CITY OF TURLOCK

MORGAN RANCH MASTER PLAN

June 2015

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INTRODUCTION

1.1 Master Plan Purpose

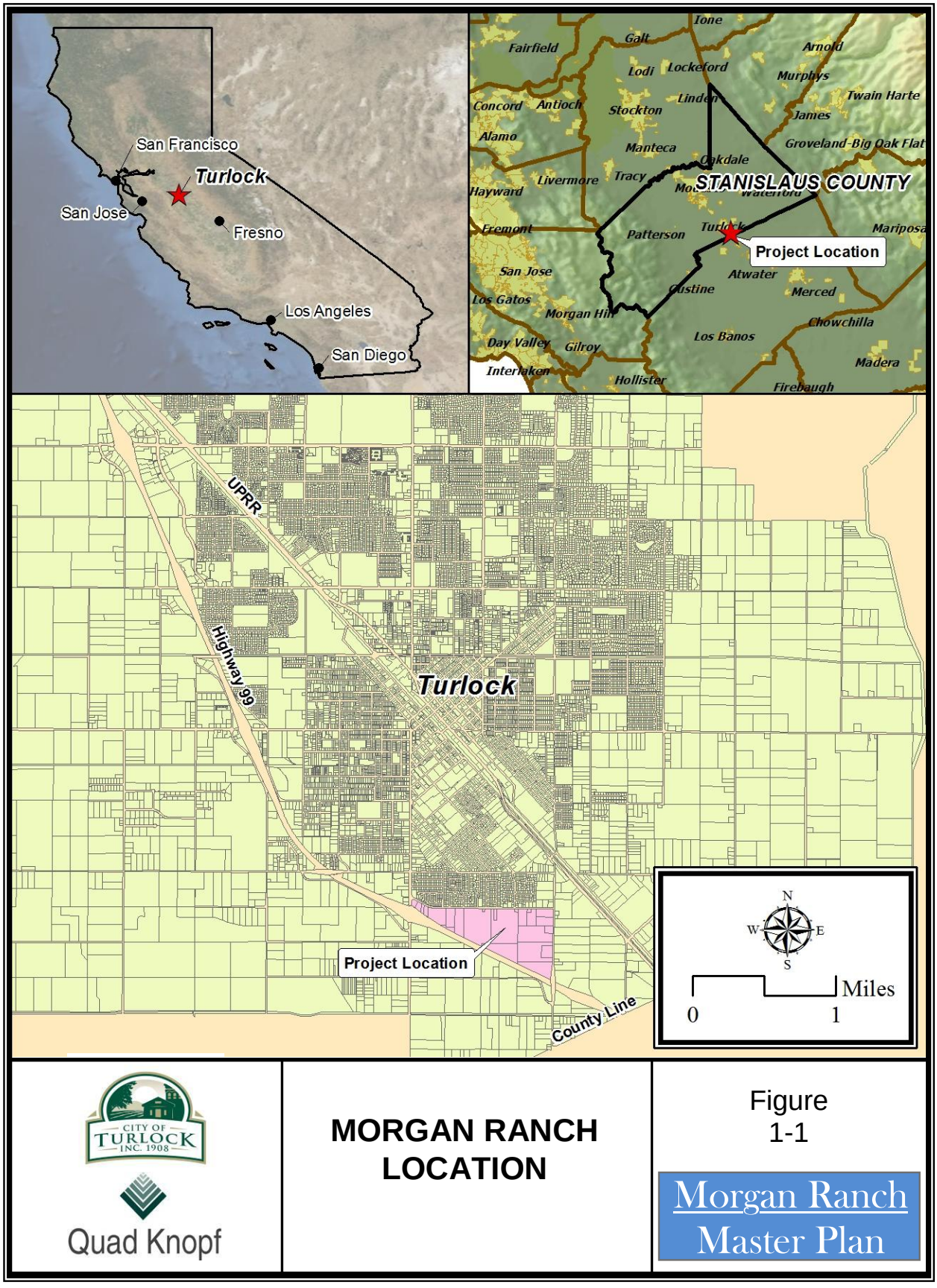
Located in the heart of California's Central Valley, the City of Turlock continually strives to maintain and improve upon providing its residents with an attractive, healthy, and vibrant place to live, work, shop, learn, and play. With a population now just under 70,000 persons, the City grew by 22.8% over the last decade. Even with the current economic recession, the City expects to continue to grow. Turlock believes that good planning and preparation now will lead to great neighborhoods in the future.

The City of Turlock prepares Master Plans and Specific Plans to direct the development of new growth areas within the City. These Master Plans and Specific Plans serve as a bridge between the more general policies in the Turlock General Plan and the requirements placed on specific development projects. The Turlock General Plan has identified the predominately undeveloped, roughly triangular area bounded by State Highway 99 to the south, Golf Road to the east, and Glenwood Avenue to the north, as Southeast (SE) 1 Master Plan Area (Plan Area). However, it has become more popularly known as Morgan Ranch. The location of the Plan Area is shown in Figure 1-1. The Plan Area covers approximately 170 acres.

The Morgan Ranch Master Plan (Master Plan) provides land use locations, development standards, and circulation patterns, and backbone infrastructure plans to direct future development. A key feature of the Master Plan is the small lot development standards. Small lot development is characterized by lots of less than 6,000 square feet in size with one single-family home on each lot. The existence of these development standards will enable subdivision maps that conform to the predetermined standards to be able to be approved without the need for other discretionary permits. The Master Plan will be used to guide the review and approval process of precise development proposals, including tentative maps, site plans, and improvement plans. The City of Turlock Development Services Department will be responsible for interpreting the Master Plan and determining compliance with adopted Master Plan standards and guidelines.

1.2 Description of Master Plan Adoption

A Master Plan for the Morgan Ranch Plan Area was first proposed by property owners in 2004. In 2005, a number of development concepts were analyzed. One of the landowners intending to develop their property agreed to fund the preparation of the Master Plan. When demand for new housing dropped significantly in 2008, all efforts to prepare the Master Plan were halted.



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MORGAN RANCH LOCATION

Figure 1-1

Morgan Ranch Master Plan

In 2010, the City agreed to take over the responsibility of funding and completing the Master Plan. Quad Knopf, Inc. was selected as the prime consultant to prepare the Master Plan and its accompanying Environmental Impact Report (EIR). Preparation of the Master Plan commenced in 2011 as a coordinated effort between the City of Turlock, the Quad Knopf consultant team, and several technical subconsultants.

On February 23, 2012, the City hosted a community outreach scoping meeting on the Master Plan and EIR to gather input from the public early in the planning and environmental documentation process. Approximately 30 people attended this scoping meeting at Turlock City Hall, including a representative from the Turlock Elementary School District. The majority of the participants were residents either within, or near, the Plan Area. They were presented with the preliminary goals and accompanying illustrations for the Master Plan land use and circulation proposals. The scoping meeting was held as a public forum, answering questions, and inviting input from attendees on not only the preliminary proposals, but also seeking input on topics, issues, and amenities to be included in the Master Plan and EIR.

Opportunities for additional public input continued throughout the Master Plan and EIR preparation process. In accordance with the City of Turlock Municipal Code, the Master Plan and EIR was reviewed, and considered for adoption/certification at public hearings held by the Planning Commission April 2, 2015, and City Council on June 23, 2015.

Individual proposals within the Master Plan are subject to review and approval of subsequent permits and entitlements by the City of Turlock (subdivision review, design review, conditional use permits, variances, and/or other permits). Application and processing requirements shall be in accordance with the Master Plan, the City's Zoning Ordinance, and other regulations, unless otherwise modified by this Master Plan.

Each subsequent development project shall be reviewed to ensure compliance with the California Environmental Quality Act (CEQA). The Master Plan EIR, certified concurrent with the Master Plan, serves as the base environmental document for subsequent entitlements within the Master Plan Area. Development applications will be reviewed on a project-by-project basis to determine consistency with the Master Plan EIR.

1.3 Consistency with Turlock General Plan

The SE 1 Master Plan Area is designated on the General Plan Land Use Diagram as a Compact Residential Neighborhood, with a minimum average residential density of 8.0 dwelling units per acre and a maximum average density of 9.6 dwelling units per acre (gross). These densities are somewhat higher overall than the current City density as a whole. Primary access to the neighborhood would be via Golf Road, Glenwood Avenue, and a new east-west arterial roadway

referred to as "Morgan Ranch Arterial". According to the General Plan, approximately two-thirds (116 acres) of the Plan Area is to be developed with residential land uses. The balance will include two neighborhood parks, an elementary school, limited office and commercial uses, and a detention/drainage basin located adjacent to State Highway 99. This Master Plan has been prepared to be consistent with the Turlock General Plan.

1.4 Relationship to Other Plans and Ordinances

Prior to adoption of this Master Plan, specific zoning has not been designated in the Plan Area except for existing parcels zoned Community Commercial (C-C) located southeast of the Lander Avenue and Morgan Ranch Arterial intersection. It is the intent that, along with adoption of this Master Plan, the Zoning Ordinance will be amended to reflect the land uses and zoning designations specified in the Master Plan.

The Master Plan specifies a number of development standards for lot design, setbacks, porches, garages, driveways, building design, landscaping, signage, parking, walls, and fences. In most cases, these standards are consistent with existing citywide development standards. Where there is a discrepancy between citywide standards and standards within the Master Plan, it is intended that the standards within the Master Plan shall apply within the Plan Area.

1.5 Organization of Master Plan

The following chapters are included in the Master Plan:

CHAPTER 1. INTRODUCTION

This section discusses the purpose of the Master Plan and its statutory authority. Additionally, several documents work in tandem with this Master Plan to provide policy guidance for implementation of the project. Existing documents include the City's General Plan, Zoning Ordinance, Municipal Code, Design Guidelines, and other plans that have been previously adopted by the City and are actively used to plan for, and implement, development projects. A summary of the Master Plan preparation and approval process and the Master Plan organization and contents are also included in this section.

CHAPTER 2. EXISTING CONDITIONS

This section provides a broad overview of existing conditions within, and surrounding, the Plan Area.

CHAPTER 3. LAND USE AND DEVELOPMENT STANDARDS

This section describes, and illustrates, the detailed land use and development standards that will shape the physical form and character of development within the Plan Area. Details include, prototypical lot configuration and intensity; dwelling unit orientation/access towards the street; setbacks; garage design/off-site parking and accessibility; landscaping; walls and fences; building height; off-site improvements and lot connectivity relationships with the various types of transportation modes (pedestrian, bicycle, trails, transit); general architectural guidelines for the commercial components of the project; lot design concepts; gateways; landmarks; signage; street furniture; and conceptual landscaping approaches and planting material lists.

CHAPTER 4. CIRCULATION

This section describes the overall circulation pattern for the Plan Area. Illustrations for typical rights-of-way cross-sections for arterial, collector, local streets, and alleys are included in this section. Other circulation topics such as traffic control, public transit, bicycle circulation, and walkability are also discussed.

