

PARKS AND RECREATION CAPITAL IMPROVEMENTS PLAN

FROM 2013 TO BUILD-OUT
MELISSA, TX



CONSULTING, INC.

TBPE FIRM # F-14760



Prepared For:
CITY OF MELISSA
April 2013



04-29-13



Casey Berend

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MELISSA, TEXAS, ACCEPTING THE CITY OF MELISSA PARKS AND RECREATION, AND OPEN SPACE CAPITAL IMPROVEMENT PROGRAM.

WHEREAS, the City Council of the City of Melissa, Texas does hereby adopt the City of Melissa Parks and Recreation, and Open Space Capital Improvement Program..

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MELISSA, TEXAS:

SECTION 1: City of Melissa Parks and Recreation, and Open Space Capital Improvement Program. That Exhibit "A", attached hereto and incorporated herein for all purposes, constitutes the Plan as adopted.

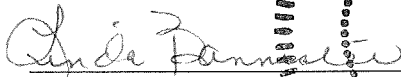
SECTION 3: Effective Date. This Resolution shall take effect immediately upon its passage.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MELISSA, TEXAS on this 23 day of April 2013.

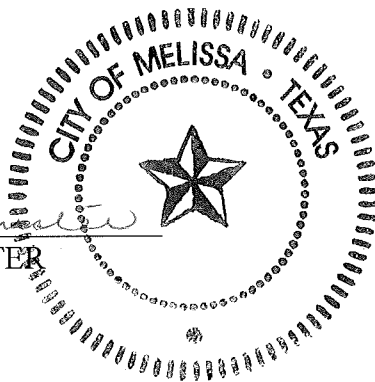


REED GREER, Mayor

ATTEST TO:



LINDA BANNISTER
City Secretary



ACKNOWLEDGEMENTS

Parks and recreation planning for this report was based on future land use assumptions contained within the *City of Melissa Comprehensive Plan 2006*, prepared by Dunkin, Sefko, and Associates, Inc. and adopted by the City of Melissa on July 11, 2006.





Parks and Recreation Capital Improvements Plan Prepared for the City of Melissa, April 2013

By H&F Consulting, Inc. (HFCI)
1710 Cooper St.
Melissa, TX 75454



TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	4
1.1	Summary.....	4
1.1.1	Development of Parks and Trails Plan	4
1.1.2	Types of Proposed Parks	5
1.1.3	Current and Projected Population	8
1.1.4	Parks and Recreation Facilities Expansion	8
1.2	Recommendations	8
1.2.1	Additional Parks and Recreation Facilities.....	8
1.2.2	Trail System	9
1.2.3	Projected Capital Improvements Costs	9
	<i>Plate 6-1 from the City of Melissa Comprehensive Plan</i>	<i>10</i>
2.0	LAND USE ASSUMPTIONS.....	11
	Figure 1: Existing Land Use Map	13
	Figure 2: 2019 Land Use Plan	14
3.0	EXISTING CONDITIONS.....	15
3.1	About this section	15
3.2	Existing Parks and Recreation Facilities	15
4.0	PARKS AND RECREATION CAPITAL IMPROVEMENTS PLAN.....	22
4.1	Demand of Parks and Recreation Facilities	22
4.2	Future Costs of Parks and Recreation Improvements.....	22
4.2.1	Total Cost of Improvements	22
4.2.2	Total Cost of Improvements by Developer	22
4.2.3	Total Cost of Improvements by Public Funds	23
5.0	SERVICE UNITS.....	24
6.0	PARKS AND RECREATION FEES	25
6.1	Expected Increase in Households	25
6.2	Fee Calculation and Allocation	25



1.0 EXECUTIVE SUMMARY

The City of Melissa, Texas, like many other cities in north Texas has experienced tremendous growth over the past few years. This growth is projected to continue well into the future. With this growth comes the need for additional parks and recreation facilities to accommodate the needs and expectations of increased numbers of residents to the City. Like most cities across the region, the question of how to pay for these improvements is a constant struggle.

The primary purpose of this Parks and Recreation Capital Improvements Plan is to provide the City of Melissa with a basis for the calculation of parks and recreation fees. This report describes parks and recreation projects to take place in upcoming years depending on the growth patterns of the City and contains cost estimations for each project. The data in this report is based on population growth projections and land use assumptions published in the *City of Melissa Comprehensive Plan* adopted by the City of Melissa on July 11, 2006 (referred to in this report as the *Comprehensive Plan*). Population projections provide the basis for estimating the size, type of components, and geographical distribution of future parks and recreation facilities for the City. Combining projected population growth rates with expected demand of parks and recreational facilities yields an implementation schedule for construction necessary to accommodate projected population growth.

1.1 Summary

1.1.1 Development of Parks and Trails Plan

The Public Workshop held on December 15, 2005 was extremely well-attended, with approximately 65 interested citizens in attendance. The input that was received specifically on issues related to parks and trails is outlined in the following.

- ✦ When asked what they thought were the most important issues facing Melissa, citizens responded with the following:
 - Parks – Open spaces, trails for walking/biking (recreation in general)
 - Preservation of nature – trees, natural areas
 - Ordinances for development
- ✦ When asked what they thought the City had done well, citizens stated that Melissa has a good park system started. Zadow Park was named as a specific example.
- ✦ When asked what the City could do better, citizens responded with the following:
 - Preserve open space
 - Establish a trail system
 - Preserve trees
 - Create places for more community events

-
- Increase bike friendliness (need wide streets for bikers to have their own lane)
 - ✦ When asked what citizens want in general, many responses involved parks, trails and recreation:
 - Parks and trails should be integrated with development
 - Development should be pedestrian-oriented (i.e., have trails)
 - There should be things within Melissa for people to do; for example, culture and entertainment for adults, and a community center with activities for youth
 - Open space should be preserved to the fullest extent possible

In order to receive additional public input and to supplement the input provided at the Public Workshop, the City sent out a Community Questionnaire in mid-February of 2006. The overall results of the questionnaire are outlined in Chapter 2 of the *Comprehensive Plan*. Park-related issues were featured prominently within the Community Questionnaire. Citizens of Melissa seem to be very much in favor of the City expanding the local park system, but also preserving open space areas. Increasing walkability and providing trails also seem to be important to respondents.

At a meeting held on February 22, 2006, the Comprehensive Plan Advisory Committee provided input on what members deemed important

- ✦ Establishment of a policy to protect creeks and floodplains; these should be preserved as open space and/or used as trails.
- ✦ Trail development is extremely important.
- ✦ Pedestrian and bike connections to other cities should be provided.
- ✦ For trails, six-foot width is currently the standard. This should be increased to eight to 10 feet to accommodate multiple users*.
- ✦ There is a need for a community center – a place people of all ages in Melissa could use, from young people to senior citizens.
- ✦ Additional ball fields will be needed to support the population as it increases.
- ✦ Off-street trails should be the priority, and the use of areas such as power line easements should be a last resort and only if a trail connection is needed.

*Note: (*this report advocates 10 to 12 feet wide trails*).



1.1.2 Types of Proposed Parks

Neighborhood Park

The neighborhood park, sometimes referred to as a playground, is generally thought of as 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 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. Facilities normally provided at a neighborhood park consist of the following.

- ✦ 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, tennis, and similar activities

Other desirable elements for neighborhood parks include

- ✦ Pavilions with tables and grills for picnics
- ✦ Restrooms
- ✦ Drinking fountains
- ✦ A passive area with landscaping, trees and natural elements.

Neighborhood parks are designed to serve a small population area. An appropriate standard in relation to size and population for this type of park is 2.5 acres per 1,000 persons. These parks normally serve a population base of 1,000 to 2,500 persons, and they generally range in size from five to 10 acres. The park created as part of the Liberty Square subdivision is an example of a neighborhood park. Neighborhood parks shall be provided by developers at the time of infrastructure planning, design and construction, and shall be maintained by Home Owners' Associations (HOAs). Ordinance revisions to accommodate neighborhood parks shall be incorporated in current City of Melissa Code of Ordinances.

Community Park

A community park is larger than a neighborhood park, and is oriented toward providing active recreational facilities for all ages. Community parks serve several neighborhood areas, and sometimes an entire city, depending on the size of the city. *{Note: The City's previous Parks and*



Recreation Master Plan used the terms "community park" and "city park" separately; however, their definitions and descriptions within that document were very similar. Therefore, the Comprehensive Plan does not distinguish between the two terms, and the discussion is concentrated on "community parks" as described herein.} Activities provided in community parks generally include:

- ✦ Game and practice fields for baseball, football, soccer and softball;
- ✦ A community building/recreation center;
- ✦ Tennis courts;
- ✦ A surfaced multiple-purpose play area;
- ✦ Playground structures;
- ✦ A passive area for picnicking; and,
- ✦ Other special facilities, such as frisbee golf, if space is available.

The service radius of a community park play field is one-half to two miles, and a location adjacent to, or as a part of, a junior high or high school is considered desirable. An appropriate size standard for these parks in relation to acreage and population is 5 acres per 1,000 persons. These parks normally serve a population base of 2,500 to 5,000 persons, and they generally range in size from 40 acres to 100 acres. Zadow Park, located along State Highway 5 in the central part of Melissa, is approximately 14 acres. Although it is less than the 40-acre minimum stated above, Zadow Park functions as a community park; it is therefore classified and discussed as a community park for park planning purposes.

Ornamental Park

Plazas, street medians, scenic drives, grounds of public buildings (i.e., with benches, fountains, etc.), trailheads and trail rest areas, and similar facilities are within this park category. These types of areas can be important to the visual appeal of a community, and can provide passive recreation space. One area within Melissa that could be considered an ornamental area would be at the entrance to the Liberty subdivision. Other areas within the City that would fit this classification are the four amenity areas along the Melissa Hike & Bike Trail adjacent to Fannin Road and Melissa Road between US 75 and SH 5. Also, the public square that is planned as part of the new Town Center would be a park of this type.

Hike-And-Bike Trails

Both citizens and CPAC members expressed a strong interest in and need for hike-and-bike trails within Melissa. The integration of a trail system in Melissa is strongly supported in the *Comprehensive Plan*. There are numerous reasons that such a system would be a positive element for the City. First, an integrated, cohesive hike-and-bike trail system would set Melissa

apart from other communities in the area; no other city in the vicinity has such a system. Second, trails are a recreation amenity that can be used and enjoyed by all age groups, which is not true of a playground or ballpark; all citizens, young and old, benefit from the availability of trails. And third, it has been proven in recent studies that property values are positively affected by being in proximity to a trail; people are generally willing to pay an increased amount for such a residence. A recent survey supports this.

- ✦ *Urban trails are regarded as an amenity that helps to attract buyers and to sell property. For residents of single-family homes adjacent to a trail:*
 - *29 percent believed that the existence of the trail would increase the selling price of their home (and 43 percent said it would have no effect);*
 - *57 percent of the residents felt that the trail would make the home easier to sell (with 36 percent saying no effect);*
 - *57 percent of these residents had lived in their homes prior to construction of the trail;*
 - *29 percent of those surveyed were positively influenced by the trail in their decision to buy the home.*
 - *Results were similarly positive for residents who lived near but not adjacent to the trail.*

1.1.3 Current and Projected Population

The City of Melissa population at the end of 2012 was 6,000. Based on current ultimate build-out boundaries and land use assumptions in the *Comprehensive Plan*, the ultimate population of the City of Melissa will be approximately 96,000 at build-out. Estimates of growth rates between the present and that date vary, but they generally agree that the greatest growth rates will be observed during the next 10 years. Of the three "scenarios" in the *Comprehensive Plan*, an adjusted version of Scenario "B" is the one chosen for the purposes of this report, on the recommendation of the authors. The population growth predictions shown on Scenario B are adjusted to correct for an observed delay in population growth in Melissa since the Plan's publication. Interpolating data points in this adjusted population growth estimate yields a 2023 population of 53,880 and an ultimate build-out of 95,700. These estimates, along with estimated extents of land uses, form the basis of the calculation of parks and recreation fees.

1.1.4 Parks and Recreation Facilities Expansion

This report outlines a basic framework for the parks and recreation facilities in Melissa as they build out. The capital improvements that the City will implement in the parks and recreation facilities plan should have this future development in mind. It should be noted that the parks and recreation facilities plan will be structured according to *Plate 6-1* in the *City of Melissa Comprehensive Plan* and has been attached to this report and is shown on page 10. Even if the



City builds strictly according to that document, variations from Melissa's actual growth compared to predicted growth will become apparent in time; as a result, this report should only be used as a guideline and not a substitute for detailed design prior to any specific project.

1.2 Recommendations

1.2.1 Additional Parks and Recreation Facilities

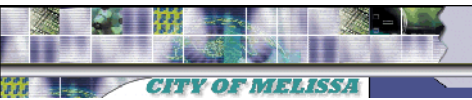
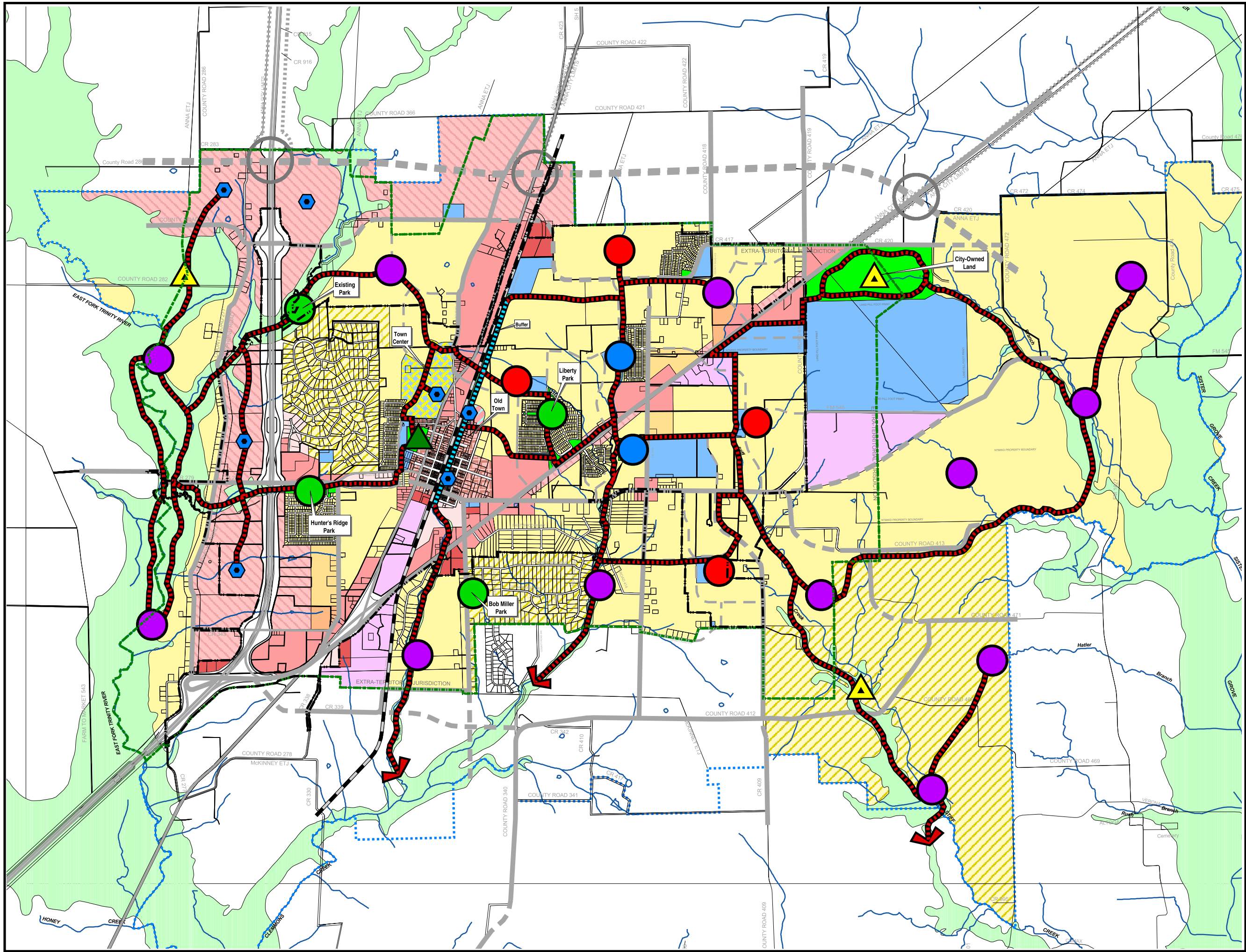
A vibrant park system is essential to creating an active environment and a sense of community in an urban setting. A major objective during the growth of the park system is to preserve the local history. At build-out, the City is expected to have an additional 28 parks to complement the existing inventory of parks. Of those 28 parks, two have already been platted and four are being planned for development. These six parks will be classified as neighborhood parks for the purpose of estimating construction costs. There will be 12 other proposed parks in this classification as well. In addition to the 18 neighborhood parks, there will be three community parks and seven ornamental parks. All parks that are five acres or greater will require an outdoor emergency warning system. Land acquisition for the parks and recreation facilities will generally occur one to three years before construction occurs. In some circumstances it may be much more cost effective to purchase property many years in advance of a project. City staff and the Park & Recreation Board should seek opportunities to acquire property as early as possible so as to obtain the most affordable price. Estimated costs, schedules, and typical components of each park classification are located in Appendices A and B.

