buildings to be increasingly setback from the road or from adjacent residential land uses as their height increases, or as the natural topography of the land increases (refer to **Illustration 9-20**).

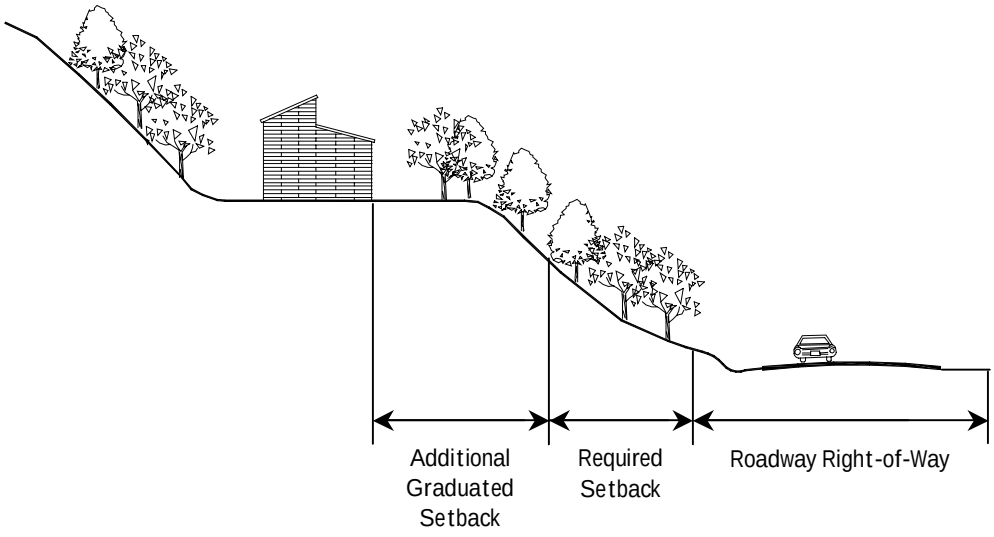


ILLUSTRATION 9-20

Graduated Set Back Required to Protect View From the Road

Circulation

PURPOSE:

- Provide continuous pedestrian access throughout the Village of Bee Cave, to all residential and non-residential areas, through the construction of a trail system.

SUGGESTIONS:

- Require all non-residential developers to consider pedestrian access to and from adjacent land uses. The Village may require the developer to construct a trail through the developing property that connects to existing trails or rights-of-way for trails on adjacent properties (refer to **Illustration 9-21**).

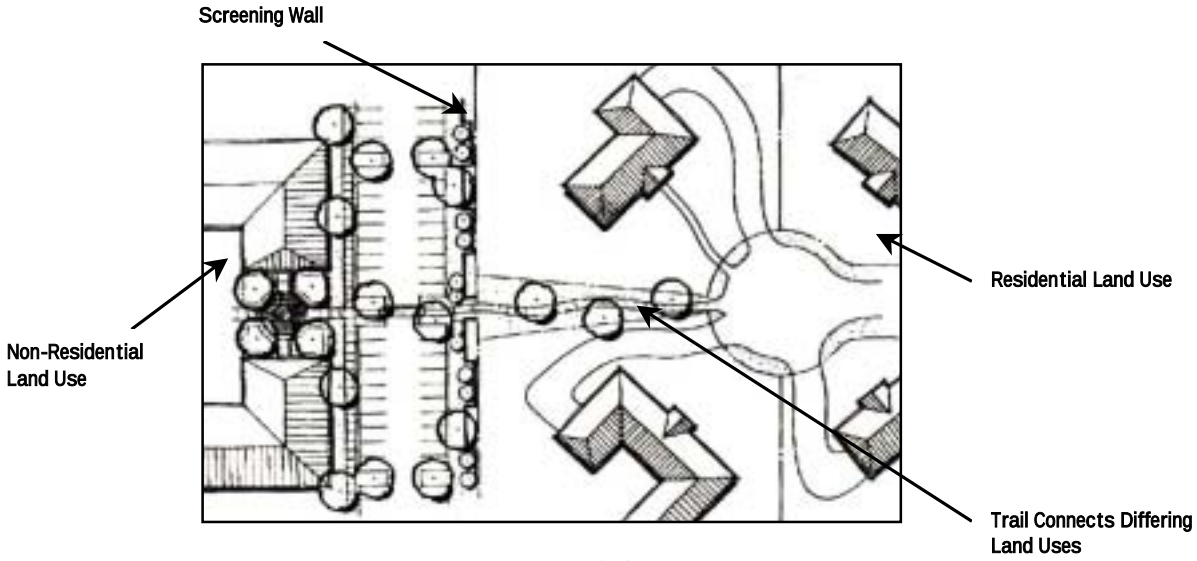


ILLUSTRATION 9-21

Allows Pedestrian Access Between Residential and Non-Residential Land Uses

Layout of Structures

PURPOSE:

- Ensure the maintenance of the existing small-town atmosphere of the Village of Bee Cave.
- Maintain the existing integrity of water quality and stormwater runoff in the Village of Bee Cave area by reducing the percentage of impervious cover..

SUGGESTIONS:

- Encourage non-residential developers to construct small-scale, pedestrian-friendly areas with small building "footprints", parking areas, and pedestrian walkways integrated into the Village trail system. The Village should create incentives for increasing the amount of landscaping, thereby increasing the amount of pervious cover, by allowing the reduction in the number of parking lot spaces on a sliding scale (refer to **Illustration 9-22**).