CHAPTER 5. PARKS AND RECREATION

This section identifies the parks and open space areas within the Plan Area. Guidelines for the design and construction of these areas are also included in this section.

CHAPTER 6. PUBLIC FACILITIES AND SERVICES

This section describes the public services/infrastructure that support the Plan Area including police, fire, schools, parks and recreation, library, public transportation, utilities, and public facilities. This section also addresses the funding mechanisms that may be necessary to allow these facilities and services to occur.

CHAPTER 7. MASTER PLAN IMPLEMENTATION

This section presents the implementation steps necessary to obtain full entitlement for development within the Plan Area. Financing of public improvements required for build out of the Plan Area are discussed. A discussion on phasing of public improvements that will need to be constructed will be identified along with future development projects. This section also includes identification of the processes necessary for any future amendments to the Master Plan.

1.6 Development Challenges

A number of development challenges must be addressed for quality development to occur in the Master Plan Area. These include:

- Extension of a sewer trunk line to the site.
- Noise from the adjacent State Highway 99.
- Provision of a storm water drainage basin that can also be a neighborhood open space amenity.
- The need for a new elementary school in the area.
- The need for new neighborhood parks in the area.
- Avoiding further increases in traffic on Glenwood Avenue.
- Rerouting of existing irrigation lines.
- The need for development standards to guide small lot development in order to achieve the desired residential density.
- Uncertainty regarding the actual phasing of development projects.
- Undergrounding utilities.
- Construction of a new arterial between Lander Avenue and Golf Road.
- Realignment of Glenwood Avenue to the new arterial.

The Master Plan provides solutions to these challenges through implementation of design guidelines, adherence to development standards, and compliance with the General Plan and other City requirements.

Chapter 2
EXISTING CONDITIONS

2.1 Existing Land Uses and Features

2.1.1 PLAN AREA

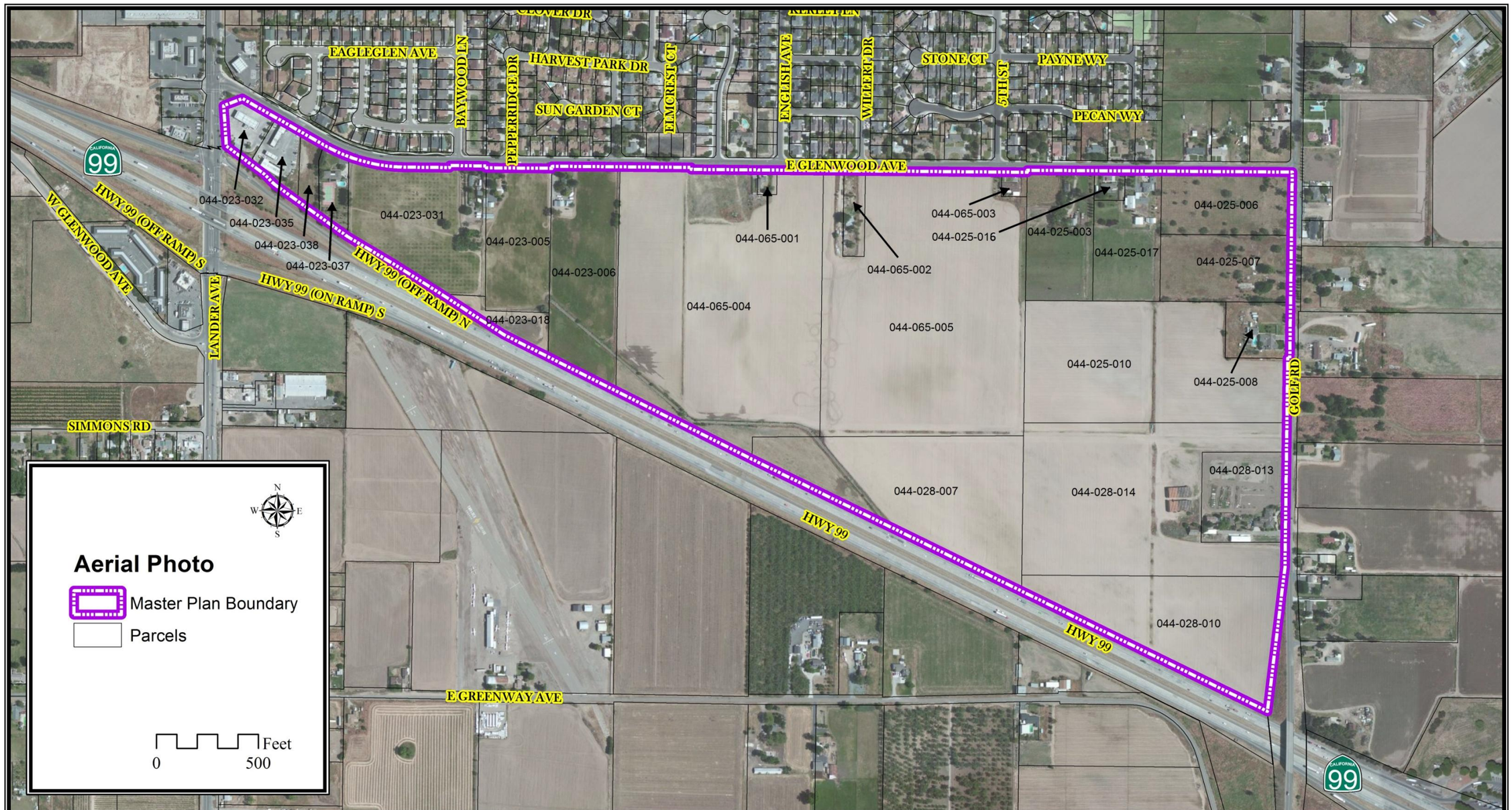
The entire Morgan Ranch Master Plan Area (Plan Area) is within Turlock's Sphere of Influence and within the Turlock city limits. The east right-of-way line of Golf Road is the current city limit boundary. The General Plan describes the boundary of the Master Plan Area as a "roughly triangular area that is bounded by State Highway 99 to the south, Golf Road to the east, and Glenwood Avenue to the north."

An aerial photo of the Plan Area is depicted in Figure 2-1. The project site is identified by the Stanislaus County Assessor's office with the following Assessor's Parcel Numbers (APNs):

044-023-005	044-023-037	044-025-010	044-028-014
044-023-006	044-023-038	044-025-017	044-065-001
044-023-018	044-025-003	044-025-016	044-065-002
044-023-031	044-025-006	044-028-007	044-065-003
044-023-032	044-025-007	044-028-010	044-065-004
044-023-035	044-025-008	044-028-013	044-065-005

2.1.2 EXISTING LAND USES

Figure 2-2 depicts the existing land uses. Current land uses include agricultural, residential, and commercial uses. Some of the agricultural land is fallow, some has been used for row crops, and one area has an existing orchard. Within the Plan Area, two occupied single-family residences front onto Golf Road. Ten occupied single-family residences and one occupied mobile home front onto Glenwood Avenue. The majority of the residences are set back from the roadways in rural residential-type configurations. Additional features for most of the homes include detached garages, sheds, or barns; one home has a tennis court, and two homes have swimming pools.



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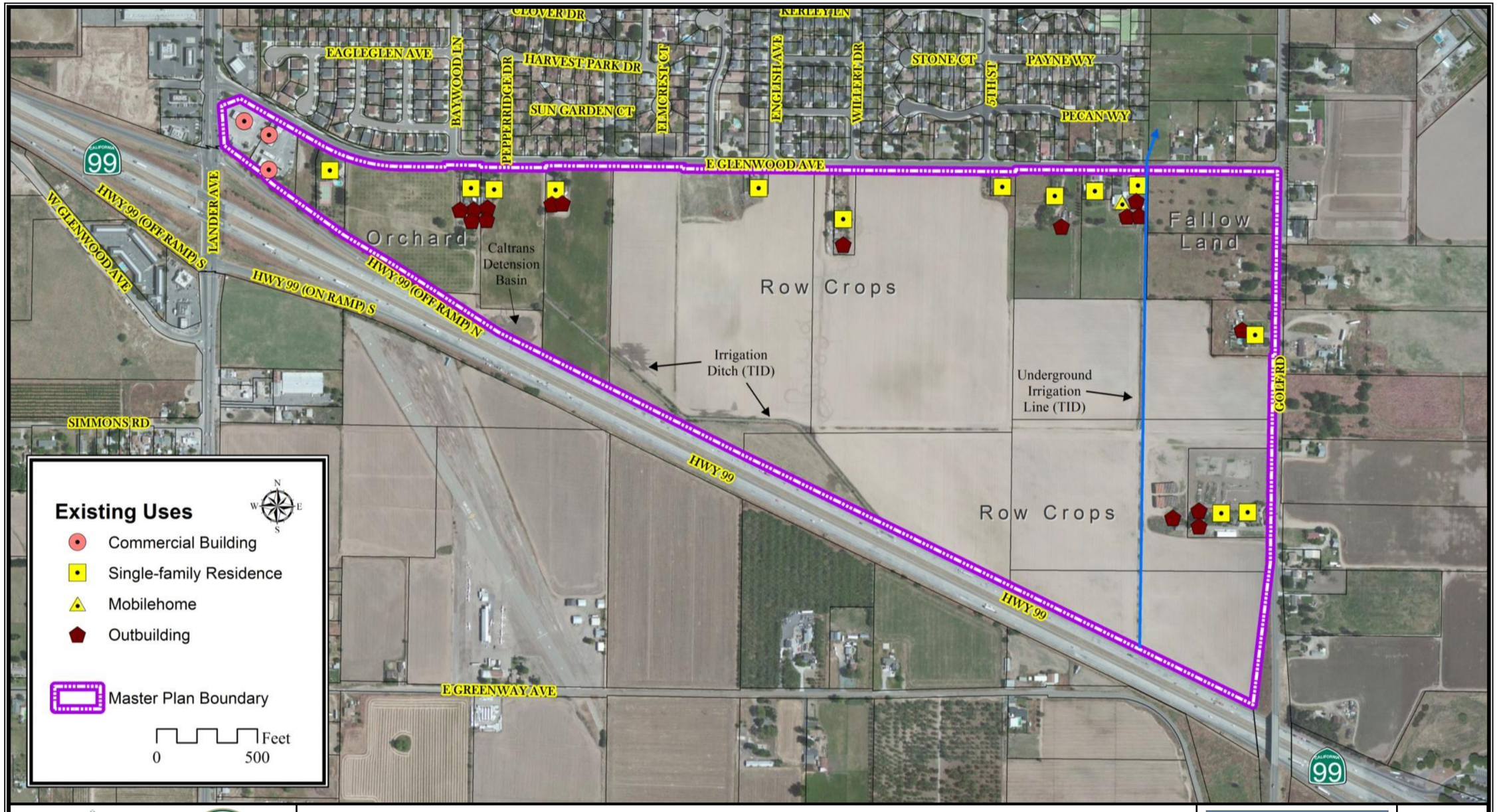
AERIAL PHOTO WITH ASSESSOR'S PARCEL NUMBERS

Morgan Ranch Master Plan

Figure 2-1



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EXISTING LAND USES

Morgan Ranch Master Plan

Figure 2-2

The existing, operating Lander Mini-Mart including a Chevron gas station with ten pumps is located at the southeast corner of Lander Avenue and Glenwood Avenue. Directly east of the mini-mart is the operating Fast Track Car Wash, which has five bays for self-service vehicle washing, one automatic vehicle washing bay, and self-service vacuums for cleaning vehicle interiors.