1.2.2 Trail System

For the purposes of park connectivity and to make the City of Melissa unique compared to nearby communities, a trail system has been structured so that most proposed parks will have easy access to other nearby parks. These trails have been classified as either major trails or feeder trails. Major trails will consist of a 12-foot wide concrete sidewalk with turf and irrigation covering the remainder of a 25-foot easement. Although only 10 feet wide, one such major trail has been constructed along Fannin Road and Melissa Road between US 75 and SH 5 and serves as the beginning of Melissa's Trail System. Feeder trails will consist of a 10-foot wide concrete sidewalk with turf and irrigation covering the rest of an 18-foot easement. As shown in the appendix, the City will have approximately 40 miles of major trails and 12 miles of feeder trails at build-out. Generally, these trails will be built per the schedule located in Appendix B.

1.2.3 Projected Capital Improvements Costs

Appendix A and Appendix B outline in full detail the costs of major projects which will allow service to parks and recreation facilities to the full geographical extent of Melissa at build-out. The extent and capacity of the infrastructure is based on current land use predictions and population projections in the *Comprehensive Plan*.

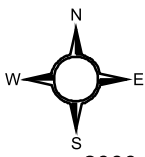


City of Melissa, Texas

Parks & Trail Plan

- Existing Park
- Platted Park
- Planned Park
- Proposed Park
- Existing Community Park
- Proposed Community Park
- Ornamental Park
- Rail with Trail
- Trail System
- Residential Estate
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Public/Semi-Public
- Parks and Open Space
- Town Center
- Old Town
- Retail Areas
- Commercial Areas
- Office Areas
- Industrial Areas
- Mixed Use
- Transit Oriented Development (TOD)
- Floodplain
- Land Fill
- Landscape Buffer

Plate 6-1



2000 0 2000 4000 Feet

Dunkin Sefko & Associates, Inc.
Urban Planning Consultants Dallas, Texas
Adopted July 2006 **10**

2.0 LAND USE ASSUMPTIONS

The *Comprehensive Plan* as adopted by the City of Melissa, July 2006, was used as a basis to determine what parks and recreation improvements will be needed in the City of Melissa. The *Comprehensive Plan* established that the City's ultimate population would be 95,700 and that this population would be reached in the year 2045. The projected populations and growth rates from the *Comprehensive Plan* are summarized in Table 1.

Table 1. City of Melissa Projected Population and Growth Rates (from 2006 *Comprehensive Plan*)

Year	Projected Population	Growth Rate
2005	2,300	37.80%
2010	11,410	
2015	26,590	18.40%
2020	64,540	19.40%
2025	75,650	3.20%
2030	81,240	1.40%
2035	88,830	1.80%
2040	94,670	1.30%
2045	95,700	0.30%

However, actual growth has not kept pace with those projections. The population of the City of Melissa at the end of 2012 was 6,000. Using this population to serve as the base for growth, the growth rate from the *Comprehensive Plan* was applied. Based on these growth rates, the future City of Melissa and surrounding extra-territorial jurisdiction (ETJ) population for the year 2023 was determined. The revised projected population is summarized in Table 2.

Table 2. City of Melissa and ETJ Projected Population

Year	Population
2012	6,000
2013	8,268
2014	11,393
2015	13,490
2016	15,972
2017	18,911
2018	22,390
2019	26,510
2020	31,653
2021	37,793
2022	45,125
2023	53,880



Where the growth is going to occur over the next 10 years to support the projected population must also be determined. By comparing the existing land use to the Future Land Use Plan from the *Comprehensive Plan* and reviewing specific ordinances, HFCI and City staff determined what types of land uses were likely to occur and where that growth would occur over the next 10 years. The Existing Land Use map is illustrated in Figure 1 and the 2023 Land Use Plan is illustrated in Figure 2.

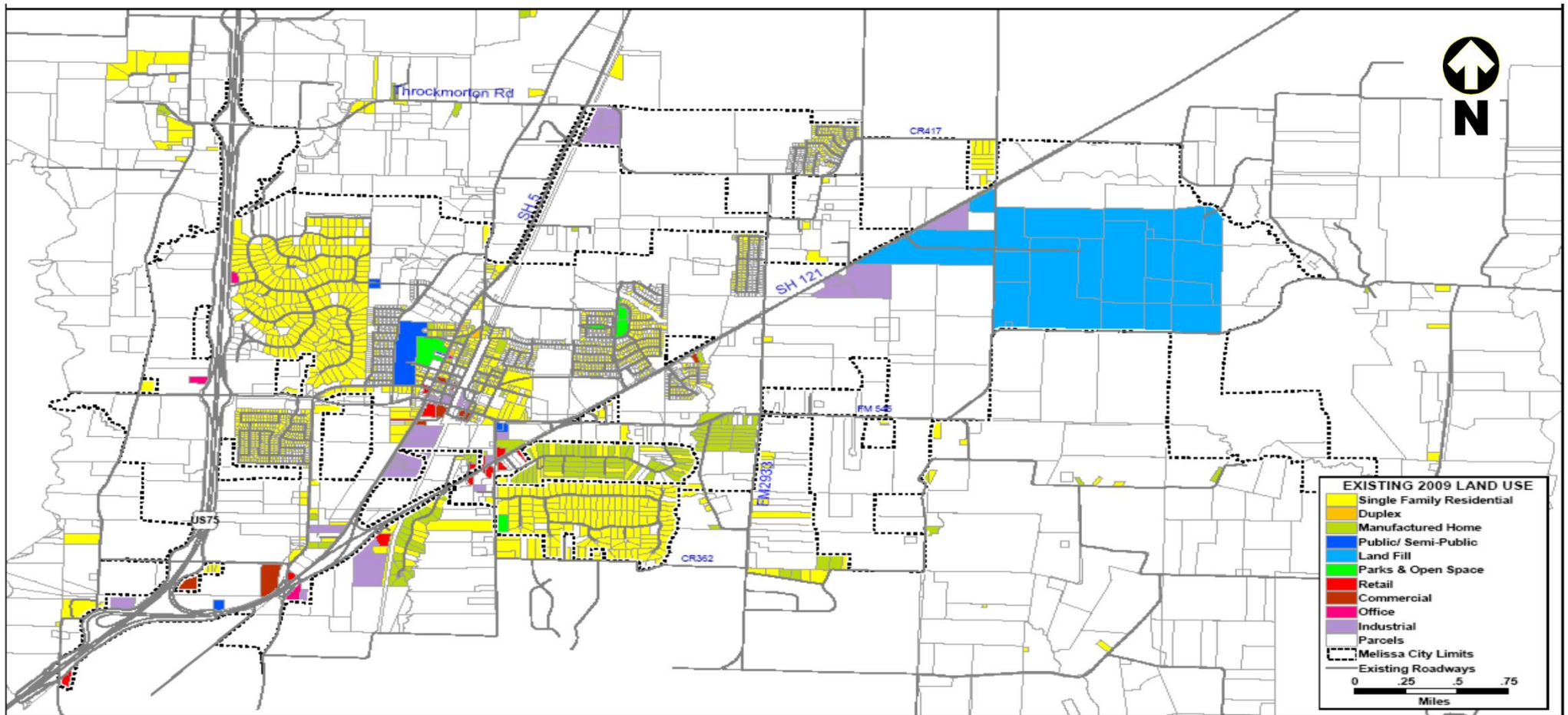


Figure 1 – Existing Land Use Map

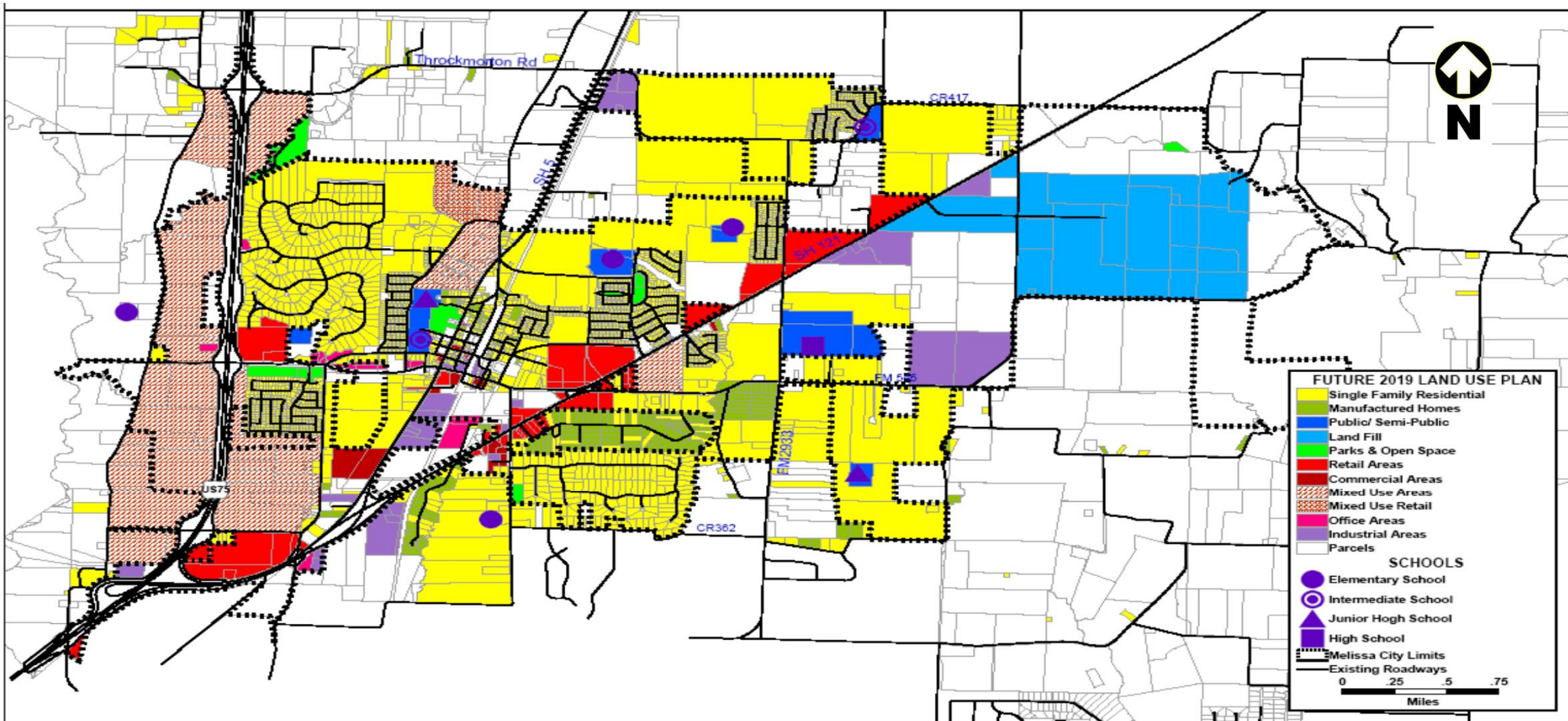


Figure 2 – 2023 Land Use Plan

3.0 EXISTING CONDITIONS

3.1 About this section

This section is specifically dedicated to describing existing parks and recreation facilities owned by and located within the City of Melissa, along with a description of all costs associated with upgrading, updating, improving, expanding, or replacing these existing capital improvements to meet the existing needs and usage for current residents. Parks and recreation fees will not be used for projects serving needs of current residents. At this time, no improvements to existing parks and recreation facilities are necessary to serve the current population of Melissa.

3.2 Existing Parks and Recreation Facilities

The City of Melissa currently has approximately 239 acres of parkland. Parks in Melissa include Zadow Park, Bob Miller Park, Hunters Ridge Park, Liberty Park, Trails of Melissa Park, and Country Ridge Park. Components of each one of these parks are outlined below.

Zadow Park (Adjacent to Melissa High School)

- 2 batting cages
- 3 baseball / softball fields with concession area
- 2 asphalt parking lots (161 spaces)
- Small soccer field
- 10 picnic tables
- 2 benches
- Trash barrels
- Sand volleyball court
- Playground
- Pavilion
- 4 barbeque grills
- 2 sets of horseshoe pits
- 2 concrete basketball courts
- 4 tennis courts

Bob Miller Park (East of Berry Road)

- 2 benches
- 7 trash barrels
- Concrete parking lot (46 spaces)
- Playground with swings
- Concrete trail



-
- Pavilion with 4 picnic tables and 9 concrete benches
 - Gazebo with 3 built-in benches
 - Lighting
 - Restrooms

Hunters Ridge Park

- Gazebo with 3 built-in benches
- Pool (HOA residents only)
- Playground with swings
- Shade canopy
- 2 benches
- Bike rack
- 2 picnic tables

Liberty Park

- Playgrounds with swings
- Pool with a pool house and restroom (HOA residents only)
- 4 benches
- 2 trash barrels
- Concrete parking lot (30 spaces)
- Small soccer field with small goals
- Large soccer field with large goals
- Bike rack
- Gazebo with 2 benches

Liberty Ornamental Park (Located near Liberty subdivision entrance)

- Pond with a fountain
- Pavilion with 4 benches and 1 trash receptacle

Trails of Melissa Park

- Playground with swings
- Pavilion
- Picnic table
- 1 trash receptacle
- 4 parking spots
- 1 bench

Country Ridge Park

- 9 stone picnic tables
- 9 stone barbeque pits
- Swing set

Melissa Hike & Bike Trail

- 5,600 linear feet of 10 feet wide concrete trail and 6 feet wide sidewalk
- 4 Amenity Areas with shade structures, benches, trash barrels, and landscaping
- Exercise Station
- Lighting

In addition to these seven parks and major trail component, there are vast amounts of open space distributed throughout the City. Table 3 shown below contains a breakdown of the current parkland in the City compared to National Recreation and Park Association (NRPA) Standards. This table clearly shows that Melissa currently meets NRPA Standards. Therefore, any improvements to parks and recreation facilities will be made to serve future City of Melissa residents.

Table 3. NRPA Standards Related to Melissa's Current Park Acreage

Park Type	NRPA Standard of Acres per 1,000 People	NRPA Standard for Current Population of 6,000	Existing Park Acreage	Acres per 1,000 People for Melissa's Current Population of 6,000 People
Neighborhood	2.5	15	19.3	3.2
Community	3.0	18	13.5	2.3
Special	3.0	18	0.0	0.0
Open Space	8.0	48	206.0	34.3
Total	16.5	99	238.8	39.8

Note: Existing trail lengths within existing parks total 2.5 miles and are contained within the park acreages



Pavilion at Bob Miller Park



Picnic Table and BBQ Pit at Country Ridge Park



Gazebo at Hunters Ridge Park



Playground at Liberty Park



Soccer Fields in Liberty Park



Playground at Trails of Melissa Park



Basketball Courts at Zadow Park



Sand Volleyball Court at Zadow Park

4.0 PARKS AND RECREATION CAPITAL IMPROVEMENTS PLAN

4.1 Demand of Parks and Recreation Facilities

As parks and recreation facilities are being built to accommodate Melissa's expected rapid growth, it is essential to have good demand estimates for residents that will be served by new projects. Proper planning of parks and recreation facilities requires knowledge of how land will be used throughout the City, and the Future Land Use Plan provides an excellent guideline. Combining this information with population estimates, parks and recreation facilities can be planned until build-out. This will reduce capital expenditure from expanding or upgrading parks and recreation facilities before its service life has expired and will limit the construction of oversized parks and recreation facilities. As discussed earlier in this report, the City of Melissa will need an additional 28 parks to serve the estimated growth of its population. Several recreation facilities that the City currently lacks include a recreation center, a dog park, an amphitheater, a skateboard park, an aquatic facility, a water playground, a disc golf course, and an inline hockey rink. Most of these facilities already exist in neighboring communities and would be of great benefit to the City of Melissa in the future. HFCl projects that the City will need three recreation centers, two amphitheaters, and two dog parks to adequately serve the estimated population at build-out.

