

Chapter 5

Environment and Natural Features

A. Quality of Life

Citizens of Colleyville take pride in the high quality living aspects of the community. Active lifestyles, generous open spaces and peaceful neighborhoods are priority items for most residents in Colleyville. According to the sample telephone survey taken during the summer of 2003, 85.0% of the survey respondents reported that Colleyville was rated as an excellent or good place to live. Furthermore, the survey revealed that the number of respondents who reported being very active, or somewhat informed about their community, increased as the length of residence in Colleyville increased.

Colleyville's reputation for having excellent neighborhoods was reconfirmed through the telephone survey which showed 97.1% of the respondents rating their neighborhood as excellent or good in terms of cleanliness, quality of houses, and general appearance. A summary of the quality of life responses is shown in Table 5-1 below.

Table 5-1 Selected Factors Contribute to Quality of Life in Colleyville			
Factor	Percentage Responding		
	Contributes a lot	Contributes a little	Does not contribute
Safe place to live	95.5	4.2	0.3
Quality of schools	88.7	5.4	5.9
Clean and attractive	86.8	12.4	0.8
Selection of housing	80.7	18.1	1.2
Parks and open space	59.0	36.8	4.2
Distance to Fort Worth/Dallas	54.9	38.2	6.8
Hometown atmosphere	47.2	43.5	9.3

Source: Colleyville Citizen Survey and Needs Assessment 2003, University of North Texas

B. Natural Features

The physical features of a community, such as topography, soils, floodplains, climate and similar factors, create the natural environment of the area and can often play important roles in shaping the urban setting. These natural physical features are discussed and presented in this section of the Colleyville Master Plan. Knowledge of these factors, and the influence they have on an area, will help local officials to assess past development trends and make for better planning and development decisions in the future.

C. Topography

Colleyville is situated within the drainage basins of Big Bear Creek and Little Bear Creek. Both of these tributaries generally extend from west to east and eventually drain into the West Fork of the Trinity River. Big Bear Creek forms the northern boundary of Colleyville, while Little Bear Creek is located in the southern portion of the city.

Situated between these two drainage basins is a ridgeline running generally along McDonwell School Road in the northwest portion of Colleyville, continuing along Tinker Road, crossing State Highway 26, and running east along Hall-Johnson Road to State Highway 121. Approximately one third of Colleyville lies within the Big Bear Creek watershed and two thirds in the Little Bear Creek watershed.

The highest point in Colleyville is in the northwest portion of the city near the Overland Trail ground water storage tank. The elevation at this location is approximately 718 feet above sea level. The lowest point in Colleyville is in the southeast part of the city near the location of where Little Bear Creek flows under Heritage Road. The elevation at this location is approximately 538 feet above sea level.

D. Major Roadway and Railway Facilities

State Highway 26, also known as Colleyville Boulevard, extends through the community from the southwest to the northeast. This roadway is the primary transportation route serving the central portion of the community and is the location where the majority of the commercial properties in the community are found. S. H. 26 is constructed as a four-lane facility with a continuous 2-way left turn lane along most of its length through the community, and its location virtually divides the community into two physical parts of nearly equal size.

Two additional major highway facilities provide access to Colleyville; State Highway 121 and Precinct Line Road. State Highway 121 is a six-lane facility built to interstate highway standards extending north and south along the eastern edge of the community and provides access to Colleyville at the intersecting roadways of Hall-Johnson Road, Glade Road and Cheek-Sparger Road.

Precinct Line Road is a four lane facility with a continuous center turn lane and runs north and south along the western boundary of Colleyville.

Another major physical feature is the presence of the Cottonbelt Railroad that extends through the community from the southwest to the northeast. The Cottonbelt Railroad currently serves as the route for the Tarantula tourist train that makes several daily runs

between the Fort Worth Stockyards and the City of Grapevine. There is very little rail freight traffic on this rail route through Colleyville.

The Cottonbelt Railroad does have a significant impact on the community since it limits roadway interconnectivity between residential neighborhoods. There are only three locations in Colleyville where railroad crossings exist; one at Bransford Road, a second at Pleasant Run Road and the third at John McCain Road.