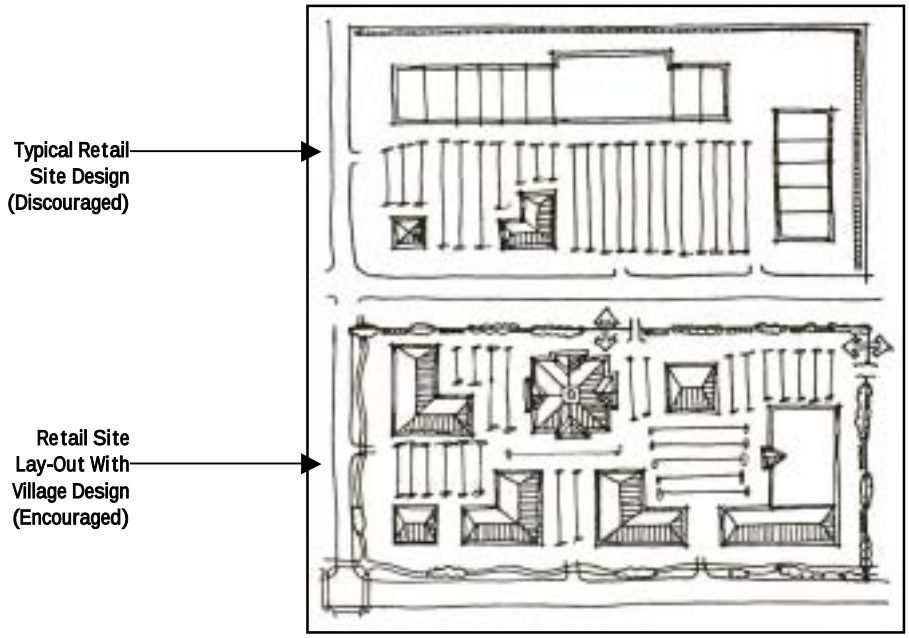


ILLUSTRATION 9-22

"Village" Site Design Helps To Create A Small-Town Atmosphere

Height of Structures

PURPOSE:

- Protect the integrity of the scenic views in and around the Village.
- Further the objective of a pedestrian-friendly environment by ensuring that nonresidential structures within the Village are constructed at a human scale.

SUGGESTIONS:

- Limit the height of nonresidential structures throughout the Village of Bee Cave to a maximum of 50 feet.
- Allow increases in height in relation to topography on a case-by-case basis.

Slope Restrictions

PURPOSE:

- Protect the integrity of the highest points of elevation in the Village by prohibiting non-residential land use construction directly at these points.
- Preserve the highest points of elevation in the Village for current and future residents of, as well as visitors to, the Village of Bee Cave.
- Protect the integrity of the ridgelines that are characteristic of the Hill Country.
- Minimize the negative visual impacts of water towers and other structures.

SUGGESTIONS:

- Prohibit the construction of any non-residential buildings directly upon the highest point of any non-residential tract of land.
- Prohibit development on topography with slopes greater than 25 percent.

The following are elements which can help to further enhance and improve the nature and appearance of non-residential land uses and their development:

ILLUSTRATION 9-23

Use of "Hill Country" Building Materials

BUILDING MATERIALS

PURPOSE:

- Ensure the aesthetic value of non-residential land uses.
- Create cohesiveness throughout the Village by establishing which building façade materials contribute to the desired "Hill Country" look and feel in the Village of Bee Cave.

SUGGESTIONS:

- Include within the Zoning Ordinance a list of acceptable materials, unacceptable materials, and materials that require further examination, and therefore require a Conditional Use Provision. The following is a recommended list with these categories:

ILLUSTRATION 9-24

Use of "Hill Country" Building Materials

BUILDING MATERIALS

Acceptable	Requires Conditional Use Approval	Unacceptable
Copper	Brick	Corrugated Metal
Limestone	Painted Wood	Vinyl Siding
Rustic Wood	Concrete	Aluminum Siding
Stucco	Glass	Cinder Blocks
Tile	Synthetic Materials	Reflective Glass
Shed Roof	Adobe (brick)	Aluminum
Granite		Metal
Marble		Reflective Roofs
Stone		
Dimensional Shingles		

COLOR OF BUILDING MATERIAL

Acceptable	Unacceptable
"Muted" color aluminum roofs	Pink
Rustic Colors	Purple
Natural Colors	Primary Colors
Earthy Colors	
Neutral Colors	

ARTICULATION OF BUILDING FACADES

PURPOSE:

- Ensure the aesthetic value of non-residential land uses, especially those that are larger in scale.

SUGGESTIONS:

- Require façade offsets of at least 5-foot in depth for every 50-foot length of flat surface, both vertically and horizontally.

