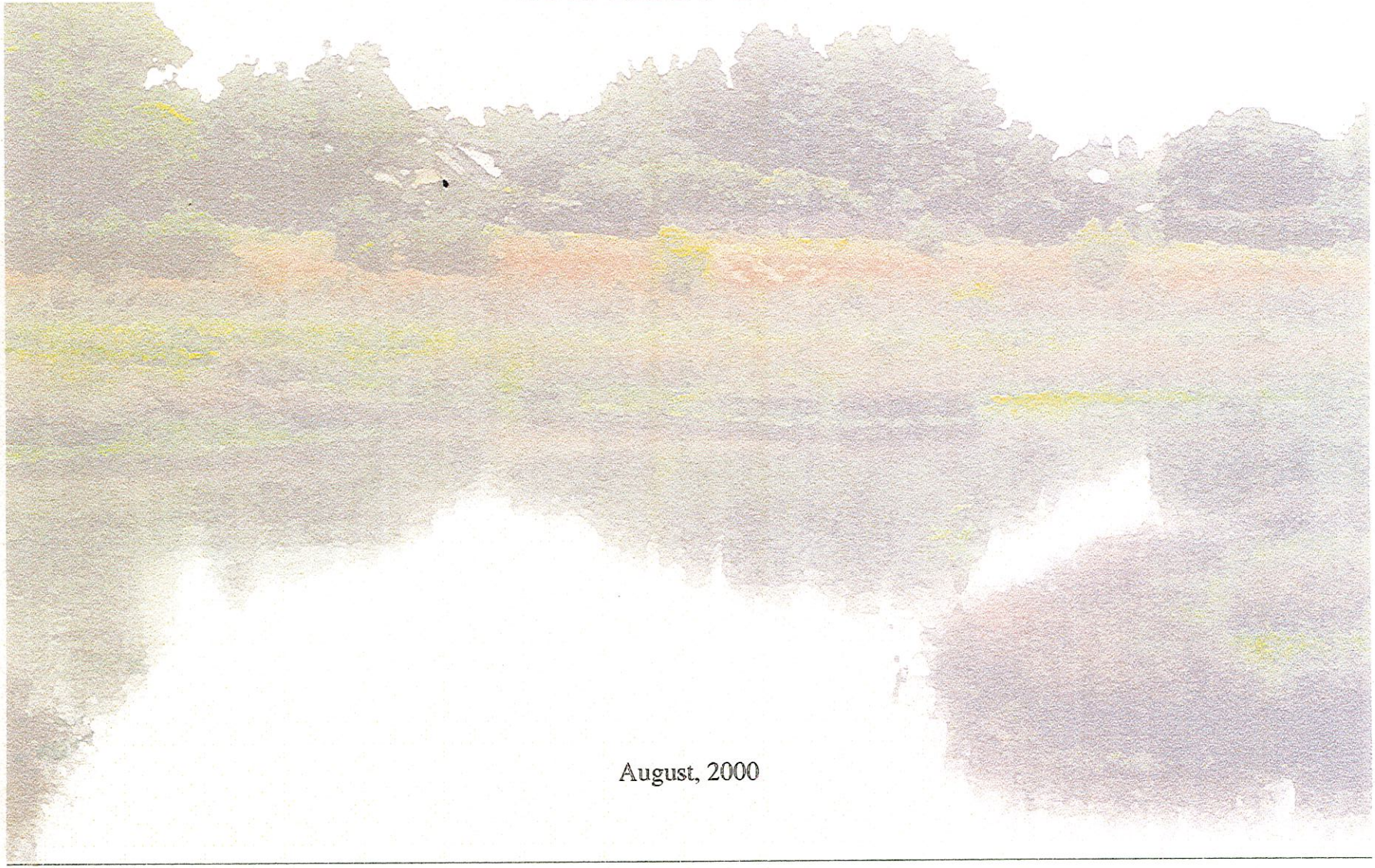
Merrell Watts

Greyhawk Development Project

Winters, California

SPECIFIC PLAN



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CHAPTER 1 - INTRODUCTION

1.1 Planning Overview

In the late 1980's, following a period of rapid residential growth, a draft Specific Plan for a nearly 900-acre area was submitted to the City of Winters. The growth and this submittal prompted the City to consider the need for a blueprint to guide land use decision-making. In 1989 the City then instituted a building moratorium and embarked on a process to update its General Plan. This process, involving numerous members of the community, continued into the early 1990's. In the spring of 1992 the City Council adopted the product of this effort, the Winters General Plan.

The General Plan calls for a balance of land uses within a framework that promotes the development of a pedestrian-oriented downtown along with substantial open space areas. The Council subsequently made a statement regarding growth by approving an urban limit line coincident with its General Plan boundary.

1.2 Planning Area Location and Description

The Greyhawk property is a 400-acre site located on the northern edge of town, north of Road 33 (Moody Slough Road) and on both sides of Railroad Avenue. As shown in Figure 1-1, *Vicinity Plan*, and Figure 1-2, *Existing Conditions*, the western portion of the site is within the city limits while the eastern portion, which is to be annexed to the city, is entirely within the City's General Plan Area, Urban Limit Line, and Sphere of Influence boundary. No portion of the Project area is under Williamson Act contract.

The 1992 General Plan designates the site for a variety of land uses including residences at a variety of densities, two schools, a fire station site and some neighborhood commercial development. The largest portion of the Plan is set aside for open space and public uses (parks, schools, fire station).

The characteristics of the site are shown on Figure 1-2, *Existing Conditions*. It is flat agricultural land currently mostly farmed with row crops and alfalfa. An orchard is located on the 80-acre parcel on the east side of the plan area. There are three farmstead complexes and a few additional isolated farm buildings on the property. Willow Canal, the main irrigation supply canal, enters the property from the north and runs roughly parallel to Railroad Avenue for nearly 2,000 feet before turning east and paralleling the south property line to the east property line. The channelized Moody Slough runs west to east across the site at approximately its midpoint until it crosses Willow Canal. From that point it turns northeast eventually exiting the site on the north property line.

1.3 How to Use the Specific Plan

The Greyhawk Specific Plan is divided into five major sections or chapters. Chapter 1 serves as a general introduction to the Specific Plan, outlining its setting and historical origins, as well as its structure and intent. Chapter 2 discusses the goals, objectives and policies which form the framework for development within the Specific Plan areas. Chapter 3 sets forth the planning concepts of the development plan. It divides the Plan into five elements (land use, circulation, parks and open space, storm drainage, and utilities) and explains how each is addressed by the Specific Plan. Chapter 4, Design Guidelines, establishes specific standards for all development and indicates allowed land uses, development densities, siting and open space requirements, and street and storm drainage system improvements. Finally, Chapter 5 discusses how the Specific Plan will be implemented, including permitting procedures and financing mechanisms.

Chapters three through five of the Specific Plan address the residential and commercial development of the 400-acre site, the provision of an access road to the site (Main Street) and the off-site drainage channel extending from the site some 3,000+ feet to Putah Creek. The first section of the Chapters three and four address the development of the main 400-acre site and the development of Main Street offsite under the overall title of *PLAN AREA*. The off-site drainage facility, and its relationship to wider Winters flood control goals, is then addressed in a second section of the chapter, entitled *OFF-SITE FLOOD CONTROL FEATURES*.

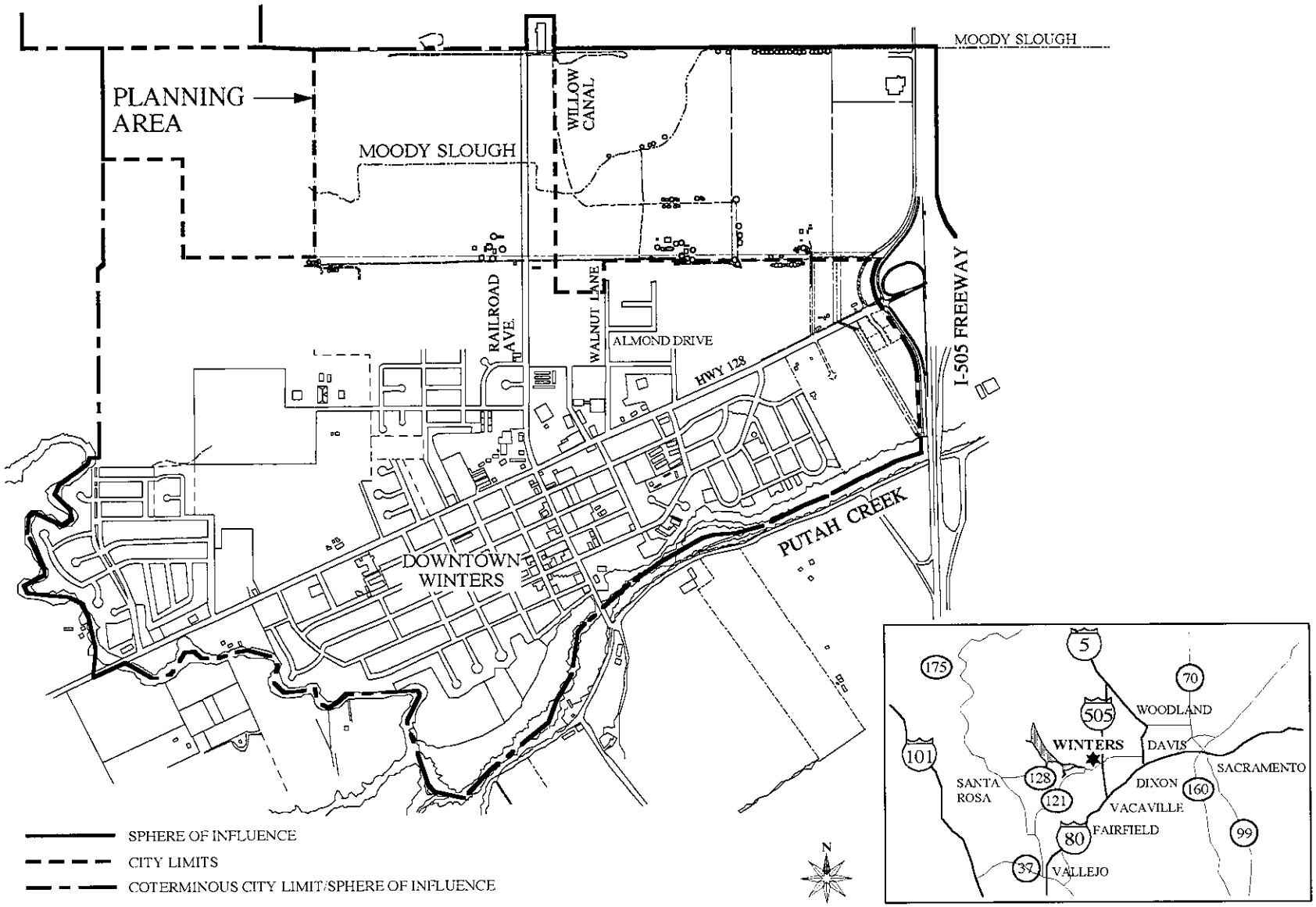


FIG. 1-1 VICINITY PLAN

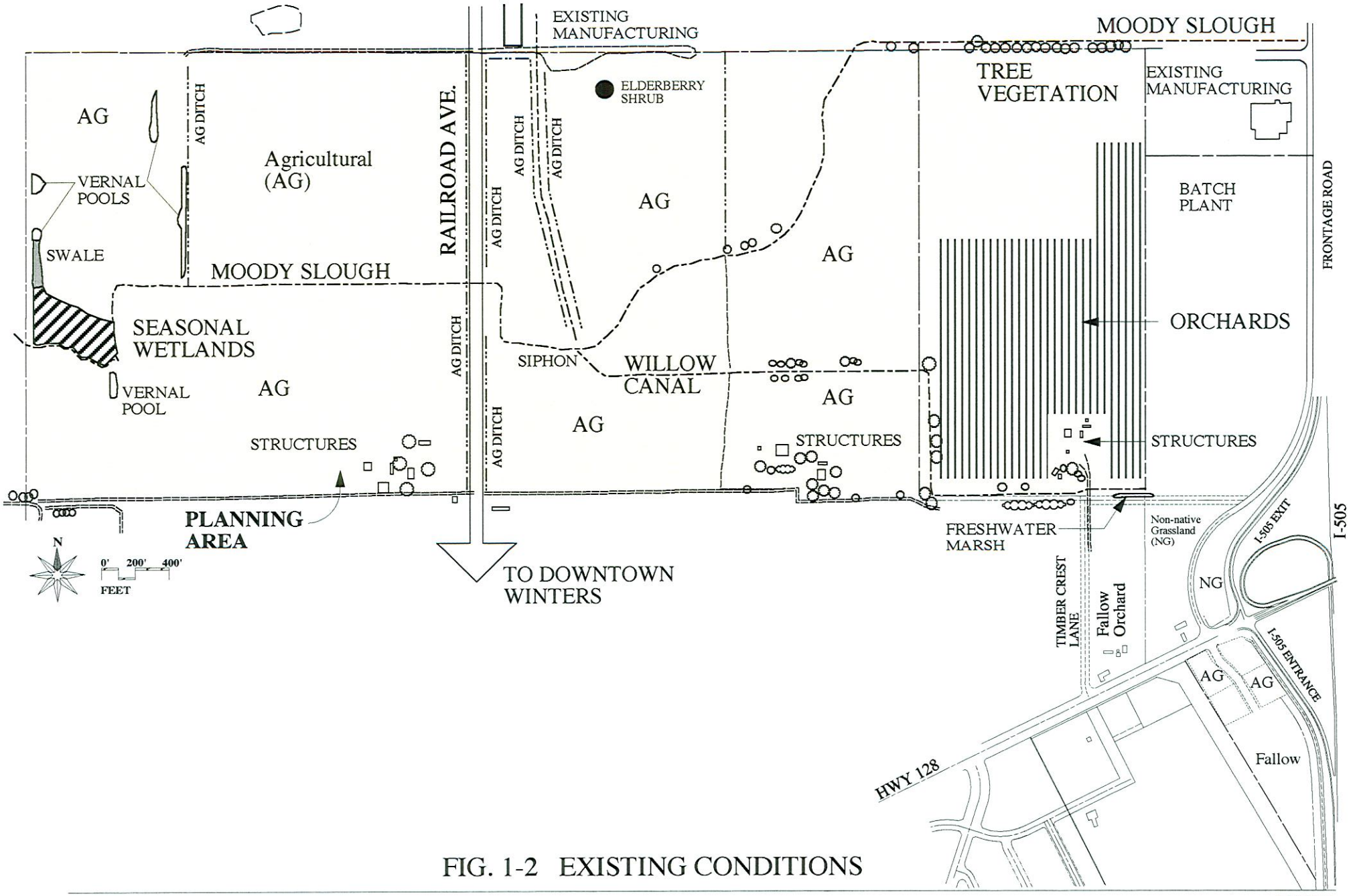


FIG. 1-2 EXISTING CONDITIONS

Chapter 2 -- SPECIFIC PLAN GOALS

2.1 Greyhawk Plan Goals

The Greyhawk Specific Plan is designed to accomplish the following goals:

- To develop approximately 1,122 units of new housing, neighborhood commercial and a site for a new high school.
- To create a community of neighborhoods with each neighborhood centering on nearby open space and connected to other neighborhoods and other open space, educational and commercial development areas.
- To provide a range of residential densities and housing sizes and styles.
- To design a new development that echoes and reinforces the styles and layout of traditional Winters neighborhoods
- To construct drainage improvements downstream of the project that will both protect the site and reduce the potential for flooding of other city areas.
- To design project drainage improvements as a public open space amenity.
- To deliver a graded high school site of appropriate size to the Winters School District.
- To provide a site for a future north Winters public safety (fire and police) facility.

2.2 Relationship of the Specific Plan to the General Plan

All State mandated general Plan elements are included in the Winters General Plan, as approved by the City Council in 1992. The consistency of each of these elements, as they pertain to the Greyhawk Plan, are discussed in the appendix to this document, *Greyhawk / City of Winters General Plan Consistency Analysis.*

Chapter 3 – DEVELOPMENT PLAN

PLAN AREA

3.1 Introduction

This chapter presents the overall land use concept and defines land use policies for residential and commercial development.

The Plan area is to accommodate 1,122 homes and associated support uses, including schools, parks, commercial, and open space. Figure 3-1, *Land Use Plan,* identifies the distribution of land uses within the area. Table 3.1: *Land Use Program,* establishes a mix of uses for a residential community supported by commercial, civic, and open space elements. The *Land Use Plan* (Figure 3-1) illustrates the fundamental structure underlying the arrangement of land uses, transportation facilities, and open space within the Urban Area. These urban design principles are summarized in the following Land Use Concepts, and further detailed in the other sections of this chapter.

3.2 Land Use Concepts

The land use concept incorporates a number of elements that, when taken together, will create a group of small neighborhoods similar in nature to the historical development pattern of Winters. The urban design elements of the Plan can be generally described as follows:

Neighborhoods: The Plan includes a variety of neighborhoods connected to downtown Winters via Railroad Avenue and the new extension of East Main Street. Traditional street grids and block sizes similar to those found in the downtown are applied in several variations, recalling the historical scale of Central Valley towns. As shown on the Circulation Plan, arterial access to the site will be provided via the extension of East Main Street. Railroad Avenue and Moody Slough Road (Road 33) will be arterials on, and bordering, the site. Bike paths and landscape setbacks between the curb and property line on the arterials. All streets within Greyhawk will be of a typical residential character with houses fronting on the street. Each neighborhood will have access to a nearby park or to the central drainageway/lake open space.

Types of Housing. Approximately 88% of the planned housing will be for sale, with approximately 12% rental. Most of the for-sale housing (91%) will fall within the land use designations of Low Density Residential (1.1 to 4.0 units per acre), and Medium Density Residential (4.1 to 6.0 units per acre). The remainder of the for sale units (9%) will fall in the Medium High Residential (6.1 to 10.0 units per acre) land use designation. Within these ranges the Plan will provide a variety of home sizes and types.

One parcel, where an existing farmhouse is to remain, will be designated Rural Residential (0.5 to 1.0 unit per acre). The project also contains 149 units (15.3% of the total units) of single family, duplex and apartments affordable to low-income families. These affordable units will be built in the Medium High Residential (6.1 to 10.0 units per acre) and High Density Residential (10.1 to 20.0 units per acre) ranges at four locations within the neighborhoods.

Open Space and Parks. A104-acre multi-purpose drainage/open space/lake corridor is located in the center of the Plan. This east/west open space will contain drainage facilities, artificial lakes, wetlands, habitat areas and passive and active recreational features and will be the central design feature of the Plan. The habitat areas will incorporate Project mitigation features. Greyhawk also provides smaller parks centrally located within the neighborhoods. All homes will be within a short distance of the central open space or these smaller parks.

Shopping. A one-acre neighborhood-serving commercial site is located on the west side of Railroad Avenue at the Main Street intersection. This small commercial area will provide local-serving retail services such as a video rental store, dry cleaner, barbershop and convenience store. The size of this commercial area and the design of small retail spaces will complement, rather than compete with, larger retail opportunities in downtown Winters.

Schools. A site for the new Winters high school is planned along Moody Slough Road west of Railroad Avenue. This site will be set at elevations above the flood level as part of project grading. The site is large enough to accommodate the new high school and also allow relocation of the district's agricultural education facilities to this location. As the entire Plan area is located within two miles of existing and planned schools, no busing of students is anticipated.

Public Safety (Fire and Police). The Plan designates a 1.2-acre site for the location of a future north Winters public safety facility on the east side of Railroad Avenue at the north Plan area boundary.

Community Center. A 5,000 square-foot community center is planned for construction in the Community Park on Railroad Avenue. This facility will provide community meeting and function rooms available for operation by the City as a recreational resource.

TABLE 3.1 LAND USE PROGRAM

RESIDENTIAL

LAND USE DESIGNATION	ABBREV.	UNITS/AC.	ACRES	UNITS
Rural Residential	RR	0.75	1.0	1
Low Density Residential	LR	3.87	39.0	151
Medium Density Residential	MR	4.93	151.0	745
Medium High Density Residential	MHR	9.47	9.5	90
High Density Residential	HR	19.3	7.0	135
	Total, RESIDENTIAL		207.5	1,122

COMMERCIAL

LAND USE DESIGNATION	ABBREV.	F.A.R.	ACRES	SQ. FT.
Neighborhood Commercial	NC	0.30	1.0	13,070

OTHER

LAND USE DESIGNATION	ABBREV.	FAR	ACRES
Public/Quasi-Public	PQP		47.8
Recreation and Parks	RP		15.6
Public Open Space	OS		105.1
Circulation			23.0
	Total, OTHER		191.5

GRAND TOTAL 400.0 acres

Notes:

1. Units shown in Table 3.2 represent the number of units to be allowed in each land use designation. Units per acre and FAR data in Table 3.1 is included to indicate Plan intensity for CEQA analysis purposes.
2. Land Use Designations and Abbreviations shown in Table 3.1 are those of the Winters General Plan and are used in the Greyhawk *Land Use Plan*, Figure 3-1.

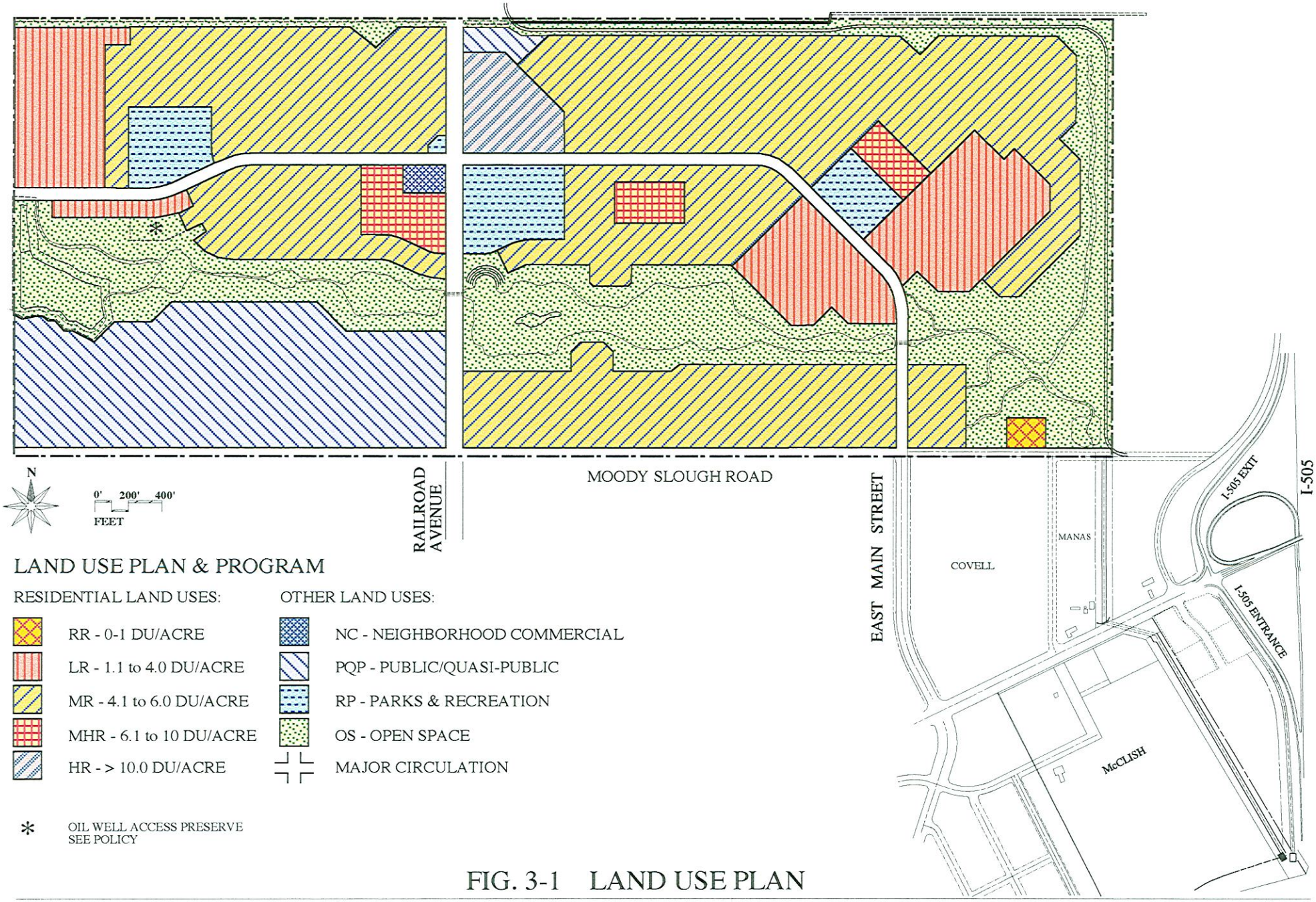


FIG. 3-1 LAND USE PLAN

3.2.1 Land Use Designations

The *Land Use Plan*, Figure 3-1, and *Land Use Program*, Table 3.1, include five categories of residential use, one commercial category as well as public facilities such as parks, schools and open space. Table 3.2, *Land Use Designations and Development Intensities*, provides an outline of this information. Each category in the plan and tables is discussed in the paragraphs which follow.

TABLE 3.2: LAND USE DESIGNATIONS & DEVELOPMENT INTENSITIES

Land Use Designation	Abbreviation	Intensity
Rural Residential	RR	0.5 to 1.0 units/acre
Low Density Residential	LR	1.1 to 4.0 units/acre
Medium Density Residential	MR	4.1 to 6.0 units/acre
Medium High Density Residential	MHR	6.1 to 10.0 units/acre
High Density Residential	HR	10.1 to 20.0 units/acre
Neighborhood Commercial	NC	FAR: 0.40 maximum

3.2.2 Residential Land Uses

Rural Residential (RR): This very low residential land use designation is included only to cover an existing farmhouse, which is to remain near the southeast corner of the Plan area. The allowable density range is from 0.5 to 1.0 home per acre.

Low Density Residential (LR): This designation provides the largest single family detached housing parcels in the Plan. All housing in this district will be single family detached units. The allowable density range is from 1.1 to 4.0 homes per acre

Medium Density Residential (MR): This designation allows single-family detached and attached homes. The housing types would include traditional detached homes and duplexes. This category comprises the vast majority of the home types found in the Greyhawk Plan. The allowable density range is from 4.1 to 6.0 homes per acre.

Medium High Density Residential (MHR): This designation allows detached and attached single-family housing as well as attached multi-family housing. Sixty percent of the affordable housing component of Greyhawk will be built in this district as small-lot single-family homes and duplexes. The allowable density range is from 6.1 to 10.0 homes per acre.