An open ditch runs roughly parallel to State Highway 99. This ditch goes underground, continues under Glenwood Avenue and Lander Avenue to serve parcels outside and west of the Plan Area. Another underground irrigation pipeline runs north/south about 500 feet west of Golf Road. This pipeline serves agricultural parcels north of the Plan Area on the northwest corner of Golf Road and Glenwood Avenue. Overhead electrical power lines parallel Glenwood Avenue on the south side of the street. A small drainage basin within the Plan Area owned by Caltrans is used for Highway 99 storm water run-off.

2.1.3 LAND USES SURROUNDING THE PLAN AREA

Glenwood Avenue is the north boundary of the Plan Area. An existing, non-operating gas station with a mini mart is located on the northeast corner of Glenwood Avenue and Lander Avenue. Approximately 40 occupied single-family residences are located along the north side of Glenwood Avenue; some homes have direct access to Glenwood Avenue, some are side-facing on Glenwood Avenue, and some are rear-facing with a block wall along the boundary. Three rural residential lots are located at the northwest corner of Glenwood Avenue and Golf Road. Each lot is developed with homes and outbuildings.

Golf Road is the eastern boundary of the Plan Area. The east right-of-way line of Golf Road is the current City limits. Properties on the east side of Golf Road are in the unincorporated portion of Stanislaus County. Twelve homes on rural lots are located on the east side of Golf Road; all of the homes have direct access to Golf Road. Golf Road crosses over State Highway 99 with a raised highway overpass at the southeast corner of the Plan Area. No freeway interchange exists at Golf Road.

State Highway 99 is a six-lane divided highway directly adjacent to the southern boundary of the Plan Area. The highway is an at grade thoroughfare for its entire length where it is adjacent to the Plan Area. A Caltrans standard wire mesh fence with metal posts separates the highway right-of-way from the Plan Area. Lander Avenue has interchange access to State Highway 99 with the highway elevated over Lander Avenue. A private airstrip, occupied rural residences, and agricultural land with mostly row crops and some orchards is located on the south side of State Highway 99.

Lander Avenue forms the western boundary of the Plan Area. An existing, operating drive-thru fast food restaurant and gas station with mini mart and automatic car wash are located on the west side of Lander Avenue.

2.2 Existing Circulation

2.2.1 CIRCULATION IN THE PLAN AREA

No public streets or roadways are currently located within the interior of the Plan Area. However, Golf Road, Glenwood Avenue, and Lander Avenue surround and are part of the Plan Area.

Lander Avenue is a four-lane divided arterial roadway running north-south. Lander Avenue connects State Highway 99 with downtown Turlock. The intersections of Lander Avenue/southbound State Highway ramps, Lander Avenue/northbound State Highway ramps, and Lander Avenue/Glenwood Avenue are all signalized. Lander Avenue is built out curb-to-curb with a center median and sidewalks and landscaping on both sides. Lander Avenue is designated as State Highway 165 south of State Highway 99, but is not designated as a highway north of its entrance/exit ramps.

Glenwood Avenue is a two-lane east-west local street that currently acts as a collector roadway between Lander Avenue and Golf Road. Currently, seven 3-way intersections are located between Lander Avenue and Golf Road. All of them are one-way stop intersections with Glenwood Avenue being the through movement. In front of the commercial uses near Lander Avenue, Glenwood Avenue is built curb-to-curb with sidewalk and landscaping on both sides. East of this area, Glenwood Avenue has curb/gutter only on the north side of the street from Lander Avenue to just east of Willert Drive. East of Willert Drive the sidewalk on the north side of Glenwood Avenue is intermittent. Above grade electrical power lines parallel Glenwood Avenue on the south side of the street.

Golf Road is a two-lane undivided arterial roadway running north-south. Golf Road connects to the eastern part of Turlock to the north, and to the Turlock Golf and Country Club to the south approximately 1.5 miles south of the Plan Area. Along the Plan Area boundary, Golf Road has no curbs, gutters, sidewalks, or landscaping. The roadway is elevated to pass over State Highway 99 at the southwest corner of the Plan Area. The east right-of-way line of Golf Road is also the current Turlock city limits.

2.2.1 CIRCULATION OUTSIDE THE PLAN AREA

State Highway 99, located south of the Plan Area, is a 6-lane divided highway oriented roughly northwest to southeast. State Highway 99 connects the City of Turlock with the cities of

Modesto, Stockton, and Sacramento to the north, and with the cities of Merced, Fresno, and Bakersfield to the south. A diamond interchange provides access and egress to State Highway 99 at Lander Avenue directly southwest of the Plan Area with the highway elevated over Lander Avenue and the entrance and exit ramps remaining at grade.

Lander Avenue continues north and south of the Plan Area, and connects the Plan Area to downtown Turlock. The first major intersection north of the Plan Area is the signalized intersection at Lander Avenue and Linwood Avenue.

Golf Road continues south over State Highway 99 and north toward downtown Turlock. The first major intersection north of the Plan Area is the stop sign-controlled intersection at Golf Road and Linwood Avenue. Further north, Golf Road connects with 1St Street, Golden State Blvd., Paulson Road, and Berkeley Avenue, and crosses Union Pacific Railroad mainline at-grade. This large intersection of a number of streets has challenging operation issues now that will be exacerbated as traffic increases in the future.

2.3 General Plan Policies, Zoning, and City Design Guidelines

2.3.1 GENERAL PLAN POLICIES

The General Plan designates the entire Plan Area as Southeast 1 (SE 1) Master Plan Area and is part of the Phase 1 phasing plan for new growth areas. SE 1 is designated as a compact mixed use neighborhood with an average minimum density of 8 and a maximum of 9.6 residential dwelling units per acre. Table 3-2 in the City's General Plan estimates that the development potential for the Plan Area is 900 residential units, along with some commercial land uses and public amenities.

The General Plan calls for a new neighborhood park to be located on the south side of Glenwood Avenue between English Avenue and Willert Drive. The General Plan also includes plans for an elementary school site on the south side of Glenwood Avenue, adjacent to the future park, between Willert Drive and 5th Street.

The General Plan includes policies for master plans in general, as well as guidelines that are specific to this Master Plan. These guidelines are intended to provide direction for the master planning process, and to clearly state the City's intentions for the respective master plan areas. Following are the guidelines, identified in the City's General Plan, that apply specifically to the preparation of this Master Plan.

- The linear detention basin and landscaped buffer shall be located adjacent to, and along the north side of Highway 99.

- Community commercial uses shall be concentrated in the western corner of the area, adjacent to the freeway where Glenwood Avenue meets Lander Avenue.
- High density residential shall be distributed in two clusters throughout the area, in the northeast corner (at Golf and Glenwood) and the west (where Glenwood meets the Morgan Ranch arterial).
- The neighborhood park and elementary school shall be adjacent to each other, centrally located in the new neighborhood.
- Office development shall be located adjacent to the community commercial and high density residential areas in the western corner of the area.
- Medium density residential shall occupy the remainder of the site.
- One of the main design considerations shall be the mitigation of noise and health risks associated with locating residential uses adjacent to Highway 99.
- At a minimum, Class II bicycle access is to be provided along the new Morgan Ranch Arterial, Golf Road, and the north/south collector between Glenwood Avenue and the Morgan Ranch Arterial.
- At a minimum, marked Class III bicycle access is to be provided along Glenwood Avenue.
- The roadway network necessary to support development in the master plan area is shown in Figure 3-3 and Figure 5-2 of the General Plan. Major roadway improvements associated with this master plan area include, but are not limited to, the Lander Avenue interchange improvements and the Morgan Ranch Arterial.

A complete list of the General Plan policies applicable to this Master Plan is located in the Appendix of this Master Plan.

2.3.2 CITY ZONING ORDINANCE

The City's General Plan requires the development of a Master Plan to establish the zoning and development standards that will apply to each parcel of land within the Master Plan Area. To achieve consistency with the General Plan, the current zoning designation of each parcel may need to change consistent with the Master Plan Land Use Plan described in Chapter 2. The zoning described in this Master Plan is based upon the City's existing zoning districts but includes changes to achieve the goals established in the General Plan for this Master Plan Area.

2.3.3 CITY DESIGN GUIDELINES

The City has adopted Design Guidelines for the City of Turlock. These guidelines will apply to the development in the Plan, unless superseded by this Master Plan.

2.4 Existing Public Facilities

The Master Plan describes the infrastructure required to serve the Plan Area. Each component of the infrastructure system is designed to accommodate full build out of the Master Plan. Phasing of infrastructure improvements and funding obligations are identified in Chapter 6.

2.4.1 SEWER COLLECTION AND DISPOSAL

Sewer service is provided by the City of Turlock. The Turlock Regional Water Quality Control Facility is located at the northwest corner of Linwood Avenue and Walnut Avenue, approximately one mile west of the Plan Area. The facility's capacity is 20 million gallons per day (MGD). Currently the facility treats 13 MGD.

Eight-inch sewer lines are located in the portions of Glenwood Avenue where residences front the street; these lines service existing residences only. The nearest sewer trunk line is a 24-inch line in Linwood Avenue, which runs east-west approximately ¼ mile north of the Plan Area. That sewer trunk line currently terminates approximately 700 feet west of the Linwood Avenue / Golf Road intersection.

2.4.2 SOLID WASTE

The City of Turlock will provide solid waste services to the Plan Area through their existing contract with Turlock Scavenger Company. Solid waste will be collected and delivered to an approved landfill. A three cart collection system is used which includes a blue can for commingled (non-sorted) recyclables, a can for green waste, and a can for all other waste. This same system will be utilized in the Plan Area.

2.4.3 DOMESTIC WATER

Domestic water service is provided by the City of Turlock. The City operates 24 active groundwater (potable) wells and several non-potable wells that are used for landscape watering in City parks. The average daily water production was 19 MGD in 2012 with a peak demand of 38 MGD during the summer.

A 12-inch water line is located in Lander Avenue. A 10-inch water line is located in Glenwood Avenue from Lander Avenue to approximately 400 feet east of 5th Street. Fire hydrants are

located on the north side of Glenwood Avenue from Lander Avenue to 5th Street near each street intersection.

2.4.4 STORM DRAINAGE

Storm drainage facilities are maintained by the City of Turlock. The gas station site drains to the existing storm drainage facilities in Lander Avenue. The north side of Glenwood Avenue drains to drop inlets that carry stormwater to existing basins located in the existing neighborhoods north of the Plan Area. None of the remaining portions of the Plan Area have existing drainage infrastructure. A storm drainage basin owned by Caltrans for exclusive use to drain storm water from State Highway 99 is located within the Plan Area just east of the Community Commercial uses.