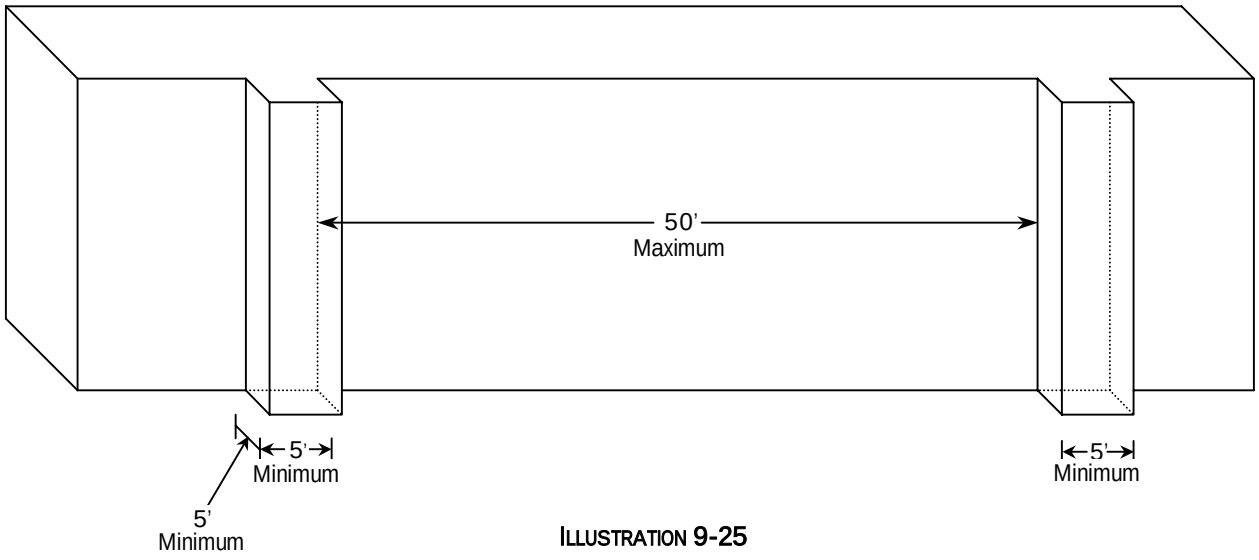


ILLUSTRATION 9-25

Façade Offset Diagram

SIGNAGE

PURPOSE:

- Ensure a sense of cohesiveness throughout the Village of Bee Cave, especially along the major thoroughfares, including State Highway 71, R.M. 620 and F.M. 2244, thereby maintaining and enhancing the aesthetic appeal of the Village.
- Encourage shared signage, especially along the major thoroughfares.

ILLUSTRATION 9-26

Monument-Style Sign Enhanced With Landscaping Materials and Ground Cover

SUGGESTIONS:

- Require all non-residential signs to be monument-style signs, proportional to the size and scale of the primary building structure. Maximum allowable height should be approximately eight feet.
- Require the use of masonry materials as the primary building materials of all non-residential signs. Wood materials should be allowed as a conditional use.
- Require the sign to be the same color as or similar to the color of the primary structure.
- Prohibit lighting as an element of the sign itself (i.e., neon lighting).
- Prohibit the construction and use of billboards.
- Ensure that the existing sign ordinance is enforced.

LANDSCAPING

PURPOSE:

- Enhance the view and image of the Village of Bee Cave, especially along the major thoroughfares, including State Highway 71, R.M. 620 and F.M. 2244.
- Contribute to the overall quality and visual appearance of individual non-residential developments.
- Contribute to the percentage of pervious cover within individual non-residential developments.

ILLUSTRATION 9-27

Non-Residential Land Uses Enhanced With Landscaping Materials and Ground Cover

SUGGESTIONS:

- Require a minimum 50-foot landscaped edge adjacent to any street right-of-way; an increase to a minimum 75-foot landscaped edge should be implemented for all non-residential land uses along the three major thoroughfares, State Highway 71, R.M. 620 and F.M. 2244.
- Provide incentives to existing non-residential land uses to persuade then to comply with the Landscaping and Tree Ordinance.
- Ensure that all non-residential land uses comply with the Village's Landscape and Tree Ordinance.
- Encourage xeriscape techniques in order to reduce the amount of watering and irrigation that are often necessary for common landscaping materials.
- Discourage the use of ground cover that would require a large amount of watering and irrigation (i.e. saint augustine grass).

SCREENING OF REFUSE CONTAINERS

PURPOSE:

- Maintain and enhance the appearance of the Village of Bee Cave from public streets and neighboring properties.
- Prevent public access to solid waste containers (e.g., dumpsters).

ILLUSTRATION 9-28

Screening Surrounding A Refuse Container

SUGGESTIONS:

- Require a screen around any commercial or industrial solid waste container that is visible from an existing or proposed public roadway (see Illustration 21). Dumpsters located at the rear of a building would not require screening.

- Solid waste containers should not be placed within required parking spaces, and they should allow proper access and vehicular circulation by service trucks.

SCREENING AND LOCATION OF OUTSIDE STORAGE, LOADING AREAS, AND UTILITY EQUIPMENT

PURPOSE:

- Improve appearance of community from public streets and neighboring properties.
- Prevent public access to storage areas.

SUGGESTIONS:

- Loading docks, service doors, and outside storage areas should be screened and should not face onto or be visible from a major or minor thoroughfare, wherever possible.
- Loading docks and service areas should be located at the rear of the building.
- When loading docks and/or outside storage areas are located within a side yard, they could be screened from adjacent properties and public rights-of-way by using masonry walls in conjunction with landscaping materials.
- Cell towers and other utility structures should be designed to blend into the surrounding area whenever possible.

State Highway 71 Corridor Streetscape Treatments

The term "streetscape" has been developed in recent years to describe the visual image that is projected by a community street and by various elements within and adjacent to the street right-of-way. Overhead power lines, traffic signals, signs, light fixtures, plant materials, and street paving are some of the most noticeable physical elements that are found within a typical streetscape. The visual appearance of adjacent developments and their physical form also influence one's perception of a streetscape and the overall community.