High Density Residential (HR): This district is for small lot detached housing as well as townhouses, condominiums and apartments. In the Greyhawk Plan all the market rate and affordable housing apartments have this land use designation. The allowable density range is from 10.1 to 20.0 homes per acre.

3.2.3 Commercial Land Use

Neighborhood Commercial (NC): Retail establishments and offices that provide a center for convenient shopping and services near residential neighborhoods are included in this category. The small commercial center on Railroad Avenue has this land use designation. Development can be proposed in this district up to a maximum Floor Area Ratio of 0.40.

3.2.4 Parks and Open Space

Parks and Recreation (RP): Two large neighborhood parks and a centrally located community park have this land use designation.

Public Open Space (OS): The open space and lake area running through the center of the site is designated as public open space. This area will contain the flow line of the drainage channel, detention and siltation basins, two lakes, preserved wetlands and created riparian habitat. The upland areas will be developed for passive and active recreation.

3.2.5 Public and Quasi-Public Facilities (PQP)

Public Safety Facility. The Greyhawk Plan includes a 1.2-acre site, on Railroad Avenue at the north property boundary, to be the location of a future north Winters fire, or fire/police, station.

Schools. A 46.6-acre high school site is located along Moody Slough Road, west of Railroad Avenue.

3.3 Parks and Open Space

3.3.1 Parks

The Plan proposes the development of community and neighborhood parks in accordance with the policies of the Winters General Plan and the provisions of the Design Guidelines of this Plan. The park dedications required of the Greyhawk Plan area are as follows.

Park dedication requirement	5 acres per 1,000 new residents
Estimated residents	3,086 residents[1]
Parks required	15.43 acres

[1] 2.75 residents per household for 1,122 households

The parks within this Plan will satisfy the City's requirement in the following fashion:

West Neighborhood Park:	5.10 acres
East Neighborhood Park	3.45 acres
Community Park	6.83 acres
Plaza	0.22 acres
Total:	15.60 acres

Policy 3.1 Provision of Parks. The Plan requires the developer(s) to be responsible for park site dedication and/or contribute their proportionate share of park improvements. This responsibility will be met by dedicating park sites, paying fees, special assessments or constructing park improvements to meet City specifications. Park sites may be dedicated and improvements may be implemented by project developers in lieu of, or as a credit against their park improvement fees.

Consistent with the Winters General Plan, the Plan also encourages the City and Winters School District to enter into an agreement regarding the joint use of park and school sites.

Policy 3.2 Joint Use of Parks. The Plan encourages the City and the Winters School District to enter into an agreement providing for establishing a system of playgrounds, ballfields, and recreation centers, constructing, maintaining and operating recreational centers and organizing, promoting and conducting community recreation programs.

3.3.2 Drainage Corridor Open Space

The 104-acre Drainage Corridor Open Space is comprised of a series of features that function in unison to provide filtered storm drainage, flood control, artificial lakes, riparian and wetland area and informal open space. This generally east-west running drainage corridor is set below the surrounding houses and streets, and includes the following major segments: the existing wetland preserve, biofilter and silt basins, an artificial lake west of Railroad Avenue, a similar artificial lake east of Railroad Avenue, and a riparian mitigation area upstream of a detention/silt basin near the eastern boundary of the Planning Area.

The water system designed to function within this Drainage Corridor begins at the western edge of the Plan area at a three-acre existing wetland. The wetland will be surrounded by a buffer at the same gradient, at the edge of which the detention basin is formed, defined at the edges by a 4:1 slope. Intermittent seasonal flows entering the site from properties to the west will drain through the wetland, dropping into a detention basin in a low-flow channel. This low-flow channel then meanders into a one-acre, two-foot deep silt basin.

Flows leaving the silt basin discharge into the West Lake, a permanent body of water approximately 3 acres in size and approximately 10 to 12 feet deep. Water from West Lake flows through culverts under Railroad Avenue into East Lake. East Lake is approximately 17 acres in size and contains a 0.5-acre freshwater marsh mitigation site in the form of an island of emergent marsh planting. This lake is also approximately 10 to 12 feet deep, with adjacent lawn areas, accented with a created sand beach and other ornamental landscape features.

The East Lake discharges under Main Street and flows into a detention basin containing a meandering low-flow channel planted with riparian vegetation. This low-flow channel is designed to mitigate intermittent drainage and riparian mitigation impacts of the Project and will not be but subject to routine maintenance activities in the detention basin. The channel continues southeast, discharging into the off-site drainage conveyance channel described in Section 3.11.

3.3.3 Agricultural Buffer

West of Railroad Avenue the Agricultural Buffer is a 50-foot wide landscaped open space that contains a drainage swale designed to capture incidental overland flows that currently enter the site from the north and northwest. From Railroad Avenue to the east, the buffer widens to 100 feet and includes a new reach of Moody Slough channel and the relocated Willow Canal (see Section 3.9 below).

Policy 3.3 Agricultural Buffer. An agricultural buffer shall be constructed along the north Plan area boundary. This buffer shall be 50 feet wide west of Railroad Avenue and 100 feet wide east of Railroad Avenue. The buffer shall be landscaped, contain a trail and, east of Railroad Avenue, accommodate the construction of relocated Moody Slough and the Willow Canal.

3.4 Circulation

Project roads and non-vehicular pedestrian circulation are shown on Figure 3-2, *Circulation Plan*. The project proposes to complete a part of the Main Street loop, envisioned in the General Plan, connecting Highway 128 to Railroad Avenue and west to the westerly property line of the site. Main Street will be an arterial street from Highway 128 (Grant Avenue) to Moody Slough Road (Road 33), at the south Greyhawk property line. The road will then continue as a collector street generally passing through the center of the development. Moody Slough Road and Railroad Avenue will also be arterial streets.

In implementing the General Plan the City adopted policy standards, in 1993, regarding road cross-sections for several of the streets now in this Plan. These policies set four-lane arterial standards for Main Street north of Highway 128 and East of Railroad, Moody Slough Road, Railroad Avenue and Highway 128. This Plan proposes road cross sections that could ultimately accommodate these four-lane policy standards. However, it is unlikely that traffic conditions will ever justify the need for four lanes on most of these roads. This Plan recommends that the requirement for dedicating these four-lane rights-of-way be revised.

Policy 3.4 Project Arterial Streets. Railroad Avenue and Moody Slough Road shall be arterial streets through, and along the boundary of, the project area. The Project shall dedicate and construct Moody Slough Road as a 2-lane arterial within the project site. This road cross section will allow the ultimate expansion of this road to 4-lanes, if necessary, at sometime in the future. The section of Railroad Avenue passing through the site shall be improved as a 2-lane arterial, in a right of way sized for ultimate expansion to 4-lanes.

Policy 3.5 Off-Site Circulation. The Project shall construct Main Street as a two-lane road in an ultimate four-lane right-of-way from Moody Slough Road south to the existing Main Street intersection at Highway 128 (Grant Avenue).

Policy 3.6 Main Street Through Greyhawk. Main Street from Moody Slough Road north and west to the west Greyhawk boundary shall be constructed as a two-lane collector street.

Policy 3.7 Reconsideration of City Arterial Planning Policies. The City of Winters should reevaluate its 1993 policy statement regarding the nature of arterials streets on Main Street, Moody Slough Road and Railroad Avenue. If projected future traffic volumes do not justify four-lane cross sections the City should consider reducing the cross section policy accordingly.

3.5 Flood Protection and Storm Drainage

A major portion of the site lies in the North Winters floodplain. The floodplain is depicted on the FEMA - Flood Insurance Map, and addressed in an Army Corps of Engineers report, *Final Feasibility Report Environmental Assessment/Initial Study* (February 1997).

Regionally, Moody Slough drains the watershed west and northwest of The Project. The slough currently flows through the center of the site, entering on the west property line and discharging near the northeast corner of the property. This flow then passes through a culvert under I-505 and continues eastward. This culvert has limited capacity and flooding sometimes occurs west of I-505 until the water has time to drain away. In its undeveloped condition the eastern two-thirds of the property would be inundated to a depth varying from zero to approximately three feet on the east boundary.

Policy 3.8 Construction Above The Flood Plain. The Project shall raise the site to a minimum of one foot above the 100-year flood elevation. The northern and eastern perimeters of the site shall be filled higher in order to provide extra protection from wave run-up and wave set-up that may occur if areas outside the development are flooded. Fill will be at its maximum height on the eastern boundary and taper down to meet the existing elevations on the western boundary.

Figure 3-3, *Storm Drainage Plan*, shows planned major drainage improvements. Moody Slough will be rerouted along the north property boundary and runoff from the west will be routed through the on-site detention basins. Off-site a new drainage channel will be constructed from the project site to Putah Creek. This off-site facility is described in sections 3.11 through 3.13 below.

Policy 3.9 Conveyance of 100-Year Storm Events. Two on-site detention basins and a new Moody Slough canal shall be designed to accommodate the 100-year storm flow through and out of the project site.

Policy 3.10 Construction of Lakes and Detention Basins. The fill necessary to raise the elevation of development areas and to provide flood protection shall be obtained by excavating three detention basins and two lakes in the central drainage channel system. These excavated areas shall also serve to control stormwater runoff, reducing peak storm flows. The lakes shall have a controlled and maintained water surface. The lake bottom will not be sealed, allowing natural groundwater infiltration to continue. The detention basins will discharge through a central drainage channel system. The basins and drainage system shall be landscaped and used as public recreation/open space areas.

Policy 3.11 Local Storm Drainage. All drainage pipelines within the Project shall be designed to carry the 10-year storm as directed by City of Winters Engineering Design Standards. These pipelines shall discharge through biofilters, designed to presently accepted standards, into the central detention basins.

3.6 Natural Resources

The majority of the project site consists of active agricultural use with a few interspersed residences and associated buildings including landscaping. Vegetation communities identified within the project site include agricultural areas including orchards, seasonal wetlands, vernal pools, emergent marsh, and agricultural drainages with limited riparian habitat (Moody and Willow Sloughs). No special status species were located on the project site although potential habitat may exist for the valley elderberry longhorn beetle, northwestern pond turtle and several species of raptors.

Policy 3.12 Biological Resources. Development shall, where feasible, avoid impacts to natural resources. Where disturbance to natural resources are unavoidable the developer shall work with the City of Winters in developing adequate mitigation measures.

3.7 Education

3.7.1 Schools

A site for the new Winters high school is to be provided on Moody Slough Road west of Railroad Avenue, as shown on Figure 4-2, *Commercial & Public Services Plan*. The site is large enough to accommodate the new high school and also allow relocation of the district's agricultural education facilities to this location. The site will be set at elevations above the flood level as part of project grading. As the entire Plan area is located within two miles of existing and planned schools, no busing of students is anticipated.

Policy 3.13 Schools. The developer will arrange with the School District for providing a graded high school site and paying school impact fees to the extent required by state law.

3.7.2 Public Safety

Greyhawk will discharge its fire protection and community buildings responsibilities by dedicating a public safety site near the village core, as shown in Figure 4-2, *Commercial & Public Services Plan.* The City will decide how and when this site is to be developed. The City may ultimately decide to use the site for a joint police/fire facility.

Policy 3.14 Public Safety Services. The Project shall dedicate a 1.2-acre public safety site on the east side of Railroad Avenue at the north project boundary. The ultimate use of this site shall be limited to police and fire facilities. This dedication shall apply to offset the Project's obligations for providing fire protection and police services, including personnel, equipment and facilities.

3.8 Cultural Resources

Policy 3.15 Historical Structures. Structures of historical, cultural or architectural merit which are proposed for demolition shall be considered for relocation as a means of preservation.

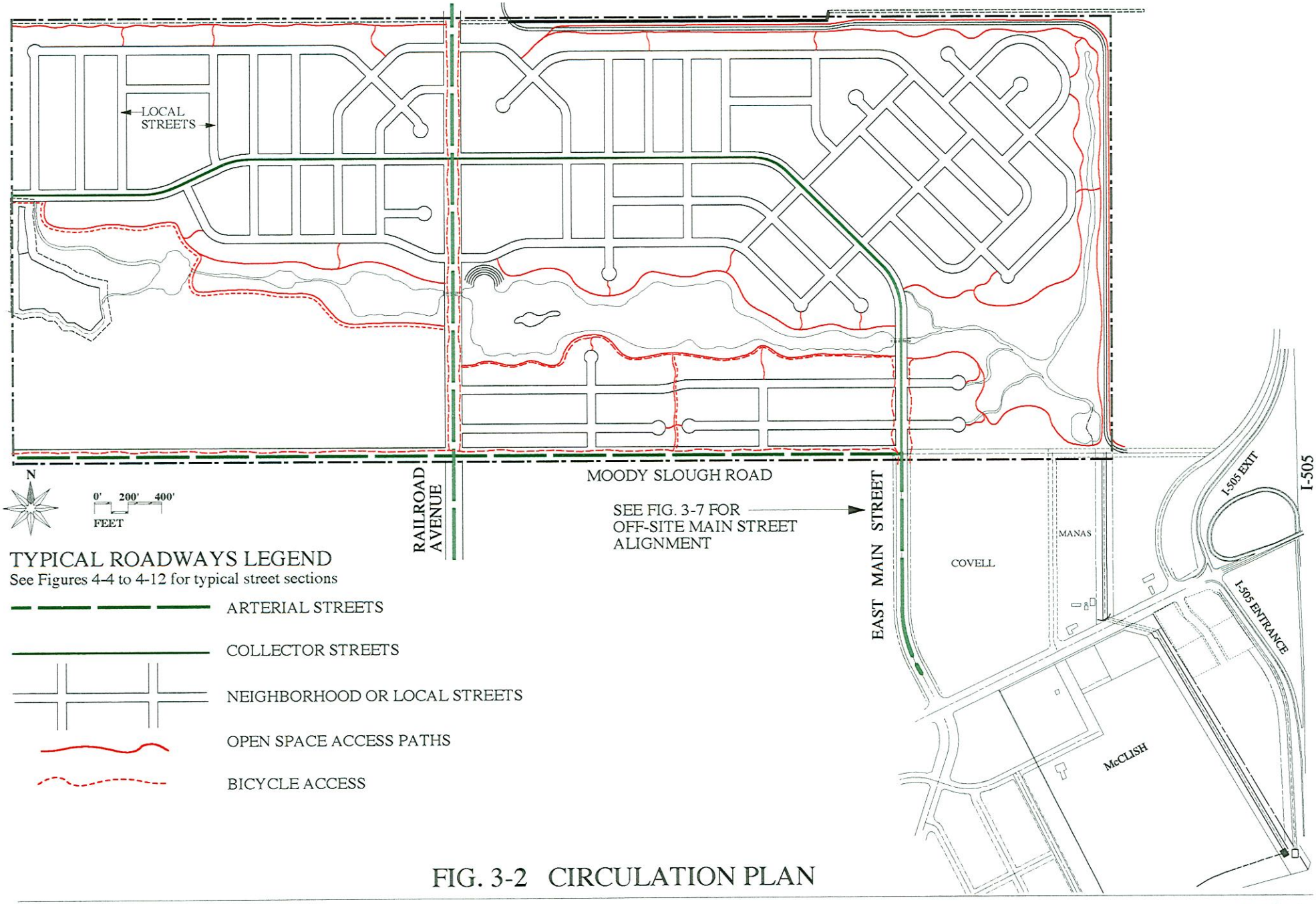


FIG. 3-2 CIRCULATION PLAN

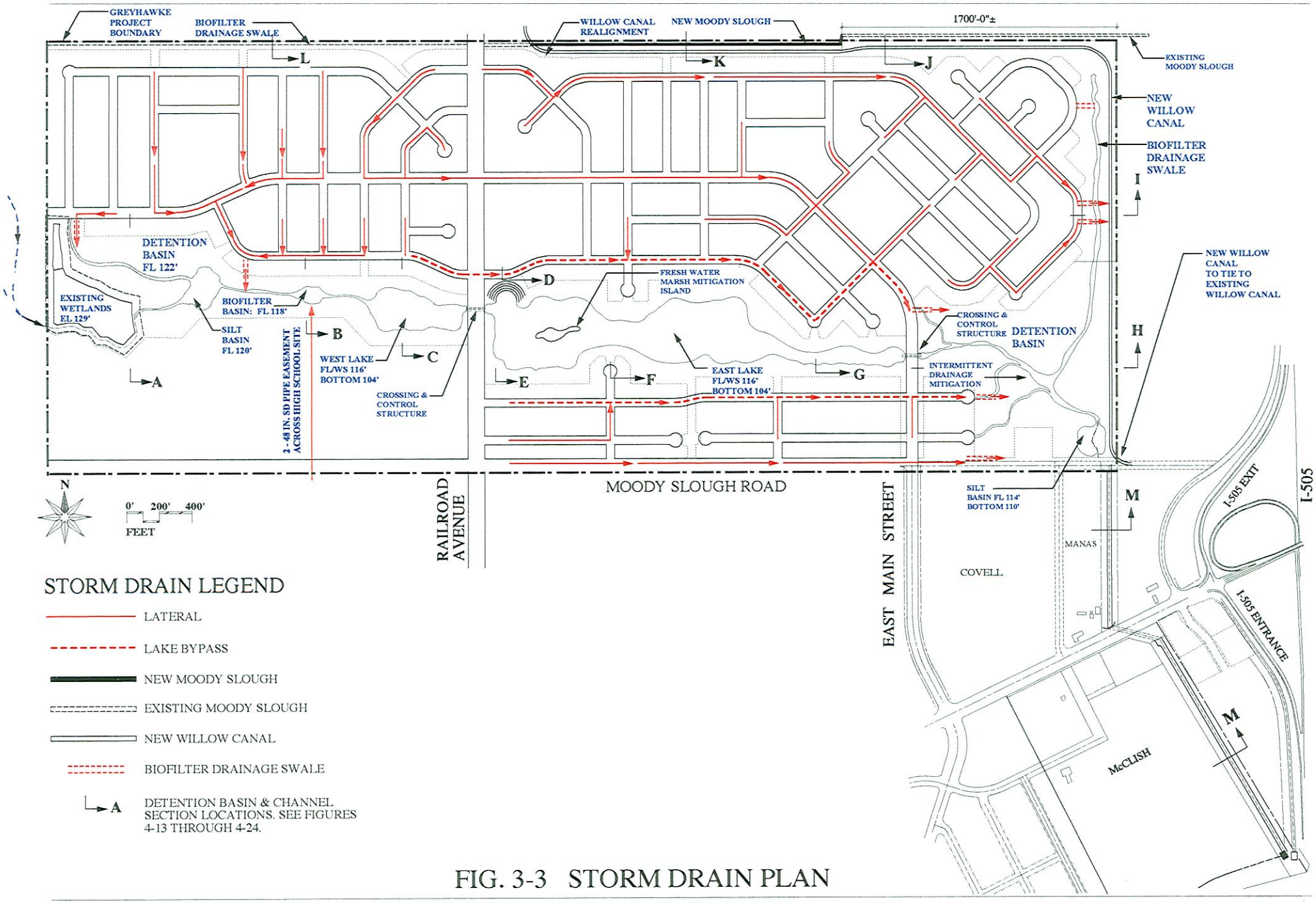


FIG. 3-3 STORM DRAIN PLAN

3.9 Utilities

3.9.1 Sanitary Sewer

The existing grade of the project site slopes naturally from west to east. This direction of fall will be continued when the site is filled, though the slope will be flatter and more uniform along the length of the development.

The sanitary sewers will flow by gravity to a new trunk line in either Railroad Avenue or Moody Slough Road (see Figure 3-4, *Sanitary Sewer Plan*). From there sewage will flow by gravity to a new pump station located near the intersection of Railroad Avenue and Moody Slough Road. The pumps will lift the flow from the Moody Slough Road sewer to an existing force main located in Railroad Avenue. This force main runs north along Railroad Avenue and then west along the north property line, eventually discharging at the existing City of Winters Wastewater Treatment Plant north of Road 32a. The pump station will be sized to serve Greyhawk and additional properties tributary to the new Moody Slough Road gravity sewer.

At this time it is not known whether the existing force main will be able to handle the additional flows from the Greyhawk area. In the event that further investigations find that this main cannot handle these Greyhawk flows the project will build a new main parallel to the existing main from the Project pump station to the treatment plant.

The quantity of wastewater generated by this development has been estimated as follows:

TABLE 3.3 -- SANITARY SEWAGE GENERATION

LAND USE	AREA	FLOW/ACRE	TOTAL FLOW
	(acres)	(gal/acre/day)	(gal/day)
Residential Use (w/roads)	230.5	1,680[1]	387,200 gal
Neighborhood Commercial	1.0	2,500	2,500 gal
High School	46.6		34,000[1] gal
Fire Station	1.2		
Com. Center	2.0	2,500	5,000
Open Space	105.1	0	0 gal
Parks	13.6	200	2,700 gal
Infiltration & Inflow (approx.)		see note 2	160,000 gal
Total	400.0 ac.		591,400 gal

[1]Residential flow based on assuming overall average density in 3.6-5.6 DU/Acre range. Average density of Greyhawk is 4.9 DU/Acre.

[2]Infiltration & Inflow flow based on depth to water table and traditional construction methods and is estimate at 20,000 gallons per mile for the approximately eight miles of sewer in the project.

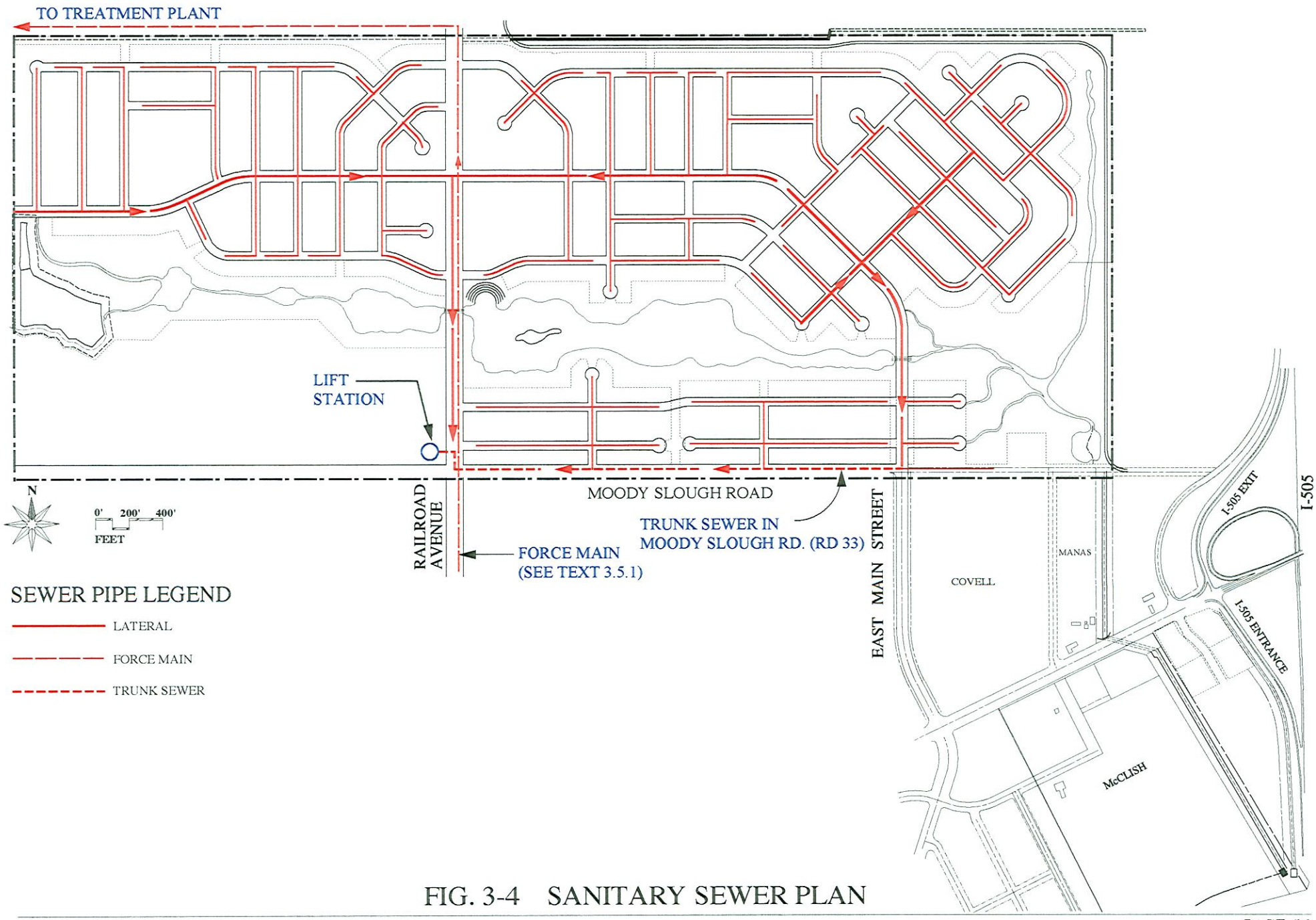


FIG. 3-4 SANITARY SEWER PLAN

3.9.2 Potable Water

Potable water demand is estimated to be 1,351,000 gallons per day (see below). This water is to be supplied to the Project from a new water well constructed within the development. As the capacity of a water well is typically 1,500 gallons per minute this well will be able to provide up to 2,160,000 gallons per day, or some 809,000 gallons per day more than the Greyhawk demand. The extra water will be available to augment the City of Winters fire protection capability.

Table 3.4 -- POTABLE WATER DEMAND

LAND USE	AREA	FLOW/ACRE	TOTAL FLOW
	(acres)	(gal/acre/day)	(gal/day)
Residential Use (w/roads)	230.5	4,452[1]	1,026,200 gal
Neighborhood Commercial	1.0	2,500	2,500 gal
High School	46.6		138,000 gal[2]
Fire Station	1.2		
Com. Center	2.0	2,500	5,000
Open Space	105.1	2,235[3]	118,500 gal
Parks	13.6	4,470	60,800 gal
Total	400.0 ac.		1,351,000 gal

[1]Residential flow based on assumed overall average density in 3.6-5.6 DU/Acre range. Average density of The Project is 4.9 DU/Acre.

[2]High school assumed at 34,000 gal/day for student load and 50% of acres irrigated at 2,235 gal/acre/day.

[3]Assume 50% of the area is irrigated.

The proposed ground surface of the development will vary from elevation 129 on the east to approximately elevation 135 on the west. Because the site is relatively flat only one pressure zone will be required. This is in conformance with previous Winters Water Supply Master Plans.

The proposed potable water distribution system will consist of a network of pipelines routed along the main roads of the development (see Figure 3-5, *Water Service Plan*). This network will be connected to the City of Winters water supply system by a water main in Railroad Avenue and by connections at various locations along Moody Slough Road.