4.2 Future Costs of Parks and Recreation Improvements

4.2.1 Total Cost of Improvements

The total Parks and Recreation Capital Improvement Plan estimate is \$128.2 million in 2013 dollars. The present value with interest charges is estimated at approximately \$191.4 million. Of the \$191.4 million, \$125.8 million will be financed through publicly generated funds while the remaining \$65.6 million (\$44 million present value) will be provided by developer at the residential development stage. The cost of each proposed improvement is shown in Appendix A. The costs shown in these tables are in terms of 2013 dollars and include 20% for engineering, surveying, procurement, and construction management costs, 2% for bond issuance, and 6% annual bond interest charges over 20 years. Land acquisition costs are estimated at \$30,000 per acre. A credit equal to 1.5% annual rate of return is placed against the total payments and interest on the bonds used to finance the projects.

4.2.2 Total Cost of Improvements by Developer

The project total before interest charges for all developer financed parks and recreation facilities is an estimated \$44 million. With interest charges, the total rises to \$65.6 million. These costs were determined by summing up the total costs of all neighborhood parks, all ornamental parks, and sections of the trail system which are expected to be components of future residential subdivisions. These projects are highlighted in yellow and orange (sections



of trail) in schedules located in Appendix B. These projects form 44.2% of the total expected cost to build all parks and recreation facilities at build-out.

4.2.3 Total Cost of Improvements by Public Funds

The project total before interest charges for all publicly financed parks and recreation facilities is an estimated \$84.2 million. With interest charges, the total rises to \$125.8 million. The projects associated with these totals include all projects which will be used by residents of multiple subdivisions. These projects are shown in white and orange (sections of trail) in schedules located in Appendix B and form the remaining 55.8% of the total expected cost to build all parks and recreation facilities. The funds used to pay for these costs include building fees and 4B Board contributions.

5.0 SERVICE UNITS

Service units are a means to measure the impact of a proposed development on parks and recreation facilities. For parks and recreation projects, the most practical service unit to use is the number of households. As the number of households increases, the demand for parks and recreation facilities increases. Assuming an average family size of 3.3 persons per household, there will be 29,000 households in the City of Melissa at build-out. Table 4 shown below summarizes assumptions made for the different types of dwelling units that are expected to be built in the City of Melissa. An impact ratio is shown in the last column which will be used to determine the impact a specific dwelling unit will have on the parks and recreation system. Each dwelling unit was compared to the average household size of 3.3 persons, which is classified as a three bedroom apartment and a three bedroom single family house. This impact ratio will be used to calculate the parks and recreation fee per residential structure.

Table 4. Persons per Dwelling Unit Assumptions

Type	Number of Bedrooms	Persons per Household	Impact Ratio
<i>Apartment</i>	1	1.3	$1.3/3.3 = 0.394$
	2	2.3	$2.3/3.3 = 0.697$
	3	3.3	$3.3/3.3 = 1.000$
<i>Single Family Residential</i>	2	2.3	$2.3/3.3 = 0.697$
	3	3.3	$3.3/3.3 = 1.000$
	4	4.3	$4.3/3.3 = 1.303$
	5	5.3	$5.3/3.3 = 1.606$



6.0 PARKS AND RECREATION FEES

The calculation of parks and recreation fees for the City of Melissa is based on the build-out population of the City. Fees will only be imposed on residential development, which drives the demand for parks. The fee can be calculated knowing the following information:

- The number of households expected to develop at build-out;
- The total costs of the future capital improvements at build-out;

6.1 Expected Increase in Households

The modified population growth estimates in the *Comprehensive Plan* show us estimated populations in Melissa from now until build-out. The number of households calculated for Melissa is based on population projections, land area, and usage as outlined in the *Comprehensive Plan* for build-out. Ultimate population, according to the revised population estimate for the City of Melissa, will be 95,700.

This population estimate will equate to 29,000 households at build-out. However, there are approximately 1,900 households in the City at the present time. Therefore, the City is expecting an increase in 27,100 households at build-out.

6.2 Fee Calculation and Allocation

Ultimately, the calculation of the fee is a division problem. The base fee is calculated by the following:

- The total cost of capital improvements expected to be developed at build-out, including finance charges calculated individually for each project, divided by
- The total number of households expected to be built, minus the total number of households in service today.

The cost of improvements to serve parks and recreation needs in the City of Melissa at build-out is estimated at approximately \$128.2 million. Finance costs based on a 20 year bond at 6% interest are estimated at \$191.4 million. As stated earlier in Section 4.2, developers will be responsible for \$65.6 million (\$44 million present value) of the \$191.4 million. Therefore, the parks and recreation fee per the typical household is summarized as follows:



Estimated Parks and Recreation Improvements Costs the Public	\$125.8 million
Total Increase in Households to Build-out Population	27,100
Base Calculated Fee Per Household	\$4,641

Fee Calculation: $\$125,770,408 \div 27,100 = \$4,640.97$ per household

This calculation is for a 3-bedroom house or apartment. For other types of residential dwelling units, the fee will be multiplied by the corresponding impact ratio shown in Table 4.

Appendix A: Conceptual Level Cost Estimates



Developer Financed Facilities Construction Cost Projection

Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
NP (R&P)	Neighborhood Park		5 to 10	Play Area	1	LS	\$70,000	\$70,000
	w/ Stand alone Restroom & Pavilion		AVG of 7.5 used	Turf & Irrigation	10	AC	\$26,000	\$260,000
				Planting Beds	1000	SF	\$4	\$4,000
				Shade Tree	100	EA	\$450	\$45,000
				Ornamental Tree	100	EA	\$200	\$20,000
				Multi-Purpose Practice Field w/ Backstop	1	LS	\$10,000	\$10,000
				Multi-Purpose Court	1	LS	\$35,000	\$35,000
				Pavilion	1	LS	\$40,000	\$40,000
				Stand alone Restroom Building	680	SF	\$165	\$112,200
				Benches	5	EA	\$1,000	\$5,000
				Picnic Tables	5	EA	\$1,500	\$7,500
				BBQ Grill	3	EA	\$1,000	\$3,000
				Drinking Fountains	2	EA	\$5,000	\$10,000
				Trash Receptacles	5	EA	\$1,000	\$5,000
				Parking Area	1	LS	\$25,000	\$25,000
Construction Cost Subtotal:								\$651,700
Engineering, Survey, Const Mgmt, Procurement (20%):								\$130,340
Land Acquisition (\$30,000 per acre):								\$225,000
Subtotal:								\$1,007,040
Bond Issuance (2%):								\$20,141
Project Total:								\$1,027,181

Bond Amortization

Project Total:		\$1,027,181				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$1,027,180.80	\$89,554.30	\$27,923.45	\$61,630.85	\$999,257.35	\$88,230.84
2	\$999,257.35	\$89,554.30	\$29,598.86	\$59,955.44	\$969,658.48	\$86,926.94
3	\$969,658.48	\$89,554.30	\$31,374.79	\$58,179.51	\$938,283.69	\$85,642.30
4	\$938,283.69	\$89,554.30	\$33,257.28	\$56,297.02	\$905,026.41	\$84,376.65
5	\$905,026.41	\$89,554.30	\$35,252.72	\$54,301.58	\$869,773.69	\$83,129.71
6	\$869,773.69	\$89,554.30	\$37,367.88	\$52,186.42	\$832,405.81	\$81,901.19
7	\$832,405.81	\$89,554.30	\$39,609.95	\$49,944.35	\$792,795.85	\$80,690.83
8	\$792,795.85	\$89,554.30	\$41,986.55	\$47,567.75	\$750,809.30	\$79,498.35
9	\$750,809.30	\$89,554.30	\$44,505.74	\$45,048.56	\$706,303.56	\$78,323.50
10	\$706,303.56	\$89,554.30	\$47,176.09	\$42,378.21	\$659,127.47	\$77,166.01
11	\$659,127.47	\$89,554.30	\$50,006.66	\$39,547.65	\$609,120.81	\$76,025.62
12	\$609,120.81	\$89,554.30	\$53,007.05	\$36,547.25	\$556,113.76	\$74,902.09
13	\$556,113.76	\$89,554.30	\$56,187.48	\$33,366.83	\$499,926.28	\$73,795.17
14	\$499,926.28	\$89,554.30	\$59,558.73	\$29,995.58	\$440,367.55	\$72,704.60
15	\$440,367.55	\$89,554.30	\$63,132.25	\$26,422.05	\$377,235.30	\$71,630.14
16	\$377,235.30	\$89,554.30	\$66,920.18	\$22,634.12	\$310,315.12	\$70,571.57
17	\$310,315.12	\$89,554.30	\$70,935.40	\$18,618.91	\$239,379.72	\$69,528.64
18	\$239,379.72	\$89,554.30	\$75,191.52	\$14,362.78	\$164,188.20	\$68,501.12
19	\$164,188.20	\$89,554.30	\$79,703.01	\$9,851.29	\$84,485.19	\$67,488.79
20	\$84,485.19	\$84,485.19	\$84,485.19	\$0.00	\$0.00	\$62,727.76
Totals:			\$1,027,181	\$758,836.15		\$1,533,761.81

Project Cost Summary

Item Description	Item Cost
Total Payments (Principal + Interest):	\$1,786,016.95
Project Cost Total (Present Value):	\$1,533,761.81



Developer Financed Facilities

Construction Cost Projection

Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
NP (PS)	Neighborhood Park w/ Picnic Shelter		5 to 10 AVG of 7.5 used	Play Area	1	LS	\$70,000	\$70,000
				Turf & Irrigation	10	AC	\$26,000	\$260,000
				Planting Beds	1000	SF	\$4	\$4,000
				Shade Tree	100	EA	\$450	\$45,000
				Ornamental Tree	100	EA	\$200	\$20,000
				Multi-Purpose Practice Field w/ Backstop	1	LS	\$10,000	\$10,000
				Multi-Purpose Court	1	LS	\$35,000	\$35,000
				Picnic Shelter w/ Integral Restrooms	2100	SF	\$110	\$231,000
				Benches	5	EA	\$1,000	\$5,000
				Picnic Tables	5	EA	\$1,500	\$7,500
				BBQ Grill	3	EA	\$1,000	\$3,000
				Drinking Fountains	2	EA	\$5,000	\$10,000
				Trash Receptacles	5	EA	\$1,000	\$5,000
				Parking Area	1	LS	\$25,000	\$25,000
Construction Cost Subtotal:								\$730,500
Engineering, Survey, Const Mgmt, Procurement (20%):								\$146,100
Land Acquisition (\$30,000 per acre):								\$225,000
Subtotal:								\$1,101,600
Bond Issuance (2%):								\$22,032
Project Total:								\$1,123,632

Bond Amortization

Project Total:	\$1,123,632
Annual Interest Rate:	6.00%
Bond Period (in years):	20
Number of payments per year:	1
Annual Rate of Return:	1.50%

Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$1,123,632.00	\$97,963.36	\$30,545.44	\$67,417.92	\$1,093,086.56	\$96,515.62
2	\$1,093,086.56	\$97,963.36	\$32,378.16	\$65,585.19	\$1,060,708.40	\$95,089.28
3	\$1,060,708.40	\$97,963.36	\$34,320.85	\$63,642.50	\$1,026,387.54	\$93,684.02
4	\$1,026,387.54	\$97,963.36	\$36,380.11	\$61,583.25	\$990,007.44	\$92,299.53
5	\$990,007.44	\$97,963.36	\$38,562.91	\$59,400.45	\$951,444.53	\$90,935.50
6	\$951,444.53	\$97,963.36	\$40,876.69	\$57,086.67	\$910,567.84	\$89,591.62
7	\$910,567.84	\$97,963.36	\$43,329.29	\$54,634.07	\$867,238.55	\$88,267.61
8	\$867,238.55	\$97,963.36	\$45,929.05	\$52,034.31	\$821,309.51	\$86,963.16
9	\$821,309.51	\$97,963.36	\$48,684.79	\$49,278.57	\$772,624.72	\$85,677.99
10	\$772,624.72	\$97,963.36	\$51,605.88	\$46,357.48	\$721,018.84	\$84,411.82
11	\$721,018.84	\$97,963.36	\$54,702.23	\$43,261.13	\$666,316.62	\$83,164.35
12	\$666,316.62	\$97,963.36	\$57,984.36	\$39,979.00	\$608,332.25	\$81,935.32
13	\$608,332.25	\$97,963.36	\$61,463.42	\$36,499.94	\$546,868.83	\$80,724.45
14	\$546,868.83	\$97,963.36	\$65,151.23	\$32,812.13	\$481,717.60	\$79,531.48
15	\$481,717.60	\$97,963.36	\$69,060.30	\$28,903.06	\$412,657.30	\$78,356.14
16	\$412,657.30	\$97,963.36	\$73,203.92	\$24,759.44	\$339,453.38	\$77,198.17
17	\$339,453.38	\$97,963.36	\$77,596.16	\$20,367.20	\$261,857.23	\$76,057.31
18	\$261,857.23	\$97,963.36	\$82,251.92	\$15,711.43	\$179,605.30	\$74,933.31
19	\$179,605.30	\$97,963.36	\$87,187.04	\$10,776.32	\$92,418.26	\$73,825.92
20	\$92,418.26	\$92,418.26	\$92,418.26	\$0.00	\$0.00	\$68,617.83
Totals:			\$1,123,632	\$830,090.07		\$1,677,780.44

Project Cost Summary

Item Description	Item Cost
Total Payments (Principal + Interest):	\$1,953,722.07
Project Cost Total (Present Value):	\$1,677,780.44



Developer Financed Facilities

Construction Cost Projection

Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
OP1 to OP7	Ornamental Park		5 to 10	Benches	10	EA	\$1,000	\$10,000.00
			AVG of 7.5 used	Picnic Tables	10	EA	\$1,500	\$15,000.00
				Fountain	1	EA	\$150,000	\$150,000.00
				Planting Beds	1,000	SF	\$4	\$4,000.00
				Shade Tree	50	EA	\$450	\$22,500.00
				Ornamental Tree	50	EA	\$200	\$10,000.00
				Turf & Irrigation	10	AC	\$26,000	\$260,000.00
				Retaining Walls (assuming 150'x150' square 5' in height)	3,000	SF	\$25	\$75,000.00
				Concrete	3,000	SF	\$4.50	\$13,500.00
				Stamped and Stained Concrete	200	SF	\$10	\$2,000.00
				Pavers	200	SF	\$15	\$3,000.00
				Trash Receptacles	10	EA	\$1,000	\$10,000.00
				Drinking Fountains	1	EA	\$5,000	\$5,000.00
Construction Cost Subtotal:								\$580,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$116,000
Land Acquisition (\$30,000 per acre):								\$225,000
Subtotal:								\$921,000
Bond Issuance (2%):								\$18,420
Project Total:								\$939,420

Bond Amortization

Project Total:		\$939,420				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$939,420.00	\$81,902.92	\$25,537.72	\$56,365.20	\$913,882.28	\$80,692.53
2	\$913,882.28	\$81,902.92	\$27,069.98	\$54,832.94	\$886,812.30	\$79,500.03
3	\$886,812.30	\$81,902.92	\$28,694.18	\$53,208.74	\$858,118.13	\$78,325.15
4	\$858,118.13	\$81,902.92	\$30,415.83	\$51,487.09	\$827,702.30	\$77,167.64
5	\$827,702.30	\$81,902.92	\$32,240.78	\$49,662.14	\$795,461.52	\$76,027.23
6	\$795,461.52	\$81,902.92	\$34,175.23	\$47,727.69	\$761,286.29	\$74,903.67
7	\$761,286.29	\$81,902.92	\$36,225.74	\$45,677.18	\$725,060.55	\$73,796.72
8	\$725,060.55	\$81,902.92	\$38,399.28	\$43,503.63	\$686,661.27	\$72,706.13
9	\$686,661.27	\$81,902.92	\$40,703.24	\$41,199.68	\$645,958.03	\$71,631.66
10	\$645,958.03	\$81,902.92	\$43,145.43	\$38,757.48	\$602,812.60	\$70,573.06
11	\$602,812.60	\$81,902.92	\$45,734.16	\$36,168.76	\$557,078.43	\$69,530.11
12	\$557,078.43	\$81,902.92	\$48,478.21	\$33,424.71	\$508,600.22	\$68,502.57
13	\$508,600.22	\$81,902.92	\$51,386.90	\$30,516.01	\$457,213.32	\$67,490.22
14	\$457,213.32	\$81,902.92	\$54,470.12	\$27,432.80	\$402,743.20	\$66,492.82
15	\$402,743.20	\$81,902.92	\$57,738.32	\$24,164.59	\$345,004.88	\$65,510.17
16	\$345,004.88	\$81,902.92	\$61,202.62	\$20,700.29	\$283,802.26	\$64,542.04
17	\$283,802.26	\$81,902.92	\$64,874.78	\$17,028.14	\$218,927.47	\$63,588.22
18	\$218,927.47	\$81,902.92	\$68,767.27	\$13,135.65	\$150,160.21	\$62,648.49
19	\$150,160.21	\$81,902.92	\$72,893.30	\$9,009.61	\$77,266.90	\$61,722.65
20	\$77,266.90	\$77,266.90	\$77,266.90	\$0.00	\$0.00	\$57,368.39
Totals:			\$939,420	\$694,002.32		\$1,402,719.49

