
**SECTION 2.
BASELINE ANALYSIS**

MASTER PLAN 2004

TOWN OF COPPER CANYON, TEXAS

SECTION 2. BASELINE ANALYSIS

Introduction

The master planning process begins with an understanding of the historical and socioeconomic experience of a community. The Baseline Analysis seeks to gain this understanding and provide a succinct description of this experience with a review of the Town's history and analysis of its socioeconomic conditions. It also provides general insight into the community's development pattern. The secondary objective of the Baseline Analysis is to ensure that the information being used in the planning process accurately portrays the community and its needs. The identification of major issues within the community begins early in the master planning process and serves as a basis for creating the following components of the Baseline Analysis section:

- Historical Background
- Regional Relationship
- Physical Factors Influencing Development
- Demographic Profile
- Existing Land Use
- Existing Housing
- Existing Plans & Ordinances
- Existing Public Facilities
- Existing Infrastructure System

Each section contains information pertaining to the topic, as well as graphic support, where appropriate. The *Baseline Analysis* section includes the identification of other issues that will be addressed in the formulation of the Master Plan for the Town of Copper Canyon. It also forms the basis for formulating the "Goals and Objectives" section and is instrumental in generating the final recommendations of the Master Plan.

2.1 Historical Background

The history of the area now known as the Town of Copper Canyon is similar to the history and experiences of the pioneers who settled the west and this region roughly 150 years ago. Prior to, and during the arrival of western pioneers, the land had been settled by American Indians, most notably the tribes of the Cherokee, Choctaw and Comanche. The Indians, much like the settlers, were drawn to the bountifulness of the land, then known as the "land of milk and honey". Western settlements began to take root in 1845 with the official land grants from the Republic of

Texas. The area was particularly accommodating by the existence of Murphy Spring and the spring water it provided to the area's inhabitants. This spring was in a canyon area located northwest of present day Orchid Hill Lane on the top of a hill known as Murphy Hill. In addition to the water supply this area provided, it was a source of rocks for chimney making. To access these resources, residents had to be particularly cautious: the canyon's name was "Copperhead Canyon"! During these initial pioneer settlements, a family known as the Chinn's arrived from North Carolina and began to play a significant role in the community. The Chinn family donated land on what was to become the site for a community-led initiative to construct a building to serve as the social center of the community. This structure provided a facility for schooling, religious services, weddings, funerals and the like. The structure became known initially as "Antioch" but later was renamed "Chinn's Chapel"; a name later given to a school, church and the present-day Chinn Chapel Road.¹

The normal activities of these settlements had evolved by the 1860's and 1870's to encompass cattle ranching activities. The settlement also served as the origination point for cattle drives to the Midwest, some of which took place along the famed Goodnight-Loving Trail.² The Town has some claim to fame as the site of bandit activity during this period with the existence of a nearby hideout of the infamous bandit Sam Bass and the Collin's gang. In fact, according to Dallas reporters of the time, a shootout occurred at Copper Canyon's Old Alton Bridge related to a man-hunt conducted by Texas Rangers seeking to hold the gang responsible for the largest robbery in Union Pacific Railroad history at the time.³

By 1881, the MK&T Railroad was built and the area experienced rapid development. The economy of the area was solidly based in ranching and farming by the 1920's and 1930's, the cash crop of the day being peanuts. By the time of the initial stages of WWII, the Town had been enjoying the modern benefits of rural electrification and the automobile. It was also a challenging time for the community itself, as many went off to the war and those who didn't relocated to other areas to join in the war effort. Many had gained new access to education, travel and expanded career options. These events left the community with a depleted population as many of these persons and families did not return to settle in the community.⁴

The modern town of Copper Canyon was incorporated in April of 1973 by citizens seeking to maintain its rural atmosphere and history. Land was donated by the developer of the Woodlands

¹ www.coppercanyon-tx.org/shorthistory.htm . "A Short History of the Town of Copper Canyon, Texas". Shirley B. Faile, Ph.D. 1998. Retrieved August 2003.

² Ibid.

³ Ibid.

⁴ Ibid.

subdivision as the site for the present day Town Hall, a structure made possible by the generous donations of the Town's citizenry. Today, the town continues to operate a Mayor-Council form of government and officials are elected on a two year term basis by the registered voters.⁵ People have continued to move to the Town of Copper Canyon for the rural atmosphere the Town's incorporation sought to protect. The citizens of Copper Canyon today enjoy the benefits of a rural setting with the modern day conveniences of living in a major metropolitan area.⁶

2.2 Regional Relationship

Plate 2.1 *Regional Relationship* shows the relationship of Copper Canyon to the surrounding region. The Town of Copper Canyon lies north of the Dallas and Fort Worth metropolitan areas and is approximately equidistance to the two cities. It is located within Denton County, Texas. The Town is located within close access to Interstate 35West (to Fort Worth) and Interstate 35East (to Dallas). It is also located just southeast of Denton, Texas.

Copper Canyon is almost completely residential in nature. Therefore, the livelihood of its citizenry relies almost solely on the economic health of the Dallas-Forth Worth metropolitan area and the communities it encompasses. The economic health of the Denton area is also important to the economic health of the Town and its citizens.

As the Town's proximity to the greater metropolitan area offers it employment opportunities, it also allows for different lifestyles to be sought. The Town's rural setting offers all of the qualities one would normally associate with a rural lifestyle. However, as part of a greater metropolitan area, citizens are also able to take advantage of diverse retail opportunities and access to high-quality health care, educational institutions, museums, professional sports and the like.

⁵ www.coppercanyon-tx.org/aboutourtown.htm . Retrieved August 2003.

⁶ www.coppercanyon-tx.org/shorthistory.htm . "A Short History of the Town of Copper Canyon, Texas". Shirley B. Faile, Ph.D. 1998. Retrieved August 2003.