2.4.5 IRRIGATION WATER

Turlock Irrigation District (TID) provides irrigation water to the region through a system of open ditches, pipelines, and pumps. Two irrigation lines currently run through the site. District 34A, known as the Casey, runs south to north from under State Highway 99 and continues in a northwesterly direction until eventually crossing under Glenwood Avenue. The pipeline continues from there to serve other downstream parcels. Within the Plan Area, the facility is comprised of a 42-inch diameter cast-in-place pipe and an open ditch.

District 247B, known as the Goldberry-Conyers, runs south to north from under State Highway 99 for approximately 400 feet before turning east to continue for about 350 feet. From there, the pipeline runs northeasterly for roughly 400 feet before turning north to cross under Glenwood Avenue. Within the Plan Area, the facility is comprised of a 36-inch diameter cast-in-place pipe and appurtenances.

TID also operates a drainage pump and well known as Pump 112 approximately 600 feet west of Golf Road, on the south side of Glenwood Avenue. The pump discharges into a structure box located to the east on the Goldberry-Conyers pipeline, for the purpose of controlling groundwater elevations in the area.

2.4.6 DRY UTILITIES

Electricity service in Turlock is provided by TID. Existing aerial power lines parallel the south side of Glenwood Avenue and the west side of Golf Road.

Natural gas is provided by Pacific Gas & Electric (PG&E). A 6-inch gas main is located in Lander Avenue. Three-inch gas mains are located in Glenwood Avenue and in Golf Road.

AT&T has existing underground facilities for communication starting south of State Highway 99 along Golf Road and continuing north before converting to overhead lines. The aerial facilities continue north on Golf Road and turn westward along the south side of Glenwood Avenue before going underground just east of 5th Street on Glenwood Avenue. The underground line continues west on Glenwood Avenue and turns to continue north and south along Lander Avenue.

Charter Communication, a local cable television operator, has an existing underground cable located on the north side of Glenwood Avenue running just behind the sidewalk from Lander Avenue to Golf Road. An existing aerial cable is located on the electrical poles located on the south side of Glenwood Avenue from Lander Avenue to Golf Road.

2.4.7 PUBLIC SAFETY

The Plan Area is served by the City of Turlock Police Department and the City of Turlock Fire Department.

As of 2011, the Turlock Police Department has a staff of 125, 81 of whom are sworn officers. The Police Department provides all operations and patrols out of its central station located at 244 North Broadway, approximately 2 miles north of the Plan Area. The new public safety facility was completed in October of 2013 as a result of a space needs study conducted in 2007 which confirmed existing facilities and staffing were not adequate to maintain a sufficient level of service for future population growth. The new facility will accommodate a projected staff of 242 by 2030, as calculated in the Space Needs Assessment.

The Fire Department provides fire protection, suppression, emergency medical services, and hazardous materials management to the Master Plan Area. Fire Stations No. 1 and No. 2 will both continue to serve the Plan Area. Fire Station No. 1 is located approximately 1½ miles north of the Plan Area at 540 East Marshall Street and Fire Station No. 2 is located approximately 1 ½ miles west of the Plan Area at 791 South Walnut Avenue.

The primary responder for the Plan Area will be Engine 31 located at Fire Station No. 1. The average response time to the Plan Area from Fire Station No. 1 is 4:01 minutes while the average response time from Fire Station No. 2 is 5:35 minutes. The City of Turlock, like many departments, strives to achieve the national target response time of 5:00 minutes or less, 90% of the time. The services provided from Fire Station No. 1 meet and exceed this target. An additional station, Fire Station No. 5, is proposed to be added in the general vicinity of the Plan Area, thus helping with response times in this part of the City.

2.4.8 PARKS

The Plan Area is served by the City of Turlock Parks, Recreation, and Facilities Department. Sunnyview Park is the nearest neighborhood park located at 500 South Berkeley Avenue, approximately 1 mile north of the Plan Area. This park offers a large playground area, mature shade trees, park benches, small picnic areas with barbeques, an ADA compliant drinking fountain, security lighting, a parking lot, and a restroom facility. This park also serves as a storm drainage basin.

A pocket park is located 1,000 feet north of the Plan Area at the northwest corner of Willow Lane and Clover Drive. The approximately one-quarter acre park includes swings, one bench, one half-basketball court, and open grassy field play.

2.4.9 SCHOOLS

Turlock Unified School District provides Kindergarten through 12th Grade public education in the Turlock area. The Plan Area is within the Cunningham Attendance Zone for elementary schools. Cunningham Elementary School is located at 324 West Linwood Avenue, approximately ½ mile northwest of the Plan Area. Dutcher Middle School is located at 1441 Colorado Avenue, about 2.5 miles north of the Plan Area. The Plan Area is also in the School Attendance Zone for Turlock High School, which is located at 1600 East Canal Drive, approximately two miles north of the Plan Area.

Both the City's General Plan and the Turlock Unified School District have identified the need for a new elementary school to be located within the boundaries of this Master Plan Area. The General Plan also includes guidelines that identify that the location of the new elementary school be "centrally located in the new neighborhood" and that a new neighborhood park shall be located adjacent to the new school.

Chapter 3

LAND USE AND DEVELOPMENT STANDARDS

3.1 Land Use Plan

The Land Use and Development Standards in this Master Plan are intended to create a sense of continuity, promote walking and biking, complement existing neighborhood development, and unify the Morgan Ranch community. Good design and the arrangement of buildings, facades, design details, landscaping, walkways, parking, and methods of screening unsightly views, are all addressed in the Development Standards established for each respective land use category.

A primary goal of this chapter is the development of a pedestrian-scaled environment to encourage residents, employees, and visitors to walk or bike to various destinations in the community. Pedestrian-scale details should be prevalent on all buildings and may be achieved through sensitive architectural treatment of entry and window design and variation in roof lines. Residential neighborhoods should place emphasis on porches and living spaces, thereby reducing the visual impact of garages on the streetscape. Open space design should further enhance the pedestrian and cycling environment by the strategic placement of walkways, trails and street bike lanes. Shade trees and drought-tolerant landscaping should be used throughout the Master Plan area. Outdoor furniture and adequate lighting are important components of trails and parks and must be included to promote walking and bike riding.

The Land Use Plan has been designed to implement the goals of the Turlock General Plan for new master plan areas. Land uses in the Plan Area include 120.2 acres of land classified Medium Density Residential at 7.5 to 9 dwelling units per acre and 15.0 acres of land classified High Density Residential at 17 to 30 dwelling units per acre. In order to meet General Plan requirements, the combination of the Medium and High Density Residential land area must achieve between 8 and 9.6 units per gross acre for the entire master plan area. This would result in a total of between 896 and 1,077 housing units.

In addition to the residential land use designations there are 8.9 acres of land classified Community Commercial with a 0.25 Typical Floor Area Ratio (FAR) including an existing gas station and car wash; 1.5 acres of land classified Commercial Office at 0.35 Typical FAR; and 24.2 acres of land classified Public that include storm water detention basins, parks, and a 880-student elementary school site. Table 3-1 provides a summary of the planned land uses and their development capacities described in dwelling units for residential uses and in leasable square footage for commercial and office uses.

Table 3-1
Land Use and Density Summary

General Plan Land Use Classification	Master Plan Acreage	Density Range per Zoning Code	Master Plan Density Range[1]	Units or Sq.Ft.	Characteristics
Medium Density Residential	120.2	7 to 15 units/acre	7.5 to 9 units/gross acre[2]	730 to 875 units	23.1 acres designated for future well site and storm drain basin
High Density Residential	15.0	15 to 40 units/acre	17 to 30 units/gross acre	250 to 450 units	
Community Commercial	8.9	0.25 FAR typical	0.25 FAR typical	96,900 sq. ft.	
Office	1.5	0.35 FAR typical	0.25 FAR typical	16,300 sq. ft.	
Public	12.0	N/A	N/A	N/A	Future Elementary School
Public	4.4	N/A	N/A	N/A	Existing Caltrans drainage basin
Park	8.7	N/A	N/A	N/A	2 future neighborhood parks

Table 3-2 shows the relationship between the General Plan land use classifications and the City's zoning districts that will be placed on the site.

Figure 3-1 shows the location of the land use classifications for the Plan Area. Most of the land use classification boundaries are located along planned roadways that are described in Chapter 4.

[1] *Combination of Medium and High Density Residential must achieve at least 8.0 units/gross acre but shall not exceed 9.6 units/gross acre for the entire master plan area, for a total of between 896 and 1,077 housing units.*

[2] *Gross acre and density calculations will exclude the estimated 23.1 acres for the future well site and storm drain basin.*

Table 3-2
Land Use / Zoning Relationship

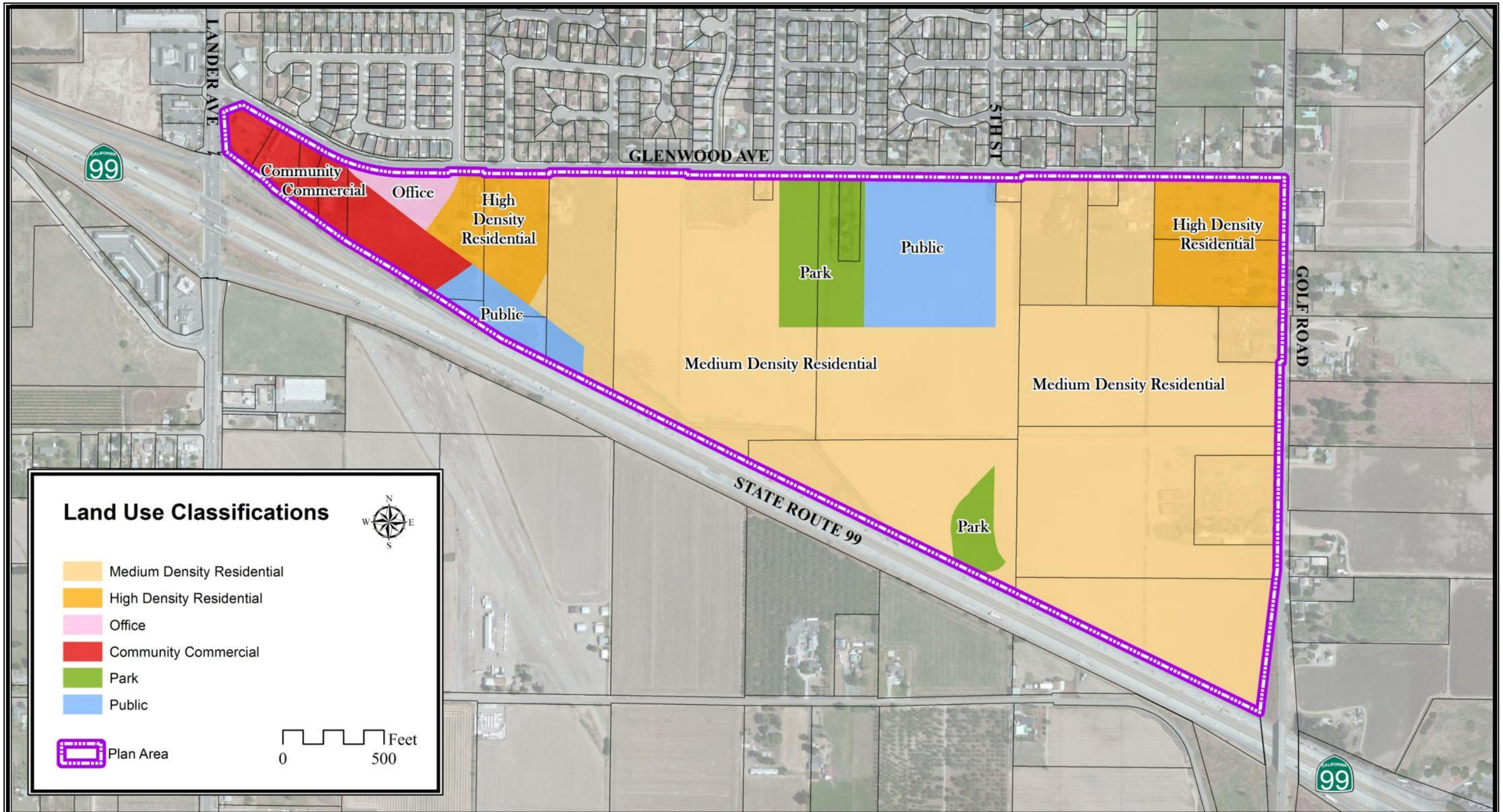
General Plan Land Use Classification	Zoning District
Medium Density Residential (MDR)	Medium Density Residential (R-M)
High Density Residential (HDR)	High Density Residential (R-H)
Community Commercial (CC)	Community Commercial (C-C)
Office (O)	Commercial Office (C-O)
Public (PUB)	Public/Semipublic (P-S)
Park (P)	Public/Semipublic (P-S)