3.9.3 Irrigation District Service

The Yolo County Flood Control District (YCFCD) provides agricultural irrigation water to the property. Willow Canal, a YCFCD irrigation canal, serves the Greyhawk property, as well as large agricultural areas to the east. The project will relocate this channel, removing it from the center of the property.

Policy 3.16 Reconstruction of the Willow Canal. The Willow Canal shall be reconstructed along the northern and eastern perimeters of the site (see Figure 3-3, *Storm Drainage Plan*) and shall re-connect to its existing alignment at the southeastern corner of the property.

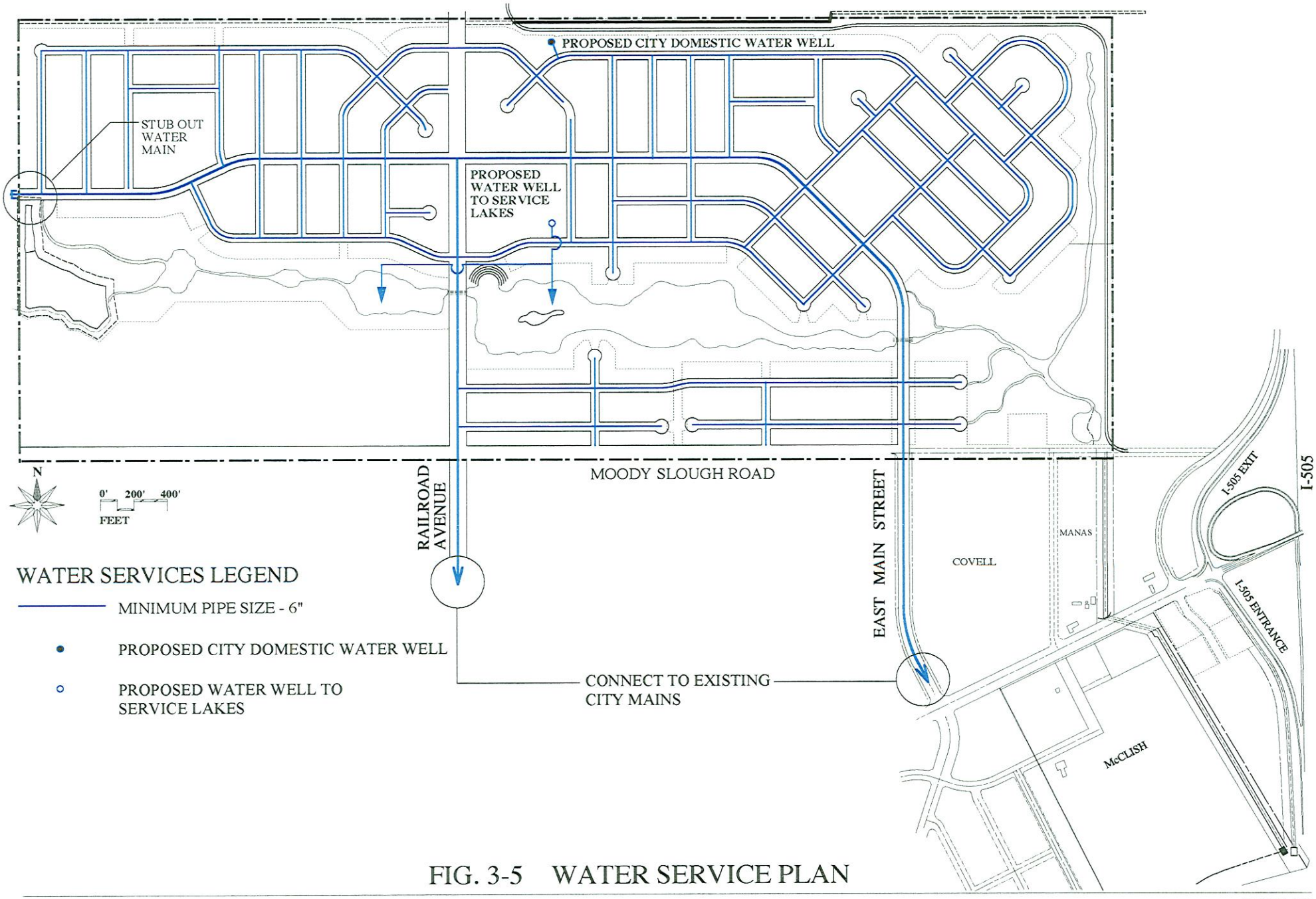


FIG. 3-5 WATER SERVICE PLAN

3.10 Phasing

Development will begin with the excavation of the detention basins / lakes and the construction of the off-site flood control features (see below). During this same time period Main Street will be constructed south from the property boundary to Highway 128. Urban development on the property will begin at the Main Street / Moody Slough intersection and proceed to the west as shown in Figure 3-6, *Phasing Plan*.

Policies relating to the timing of significant features are further described in the following policies.

Policy 3.17 Phasing. The following describes the number of units and key features within each development phase. A portion of the affordable housing units will be constructed within each phase. The total unit count for each phase is approximate and may be adjusted administratively upon approval of the Community Development Director.

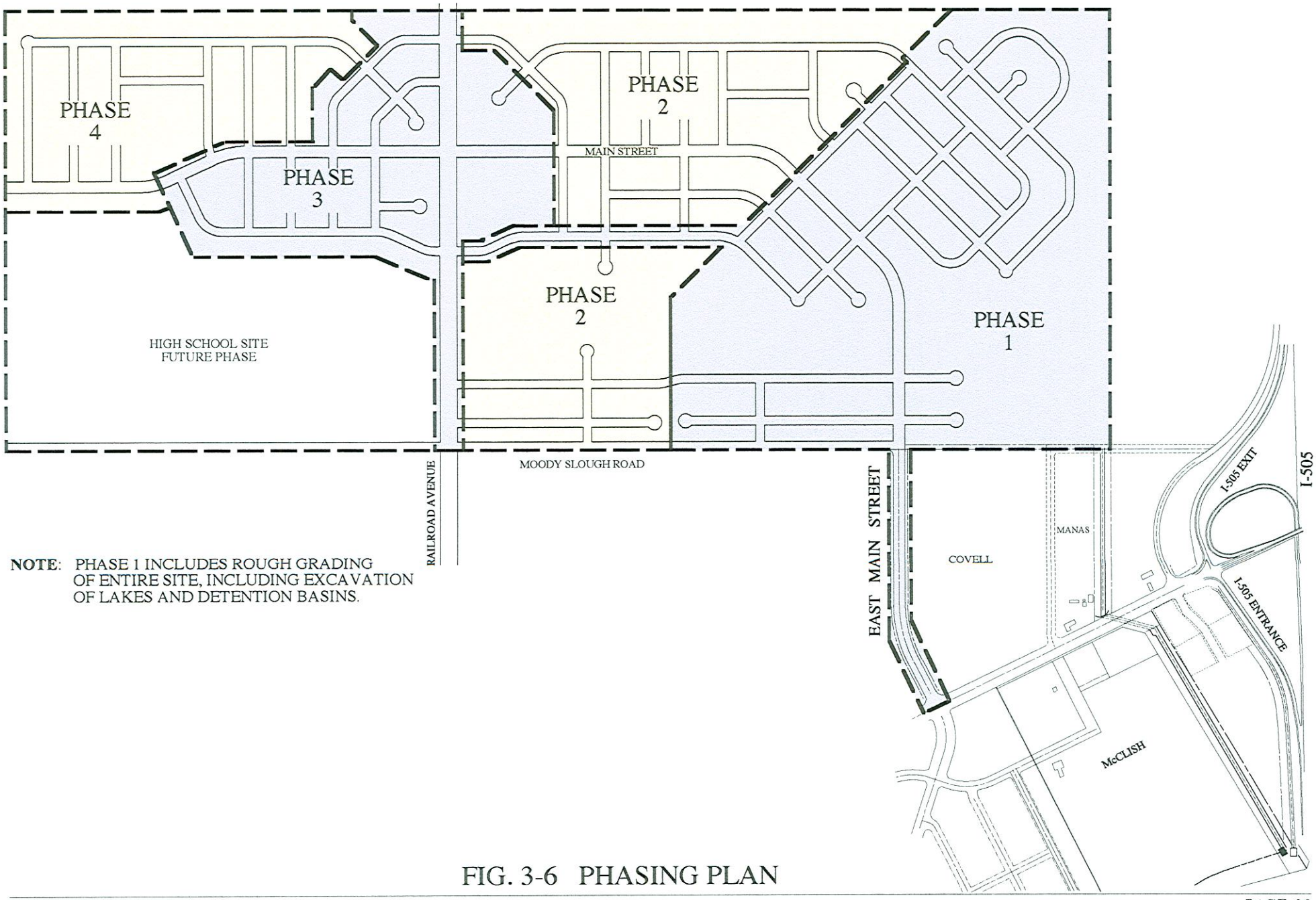
TABLE 3.5: PHASING

Phase	Residential Units	Significant Features
1	317	Site mass grading, East and West Lakes, habitat mitigation features, road connections to Highway 128 and Railroad Avenue, East Neighborhood Park and water wells.
2	336	Railroad Avenue and Moody Slough Road, east of Railroad Avenue, improvements.
3	314	Community park and community center building.
4	155	West Neighborhood Park

Policy 3.18 Construction of Drainage Improvements. The on-site detention ponds and off-site conveyance facilities shall be completed before occupancy of the first residence.

Policy 3.19 Construction of Main Street from Highway 128 to Moody Slough Road. Main Street shall be constructed from the intersection at Highway 128 before the first home is occupied.

Policy 3.20 Construction of Connection to Railroad Avenue. A suitable secondary fire access connection, shall be completed from the Phase 1 boundary to Railroad Avenue before occupancy of the fiftieth residence in Phase 1.



NOTE: PHASE 1 INCLUDES ROUGH GRADING OF ENTIRE SITE, INCLUDING EXCAVATION OF LAKES AND DETENTION BASINS.

FIG. 3-6 PHASING PLAN

OFF-SITE FLOOD CONTROL FEATURES

3.11 Flood Hazards

Generally the land north and west of Winters slopes down from the foothills to a floodplain on the northeast side of town. Here the plain has a gentle slope southeasterly to Putah Creek. Natural creeks and drainages in the area tend to follow this direction of drainage.

Within this floodplain the culverts under Interstate 505 do not have the capacity to carry the water from a major storm event in these watersheds to the west. This causes the water to backup and overflow out of the drainage channels leading to the culverts. This overflow then spreads south and east following the west side of the highway embankment. This overland flow then spreads into the city of Winters. This flooding is depicted in the FEMA flood maps (Community Panel No. 0604250001C, and adjoining area, Inset B on Panel 0604230500B, revised November 1998).

The low lands on the east side of the Greyhawk properties are part of this low flood plain, which pools water during significant storm events. Once the runoff decreases this pond disappears as the water is carried away by the highway culverts and drainage channels.

Other on-site flooding is caused by inadequate culvert capacity on Moody Slough at Railroad Avenue and at a siphon where Moody Slough drainage is carried under the Willow Canal.

3.12 The 1998 Corps of Engineers Project

From 1993 to 1998 the US Army Corps of Engineers (USACE), in cooperation with the City of Winters and the Yolo County Flood Control and Water Conservation District, prepared a plan to alleviate flooding in Winters. The report entitled, *Winters Flood Control Project, Winters California, Design File No. PC-25-10*, January 9, 1998, and the accompanying *Final Feasibility Report Environmental Assessment/Initial Study*, February 1997, suggested that a low east-west levee be constructed on the north edge of town east of Railroad Avenue. This levee would follow approximately the south property line of the Greyhawk lands. From this point the USACE project would have routed a conveyance facility east and then south, roughly paralleling the edge of the Interstate 505 right of way until it discharged to Putah Creek immediately west of the I-505 bridge. This conveyance was designed for a flood flow of approximately 1,000 cubic feet per second. These facilities are shown in Figure 3-7, *USACE Flood Control Proposal & Greyhawk Off Site Improvements Plan*. This proposal was evaluated in a Federal environmental document and cleared for construction.

Since the completion of the USACE report no federal or local funding has been available to constructed the planned improvements.

3.13 The Greyhawk Flood Control Concept

The Project will construct needed flood control facilities in a fashion similar to, but slightly different from, the USACE proposal. The Greyhawk flood control project is shown in Figure 3-7, *USACE Flood Control Proposal & Greyhawk Off-Site Improvements Plan*, and is described in Table 3.5, *USACE and Greyhawk Drainage Facilities*. This table compares the features of the USACE proposal with the proposed comparable Greyhawk project features.

TABLE 3.5, USACE AND GREYHAWK DRAINAGE FACILITIES

FEATURE	USACE PLAN	GREYHAWK PLAN
Barrier to flooding from north	Build a levee east from Railroad Avenue along south Greyhawk property line	Provide barrier by raising Greyhawk site above flood levels.
Drain water trapped south of barrier discussed above	Construct a ditch along south side of proposed levee.	Provide storm drain line in Moody Slough Road.
Construct conveyance from east end of levee to Putah Creek	Open channel to be built east from southeast corner of Greyhawk site to existing I-505 frontage road. Pipe conveyance under frontage road to south of Highway 128. Open channel paralleling I-505 south to Putah Creek.	Open channel to be built south from southeast corner of Greyhawk site to Highway 128. Pipe conveyance under Highway 128. Open channel directly south to Putah Creek.
Build discharge structure at Putah Creek	Construct 1,000 cfs capacity discharge structure at Putah Creek adjacent to I-505 bridge.	Construct 1,000 cfs capacity discharge structure at Putah Creek adjacent to I-505 bridge.

3.14 Off-Site Conveyance and Discharge Facilities

On-site drainage facilities, and the raising of the Greyhawk home sites above the 100-year flood level is discussed in Sections 3.4 through 3.6 above. The off-site facilities identified on Figure 3.7, *USACE Flood Control Proposal & Off-Site Improvements Plan,* will be constructed as follows:

Policy 3.17, Off-Site Storm Water Conveyance and Discharge Facilities. The Project shall construct the following off-site drainage features. These features may vary slightly in location and sizing from those described as final design and coordination with the City of Winters, YCFCD and USACE is completed.

Greyhawk South Boundary to Highway 128. An open channel shall be constructed adjacent to the east boundary of the Manas property just south of the Project site. A separate parcel shall be created to contain this drainageway. The new parcel will have the land use designation of Public Open Space, O-S.

Pipe Conveyance Under Highway 128. Design flows shall be carried under the highway in pipes of approximately three arch culverts. A Caltrans encroachment permit will be required for this conveyance to be constructed.

Highway 128 South to Putah Creek. An open channel shall be constructed adjacent to the east boundary of the McClish property south of Highway 128. A separate parcel will be created to contain this drainageway. The new parcel will have the land use designation of Public Open Space, O-S. At Putah Creek a discharge structure shall be constructed adjacent to the I-505 bridge

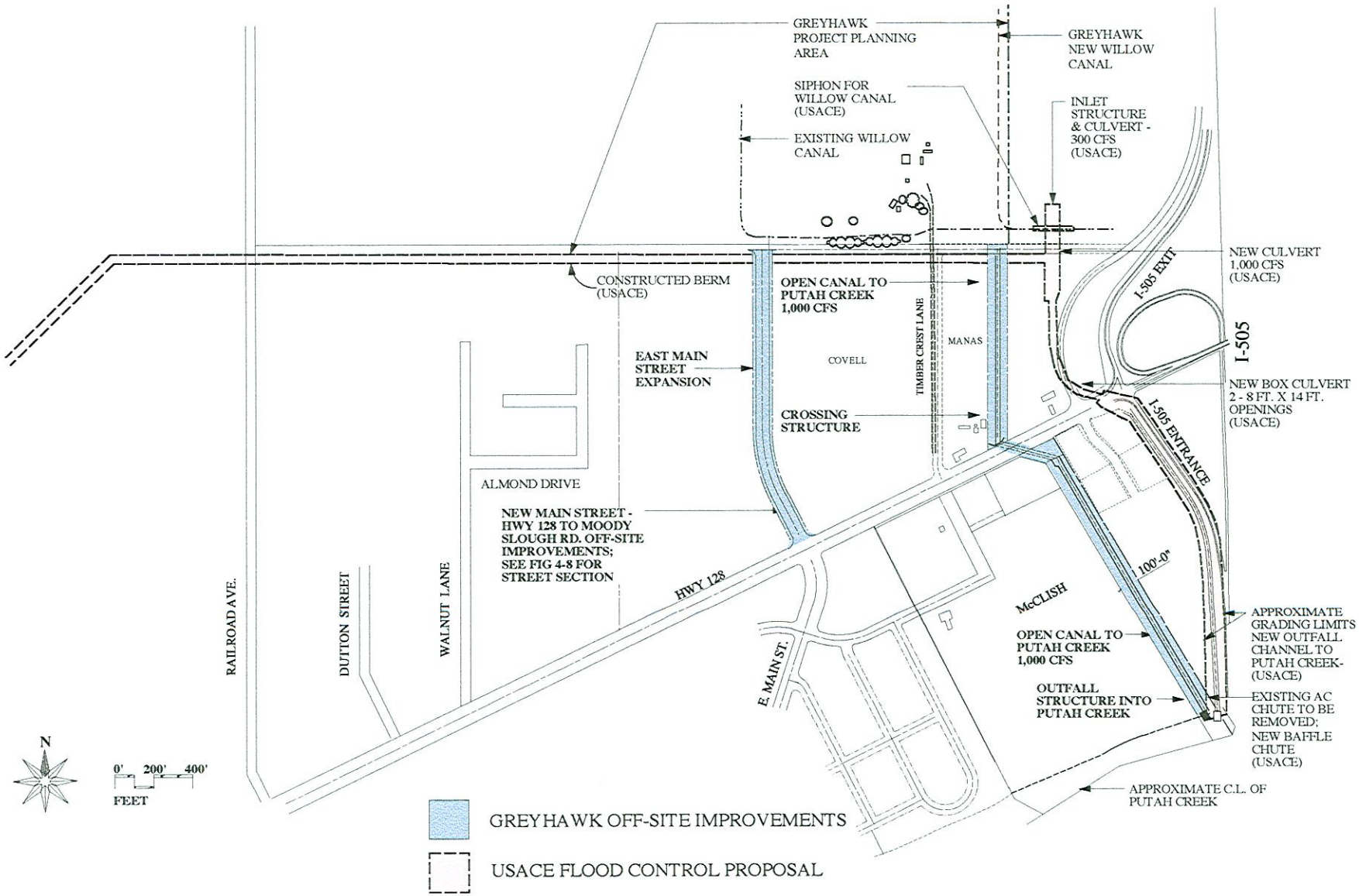


FIG. 3-7 USACE FLOOD CONTROL PROPOSAL & GREYHAWK OFF-SITE IMPROVEMENTS PLAN

Chapter 4 – DESIGN STANDARDS AND GUIDELINES

PLAN AREA

This chapter presents the standards and design guidelines that will ensure Greyhawk develops with a high level of quality in its public and private areas. These design standards are portrayed in three overall concept drawings. These drawings are Figure 4-1, *Illustrative Concept Plan*, Figure 4-2, *Commercial & Public Services Plan* and Figure 4-3, *Village Core Plan*.

The implementation of these guidelines will integrate diverse areas of the Plan that will develop over a number of years. They will ensure a cohesive character for Greyhawk yet allow flexibility for individual project and public facilities design.

4.1 Land Use

Greyhawk will be developed largely in conformance with existing City of Winters zoning standards. In Chapter 5, *Implementation*, Table 5.1, *Zoning Classifications*, shows how each land use designation of this Plan coordinates with City zoning districts. This table establishes Greyhawk-specific zoning districts GR-1, GR-2, GR-3 and GR-4 which closely parallel existing City R-1, R-2, R-3 and R-4 districts. The following sections describe the Greyhawk specific zoning standards that apply to the residential zoning districts.

Policy 4.1 Greyhawk Zoning. The following sections contain the development standards for the Project. Unless otherwise modified here, the existing provisions of the City of Winters Zoning Ordinance, latest amended edition, shall apply.

4.1.1 Residential Uses

Policy 4.2 Modification of Zoning Standards. This Plan, as described in Table 5.1, *Zoning Classifications*, establishes zoning districts GR-1, GR-2, GR-3 and GR-4. The lot development standards of this Plan shall apply within the area covered by these zoning designations.

Policy 4.3 Permitted, Conditionally Permitted and Temporary Uses. The permitted, conditionally permitted and temporary use lists of the City's residential zoning categories shall apply in the Plan area.

Policy 4.4 Residential Lot And Structure Standards. Development shall comply with Table 4.1, *Lot and Building Standards*.

4.1.2 Residential Design Guidelines

Policy 4.5 Subdivision Design. Design features which are to be included in subdivision plans are as follows:

(a) When designing the subdivision, create buffers between residential, commercial and public uses with landscaping.

(b) Uses at the edge of residential areas should be compatible with adjacent existing development. The character and scale of new neighborhoods should complement the adjacent neighborhoods, although it is not necessary that they be identical.

(c) The subdivision shall be designed so that the streets, sidewalks, pedestrian and bicycle ways connect with the appropriate neighborhood open space and park system. Wherever possible, cul de sacs shall provide a connection from the cul de sac bulb to open space or the next street.

(d) Incorporate the street design guidelines and parking standards from Section 4.2.

(e) Provide internal accessways between multi-family and single-family areas.

(f) Multi-family units should have parking areas visible from the adjacent street to provide safety and allow easy police surveillance; however, landscaped berming should be provided in the setback to minimize visual impact.

(g) The design of multi-family developments should provide a sense of territoriality so that strangers loitering within the complex can be identified from residents.

(h) Within each subdivision, provide a mix of housing types and unit designs.

(i) Unit setbacks from streets should be varied to provide a more interesting streetscape.

Policy 4.6 Residential Design. The following should be considered when designing homes within the subdivisions:

(a) The architectural aesthetic character should be "traditional style" reminiscent of the homes prevalent in the older part of Winters which were built between 1900 and 1930. The design of these homes borrowed heavily from the provincial architecture of various parts of western Europe. The style features simplified classical trim and details, steeply sloped roofs (7:12 and steeper) and traditional material palettes (including stucco, brick veneer, wood shingles and stone veneer).

(b) Care should be given to the design of all four sides of the homes to insure the design detail is consistent from all views: (especially for homes on corner lots and where the rear of the homes have lake or park frontage).

(c) To achieve the "old town" quality of the original homes , a variety of color schemes, wall materials, and roof materials should be used.

(d) Rather than use pastel color schemes of varying tones of beige, color schemes should include bold accent colors for window trim, doors, shutters and eave lines.

(e) Utilize different roof materials and colors on adjacent houses in order to, as much as possible, achieve the architectural character of "old town" Winters.

(f) The placement of garages should vary between adjacent homes. The garage may be detached and located to the rear of the home; or the garage may be side access or direct frontal access when located on the front of the house.

(g) Developers should be encouraged to construct driveways that have a variety of finishes or materials and design features. Washed aggregate concrete, inter locking pavers, brick bordering and lawn inserts should be used to achieve a variety between adjacent homes.

(h) See prototype design for homes in Figures A-1 through A-12, at the back of this document.

Table 4.1, Lot and Building Standards

Land Use	Lot Standards			Setback Standards				Building Standards		
	Min Lot Size (sf)	Min Width or Depth	Max Lot Depth/Width Ratio	Front	Secondary Frontage[3]	Side (min/total)	Rear[6]	Minimum Building Separation	Max. Height[7]	Max Site Coverage
Detached Housing										
R-R	43,560	100	3:1	25	20	15	25	30	30	n/a
GR-1	7,000	70[1,2]	3:1	20[4]	15	7.5/15	20	10	35	0.50
GR-2	5,000	60[1,2]	3:1	20[4]	15	7.5/15	20	10	35	0.50
GR-3	3,000	35	3:1	20[4]	20	5/10	20	6	35	0.60
Attached Housing										
GR-3	10,000	80	3:1	20	20	15[5]	20	20	45	0.60
GR-4	10,000	80	3:1	20	20	15[5]	10	20	45	0.70

Land Use	Lot Standards			Setback Standards				Building Standards		
	Min Lot Size (sf)	Min Width or Depth	Max Lot Depth/Width Ratio	Front	Secondary Frontage	Side (min/total)	Rear	Minimum Building Separation	Max. Height	Max Floor Area Ratio
Neighborhood Commercial										
C-1	10,000	80	4:1	20	20	10	10	20	30	0.40

Notes:

1. Corner lots shall be ten feet wider.
2. Cul-de-sac lots shall be a minimum of 42' wide along their street dimension.
3. Add five feet if lot is located on Railroad Avenue.
4. Front setback to garage to be a minimum of 15' on swing-in garages.
5. For attached housing add five feet to side yard setback for each story over first story.
6. Rear yards shall be twenty percent of lot depth, up to the maximum listed.
7. Building height exceptions/modifications are allowed for such elements as chimneys and antennas. See Zoning Ordinance section 8-1.5302(A)

FIG. 4-1 ILLUSTRATIVE CONCEPT PLAN

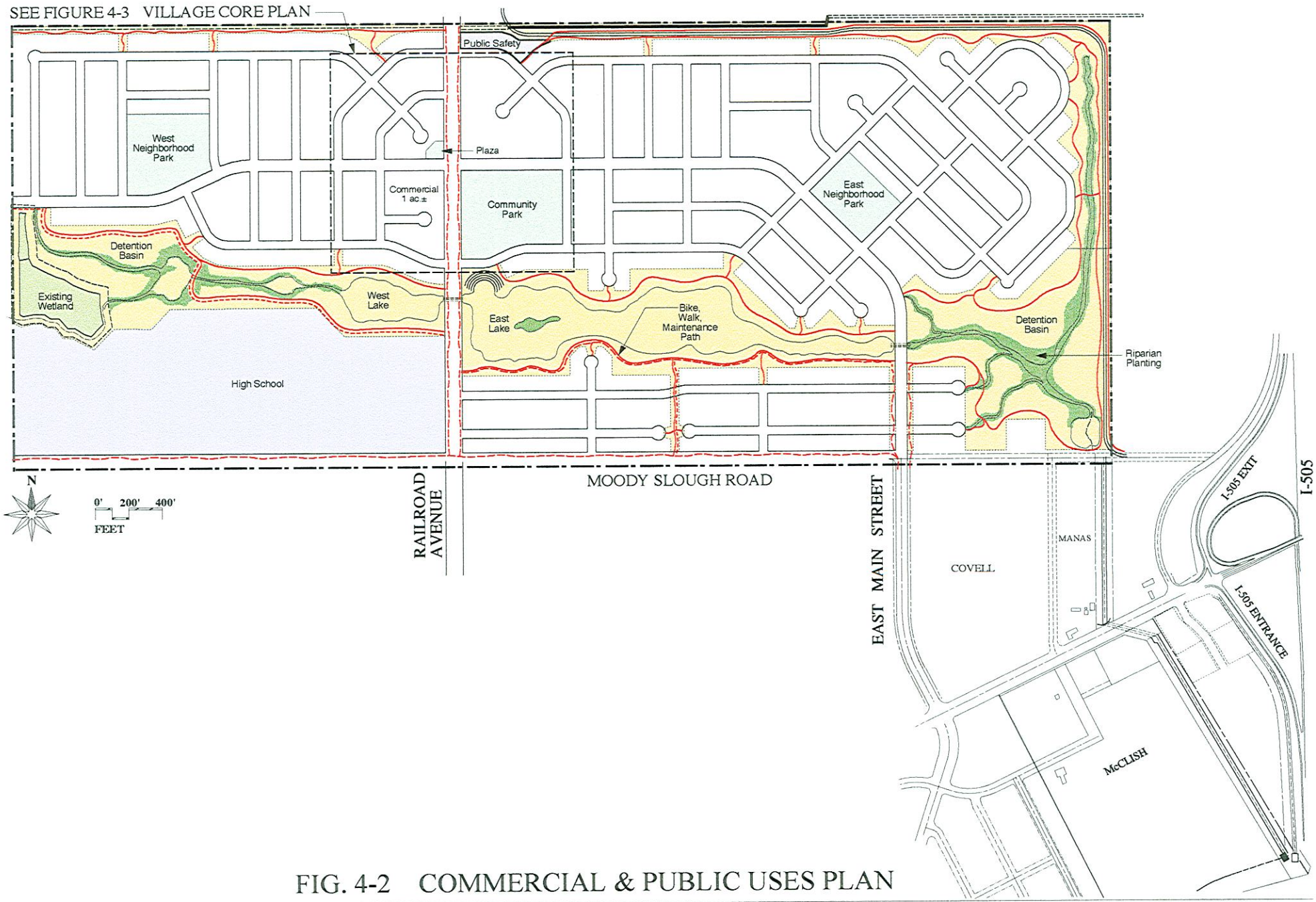


FIG. 4-2 COMMERCIAL & PUBLIC USES PLAN

FIGURE 4-3 VILLAGE CORE PLAN

4.2 Circulation

4.2.1 Roadway Standards

The circulation system has been designed to serve the needs of the Specific Plan and to link to the City's existing roadway network.