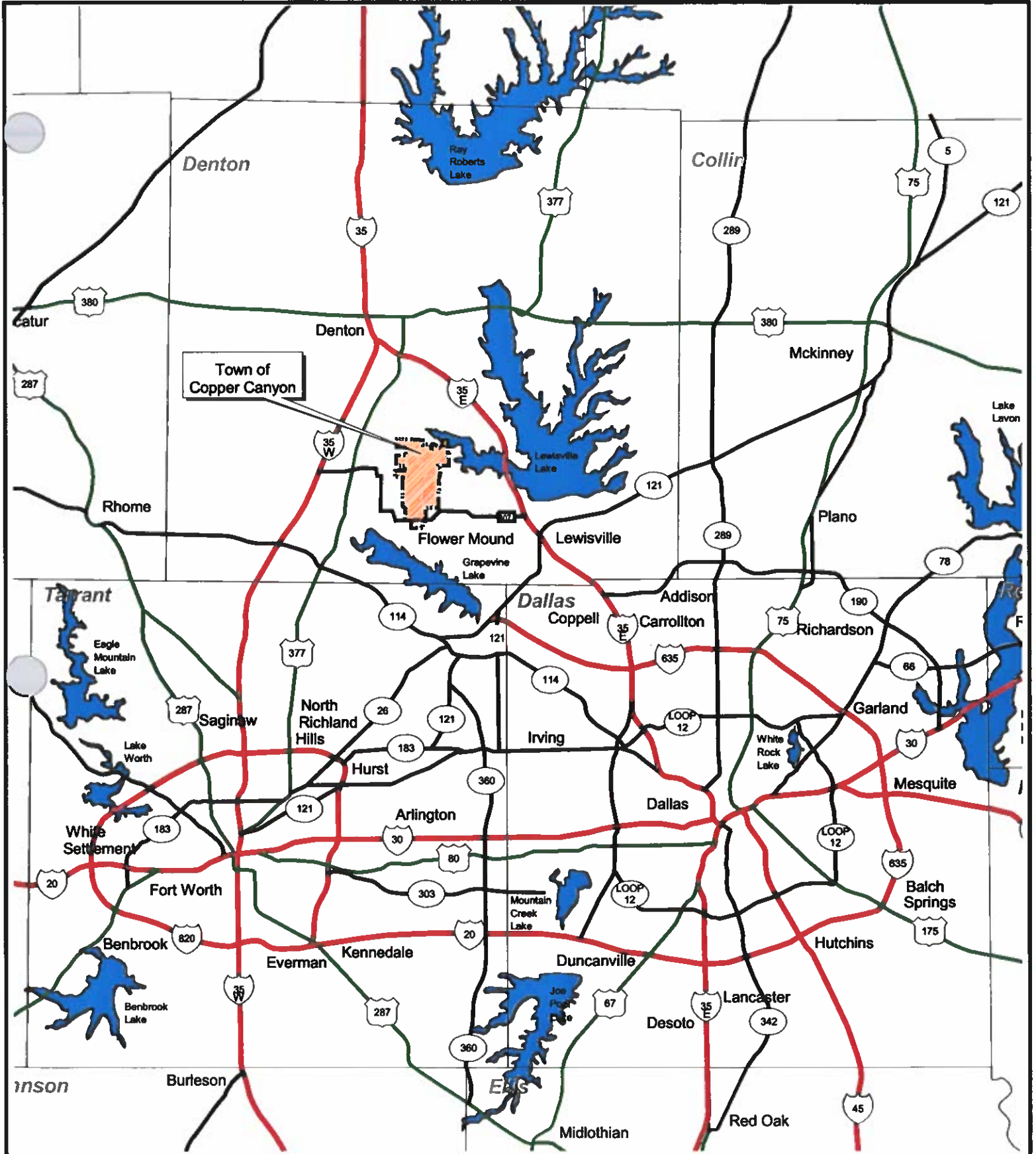


Plate 2.1

COPPER CANYON

Relationship to the Region



Adopted January 12, 2004

2.3 Physical Factors Influencing Development

Natural Features

The natural features of a town include the geology, topography, soils and vegetation present. It is the interrelation of these natural features that creates the natural environment of a community. Floodplains, aquifers, endangered species and the climate of the area are some other natural features that may also affect development in an area. The knowledge of a town's natural environment plays a significant role in determining future development trends and possibilities for the community by enabling the town to make better-informed decisions and ensuring the exercise of accepted planning principles. Plate 2.2 *Physical Features* graphically describes the environmental characteristics of Copper Canyon.

Geology

Geology, in simple terms, is the study of rocks and the surface characteristics of those rocks. The mineral wealth and varied landforms found in the state today are a legacy of the geologic history of Texas. Thus while developing any area or to understand the different landforms and how best to utilize them, it becomes important to study and take into consideration the geological formation of that area. The Town exists where the Cretaceous period took place approximately 140 million years ago and just west of where the geologic periods Pliocene, Miocene and Oligocene occurred. During the late Cretaceous, the area (and much of Texas) layed beneath seas. When these seas receded, a chalky rock was deposited, now commonly referred to as "Austin Chalk". Austin Chalk spans a vast area in Texas, including Denton County.⁷

Soils

Soil in Denton County primarily consists of Blackland and Grand Prairie soils. The Grand Prairie region extends south from the Red River to the Colorado River and lies between the Eastern and Western Cross Timbers. Upland soils in this region are mostly dark-grey, alkaline clays. Some areas have light-colored loamy soils over limestone. Bottomland soils, along the Colorado and Brazos Rivers, are reddish silt loams and clays. Other bottomland soils can possess dark-gray loams and clays. Blackland soils are called "cracking clays" for the large, deep cracks that form during dry weather. Where Blackland soil is present, it can be damaging to foundations of

⁷ Information in this section derived from the *2000-2001 Texas Almanac*. Dallas: The Dallas Morning News, 1999.

structures and highways because of its propensity for crack formation. Water erosion and brush control are management issues for both soil types.⁸

Vegetation

Mostly prairie, this region is also characterized by significant timber, particularly along its creeks, streams and rivers. This timber consists mainly of Oak, Pecan, Elm, Hackberry, Horseapple and Mesquite. Original grassland, which has changed over time given development and cattle grazing activity, consists of Bluestem, Indiangrass, Switchgrass, Hairy and Tall Grama, Texas Wintergrass, Buffalograss and others.⁹

Topography

The area of Denton County and Copper Canyon may be characterized as ranging from flat to gently rolling hills with numerous creeks (principally Poindexter Creek) draining to Lake Lewisville. The elevation in Copper Canyon changes from 660 feet along F.M. 407 to 550 feet closer to Lake Lewisville.¹⁰

Floodplains and Drainage Ways

From a development standpoint, floodplains create unique opportunities and challenges. Generally a floodplain may not be developed unless it happens in a manner that meets the concerns of the Federal Emergency Management Agency (FEMA). This challenge creates unique opportunities because this land, while serving drainage needs, may be used in an open space or recreational capacity. A floodplain exists within the Town and constitutes an area that mostly borders along Poindexter Creek. This creek exists principally in the northeastern portion of the Town, beginning from a southwestern location and flowing in a northeasterly direction toward Lake Lewisville. The creek branches off at various points and the floodplain follows this pattern.¹¹

Major Aquifers

About 80 percent of area in the state of Texas is covered by underlying major aquifers. Approximately 56 percent of the water currently used in the State is derived from underground

⁸ Ibid.

⁹ Information in this section derived from the *2000-2001 Texas Almanac*. Dallas: The Dallas Morning News, 1999.

¹⁰ Maptech, Inc. 1997.

¹¹ Flood Insurance Rate Map, Panel 526 of 720. Denton County, Texas and Incorporated Areas. FEMA. April 2, 1997.

sources that occupy nine major and 20 minor aquifers. The aquifer located directly beneath this region and Copper Canyon is the Cenozoic Pecos Alluvium.¹² Commonly (and more specifically), this aquifer is referred to as the Trinity aquifer and Paluxy Sand aquifer. The Trinity aquifer lies beneath the Paluxy Sand.¹³

Climate

Climate is also a factor that affects the type of development occurring in an area. Climate of a community can either be a limiting or encouraging factor to development depending on the type of industry or business. For Copper Canyon, the climate will not seriously limit or impact development types. The summary of the climate in the North Central Texas area over a 30 year period is presented in Table 2.1 below.