Project Cost Summary

Item Description	Item Cost
Total Payments (Principal + Interest):	\$1,633,422.32
Project Cost Total (Present Value):	\$1,402,719.49



Developer Financed Facilities

Construction Cost Projection

Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
-----	Greenbelts / Trails & Open Space (Major Trails)		86.65	12 Foot Sidewalk	28.6	MI	\$300,000	\$8,577,941.98
				Turf & Irrigation	45.1	AC	\$26,000	\$1,171,452.28
Construction Cost Subtotal:								\$9,749,394
Engineering, Survey, Const Mgmt, Procurement (20%):								\$1,949,879
Land Acquisition (\$30,000 per acre):								\$2,599,376
Subtotal:								\$14,298,649
Bond Issuance (2%):								\$285,973
Project Total:								\$14,584,622

Bond Amortization

Project Total:		\$14,584,622				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$14,584,622.46	\$1,271,553.85	\$396,476.50	\$875,077.35	\$14,188,145.96	\$1,252,762.41
2	\$14,188,145.96	\$1,271,553.85	\$420,265.09	\$851,288.76	\$13,767,880.87	\$1,234,248.68
3	\$13,767,880.87	\$1,271,553.85	\$445,481.00	\$826,072.85	\$13,322,399.87	\$1,216,008.55
4	\$13,322,399.87	\$1,271,553.85	\$472,209.86	\$799,343.99	\$12,850,190.02	\$1,198,037.98
5	\$12,850,190.02	\$1,271,553.85	\$500,542.45	\$771,011.40	\$12,349,647.57	\$1,180,332.99
6	\$12,349,647.57	\$1,271,553.85	\$530,574.99	\$740,978.85	\$11,819,072.58	\$1,162,889.64
7	\$11,819,072.58	\$1,271,553.85	\$562,409.49	\$709,144.35	\$11,256,663.08	\$1,145,704.08
8	\$11,256,663.08	\$1,271,553.85	\$596,154.06	\$675,399.79	\$10,660,509.02	\$1,128,772.50
9	\$10,660,509.02	\$1,271,553.85	\$631,923.31	\$639,630.54	\$10,028,585.72	\$1,112,091.13
10	\$10,028,585.72	\$1,271,553.85	\$669,838.70	\$601,715.14	\$9,358,747.01	\$1,095,656.28
11	\$9,358,747.01	\$1,271,553.85	\$710,029.03	\$561,524.82	\$8,648,717.98	\$1,079,464.32
12	\$8,648,717.98	\$1,271,553.85	\$752,630.77	\$518,923.08	\$7,896,087.21	\$1,063,511.64
13	\$7,896,087.21	\$1,271,553.85	\$797,788.61	\$473,765.23	\$7,098,298.60	\$1,047,794.72
14	\$7,098,298.60	\$1,271,553.85	\$845,655.93	\$425,897.92	\$6,252,642.67	\$1,032,310.07
15	\$6,252,642.67	\$1,271,553.85	\$896,395.29	\$375,158.56	\$5,356,247.38	\$1,017,054.26
16	\$5,356,247.38	\$1,271,553.85	\$950,179.01	\$321,374.84	\$4,406,068.37	\$1,002,023.90
17	\$4,406,068.37	\$1,271,553.85	\$1,007,189.75	\$264,364.10	\$3,398,878.63	\$987,215.67
18	\$3,398,878.63	\$1,271,553.85	\$1,067,621.13	\$203,932.72	\$2,331,257.50	\$972,626.27
19	\$2,331,257.50	\$1,271,553.85	\$1,131,678.40	\$139,875.45	\$1,199,579.10	\$958,252.48
20	\$1,199,579.10	\$1,199,579.10	\$1,199,579.10	\$0.00	\$0.00	\$890,652.00
Totals:			\$14,584,622	\$10,774,479.75		\$21,777,409.59

Project Cost Summary

Item Description	Item Cost
Total Payments (Principal + Interest):	\$25,359,102.21
Project Cost Total (Present Value):	\$21,777,409.59



Developer Financed Facilities

Construction Cost Projection

Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
-----	Greenbelts / Trails & Open Space (Feeder Trails)		18.71	10 Foot Sidewalk	8.6	MI	\$250,000	\$2,144,317.57
				Turf & Irrigation	8.3	AC	\$26,000	\$216,251.18
Construction Cost Subtotal:								\$2,360,569
Engineering, Survey, Const Mgmt, Procurement (20%):								\$472,114
Land Acquisition (\$30,000 per acre):								\$561,421
Subtotal:								\$3,394,104
Bond Issuance (2%):								\$67,882
Project Total:								\$3,461,986

Bond Amortization

Project Total:		\$3,461,986				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$3,461,985.90	\$301,831.71	\$94,112.55	\$207,719.15	\$3,367,873.34	\$297,371.14
2	\$3,367,873.34	\$301,831.71	\$99,759.31	\$202,072.40	\$3,268,114.04	\$292,976.49
3	\$3,268,114.04	\$301,831.71	\$105,744.86	\$196,086.84	\$3,162,369.17	\$288,646.79
4	\$3,162,369.17	\$301,831.71	\$112,089.56	\$189,742.15	\$3,050,279.62	\$284,381.07
5	\$3,050,279.62	\$301,831.71	\$118,814.93	\$183,016.78	\$2,931,464.69	\$280,178.40
6	\$2,931,464.69	\$301,831.71	\$125,943.83	\$175,887.88	\$2,805,520.86	\$276,037.83
7	\$2,805,520.86	\$301,831.71	\$133,500.45	\$168,331.25	\$2,672,020.41	\$271,958.45
8	\$2,672,020.41	\$301,831.71	\$141,510.48	\$160,321.22	\$2,530,509.93	\$267,939.36
9	\$2,530,509.93	\$301,831.71	\$150,001.11	\$151,830.60	\$2,380,508.81	\$263,979.67
10	\$2,380,508.81	\$301,831.71	\$159,001.18	\$142,830.53	\$2,221,507.64	\$260,078.49
11	\$2,221,507.64	\$301,831.71	\$168,541.25	\$133,290.46	\$2,052,966.39	\$256,234.97
12	\$2,052,966.39	\$301,831.71	\$178,653.72	\$123,177.98	\$1,874,312.66	\$252,448.24
13	\$1,874,312.66	\$301,831.71	\$189,372.95	\$112,458.76	\$1,684,939.72	\$248,717.48
14	\$1,684,939.72	\$301,831.71	\$200,735.32	\$101,096.38	\$1,484,204.39	\$245,041.85
15	\$1,484,204.39	\$301,831.71	\$212,779.44	\$89,052.26	\$1,271,424.95	\$241,420.54
16	\$1,271,424.95	\$301,831.71	\$225,546.21	\$76,285.50	\$1,045,878.74	\$237,852.75
17	\$1,045,878.74	\$301,831.71	\$239,078.98	\$62,752.72	\$806,799.76	\$234,337.69
18	\$806,799.76	\$301,831.71	\$253,423.72	\$48,407.99	\$553,376.04	\$230,874.57
19	\$553,376.04	\$301,831.71	\$268,629.14	\$33,202.56	\$284,746.89	\$227,462.63
20	\$284,746.89	\$284,746.89	\$284,746.89	\$0.00	\$0.00	\$211,416.14
Totals:			\$3,461,986	\$2,557,563.42		\$5,169,354.58

Project Cost Summary

Item Description	Item Cost
Total Payments (Principal + Interest):	\$6,019,549.32
Project Cost Total (Present Value):	\$5,169,354.58

Developer Financed Parks and Recreation Projects Total:	\$43,979,863.56
Present Value Costs of all Projects:	\$65,669,680.86



Publicly Financed Facilities Construction Cost Projection									
Project Number	Park Classification	General Location		Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
CP1 to CP3	Community Park			40 to 100	Playground Equipment & Area	1	LS	\$100,000	\$100,000
				AVG of 75 used	Pavilions	1	EA	\$75,000.00	\$75,000
					Gazebo	1	EA	\$10,000	\$10,000
					Turf & Irrigation	75	AC	\$26,000	\$1,950,000
					Planting Beds	5000	SF	\$4	\$20,000
					Shade Tree	800	EA	\$450	\$360,000
					Ornamental Tree	800	EA	\$200	\$160,000
					Park Signs	1	EA	\$5,000	\$5,000
					Monument Signs	1	EA	\$15,000	\$15,000
					Lighted Tennis Court - Asphalt	1	EA	\$112,000	\$112,000
					Lighted Tennis Court - Post Tension Concrete	1	EA	\$159,000	\$159,000
					Lighted Basketball Court (84'x50')	1	EA	\$40,000	\$40,000
					Sand Volleyball Court	2	EA	\$10,000	\$20,000
					Lighted Baseball Field	4	EA	\$350,000	\$1,400,000
					Lighted Softball Field	4	EA	\$192,000	\$768,000
					Lighted Football/Soccer Field (65x120 yards)	4	EA	\$167,000	\$668,000
					BBQ Grill	10	EA	\$1,000	\$10,000
					Horseshoe Pits (set of 2)	3	EA	\$5,000	\$15,000
					Restrooms / Concession Facilities	1	LS	\$325,000	\$325,000
					Benches	15	EA	\$1,000	\$15,000
					Picnic Tables	15	EA	\$1,500	\$22,500
					Lighting	150	EA	\$7,000	\$1,050,000
					Parking Areas	1	LS	\$650,000	\$650,000
					Trash Receptacles	15	EA	\$1,000	\$15,000
					Drinking Fountains	3	EA	\$5,000	\$15,000
Construction Cost Subtotal:									\$7,979,500
Engineering, Survey, Const Mgmt, Procurement (20%):									\$1,595,900
Land Acquisition (\$30,000 per acre):									\$2,250,000
Subtotal:									\$11,825,400
Bond Issuance (2%):									\$236,508
Project Total:									\$12,061,908

Bond Amortization						
Project Total:		\$12,061,908				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$12,061,908.00	\$1,051,612.11	\$327,897.63	\$723,714.48	\$11,734,010.37	\$1,036,071.04
2	\$11,734,010.37	\$1,051,612.11	\$347,571.48	\$704,040.62	\$11,386,438.89	\$1,020,759.65
3	\$11,386,438.89	\$1,051,612.11	\$368,425.77	\$683,186.33	\$11,018,013.12	\$1,005,674.53
4	\$11,018,013.12	\$1,051,612.11	\$390,531.32	\$661,080.79	\$10,627,481.80	\$990,812.34
5	\$10,627,481.80	\$1,051,612.11	\$413,963.20	\$637,648.91	\$10,213,518.60	\$976,169.80
6	\$10,213,518.60	\$1,051,612.11	\$438,800.99	\$612,811.12	\$9,774,717.62	\$961,743.64
7	\$9,774,717.62	\$1,051,612.11	\$465,129.05	\$586,483.06	\$9,309,588.57	\$947,530.68
8	\$9,309,588.57	\$1,051,612.11	\$493,036.79	\$558,575.31	\$8,816,551.78	\$933,527.76
9	\$8,816,551.78	\$1,051,612.11	\$522,619.00	\$528,993.11	\$8,293,932.78	\$919,731.79
10	\$8,293,932.78	\$1,051,612.11	\$553,976.14	\$497,635.97	\$7,739,956.64	\$906,139.69
11	\$7,739,956.64	\$1,051,612.11	\$587,214.71	\$464,397.40	\$7,152,741.93	\$892,748.46
12	\$7,152,741.93	\$1,051,612.11	\$622,447.59	\$429,164.52	\$6,530,294.34	\$879,555.14
13	\$6,530,294.34	\$1,051,612.11	\$659,794.44	\$391,817.66	\$5,870,499.90	\$866,556.79
14	\$5,870,499.90	\$1,051,612.11	\$699,382.11	\$352,229.99	\$5,171,117.79	\$853,750.53
15	\$5,171,117.79	\$1,051,612.11	\$741,345.04	\$310,267.07	\$4,429,772.75	\$841,133.52
16	\$4,429,772.75	\$1,051,612.11	\$785,825.74	\$265,786.36	\$3,643,947.01	\$828,702.98
17	\$3,643,947.01	\$1,051,612.11	\$832,975.28	\$218,636.82	\$2,810,971.72	\$816,456.14
18	\$2,810,971.72	\$1,051,612.11	\$882,953.80	\$168,658.30	\$1,928,017.92	\$804,390.28
19	\$1,928,017.92	\$1,051,612.11	\$935,931.03	\$115,681.08	\$992,086.89	\$792,502.74
20	\$992,086.89	\$992,086.89	\$992,086.89	\$0.00	\$0.00	\$736,595.17
Totals:		\$12,061,908	\$8,910,808.89			\$18,010,552.67

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$20,972,716.89
	Project Cost Total (Present Value):	\$18,010,552.67



Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
-----	Greenbelts / Trails & Open Space (Major Trails)		30.25	12 Foot Sidewalk	10.0	MI	\$300,000	\$2,995,123.36
				Turf & Irrigation	15.7	AC	\$26,000	\$409,030.99
Construction Cost Subtotal:								\$3,404,154
Engineering, Survey, Const Mgmt, Procurement (20%):								\$680,831
Land Acquisition (\$30,000 per acre):								\$907,613
Subtotal:								\$4,992,598
Bond Issuance (2%):								\$99,852
Project Total:								\$5,092,450

Bond Amortization						
Project Total:		\$5,092,450				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$5,092,450.32	\$443,983.03	\$138,436.01	\$305,547.02	\$4,954,014.32	\$437,421.70
2	\$4,954,014.32	\$443,983.03	\$146,742.17	\$297,240.86	\$4,807,272.15	\$430,957.34
3	\$4,807,272.15	\$443,983.03	\$155,546.70	\$288,436.33	\$4,651,725.45	\$424,588.51
4	\$4,651,725.45	\$443,983.03	\$164,879.50	\$279,103.53	\$4,486,845.96	\$418,313.81
5	\$4,486,845.96	\$443,983.03	\$174,772.27	\$269,210.76	\$4,312,073.69	\$412,131.83
6	\$4,312,073.69	\$443,983.03	\$185,258.60	\$258,724.42	\$4,126,815.08	\$406,041.21
7	\$4,126,815.08	\$443,983.03	\$196,374.12	\$247,608.91	\$3,930,440.96	\$400,040.60
8	\$3,930,440.96	\$443,983.03	\$208,156.57	\$235,826.46	\$3,722,284.40	\$394,128.67
9	\$3,722,284.40	\$443,983.03	\$220,645.96	\$223,337.06	\$3,501,638.44	\$388,304.11
10	\$3,501,638.44	\$443,983.03	\$233,884.72	\$210,098.31	\$3,267,753.72	\$382,565.62
11	\$3,267,753.72	\$443,983.03	\$247,917.80	\$196,065.22	\$3,019,835.91	\$376,911.95
12	\$3,019,835.91	\$443,983.03	\$262,792.87	\$181,190.15	\$2,757,043.04	\$371,341.82
13	\$2,757,043.04	\$443,983.03	\$278,560.44	\$165,422.58	\$2,478,482.60	\$365,854.01
14	\$2,478,482.60	\$443,983.03	\$295,274.07	\$148,708.96	\$2,183,208.53	\$360,447.30
15	\$2,183,208.53	\$443,983.03	\$312,990.51	\$130,992.51	\$1,870,218.02	\$355,120.49
16	\$1,870,218.02	\$443,983.03	\$331,769.94	\$112,213.08	\$1,538,448.07	\$349,872.40
17	\$1,538,448.07	\$443,983.03	\$351,676.14	\$92,306.88	\$1,186,771.93	\$344,701.88
18	\$1,186,771.93	\$443,983.03	\$372,776.71	\$71,206.32	\$813,995.22	\$339,607.76
19	\$813,995.22	\$443,983.03	\$395,143.31	\$48,839.71	\$418,851.91	\$334,588.93
20	\$418,851.91	\$418,851.91	\$418,851.91	\$0.00	\$0.00	\$310,985.15
Totals:			\$5,092,450	\$3,762,079.07		\$7,603,925.08