This Plan will construct a portion of the possible ultimate cross-section on Railroad Avenue, Moody Slough Road and the off-site portion of Main Street. The following describes how these three streets are to be funded and constructed.

Railroad Avenue:	See Figure 4.4, *Railroad Avenue - Without Las Lomas* and Figure 4.5, *Railroad Avenue - With Las Lomas*. The Project will construct a two-lane road in a right-of-way sized to ultimately accommodate a four-lane arterial. In the event the proposed Las Lomas project, or any other project of similar size, is developed north of the Specific Plan area the road may be expanded to four-lanes. The subsequent project would pay for the widening to four-lanes.
Main Street - Moody Slough Road to Highway 128:	See Figure 4-7, *Main Street -- Highway 128 To Moody Slough Road - Interim*, and Figure 4-8, *Main Street -- Highway 128 To Moody Slough Road - Ultimate*. The Project will construct a two-lane road in a right-of-way sized to ultimately accommodate a four-lane arterial. In the event the off-site property containing this road section (Covell) is developed the road may be expanded to four-lanes. The subsequent project would pay for the widening to four-lanes.
Moody Slough Road -- Along Greyhawk Frontage	See Figure 4-9, *Moody Slough Road - Greyhawk Improvements* and Figure 4-10, *Moody Slough Road - Two Travel Lanes* and Figure 4-11 *Moody Slough Road - Four Travel Lanes*. The Project will construct a 24' wide two-lane road. The crown of the road will be off-center as shown in Figure 4-9. Future development on the south side of Moody Slough Road would construct the remainder of the arterial section.

Policy 4.7 General Streetscape Design Requirements. The design of Specific Plan streets shall conform to Table 4.2 and the cross sections shown on Figures 4.4 to 4.12.

TABLE 4.2: ROADWAY STANDARDS

Name	Category	Lanes	Traveled Way	Figure Reference
Railroad Avenue	Arterial	2	24' (note 1)	4-4, 4-5
Main Street, On-Site	Collector	2	40'	4-6
Main Street, Off-Site	Arterial	2	24' (note 2)	4-7, 4-8
Moody Slough Road	Arterial	2	24' (note 3)	4-9, 4-10, 4-11
Neighborhood Street	Local	2	36'	4-12

Notes:

1. Two-lane road in four-lane right-of-way. With Las Lomas project Traveled Way to be expanded to 102' by others.
2. Two-lane road in four-lane right-of-way. When land between Moody Slough Road and Highway 128 is developed Traveled Way to be expanded to 62' by others.
3. The Project to build two-lane section shown in Figure 4-9. Future development, south of Moody Slough Road, to build Traveled Way to full 62' width (see Figure 4-11) (Future Traveled Way to be 38' if standard is changed to two-lanes per Figure 4-10).

4.2.2 Non-Vehicular Circulation Standards

Figure 3-2, *Circulation Plan*, indicates the proposed bicycle and pedestrian paths and trails of the Plan. Facilities to be constructed as part of streets are also shown as part of street sections in this chapter. In general, a complete on-site pedestrian circulation system will provide the opportunity for non-vehicular access to all parts of the Plan. These trails and paths are to connect to existing and future off-site city-wide trail systems.

Policy 4.8 Pedestrian Connections. Convenient, pedestrian connections shall be provided to connect residential areas with nearby public facilities and open space, and to facilitate pedestrian movement between and within neighborhoods.

Policy 4.9 Trail System. Trails shall be provided as described by Figure 3-2, *Circulation Plan*. Locate, design, and develop trail routes with sensitivity to their potential environmental, recreational, and other impacts on adjacent lands and private property. Trail access should be provided for a range of user capabilities and needs in a manner consistent with State and Federal regulations.

4.2.3 Parking Standards

Policy 4.10 Off-Street Parking. Off-street parking shall conform to the requirements of the City of Winters Zoning Ordinance.

4.3 Privacy Walls

4.4 Noise Standards

Policy 4.11 Exterior and Interior Noise Standards. All structures shall meet the noise standards of the Winters General Plan.

Policy 4.12 Noise Standards for the Commercial/Residential Interface. New commercial projects shall be designed to minimize noise impacts on neighboring noise-sensitive residential areas. Reduced noise levels can be achieved with landscaping and additional setbacks where necessary.