E. Flood Prone Areas

Portions of Colleyville are designated by the Federal Emergency Management Administration (FEMA) as being within a 100 year flood area. This designation means that every year there is a one in one-hundred chance of the designated area being inundated during periods of heavy rainfall.

Development within a designated 100 year flood area is highly restricted, except under certain circumstances. For example, within the floodway, known as the primary flood channel, no development can occur. The floodway is intended to remain open to accommodate the main flow of flooding run-off. However, portions of the flood-plain, the area outside of the floodway, may be reclaimed with fill material, provided a drainage study has been approved by FEMA which indicates that the reclaimed area does not raise the flood elevation by more than one foot.

Residential and commercial development in Colleyville is highly influenced by the locations of these 100-year floodplains. The Colleyville Engineering Department maintains current copies of the maps published by FEMA and provides information to prospective homeowners regarding the certification process required by Federally insured mortgage lenders. The City of Colleyville has in the past contracted with area engineering firms to prepare special studies of flood areas where available information is limited or not readily available. The flood prone areas are shown on the following Plate 5-1.

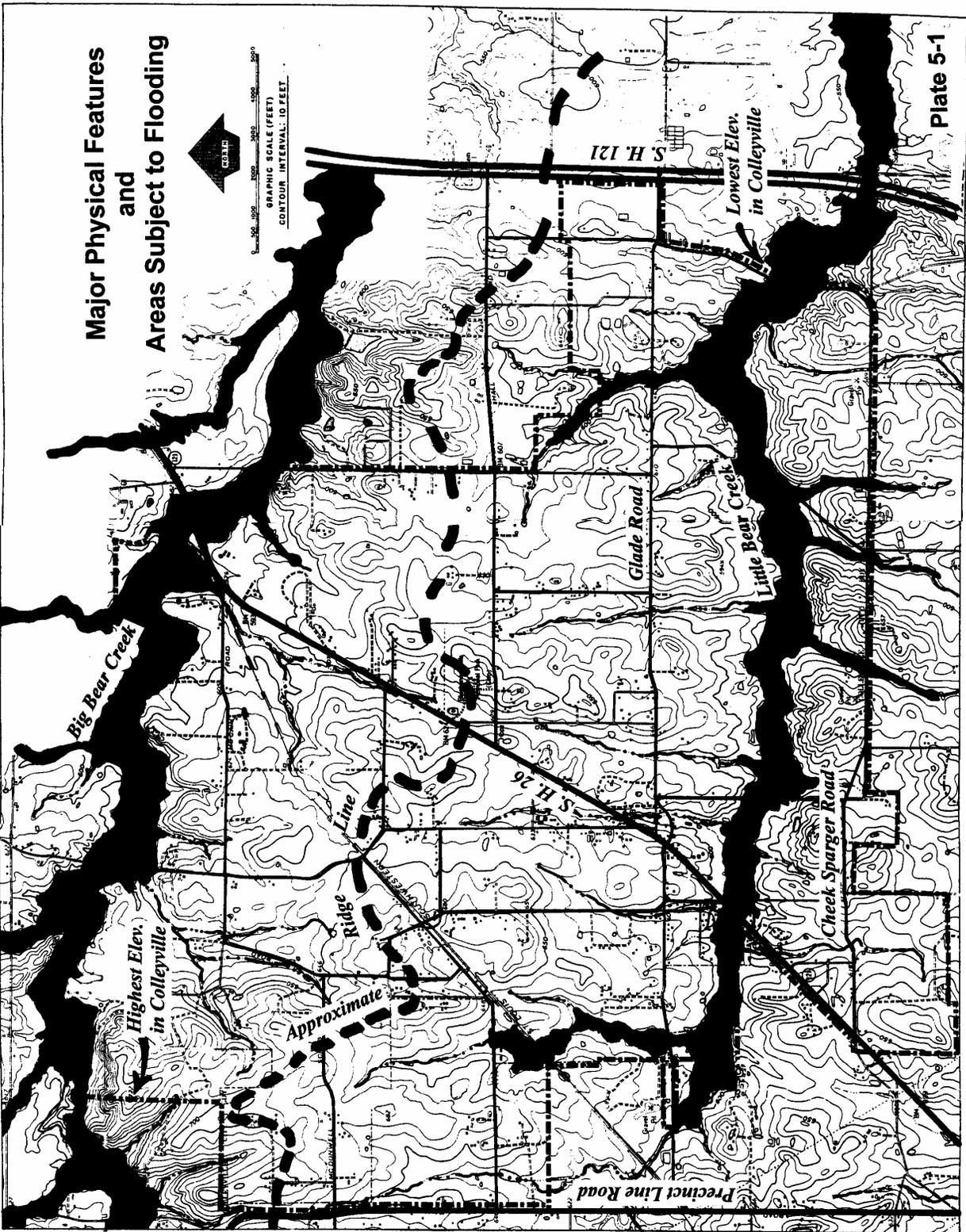


Plate 5-1

Plate 5-1

F. Soils

The document "Soil Survey of Tarrant County, Texas", published by the U. S. Department of Agriculture in 1981, documents and maps the general locations of the various soil types in Tarrant County, assigns a name to each soil classification type and provides a physical description of the characteristics of each soils type. The soils in the Colleyville area fall into the general soils classification known as the Crosstell-Gasil-Rader, which is basically a deep loamy soil.

The Crosstell series consists of deep moderately well drained and deep loamy soils on uplands that formed in shale and clay sediments containing thin strata of weakly cemented sandstone. Slopes range from 1 to 6 percent. However, there are a number of soil gradations in Colleyville and it is recommended that reference is made to the "Soil Survey of Tarrant County, Texas" publication to obtain the soil characteristics for a specific site.

G. Climate

The climate in the Colleyville area is humid subtropical with hot summers. It is also continental, characterized by a wide annual temperature range. Winters are mild, but "blue northers" occur and are often accompanied by sudden drops in temperature. Periods of extreme cold are generally short-lived, so that even in January mild weather occurs frequently.