Table 2.1 Climate Summaries, North Central Texas (30-Year Period)

Measure (Fahrenheit)	Month						
	January	March	May	July	September	November	Annual
Normal Daily Maximum	54	68	83	95	88	65	76
Normal Daily Minimum	34	46	63	75	67	45	55

Source: <http://www.srh.noaa.gov/fwd/ntexclima.html>. Annual Summary of Normal, Means, and Extremes. Retrieved August 2003.

Man-Made Features

Man-made features such as roadways (and rights-of-way), electrical transmission lines, special areas/corridors, the extraterritorial jurisdiction, railroad, and public facilities within the Town are some factors that impact urban development patterns in a Town.

Major Thoroughfare Routes

Thoroughfare routes are the key driving forces in determining the location and intensity of all types of development. The transportation system may be defined by a hierarchy of roads based on the level of service they provide. This hierarchy consists of arterials (i.e. highways, multi-lane streets) at the top, with lesser service provided by collector and residential streets. Copper

¹² Information in this section derived from the *2000-2001 Texas Almanac*. Dallas: The Dallas Morning News, 1999.

¹³ Telephone conversation. Jim Leggieri, General Manager, Bartonville Water Supply Corporation. August 13, 2003.

Canyon borders F.M. 407, serving as the main regional thoroughfare to access neighboring communities and the larger highway system.

Streets

The street system within the community consists of mostly two lanes, undivided, rural street sections serving the community. Residential streets may be differentiated from collector streets only as being narrower; the paving sections for both are similar. Access to the already discussed F.M. 407 is provided by Copper Canyon Road, Jernigan Road and Chinn Chapel Road.

Railroads

A Kansas City Southern railroad line cuts through town in a northwest to southeast direction, extending to the City of Denton to the northwest and Dallas to the southeast. The rail line is currently used for freight only and has been considered for commuter rail service for persons traveling between the Denton and Dallas areas.

Extraterritorial Jurisdiction (ETJ)

Extraterritorial 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 has established specific amounts of unincorporated land for possible annexation by municipalities depending upon their sizes. As a town of under 5,000 population, Copper Canyon has an ETJ area of one-half mile. The town limits of Copper Canyon abut the city limits of Highland Village to the east, Flower Mound and Double Oak to the south and the City of Denton's ETJ to the north. Therefore, the Town's ETJ primarily exists to the west of the town limit boundary, along Copper Canyon Road (Plate 2.3 *Existing Land Use*).

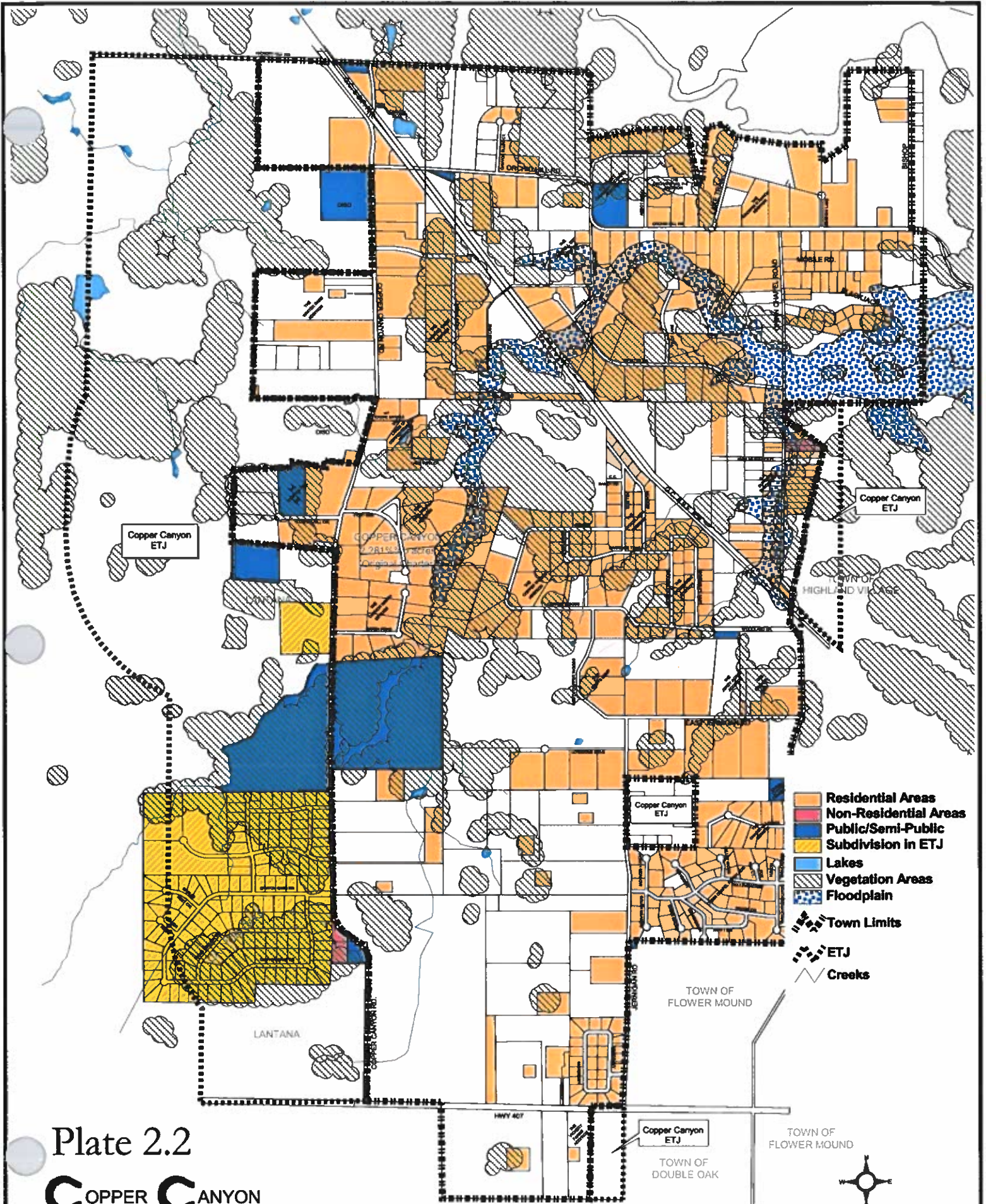


Plate 2.2

COPPER **C**ANYON

Physical Features

0 600 1200 Feet
 Dunkin Sefko & Associates, Inc.
 Urban Planning Consultants Dallas, Texas

2.4 Demographic Profile

The people who live in Copper Canyon will be the most important resource of the community and a critical determinant of the Town's future. The following discussion is intended to provide insight into the historical and existing demographic characteristics of the Town. Knowledge of these characteristics can help the Town plan for projected population increases and expected growth patterns.

Population

Referring to Table 2.2 below, explosive growth rates have been experienced not only for the Town of Copper Canyon (61% over the period 1980-2000) but for all communities in the immediate area as well. Growth in these suburban communities may undoubtedly be accredited to, in part, the phenomenal growth rates of the "anchoring" cities of Dallas and Fort Worth. In fact, Copper Canyon nearly tripled in population over the period (Table 2.2).