Development shall comply with the corresponding Zoning District's development and design standards. Where the standards in this Master Plan conflict with the Zoning Ordinance (Turlock Municipal Code Title 9), the standards in the Master Plan shall apply. In addition, all development is subject to the provisions of California Government Code Section 66473.7 which requires a water supply assessment by the City prior to approving subdivision maps in the plan area, including, but not limited to, verification of the location, quality, and production levels of the proposed potable wells identified in Chapter 6.

3.2 Medium Density Residential Land Uses (MDR)

3.2.1 MEDIUM DENSITY RESIDENTIAL DEVELOPMENT STANDARDS

The Medium Density Residential (MDR) classification corresponds to the Medium Density Residential land use classification in the Turlock General Plan. Densities range from 7 to 15 dwelling units per gross acre in the City's Zoning Ordinance. However, to achieve the targeted density range in the General Plan of between 8.0 units to the acre minimum and 9.6 units to the acre maximum for all residential land within the master plan area, the Master Plan envisions that the Medium Density Residential zoning district will be developed as small lot single family residential units (see Appendix B) at between 7.5 and 9.0 units per gross acre. "Gross acres" excludes the 23.1 acres of Medium Density Residential land designated for the future well site and storm drain basin. While it may be possible to achieve these densities with a mix of other housing types, a change in the type of housing from the conceptual lotting plan in Appendix B will require an amendment to this Master Plan. Located on both sides of the new Morgan Ranch arterial, this is the predominant land use classification within the Master Plan area and is intended to provide entry-level housing opportunities within easy walking and biking distance to neighborhood parks and the new elementary school.



Quad Knopf

CITY OF TURLOCK INC. 1908

LAND USE PLAN

Morgan Ranch Master Plan

Figure 3-1

This Master Plan establishes the development and design standards applicable to both single- and multi-family residences in the Medium Density Residential classification. The development and design standards applicable to the Medium Density Residential zoning district established in TMC Chapter 9-3 shall apply unless amended herein. Tentative maps shall be reviewed and approved by the Turlock Planning Commission pursuant to TMC Title 11-5 Subdivision Maps, Article 7. When approving a tentative subdivision map within the Plan Area, a finding shall be made that the proposed lots and model homes are consistent with the Morgan Ranch Master Plan.

A lot fit plan, including the footprint of model homes, driveway locations and approaches, and setbacks for production, shall be submitted with an application for a tentative map demonstrating conformance with setback, driveway, and driveway spacing requirements. Preliminary model home plans, including four-sided, color elevations, shall be submitted with the subdivision map. For detached single-family units, design review shall be conducted prior to the issuance of a building permit to confirm conformance with the development and design standards contained herein. For all other residential and non-residential units, design review shall occur during the appropriate entitlement process as defined by the Articles 2 and 5 of Title 9-3 of the Turlock Municipal Code. Deviations from the design and/or development standards in this Master Plan shall be approved through an amendment to this Master Plan. All development shall be subject to the City's Design Guidelines.

Table 3-3 lists the development standards for the Medium Density Residential classification within the Plan Area. Figure 3-2 shows examples of allowable residential fence locations. Figure 3-3 shows examples of small lots of varying sizes with layouts of single-family homes that show the variety of ways that the medium density residential design standards can be met. Other layouts that can be shown to meet the development standards will also be acceptable.

Table 3-3
Medium Density Residential Standards

Category	Regulation
Land Use	
Applicable Zoning District	R-M
Density Range	7.5 to 9.0 dwelling units per gross acre
Permitted Uses	Single-family dwellings; Second units; Duplexes; Group homes; Family day care (large and small); Drainage basin; Minor utilities; Accessory structures; Detached garage[3]
Conditional Uses	All other uses permitted or requiring a MAA, MDP, or PD in the R-M zoning district pursuant to Turlock Municipal Code Section 9-3-202
Prohibited Uses	All other uses prohibited or requiring a CUP in the R-M zoning district pursuant to Turlock Municipal Code Section 9-3-202
Exemplary Product Types[4]	Single-family detached homes, patio homes.
Lot Configuration	
Lot Area	
1 Residential Unit	3,600 sq. ft. minimum
2 or more Residential Units	6,000 sq. ft. minimum plus 2,000 sq. ft. for each additional unit above 2 units
Lot Width	
Single Family	
Interior Lot	45 feet minimum
Corner Lot	55 feet minimum
Multi-Family (2 or more units)	
Interior Lot	60 feet plus 5 feet per unit above 2 units
Corner Lot	65 feet plus 5 feet per unit above 2 units
Lot Depth	
Single Family	80 feet minimum
Multi-Family	100 feet minimum
Lot Width to Depth Ratio	Lot depth shall be no greater than 4 times the lot width
Curved or Cul-de-sac Frontage	35 feet minimum

[3] A "detached garage" is a structure designed to meet the required parking for the residential dwelling and is not attached to the main structure. A detached garage shall be approximately 400 square feet in size. Any structure designed to accommodate more than the required parking shall be considered an accessory structure.

[4] Other product types such as zero lot line and patio homes can be considered through the Planned Development process.

Table 3-3 (continued)
Medium Density Residential Standards

Category	Regulation
Setbacks (continued)	
Front Yard	
Living Space	15 feet minimum, 20 feet minimum along Glenwood Avenue
Porch	15 feet minimum, 20 feet minimum along Glenwood Avenue
Garage	20 feet minimum, and at least 5 feet behind living space
Accessory Structures	
7 feet tall or less	15 feet minimum, 20 feet minimum along Glenwood Avenue and shall be located behind a fence for screening
Greater than 7 feet tall	20 feet minimum, 25 feet minimum along Glenwood Avenue and shall be located behind a fence for screening
Patio Covers	20 feet minimum, 25 feet minimum along Glenwood Avenue
Interior Side Yard	
Living Space	5 feet minimum
Porch	5 feet minimum
Garage	5 feet minimum
Accessory Structures	
7 feet tall or less	0 feet
Greater than 7 feet tall	5 feet minimum
Patio Covers	5 feet minimum
Corner Side Yard	
Living Space	15 feet minimum, 20 feet minimum along Glenwood Avenue
Porch	15 feet minimum, 20 feet minimum along Glenwood Avenue
Garage	20 feet minimum, and at least 5 feet behind living space
Accessory Structures	
7 feet tall or less	15 feet minimum, 20 feet minimum along Glenwood Avenue and shall be located behind a fence for screening
Greater than 7 feet tall	20 feet minimum, 25 feet minimum along Glenwood Avenue and shall be located behind a fence for screening
Patio Covers	20 feet minimum, 25 feet minimum along Glenwood Avenue
Rear Yard (without Public Alley)	
Living Space	10 feet minimum
Garage	10 feet minimum
Accessory Structures:	
7 feet tall or less	0 feet
Greater than 7 feet tall	5 feet minimum
Patio Covers	5 feet minimum

Table 3-3 (continued)
Medium Density Residential Standards

Category	Regulation
Setbacks (continued)	
Rear Yard (with Public Alley[5])	
Living Space	5 feet minimum
Garage	2 feet minimum
Accessory Structures	
7 feet tall or less	0 feet
Greater than 7 feet tall	2 feet minimum
Patio Covers	2 feet minimum
Building Projections into Yard	Refer to Turlock Municipal Code Section 9-2-105 but shall not be closer than 2 feet to the property line and shall not be permitted within or above any required easement area; patio covers shall not project into required setback areas
Distance between Buildings on the Same Lot	6 feet minimum
Building Massing	
Building Height	
Living Space	35 feet maximum
Garage:	
Attached	35 feet maximum, but no higher than the height of the attached living space
Detached	Maximum of 14 feet for garages built with a gable or gambrel roof and a maximum of 11 feet with a flat roof
Accessory Structures	10 feet maximum
Patio Covers	12 feet maximum
Lot Coverage	Accessory structures shall not exceed 15% of the total lot area

[5] Public Alleys shall be a minimum of 20' wide and shall be constructed to City standards.

Table 3-3 (continued)
Medium Density Residential Standards

Category	Regulation
Covered Porch / Courtyard[6]	
Applicability	A covered porch or courtyard is required for 60% of all dwelling units
Porch Size	
Depth	6 feet minimum, 8 feet preferred
Width	25% minimum of building front elevation
Courtyard Size	
Area	75 square foot minimum
Width/Depth	8 feet minimum
Off-street Parking	
Rate	
Single Family	2 spaces per residential unit
Multi-Family	1.5 spaces per residential unit plus 1 guest space for every 4 units
Garage Width	Double-wide maximum[7]
Driveway Width[8]	
Double-wide garage	20 feet maximum
Tandem garage	10 feet maximum
Driveway Setback	5 feet from side property line; may be reduced to 2 feet where driveway accesses a detached garage located behind the rear wall of the living space
Entry walkway	4 feet wide minimum

[6] A courtyard and covered porch are spaces located at the front entrance to a residence. A courtyard is surrounded by a low wall, a maximum of 3 feet in height, and is not subject to the front yard setback. A covered porch is covered area that shall meet the front yard setback for the living space.