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$8,854,529.39
	Project Cost Total (Present Value):	\$7,603,925.08



Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
-----	Greenbelts / Trails & Open Space (Feeder Trails)		6.53	10 Foot Sidewalk	3.0	MI	\$250,000	\$748,722.21
				Turf & Irrigation	2.9	AC	\$26,000	\$75,507.50
Construction Cost Subtotal:								\$824,230
Engineering, Survey, Const Mgmt, Procurement (20%):								\$164,846
Land Acquisition (\$30,000 per acre):								\$196,029
Subtotal:								\$1,185,105
Bond Issuance (2%):								\$23,702
Project Total:								\$1,208,807

Bond Amortization						
Project Total:		\$1,208,807				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$1,208,806.83	\$105,389.29	\$32,860.88	\$72,528.41	\$1,175,945.95	\$103,831.81
2	\$1,175,945.95	\$105,389.29	\$34,832.53	\$70,556.76	\$1,141,113.42	\$102,297.35
3	\$1,141,113.42	\$105,389.29	\$36,922.48	\$68,466.81	\$1,104,190.94	\$100,785.57
4	\$1,104,190.94	\$105,389.29	\$39,137.83	\$66,251.46	\$1,065,053.10	\$99,296.12
5	\$1,065,053.10	\$105,389.29	\$41,486.10	\$63,903.19	\$1,023,567.00	\$97,828.69
6	\$1,023,567.00	\$105,389.29	\$43,975.27	\$61,414.02	\$979,591.74	\$96,382.95
7	\$979,591.74	\$105,389.29	\$46,613.78	\$58,775.50	\$932,977.95	\$94,958.57
8	\$932,977.95	\$105,389.29	\$49,410.61	\$55,978.68	\$883,567.34	\$93,555.24
9	\$883,567.34	\$105,389.29	\$52,375.25	\$53,014.04	\$831,192.09	\$92,172.65
10	\$831,192.09	\$105,389.29	\$55,517.76	\$49,871.53	\$775,674.33	\$90,810.50
11	\$775,674.33	\$105,389.29	\$58,848.83	\$46,540.46	\$716,825.50	\$89,468.47
12	\$716,825.50	\$105,389.29	\$62,379.76	\$43,009.53	\$654,445.75	\$88,146.27
13	\$654,445.75	\$105,389.29	\$66,122.54	\$39,266.74	\$588,323.20	\$86,843.62
14	\$588,323.20	\$105,389.29	\$70,089.90	\$35,299.39	\$518,233.31	\$85,560.22
15	\$518,233.31	\$105,389.29	\$74,295.29	\$31,094.00	\$443,938.02	\$84,295.78
16	\$443,938.02	\$105,389.29	\$78,753.01	\$26,636.28	\$365,185.01	\$83,050.03
17	\$365,185.01	\$105,389.29	\$83,478.19	\$21,911.10	\$281,706.83	\$81,822.69
18	\$281,706.83	\$105,389.29	\$88,486.88	\$16,902.41	\$193,219.95	\$80,613.49
19	\$193,219.95	\$105,389.29	\$93,796.09	\$11,593.20	\$99,423.86	\$79,422.15
20	\$99,423.86	\$99,423.86	\$99,423.86	\$0.00	\$0.00	\$73,819.27
Totals:			\$1,208,807	\$893,013.50		\$1,804,961.46

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$2,101,820.32
	Project Cost Total (Present Value):	\$1,804,961.46



Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
RC20	Recreation Center		5.00	20,000 square foot Recreation Center	20,000	SF	\$250	\$5,000,000.00
Construction Cost Subtotal:								\$5,000,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$1,000,000
Land Acquisition (\$30,000 per acre):								\$150,000
Subtotal:								\$6,150,000
Bond Issuance (2%):								\$123,000
Project Total:								\$6,273,000

Bond Amortization						
Project Total:		\$6,273,000				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$6,273,000.00	\$546,908.73	\$170,528.73	\$376,380.00	\$6,102,471.27	\$538,826.33
2	\$6,102,471.27	\$546,908.73	\$180,760.45	\$366,148.28	\$5,921,710.82	\$530,863.38
3	\$5,921,710.82	\$546,908.73	\$191,606.08	\$355,302.65	\$5,730,104.75	\$523,018.11
4	\$5,730,104.75	\$546,908.73	\$203,102.44	\$343,806.28	\$5,527,002.31	\$515,288.78
5	\$5,527,002.31	\$546,908.73	\$215,288.59	\$331,620.14	\$5,311,713.72	\$507,673.67
6	\$5,311,713.72	\$546,908.73	\$228,205.90	\$318,702.82	\$5,083,507.82	\$500,171.11
7	\$5,083,507.82	\$546,908.73	\$241,898.26	\$305,010.47	\$4,841,609.56	\$492,779.41
8	\$4,841,609.56	\$546,908.73	\$256,412.15	\$290,496.57	\$4,585,197.41	\$485,496.96
9	\$4,585,197.41	\$546,908.73	\$271,796.88	\$275,111.84	\$4,313,400.53	\$478,322.13
10	\$4,313,400.53	\$546,908.73	\$288,104.69	\$258,804.03	\$4,025,295.83	\$471,253.33
11	\$4,025,295.83	\$546,908.73	\$305,390.98	\$241,517.75	\$3,719,904.86	\$464,288.99
12	\$3,719,904.86	\$546,908.73	\$323,714.43	\$223,194.29	\$3,396,190.42	\$457,427.58
13	\$3,396,190.42	\$546,908.73	\$343,137.30	\$203,771.43	\$3,053,053.12	\$450,667.57
14	\$3,053,053.12	\$546,908.73	\$363,725.54	\$183,183.19	\$2,689,327.58	\$444,007.45
15	\$2,689,327.58	\$546,908.73	\$385,549.07	\$161,359.65	\$2,303,778.51	\$437,445.77
16	\$2,303,778.51	\$546,908.73	\$408,682.02	\$138,226.71	\$1,895,096.50	\$430,981.05
17	\$1,895,096.50	\$546,908.73	\$433,202.94	\$113,705.79	\$1,461,893.56	\$424,611.87
18	\$1,461,893.56	\$546,908.73	\$459,195.11	\$87,713.61	\$1,002,698.45	\$418,336.82
19	\$1,002,698.45	\$546,908.73	\$486,746.82	\$60,161.91	\$515,951.63	\$412,154.50
20	\$515,951.63	\$515,951.63	\$515,951.63	\$0.00	\$0.00	\$383,078.82
Totals:			\$6,273,000	\$4,634,217.42		\$9,366,693.63

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$10,907,217.42
	Project Cost Total (Present Value):	\$9,366,693.63

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
RC40	Recreation Center		5.00	40,000 square foot Recreation Center	40,000	SF	\$250	\$10,000,000.00
Construction Cost Subtotal:								\$10,000,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$2,000,000
Land Acquisition (\$30,000 per acre):								\$150,000
Subtotal:								\$12,150,000
Bond Issuance (2%):								\$243,000
Project Total:								\$12,393,000

Bond Amortization						
Project Total:		\$12,393,000				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$12,393,000.00	\$1,080,478.21	\$336,898.21	\$743,580.00	\$12,056,101.79	\$1,064,510.56
2	\$12,056,101.79	\$1,080,478.21	\$357,112.11	\$723,366.11	\$11,698,989.68	\$1,048,778.87
3	\$11,698,989.68	\$1,080,478.21	\$378,538.83	\$701,939.38	\$11,320,450.84	\$1,033,279.68
4	\$11,320,450.84	\$1,080,478.21	\$401,251.16	\$679,227.05	\$10,919,199.68	\$1,018,009.53
5	\$10,919,199.68	\$1,080,478.21	\$425,326.23	\$655,151.98	\$10,493,873.45	\$1,002,965.06
6	\$10,493,873.45	\$1,080,478.21	\$450,845.81	\$629,632.41	\$10,043,027.64	\$988,142.92
7	\$10,043,027.64	\$1,080,478.21	\$477,896.56	\$602,581.66	\$9,565,131.08	\$973,539.82
8	\$9,565,131.08	\$1,080,478.21	\$506,570.35	\$573,907.86	\$9,058,560.73	\$959,152.53
9	\$9,058,560.73	\$1,080,478.21	\$536,964.57	\$543,513.64	\$8,521,596.16	\$944,977.86
10	\$8,521,596.16	\$1,080,478.21	\$569,182.44	\$511,295.77	\$7,952,413.72	\$931,012.67
11	\$7,952,413.72	\$1,080,478.21	\$603,333.39	\$477,144.82	\$7,349,080.33	\$917,253.86
12	\$7,349,080.33	\$1,080,478.21	\$639,533.40	\$440,944.82	\$6,709,546.93	\$903,698.39
13	\$6,709,546.93	\$1,080,478.21	\$677,905.40	\$402,572.82	\$6,031,641.53	\$890,343.24
14	\$6,031,641.53	\$1,080,478.21	\$718,579.72	\$361,898.49	\$5,313,061.81	\$877,185.46
15	\$5,313,061.81	\$1,080,478.21	\$761,694.51	\$318,783.71	\$4,551,367.30	\$864,222.13
16	\$4,551,367.30	\$1,080,478.21	\$807,396.18	\$273,082.04	\$3,743,971.13	\$851,450.37
17	\$3,743,971.13	\$1,080,478.21	\$855,839.95	\$224,638.27	\$2,888,131.18	\$838,867.36
18	\$2,888,131.18	\$1,080,478.21	\$907,190.34	\$173,287.87	\$1,980,940.83	\$826,470.31
19	\$1,980,940.83	\$1,080,478.21	\$961,621.76	\$118,856.45	\$1,019,319.07	\$814,256.46
20	\$1,019,319.07	\$1,019,319.07	\$1,019,319.07	\$0.00	\$0.00	\$756,814.26
Totals:			\$12,393,000	\$9,155,405.15		\$18,504,931.33

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$21,548,405.15
	Project Cost Total (Present Value):	\$18,504,931.33



Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
RC60	Recreation Center		5.00	60,000 square foot Recreation Center	60,000	SF	\$250	\$15,000,000.00
Construction Cost Subtotal:								\$15,000,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$3,000,000
Land Acquisition (\$30,000 per acre):								\$150,000
Subtotal:								\$18,150,000
Bond Issuance (2%):								\$363,000
Project Total:								\$18,513,000

Bond Amortization						
Project Total:		\$18,513,000				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$18,513,000.00	\$1,614,047.70	\$503,267.70	\$1,110,780.00	\$18,009,732.30	\$1,590,194.78
2	\$18,009,732.30	\$1,614,047.70	\$533,463.77	\$1,080,583.94	\$17,476,268.53	\$1,566,694.37
3	\$17,476,268.53	\$1,614,047.70	\$565,471.59	\$1,048,576.11	\$16,910,796.94	\$1,543,541.25
4	\$16,910,796.94	\$1,614,047.70	\$599,399.89	\$1,014,647.82	\$16,311,397.05	\$1,520,730.29
5	\$16,311,397.05	\$1,614,047.70	\$635,363.88	\$978,683.82	\$15,676,033.17	\$1,498,256.45
6	\$15,676,033.17	\$1,614,047.70	\$673,485.71	\$940,561.99	\$15,002,547.46	\$1,476,114.73
7	\$15,002,547.46	\$1,614,047.70	\$713,894.86	\$900,152.85	\$14,288,652.60	\$1,454,300.22
8	\$14,288,652.60	\$1,614,047.70	\$756,728.55	\$857,319.16	\$13,531,924.06	\$1,432,808.10
9	\$13,531,924.06	\$1,614,047.70	\$802,132.26	\$811,915.44	\$12,729,791.80	\$1,411,633.60
10	\$12,729,791.80	\$1,614,047.70	\$850,260.20	\$763,787.51	\$11,879,531.60	\$1,390,772.02
11	\$11,879,531.60	\$1,614,047.70	\$901,275.81	\$712,771.90	\$10,978,255.79	\$1,370,218.74
12	\$10,978,255.79	\$1,614,047.70	\$955,352.36	\$658,695.35	\$10,022,903.44	\$1,349,969.20
13	\$10,022,903.44	\$1,614,047.70	\$1,012,673.50	\$601,374.21	\$9,010,229.94	\$1,330,018.91
14	\$9,010,229.94	\$1,614,047.70	\$1,073,433.91	\$540,613.80	\$7,936,796.03	\$1,310,363.46
15	\$7,936,796.03	\$1,614,047.70	\$1,137,839.94	\$476,207.76	\$6,798,956.09	\$1,290,998.48
16	\$6,798,956.09	\$1,614,047.70	\$1,206,110.34	\$407,937.37	\$5,592,845.76	\$1,271,919.69
17	\$5,592,845.76	\$1,614,047.70	\$1,278,476.96	\$335,570.75	\$4,314,368.80	\$1,253,122.85
18	\$4,314,368.80	\$1,614,047.70	\$1,355,185.58	\$258,862.13	\$2,959,183.22	\$1,234,603.79
19	\$2,959,183.22	\$1,614,047.70	\$1,436,496.71	\$177,550.99	\$1,522,686.51	\$1,216,358.41
20	\$1,522,686.51	\$1,522,686.51	\$1,522,686.51	\$0.00	\$0.00	\$1,130,549.69
Totals:			\$18,513,000	\$13,676,592.88		\$27,643,169.02

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$32,189,592.88
	Project Cost Total (Present Value):	\$27,643,169.02



Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
DP1 & DP2	Dog Park		5.00	5 acre dog park	2	EA	\$100,000	\$200,000.00
Construction Cost Subtotal:								\$200,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$40,000
Land Acquisition (\$30,000 per acre):								\$300,000
Subtotal:								\$540,000
Bond Issuance (2%):								\$10,800
Project Total:								\$550,800

Bond Amortization						
Project Total:		\$550,800				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$550,800.00	\$48,021.25	\$14,973.25	\$33,048.00	\$535,826.75	\$47,311.58
2	\$535,826.75	\$48,021.25	\$15,871.65	\$32,149.60	\$519,955.10	\$46,612.39
3	\$519,955.10	\$48,021.25	\$16,823.95	\$31,197.31	\$503,131.15	\$45,923.54
4	\$503,131.15	\$48,021.25	\$17,833.39	\$30,187.87	\$485,297.76	\$45,244.87
5	\$485,297.76	\$48,021.25	\$18,903.39	\$29,117.87	\$466,394.38	\$44,576.22
6	\$466,394.38	\$48,021.25	\$20,037.59	\$27,983.66	\$446,356.78	\$43,917.46
7	\$446,356.78	\$48,021.25	\$21,239.85	\$26,781.41	\$425,116.94	\$43,268.44
8	\$425,116.94	\$48,021.25	\$22,514.24	\$25,507.02	\$402,602.70	\$42,629.00
9	\$402,602.70	\$48,021.25	\$23,865.09	\$24,156.16	\$378,737.61	\$41,999.02
10	\$378,737.61	\$48,021.25	\$25,297.00	\$22,724.26	\$353,440.61	\$41,378.34
11	\$353,440.61	\$48,021.25	\$26,814.82	\$21,206.44	\$326,625.79	\$40,766.84
12	\$326,625.79	\$48,021.25	\$28,423.71	\$19,597.55	\$298,202.09	\$40,164.37
13	\$298,202.09	\$48,021.25	\$30,129.13	\$17,892.13	\$268,072.96	\$39,570.81
14	\$268,072.96	\$48,021.25	\$31,936.88	\$16,084.38	\$236,136.08	\$38,986.02
15	\$236,136.08	\$48,021.25	\$33,853.09	\$14,168.16	\$202,282.99	\$38,409.87
16	\$202,282.99	\$48,021.25	\$35,884.27	\$12,136.98	\$166,398.72	\$37,842.24
17	\$166,398.72	\$48,021.25	\$38,037.33	\$9,983.92	\$128,361.39	\$37,282.99
18	\$128,361.39	\$48,021.25	\$40,319.57	\$7,701.68	\$88,041.81	\$36,732.01
19	\$88,041.81	\$48,021.25	\$42,738.75	\$5,282.51	\$45,303.07	\$36,189.18
20	\$45,303.07	\$45,303.07	\$45,303.07	\$0.00	\$0.00	\$33,636.19
Totals:			\$550,800	\$406,906.90		\$822,441.39

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$957,706.90
	Project Cost Total (Present Value):	\$822,441.39

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
A1 & A2	Amphitheater		5.00	Amphitheater	2	EA	\$500,000	\$1,000,000.00
Construction Cost Subtotal:								\$1,000,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$200,000
Land Acquisition (\$30,000 per acre):								\$300,000
Subtotal:								\$1,500,000
Bond Issuance (2%):								\$30,000
Project Total:								\$1,530,000