The current streetscape along within the Village of Bee Cave is generally characteristic of the typical state highway, with regional traffic, especially at peak periods of the days, various gas stations, and several restaurants. Steps should be taken now, as new development occurs, to improve and upgrade the image of the community as seen from State Highway 71, while at the same time protecting its traffic-carrying capacity.

To date, the process of planning for the streetscape along major thoroughfares within the Village has been developed through the efforts of public and private groups. The Village should consider adopting the following guidelines within a specific ordinance that directly addresses design criteria for State Highway 71. It should be noted that several of these guidelines are similar to those previously recommended for implementation throughout the Village of Bee Cave.

- **DIVIDED MEDIAN**

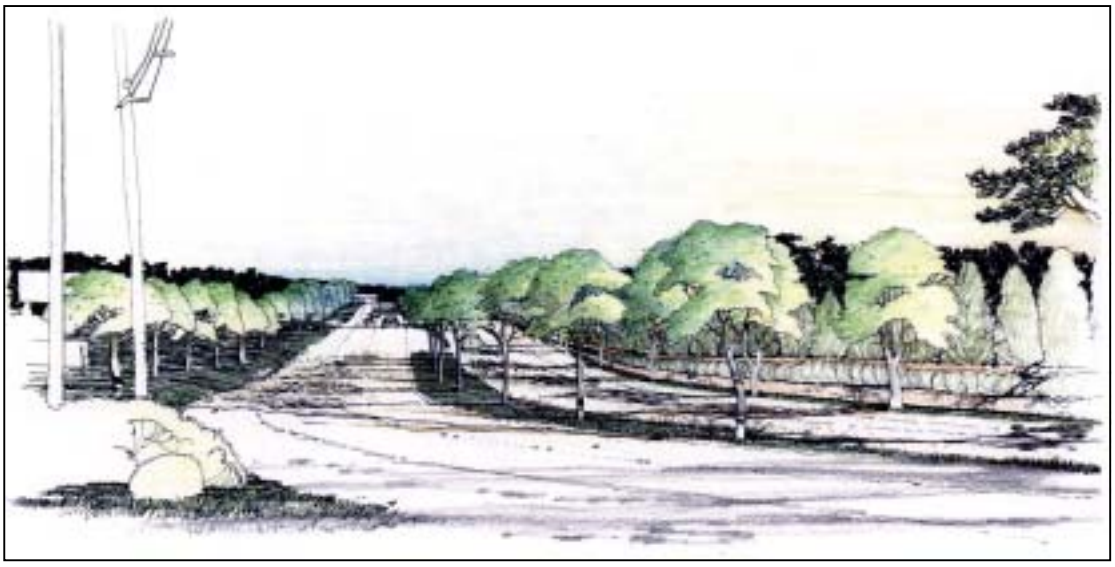
  Traffic along State Highway 71 is increasing, and will likely continue to increase as the Village of Bee Cave and neighboring communities continue to grow and develop. The Village should coordinate with the Texas Department of Transportation pertaining to the need for the construction of a landscaped median that would divide opposing lanes of traffic on State Highway 71.

  This median would serve a multitude of purposes; it would limit the number of left turns allowed (thereby helping traffic flow), increase the safety, and increase the positive visual nature of the highway itself, as well as that of the Village of Bee Cave.

Source: Bosse & Compton Assoc., Inc.

ILLUSTRATION 9-29

State Highway 71 in the Village of Bee Cave



Source: Bosse & Compton Assoc., Inc.

ILLUSTRATION 9-30

State Highway 71 With Proper Design Guidelines

♦ SETBACK

ILLUSTRATION 9-31

Retail Area Setback From A Major Thoroughfare Protecting the View From The Road

All structures, parking and related buildings should be setback from State Highway 71 by 75 feet. This will help to eliminate the visual clutter created by large expanses of concrete (i.e., parking lots) and will help improve the "view from the road".

♦ PLACEMENT OF ACCESSORY ELEMENTS

- **Parking** for non-residential areas along State Highway 71 should be placed to the side or to the rear of the site for the purpose of shielding these areas from the view of those traveling on State Highway 71.

- **Refuse containers** should be placed at the rear of the primary non-residential structure, and should be screened with a six-foot masonry wall.

ILLUSTRATION 9-32

Screening Wall Shields Refuse Containers From Public View

- **Loading areas** should be placed at the rear of the primary non-residential structure, and should also be screened with a six- to eight-foot masonry wall (shielding these areas not only from State Highway 71, but also from adjacent land uses).

♦ SIGNAGE

The Village should establish a uniform sign design for use along State Highway 71. It is recommended that signs in this area generally be monument-style, constructed of masonry materials, and limited in height. In addition, the Village should encourage shared signage between neighboring land uses.

ILLUSTRATION 9-33

Monument-Style Sign

- **LANDSCAPING**

  The Village should encourage an abundance of landscaping along State Highway 71. Specific placement should be mandated within the setback area of 75 feet, surrounding monument signs, and in and around parking areas. The Village should review the Landscape Ordinance in order to ensure that such placement of landscaping elements is addressed. Many communities across Texas have engaged in the practice of planting native Texas wildflowers in order to increase the visual quality of their highway frontage. State Highway 71 would benefit from this as well.