Table 2.2 Population Change, Copper Canyon and Regional Cities (1980-2000)

Town	1980	1990	2000	Net Growth, 1980-2000
Argyle	1,111	1,575	2,365	53.0%
Copper Canyon	465	978	1,216	61.7
Dallas	904,078	1,006,877	1,188,580	23.9
Denton	48,063	66,270	80,537	40.3
Flower Mound	4,402	15,527	50,702	91.3
Fort Worth	385,164	447,619	534,694	30.0
Highland Village	3,246	7,027	12,173	73.3
Lewisville	24,273	46,521	77,737	68.8

Source: U.S. Census

Population growth for Denton County has been equally substantial to Copper Canyon's (Table 2.3 below). This relationship in population growth is quite clear as the population of Copper Canyon as a percentage of Denton County population has remained virtually unchanged over the 1980-2000 period (Table 2.3).

Table 2.3 Copper Canyon Population in Relationship to Denton County (1980-2000)

Year	Copper Canyon Population	Denton County Population	Copper Canyon as a Percentage of County
1980	465	143,126	0.3%
1990	978	273,525	0.4
2000	1,216	432,976	0.3

Source: U.S. Census

Household Structure

As may be expected for a rural, family-oriented community, households containing a much more traditional family structure are significantly more prevalent in Copper Canyon than they are in the United States as a whole (Table 2.4). In fact, almost 90% of all households in the Town may be described as “family” households, versus a rate of just under 70% for the nation. This comparison with the nation continues a similar relationship for other household structure categories throughout Table 2.4, with lower percentages being described for elements unlike typical family household structures within the Town.

**Table 2.4 Households by Type
Copper Canyon and the United States (2000)**

Relationship	Copper Canyon	U.S.
Total Households	100.0 %	100.0%
Family households	87.2	68.1
With own children under 18 years	42.3	32.8
Married-couple family	81.3	51.7
With own children under 18 years	38.6	23.5
Female householder	4.2	12.2
With own children under 18 years	2.5	7.2
Non-family households	12.8	31.9
Householder living alone	9.3	25.8
Householder 65 years and over	2.7	9.2

Source: U.S. Census

Age and Race Composition

Referring to Table 2.5 below, most age categories have remained relatively constant over the period 1990-2000, with two notable and important exceptions. The relationship between the

“prime” and “older” labor force has inversed itself and now shows an “older” labor force occupying a significantly larger proportion of the total population. Normally, one would anticipate statistics showing an aging of the child population to accompany this aging labor force. This is not the case for Copper Canyon and indicates that the majority of actual population growth has been in the 45-64 age category (Table 2.5).

Table 2.5 Age Distribution, Copper Canyon (1990, 2000)

Age Group	1990		2000	
	Number	Percentage	Number	Percentage
Young (under 5)	73	7.5%	70	5.8%
School Age (5-17)	242	24.7	272	22.4
Post High School (18-24)	54	5.5	76	6.3
Prime Labor Force (25-44)	354	36.2	334	27.5
Older Labor Force (45-64)	221	22.6	382	31.4
Elderly (65+)	34	3.5	82	6.7
Totals	978	100.0	1216	100.0
<i>Median Age</i>	<i>Not Extrapolated</i>		<i>40.1</i>	

Source: U.S. Census

As the age composition is important to take into account in the planning of a community’s physical needs, so is the community’s ethnic composite. An understanding of this increases the chances for generally informed decisions to be made in all matters planning-related.

Various ethnic groups may have certain issues that may be addressed from a planning perspective and an understanding of racial and ethnic distribution provides some basic information from which these issues may be analyzed. Table 2.6 describes the racial and ethnic composition for the Town of Copper Canyon as it compares to the state as a whole for the year 2000. Copper Canyon is predominantly White/Caucasian in its racial composition. Some racial groups, in particular whites, may also consider themselves to be Hispanic. Most racial/ethnic groups are represented in small percentages within the Town (Table 2.6).

**Table 2.6 Race and Ethnic Distribution
Copper Canyon and Texas (2000)**

Race/Ethnicity	Copper Canyon		Texas	
	Number	Percent	Number	Percent
White/Caucasian	1,197	98.4%	14,799,505	71.0%
African American	7	0.6	2,404,566	11.5
Hispanic (of any race)*	49	4.0	6,669,666	32.0
Asian/ Pacific Islander	5	0.4	576,753	2.8
American Indian/Alaska Native	14	1.2	215,599	1.0
Other	15	1.2	2,952,634	14.2

* Individuals may report more than one race and therefore total numbers will exceed actual population. This is particularly true for the Hispanic (of any race) category where a person may be accounted for as both White/Caucasian *and* of Hispanic origin.

Source: U.S. Census

Educational Attainment

From an analysis of the educational attainment levels below in Table 2.7, Copper Canyon has an exceptionally well-educated population. Its relationship to the State, in terms of educational attainment, can generally be described as higher to substantially higher, depending upon which category is reviewed. The exception to this is a slightly lower (0.6%) level of graduate or professional degrees received. Most notable is a more than double percentage level of those holding a bachelor's degree in Copper Canyon versus the State (Table 2.7).

**Table 2.7 Educational Attainment
Copper Canyon and Texas (2000)**

Level Attained*	Copper Canyon	Texas
Less than 9th grade	1.7%	11.5%
9th to 12th grade, no diploma	4.5	12.9
High school graduate	23.0	24.8
Some college, no degree	22.2	22.4
Associate degree	4.6	5.2
Bachelor's degree	37.1	15.6
Graduate/Professional Degree	7.0	7.6
Total	100.0	100.0

* For person 25 years and older

Source: U.S. Census

Income and Poverty Levels

Table 2.8 below describes income levels for Copper Canyon, select regional cities and the State. As expected, a significantly higher level of persons holding a bachelor's degree is directly related to the higher earning potential of those individuals. Such is the case for Copper Canyon and evidence of this may be seen in the higher percentage levels for the income categories at and over \$75,000 when compared to the State. To provide regional context for Copper Canyon, the neighboring cities of Flower Mound and Highland Village all reflect highly similar income levels (Table 2.8). Dallas County, where approximately 42% of Denton County residents are employed (Table 2.12), is highly reflective of state income levels. Perhaps most remarkable is the median income of the Town measuring nearly two and one-half times that of the State (Table 2.8).

**Table 2.8 Household Income Levels
Copper Canyon, Regional Cities and Texas (1999)**

Household Income	Copper Canyon	Flower Mound	Highland Village	Dallas (County)	Texas
Less than \$10,000	2.4%	1.5%	0.1%	10.5%	10.4%
\$10,000 to \$14,999	0.5	0.9	0.2	6.0	6.6
\$15,000 to \$24,999	3.5	2.3	1.6	14.5	13.6
\$25,000 to \$34,999	5.7	3.2	2.4	15.0	13.5
\$35,000 to \$49,999	6.0	7.2	5.6	17.1	16.5
\$50,000 to \$74,999	15.7	18.4	16.1	16.4	18.4
\$75,000 to \$99,999	18.2	20.4	19.5	8.0	9.5
\$100,000 to \$149,999	23.3	29.3	26.8	6.5	7.2
\$150,000 to \$199,999	12.7	8.9	13.6	2.4	2.1
\$200,000 or more	11.9	7.9	14.1	3.5	2.2
Median Income (\$)	96,745	95,416	105,109	37,628	39,927

Also related to the level of educational attainment is the level of persons below the poverty level. An inverse relationship exists whereby poverty levels are low when educational attainment is high. This statement certainly holds true for Copper Canyon and is reflected in its roughly 2% poverty level over the 1990-2000 period, a figure that is roughly 13% lower than the State's (Table 2.9).