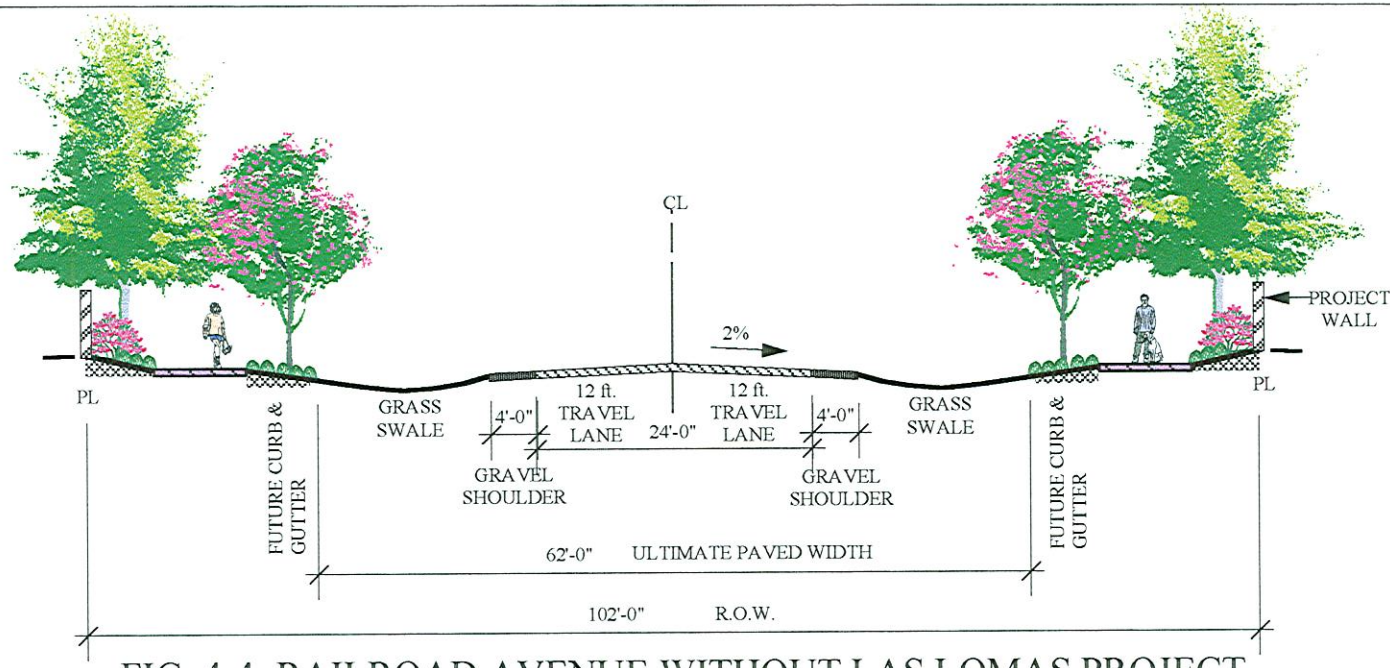


FIG. 4-4: RAILROAD AVENUE WITHOUT LAS LOMAS PROJECT

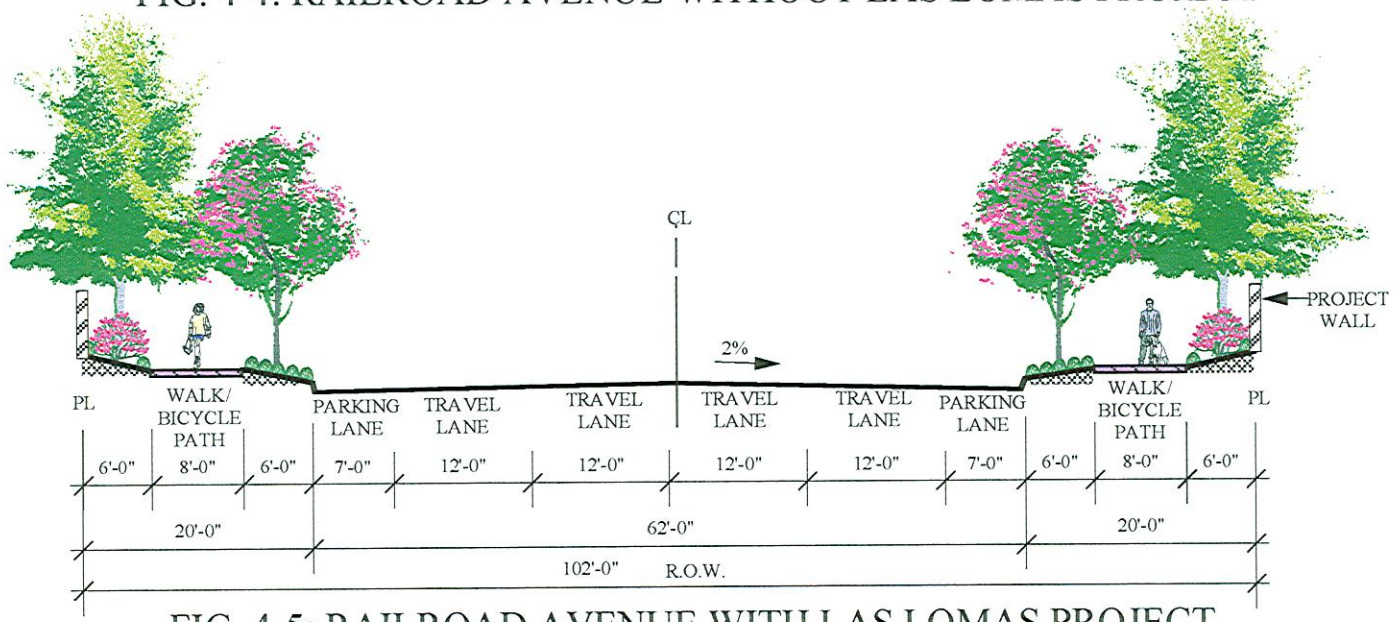


FIG. 4-5: RAILROAD AVENUE WITH LAS LOMAS PROJECT

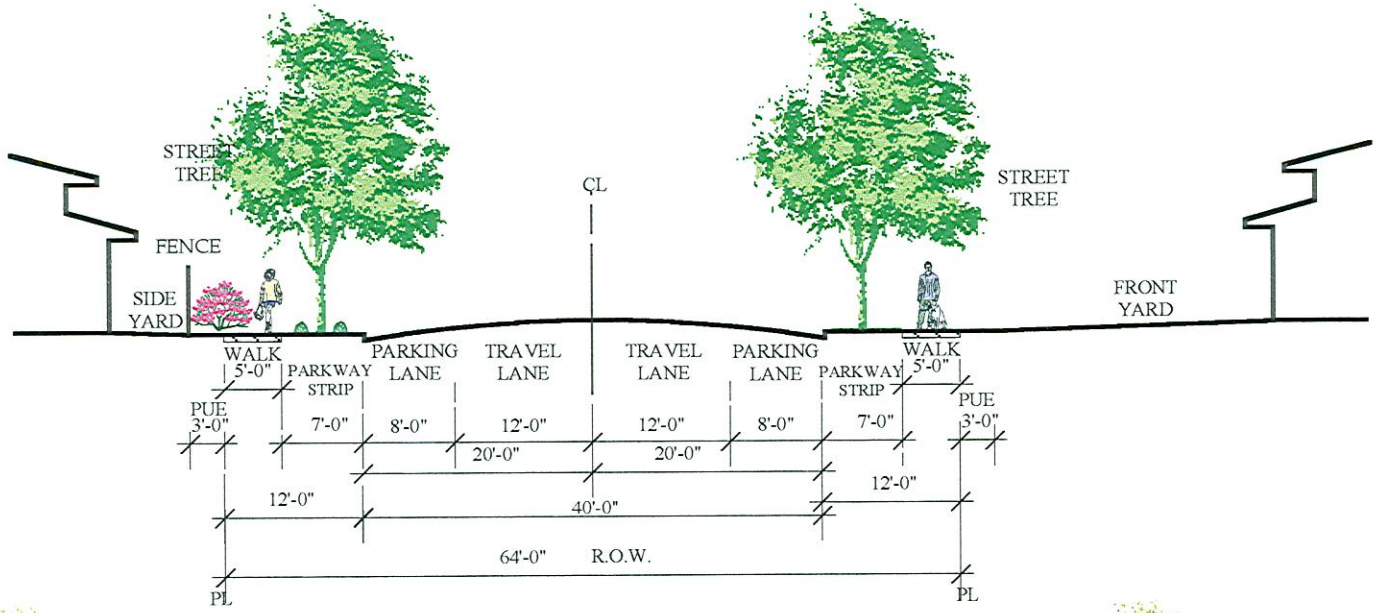


FIG. 4-6: MAIN STREET WITHIN PROJECT

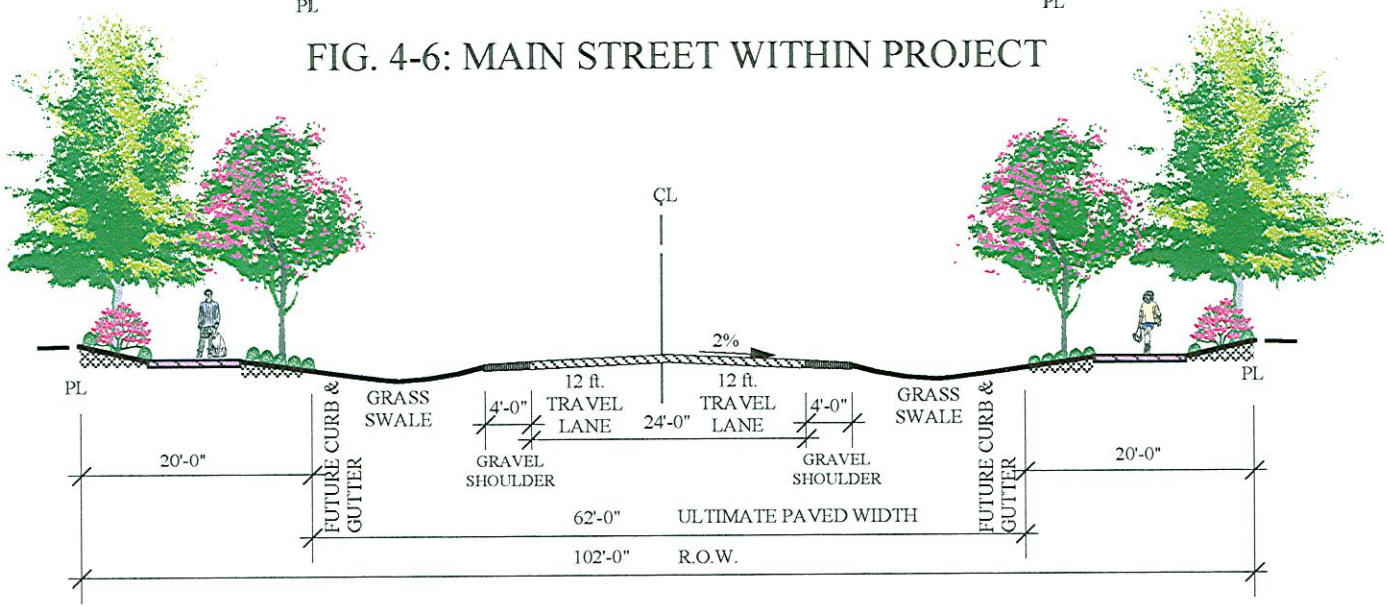


FIG 4-7: MAIN STREET - HWY 128 TO MOODY SLOUGH ROAD
GREYHAWK IMPROVEMENTS

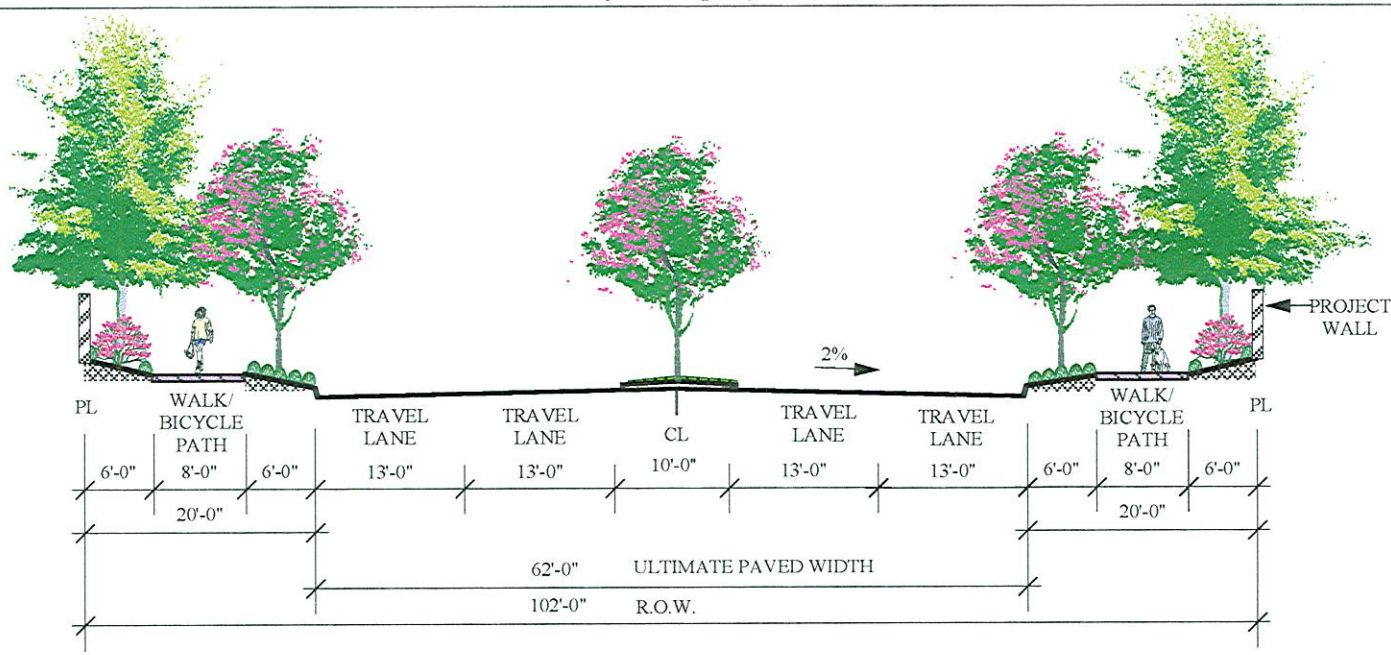


FIG. 4-8: MAIN STREET-HWY 128 TO MOODY SLOUGH ROAD ULTIMATE IMPROVEMENTS

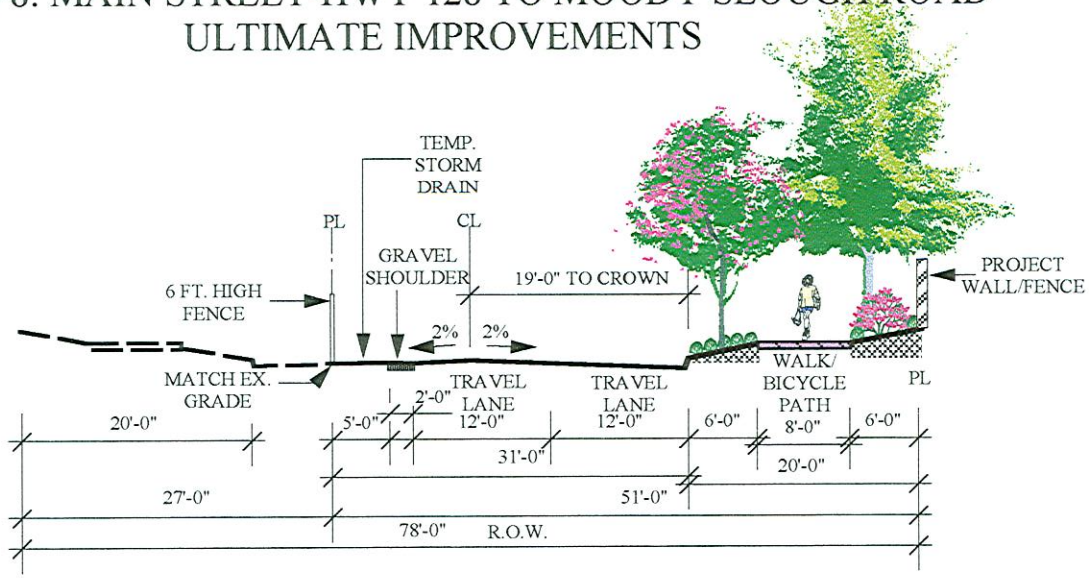


FIG 4-9: MOODY SLOUGH ROAD - GREYHAWK IMPROVEMENTS

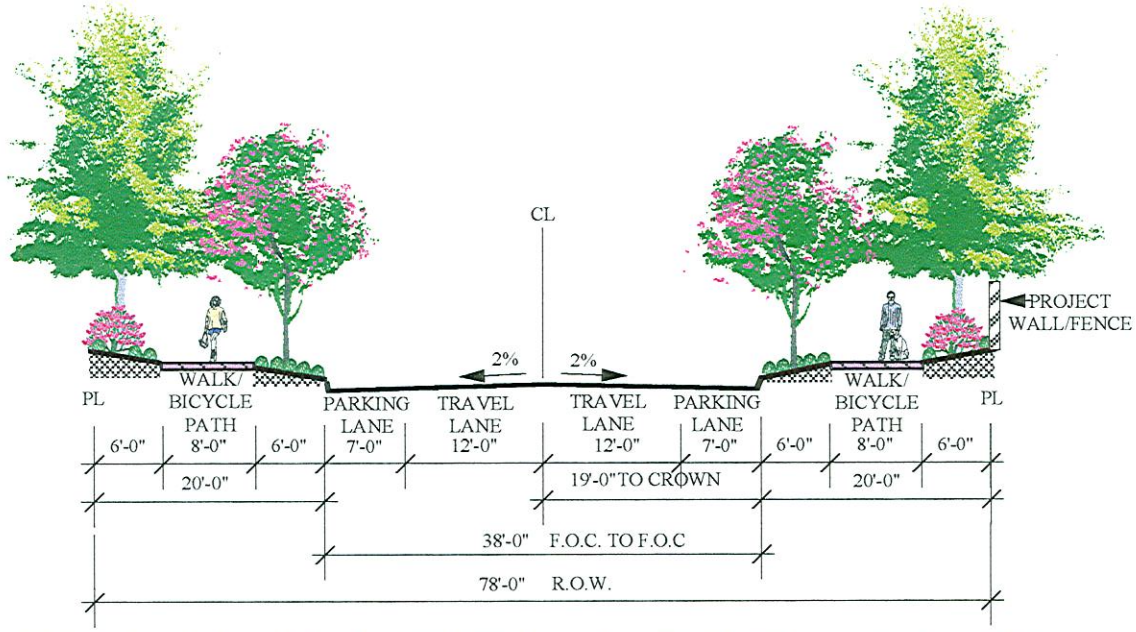


FIG 4-10: MOODY SLOUGH ROAD - TWO TRAVEL LANES

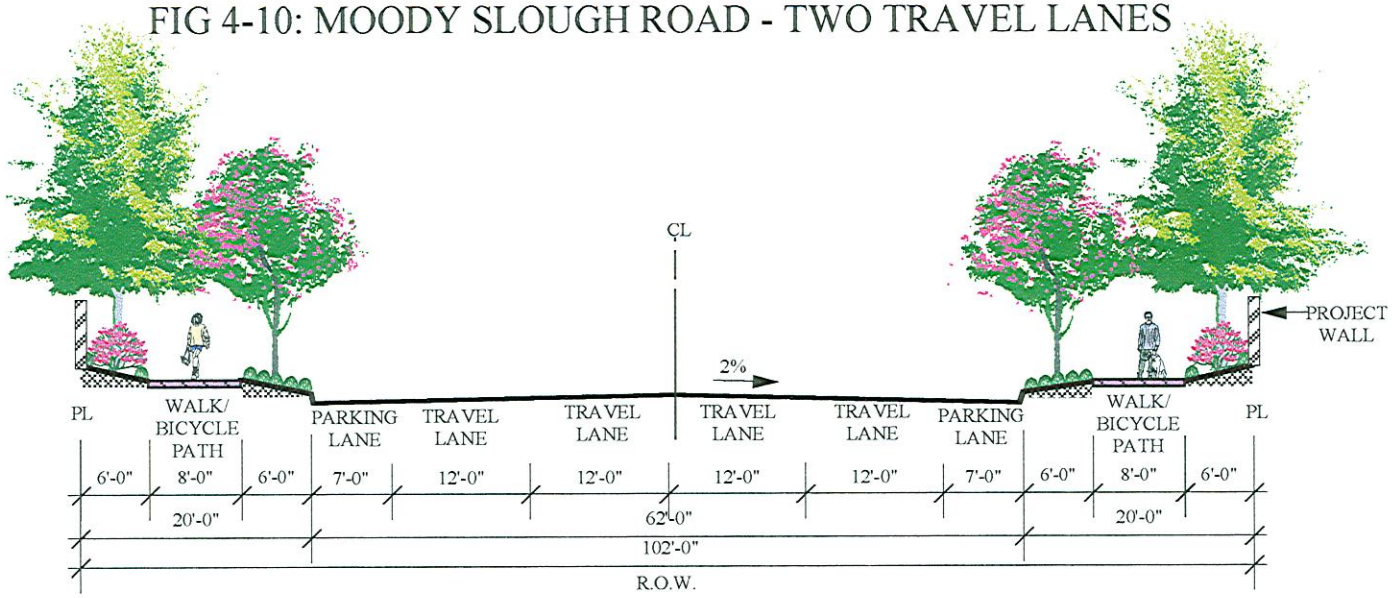


FIG. 4-11: MOODY SLOUGH ROAD- FOUR TRAVEL LANES

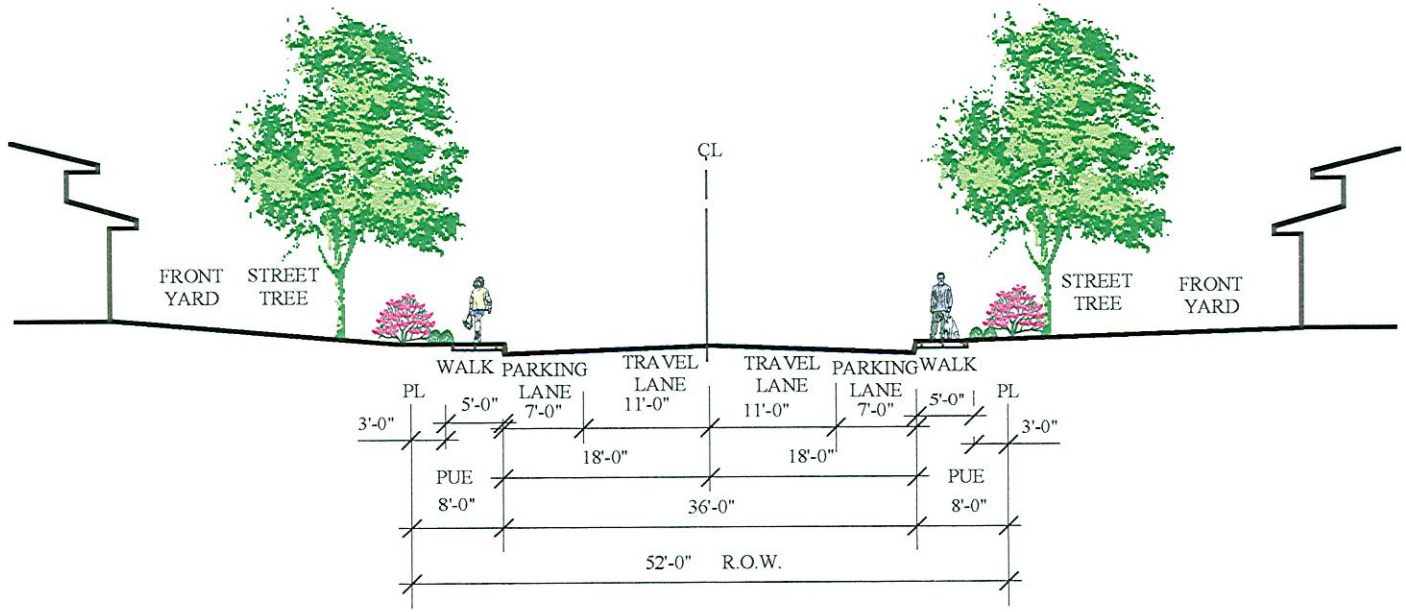


FIG. 4-12: NEIGHBORHOOD STREET

4.5 Air Quality Standards

Policy 4.13 Construction Air Quality. All mass grading, road and utility construction projects shall establish dust control plans to ensure that construction dust is controlled.

4.6 Infrastructure and Building Construction Standards

Policy 4.14 Resistance to Ground Shaking. All structures shall be built to seismic standards of the most recent edition of the Uniform Building Code effective at the time of development and designed and constructed to withstand ground shaking forces of a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. Utilities shall be constructed to the latest state requirements for seismic safety.

Policy 4.15 Seismic Risk Reduction Measures. All construction shall incorporate appropriate seismic risk reduction techniques in accordance with state law.

Policy 4.16 Grading Restrictions. The City shall condition development approvals to minimize discharge of sediment from grading into Putah Creek.

4.7 Fire Protection Design Standards

Policy 4.17 Fire Protection Design Standards. All new development shall provide all necessary water service, fire hydrants, and access roads consistent with Fire Protection District standards. In addition, all new development shall be constructed according to fire safety and structural stability standards contained in the latest adopted Uniform Fire and Building Codes and related regulations

Policy 4.18 Fire Protection Water Flow Rates. The Project development shall comply with the following minimum fire-flow rate design standards:

Development Category	Gallons Per Minute
Single-Family Residential	1,500
Multi-Family Residential	1,500
Neighborhood Commercial	3,000

4.8 Storm Drainage

These standards shall govern the construction of conventional pipe and channel storm drains, the detention basins and silt basin. Mitigation area and lake construction and open space corridor landscaping is described in the Parks and Open Space, Lake Construction and Natural Resources design guideline sections of this chapter.

Policy 4.19 Storm Water Collection Systems. Storm runoff collected from on and off-site areas shall be conveyed to the drainage and open space corridor in piped and open channel systems meeting the 10-year storm requirements as directed by City of Winters Engineering Design Standards.

Policy 4.20 Flows From Preserved Wetland Area. Erosion control measures shall be constructed protecting the perimeter of the preserved wetland area at the west boundary of the Plan area from eroding as runoff discharges into the detention basin.

Policy 4.21 Detention Basin Construction. Detention basins shall be constructed as shown in Figures 3-3, *Storm Drain Plan*, in the detention basin, lake and drainage corridor sections shown in Figures 4-12 through 4-119, and in accordance with the following criteria:

a) The detention basins shall be sufficiently deep to convey the 100-year storm with a minimum 1 foot freeboard at adjacent streets.

b) The lake and basin water surfaces shall be at or below the designed low flow lines so as to not interfere with flood conveyance.

c) Basin edges shall not exceed a 4:1 slope down into the basin, except as required at headwalls or transition slopes at walkways and maintenance roads.

Policy 4.22 West Siltation Basin. A one-acre, two-foot deep silt basin shall be constructed west of West Lake at the location shown in Figure 3-3, *Storm Drainage Plan*. This siltation pond shall be designed to capture the initial flows, which originate on lands to the west of Greyhawk, from a two to five-year storm event.

Policy 4.23 Biofilter Basin. A biofilter basin (a grassy basin designed to filter out contaminants originating from small storms or nuisance water) shall be constructed within the detention basin west of West Lake and east of the siltation pond. This basin shall be located at the outfall of the piped drainage system which is to carry

off-site flows from south of the project into the detention basin. The basin shall be sized to capture the low summertime flows originating from car washing and lawn watering.

Policy 4.24 Bio Channels. Bio channels (grassy swales designed to retain and filter low summertime flows) shall be constructed at the outfall where Project street drainage discharges into the detention basins. These bio channels shall be sized to capture and treat the low summertime flows originating from car washing and lawn watering.

Policy 4.25 East Silt Basin. A silt basin shall be constructed within the detention basin at the east boundary of the Plan area. This basin shall be sized to reduce silt transport to the off-site drain channel and Putah Creek.

4.9 Natural Resources

The storm drainage conveyance facilities described above will be the site of all on-site habitat mitigation activities. These facilities shall be designed to include the following provisions.

Policy 4.26 Habitat Mitigation Features. Storm water conveyance and detention features shall be designed with adequate capacity to contain habitat mitigation features. Habitat types to be replaced include intermittent drainages and associated riparian areas. Emergent marsh habitat will be created in an island in the east lake. Existing seasonal wetlands will be protected in place and will be integrated into project design.

4.10 Lakes

Policy 4.27 Lake Construction. The lakes shall be constructed in accordance with the following criteria:

a) Lake and basin water surfaces shall be at or below the designed low flow lines so as to not interfere with flood conveyance.
b) The lake bottom will not be sealed, allowing natural infiltration to continue and replenish the groundwater basin.
c) Bottom depth, in the middle of the lakes, shall be from ten to twelve feet.
d) Lakes shall be designed to have a controlled and maintained water surface.
e) The lakes shall be designed so as to prevent weed growth and to be easily maintained.
f) Lake design shall incorporate a soil cement pavement near the lake edge and a gradual slope from the edge into deeper water. The design shall meet the industry standards of care for safety.
g) Lake make-up water shall be supplied by a groundwater well located near the lake edge.
h) The lake edge treatment shall vary to create a natural-looking edge.

4.11 Willow Canal Relocation

Policy 4.28 Construction of the Relocated Willow Canal. The Willow Canal shall be relocated to the north and east boundaries of the Plan area in accordance with the standards of the Yolo County Flood Control District.

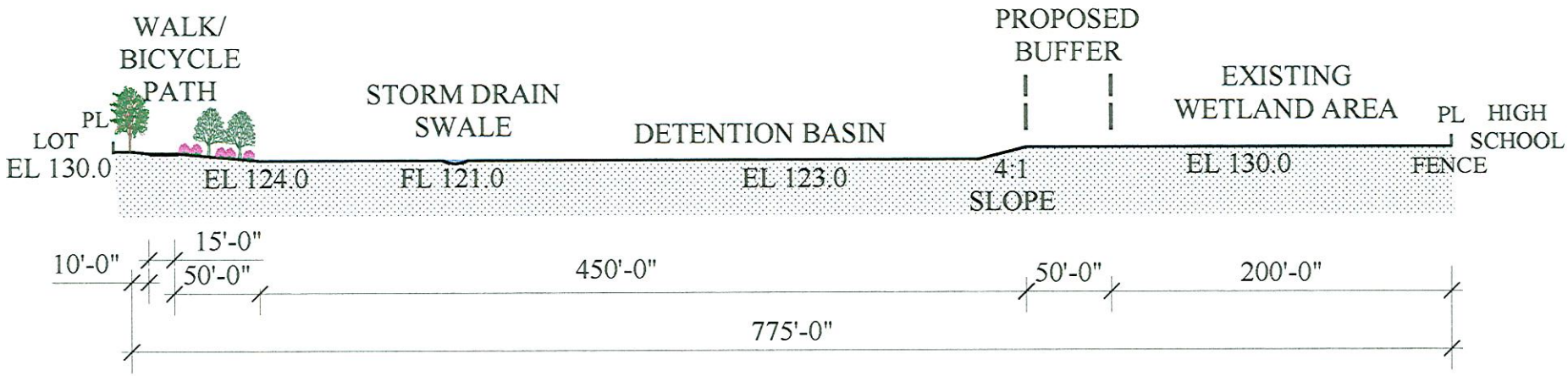


FIG. 4-13: SECTION A
EXISTING WETLAND/
DETENTION BASIN

Scale: 1" = 100'

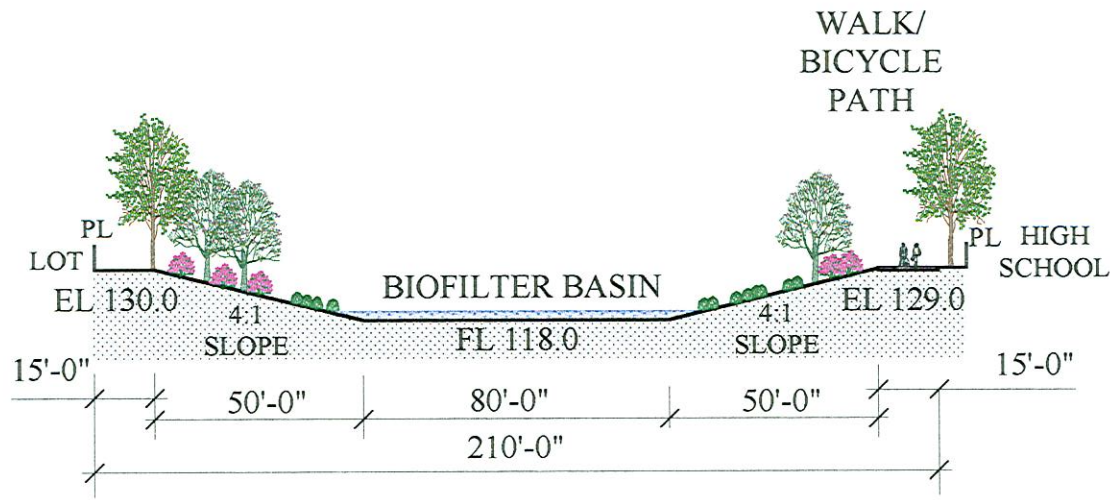


FIG. 4-14: SECTION B
BIOFILTER BASIN

Scale: 1" = 50'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS

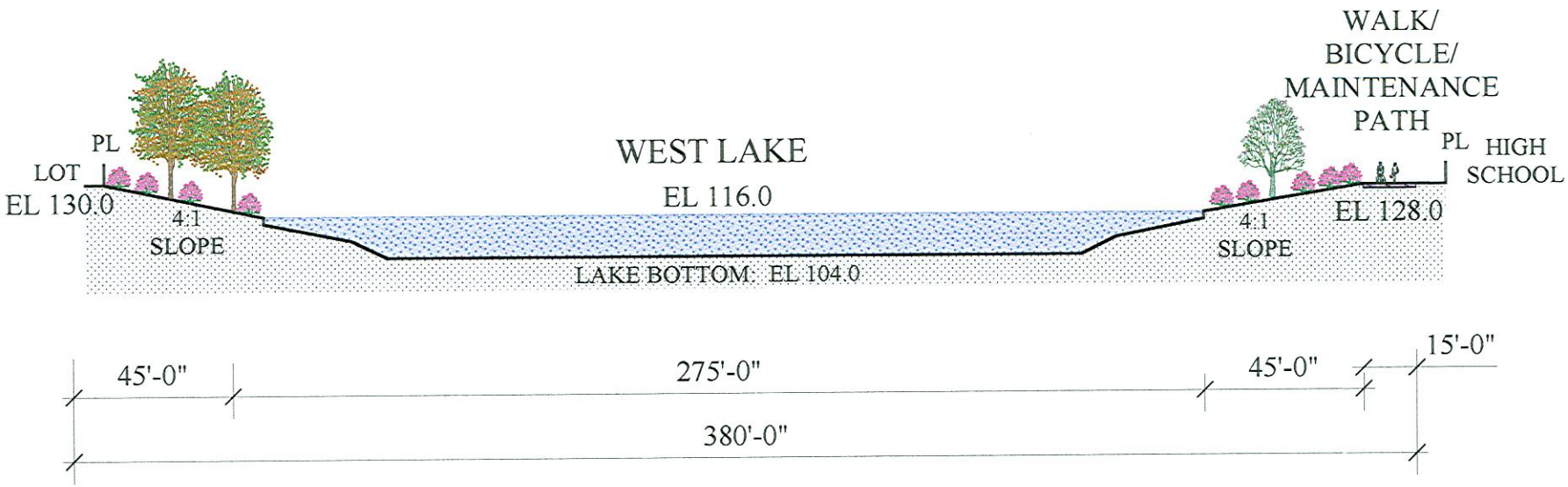


FIG 4-15 : SECTION C
WEST LAKE

Scale: 1" = 50'

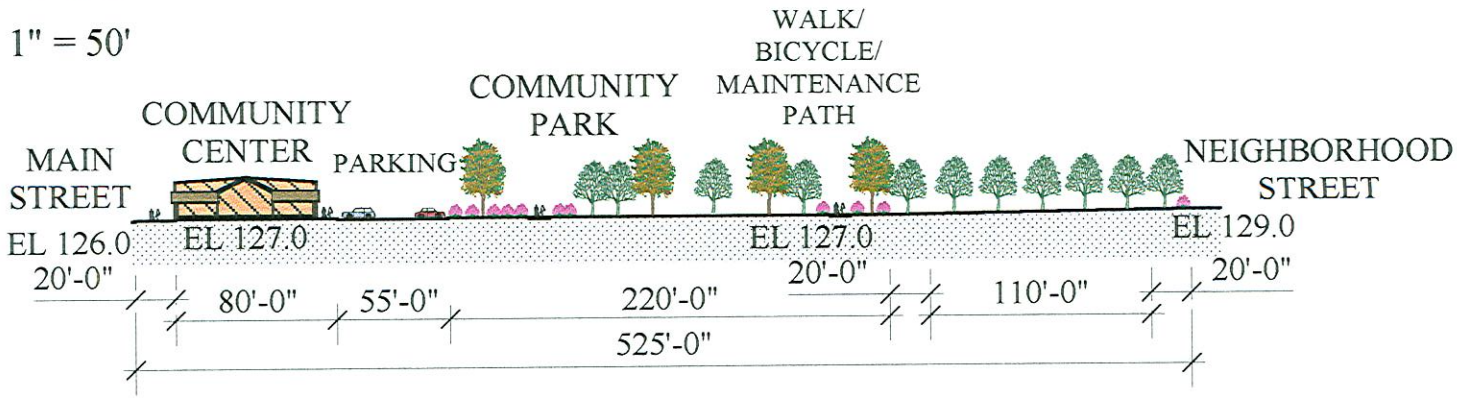


FIG. 4-16: SECTION D
COMMUNITY PARK

Scale: 1" = 100'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS

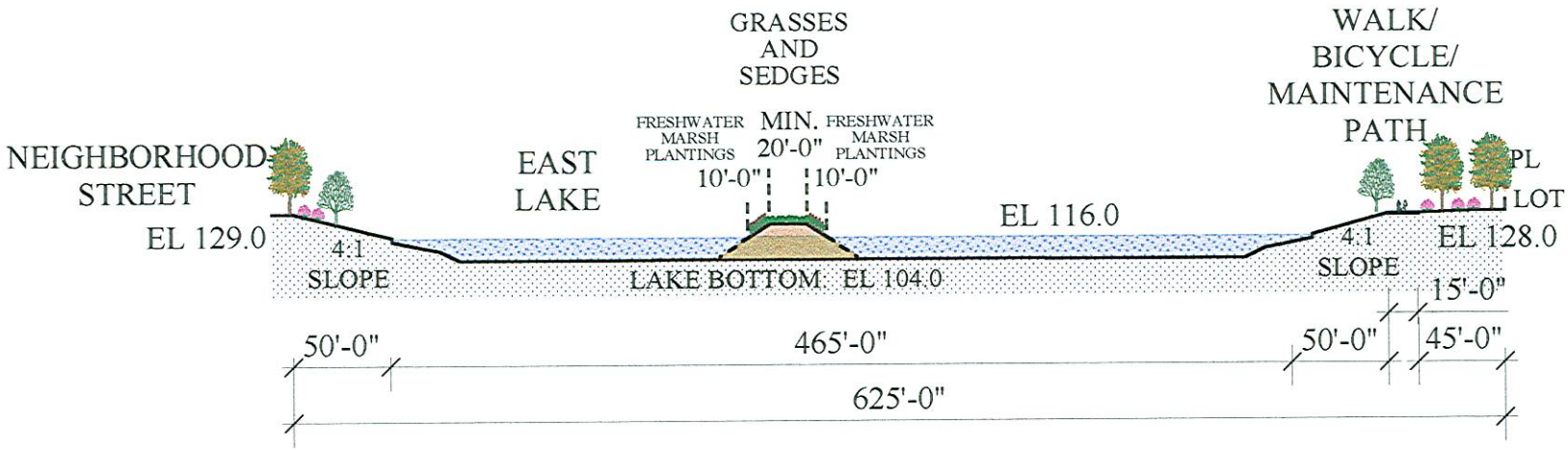


FIG. 4-17: SECTION E
EAST LAKE

Scale: 1" = 100'

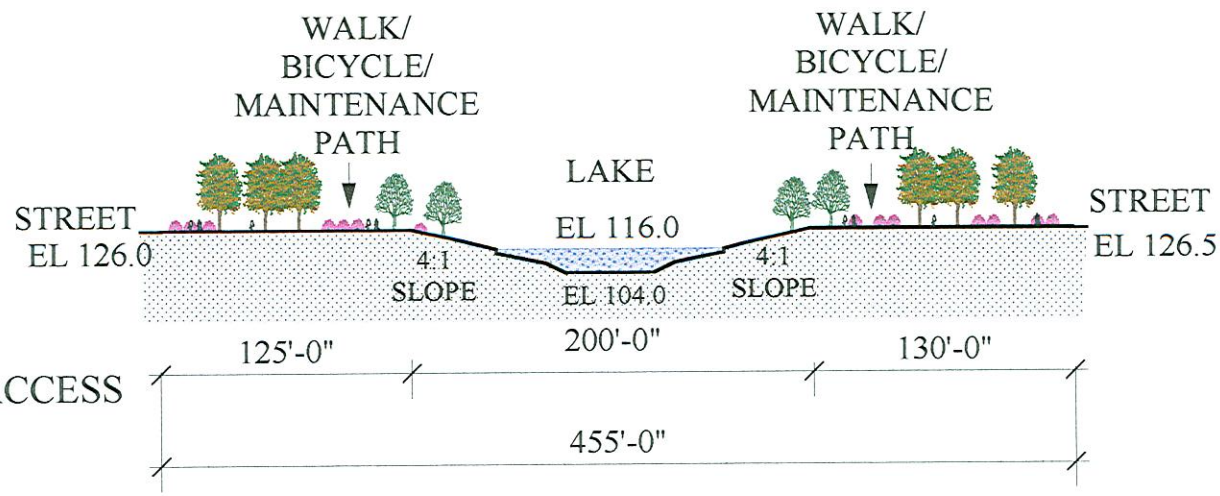
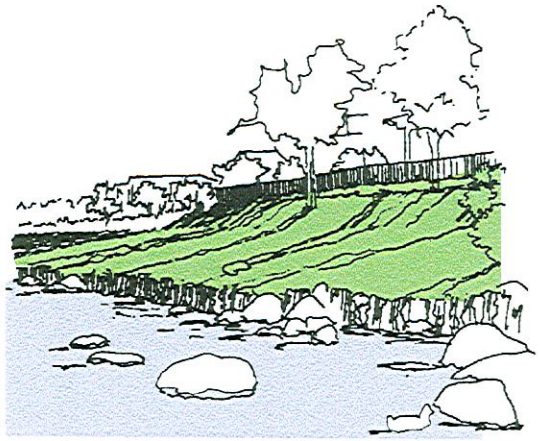


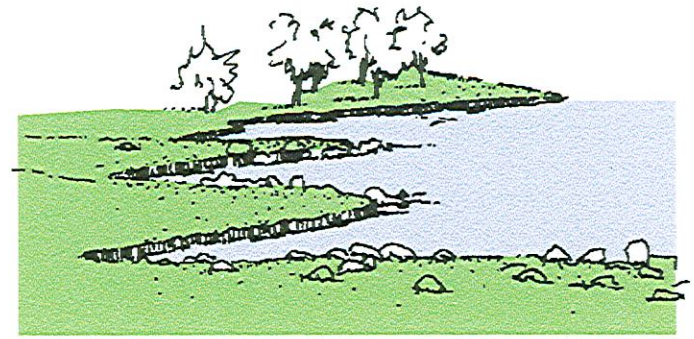
FIG. 4-18: SECTION F
EAST LAKE NEIGHBORHOOD ACCESS

Scale: 1" = 100'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS



SLOPE CONDITIONS
AT LAKE EDGE



TYPICAL
LAKE EDGE

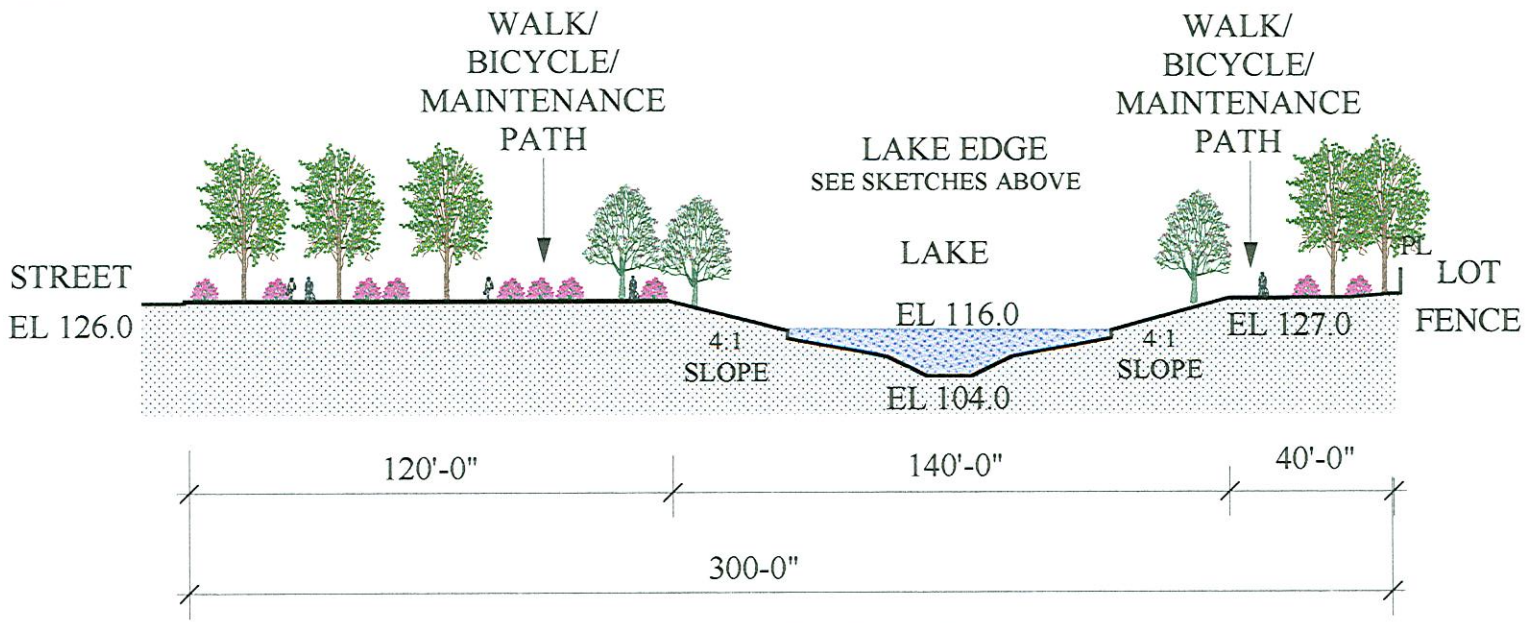


FIG. 4-19: SECTION G
EAST LAKE NARROWS
Scale: 1" = 50'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS

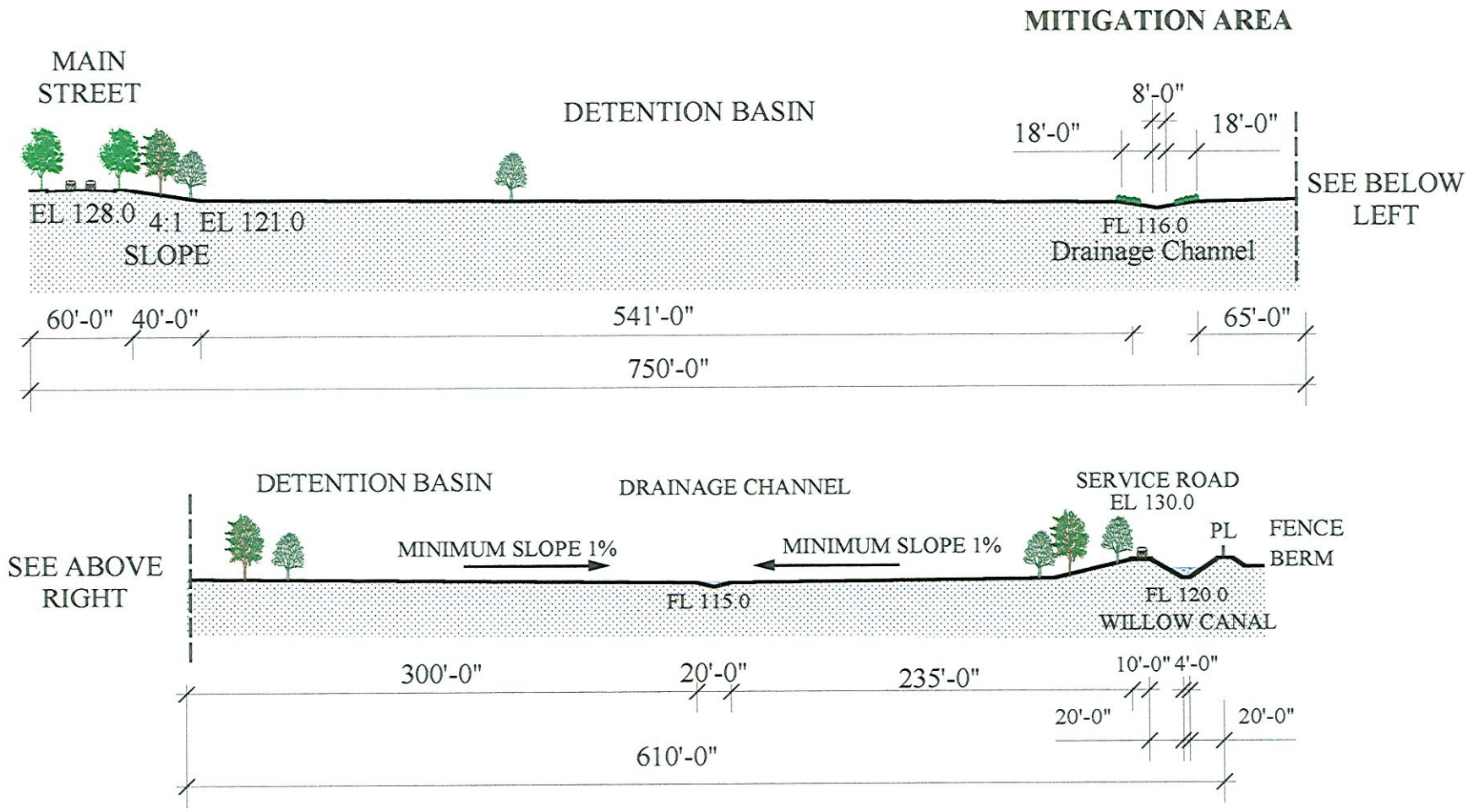


FIG. 4-20: SECTION H
MITIGATION AREA/DETENTION BASIN
Scale: 1" = 100'

SEE FIGURE 3-3 FOR SECTION LOCATIONS

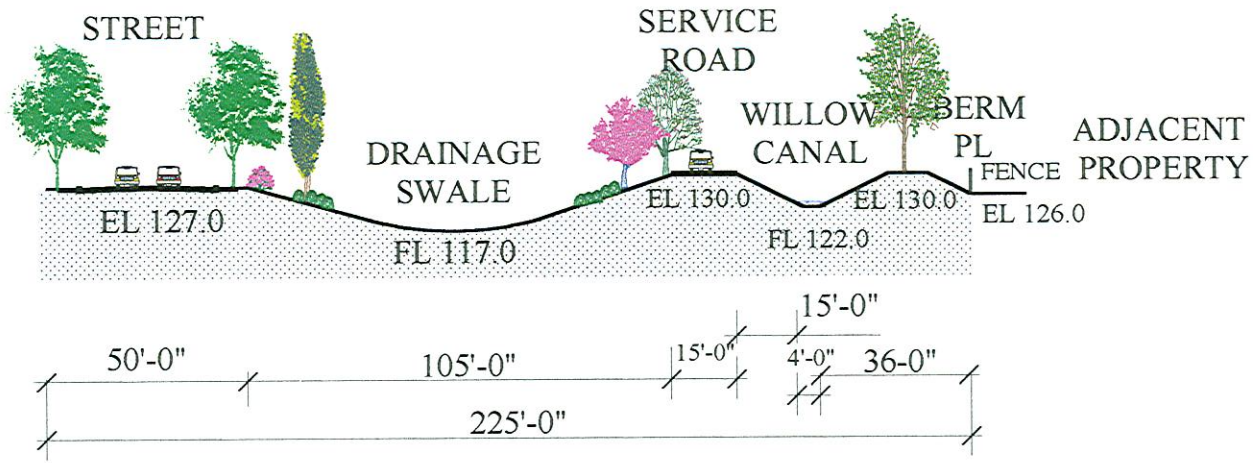


FIG. 4-21: SECTION I
WILLOW CANAL
EASTERN BOUNDARY
Scale: 1" = 50'

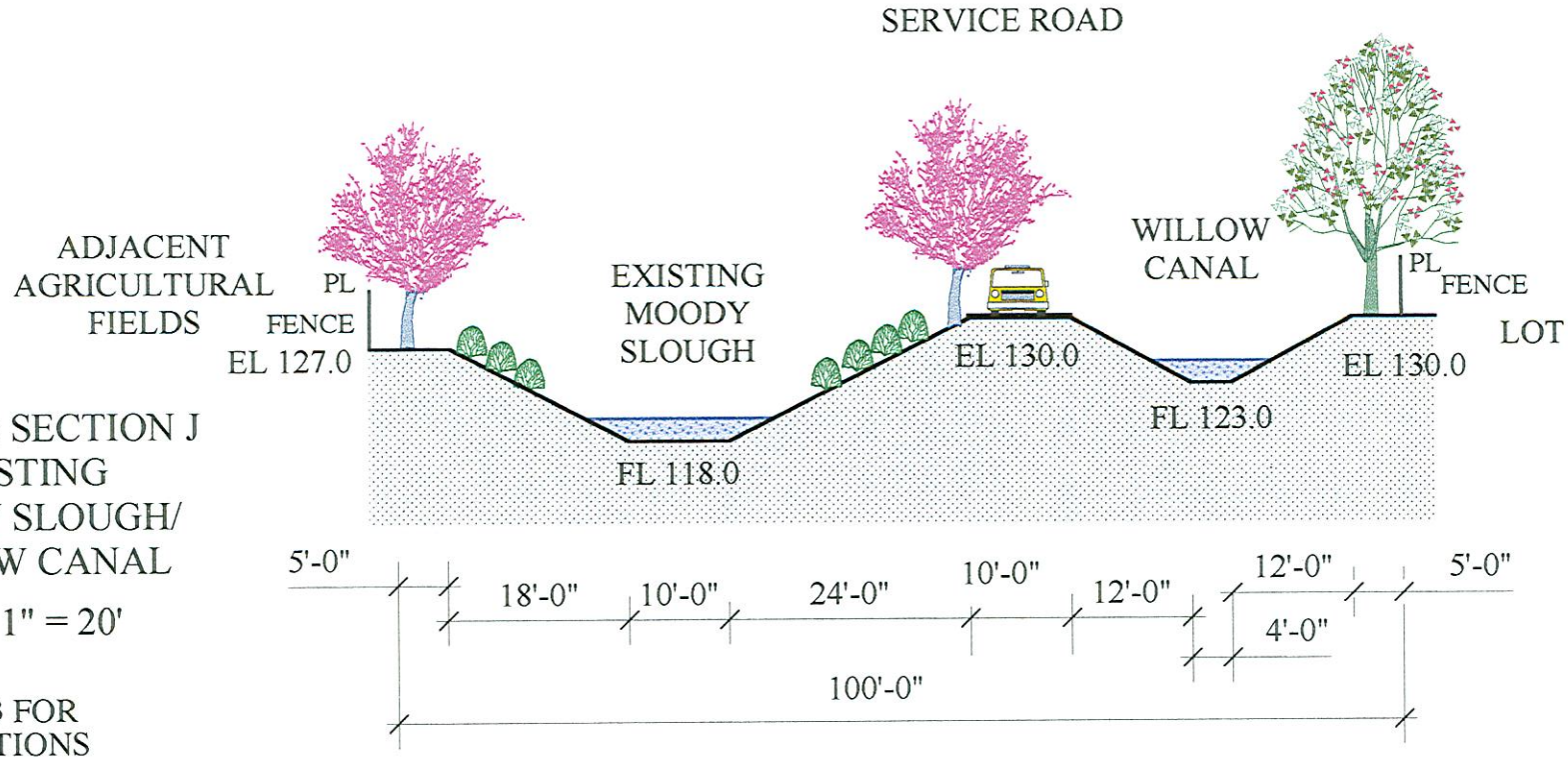


FIG. 4-22: SECTION J
EXISTING
MOODY SLOUGH/
WILLOW CANAL

Scale: 1" = 20'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS

4.12 Park and Open Space Development Standards

Park and open space standards shall govern the development of all Greyhawk parks and plazas. These standards shall also govern landscape and hardscape development within the drainage corridor open space. Drainage, mitigation area and lake construction within this corridor is described in the Storm Drainage and Natural Resources design guidelines.

4.12.1 Community and Neighborhood Parks

Policy 4.29 Community Park. A 6.8-acre community park shall be developed at the southeast corner of Main Street and Railroad Avenue. A preliminary program for this park includes a 5,000 square foot community center, on-site parking for 50 cars, tennis courts, basketball courts, bocce ball, a 10,000 square foot play area, group picnic facilities, outdoor performing terrace, walkways, formal gardens, lawn areas. This park program expresses the type of facilities planned for the community park and may be varied in final design. The design concept for the community park shall be generally formal with informal edges and a broad plant palette.

Policy 4.30 Neighborhood Parks: West Park. A neighborhood park approximately 5.06 acres in size shall be developed west of Railroad Avenue. The preliminary program for this park includes on-site parking for 30 vehicles, open lawn areas to accommodate informal softball play, an 8,000 square foot play area, picnic areas, arbor shade structure and gathering place, designed with informal landforms and planting. This park program expresses the type of facilities planned for this neighborhood park and may be varied in final design. The design concept for West Park shall be generally informal with a plant palette emphasizing native and naturalized plants.

Policy 4.31 Neighborhood Parks: East Park. A neighborhood park of approximately 3.45 acres in size shall be developed east of Railroad Avenue. The preliminary program for this park includes on-site parking for 50 vehicles, open lawn areas for informal softball play and practice soccer field, 10,000 square-foot play structure area, picnic areas, picnic shelter, 10,000 square feet of formal gardens, designed with formal landforms and planting. This park program expresses the type of facilities planned for this neighborhood park and may be varied in final design. The design concept for East Park shall be generally formal with an emphasis on an ornamental plant palette.

4.12.2 The Plaza

Policy 4.32 The Plaza. An urban plaza of approximately 0.25 acre in size shall be constructed at the northwest corner of Main Street and Railroad Avenue. This plaza shall be designed as a community gathering space and may include a paved courtyard, water feature, sculpture, elements expressing the identity of the community.

4.12.3 Drainage Corridor Open Space

Policy 4.33 Landscaped Upland Areas. The upland areas around the lakes and detention basins shall be designed in accordance with the following criteria:

a) A minimum of 25-foot wide upper terrace shall be maintained between adjacent lots and the 100-year storm design elevation of the detention basins.
b) A combination bicycle, pedestrian and service road system within or at the edge of the Drainage Corridor shall be a minimum of 10 ft. wide, with slopes less than 5%.

Policy 4.34 Landscaping Below the 100-Year Flood Level. The areas around the lakes and within the detention basins shall be landscaped in accordance with the following criteria:

a) Shade canopy trees shall be planted at top of basin at perimeter of lots and streets;
b) Informal clusters of low shrubs and ground covers in transition pattern, gradually diminishing to lake edges of lawn.
c) The basins will be planted with low-growing perennials (preferably native/non-invasive) transitioning to native shrubs and trees to serve as a visual and habitat buffer as appropriate.
d) Mitigation areas will be planted with site specific, native vegetation as recommended by a restoration ecologist.

Policy 4.35 Landscaping the Siltation and Biofilter Basins. The siltation and biofilter basins shall be planted with low-growing perennials (preferably native/non-invasive) transitioning to native shrubs and trees to serve as a visual and habitat buffer as appropriate.

4.12.4 Agricultural Buffer

Policy 4.36 The Agricultural Buffer. The buffer will contain a drainage swale and combination bicycle/pedestrian trail and maintenance road. A berm will hide the rear of the lots and the area will be planted with grasses, drought resistant ground covers and native trees and shrubs.

4.13 Streetscapes

Policy 4.37 Street Trees. The Project shall install street trees according to the City's Street Tree Plan and Standards.

Policy 4.38 Privacy Walls. The use of unbroken solid walls along arterial streets shall be limited in order to avoid a monotonous, walled-city appearance.

4.14 Street Lighting

Policy 4.39 Design of Street Lighting. Street lighting should be designed and installed to minimize excess light spillage, unnecessary brightness and glare, and degradation of night sky clarity.

FIG. 4-25 COMMUNITY CENTER & PARK CONCEPT PLAN

FIG. 4-26 EAST NEIGHBORHOOD PARK

FIG. 4-27 WEST NEIGHBORHOOD PARK CONCEPT PLAN

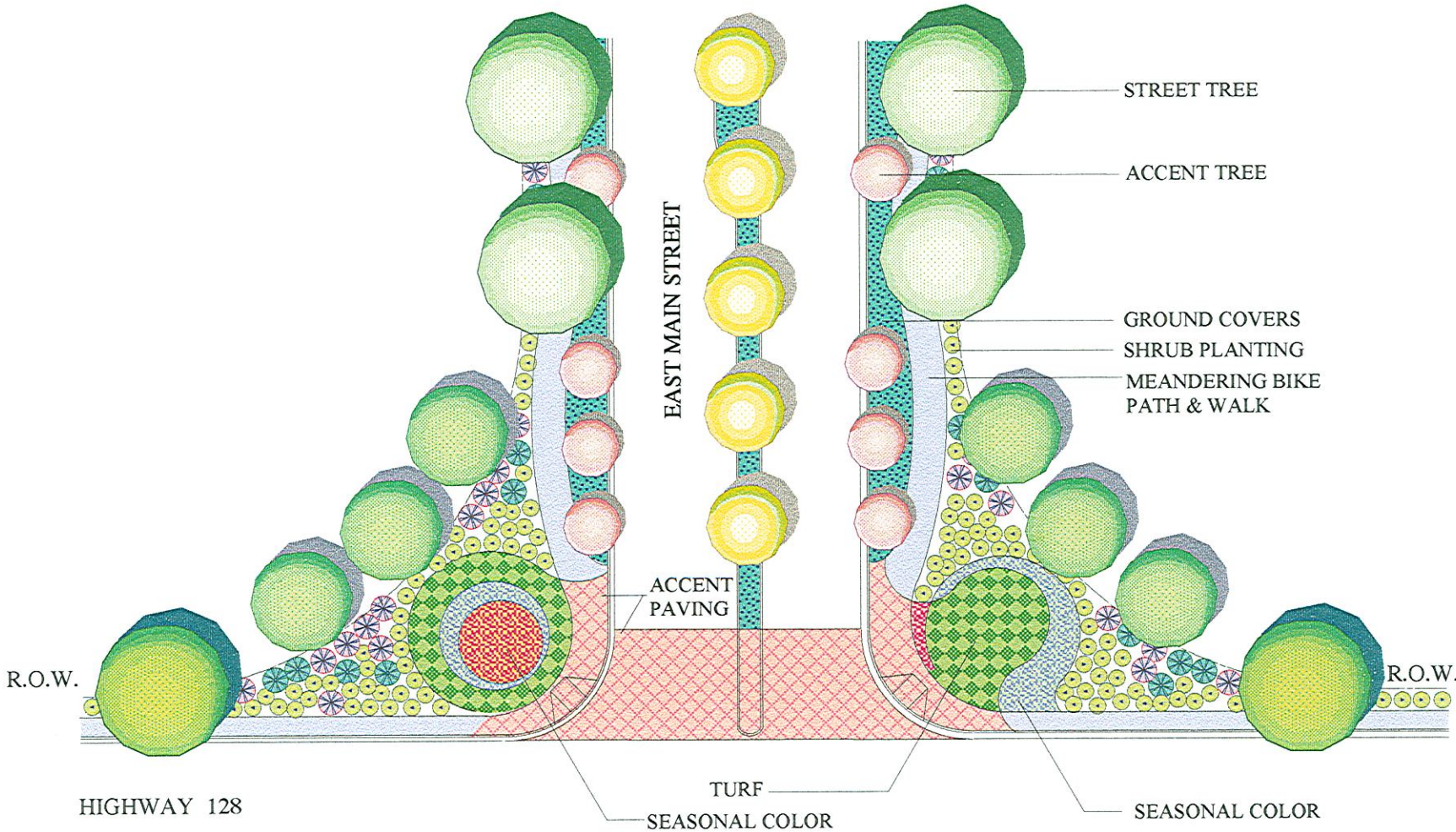
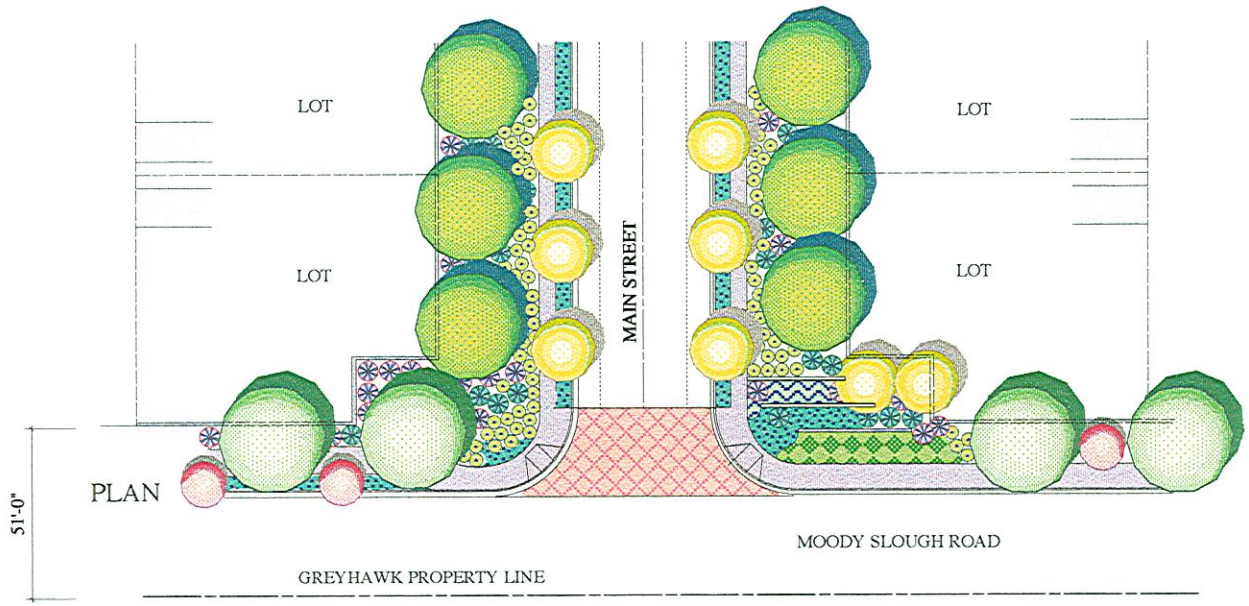


FIG. 4-28 COMMUNITY ENTRY DESIGN @ HWY 128



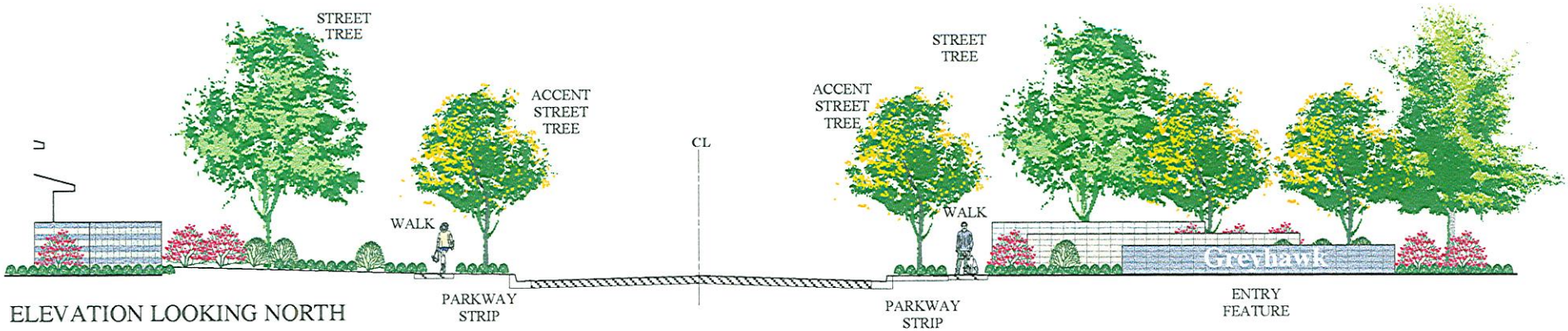


FIG. 4-29 PROJECT ENTRY AT MAIN STREET & MOODY SLOUGH ROAD

OFF-SITE FLOOD CONTROL FEATURES

4.15 Drainage Channel.

The off-site drainage facilities will be constructed to USACE design standards. The final alignment and sizing of these facilities will occur in the design documents phase of the project and in accordance with the following policies.

Policy 4.40 Design Criteria. The drainage facilities from the south Specific Plan boundary to Putah Creek shall be designed in accordance with criteria set by the US Army Corps of Engineers (USACE), in cooperation with the City of Winters and the Yolo County Flood Control and Water Conservation District.

Policy 4.41 Discharge at Putah Creek. The design discharge flow rate for waters exiting the off site conveyance to Putah Creek shall be 1,000 cubic feet per second.

Policy 4.42 Typical Channel Cross Section. The open channel facility shall be constructed in accordance with Figure 4.30, *Off Site Drainage Channel*, as modified during final design.

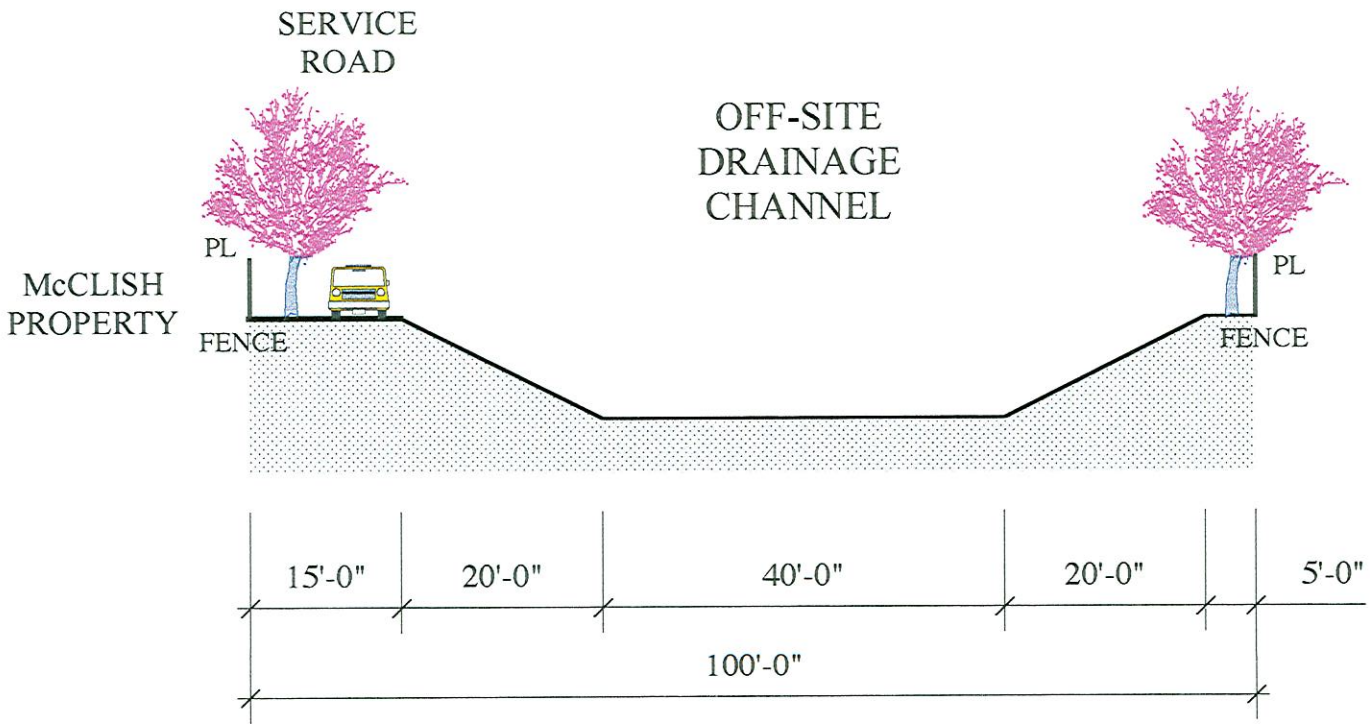


FIG. 4-30: SECTION M
OFF-SITE DRAINAGE CHANNEL
Scale: 1" = 20'

SEE FIGURE 3-3 FOR
SECTION LOCATIONS

Chapter 5 – IMPLEMENTATION

This chapter sets forth a variety of implementing steps and regulatory and organizational procedures to implement provisions of this Specific Plan.