- **PEDESTRIAN ACCESS**

  Pedestrian access across State Highway 71 will be a challenge for the Village of Bee Cave. Several points should be designated for at-grade pedestrian access. At least one point of access should be to construct a tunnel underneath State Highway 71. This will be an expensive proposition, and would require the cooperation of several entities, including the Texas Department of Transportation, the Village of Bee Cave, as well as private developers.

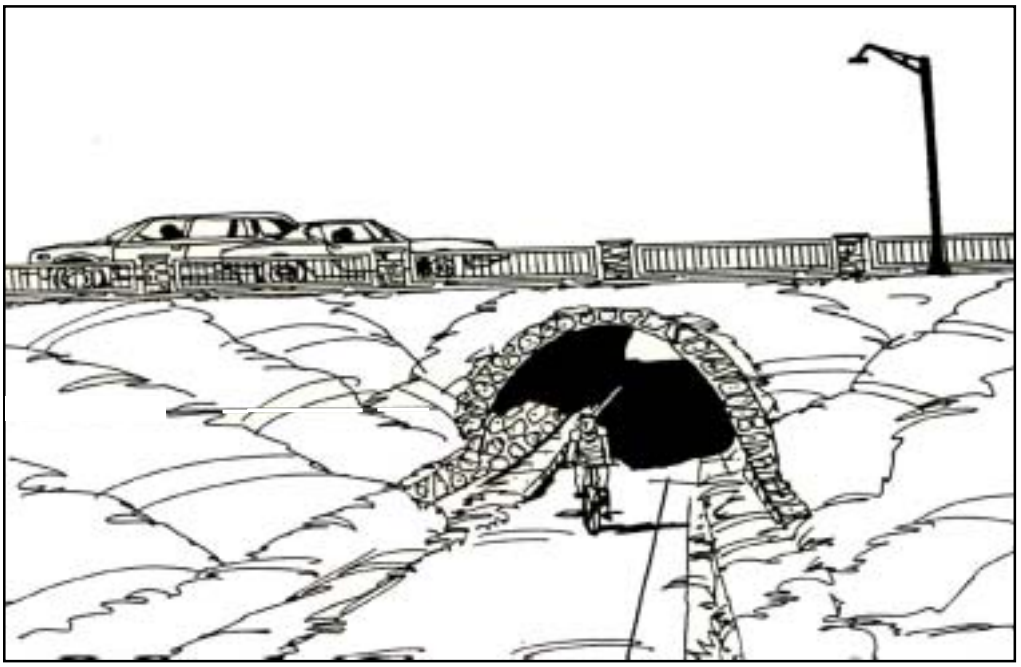


ILLUSTRATION 9-34

Tunnel Underneath A Major Thoroughfare Provides Pedestrian Access

The best location for this grade separate crossing would be at the Town Center (refer to the Future Land Use Plan, Plate 11) along State Highway 71 between R.M. 620 and F.M. 2244. The Village could provide some of the financing for this venture through development impact fees, sales tax revenue, and savings from the Capital Improvements Program (recommended within the *Implementation Plan* element of the Comprehensive Plan).

- **SCREENING**

  Screening of non-residential buildings should be done primarily through the use of landscaping materials. As previously mentioned, screening of accessory elements of non-residential uses (parking areas, loading areas, and refuse containers) should be done with a masonry wall, in order to protect the view from the road, as well as that of adjacent land uses.

It is suggested that the community pursue these reasonable and practical requirements for the development of non-residential areas, multi-family areas, as well as along the edges of residential subdivisions along State Highway 71.

Community Identity

Communities often lack visual individuality, especially in the wake of major metropolitan areas, like the city of Austin. Smaller communities generally have more of a challenge than do larger ones due to the fact that smaller communities generally do not have the advantage of distinctive skylines as identifying elements. They must endeavor to create their own identity, or signature, in other ways that are both conducive and responsive to their own individual size, scale and character. A recognizable image/identity is not only important to the inhabitants of a particular community, it is also important to those who live within surrounding areas and to visitors. It helps to provide orientation – a point (or place) of reference for people moving into, around within, and out of a community.

The "sameness" that is often inherent to communities within a particular geographic area makes it appear that each one is just like its neighbors. For example, the visual appearance of the Village to a traveler along State Highway 71, R.M. 620, or F.M. 2244 may be the same, or very similar, to the appearance of any other community. Due to the fact that developers and their architects often adhere to popular design trends of a particular time period, rapid development tends to result in homogeneity of style – it all looks similar. This lack of design variety, especially along major travel corridors, tends to create anonymity within a region – one community looks just like its neighbor, and it is difficult for people to know when they have left one community and entered another. Of course, many communities have taken steps to beautify and individualize their physical appearance, thereby creating their own image/identity to set them apart from their neighboring cities. Therein lies the challenge for the Village of Bee Cave.

ILLUSTRATION 9-35
Example of Community Gateway Treatment

Gateways are significant elements that can help residents and visitors to determine the geographical boundaries of a community. Also known as entryways or portals, gateways can provide a strong sense of arrival to, as well as a sense of departure from, the community. They are the first thing visitors see when they come into a community, and the last impression visitors have when leaving, and they can provide a strong indication of a community's image if they are prominent enough. One of the major urban design issues facing the Village of Bee Cave is the visual continuity, or sameness, along its major thoroughfares and highways. Currently, there is little to distinguish the Village from other communities along the major access corridors into the community, specifically State Highway 71, R.M. 620 and F.M. 2244 (Bee Cave Road). Properly developed, the establishment of distinctive gateways into the community could add greatly to the Village's sense of identity, and could create the sense of "arrival" which is currently lacking.