**Table 2.9 Persons Below the Poverty Level
Copper Canyon and Texas (1990 and 2000)**

Place	1990	2000
Copper Canyon	2.60%	2.10%
Texas	18.1	15

Source: U.S. Census

Employment

To gain an understanding of how employment plays a role in defining the economy of Copper Canyon, it is useful to review several types of data (for Copper Canyon) in comparison to the State. This data includes statistics related to employment by industry/sector and types of occupations employed by these industries. Employment, when compared to the State, can be described as largely professional in nature, reflecting a more than double percentage rate for those persons in the "Professional" category versus Texas as a whole. However, most categories are fairly similar in percentage levels for the Town and the State. The State is significantly higher in the areas of educational, entertainment and recreation, and public administration employment (Table 2.10).

Table 2.10 Employment by Sector, Copper Canyon and Texas (2000)

Type of Industry	Copper Canyon	Texas
Employed civilian population 16 years and over	100.0%	100.0%
Agriculture, forestry and fisheries	0.7%	2.7%
Construction	7.0%	8.1%
Manufacturing	14.3%	11.8%
Wholesale trade	5.9%	3.9%
Retail trade	13.8%	12.0%
Transportation, warehousing and utilities	7.7%	5.8%
Information	3.0%	3.1%
Finance, insurance and real estate	4.7%	4.8%
Professional, scientific, management, admin., waste mgmt. svcs.	20.9%	9.5%
Education, health and social services	12.4%	19.3%
Entertainment and recreational services	3.8%	7.3%
Other services (except public administration)	5.1%	5.2%
Public Administration	0.7%	4.5%

Source: U.S. Census

Table 2.11, concerning occupational analysis, reveals a somewhat similar relationship to the one described in the “employment by sector” analysis. Most categories are somewhat similar except for a significantly higher level of persons describing their occupations as “management or professional” in nature (Table 2.11). The other notable difference is the exactly double percentage level of those persons at the State level being described as having service occupations (Table 2.11).

Table 2.11 Occupational Analysis, Copper Canyon and Texas (2000)

Occupation	Copper Canyon	Texas
Employed civilian population 16 years and over	100.0%	100.0%
Management, professional, and related occupations	48.9%	33.3%
Service occupations	7.3%	14.6%
Sales and office occupations	27.9%	27.2%
Farming, fishing, and forestry occupations	0.0%	0.7%
Construction, extraction, maintenance occupations	7.0%	10.9%
Production, transportation, material moving occupations	8.9%	13.2%

Source: U.S. Census

In examining the employment characteristics of Copper Canyon, it is particularly useful to understand where, geographically, these persons are actually employed, given that the Town provides no noteworthy employment base itself. Data on work flow patterns of the actual Town is not tracked, but it may prove beneficial to examine Denton County workers and the actual county where they work. Table 2.12 describes this activity for the four highest destination counties. This analysis assumes that the commuter patterns of those persons living in Copper Canyon are similar to that of the County as a whole. Most persons live and work within the County, though almost an equal number travel to Dallas County (Table 2.12). Given the similar proximity of Denton County to the Dallas and Fort Worth areas, it is somewhat surprising to see, taking into consideration the population difference of the two cities, a much lower rate of those persons traveling to Tarrant County (Fort Worth) versus Dallas County (Dallas) (Table 2.12). The characteristics of the worker population in Denton County may be more suitable to the employment opportunities available in Dallas County, though this occurrence is not analyzed.

**Table 2.12 County-To-County Worker Flow
Denton County (2000)**

Work Destination County	Commuter Numbers
Collin	14,896
Dallas	95,367
Denton	103,598
Tarrant	15,809

Source: U.S. Census

2.5 Existing Land Use

Providing for the orderly and efficient use of land should be the overriding planning consideration in Copper Canyon. In order to accurately assess the Town's future land use needs, an analysis of present land use patterns is important. The patterns of land use found in Copper Canyon have evolved to satisfy the requirements of the community as it grew. The activities of the residents of the Town create a need for residential and commercial uses (whether these uses exist within the Town or in its vicinity) as well as an efficient thoroughfare system. The conversion process and how it occurs will be very important to the Town because it is one of the factors that will determine the community's future urban form. It will not only have an impact upon how Copper Canyon develops economically, but also the existing and future land uses that will shape the character and livability of the community for years to come. These relationships will be reflected in the provision of services and facilities throughout the community. An orderly land use arrangement will best serve the needs of the community.

In order to analyze the land use trends within Copper Canyon, a field survey was conducted during the preparation of this Plan. Using accepted survey methodologies and land use categories, a comparison of existing land uses can be made.

Land Use Survey Methodology

In August, 2003, a parcel-by-parcel land use survey was conducted by automobile for all areas within the existing Town limits and ETJ. Each parcel was color-coded and documented according to the following categories (where applicable):

Residential Uses

Single-Family Residences: One-family dwellings and related accessory buildings.

Two-Family Residences: Duplex/town home dwellings and related accessory buildings.

Multiple-Family Residences: Apartments, rooming houses & related buildings.

Manufactured Homes: A manufactured home located on a lot or a parcel.

Public, Semi-Public and Related Uses

schools, churches, cemeteries, utilities, public buildings

Parks and Open Spaces

parks, playgrounds, public open space

Office Uses

Professional/Administrative, healthcare-related, real estate agencies, financial services, other typical office uses

Retail Uses

retail stores, shops and personal service establishments, shopping centers, service stations, 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, welding shops

Industrial Uses

Light Industry: light processing, storage, light fabrication, assembly and repairing