The following approval activities will have been completed at such time as this Specific Plan is approved.

- The Final EIR for both the Specific Plan and any necessary General Plan Amendments will have been certified as adequate, and the findings and mitigation monitoring programs of the EIR adopted by the City.
- Conforming General Plan Amendments will have been approved.
- The Specific Plan, including implementation and financing strategies will have been approved by the City.
- A Notice of Determination will have been filed stating that the project EIR has been certified by the City and a project approved in reliance thereon.

The sections that follow discuss subsequent activities necessary to annex portions of the Specific Plan Area that are, as of the date of the Plan, in the County, and to allow the development of individual projects. The first section (5.1: Pre-Annexation Implementation Activities) discusses the activities necessary to allow development to proceed once this Specific Plan is approved through the point where the entire project area is annexed to the City. The second section (5.2: Community Infrastructure Implementation) discusses the implementation activities necessary to form any financing districts necessary to implement the infrastructure needed for development to begin. The third section (5.3: Project Level Implementation) then discusses the steps to be taken as individual projects seek final approvals. In the event applicants for project approvals are not landowners, landowner approval of individual project approval applications and development agreement(s) will be required.

5.1 Pre-Annexation Implementation Activities

Policy 5.1 The Infrastructure Financing Plan A program of financing measures necessary to implement the Specific Plan land uses, infrastructure and standards will be prepared and shall include estimates of costs for all public facilities and open space and affordable housing programs (if required); recommend the appropriate public financing mechanism(s) to fund such facilities, acquisitions and programs; and clearly indicate how the Specific Plan will assure all needed infrastructure.

Policy 5.2 Pre-zoning. This Specific Plan establishes the land uses and development standards that will apply to the property currently in the county following its annexation to the city. Following adoption of the Specific Plan the portion of the property that is now in the county shall be pre-zoned with the appropriate zoning district, which zoning will become "effective" upon annexation of these areas to the city.

Policy 5.3 Zoning Ordinance Coordination. Following adoption of the Specific Plan the Zoning Ordinance and Map will be modified to include the zoning districts described in Table 5.1, *Zoning Classifications*, below, each of which corresponds to a particular land use designation in the Specific Plan. The zoning districts shall conform to the provisions of this Specific Plan for all typical zoning features. Examples of such provisions include lot size, coverage and parking requirements. Where the City's current zoning districts are identified as the appropriate zoning district for implementation of the Specific Plan, these zoning districts shall be used for Greyhawk zoning.

Table 5.1: Zoning Classifications

Land Use	Zoning
RR Rural Residential	RR Current City Rural Residential
LR Low Density Residential	GR-1 Greyhawk Single Family Residential
MR Medium Density Residential	GR-2 Greyhawk One- and Two-Family Residential
MHR Medium High Density Residential	GR-3 Greyhawk Single- and Multi-Family Residential
HR High Density Residential	GR-4 Greyhawk High Density Multi-Family Residential

Table 5.1: Zoning Classifications (continued)

Land Use	Zoning
NC Neighborhood Commercial	C-1 Current City Neighborhood Commercial
PQP Public/Quasi-Public	PQP Current City Public/Quasi-Public
RP Recreation and Parks	P-R Current City Parks and Recreation
OS Open Space	OS Current City Open Space

5.2 Annexation

An annexation application and a resolution of annexation will be prepared and processed with LAFCO requesting that the land within the Specific Plan, but currently under County jurisdiction, be annexed to the City.

5.3 Community Infrastructure Implementation

This section describes the steps necessary to implement the public infrastructure elements of this Specific Plan. These activities can proceed while the annexation is being processed. They will, however, most likely overlap with project level implementation as discussed in Section 5.4.

The actions necessary are those shown in the following table. These actions are further explained in the paragraphs that follow.

Table 5.2: IMPLEMENTING INFRASTRUCTURE

Action	Responsibilities / Remarks
Prepare infrastructure plans for area-wide infrastructure	City and Landowner
Obtain regulatory permits necessary to implement the area-wide infrastructure plans	City and Landowner
City Affordable Housing Commission review of the affordable housing plan.	Landowner

Policy 5.4 Design The Initial Infrastructure Needed At Year Zero. The Landowner, in consultation with the City, shall prepare plans for the off-site drainage facilities, off-site roads, sewerage and water supply infrastructure necessary for development to begin.

Policy 5.5 Obtain Regulatory Permits For Infrastructure and Urban Development. Regulatory permits needed to allow the project infrastructure and development to proceed may include :

a) U.S. Army Corps of Engineers Section 404 Individual and/or Nationwide permits;

b) Regional Water Quality Control Board water quality certification or waiver and/or issuance of waste discharge requirements;

c) Incidental take authorization from the U.S. Fish & Wildlife Service and California Department of Fish and Game; and

d) Section 1603 authorizations from the California Department of Fish and Game.

Policy 5.6 Affordable Housing Commission Approvals. The Landowner shall submit an overall affordable housing plan for Greyhawk. The City Affordable Housing Commission shall review this plan and advise the Planning Commission and City Council of its findings.

5.4 Project Level Implementation Summary

This section provides an overview of the typical procedural steps needed to review and approve tentative subdivision maps and other development applications for projects in the Specific Plan Area. Project applicants also should review City ordinances and procedures applicable to processing development applications. An overview of this section is presented in Table 4.2, *Processing A Development Proposal.*

Policy 5.7 Tentative Subdivision Map. The subdivision process in the Specific Plan Area shall be governed by the Subdivision Map Act, as well as City standards and procedures. The phasing of development proposed in the Tentative Map shall be coordinated with the phasing of infrastructure to serve the mapped area. Landowners and the City should initiate discussion of the development agreement provisions at or prior to the time the tentative map application is submitted.

Policy 5.8 Project Specific Environmental Requirements. If a project involves alterations to a wetland or other protected area, an applicant may be required to work with the City and environmental agencies in obtaining necessary permits. In this event the landowner shall have the primary responsibility for working with the Department of Fish and Game, the Regional Water Quality Control Board, the US Fish and Wildlife Service, the US Army Corps of Engineers and other agencies in pursuing such permits.

Table 5.3 PROCESSING A DEVELOPMENT PROPOSAL

Action	Responsibilities
Prepare and submit development approval applications (e.g., development plan, site plan, tentative subdivision map).	Landowner
Negotiate development agreement(s), if desired.	City, Landowner
If the project is not consistent with the Specific Plan and/or results in impacts not addressed in the Specific Plan EIR, new potential significant impacts or a substantial increase in the severity of previously identified significant effects, additional project level environmental review may be necessary.	City, Landowner
Review submitted materials for conformance with provisions of the Specific Plan, zoning and subdivision and engineering standards.	City
If the project involves alterations to a wetland or other protected area, the applicant may be required to submit additional information and implement site-specific mitigation measures to satisfy the regulatory requirements.	Landowner, City CDFG, USACOE & USFWS, RWQCB, etc.
Planning Commission review, recommendation or approval of development approval applications and development agreement, as appropriate	City Staff Planning Commission
City Council review and approval of development approval applications and development agreement, as appropriate	City Staff City Council
Final Subdivision Map approval	Landowner submittal, City Staff review and City approval
Project level design review by the Planning Commission	City Staff Planning Commission

Policy 5.9 Development Agreements. The City and Landowner(s) applying for development approvals (typically at the tentative map application stage) may enter into development agreements. These agreements shall define the rules, regulations and official policies that will govern developments as they proceed through the approval process and construction. These development agreements may:

a) specify how the provisions of this Specific Plan will be implemented in connection with the development contemplated by the development agreement;

b) spell out the precise financial responsibilities of the developer(s);

c) lock in approvals and land use regulations for a fixed period of time;

d) ensure timely provision of adequate public facilities for each phase of the project;

e) streamline the development approval process by coordinating various discretionary approvals;

f) define development phasing; and

g) provide the terms for credit/reimbursement when a developer advances funding for specific facilities which have community-wide or area benefit.

Policy 5.10 Project Design Review. The City requires design review for the construction of subdivisions of six or more single-family residences, for five or more multi-family residences and for all non-residential buildings of more than 500 square feet in size. Design review shall be conducted in two phases. The first phase shall consider the overall project and such things as streetscapes and the detailed design of the open space corridor.. Second phase reviews shall be conducted for each neighborhood with in the Plan. Second stage submittals shall be in accordance with the Zoning Ordinance and shall be conducted prior to the issuance of a building permit.

Policy 5.11 Covenants, Conditions, and Restrictions. The Specific Plan encourages the use of Covenants, Conditions, and Restrictions (CC&R's) for private enforcement of the design guidelines of the Specific Plan and for maintenance of landscape and open space areas and the improvements of each development project. All CC&R's shall reflect the requirements contained in the Specific Plan. In addition, provisions for the design and maintenance of fencing, landscaping, and open space areas and other facilities within projects as well for the abatement of nuisances shall be set forth in the CC&R's.

Policy 5.12 Final Maps. When all conditions of the Tentative Map are met or secured by posting adequate and appropriate bonds, improvement plans are approved and improvement agreements entered into, a Final Map shall be approved by the City, following the requirements of the Subdivision Map Act as implemented by City procedures. Final Maps will be reviewed by the City Engineer and approved by the City Council.

Policy 5.13 Construction By Local Builders. The developer shall make 98 lots in residential neighborhoods/subdivisions available for construction by local builders. This offer shall remain open for a 30 day period. In the event no local builder is able to take advantage of this offer by the end of 30 days the developer's responsibility shall expire and he shall be free to sell these units to any home builder.

5.5 Administration Of The Specific Plan

Policy 5.14 Responsibilities for Specific Plan Administration. This Specific Plan shall be used to direct the processing of future development projects within the Specific Plan Area. The following responsibilities, mechanisms and procedures will be used to review, monitor, coordinate and integrate the development.

Policy 5.15 Specific Plan Consistency. Following adoption of this Specific Plan, no development plan, site plan, subdivision map, use permit or other entitlement for use shall be approved by the City and no public improvement shall be authorized by the City for construction in the Greyhawk Specific Plan Area until a finding has been made that the proposed entitlement or public improvement is in substantial conformance with this Specific Plan. Approval of final development plans, on-site public improvement plans and use permits also shall be consistent with the applicable provisions of the Winters General Plan. All Specific Plan changes (both minor and major amendments) must be consistent with the City's General Plan.

Policy 5.16 Specific Plan Amendments. Specific Plan amendments may be proposed by a developer or property owner or initiated by the City, and shall be processed in accordance with City ordinances and subject to the requirements of any applicable development agreement. All amendments will be presented in public hearing before City Council action on the proposal. Generally, the process for amending the Specific Plan is similar to that for amending the City's General Plan, with the difference that there is no limitation on the number of Specific Plan amendments that can be approved in any one year. All Specific Plan amendments must be consistent with the City's General Plan and the remainder of the Specific Plan. Major amendments inconsistent with this Specific Plan may require an

accompanying General Plan Amendment and possibly a Zoning Ordinance revision. Such amendments will be subject to the provisions of the California Environmental Quality Act and thus would have to be reviewed for potential environmental effects. If it is determined that additional environmental impacts, beyond those identified in the Specific Plan EIR, will occur, additional environmental documentation may be required (e.g., subsequent or supplemental EIR, focused EIR, new EIR, or a subsequent/ supplemental mitigated negative declaration).

5.6 Specific Plan Financing

The policies, objectives, and analysis related to the program for funding of public improvements and other capital facility obligations created by the Specific Plan are presented in this section.

5.6.1 Description of Financing Alternatives

The following paragraphs describe a variety of financing mechanisms that might be employed in the implementation of the Plan. Certain other alternatives, such as Revenue Bonds and Certificates of Participation, are not discussed as it is unlikely that these mechanisms would be used. The Project proposes to use a combination of impact fees and maintenance districts to construct and maintain public improvements.

A. Impact Fees

Impact fees are monetary exactions (other than taxes or special assessments) that are charged by local agencies in conjunction with approval of a development project. Impact fees are levied for the purpose of defraying all or a portion of the costs of a public facility, improvement, or amenity that benefits the project. The collection of impact fees does not require formation of a special district; a fee program is implemented by a public agency's adoption of a resolution or ordinance.

Impact fees are paid by builders or developers, typically at the time a building permit is issued. The public facilities funded by impact fees must be specifically identified, and there must be a reasonable relationship, or "nexus," between the type of development project and the need for the facilities, the cost of the facilities, and the need to impose a fee.

While developer fees cannot typically be leveraged (i.e., provide security for bonds or other debt instruments), fees can be used in conjunction with debt financing to help retire bonds secured by other means (e.g., land). In this case, developer fees can generate supplemental revenues to reduce future special taxes or assessments, or free up tax increment or other revenues for alternative uses. Developer fees can also be used to generate reimbursement revenues to property owners or public agencies who have previously paid more than their fair share of public improvement costs.

B. Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act (the "Act")was enacted by the California State Legislature in 1982 to provide an alternate means of financing public infrastructure and services subsequent to the passage of Proposition 13 in 1978. The Act complies with Proposition 13, which permits cities, counties, and special districts to create defined areas within their jurisdiction and, by a two-thirds vote within the defined area, impose special taxes to pay for the public improvements and services needed to serve that area. The Act defines the area subject to a special tax as a Community Facilities District ("CFD").

A CFD may provide for the purchase, construction, expansion, or rehabilitation of any real or other tangible property with an estimated useful life of at least five years. A CFD may also finance the costs of planning, design, engineering, and consultants involved in the construction of improvements or formation of the CFD. The facilities financed by the CFD do not have to be physically located within the CFD. The facilities that can be financed by a Mello-Roos CFD include, but are not limited to, the following:

- Roads, water and sewer lines, flood control channels
- Local park, recreation parkway and open-space facilities
- School sites, structures, furnishings and equipment
- Libraries
- Child care facilities
- Utility improvements (limited to five percent of bond proceeds if improvements are to be taken over by a non-publicly owned utility agency)
- Any other governmental facilities which the legislative body creating the CFD is authorized by law to contribute revenue to, construct, own or operate
- School facilities maintenance

A CFD may also pay for public services, including the following:

- Police protection
- Fire protection

Recreation program services
Library services
Park and open space maintenance
Flood and storm protection services
Removal or cleanup of hazardous substances
Seismic retrofitting

A CFD may only finance the services mentioned above to the extent that they are in addition to those provided in the area before the CFD was created and may not supplant services already available within that area.

There are two limitations on the amount of financing available from a CFD. The first is the value-to-lien ratio. "Value" is considered to be the appraised value of the property, including entitlements and improvements in place on the date the CFD bonds are to be sold. The value of improvements to be constructed with bond proceeds are included in the value calculation. "Lien" refers to the proposed Mello-Roos bond issue, as well as any other debt secured by the property. In 1992 a law was enacted requiring a minimum value-to-lien ratio of 3:1.

The second restriction on the amount of financing available from a CFD is the total effective tax rate ("ETR") paid by a homeowner or property owner in the CFD. The ETR consists of the basic one percent ad valorem property tax levy mandated by Proposition 13, plus overrides from voter-approved bonded indebtedness and non-ad valorem taxes, assessments and parcel charges (expressed as a percentage of market value). Market value can be determined based on input from local developers, a market consultant, local realtors, or an appraiser.

There is no legal limit, but a maximum ETR of two percent of market value has developed as a standard for residential development in many areas throughout the State. It is thought that ETRs higher than two percent may lead to market resistance by prospective homebuyers, or potential "taxpayer revolts" by overburdened homeowners. The maximum supportable ETR for a given project should also consider the maximum tax rates paid by homes in competing projects in the area and, based on the strength of the real estate market, the demand for homes in general. Commercial/industrial projects often support higher ETRs, as the property owner is able to spread the tax burden among many tenants and, therefore is less sensitive to a higher ETR.

Formation of a CFD authorizes a public agency to levy a special tax on all taxable property within the CFD in the manner prescribed in the formation documents. Property owned by, or irrevocably offered to, a public agency may be exempted from the special tax. Mello-Roos special taxes are collected at the same time and in the same manner as property taxes, unless otherwise specified by the agency. Special tax revenues may be used to pay debt service on bonds sold or may also be used to pay directly for facilities and public services.

Mello-Roos bonds can be short or long-term obligations. Typically, long-term bonds have either a twenty-five or thirty year maturity. Short-term notes or bonds can be issued to provide interim funding; these obligations are then retired when another source of revenue becomes available.

C. 1913/1915 Act Assessment Bonds

In 1979, the California Court of Appeals, in its decision, Fresno County vs. Malmstrom, ruled that special benefit assessments levied pursuant to the Improvement Act of 1911 and Municipal Improvements Act of 1913 are not "special taxes" under Proposition 13's definition of such taxes. The result of this decision has been a proliferation of Special Assessment Districts ("AD") throughout the State, using the Municipal Improvements Act of 1913 to initiate proceedings for the formation of an AD, and the Improvement Bond Act of 1915 to issue bonds. These Acts provide mechanisms for Issuers to construct or acquire public improvements, to apportion the costs through liens against the properties in a designated area which directly benefit from the improvements (the "Assessment District"), and to finance the liens through the issuance of tax-exempt bonds.

Public works improvements are eligible for Assessment District financing to the extent that properties within the District receive a special, measurable, local and direct benefit from such improvements. Traditionally, improvements to be financed using an AD include, but are not limited to, streets and roads, water, sewer, flood control facilities, utility lines and landscaping. Other types of public improvements which have a "regional" significance (e.g., major roads, bridges, flood control facilities, etc.) are only partially eligible, based on the proportion of benefit from the improvements that can be assigned to parcels within the AD. Traditionally, items of general benefit to a community, such as schools, fire stations and parks, have not been eligible for Assessment District financing.

The formation of an AD is initiated through either a petition submitted by sixty percent of the landowners in a proposed AD, or through the adoption of a Resolution of Determination and the preliminary approval of an investigative report by the County Board of Supervisors. The County then adopts a Resolution of Intention

which designates the boundaries of the proposed AD, describes the proposed improvements, orders the issuance of bonds and declares the County's intention to levy the assessments. This resolution must include an engineer's report that includes the proposed assessment diagram, which is used to determine the assessment levied against each property.

Pursuant to Proposition 218, each landowner must be sent a notice of public hearing and a ballot that identifies the amount of assessment assigned to their parcel. The owner is directed to return the ballot indicating their support or opposition to the assessment. At the public hearing, the agency must determine if a majority protest exists. If ballots submitted in opposition to the assessment exceed the ballots submitted in favor, the agency must abandon the assessment proceedings. In determining whether a majority protest exists, the ballots are weighted based on the amount of assessment assigned to each parcel.

Subsequent to the confirmation of assessments, a thirty-day cash payment period is established during which any property owner can pre-pay his assessment. After this thirty-day period, bonds may be sold for all unpaid assessments in the newly-formed AD.

Each parcel of property within an AD is assessed a portion of the costs of the public improvements and services to be financed by the AD, based on the proportion of benefit received by that parcel. Assessment liens are levied at the time of formation of the AD and installment payments are collected along with property taxes on a semi-annual basis.

Limitations on the timing and amount of financing available through an AD are similar to the limitations for Mello-Roos, as discussed above. A minimum 3:1 value-to-lien ratio is usually required, and a reserve fund must be established to provide for timely debt service payments regardless of delinquencies. It may be feasible to estimate the total ETR based on the anticipated land uses for each parcel. However, because the assessment becomes a fixed amount on that parcel, if the land uses ultimately developed are different than anticipated, the actual ETR could be much higher than 2.00% of market value.

F. Infrastructure Financing Districts

In 1990 a bill was passed which provides for the formation of Infrastructure Financing Districts ("IFDs") to finance regional infrastructure needs. This law extends the use of tax increment ("TI") financing to undeveloped areas within the boundaries of an IFD. IFD financing is similar to tax increment financing within redevelopment project areas, in that it uses ad valorem property tax revenues to pay for public improvements without imposing special taxes or assessments on the land. An IFD may finance the purchase, construction, expansion, or improvement of any real or tangible property with an estimated useful life of fifteen years or longer. Authorized facilities must be of community-wide significance and provide significant benefits to an area larger than the area of the proposed IFD. Examples of permissible projects include the following:

- Highways, interchanges, arterial streets, and transit facilities
- Sewage treatment and water reclamation plants
- Water collection and treatment facilities
- Flood control levees and dams, retention basins, and drainage channels
- Child care facilities and libraries
- Parks and open space
- Facilities for the transfer and disposal of solid waste

When forming an IFD, a "base year" is identified; the ad valorem tax revenues paid on the assessed property value in the base year continue to be passed through to the agencies that receive ad valorem tax revenues. However, the revenues that result from an increase in assessed value above the base year assessed value are called tax increment revenues, and a portion of these revenues are retained by the IFD. An IFD can then issue bonds secured by the TI revenue it receives, or will receive, because of the continuing increase in assessed value associated with land development within the IFD.

Revenues from an IFD may be pledged to repay bonds issued by a Special Assessment District or Mello-Roos CFD, or may be advanced to an Integrated Financing District (discussed below) as part of a reimbursement agreement. The IFD may issue tax allocation bonds or Certificates of Participation payable from anticipated tax increment.

G. Integrated Financing Districts

The Integrated Financing District Act was designed to achieve overall equity among landowners by providing a formal mechanism to reimburse the initial developers (or public agency) for the up-front funding of infrastructure needed prior to development. The Act creates the ability for local governmental entities to levy contingent assessments on owners of land within special districts which are created to levy non-contingent assessments or special taxes for the financing of public facilities (i.e., Mello-Roos or Special Assessment Districts). An Integrated Financing District (IGFD) can be used to finance any improvements authorized in the legislation of any co-financing district, including major regional improvements and local community facilities, such as schools, fire stations, and parks.

In its most likely use, an IGFD is formed over an area that benefits from improvements being financed through another financing mechanism. The benefit received by each parcel is determined and a "contingent lien" is placed on all parcels that benefit from the improvement, but have not paid for its construction. A warrant is issued, in the amount of the contingent lien on a given parcel, to the party that will ultimately receive the reimbursements. Once development begins on the parcel, the contingent lien will become due and payable to the party who holds a "warrant" securing the lien.

An IGFD issues securities in the form of warrants which represent interest in a reimbursement fund into which contingent assessments are paid. The contingent assessment is a lien against property which is not levied until the occurrence of a certain event that is associated with land development, such as the approval of a tentative or vesting tentative subdivision map, a zoning change, or the issuance of a building permit.

H. Landscape and Lighting District Act of 1972

When approval of a development project is conditioned upon all or some part of the maintenance cost of the project's public landscaping and street lighting improvements being paid by the property owners within the project, the local agency and the developer may wish to consider the Landscaping and Lighting Act of 1972 (Sections 22500 and following. Streets and Highways Code) (the "1972 Act") as a means of implementing compliance with this condition. The 1972 Act is a form of assessment district procedural act, and its central features are the following:

1. It authorizes assessment financing to fund all or a part of the cost of operating and maintaining certain enumerated categories of public improvements, and both landscaping and street lighting are among those listed.

2. It provides for the initial formation of the assessment district to encompass specified property (typically, the development project area), and as surrounding property moves forward in the development process, the surrounding property can be annexed to the assessment district. If there are different levels of improvement and corresponding different levels of maintenance cost from one project area to another, the different project areas can be established as "zones" within the overall assessment district, and the costs of maintenance within each zone can be isolated and imposed upon only the parcels within that zone.

3. The basic concept is to levy an assessment on all benefited parcels within the assessment district through procedures conducted annually by the legislative body of the local agency (i.e., the City Council or the Board of Supervisors), based upon an annual report and hearing process, to fund the estimated operation and maintenance costs for the coming fiscal year of the local agency.

4. Once the amount of the annual assessments is established, the list of those individual assessments is transmitted to the County Auditor for collection on the general property tax bill administered by the County, and both the payment procedures and enforcement methods are the same as for general property taxes.

5. With the source of funding thus assured, the local agency then provides for the operation and maintenance services, either with its own staff or by contracting with outside service providers.