The design of gateways, or entry points, into the Village of Bee Cave should be guided by several factors. One of the most obvious factors is the number of people using a particular entry point. The most heavily traveled the roadway entering the community is State Highway 71, although both of the other primary access points also carry a large amount of traffic. Two entry features for the Village placed directly along State Highway 71, both leading into and out of the community (i.e., at the eastern and western corporate limits) would be a positive step in creating a visual identity. These gateways could be as simple as carefully designed landscape features, which may include a special type of signage or other identifier that signifies arrival into the Village. Other obvious places for such entry features would be along both R.M. 620 and F.M. 2244.

ILLUSTRATION 9-36
Example of a Community Gateway Treatment

Another important factor in the design of entry points is to develop an entry, which provides a sense of identity for the community, while projecting a desirable image for the community. This can be accomplished through careful use of signage, landscaping, and other design elements such as lighting, fencing, paving patterns, art/sculptural elements, and a variety of earth forms. Consideration should be given to establishing a uniform design concept for all gateway treatment areas, and hierarchical distinction between major and minor gateways can be achieved through design modification for each type of entry feature.

Design of entry features should take into consideration the setting in which each feature will be placed, as well as the traffic speed with which it will be viewed. Although any entry feature might ideally be placed at the corner of a roadway intersection which is at, or near, the true City limits, the design of the feature might conflict either visually or aesthetically with an adjacent retail use at the intersection. In such a situation, it may be prudent to move the entry feature further into the community to provide a better setting and better visibility, such as placing it upon the thoroughfare median, if there is one. The traffic speed at which an entry feature is viewed must also be taken into account, and the size, boldness and scale of the feature should be designed accordingly.

Many communities throughout Texas have successfully utilized this technique. However, the degree of success or effectiveness has greatly depended upon the design quality of the entry feature, as well as upon how strategically it is located and how visible it is from the road. It is important for the Village of Bee Cave to assert its differing qualities, and to distinguish itself from other Hill Country communities. Gateway features are a simple first step in this direction.

Priority for funding entry features, both in terms of total dollars spent per entry and in terms of the timing of expenditures, should be directly related to the number of people using a particular entry point. Often, donations can be solicited from civic groups to assist in the funding of specific gateways and/or their maintenance (e.g., an "adopt a gateway" program).

POLICIES

The following sections describe recommended policies that should guide the Village of Bee Cave's future development decisions pertaining to how such decisions may influence the community image of the Village:

- The Village should use the recommendations made within this element of the Comprehensive Plan to guide future Development Decisions.
- The Village should use its planning and development regulations to ensure that individual residential and non-residential development proposals make a positive contribution to the image of the Village of Bee Cave as a whole.
- The Village should integrate the recommendations made herein into the Village's Subdivision Ordinance, as applicable.
- The Village should integrate the recommendations made herein into the Village's Zoning Ordinance, as applicable.
- The Village should review all design-related ordinances and regulations at periodic intervals, in order to ensure their continued contribution to the image and design of the Village.

CONCLUSION

It is the intent of these guidelines to improve the overall quality and image of the Village of Bee Cave. As zoning changes are requested, the application of these concepts should be followed. Each concept/guideline should be applied constantly and consistently with each individual project, in keeping with these recommendations and with the stated goals and objectives pertaining to community image within this Comprehensive Plan.

I M P L E M E N T A T I O N P L A N

Section Ten

Comprehensive Plan 2000

INTRODUCTION

With the publication and adoption of this Comprehensive Plan document, the Village of Bee Cave has taken an important step in shaping the future of the community. The Plan will provide a very important tool for Village staff and civic leaders to use in making sound planning decisions regarding the long-term growth and development of the community. The various elements of the Plan are based upon realistic growth objectives and goals for Village of Bee Cave which resulted from an intense comprehensive planning process involving citizens, Village staff, elected and appointed officials, major stakeholders, business interests and the development community.

The future quality of life within Village of Bee Cave and the environment of the community will be substantially influenced by the manner in which Comprehensive Plan recommendations are administered and maintained.

The Comprehensive Plan should never be considered a finished product, but rather a broad guide for community growth and development that is always evolving and changing in scope.

Changes in the Village's socioeconomic climate and in development trends will, from time to time, occur which were not anticipated during preparation of the Plan, and therefore, subsequent adjustments will be required. Elements of the community that were treated in terms of a general relationship to the overall area may, in the future, require more specific and detailed attention. Planning for the community's future should be a continuing process, and the Comprehensive Plan is designed to be a dynamic tool that can be modified and periodically updated to keep it in tune with changing conditions and trends.

The full benefits of the Plan for the Village of Bee Cave can only be realized by maintaining it as a vital, up-to-date document. As changes occur and new facets of the community become apparent, the Plan should be revised rather than ignored. By such action, the Plan will remain current and effective in meeting the community's decision-making needs regarding growth and development into the next century and beyond.