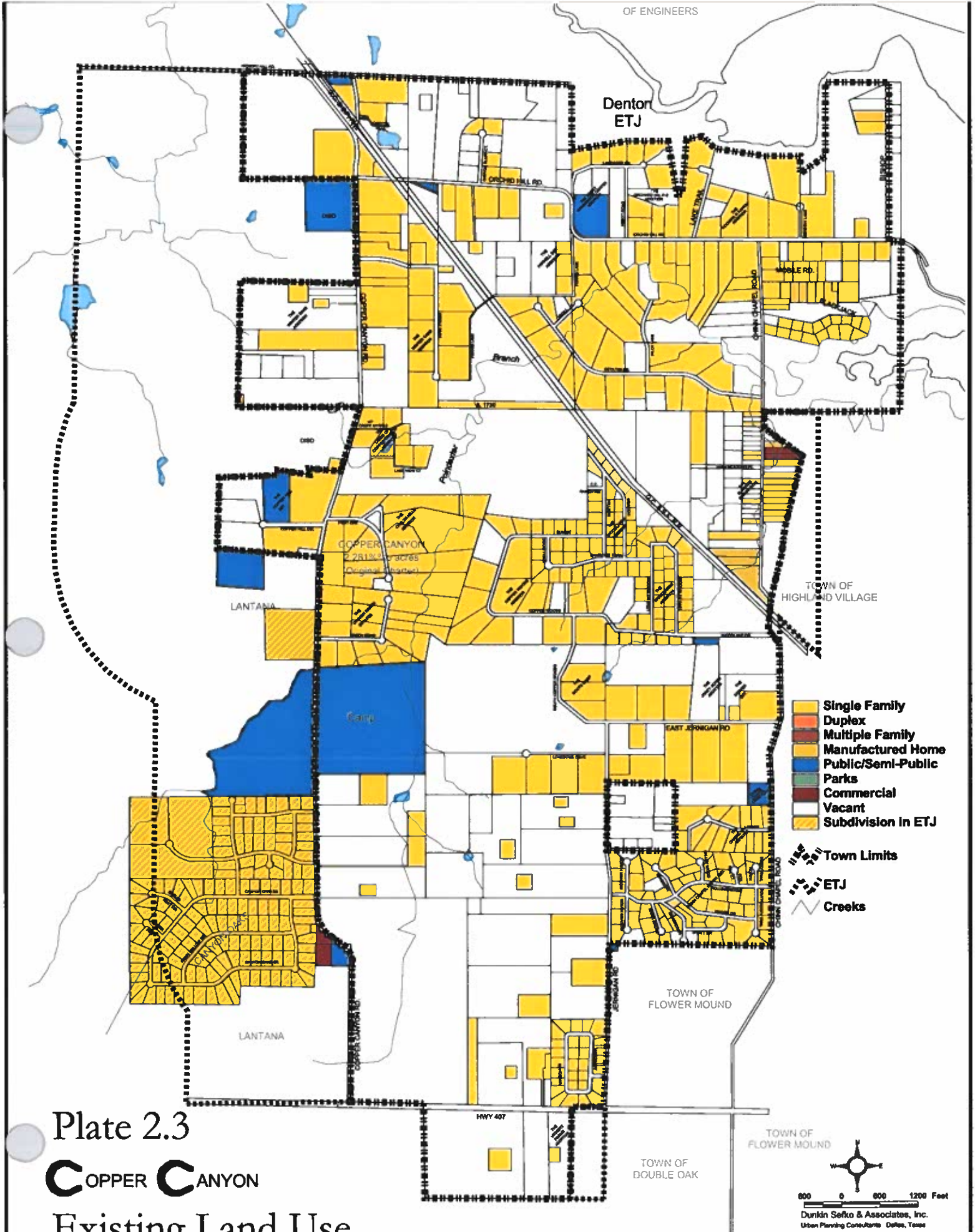
Streets and Alleys

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

Vacant and Agricultural Uses

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

Plate 2.3 *Existing Land Use* shows a general representation of the existing land use pattern in Copper Canyon as of August, 2003.



Denton ETJ

- Single Family
- Duplex
- Multiple Family
- Manufactured Home
- Public/Semi-Public
- Parks
- Commercial
- Vacant
- Subdivision in ETJ

- Town Limits
- ETJ
- Creeks

Plate 2.3

COPPER CANYON

Existing Land Use

TOWN OF FLOWER MOUND

Dunkin Sefko & Associates, Inc.
Urban Planning Consultants Dallas, Texas

Existing Land Use Analysis

Of the developed land area in 2003, (excluding roadways) single-family residential land uses comprise the overwhelming percentage of land use. It is expected that the composition of land uses in Copper Canyon will remain constant for the foreseeable future.

By calculating the amount of acreage consumed for various land uses and comparing it to population, 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.

In 1987, a Master Plan was completed and included a land use survey conducted in 1985. The 1994 Master Plan Update did not quantify the existing land uses at the time and it is therefore not possible to track any changes in a statistical manner for the period 1994-2003. Because the land use is almost exclusively residential, it can be determined that the only substantial changes would have been an increase in residential development to accommodate the population growth experienced within the Town. Table 2.13 below describes what was recorded during the recent land use survey.

Table 2.13 Land Use Acreage, Copper Canyon (2003)

Land Use Category	Acres	Percent of Developed Land	Acres/100 persons
Single Family	1,047.4	90.3	85.9
Duplex/Town home	0	0.0	0.0
Multi-Family	0	0.0	0.0
Manufactured Homes	14.5	1.2	1.2
Parks/Open Space	0	0.0	0.0
Public/Semi-Public	93.5	8.1	0.7
Office	0	0.0	0.0
Retail	0	0.0	0.0
Commercial	1.8	0.2	
Industrial	0	0.0	0.0
Total Developed Land	1,160.3		
Rights-of-Way	176.0	15.2	14.5
Undeveloped Land	1,742.5	N/A	143.3
Total	2,902.8	N/A	238.7

Source: Dunkin, Sefko and Associates, Inc. Land Use Survey. August, 2003.

Table 2.14 below offers land use ratio averages for Texas communities with relatively similar populations. As may be expected given the Town's rural and residential character, the land uses present in Copper Canyon vary substantially from those cities analyzed and averaged in Table 2.14. It should be noted that land uses are largely reflective of a community's vision and market forces, and do not suggest appropriate or inappropriate levels of land use types.

Table 2.14 Land Use Averages, Small Texas Cities

Land Use Category	Acres	Percent of Developed Land	Acres/100 persons
Single Family	537.4	49.8%	17.92
Duplex/Town home	18.9	1.8%	0.63
Multi Family	11.0	1.0%	0.37
Man. Homes	69.3	6.4%	2.31
Parks/Open Space	206.3	19.1%	6.88
Public/Semi-Public	111.2	10.3%	3.71
Office	8.5	0.8%	0.28
Retail	25.9	2.4%	0.86
Commercial	78.6	7.3%	2.62
Industrial	13.2	1.2%	0.44
Total Developed Land	1,080.1	100.0%	36.01
Rights-of-Way	417.0	n/a	13.91
Undeveloped Land	2,251.0	n/a	75.06
Total	3,748.1	n/a	124.98

*Small Texas cities (average population: 2,999) include: Bee Cave, Sunnyvale, Crandall, Fairfield, Heath, Hutchins, Lago Vista, Salado
Source: Dunkin, Sefko & Associates, Inc.

The Village of Bee Cave, Texas is similar to Copper Canyon in its socioeconomic characteristics and its semi-rural setting and is therefore useful as a land use comparison. Bee Cave is located outside of Austin, Texas. From Table 2.15 below, differences in land use, when compared to Copper Canyon, are significant and describes a community with higher levels of non-residential development.