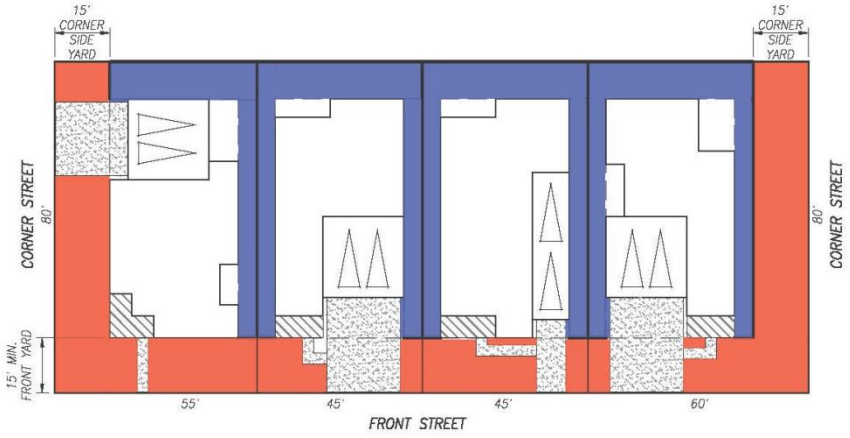
[7] No more than 40% of the single family homes shall be designed with front-loaded double-wide garages that are fully visible from the street

[8] "Ribbon" driveways constructed to City standards are acceptable.

Table 3-3 (continued)
Medium Density Residential Standards

Category	Regulation
Walls and Fencing	
General Requirement[9]	Fences shall be constructed at a height of 7 feet except when located within the front or corner side yard (see exceptions below).
Fence/Wall Height Exceptions	
Front Yard	3 feet maximum (solid), 4 feet maximum (at least 50% open)
Corner Side Yard	3 feet maximum (solid), 4 feet maximum (at least 50% open)
Adjacent to arterial roadway or Highway 99	May exceed 7 feet if approved by the Community Development Director to mitigate noise when documented by a noise study
Identification Signage	Refer to Turlock Municipal Code Article 5 of Chapter 9-2
Landscape / Open Space Area Coverage	
Landscaping	30%
Usable Open Space	500 sq.ft. minimum per unit

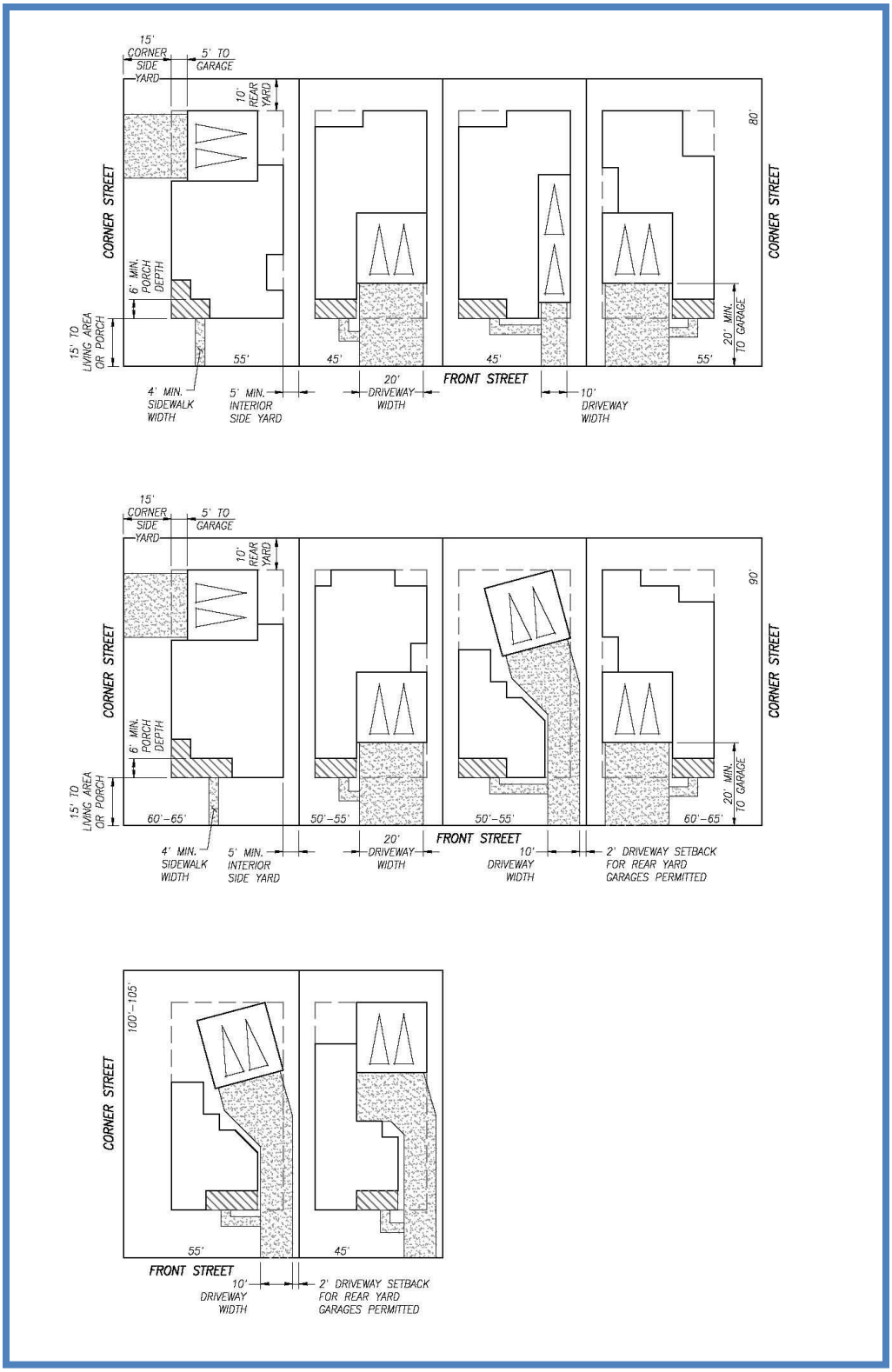
Figure 3-2
Examples of Allowable Fence Locations



Red area = 3 feet maximum (solid), 4 feet maximum (at least 50% open)
Blue area = 7 feet maximum

[9] Also see Figure 3-2 for examples of fence location standards.

Figure 3-3
Examples of Acceptable Small Lot Layouts



3.2.2 MEDIUM DENSITY RESIDENTIAL DESIGN GUIDELINES

Building Design

a. Buildings shall comply with and conform to the Turlock Municipal Code and Design Guidelines. Design Review for single family homes shall be required at both the subdivision map approval and building permit approval stages.

b. A diversity of building types and styles shall be provided within the neighborhood. This is accomplished with a variety of builders, a variety of floor plans and building elevations, and a variety of residential product densities.

c. For single family detached products, the same floor plan and same elevation may not be repeated on adjoining lots or facing lots. Lots that back onto each other are permitted the same floor plan and same elevation. Homes on adjoining lots or facing lots may not be painted the same exterior color. Homes that back onto each other are permitted the same exterior color.

d. A Lot Fit Plan and model house plans shall be submitted with the Tentative Map application to confirm that the selection of house plans will fit on each of the proposed lots. The Lot Fit Plan shall include the footprint of model homes, driveway location, and approaches, and setbacks for production housing developments.

e. Homes shall be oriented toward the street with outdoor sitting spaces, such as porches or courtyards, except along arterial streets. Homes shall not be permitted to front onto arterial streets.

f. All elevations that can be seen from the public street, a park, or open space shall be architecturally enhanced.

g. Architectural features, such as porches, balconies, chimneys, door placement, window placement, bay windows, chimneys, arches, recesses and projections, changes in plan, and siding materials shall be used to design buildings in order to avoid flat, blank, or unarticulated walls.

h. Building facades and roof lines shall be varied to create visual interest. No single design shall be repeated more frequently than every fourth house. A significant difference in massing, composition and style shall be required (not just finish or color). Individual dwelling units shall be distinguishable from one another. Roof articulation may be achieved by changes in plane of no less that 2.5 and/or the use of traditional roof forms such as gables, hips and dormers. Secondary ridge lines such as a front facing gable may not exceed the height of the primary ridge line.

i. Roofing colors shall be soft earth tones to minimize reflective glare and visual impact.

j. Solar panels and exposed roof metal such as stack vents, attic ventilators, roof flashing, etc. are encouraged to be located out of view from the public street, when possible.

k. All utility and mechanical equipment shall be screened from view from the public right-of-way and located behind a solid fence at least as tall as the equipment of at least seven (7') feet in height. The solid fence shall be constructed of high quality, low-maintenance materials such as masonry or recycled plastic with landscaping, such as vines, to discourage graffiti. All external materials shall be graffiti-resistant. Ground-mounted air conditioners, coolers, and antennas are encouraged.

l. Buildings, structures, and fences shall not obstruct visibility in the Clear Vision Triangle established in the City of Turlock Standard Specifications and Drawings.

Garages and Driveways

a. A garage is defined as a special accessory building designed to store vehicles and is fully enclosed on all sides.

b. Required parking for residential units shall be enclosed within a garage (attached or detached); guest or additional parking may be uncovered.

c. In a single family subdivision, a maximum of 25% of units may use tandem parking.

d. A detached garage may be constructed so long as it satisfies the required parking for a residential dwelling and is approximately 400 square feet in size.

e. Garages shall be de-emphasized to create a positive visual relationship between the front entrance of the home and the street.

f. Garages shall be designed to match the colors, materials, and architectural style of the living space.

g. Garages are required to be recessed at least five (5') feet behind the living space or porch of the dwelling unit. Rear yard garages accessed by a driveway from the street are preferred as a way to provide off-street guest parking.

h. No more than 40% of the single family homes shall be designed with front-loaded two-car garages that are fully visible from the street. The visual impact of two-car garages from the street may be minimized by the following alternative methods:
    - Facing the garage on a side street or alley;
    - Tandem garages;

- Rear yard garages accessed from the street.
- Projecting the second story out over the garage.

i. There shall not be more than three consecutive adjacent homes with front-loaded two-car garages. On corner lots, side-loaded garages accessed from the street side yard are encouraged, but not required.

j. On corner lots, garages shall be sited on the lot so that the driveway is located the maximum possible distance from the nearest street intersection.

Example of a garage recessed from the main living area.

Example of a garage located at the rear of the lot behind the dwelling.

k. Driveways shall lead to the garage. No additional parking areas may be provided within the front or corner side yard setback. Circular driveways are prohibited. Hardscape or gravel improvements in the front yard may not be configured in such a manner as to facilitate vehicle parking.

l. Garage doors shall be recessed behind the edge of the garage.

m. Garage doors shall include ornamental features or windows to create visual interest.

n. Rear-loaded detached garages accessed from a Public Alley at the rear of the lot are acceptable. Such garages shall be set back a minimum of two (2') feet from the alley and must meet side yard setback requirements. When the required parking for the dwelling unit is accessed from a Public Alley, one (1) additional guest parking space no greater than twenty (20') feet long and ten (10') feet wide may be constructed in the front yard.

o. "Ribbon" driveways are preferred but not required. "Ribbon" driveways shall be constructed to City standards.

p. Driveways shall be located and spaced to maximize the frontage of adjacent lots to provide more street parking opportunities. If less than twenty (20') feet is provided between driveway approaches, the curb shall be marked to prohibit parking.