THE PLAN AS A GUIDE FOR DAILY DECISION-MAKING

The current physical layout of the Village is a product of previous efforts put forth by many diverse individuals and groups. In the future, each subdivision that is platted, each home that is built, each new school, church or shopping center represents an addition to the Village's physical form. The composite of all such efforts and facilities creates the community as it is seen and experienced by its citizens and visitors. If planning is to be effective, it must guide each individual decision, whether it is that of a private homeowner or of the entire community. The Village, in its daily decisions pertaining to whether to surface a street, to approve a subdivision, to amend a zoning ordinance, to enforce the building or other codes or to construct a new utility line, should always refer to the basic proposals outlined within the Comprehensive Plan. The private builder or investor, likewise, should recognize the broad concepts and policies of the Plan so that their efforts become part of a meaningful whole in planning the community. Those investments are, over the years, reinforced and enhanced by the Village's form, development pattern and economic vitality.

COMPREHENSIVE PLAN AMENDMENTS AND PERIODIC REVIEW

The Comprehensive Plan for the Village of Bee Cave is intended to be a dynamic planning document – one that responds to changing needs and conditions. Plan amendments should not be made without thorough analysis of immediate needs, as well as consideration for long-term effects of amendments to the Plan. The Village Board of Aldermen and other Village officials should consider each proposed amendment carefully to determine whether or not it is consistent with the Plan's goals and policies, and whether it will be beneficial for the long-term health and vitality of the Village of Bee Cave.

At approximately one-year intervals, a periodic review of the Comprehensive Plan with respect to current conditions and trends should be performed. Such ongoing, scheduled reevaluations will provide a basis for adjusting capital expenditures and priorities, and will reveal changes and additions which should be made to the Plan in order to keep it current and applicable long-term. It would be appropriate to devote one annual meeting of the Village Planning and Zoning Commission to reviewing the status and continued applicability of the Plan in light of current conditions, and to prepare a report on these findings to the Village Board of Aldermen. The Commission should submit its comments and findings to the Board of Aldermen at least 60 days prior to the scheduled annual review of the Comprehensive Plan. Those items that appear to need specific attention should be examined in more detail, and changes and/or additions should be made accordingly. By such periodic reevaluations, the Plan will remain functional, and will continue to give civic leaders effective guidance in decision-making. Periodic reviews of the Plan should include consideration of the following:

- The Village's progress in implementing the Plan;
- Changes in conditions that form the basis of the Plan;
- Community support for the Plan's goals, objectives & policies; and,
- Changes in State laws.

In addition to periodic annual reviews, the Comprehensive Plan should undergo a complete, more thorough review and update every five years. The review and updating process should begin with the establishment of a citizen committee, thereby encouraging citizen input from the beginning of the process. Specific input should be sought from various groups, including property owners, neighborhood groups, civic leaders and major stakeholders, developers, merchants, and other citizens and individuals who express an interest in the long-term growth and development of the Village.

COMMUNITY INVOLVEMENT

An informed, involved citizenry is a vital element of a democratic society. The needs and desires of the public are important considerations in the Village of Bee Cave's decision-making process. Citizen participation takes many forms, from educational forums to serving on Village boards and commissions. A broad range of perspectives and ideas at public hearings helps Village leaders and the Village Board of Aldermen to make more informed decisions for the betterment of the community as a whole. The Village of Bee Cave should continue to encourage as many forms of community involvement as possible as the Village implements its Comprehensive Plan.

IMPLEMENTATION STRATEGIES

There are two primary methods of implementing the Comprehensive Plan – proactive and reactive methods. Both must be used in an effective manner in order to successfully achieve the recommendations contained within the Plan.

Proactive methods include:

- Developing a capital improvements program (CIP), by which the Village expends funds to finance certain public improvements (e.g., utility lines, roadways, etc.), meeting objectives that are cited within the Plan;
- Establishing/enforcing Zoning Ordinances;

- Establishing/enforcing Subdivision Ordinances; and,
- Coordinating with/lobbying CAMPO and TxDOT to influence roadway planning, funding, and construction.

Reactive methods include:

- Rezoning because of a development proposal that would enhance the community;
- Site plan review;
- Subdivision review.

Several specific implementation strategies for Village of Bee Cave's Comprehensive Plan are described within the following sections.

Capital Improvements Programming

The Comprehensive Plan makes recommendations on the various public improvements that will be needed to accommodate growth and development envisioned for the Village over the next 20 years or more. Many of the changes involve improvements that will be financed by future improvement programs. It will be a desirable practice to invest regularly in the physical maintenance and enhancement of the Village of Bee Cave rather than to undertake large improvement-type programs at longer time intervals. A modest amount of money expended annually and on a regular basis in accordance with Plan recommendations will produce a far greater return to the community than will large expenditures at long intervals.

It is also recommended that the Village implement a Capital Improvements Program (CIP) showing a recommended, generalized plan for capital facilities within Village of Bee Cave. The CIP should also identify priorities and the approximate cost of improvements over a specific period of time. After voters approve funding for capital improvements, projects should be constructed within three years. Priority projects should be determined annually, and should be generally scheduled for review on a two- or three-year basis to ensure that their level of priority has not changed.

At least one annual meeting of the Village Board of Aldermen should be devoted to reviewing the status of the CIP. A joint review meeting of the Village Board of Aldermen, the Village Administrator and Village staff would be desirable. A report and review meeting with a "citizens' planning committee" would also be desirable. It should be recognized that the Village staff's role in the capital improvement programming process is advisory, and that the financing and priority decisions are the Village Board of Aldermen's responsibility. In their advisory role, staff should seek to achieve programs which are geographically balanced (equitable) and which include all important aspects of the community's development from parks to transportation and utilities. Capital improvements programming should be viewed as a continuation of the ongoing comprehensive planning process.