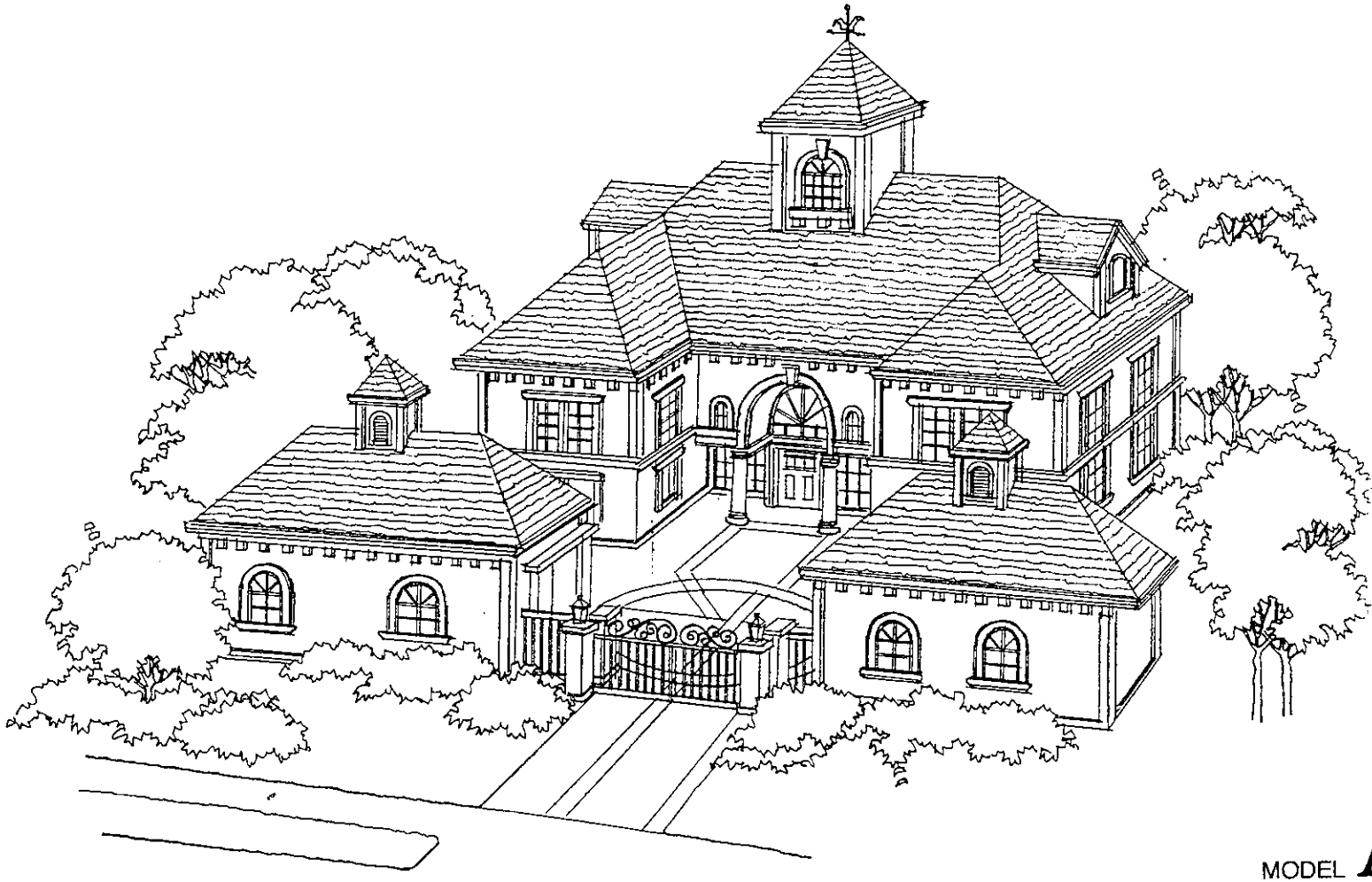
6. While the issuance of bonds upon the security of the annual assessments is permitted, 1972 Act assessment districts generally function on a pay-as-you-go basis, with the annual maintenance expenditures being limited to the annual assessment revenues billed to the property owners.

7. The initial district formation procedures are subject to the assessment ballot provisions of Article XH1D of the California Constitution (added in 1996 by Prop. 218), and the owners of any property later proposed for annexation

have the same Prop. 218 protections. Furthermore, any proposed increase in the amount of the annual assessments over and above what is authorized by the report approved at the time of initial district formation requires further Prop. 218 ballot proceedings.

8. In view of the foregoing, local agencies commonly provide in the report for the initial district formation for annual increases in the assessment amounts based upon some cost index, as a protection against inflation. It is also common practice to provide for a increase in the annual assessment when a parcel moves from an undeveloped status to a developed status, with the increase triggered by issuance of a building permit for the parcel. Other means of seeking fairness in distributing the annual maintenance costs among the owners of the parcels are available for consideration.

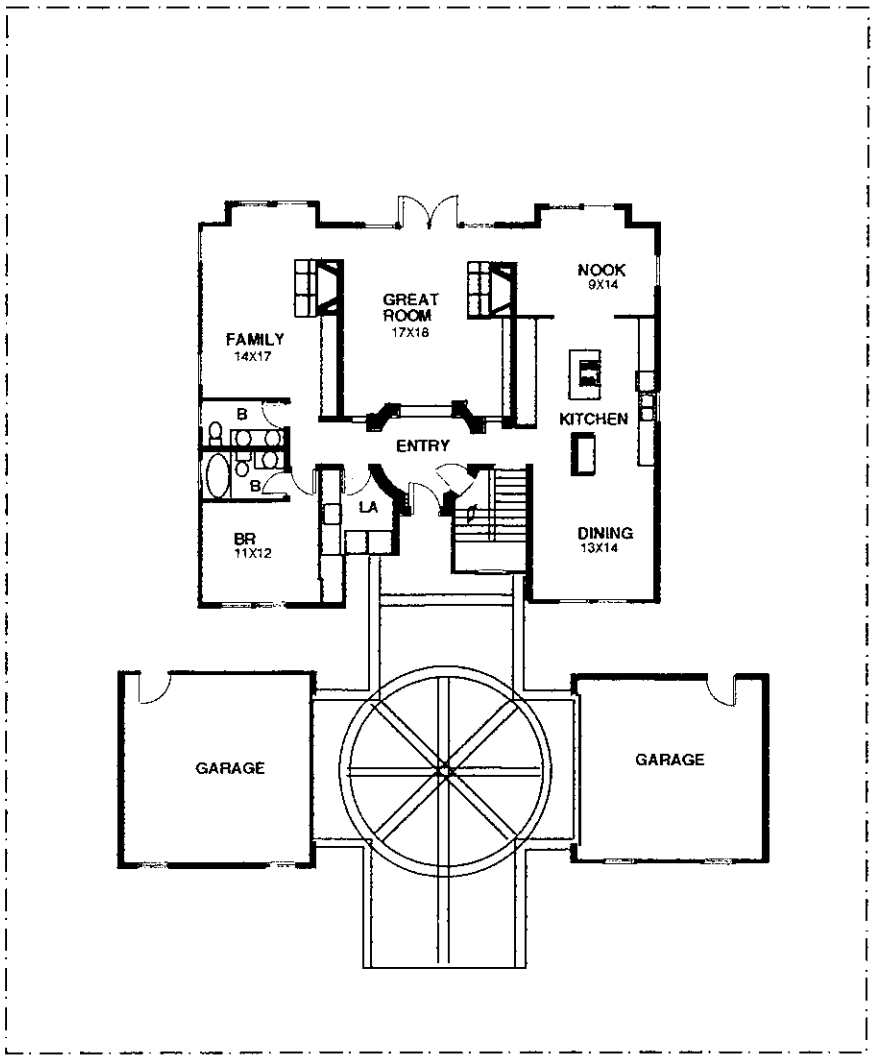
Since its inception, the 1972 Act has been regularly used as a tool to enable cities and counties across the state to coordinate with developers to provide a practical means of implementing maintenance cost conditions of development approvals.



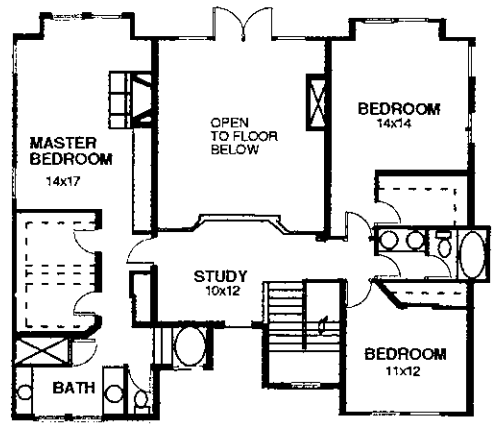
MODEL **A**

LOT SIZE 90'X110"

FIG. A-1, PERSPECTIVE VIEW



FIRST FLOOR



SECOND FLOOR

MODEL **A**

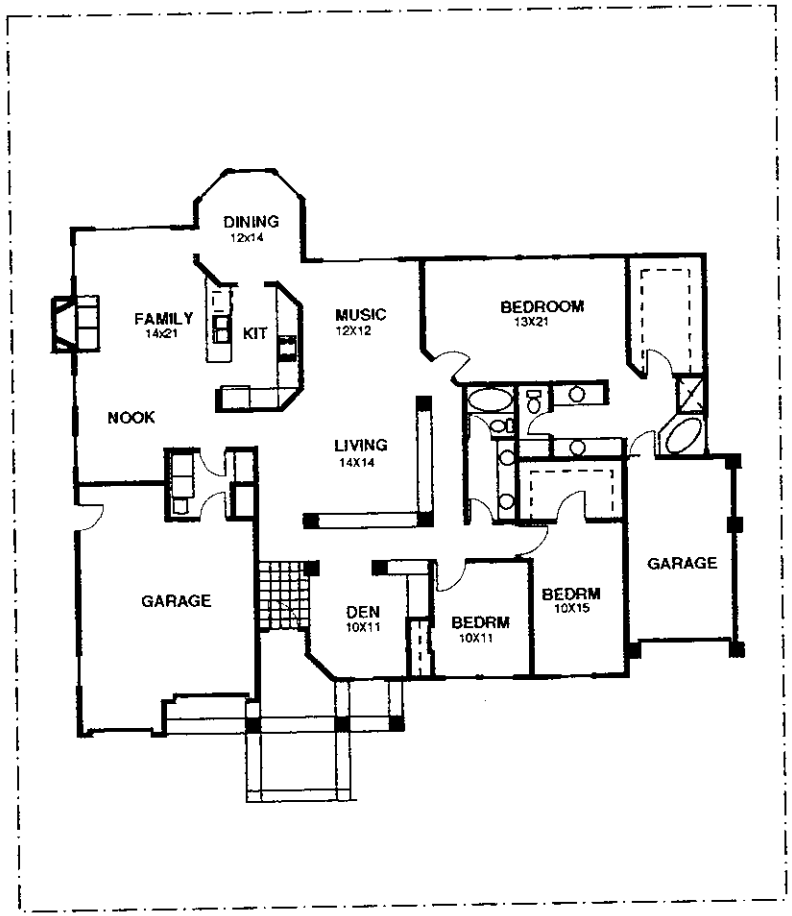
LOT SIZE 90'X110"
AREA: 3,200 SF

FIG. A-2, FLOOR PLANS

MODEL **B**

LOT SIZE 80'X94'

FIG. A-3, PERSPECTIVE VIEW



FIRST FLOOR

MODEL **B**

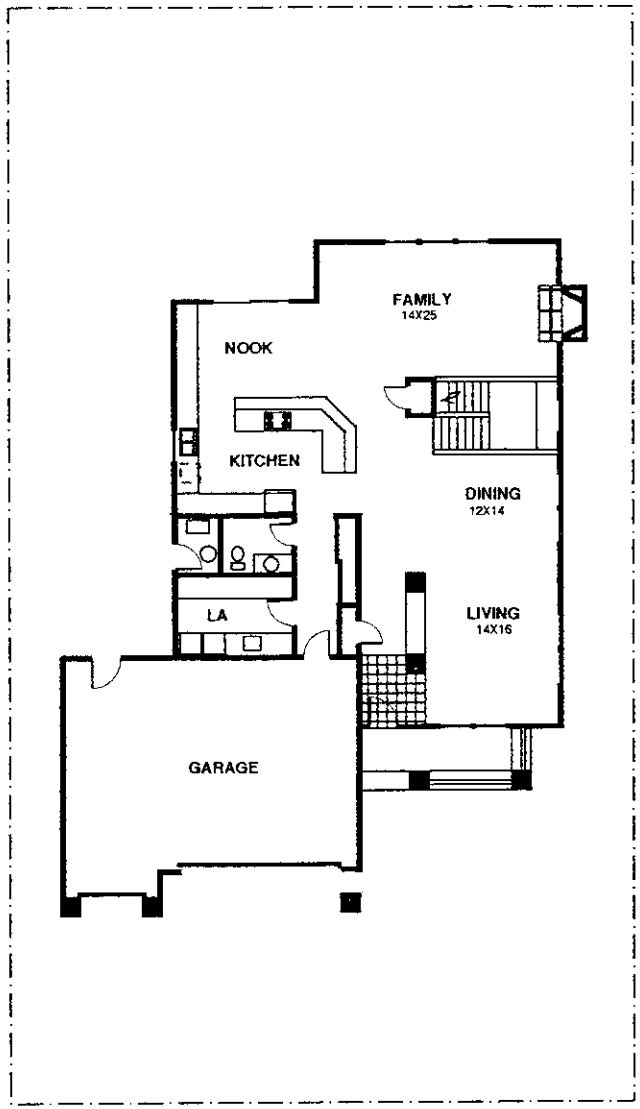
LOT SIZE 80'X94'
AREA: 2,300 SF

FIG. A-4, FLOOR PLAN

MODEL **C**

LOT SIZE 65'X115'

FIG. A-5, PERSPECTIVE VIEW



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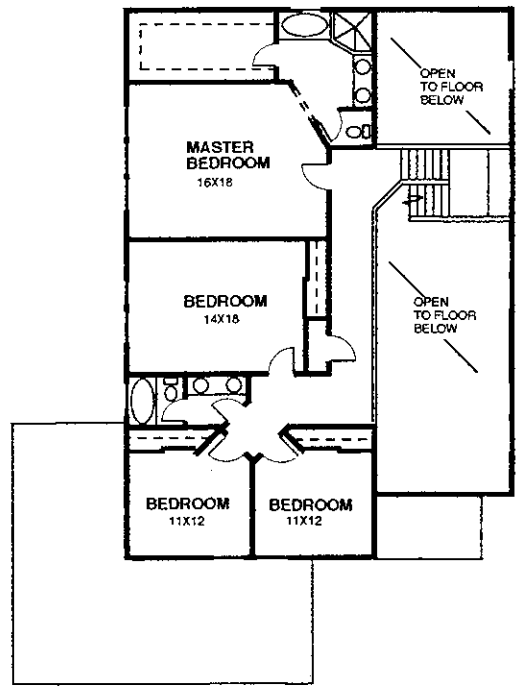


SECOND FLOOR

MODEL **C**

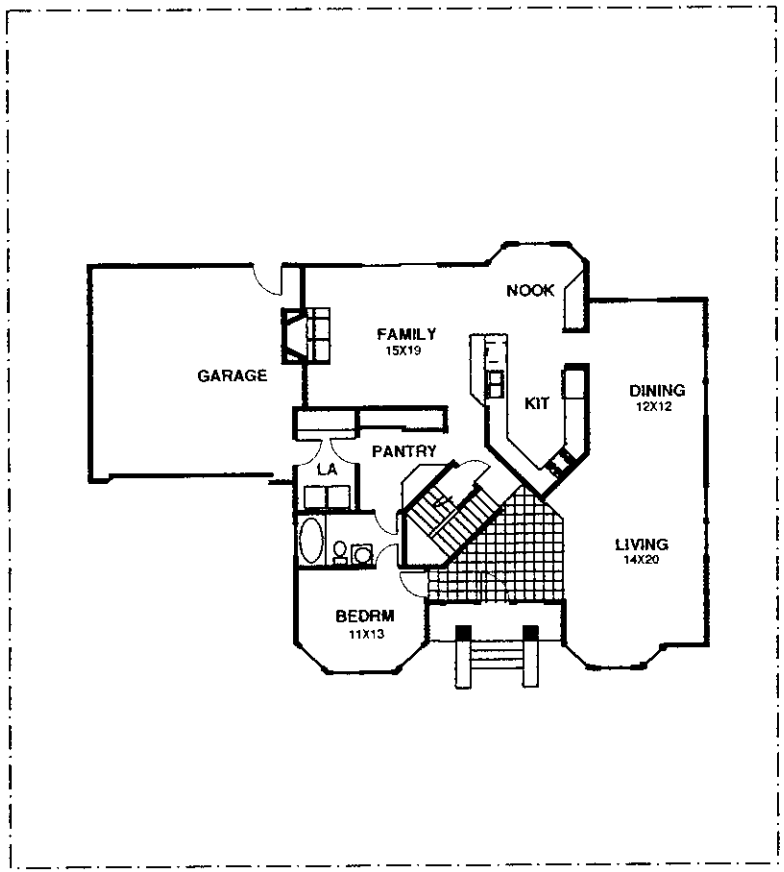
LOT SIZE 65'X115'
AREA: 2,600 SF

FIG. A-6, FLOOR PLANS

MODEL **D**

LOT SIZE 75'X90'

FIG. A-7, PERSPECTIVE VIEW



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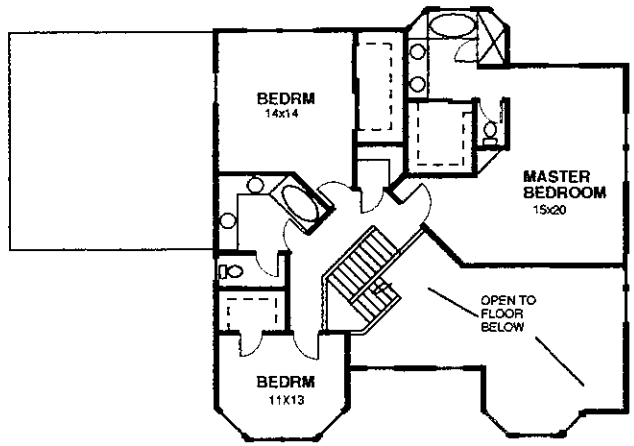
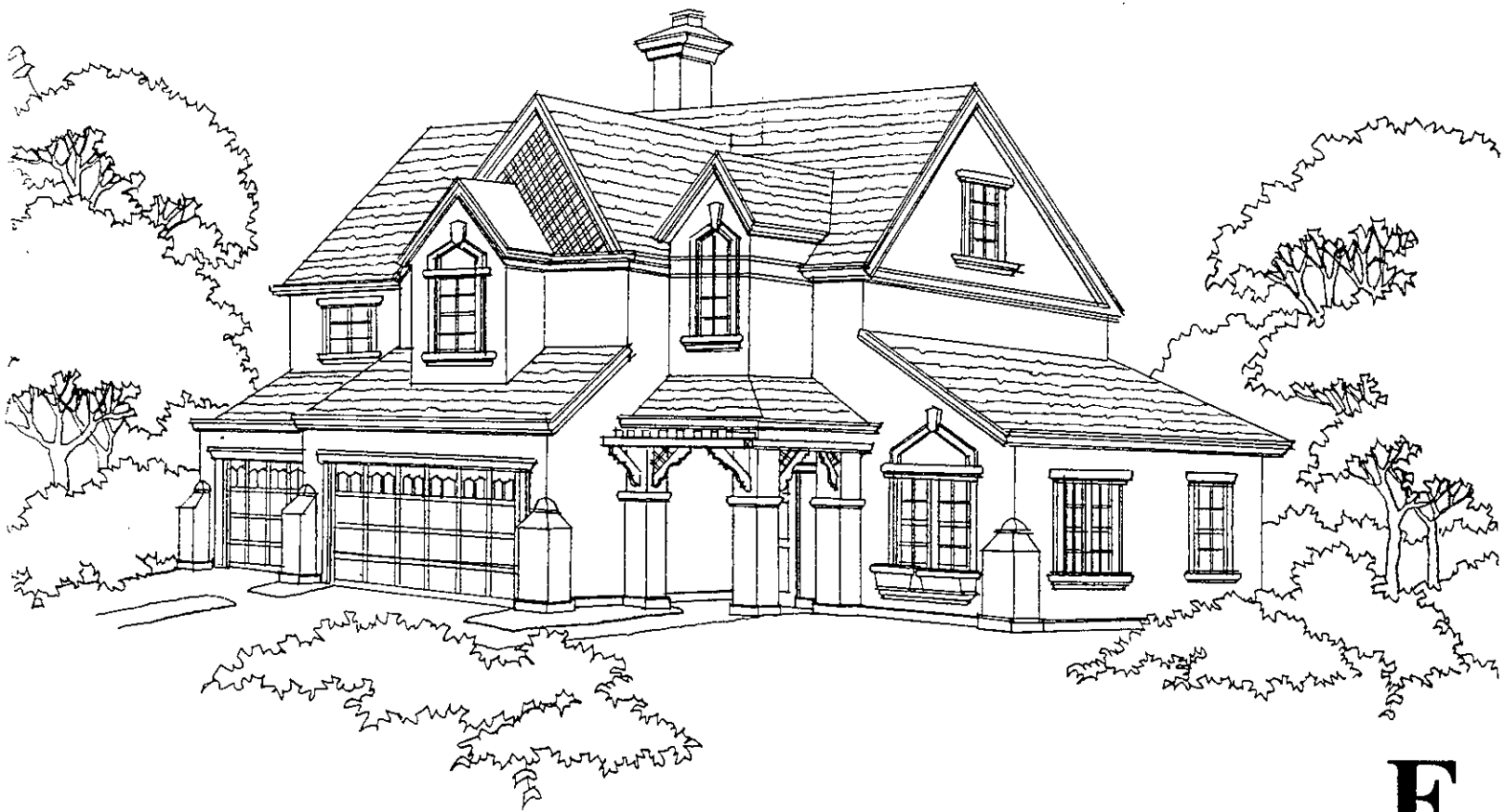


SECOND FLOOR

MODEL **D**

LOT SIZE 75'X90'
AREA: 2,500 SF

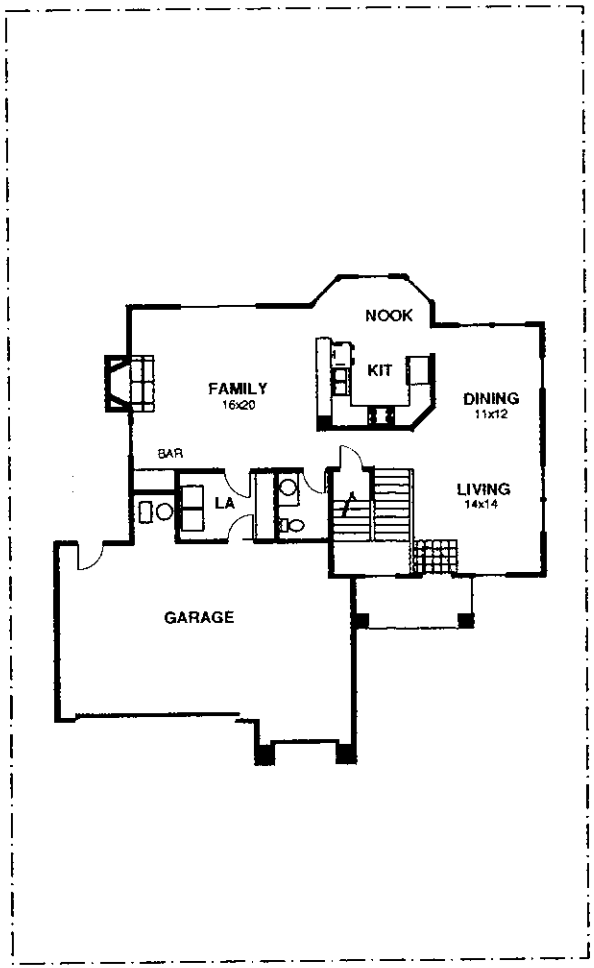
FIG. A-8, FLOOR PLANS



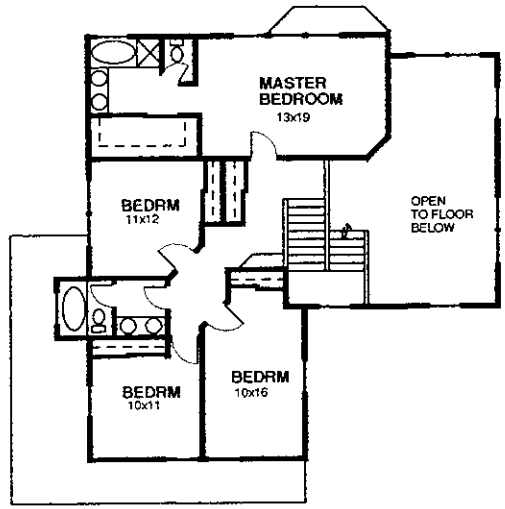
MODEL **E**

LOT SIZE 60'X100'

FIG. A-9, PERSPECTIVE VIEW



FIRST FLOOR



SECOND FLOOR

MODEL **E**

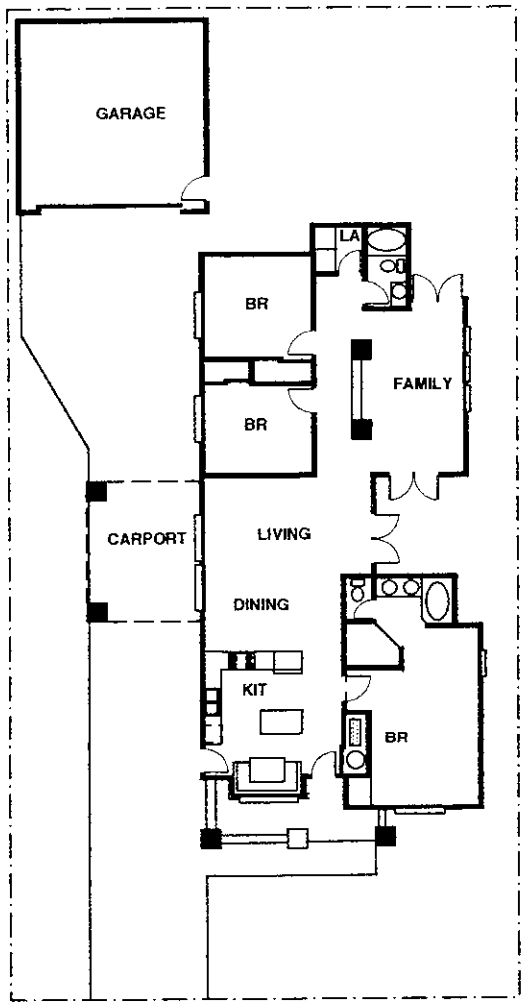
LOT SIZE 60'X100'
AREA: 2,350 SF

FIG. A10, FLOOR PLANS

MODEL **F**

LOT SIZE 50'X100'

FIG. A-11, PERSPECTIVE VIEW



FIRST FLOOR

MODEL **F**

LOT SIZE 50'X100'
AREA: 1,500 SF

FIG. A-12, FLOOR PLAN

Greyhawk Specific Plan
Project Participants

The Greyhawk Specific Plan and related documents have been prepared for Land Research & Management, serving as the applicant to the City of Winters. The following have prepared the Specific Plan and contributed to its contents:

Land Research & Management
- James Santurro, Project Manager

William Clarke, P. E., L. A., Planning

MD Fotheringham, Landscape Architects, Inc., Planning, Landscape Architecture, Urban Design
- Michael Fotheringham, ASLA, Principal-in-charge
- Dave Cubberly, Project Manager
- Helen Maderazo, Graphic Design

Wollman Associates, Civil Engineering
- John Wollman, P. E.

Abrams Associates, Transportation, Traffic, Engineering, Planning
- Charlie Abrams, Traffic Engineer

EDAW, Inc., Planning, Environmental Analyses
- Cindy Davis
- Debra Bishop

T & B Planning Consultants
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Nanco Architecture
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Archer Norris, Land Use Attorneys
- Ed Shaffer, Attorney

DFC Associates, Affordable Housing Consultant
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The Ryness Company, Marketing
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