Bond Amortization						
Project Total:		\$1,530,000				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$1,530,000.00	\$133,392.37	\$41,592.37	\$91,800.00	\$1,488,407.63	\$131,421.06
2	\$1,488,407.63	\$133,392.37	\$44,087.91	\$89,304.46	\$1,444,319.71	\$129,478.87
3	\$1,444,319.71	\$133,392.37	\$46,733.19	\$86,659.18	\$1,397,586.52	\$127,565.39
4	\$1,397,586.52	\$133,392.37	\$49,537.18	\$83,855.19	\$1,348,049.34	\$125,680.19
5	\$1,348,049.34	\$133,392.37	\$52,509.41	\$80,882.96	\$1,295,539.93	\$123,822.85
6	\$1,295,539.93	\$133,392.37	\$55,659.98	\$77,732.40	\$1,239,879.96	\$121,992.95
7	\$1,239,879.96	\$133,392.37	\$58,999.57	\$74,392.80	\$1,180,880.38	\$120,190.10
8	\$1,180,880.38	\$133,392.37	\$62,539.55	\$70,852.82	\$1,118,340.83	\$118,413.89
9	\$1,118,340.83	\$133,392.37	\$66,291.92	\$67,100.45	\$1,052,048.91	\$116,663.93
10	\$1,052,048.91	\$133,392.37	\$70,269.44	\$63,122.93	\$981,779.47	\$114,939.84
11	\$981,779.47	\$133,392.37	\$74,485.60	\$58,906.77	\$907,293.87	\$113,241.22
12	\$907,293.87	\$133,392.37	\$78,954.74	\$54,437.63	\$828,339.13	\$111,567.70
13	\$828,339.13	\$133,392.37	\$83,692.02	\$49,700.35	\$744,647.10	\$109,918.92
14	\$744,647.10	\$133,392.37	\$88,713.55	\$44,678.83	\$655,933.56	\$108,294.50
15	\$655,933.56	\$133,392.37	\$94,036.36	\$39,356.01	\$561,897.20	\$106,694.09
16	\$561,897.20	\$133,392.37	\$99,678.54	\$33,713.83	\$462,218.66	\$105,117.33
17	\$462,218.66	\$133,392.37	\$105,659.25	\$27,733.12	\$356,559.40	\$103,563.87
18	\$356,559.40	\$133,392.37	\$111,998.81	\$21,393.56	\$244,560.60	\$102,033.37
19	\$244,560.60	\$133,392.37	\$118,718.74	\$14,673.64	\$125,841.86	\$100,525.49
20	\$125,841.86	\$125,841.86	\$125,841.86	\$0.00	\$0.00	\$93,433.86
Totals:			\$1,530,000	\$1,130,296.93		\$2,284,559.42

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$2,660,296.93
	Project Cost Total (Present Value):	\$2,284,559.42

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
SP	Skateboard Park		2.00	Skateboard Park	1	LS	\$200,000	\$200,000.00
Construction Cost Subtotal:								\$200,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$40,000
Land Acquisition (\$30,000 per acre):								\$60,000
Subtotal:								\$300,000
Bond Issuance (2%):								\$6,000
Project Total:								\$306,000

Bond Amortization						
Project Total:		\$306,000				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$306,000.00	\$26,678.47	\$8,318.47	\$18,360.00	\$297,681.53	\$26,284.21
2	\$297,681.53	\$26,678.47	\$8,817.58	\$17,860.89	\$288,863.94	\$25,895.77
3	\$288,863.94	\$26,678.47	\$9,346.64	\$17,331.84	\$279,517.30	\$25,513.08
4	\$279,517.30	\$26,678.47	\$9,907.44	\$16,771.04	\$269,609.87	\$25,136.04
5	\$269,609.87	\$26,678.47	\$10,501.88	\$16,176.59	\$259,107.99	\$24,764.57
6	\$259,107.99	\$26,678.47	\$11,132.00	\$15,546.48	\$247,975.99	\$24,398.59
7	\$247,975.99	\$26,678.47	\$11,799.91	\$14,878.56	\$236,176.08	\$24,038.02
8	\$236,176.08	\$26,678.47	\$12,507.91	\$14,170.56	\$223,668.17	\$23,682.78
9	\$223,668.17	\$26,678.47	\$13,258.38	\$13,420.09	\$210,409.78	\$23,332.79
10	\$210,409.78	\$26,678.47	\$14,053.89	\$12,624.59	\$196,355.89	\$22,987.97
11	\$196,355.89	\$26,678.47	\$14,897.12	\$11,781.35	\$181,458.77	\$22,648.24
12	\$181,458.77	\$26,678.47	\$15,790.95	\$10,887.53	\$165,667.83	\$22,313.54
13	\$165,667.83	\$26,678.47	\$16,738.40	\$9,940.07	\$148,929.42	\$21,983.78
14	\$148,929.42	\$26,678.47	\$17,742.71	\$8,935.77	\$131,186.71	\$21,658.90
15	\$131,186.71	\$26,678.47	\$18,807.27	\$7,871.20	\$112,379.44	\$21,338.82
16	\$112,379.44	\$26,678.47	\$19,935.71	\$6,742.77	\$92,443.73	\$21,023.47
17	\$92,443.73	\$26,678.47	\$21,131.85	\$5,546.62	\$71,311.88	\$20,712.77
18	\$71,311.88	\$26,678.47	\$22,399.76	\$4,278.71	\$48,912.12	\$20,406.67
19	\$48,912.12	\$26,678.47	\$23,743.75	\$2,934.73	\$25,168.37	\$20,105.10
20	\$25,168.37	\$25,168.37	\$25,168.37	\$0.00	\$0.00	\$18,686.77
Totals:			\$306,000	\$226,059.39		\$456,911.88

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$532,059.39
	Project Cost Total (Present Value):	\$456,911.88

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
P	Aquatic Facilities		5.00	Pool (60'x82') with Bathhouse	4,920	SF	\$490	\$2,410,800.00
Construction Cost Subtotal:								\$2,410,800
Engineering, Survey, Const Mgmt, Procurement (20%):								\$482,160
Land Acquisition (\$30,000 per acre):								\$150,000
Subtotal:								\$3,042,960
Bond Issuance (2%):								\$60,859
Project Total:								\$3,103,819

Bond Amortization						
Project Total:		\$3,103,819				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$3,103,819.20	\$270,605.10	\$84,375.95	\$186,229.15	\$3,019,443.25	\$266,606.01
2	\$3,019,443.25	\$270,605.10	\$89,438.51	\$181,166.60	\$2,930,004.74	\$262,666.02
3	\$2,930,004.74	\$270,605.10	\$94,804.82	\$175,800.28	\$2,835,199.93	\$258,784.26
4	\$2,835,199.93	\$270,605.10	\$100,493.11	\$170,112.00	\$2,734,706.82	\$254,959.86
5	\$2,734,706.82	\$270,605.10	\$106,522.69	\$164,082.41	\$2,628,184.13	\$251,191.98
6	\$2,628,184.13	\$270,605.10	\$112,914.05	\$157,691.05	\$2,515,270.07	\$247,479.78
7	\$2,515,270.07	\$270,605.10	\$119,688.90	\$150,916.20	\$2,395,581.18	\$243,822.45
8	\$2,395,581.18	\$270,605.10	\$126,870.23	\$143,734.87	\$2,268,710.94	\$240,219.16
9	\$2,268,710.94	\$270,605.10	\$134,482.45	\$136,122.66	\$2,134,228.50	\$236,669.12
10	\$2,134,228.50	\$270,605.10	\$142,551.39	\$128,053.71	\$1,991,677.11	\$233,171.55
11	\$1,991,677.11	\$270,605.10	\$151,104.48	\$119,500.63	\$1,840,572.63	\$229,725.66
12	\$1,840,572.63	\$270,605.10	\$160,170.74	\$110,434.36	\$1,680,401.89	\$226,330.70
13	\$1,680,401.89	\$270,605.10	\$169,780.99	\$100,824.11	\$1,510,620.90	\$222,985.91
14	\$1,510,620.90	\$270,605.10	\$179,967.85	\$90,637.25	\$1,330,653.05	\$219,690.56
15	\$1,330,653.05	\$270,605.10	\$190,765.92	\$79,839.18	\$1,139,887.13	\$216,443.90
16	\$1,139,887.13	\$270,605.10	\$202,211.87	\$68,393.23	\$937,675.26	\$213,245.22
17	\$937,675.26	\$270,605.10	\$214,344.59	\$56,260.52	\$723,330.67	\$210,093.81
18	\$723,330.67	\$270,605.10	\$227,205.26	\$43,399.84	\$496,125.41	\$206,988.98
19	\$496,125.41	\$270,605.10	\$240,837.58	\$29,767.52	\$255,287.83	\$203,930.03
20	\$255,287.83	\$255,287.83	\$255,287.83	\$0.00	\$0.00	\$189,543.66
Totals:			\$3,103,819	\$2,292,965.57		\$4,634,548.63

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$5,396,784.77
	Project Cost Total (Present Value):	\$4,634,548.63

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
W	Aquatic Facilities		2.00	Water Playground (Splash Pad)	1	LS	\$250,000	\$250,000.00
Construction Cost Subtotal:								\$250,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$50,000
Land Acquisition (\$30,000 per acre):								\$60,000
Subtotal:								\$360,000
Bond Issuance (2%):								\$7,200
Project Total:								\$367,200

Bond Amortization						
Project Total:		\$367,200				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$367,200.00	\$32,014.17	\$9,982.17	\$22,032.00	\$357,217.83	\$31,541.05
2	\$357,217.83	\$32,014.17	\$10,581.10	\$21,433.07	\$346,636.73	\$31,074.93
3	\$346,636.73	\$32,014.17	\$11,215.97	\$20,798.20	\$335,420.77	\$30,615.69
4	\$335,420.77	\$32,014.17	\$11,888.92	\$20,125.25	\$323,531.84	\$30,163.25
5	\$323,531.84	\$32,014.17	\$12,602.26	\$19,411.91	\$310,929.58	\$29,717.48
6	\$310,929.58	\$32,014.17	\$13,358.39	\$18,655.78	\$297,571.19	\$29,278.31
7	\$297,571.19	\$32,014.17	\$14,159.90	\$17,854.27	\$283,411.29	\$28,845.62
8	\$283,411.29	\$32,014.17	\$15,009.49	\$17,004.68	\$268,401.80	\$28,419.33
9	\$268,401.80	\$32,014.17	\$15,910.06	\$16,104.11	\$252,491.74	\$27,999.34
10	\$252,491.74	\$32,014.17	\$16,864.67	\$15,149.50	\$235,627.07	\$27,585.56
11	\$235,627.07	\$32,014.17	\$17,876.54	\$14,137.62	\$217,750.53	\$27,177.89
12	\$217,750.53	\$32,014.17	\$18,949.14	\$13,065.03	\$198,801.39	\$26,776.25
13	\$198,801.39	\$32,014.17	\$20,086.09	\$11,928.08	\$178,715.30	\$26,380.54
14	\$178,715.30	\$32,014.17	\$21,291.25	\$10,722.92	\$157,424.05	\$25,990.68
15	\$157,424.05	\$32,014.17	\$22,568.73	\$9,445.44	\$134,855.33	\$25,606.58
16	\$134,855.33	\$32,014.17	\$23,922.85	\$8,091.32	\$110,932.48	\$25,228.16
17	\$110,932.48	\$32,014.17	\$25,358.22	\$6,655.95	\$85,574.26	\$24,855.33
18	\$85,574.26	\$32,014.17	\$26,879.71	\$5,134.46	\$58,694.54	\$24,488.01
19	\$58,694.54	\$32,014.17	\$28,492.50	\$3,521.67	\$30,202.05	\$24,126.12
20	\$30,202.05	\$30,202.05	\$30,202.05	\$0.00	\$0.00	\$22,424.13
Totals:			\$367,200	\$271,271.26		\$548,294.26

Project Cost Summary		
Item Description		Item Cost
Total Payments (Principal + Interest):		\$638,471.26
Project Cost Total (Present Value):		\$548,294.26

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
D	Disc Golf Course		18.00	Disc Golf (Basket, Tee Pad and Sign - Each Ho	18	EA	\$1,000	\$18,000.00
Construction Cost Subtotal:								\$18,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$3,600
Land Acquisition (\$30,000 per acre):								\$540,000
Subtotal:								\$561,600
Bond Issuance (2%):								\$11,232
Project Total:								\$572,832

Bond Amortization						
Project Total:		\$572,832				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$572,832.00	\$49,942.10	\$15,572.18	\$34,369.92	\$557,259.82	\$49,204.04
2	\$557,259.82	\$49,942.10	\$16,506.52	\$33,435.59	\$540,753.30	\$48,476.89
3	\$540,753.30	\$49,942.10	\$17,496.91	\$32,445.20	\$523,256.39	\$47,760.48
4	\$523,256.39	\$49,942.10	\$18,546.72	\$31,395.38	\$504,709.67	\$47,054.66
5	\$504,709.67	\$49,942.10	\$19,659.52	\$30,282.58	\$485,050.15	\$46,359.27
6	\$485,050.15	\$49,942.10	\$20,839.10	\$29,103.01	\$464,211.06	\$45,674.16
7	\$464,211.06	\$49,942.10	\$22,089.44	\$27,852.66	\$442,121.61	\$44,999.17
8	\$442,121.61	\$49,942.10	\$23,414.81	\$26,527.30	\$418,706.81	\$44,334.16
9	\$418,706.81	\$49,942.10	\$24,819.70	\$25,122.41	\$393,887.11	\$43,678.98
10	\$393,887.11	\$49,942.10	\$26,308.88	\$23,633.23	\$367,578.23	\$43,033.47
11	\$367,578.23	\$49,942.10	\$27,887.41	\$22,054.69	\$339,690.82	\$42,397.51
12	\$339,690.82	\$49,942.10	\$29,560.65	\$20,381.45	\$310,130.17	\$41,770.95
13	\$310,130.17	\$49,942.10	\$31,334.29	\$18,607.81	\$278,795.88	\$41,153.64
14	\$278,795.88	\$49,942.10	\$33,214.35	\$16,727.75	\$245,581.52	\$40,545.46
15	\$245,581.52	\$49,942.10	\$35,207.21	\$14,734.89	\$210,374.31	\$39,946.27
16	\$210,374.31	\$49,942.10	\$37,319.65	\$12,622.46	\$173,054.67	\$39,355.93
17	\$173,054.67	\$49,942.10	\$39,558.82	\$10,383.28	\$133,495.84	\$38,774.31
18	\$133,495.84	\$49,942.10	\$41,932.35	\$8,009.75	\$91,563.49	\$38,201.29
19	\$91,563.49	\$49,942.10	\$44,448.29	\$5,493.81	\$47,115.19	\$37,636.74
20	\$47,115.19	\$47,115.19	\$47,115.19	\$0.00	\$0.00	\$34,981.64
Totals:			\$572,832	\$423,183.17		\$855,339.05

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$996,015.17
	Project Cost Total (Present Value):	\$855,339.05

Publicly Financed Facilities								
Construction Cost Projection								
Project Number	Park Classification	General Location	Area (acres)	Construction Items	Quantity	Unit	Unit Cost	Total Costs
IH	Inline Hockey Rink		2.00	Inline Hockey Rink (180'x80')	1	LS	\$300,000	\$300,000.00
Construction Cost Subtotal:								\$300,000
Engineering, Survey, Const Mgmt, Procurement (20%):								\$60,000
Land Acquisition (\$30,000 per acre):								\$60,000
Subtotal:								\$420,000
Bond Issuance (2%):								\$8,400
Project Total:								\$428,400