Annexation and Extraterritorial Jurisdiction

Annexation is the process by which communities extend municipal services, regulations, voting privileges and taxing authority to new territory with the purpose of protecting the public's health, safety and general welfare. Chapter 43 of the Texas Local Government Code prescribes the process by which communities can annex land within Texas. Annexation is essential to the efficient and logical extension of urban services. Because the Village of Bee Cave is a general law municipality, it cannot annex land on a non-consensual basis.

The majority of incorporated entities equal in size to the Village of Bee Cave have a one-half-mile ETJ. However, the advocates for incorporation of the Village of Bee Cave secured a one-mile ETJ from the state legislature for the Village during the process of incorporation in 1987. The ETJ area is shown on the Future Land Use Plan, **Plate 8-1**. In addition, the Village ETJ has a large amount of preserve land – entities (i.e., the City of Austin and the Nature Conservancy) have purchased this land for the purposes of maintaining it in a perpetual natural state. Due to this, much of the area surrounding the Village of Bee Cave within its ETJ will remain permanent open space in the future. Still, Bee Cave has several thousand acres that can be developed in the ETJ.

It is in the best interest of the Village of Bee Cave, however, to require areas within the ETJ to be annexed prior to development rather than after development has occurred. Annexation procedures for general law municipalities are outlines in Chapter 43 of the Texas Local Government Code. Prior to development, the Village of Bee Cave will be able to affect development in a more meaningful way, especially in terms of ensuring that the Village's development standards are met. However, the Texas State statute has established service and other requirements to keep general law municipalities from misusing their annexation power. Until Bee Cave becomes a home-rule city (meaning until it is over 5,000 in population), the Village will not be able to annex ETJ areas on a non-consensual basis. State law requires that property owners must consent before general law cities can annex their property. Annexation is important to the long-term well being of communities; therefore, such action should be carried out in accordance with established policies.

The Village of Bee Cave must develop a policy with the support of the Lower Colorado River Authority (LCRA) stating that water and wastewater connections will not be provided to areas in the ETJ unless the property owner requests annexation. Many general law communities in Texas have similar policies, and the Village of Bee Cave must incorporate this element into its ordinances in order to ensure the provision of adequate public facilities in the ETJ.

Administrative Processes

The usual processes for reviewing and processing zoning amendments, development plans, and subdivision plans provide significant opportunities for implementing the Comprehensive Plan. Each zoning (if enacted), development and subdivision decision should be evaluated and weighed against applicable proposals contained within the Plan. The Plan allows the Village to review proposals and requests in light of an officially prepared document adopted through a sound, thorough planning process. If decisions are made that are inconsistent with Plan recommendations, then they should include actions to modify or amend the Plan accordingly to ensure consistency and fairness in future decision-making.

The act of subdividing land to create building sites is one of the most important and significant activities, and therefore will likely have the greatest effect on the overall design and image of the Village. Much of the basic physical form of the Village is currently created by the layout of streets, easements, alleys, and lots. In the future, the basic physical form will be further affected by elements such as new developments, the creation of the proposed Town Center and the implementation of the park and trail system. As mentioned previously, many of the growth and development proposals contained within the community's Comprehensive Plan can be achieved through the exercise of subdivision control and other "reactive" practices. Some elements of the Plan, such as major thoroughfare rights-of-way, drainage easements, and linear parkways, can be influenced, guided and actually achieved during the process of subdividing the land. Once the subdivision has been filed (recorded) and development has begun, the subdivision becomes a permanent, integral part of the community's urban fabric. It can, thereafter, be changed but only through expending great effort and expense.

RECOMMENDATIONS FOR IMPLEMENTATION

Implementation is probably one of the most important, yet most difficult, aspects of the comprehensive planning process. Without viable, realistic mechanisms for implementation, the recommendations contained within the Comprehensive Plan can never be realized. The following points specify ways to implement the various recommendations within the Plan:

Recommendations:

Develop a regular proactive program to coordinate with and lobby CAMPO and TxDOT to promote transportation and roadway planning, funding, and construction.

Adopt an ordinance to mandate periodic updating of the Comprehensive Plan.

Implement a Capital Improvements Program (CIP) for the purposes of funding necessary projects and improvements within the Village of Bee Cave. Such projects should be prioritized and reviewed on an annual basis.

Investigate the feasibility of enacting an impact fee (capital recovery fee) ordinance as prescribed by the Texas Local Government Code to assist in financing the Capital Improvements Program (CIP).

Amend the Village Zoning Ordinance text to implement the guidelines, proposals, and standards recommended within the Comprehensive Plan.

Amend the Village Subdivision Ordinance text to implement the guidelines, proposals, and standards recommended within the Comprehensive Plan.

Adopt recognized review procedures for implementing policies and other guidelines that are not incorporated within current codes and ordinances.

Offer short courses and other educational classes or seminars concerning planning and zoning procedures to the Village Board of Aldermen, the Planning and Zoning Commission, and other interested Village staff.

An annual report should be prepared by the Planning and Zoning Commission or Village staff recommending any changes or amendments to the Comprehensive Plan, and identifying items for implementation or further study.