The highest temperatures of summer are associated with fair skies, westerly winds, and low humidity. Air conditioners are recommended for maximum comfort indoors and while traveling via automobile. The average length of the warm seasons (freeze-free period) is about 248 days, or about 8 months. The average first occurrence of 32°F or below is November 17, while the average last occurrence of 32°F or below is March 14. The lowest recorded temperature was – 8°, which occurred on February 12, 1899. The highest recorded temperature was 113°, which occurred on June 27, 1980.

Throughout the year, rainfall occurs more frequently during the night. Usually, periods of rainy weather last for only a day or two, and are followed by several days with fair skies. Average rainfall in the Colleyville areas is between 34 and 35 inches per year. The most rainfall occurring during a 24-hour period occurred on August 31, 1976 when 4.05 inches of rain were recorded. The greatest amount of rainfall during a single month was 16.97 inches, which occurred in April, 1942. The most rainfall during a single year occurred in 1991, when 53.54 inches of rainfall was recorded.

A large part of the annual precipitation results from thunderstorm activity, with occasional heavy rainfall over brief periods of time. Thunderstorms occur throughout

the year, but are most frequent in the spring. Hail falls on about two or three days a year, ordinarily with only slight and scattered damage. Windstorms that occur during thunderstorm activities are sometimes destructive. Snowfall in Colleyville is rare.

H. Air Quality

The DFW Metroplex is not known as being a heavy smokestack industrial area. Furthermore, Colleyville, with its rural atmosphere, is noted for its pristine open spaces and expansive park facilities. While air quality in Colleyville is generally good on most days of the year, like many large urban areas around the nation, citizens in Colleyville, and those living in other communities in the DFW area, are heavily dependant upon automobiles as their primary means of transportation. Since automobiles are the areas primary pollutant source, drivers are routinely encouraged to minimize their use of their automobiles, particularly on days when ozone levels are forecasted as being higher than normal.

The Texas Commission on Environmental Quality has established an ozone level of 125 parts per billion or greater as the threshold where exceeding the 1-hour ozone standard results in a Non-Attainment Day. During 2003, there were three such Non-Attainment days in the DFW Metroplex area.