Bond Amortization						
Project Total:		\$428,400				
Annual Interest Rate:		6.00%				
Bond Period (in years):		20				
Number of payments per year:		1				
Annual Rate of Return:		1.50%				
Year	Beginning Balance	Scheduled Payment	Principal	Interest	Balance	Present Value of Payments
1	\$428,400.00	\$37,349.86	\$11,645.86	\$25,704.00	\$416,754.14	\$36,797.90
2	\$416,754.14	\$37,349.86	\$12,344.62	\$25,005.25	\$404,409.52	\$36,254.08
3	\$404,409.52	\$37,349.86	\$13,085.29	\$24,264.57	\$391,324.23	\$35,718.31
4	\$391,324.23	\$37,349.86	\$13,870.41	\$23,479.45	\$377,453.82	\$35,190.45
5	\$377,453.82	\$37,349.86	\$14,702.64	\$22,647.23	\$362,751.18	\$34,670.40
6	\$362,751.18	\$37,349.86	\$15,584.79	\$21,765.07	\$347,166.39	\$34,158.03
7	\$347,166.39	\$37,349.86	\$16,519.88	\$20,829.98	\$330,646.51	\$33,653.23
8	\$330,646.51	\$37,349.86	\$17,511.07	\$19,838.79	\$313,135.43	\$33,155.89
9	\$313,135.43	\$37,349.86	\$18,561.74	\$18,788.13	\$294,573.69	\$32,665.90
10	\$294,573.69	\$37,349.86	\$19,675.44	\$17,674.42	\$274,898.25	\$32,183.15
11	\$274,898.25	\$37,349.86	\$20,855.97	\$16,493.90	\$254,042.28	\$31,707.54
12	\$254,042.28	\$37,349.86	\$22,107.33	\$15,242.54	\$231,934.96	\$31,238.96
13	\$231,934.96	\$37,349.86	\$23,433.77	\$13,916.10	\$208,501.19	\$30,777.30
14	\$208,501.19	\$37,349.86	\$24,839.79	\$12,510.07	\$183,661.40	\$30,322.46
15	\$183,661.40	\$37,349.86	\$26,330.18	\$11,019.68	\$157,331.22	\$29,874.35
16	\$157,331.22	\$37,349.86	\$27,909.99	\$9,439.87	\$129,421.22	\$29,432.85
17	\$129,421.22	\$37,349.86	\$29,584.59	\$7,765.27	\$99,836.63	\$28,997.88
18	\$99,836.63	\$37,349.86	\$31,359.67	\$5,990.20	\$68,476.97	\$28,569.34
19	\$68,476.97	\$37,349.86	\$33,241.25	\$4,108.62	\$35,235.72	\$28,147.14
20	\$35,235.72	\$35,235.72	\$35,235.72	\$0.00	\$0.00	\$26,161.48
Totals:			\$428,400	\$316,483.14		\$639,676.64

Project Cost Summary		
	Item Description	Item Cost
	Total Payments (Principal + Interest):	\$744,883.14
	Project Cost Total (Present Value):	\$639,676.64

Publicly Financed Parks and Recreation Projects Total:	\$84,230,032.35
Present Value Costs of all Public Financed Projects:	\$125,770,408.02

Appendix B: Build-out Schedules



City of Melissa, Texas Parks and Recreation Build-out Summary

Build-out Population:	95,700 Persons (29,000 Households)																
Current Population:	6,000 Persons (1,900 Households)																
Increase in Population:	89,700 Persons (27,100 Households)																
Increase in Households	Increase in Population	Population (Current Population Added)	Year Population Reached	Project Number													
1,500	4,950	10,950	2014	NP1 (R&P)													
3,000	9,900	15,900	2016	NP2 (PS)		OP1											
4,500	14,850	20,850	2018	NP3 (R&P)													
6,000	19,800	25,800	2019	NP4 (PS)	CP1		RC20										
7,500	24,750	30,750	2020	NP5 (R&P)		OP2		DP1									
9,000	29,700	35,700	2021	NP6 (PS)													
10,500	34,650	40,650	2022	NP7 (R&P)								P					
12,000	39,600	45,600	2023	NP8 (PS)		OP3											
13,500	44,550	50,550	2023	NP9 (R&P)						A1							
15,000	49,500	55,500	2024	NP10 (PS)	CP2		RC60							D			
16,500	54,450	60,450	2024	NP11 (R&P)		OP4					SP						
18,000	59,400	65,400	2025	NP12 (PS)									W				
19,500	64,350	70,350	2027	NP13 (R&P)		OP5											
21,000	69,300	75,300	2029	NP14 (PS)													
22,500	74,250	80,250	2034	NP15 (R&P)	CP3			DP2									
24,000	79,200	85,200	2038	NP16 (PS)		OP6								IH			
25,500	84,150	90,150	2041	NP17 (R&P)			RC40										
27,000	89,100	95,100	2046	NP18 (PS)		OP7				A2							

NP = Neighborhood Park
 OP = Ornamental Park
 CP = Community Park
 R&P = Standalone Restroom & Pavilion
 PS = Picnic Shelter
 RC20 = 20,000 Square Foot Recreation Center
 RC40 = 40,000 Square Foot Recreation Center
 RC60 = 60,000 Square Foot Recreation Center
 DP = 5 Acre Dog Park
 A = Amphitheater
 SP = Skateboard Park
 P = Pool w/ Bathhouse
 W = Water Playground (Splash Pad)
 D = Disc Golf Course
 IH = Inline Hockey Rink



City of Melissa, Texas Parks and Recreation Build-out Schedule (2013-2022)										
Population Projections	8,268	11,393	13,490	15,972	18,911	22,390	26,510	31,653	37,793	45,125
Approx. Year Reached	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Project										
Neighborhood Park 1 (Restroom & Pavilion)		\$ 802,181								
Land Acquisition (Neighborhood Park 1)	\$ 225,000									
Neighborhood Park 2 (Picnic Shelter)			\$ 898,632							
Land Acquisition (Neighborhood Park 2)	\$ 225,000									
Neighborhood Park 3 (Restroom & Pavilion)					\$ 802,181					
Land Acquisition (Neighborhood Park 3)		\$ 225,000								
Neighborhood Park 4 (Picnic Shelter)						\$ 898,632				
Land Acquisition (Neighborhood Park 4)				\$ 225,000						
Neighborhood Park 5 (Restroom & Pavilion)							\$ 802,181			
Land Acquisition (Neighborhood Park 5)					\$ 225,000					
Neighborhood Park 6 (Picnic Shelter)								\$ 898,632		
Land Acquisition (Neighborhood Park 6)						\$ 225,000				
Neighborhood Park 7 (Restroom & Pavilion)									\$ 802,181	
Land Acquisition (Neighborhood Park 7)							\$ 225,000			
Land Acquisition (Neighborhood Park 8)							\$ 225,000			
Land Acquisition (Neighborhood Park 9)								\$ 225,000		
Land Acquisition (Neighborhood Park 10)								\$ 225,000		
Land Acquisition (Neighborhood Park 11)									\$ 225,000	
Land Acquisition (Neighborhood Park 12)									\$ 225,000	
Community Park 1						\$ 9,766,908				
Land Acquisition (Community Park 1)	Already Owned By City									
Land Acquisition (Community Park 2)								\$ 2,250,000		
Land Acquisition (Community Park 3)									\$ 2,250,000	
Ornamental Park 1			\$ 714,420							
Land Acquisition (Ornamental Park 1)	\$ 225,000									
Ornamental Park 2							\$ 714,420			
Land Acquisition (Ornamental Park 2)				\$ 225,000						
Land Acquisition (Ornamental Park 3)								\$ 225,000		
Land Acquisition (Ornamental Park 4)									\$ 225,000	
20,000 Square Foot Rec Center						\$ 6,123,000				
Land Acquisition (20,000 Square Foot Rec Center)				\$ 150,000						
Land Acquisition (60,000 Square Foot Rec Center)								\$ 150,000		
Dog Park 1							\$ 125,400			
Land Acquisition (Dog Park 1)				\$ 150,000						
Land Acquisition (Amphitheater 1)							\$ 150,000			
Land Acquisition (Skateboard Park)								\$ 60,000		
Pool with Bathhouse									\$ 2,953,819	
Land Acquisition (Pool with Bathhouse)						\$ 150,000				
Land Acquisition (Disc Golf Course)								\$ 540,000		
Trail # 12		\$ 863,476								
Land Acquisition (Trail #12)	\$ 183,347									
Trail # 13				\$ 335,232						
Land Acquisition (Trail #13)	\$ 71,182									
Trail # 19					\$ 203,171					
Land Acquisition (Trail #19)		\$ 43,141								
Trail # 18						\$ 822,841				
Land Acquisition (Trail #18)			\$ 174,719							
Trail # 21							\$ 375,866			
Land Acquisition (Trail #21)				\$ 79,810						
Trail # 20								\$ 406,341		
Land Acquisition (Trail #20)					\$ 86,281					
Trail # 25									\$ 406,341	
Land Acquisition (Trail #25)						\$ 86,281				
Land Acquisition (Trail #14)							\$ 183,347			
Land Acquisition (Trail #28)								\$ 388,265		
Land Acquisition (Trail #27)									\$ 129,422	
TOTALS (2013-2022)										
Yearly Totals	\$ 450,000	\$ 1,281,710	\$ 1,131,616	\$ 1,787,771	\$ 1,165,042	\$ 1,316,633	\$ 18,072,662	\$ 2,801,214	\$ 5,368,238	\$ 7,216,763
Not by Developer	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ 16,039,908	\$ 275,400	\$ 3,271,785	\$ 5,203,819
Developer Totals	\$ 450,000	\$ 1,281,710	\$ 1,131,616	\$ 1,787,771	\$ 865,042	\$ 1,316,633	\$ 2,032,754	\$ 2,525,814	\$ 2,096,453	\$ 2,012,944
TOTALS (2013-2022)										



City of Melissa, Texas Parks and Recreation Build-out Schedule (2023-2032)

	Population Projections		53,880	64,332	66,391	68,516	70,708	72,971	75,306	76,360	77,429	78,513										
	Approx. Year Reached		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032										
Project																						
Neighborhood Park 8 (Picnic Shelter)	\$	898,632																				
Neighborhood Park 9 (Restroom & Pavilion)	\$	802,181																				
Neighborhood Park 10 (Picnic Shelter)		\$	898,632																			
Neighborhood Park 11 (Restroom & Pavilion)		\$	802,181																			
Neighborhood Park 12 (Picnic Shelter)				\$	898,632																	
Neighborhood Park 13 (Restroom & Pavilion)						\$	802,181															
Land Acquisition (Neighborhood Park 13)		\$	225,000																			
Neighborhood Park 14 (Picnic Shelter)									\$	898,632												
Land Acquisition (Neighborhood Park 14)					\$	225,000																
Land Acquisition (Neighborhood Park 15)											\$	225,000										
Community Park 2		\$	9,811,908																			
Ornamental Park 3	\$	714,420																				
Ornamental Park 4		\$	714,420																			
Ornamental Park 5						\$	714,420															
Land Acquisition (Ornamental Park 5)				\$	225,000																	
60,000 Square Foot Rec Center		\$	18,363,000																			
Land Acquisition (Dog Park 2)											\$	150,000										
Amphitheater 1	\$	615,000																				
Skateboard Park		\$	246,000																			
Water Playground (Splash Pad)				\$	307,200																	
Land Acquisition (Water Playground-Splash Pad)	\$	60,000																				
Disc Golf Course		\$	32,832																			
Trail # 14	\$	863,476																				
Trail # 28		\$	1,828,536																			
Trail # 27				\$	609,512																	
Trail # 10					\$	406,341																
Land Acquisition (Trail #10)	\$	86,281																				
Trail # 6						\$	579,037															
Land Acquisition (Trail #6)		\$	122,950																			
Trail # 3						\$	1,015,854															
Land Acquisition (Trail #3)				\$	215,703																	
Trail # 4								\$	1,066,646													
Land Acquisition (Trail #4)				\$	226,488																	
Trail # 5									\$	507,927												
Land Acquisition (Trail #5)				\$	107,851																	
Trail # 9										\$	304,756											
Land Acquisition (Trail #9)						\$	64,711															
Trail # 2											\$	355,549										
Land Acquisition (Trail #2)								\$	75,496													
Trail # 8												\$	203,171									
Land Acquisition (Trail #8)								\$	43,141													
Land Acquisition (Trail #7)									\$	86,281												
Land Acquisition (Trail #22)											\$	118,636										
Land Acquisition (Trail #26)											\$	97,066										
												TOTALS (2023-2032)										
Yearly Totals	\$	4,039,989	\$	33,045,460	\$	2,482,534	\$	739,193	\$	3,176,202	\$	1,142,142	\$	1,449,699	\$	391,037	\$	849,185	\$	300,237	\$	47,615,679
Not by Developer	\$	675,000	\$	29,795,191	\$	749,390	\$	53,926	\$	1,305,372	\$	1,104,394	\$	253,963	\$	-	\$	327,774.38	\$	-	\$	34,265,011
Developer Totals	\$	3,364,989	\$	3,250,269	\$	1,733,144	\$	685,267	\$	1,870,830	\$	37,748	\$	1,195,736	\$	391,037	\$	521,411	\$	300,237	\$	13,350,668



City of Melissa, Texas Parks and Recreation Build-out Schedule (2033-2042)																						
Population Projections	79,612	80,727	81,857	83,330	84,830	86,357	87,912	89,055	90,212	91,385												
Approx. Year Reached	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042												
Project																						
Neighborhood Park 15 (Restroom & Pavilion)	\$	802,181																				
Neighborhood Park 16 (Picnic Shelter)						\$	898,632															
Land Acquisition (Neighborhood Park 16)			\$	225,000																		
Neighborhood Park 17 (Restroom & Pavilion)								\$	802,181													
Land Acquisition (Neighborhood Park 17)						\$	225,000															
Community Park 3	\$	9,811,908																				
Ornamental Park 6						\$	714,420															
Land Acquisition (Ornamental Park 6)				\$	225,000																	
40,000 Square Foot Rec Center								\$	12,243,000													
Land Acquisition (40,000 Square Foot Rec Center)						\$	150,000															
Dog Park 2	\$	125,400																				
Land Acquisition (Amphitheater 2)										\$	150,000											
Inline Hockey Rink						\$	368,400															
Land Acquisition (Inline Hockey Rink)				\$	60,000																	
Trail # 7	\$	406,341																				
Trail # 22	\$	558,719																				
Trail # 26			\$	457,134																		
Trail # 15				\$	253,963																	
Land Acquisition (Trail #15)	\$	53,926																				
Trail # 24				\$	355,549																	
Land Acquisition (Trail #24)	\$	75,496																				
Trail # 16					\$	711,098																
Land Acquisition (Trail #16)			\$	150,992																		
Trail # 1						\$	386,024															
Land Acquisition (Trail #1)				\$	81,967																	
Trail # 29							\$	711,098														
Land Acquisition (Trail #29)				\$	150,992																	
Trail # 31								\$	1,472,988													
Land Acquisition (Trail #31)					\$	312,769																
Trail # 32									\$	914,268												
Land Acquisition (Trail #32)						\$	194,132															
Trail # 33										\$	507,927											
Land Acquisition (Trail #33)							\$	107,851														
Land Acquisition (Trail #34)								\$	118,636													
Land Acquisition (Trail #30)									\$	107,851												
Land Acquisition (Trail #17)										\$	103,537											
Land Acquisition (Trail #23)										\$	92,752											
Yearly Totals	\$	460,267	\$	11,373,704	\$	833,126	\$	1,127,471	\$	1,023,866	\$	2,711,609	\$	1,043,949	\$	1,591,624	\$	14,067,300	\$	854,216	\$	35,087,132
Not by Developer	\$	-	\$	9,937,308.00	\$	-	\$	100,983.49	\$	-	\$	711,412.18	\$	-	\$	-	\$	-	\$	152,393.87	\$	10,902,098
Developer Totals	\$	460,267	\$	1,436,396	\$	833,126	\$	1,026,487	\$	1,023,866	\$	2,000,197	\$	1,043,949	\$	1,591,624	\$	14,067,300	\$	701,822	\$	24,185,035

City of Melissa, Texas Parks and Recreation Build-out Schedule (2043-2046)					
Population Projections	92,573	93,777	94,996	95,700	
Approx. Year Reached	2043	2044	2045	2046	
Project					
Neighborhood Park 18 (Picnic Shelter)				\$	898,632
Land Acquisition (Neighborhood Park 18)	\$ 225,000				
Ornamental Park 7				\$	714,420
Land Acquisition (Ornamental Park 7)		\$ 225,000			
Amphitheater 2				\$	615,000
Trail # 34	\$ 558,719				
Trail # 30		\$ 507,927			
Trail # 17			\$ 487,610		
Trail # 23			\$ 436,817		
Trail # 35				\$	203,171
Land Acquisition (Trail #35)	\$ 43,141				
Yearly Totals	\$ 826,860	\$ 732,927	\$ 924,427	\$ 2,431,223	\$ 4,915,436
Not by Developer	\$ -	\$ -	\$ 717,701	\$ 615,000	\$ 1,332,701
Developer Totals	\$ 826,860	\$ 732,927	\$ 206,726	\$ 1,816,223	\$ 3,582,736
DEVELOPER TOTAL				\$	56,619,175
%PAID BY DEVELOPER					44.2%
GRAND TOTAL					
\$				128,209,896	