**Table 2.15 Land Use Survey
Town of Bee Cave, Texas (Population 551)**

Land Use Category	Acres	Percent of Developed Land	Acres/100 persons
Single Family	258.8	57.0%	46.98
Duplex/Town home	n/a	n/a	n/a
Multi Family	n/a	n/a	n/a
Man. Homes	15.0	3.3%	2.72
Parks/Open Space	14.8	3.3%	2.69
Public/Semi-Public	43.1	9.5%	7.82
Office	9.2	2.0%	1.67
Retail	59.0	13.0%	10.70
Commercial	42.4	9.3%	7.69
Industrial	11.5	2.5%	2.08
Total Developed Land	453.7	100.0%	82.34
Rights-of-Way	139.3	n/a	25.28
Undeveloped Land	1,039.2	n/a	188.60
Total	1,632.2	n/a	296.22

Source: U.S. Census

2.6 Existing Housing Conditions

Quality of housing and the appreciation of housing values are important planning considerations. Among the factors contributes to the desirability of Copper Canyon as a place to live is the condition of existing housing and the quality of the residential neighborhoods they form. The community has an interest in attracting quality residential development for its residents and the enhancement of the Town.

The quality of housing in Copper Canyon is an important consideration in evaluating the adequacy of the existing housing stock and predicting future housing requirements. Condition and age are two of the physical characteristics of the housing supply which reflect impact the quality of housing. Tenure, length of residence, persons per household, and affordability are other variables which determine the general status of the housing supply. The condition of housing within an area also influences the decision for investment in new or remodeled dwelling units. Normally, residential neighborhoods with positive attributes (ex. sound housing, school facilities within a reasonable distance, convenient parks and open space, adequate streets and good sanitation and drainage) will have minimum health, economic and social problems. In

contrast, a blighted area where such variables just listed are either nonexistent or poorly provided will likely present a greater number of problems to the community.

Analyzing existing residential conditions allows any major issue to be identified so that they may be addressed in the Plan.

Trends in Housing Supply

Examining Table 2.16 below, the total number of dwelling units in the Town has increased by roughly 9% over the period 1990-2000 while persons per household has decreased slightly.

**Table 2.16 Total Dwelling Units
Copper Canyon (1990-2000)**

Year	Total Dwelling Units	Persons Per Household
1990	324	3.1
2000	407	3.0

Source: U.S. Census

Table 2.17 below confirms what may already be expected, an extremely high level of single-family development as the dominant housing type within the community. Manufactured housing, the other residential type present within the Town, occupies a very low percentage of total housing (Table 2.17).

Table 2.17 Housing Types, Copper Canyon (2003)

Housing Type	2003	
	Number	Percent
Single-Family	427	98.2%
Duplex	0	0.0
Multi-Family	0	0.0
Manufactured Homes	8	1.8
TOTAL	435	100.0

Source: Dunkin, Sefko & Associates, Inc. Land Use Survey, August. 2003

Residency

The length of time people tend to reside within a community, to a certain degree, influences the town structure's physical condition. It can be reasonably assumed that the occupancy of a structure by a particular family unit over a long period of time would be a deterring factor in any decline of the structure's condition, as compared to several families occupying a structure during the same or a shorter period of time. Also, a renter- or owner-type of occupancy will likely be reflected by the level and quality of maintenance and upkeep that is given to a residential structure. According to the U.S. Census, Copper Canyon's owner-and renter-occupancy rates were comparable with other cities in the area for the year 2000. A high owner-occupancy can be considered an asset when planning for Copper Canyon's future. The percentage of renter- versus owner-occupied dwellings in Copper Canyon compared to other selected cities is shown in Table 2.18. The percentage of owner-occupied units in Copper Canyon is much higher than the State as is the case for the neighboring communities of Flower Mound and Highland Village. All have a similar level of over 90% owner-occupied units.

**Table 2.18 Renter Versus Owner-Occupied Units
Copper Canyon, Area Cities and Texas (2000)**

Town	Owner-Occupied	Percentage	Renter-Occupied	Percentage
Copper Canyon	381	93.6%	26	6.4%
Flower Mound	15,024	92.9	1,155	7.1
Highland Village	3,750	96.8	124	3.2
Lewisville	16,184	53.9	13,859	46.1
Texas	4,716,959	63.8	2,676,395	36.2

Source: U.S. Census

Housing Values

The ability of a family or individual to obtain adequate housing is generally determined by household income as it relates to housing values. Generally, it is assumed that 30 percent or less of a family unit's gross total income may be dedicated to housing costs. Table 2.19 shows the housing value for occupied dwelling units in Copper Canyon for 1990 and 2000. Over the ten-year period, housing values have risen dramatically; median housing values have risen by 29.4% or \$66,100. This increase is most attributable to a dramatic increase in the revaluing of existing homes and the development of new homes in the \$200,000-299,000 category and the "\$300,000 or more" category.

**Table 2.19 Housing Value of Owner-Occupied Units
Copper Canyon (1990, 2000)**

Housing Value	1990		2000	
	Number	Percent	Number	Percent
Less than \$50,000	2	0.9%	0	0.0
\$50,000 to \$99,999	15	6.7	12	3.7
\$100,000 to \$149,999	73	32.6	21	6.4
\$150,000 to \$199,000	90	40.2	110	33.5
\$200,000 to \$299,999	26	11.6	84	25.6
\$300,000 or more	18	8.0	101	30.8
TOTAL	224	100.0	328	100.0
Median Value(\$)	158,900		225,000	

Source: U.S. Census

Housing Inventory

A housing inventory was also conducted for the purpose of determining the physical condition of housing throughout the planning area. The conditions of manufactured housing are not measured in the housing inventory. The housing conditions of each block were measured against the four categories described below:

Type 1: *Good and sound condition*

Structures are either new or older and well-maintained.

Type 2: *Housing in need of minor repair*

Structures need minor maintenance like painting of trim or exterior surfaces, replacement of small trim areas, or other similar minor repairs.

Type 3: *Housing in need of major repairs*

Structures were in various stages of deterioration and show signs of sagging roofs, missing shingles and similar major repairs.

Data obtained from the field survey provides a basis for evaluating existing housing conditions. Determine the measures needed to either preserve or physically upgrade the overall housing inventory. The results of the field survey are shown in Table 2.20 below. Of the existing housing at the time of the survey, all structures rated a Type 1, the highest rating that may be given.

**Table 2.20 Housing Conditions
Copper Canyon (2003)**

Structure Type*	Percentage
Type 1	100.0
Type 2	0.0
Type 3	0.0
Total	100.0

Source: Dunkin, Sefko & Associates. Housing Conditions Survey, August 2003.

2.7 Existing Plans & Ordinances

Existing Plans

The original Master Plan was completed in 1987 by a contracted consultant. This plan was updated in 1994 and consisted mainly of an analysis of a survey conducted to determine a cohesive vision for the community and to guide the residential zoning district categories and their placement throughout the Town.

Existing Zoning Ordinance

The Town of Copper Canyon's current zoning ordinance was adopted in 1998. The purpose of this zoning ordinance was to do the following:

:

- Promote health, safety and general welfare
- Promote stability of existing land uses and reflect the Master Plan
- Promote safe and effective traffic circulation
- Promote and protect the aesthetic quality of the Town
- Provide adequate protection for community investments
- Divide the Town into zoning districts to provide for the elimination of nonconforming uses of land, buildings and structures

- Zone the Town entirely with residential, large lot districts to maintain both the rural and residential character of the community
- The existing zoning districts are: Residential Estate RE10 and RE5; Residential Single-Family R1, R-1A and R2; Commercial Neighborhood CN; and Mobile Home

2.8 Existing Public Facilities

The type of public facilities and services available to the residents of the Town is an important factor influencing the desirability of Copper Canyon as a place to live. The availability of public facilities in a community also affects the potential for future development of various portions of the Town and surrounding areas. The community has an interest in providing public facilities and services to ensure the quality of life within the Town is maintained and enhanced in this regard.