The following recommendations offered by the North Central Texas Council of Governments Air are considered excellent ways an individual can help to reduce air pollution.

- Limit driving, use public transportation where available, walk, carpool, or bike.

If is essential to drive, then try to follow these guidelines:

- Avoid high speeds.
- Do not overfill or top off your gasoline tank.
- Do not refuel on high ozone days — try to refuel after dark.
- Drive smoothly and avoid lengthy idling.
- Keep the vehicle well maintained, especially the emissions control system.
- Keep tires properly inflated.
- Maintain the vehicle's air conditioning system.
- Make fewer trips in your vehicle — plan routes to avoid traffic.

I. Tree Preservation

The City of Colleyville qualifies for designation as a “Tree City” under the standards and guidelines established by the National Arbor Day Foundation. Tree City USA, a program sponsored by The National Arbor Day Foundation in cooperation with the USDA Forest Service and the National Association of State Foresters, provides direction, technical assistance, public attention, and national recognition for urban and community forestry programs to local units of government. The four standards of a Tree City are:

- A tree board or department
- A tree care ordinance
- A community forestry program with an annual budget of at least \$2 per capita
- An Arbor Day Observance and Proclamation

J. Historical Markers

There are eight locations in Colleyville where the Texas Historical Commission has placed markers designating places of significant historical importance. Designation of these eight sites required the approval and recommendation of the Tarrant County Historical Commission, prior to the official designation by the State of Texas Historical Commission.

Complimenting those State designated historical sites are five additional historical sites designated by the Colleyville Historical Preservation Committee, a local committee appointed by the City Council to promote the preservation of sites important to the history of Colleyville and its citizens.



The locations of those sites designated by the Texas Historical Commission are listed in Table 5-2 below. Whereas, those sites that have been designated by the Colleyville Historical Preservation Committee are listed in Table 5-3 below. All of the historical sites and their respective locations are shown on Plate 5-2.