Covered Porch/Courtyard Design

a. A minimum of 40% of all dwelling units shall include a front porch or courtyard oriented to the fronting street. Side porches are permitted on corner lots. Side porches may not be used to meet the front porch requirements. Compliance with this requirement for production housing shall be determined based on the master plans offered and the lot fit plan submitted with the subdivision map.

b. Covered porches shall include detailed columns and railings that are consistent with the architectural character of the building. Railings must be attached directly to a porch column and not attached to the building wall. Use of column brackets, fascia, and steps are encouraged when consistent with the architectural character of the building.

c. Courtyards may be enclosed by a fence or wall that meet the standards for front yard fencing identified in Table 3-3 with a pedestrian opening to the front yard area. Solid masonry walls not exceeding a height of three (3') feet and complimenting the materials of the residence are permitted.

Accessory Structure Design

a. Accessory structures greater than seven (7') feet in height shall be constructed of colors, materials, and architectural style to match the living space.

b. Accessory structures greater than seven (7') feet in height shall be located at least five (5') feet behind the front wall of the living space.

c. Accessory structures are limited to 15% of the lot area.

d. Patio covers shall not be allowed to project into a yard setback area.

e. Patio covers are one-story, roofed structures not more than twelve (12") feet above grade and used only for recreational or outdoor living purposes, not as carports, garages, storage rooms, or habitable rooms.

f. Patio covers shall be open on two or more sides for not less than 65% of the wall area below a minimum of six feet eight (6' 8") inches of each open wall, measured from the floor. The open sides must not be covered with any permanent materials which obstruct the free passage of light and air, except insect screening, or approved, translucent or transparent plastic, not more than .125 (.125") inch (3.2 mm), in thickness, glass conforming to the provisions of Chapter 24 of the California Building Code (tempered) or any combination of these.

g. If two sides of a patio cover are open, the open sides may be partially enclosed by solid walls which do not exceed 30 (30") inches in height above the floor, in addition to the screening. When required windows from adjoining rooms open into a patio cover, however, open area equivalent to the requirements of the California Building Code apply.

h. Patio covers may be attached or detached, and permitted only as accessory to single-family dwellings or to individual dwelling units in multi-dwelling-unit buildings. Detached patio covers must be a minimum of six (6') feet from the main structure and will be considered an accessory structure.

Fences and Walls

a. Fences constructed along arterials shall be graffiti-resistant masonry designed with regularly spaced enhanced pilasters.

b. Fences constructed along collectors shall be graffiti-resistant masonry. The materials shall be the same type and design as the fencing used along arterials.

c. Masonry fences are preferred, but not required, along all local streets.

d. Landscaping shall be required between a fence or wall and the public right-of-way.

3.3 High Density Residential Land Uses (HDR)

3.3.1 HIGH DENSITY RESIDENTIAL DEVELOPMENT STANDARDS

The High Density Residential (HDR) classification corresponds to the High Density Residential land use classification in the Turlock General Plan. Densities range from 15 to 40 dwelling units per gross acre. However, to achieve the targeted density range in the General Plan of between 8.0 units to the acre minimum and 9.6 units to the acre maximum for all residential land within the master plan area, the Master Plan envisions that the High Density Residential zoning district will be at between 17 and 30 units per gross acre.

This classification is intended to support compact development, provide housing choices to match changing demographics, and facilitate needed affordable housing with a variety of designs within the Plan Area. Multi-family homes, such as townhomes or row houses, apartment or condominium complexes, and other attached residential product types, fall within the density range acceptable within this classification. Two areas are designated for High Density Residential Development on the Morgan Ranch Master Plan: 1) southwest of the intersection of Glenwood Avenue and Golf Road and 2) southeast of the intersection of Glenwood Avenue and Baywood Lane.

This Master Plan establishes the development and design standards applicable to multi-family residences in the High Density Residential classification. The development and design standards applicable to the High Density Residential zoning district established in TMC Chapter 9-3 shall apply unless amended herein. When approving a tentative subdivision map within the Plan Area, a finding shall be made that the proposed lots are consistent with the minimum standards in the Morgan Ranch Master Plan. Permitted multi-family dwellings are required to submit a Design Review (Minor Discretionary Permit) application concurrently with an application for a tentative map demonstrating conformance with City standards and the design guidelines. For all development types, Design Review shall occur during the appropriate entitlement process as defined by Article 2 and 5 of Chapter 9-3 of the Turlock Municipal Code. Deviations to the designs in this Master Plan shall be approved through an amendment to this Master Plan. Table 3-4 lists the development standards for the High Density Residential classification within the Plan Area.

Table 3-4
High Density Residential Standards

Category	Regulation
Land Use	
Applicable Zoning District	R-H
Density Range	17-30 dwelling units per gross acre
Permitted	Multi-family dwellings including Condominiums, Group homes, Group quarters and duplexes; Family day care (large and small); Accessory structures; Minor utilities
Conditional Uses	All other uses permitted or requiring a MAA, MDP, or PD in the R-H zoning district pursuant to Turlock Municipal Code Section 9-3-202
Prohibited Uses	All other uses prohibited or requiring a CUP in R-H zoning district pursuant to Turlock Municipal Code Section 9-3-202
Exemplary Product Types	Townhomes, Row houses, Condominiums, Apartment complexes
Lot Configuration	
Lot Area	7,500 sq. ft. minimum
Lot Width	75 feet minimum; 80 feet minimum corner lots
Lot Depth	100 feet minimum

Table 3-4 (continued)
High Density Residential Standards

Category	Regulation
Lot Width to Depth Ratio	Lot depth may be no greater than 4 times the lot width
Frontage	35 feet minimum
Setbacks	
Front Yard	20 feet minimum
Interior Side Yard	10 feet minimum for one-story building plus 5 feet for each additional story
Corner Side Yard	20 feet minimum
Rear Yard	10 feet per story
Distance Between Buildings on the Same Lot	6 feet minimum
Building Massing	
Building Height	45 feet maximum height; exceptions may be granted in accordance with Turlock Municipal Code 9-2-108 (Exceptions to height limitations)
Lot Coverage	Accessory structures shall not exceed 15% of the total lot area
Off Street Parking	
Requirement	1.5 spaces per residential unit plus 1 guest space for every 4 units
Design	Required parking for residential units must be covered or enclosed; Guest parking may be covered or open; Townhomes with attached garages may have tandem garages
Garage Width	Double-wide maximum[10]

[10] All garages and parking shall be accessed from a paved alley, drive aisle or driveway.

Table 3-4 (continued)
High Density Residential Standards

Category	Regulation
Walls and Fencing	
Height	7 feet maximum[11]
Setback[12]	
Lot line adjacent to:	
Arterial street	0 feet
Collector street	20 feet
Local street	20 feet
Interior lot line	0 feet
Landscape/Open Space Area Coverage	
Landscaping	30% minimum.
Usable Open Space	500 sq. ft. minimum per unit, adjacent to the unit. This area shall be included in the calculation of landscaping.
Common Recreational Open Space	10%. This area shall include amenities to promote exercise, recreation, and social gatherings. This area shall not be included in the calculation of usable open space but may be included in the calculation of landscaping.
Children's Play Area	Projects with twenty (20) or more units shall include an additional nine hundred (900) square feet of children's play area, designed and equipped for children through the age of nine (9) years. This area shall be included in the calculation of common recreational open space.
Parking lots	Shall comply with Turlock Municipal Code Section 9-2-109 (Landscaping and irrigation) and Turlock Municipal Code 9-2-200ART (Off-Street Parking and Loading Regulations)
Identification Signage	Refer to Turlock Municipal Code 9-2-500ART

[11] The Community Development Director may allow fence and wall heights to be increased in order to mitigate noise when documented by a noise study

[12] All fences and walls shall be subject to the driveway visibility requirements of the Turlock City Standard Specifications and Drawings

3.3.2 HIGH DENSITY RESIDENTIAL DESIGN GUIDELINES

Site Planning

a. Sites shall be designed in accordance with the Turlock Municipal Code and Design Guidelines.

b. Buildings are encouraged to be located adjacent to the landscaped setback along the street edge.

c. The number of vehicle access points shall be minimized and located as far as possible from street intersections. Access from a local or collector street is preferred to access from the arterial roadway. Access from an arterial roadway shall be reviewed and approved by the City Engineer.

Main entries into multi-family residential developments shall be well-landscaped and include attractive monumentation.

d. Project entry areas shall be enhanced and obvious to the resident and visitor. A minimum of two of the following entry enhancements shall be required: landscaped medians, enriched/special paving, decorative landscaped entry walls, and/or gateway structures.

e. Off-street parking shall be located to the rear of the building or internalized (between buildings) and not visible from residential areas or public rights-of-way. When buildings cannot adequately screen all parking, parking areas shall be screened with a low wall, berm, evergreen hedge, or combination thereof, at least three (3') feet in height.

f. Trash enclosures shall be designed to the standards identified in the City of Turlock Municipal Code. Trash enclosures shall be screened from the view of the public right-of-way.

g. All utility and mechanical equipment shall be screened from view from the public street and preferably located behind a solid fence at least as tall as the equipment up to seven (7') feet in height. Ground-mounted air conditioners, coolers, and antennas are encouraged.

h. Carports and garages adjacent to the street are not permitted.

i. Mature trees shall be retained to the greatest extent possible.

Blank unarticulated walls are not permitted.

Building Design

Lengthy balconies that access multiple units are not permitted.

a. Buildings shall conform to the Turlock Municipal Code and Design Guidelines.

b. Multi-family residential units shall respect and compliment the character of the adjacent residential neighborhood.

c. Consistent architectural detailing must be provided on all sides of a building. Blank unarticulated walls are not permitted.

d. Lengthy, unbroken facades and box-like forms are not permitted. Separations, changes in planes and heights, and the inclusion of elements such as balconies, porches, arcades, dormers, and cross gables mitigate the "barracks-like" quality of flat walls and roofs of excessive length. Flat, hipped or gabled roofs covering the entire mass of a building are required. Mansard roofs or segments of pitched roof applied at the structure's edge are not permitted.

Open metal prefabricated stairs not permitted.

e. Lengthy, monotonous balconies that provide access to multiple units are not permitted.

f. Stairways shall be integrated into the architectural massing and form of the structure. Open metal, prefabricated stairs are prohibited.

Fences and Walls

a. Fences constructed along arterials shall be graffiti-resistant masonry designed with regularly spaced enhanced pilasters.

b. Fences constructed along collectors and local streets shall be constructed of graffiti-resistant masonry or open wrought-iron style design with regularly spaced enhanced pilasters matching arterial design.

c. Landscaping shall be required between a fence or wall and the public right-of-way.