Presently, the Town of Copper Canyon provides its residents with the following facilities and/or services:

Town Hall

The present Town Hall is located at 400 Woodland Drive, Copper Canyon, Texas. The services housed within Town Hall are as follows:

- Town Management
- Town Secretary
- Administrative support
- Inspection/ Code Enforcement
- Municipal Court
- Occasional housing of fire department vehicles

Fire and Emergency Service

Currently the Town contracts services from the Argyle Volunteer Fire District. This Fire District makes available 26 part-time paid fire fighters, 21 volunteer fire fighters, and three paramedics on duty at all times. The main facility is located in Argyle, Texas, a neighboring city, with a sub-station in Copper Canyon.¹⁴

¹⁴ Email communication. Mac Hohenberger, Chief of Argyle Fire District. August 13, 2003.

Police Service

Police protection is currently provided by contract with the Double Oak Police Department. The actual facility is located in Double Oak, a neighboring city.¹⁵

Library

Although there is not a library facility within the Town, citizens may use the Denton County library on Locust Drive in Denton at no charge.¹⁶

2.9 Existing Water & Wastewater System

Water Supply

Copper Canyon contracts with the Bartonville Water Supply Corporation (BWSC), a member of the Upper Trinity Regional Water District. The BWSC operates two pump stations within and for the community. The first of which is the Jernigan Road Station which has a ground storage capacity of 216,000 gallons of water and can produce 400 gallons/minute for water service. The second and larger pump station is the Copperhill Station which has a ground storage capacity of 2.3 million gallons with an interconnection to surface water through the Upper Trinity Regional Water District for which it can serve up to 2.5 million gallons/day. Current water supply is well above what is required for current demands and enough exists to add roughly 20,000 connections should it ever be needed.¹⁷

Wastewater System

Currently, there is not a wastewater system for the Town. Wastewater is handled by individual onsite wastewater systems.

Drainage

Drainage throughout the community is accomplished through easements that set aside land for natural drainage to creeks and streams and any other minor bodies of water.¹⁸

¹⁵ www.coppercanyon-tx.org/aboutourtown.htm. Retrieved August 2003.

¹⁶ Email communication. Elizabeth Penny, Town Secretary, Town of Copper Canyon. August 13, 2003.

¹⁷ Telephone conversation. Jim Leggieri, General Manager, Bartonville Water Supply Corporation. August 13, 2003.

¹⁸ 1994 Master Plan Update. Bucher, Willis & Ratcliff.

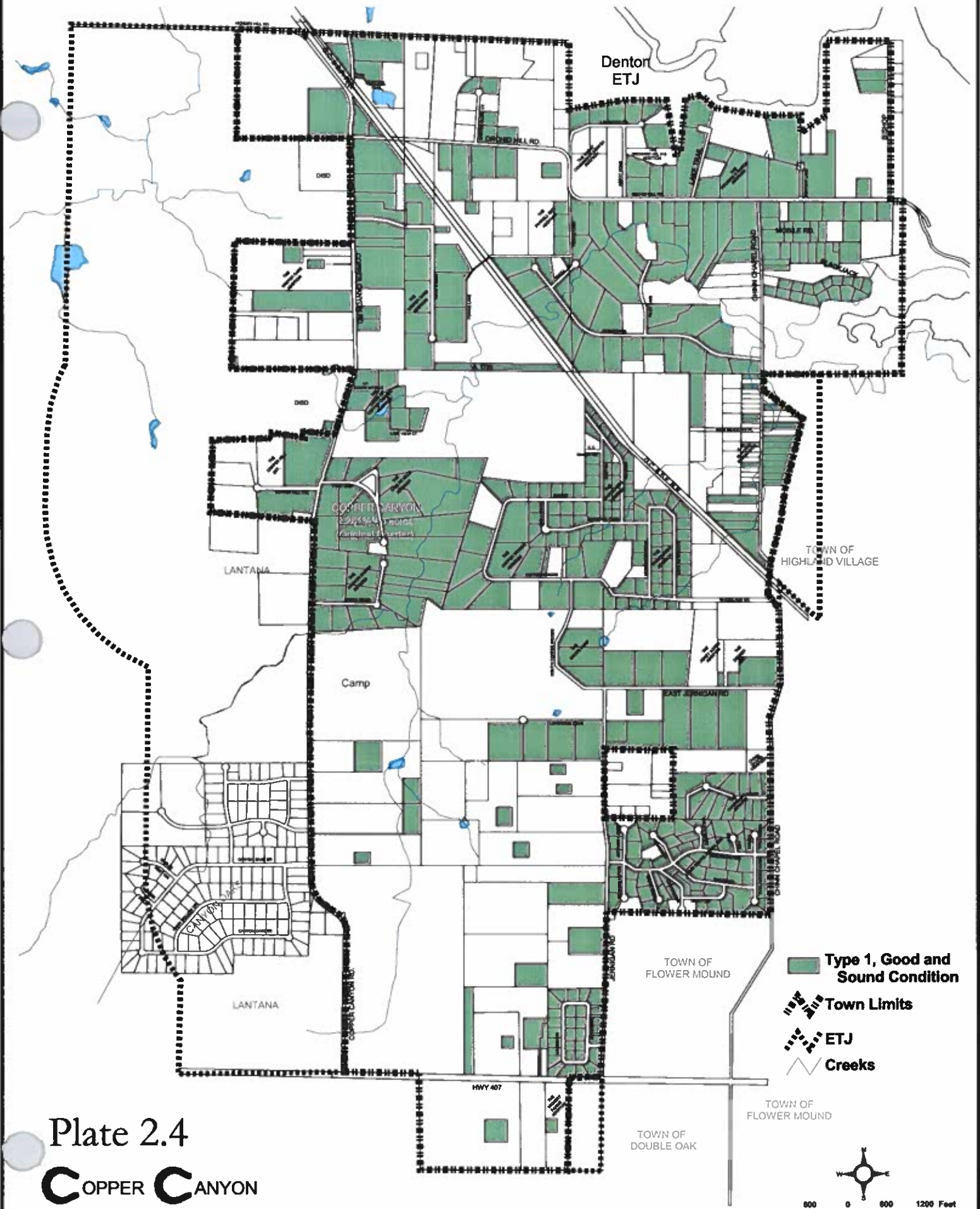


Plate 2.4

COPPER **C**ANYON

Housing Conditions

- Type 1, Good and Sound Condition
- Town Limits
- ETJ
- Creeks



800 0 800 1200 Feet

Dunkin Sefko & Associates, Inc.
Urban Planning Consultants Dallas, Texas

Adopted January 12, 2004