**Table 5-2
State of Texas Historical Markers in Colleyville**

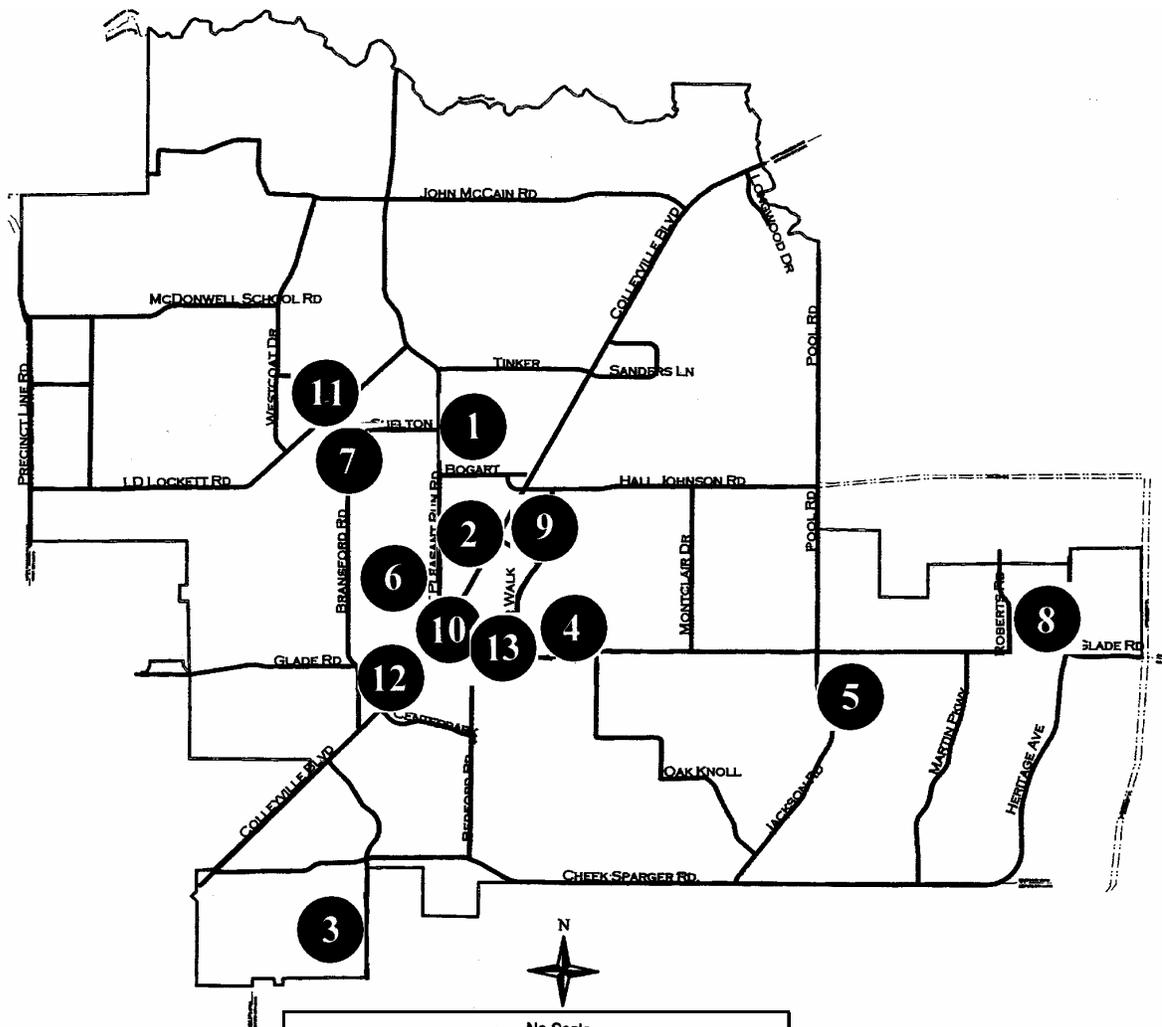
Marker Title	Marker Location	Significance & Date Placed
Pleasant Run Baptist Church	6005 Pleasant Run Road	On April 7, 1877, the Baptist Church of Christ of Pleasant Run was organized – 1978
Pleasant Run School	5505 Pleasant Run Road	In 1870, location of early log school house near this site as early as – 1978
Riley Cemetery	Morning Glory Ln. & Brown Trail Dr.	In 1883 Thomas Riley and William Autry set aside this one-acre tract for a graveyard – 1979
Bidault House	1416 Glade Road	Started in 1905, this house was designed and built by French native Anthlem Bidault and constructed of molded concrete blocks – 1980
Witten Cemetery	Jackson Court	Early settler cemetery –1981
Dr. Lilburn Howard Colley	5400 Bransford Road	Early settler and namesake of Colleyville – 1983
Bransford	408 Shelton Drive	Location of early post office and railroad depot on the route of the St. Louis, Arkansas, and Texas Railroad – 1986
Pleasant Glade Baptist Church	3708 Glade Road	Site of Pleasant Glade Baptist Church – 2000

Source: Texas Historical Commission

**Table 5-3
Markers Designated by the Colleyville Historical Preservation Committee**

Marker Title	Marker Location	Significance & Date Placed
Bransford Depot	6100 block of L. D. Lockett Road	Site of early train stop – December-2001
Home site of Dr. L. H. Colley	4800 block of Glade Road	Site of Dr. Lilburn Colley's home, early settler and namesake of Colleyville – March-2002
Colleyville's First Fire Hall	4913 Colleyville Boulevard	Location of first Colleyville fire station – October-2003
Bogart Dairy	5506 Colleyville Boulevard	Site of first dairy barn owned by W. H. Bogart – November-2003
Eudaly House	710 Glade Road	Home of Colleyville's first mayor, Ernest "Hico" Eudaly – May-2004

Source: Colleyville Historical Preservation Committee



Legend	
1	Pleasant Run Baptist Church
2	Pleasant Run School
3	Riley Cemetary
4	Bidault House
5	Witten Cemetary
6	Dr. Lilburn Howard Colley
7	Bransford
8	Pleasant Glade Baptist Church
9	Bogart Dairy
10	Colleyville's First Fire Hall
11	Bransford Depot
12	Home site of Dr. L. H. Colley
13	Eudaly House

Historical Markers in Colleyville

Plate 5-2