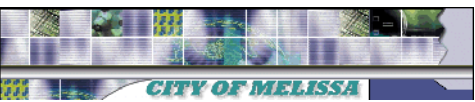
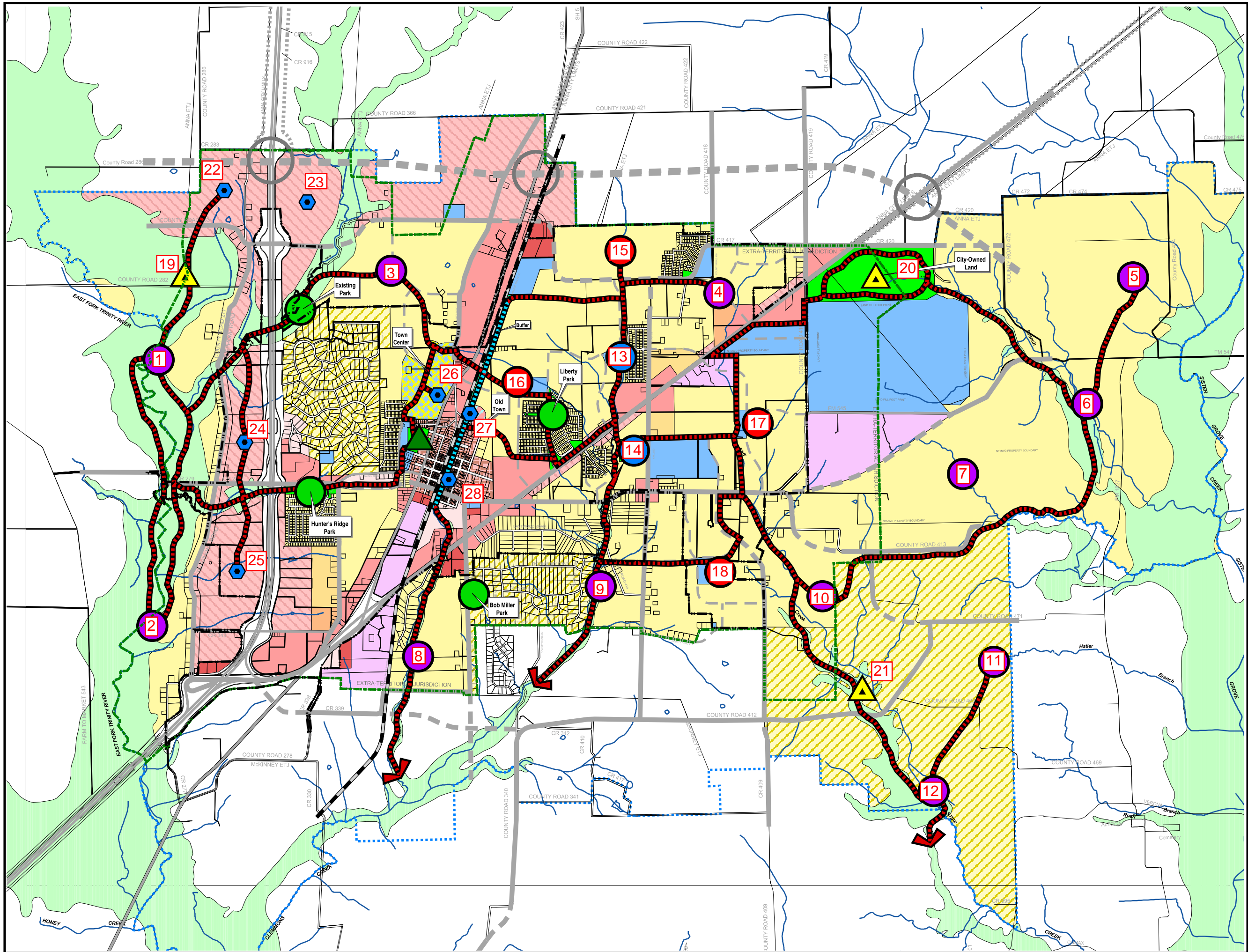
City of Melissa, Texas Parks and Recreation Build-out of Parks and Detailed Trail Build-out Summary							
Expected Build-out of Parks	Expected Build-out of Major Trails	Major Trail Length (ft)	Major Trail Length (miles)	Corresponding Turf & Irrigation (acres)	Feeder Trails* (ft)	Feeder Trails (miles)	Corresponding Turf & Irrigation (acres)
13 (To be built first)	12 (To be built first)	8,757	1.66	2.61	2,627	0.50	0.48
26 (OP)	13	3,400	0.64	1.01	1,020	0.19	0.19
14	19	2,061	0.39	0.61	618	0.12	0.11
16	18	8,345	1.58	2.49	2,503	0.47	0.46
15	21	3,812	0.72	1.14	1,144	0.22	0.21
20 (CP)	20	4,121	0.78	1.23	1,236	0.23	0.23
17	25	4,121	0.78	1.23	1,236	0.23	0.23
27 (OP)	14	8,757	1.66	2.61	2,627	0.50	0.48
18	28	18,545	3.51	5.53	5,563	1.05	1.02
1	27	6,182	1.17	1.84	1,854	0.35	0.34
3	10	4,121	0.78	1.23	1,236	0.23	0.23
25 (OP)	6	5,873	1.11	1.75	1,762	0.33	0.32
2	3	10,303	1.95	3.07	3,091	0.59	0.57
19 (CP)	4	10,818	2.05	3.23	3,245	0.61	0.60
24 (OP)	5	5,151	0.98	1.54	1,545	0.29	0.28
9	9	3,091	0.59	0.92	927	0.18	0.17
28 (OP)	2	3,606	0.68	1.08	1,082	0.20	0.20
4	8	2,061	0.39	0.61	618	0.12	0.11
8	7	4,121	0.78	1.23	1,236	0.23	0.23
22 (OP)	22	5,667	1.07	1.69	1,700	0.32	0.31
10	26	4,636	0.88	1.38	1,391	0.26	0.26
6	15	2,576	0.49	0.77	773	0.15	0.14
21 (CP)	24	3,606	0.68	1.08	1,082	0.20	0.20
7	16	7,212	1.37	2.15	2,163	0.41	0.40
12	1	3,915	0.74	1.17	1,174	0.22	0.22
11	29	7,212	1.37	2.15	2,163	0.41	0.40
23 (OP)	31	14,939	2.83	4.46	4,481	0.85	0.82
5 (To be built last)	32	9,273	1.76	2.77	2,782	0.53	0.51
	33	5,151	0.98	1.54	1,545	0.29	0.28
	34	5,667	1.07	1.69	1,700	0.32	0.31
	30	5,151	0.98	1.54	1,545	0.29	0.28
	17	4,945	0.94	1.48	1,483	0.28	0.27
	23	4,430	0.84	1.32	1,329	0.25	0.24
	35 (To be built last)	2,061	0.39	0.61	618	0.12	0.11
	Total Length	203,686	38.58	60.79	61,101	11.57	11.22

*Note: Feeder trails are not shown on *Plate 6-1 of the City of Melissa 2006 Comprehensive Plan* . Therefore, these lengths are based on distribution of the individual Major Trails.



City of Melissa, Texas Parks and Recreation Build-out of Parks and Detailed Trail Build-out Summary

Major Trails	Construction Cost	Engineering, Survey, Const Mgmt, Procurement (20%)	Land Acquisition Cost	Subtotal	Bond Issuance (2%)	Total Cost (Each Trail)
12	\$702,458.02	\$140,491.60	\$183,347.19	\$1,026,296.81	\$20,525.94	\$1,046,822.75
13	\$272,718.99	\$54,543.80	\$71,181.85	\$398,444.64	\$7,968.89	\$406,413.54
19	\$165,284.24	\$33,056.85	\$43,140.52	\$241,481.60	\$4,829.63	\$246,311.23
18	\$669,401.17	\$133,880.23	\$174,719.09	\$978,000.49	\$19,560.01	\$997,560.50
21	\$305,775.84	\$61,155.17	\$79,809.95	\$446,740.96	\$8,934.82	\$455,675.78
20	\$330,568.48	\$66,113.70	\$86,281.03	\$482,963.20	\$9,659.26	\$492,622.47
25	\$330,568.48	\$66,113.70	\$86,281.03	\$482,963.20	\$9,659.26	\$492,622.47
14	\$702,458.02	\$140,491.60	\$183,347.19	\$1,026,296.81	\$20,525.94	\$1,046,822.75
28	\$1,487,558.15	\$297,511.63	\$388,264.64	\$2,173,334.42	\$43,466.69	\$2,216,801.11
27	\$495,852.72	\$99,170.54	\$129,421.55	\$724,444.81	\$14,488.90	\$738,933.70
10	\$330,568.48	\$66,113.70	\$86,281.03	\$482,963.20	\$9,659.26	\$492,622.47
6	\$471,060.08	\$94,212.02	\$122,950.47	\$688,222.57	\$13,764.45	\$701,987.02
3	\$826,421.20	\$165,284.24	\$215,702.58	\$1,207,408.01	\$24,148.16	\$1,231,556.17
4	\$867,742.26	\$173,548.45	\$226,487.70	\$1,267,778.41	\$25,355.57	\$1,293,133.98
5	\$413,210.60	\$82,642.12	\$107,851.29	\$603,704.01	\$12,074.08	\$615,778.09
9	\$247,926.36	\$49,585.27	\$64,710.77	\$362,222.40	\$7,244.45	\$369,466.85
2	\$289,247.42	\$57,849.48	\$75,495.90	\$422,592.80	\$8,451.86	\$431,044.66
8	\$165,284.24	\$33,056.85	\$43,140.52	\$241,481.60	\$4,829.63	\$246,311.23
7	\$330,568.48	\$66,113.70	\$86,281.03	\$482,963.20	\$9,659.26	\$492,622.47
22	\$454,531.66	\$90,906.33	\$118,636.42	\$664,074.41	\$13,281.49	\$677,355.89
26	\$371,889.54	\$74,377.91	\$97,066.16	\$543,333.61	\$10,866.67	\$554,200.28
15	\$206,605.30	\$41,321.06	\$53,925.64	\$301,852.00	\$6,037.04	\$307,889.04
24	\$289,247.42	\$57,849.48	\$75,495.90	\$422,592.80	\$8,451.86	\$431,044.66
16	\$578,494.84	\$115,698.97	\$150,991.80	\$845,185.61	\$16,903.71	\$862,089.32
1	\$314,040.05	\$62,808.01	\$81,966.98	\$458,815.04	\$9,176.30	\$467,991.35
29	\$578,494.84	\$115,698.97	\$150,991.80	\$845,185.61	\$16,903.71	\$862,089.32
31	\$1,198,310.74	\$239,662.15	\$312,768.73	\$1,750,741.62	\$35,014.83	\$1,785,756.45
32	\$743,779.08	\$148,755.82	\$194,132.32	\$1,086,667.21	\$21,733.34	\$1,108,400.55
33	\$413,210.60	\$82,642.12	\$107,851.29	\$603,704.01	\$12,074.08	\$615,778.09
34	\$454,531.66	\$90,906.33	\$118,636.42	\$664,074.41	\$13,281.49	\$677,355.89
30	\$413,210.60	\$82,642.12	\$107,851.29	\$603,704.01	\$12,074.08	\$615,778.09
17	\$396,682.17	\$79,336.43	\$103,537.24	\$579,555.85	\$11,591.12	\$591,146.96
23	\$355,361.11	\$71,072.22	\$92,752.11	\$519,185.44	\$10,383.71	\$529,569.15
35 (To be built last)	\$165,284.24	\$33,056.85	\$43,140.52	\$241,481.60	\$4,829.63	\$246,311.23
	\$16,338,347.06	\$3,267,669.41	\$4,264,439.91	\$23,870,456.38	\$477,409.13	\$24,347,865.51

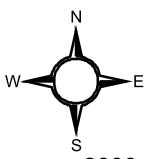


City of Melissa, Texas

Parks & Trail Plan

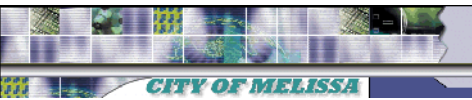
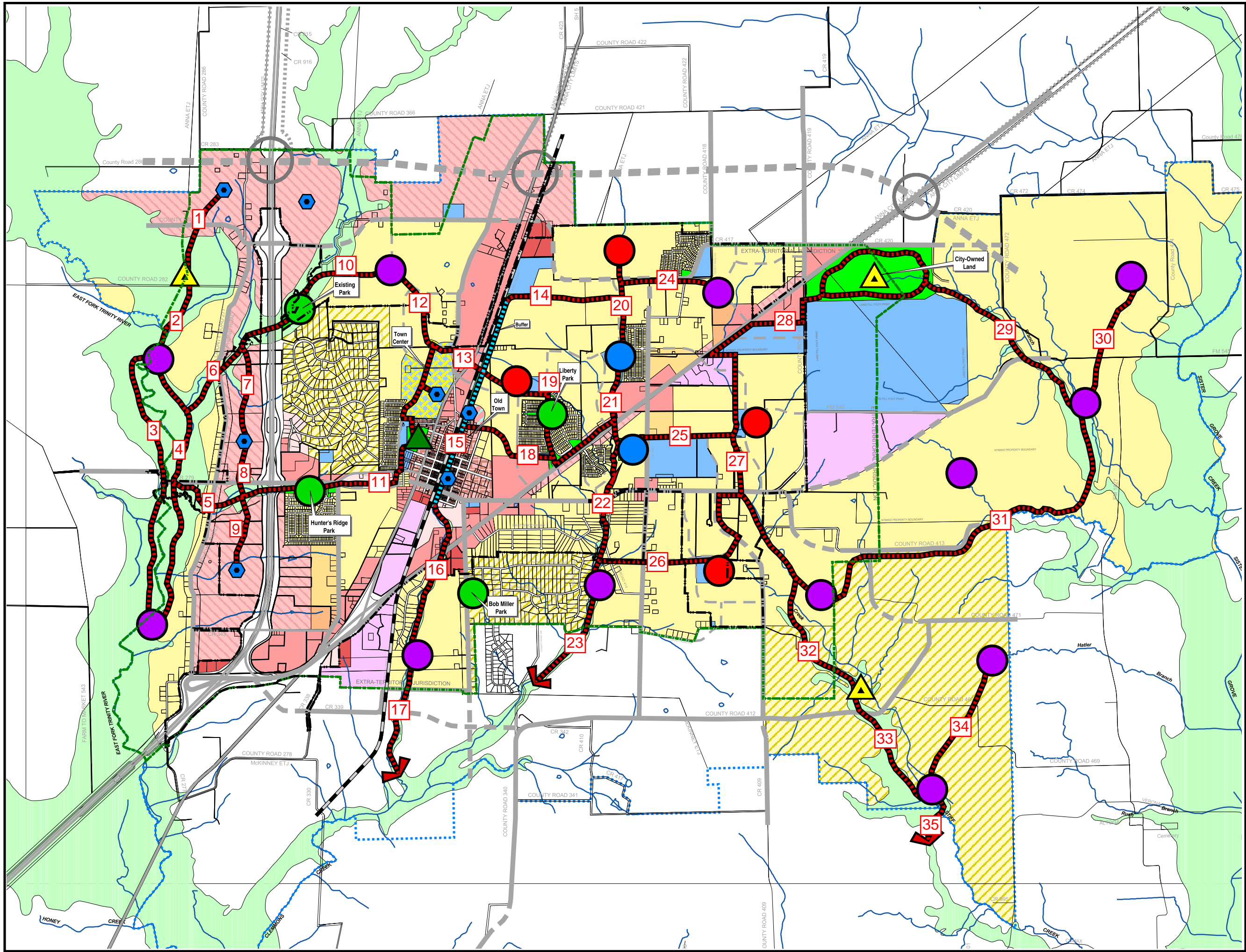
- Existing Park
- Platted Park
- Planned Park
- Proposed Park
- Existing Community Park
- Proposed Community Park
- Ornamental Park
- Rail with Trail
- Trail System
- Residential Estate
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Public/Semi-Public
- Parks and Open Space
- Town Center
- Old Town
- Retail Areas
- Commercial Areas
- Office Areas
- Industrial Areas
- Mixed Use
- Transit Oriented Development (TOD)
- Floodplain
- Land Fill
- Landscape Buffer

Plate 6-1



2000 0 2000 4000 Feet

Dunkin Sefko & Associates, Inc.
Urban Planning Consultants Dallas, Texas
Adopted July 2006

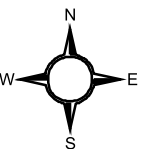


City of Melissa, Texas

Parks & Trail Plan

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1710 Cooper St.
Melissa, TX 75454