Signage

a. All signs shall be externally illuminated with concealed or architecturally treated indirect lighting.

b. Lighting of all exterior signs shall be directional to illuminate the sign without producing glare on pedestrians, autos, or residences.

c. One monument sign per street frontage shall be permitted for each multi-family development project. Monument signs shall be limited to four (4') feet in height and shall be architecturally integrated with the building. The sign shall not be permitted on an arterial street.

3.4 Community Commercial Land Uses (CC)

3.4.1 COMMUNITY COMMERCIAL DEVELOPMENT STANDARDS

The Community Commercial (CC) classification is intended to provide a wide range of retail stores, restaurants, commercial recreation, personal services, business and financial services, and for limited office and residential uses. Since this site is located adjacent to and visible from Highway 99, commercial land uses also can include business and traveler oriented lodging. The Community Commercial classification is intended to create a lively commercial environment that will attract and provide small retail services that will be easily accessible for the neighborhood residents. Such convenience commercial uses can include a small market, restaurant, deli, bakery, coffee shop, professional offices, and personal services such as dry cleaners, pet care, hair care, and other small scale uses that will provide convenience for the neighborhood residents.

The Community Commercial zone should create a vibrant pedestrian environment where people will naturally choose to walk and bike instead of drive. Public spaces should be provided within the commercial location with special attention given to paving, street furniture, landscaping and lighting. The first floor should consist mainly of retail store front uses with awnings, galleries or arcades, pedestrian scale signs, and interesting window displays. Upper story uses shall be restricted to office, professional and residential uses only. Parking and service areas should be located away from major pedestrian and vehicular traffic sights (behind structure or internal). Some limited parking between the building and the sidewalk may be permitted (see Design Guidelines for Site Planning), but is not encouraged.

A convenience store with gas pumps and car wash currently exist at the westernmost portion of the property adjacent to Lander Avenue. Site amenities such as landscaping, lighting, and signage for future commercial development shall meet or exceed the quality of such amenities on these sites. Approximately five acres of undeveloped land is available for Community

Commercial uses which should support more than 54,000 square feet of building area. Table 3-5 lists the development standards for the Community Commercial classification within the Plan Area.

Table 3-5
Community Commercial Standards

Category	Regulation
Land Use	
Applicable Zoning District	C-C
Typical Floor Area Ratio	0.25
Permitted & Conditional Uses	Refer to Turlock Municipal Code Section 9-3-302
Setbacks	
Front and Corner Side Yard	15 feet minimum
Side Yard	0 feet; 10 feet minimum if adjacent to Residential district
Rear Yard	10 feet minimum; 15 feet, landscaped bed, minimum if adjacent to Highway 99
Landscape Area Coverage	
Site	10%
Parking	Parking lot areas shall be planted with deciduous trees. The placement and species type shall be designed so that 50% of the parking lot will be shaded within 15 years of construction.
Off Street Parking[13]	
Retail	1 space/300 square feet of floor area
Restaurant	1 space/100 square feet of floor area
Office	1 space/250 square feet of floor area
Medical/Dental Office	1 space/200 square feet of floor area
Other	Refer to City of Turlock Municipal Code 9-2-200ART

[13] Alternative parking ratios may be approved if supported by substantial evidence.

Table 3-5 (continued)
Community Commercial Standards

Category	Regulation
Fencing and Walls	
Within Required Front or Corner Side Yard	Not Permitted
Along property line abutting Residential District	7-foot high decorative masonry wall required
Within Buildable Area, Interior Side Yard, Rear Yard	7 feet maximum
Signage	Refer to City of Turlock Municipal Code 9-2-500ART

3.4.2 COMMUNITY COMMERCIAL DESIGN GUIDELINES

Site Planning

a. Sites shall be designed in accordance with the Turlock Municipal Code and Design Guidelines.

b. A mixture of uses is encouraged in the Community Commercial area.

c. Pedestrian walkways, a minimum of five (5') feet wide, shall extend from street curb to the sidewalk where appropriate.

d. Public spaces shall be incorporated into the site layout. Courtyards, covered walkways and outdoor gathering/eating areas are encouraged to create a personal, intimate atmosphere.

e. Pedestrian walkways shall be provided throughout the development to encourage pedestrian movement within the development. A minimum five (5') foot wide walkway is required connecting the sidewalk to the building. Walkways along building frontages shall be a minimum fifteen (15') feet wide.

f. Universal accessibility is required for all walkways, pedestrian plazas, and outdoor dining spaces / cafes.

g. In walkways, pedestrian plazas and outdoor dining spaces/cafes, shade trees shall be planted in walkway cut-outs and spaced to shade 50% of the walkway within 15 years of installation. Tree grates are encouraged. The type and density of street trees shall be provided in accordance with City of Turlock standards.

h. Service and loading functions shall be located behind the building.

i. All parking areas shall be connected for both vehicular and pedestrian traffic. Wall and fencing is not permitted along interior side property lines.

j. Parking lots shall be designed and landscaped in accordance with the Turlock Municipal Code and the City of Turlock Design Guidelines.

k. The number of site access points from an adjacent street shall be minimized. The use of common or shared driveways that provide access to more than one site is encouraged. Driveway spacing shall meet the minimum standards established in the Turlock General Plan.

l. Site design, building orientation and placement shall carefully integrate pedestrian connections to adjoining residential neighborhoods in ways that maximize ease of access and ensure the safety and security of both commercial and residential uses.

m. Trash enclosures shall be designed to the standards identified in the Turlock Municipal Code. Trash enclosures shall be screened from the view of the public right-of-way.

n. Innovative use of night lighting will add to the neighborhood character, create a safer and more secure environment, and minimize light and glare (i.e. lighting of footpaths, water features, landscaping elements, and the buildings themselves).

o. All exterior lighting shall be directed to its intended surfaces and shielded to confine light within the site and prevent glare onto adjacent properties. Building illumination and architectural lighting should be indirect and concealed from view. Indirect wall lighting, (wall "washing" from concealed fixtures) and landscape lighting is encouraged. Sconces are encouraged on building columns.

p. Ornamental pedestrian scale lighting shall be provided to ensure secure walking conditions after dark, especially at sidewalks, plazas, and pedestrian crossing areas. The maximum height permitted for pedestrian scale lighting is sixteen (16') feet; fourteen (14') feet or less is encouraged.

Building Design

a. Buildings shall conform to the Turlock Municipal Code and Design Guidelines.

b. All sides of the building shall be architecturally articulated and receive appropriate enhancement through the use of landscape treatments and accent lighting. Buildings that back onto Highway 99 shall be architecturally enhanced to mimic the front of the building and loading areas shall be screened from view of the freeway.

c. Buildings shall have street presence and relate to human scale. Buildings exceeding two-stories shall be stepped back and vertically articulated to reduce the buildings bulk against the sidewalk.

d. Buildings shall not appear substantially taller, wider, or more massive than neighboring buildings.

e. Facades should be organized into three major recognizable components, the base, body, and cap. The base shall be no less than eighteen (18") inches in height. The use of brick, stone, cast stone, tile, granite, precast concrete, slate, and other natural materials are required on the base and building entries (except individual unit entries) to create visual interest. Concrete block and exposed metal surfaces shall not be permitted.

f. Facades of all commercial structures shall incorporate transparent features (windows and doors) over a minimum percentage of the surface area of street fronting facades. Minimum percentages for different levels are outlined as follows: Ground level of retail uses: 50% of surface area; ground level of other commercial uses: 35% of surface area; and upper levels of all uses: 20% of surface area.

g. Elements such as arcades, arbors, and openings should be incorporated into the design to break-up expansive and lengthy walls.

h. Varied roof forms and building offsets shall be used to soften building massing. Offsets in wall planes reduce the mass of building walls, accent entry areas, and create architectural interest. Flat roofs are permitted. Flat rooflines shall be articulated by the use of varied, crenulated parapet walls (varying parapet wall heights).

Example of varying parapet wall heights.

i. Roofing colors shall be soft earth tones to minimize reflective glare and visual impacts. Flat roofs are permitted white or lighter colors.

j. All rooftop equipment shall be screened from public view.

k. Service areas are to be separate and screened from public areas by the use of masonry walls and landscaping.

Fences and Walls

a. Fences shall be open wrought-iron style grillwork with regularly spaced masonry pilasters.

b. When adjacent to a drainage basin or Residential zone, fences shall be solid masonry and planted with vines.

c. Barbed wire, razor wire, electrified fences, and other similar security are prohibited.

Landscaping

a. Landscaping shall be provided in a landscaped bed between the sidewalk and the building.

b. Landscaping within the public right-of-way shall be counted toward the landscaping setback and area requirements for a project.

c. All areas not developed as buildings, parking, driveways, or pedestrian walkways shall be fully landscaped.

3.5 Office Land Uses (O)

3.5.1 OFFICE DEVELOPMENT STANDARDS

Approximately 1.5 acres of Office (O) land use are planned for a triangular site located at the southwest corner of Glenwood Avenue and Baywood Lane. The Commercial Office (CO) zoning district is the applicable zoning district for the Office land use classification. The purpose of CO Zoning is to provide a transitional zone between commercial and residential uses with areas for business and professional offices and medical and dental offices. The Office land use should complement the Community Commercial land use located to the south and similarly provide for a vibrant pedestrian environment where people will naturally choose to walk and bike instead of drive. Building(s) shall front on the arterial roadway to the extent possible. Public spaces should be provided within the office land use with special attention given to paving, street furniture, landscaping, and lighting. Table 3-6 states the Office Development Standards.

Table 3-6
Office Standards

Category	Regulation
Land Use	
Applicable Zoning District	C-O
Typical Floor Area Ratio	0.35
Permitted & Conditional Uses	Refer to Turlock Municipal Code Section 9-3-303
Setbacks	
Front	10 feet minimum
Side	10 feet minimum
Corner Side	10 feet minimum
Rear	10 feet minimum
Landscape Area Coverage	
Site Landscape Requirement	15%
Parking Landscape Requirement	Parking lot areas shall be planted with deciduous trees. The placement and species type shall be designed so that 50% of the parking lot will be shaded within 15 years of construction.
Off Street Parking	
Office	1 space/250 square feet of floor area
Medical/Dental Office	1 space/200 square feet of floor area
Other	Refer to City of Turlock Municipal Code 9-2-200ART
Fencing and Walls	
Within Required Front or Corner Side Yard	Not Permitted
Along property line abutting Residential District	7-foot high decorative masonry wall required
Within Buildable Area, Interior Side Yard, Rear Yard	7 feet maximum
Signage	Refer to Turlock Municipal Code 9-2-500ART

3.5.2 OFFICE DESIGN GUIDELINES

Site Planning

a. Sites shall be designed in accordance with the Turlock Municipal Code and Design Guidelines.

b. Sidewalks shall extend from street curb to right-of-way line. Shade trees shall be installed in cut-out areas in the sidewalk and spaced a distance of 30 feet. Tree grates are encouraged.

c. Public spaces shall be incorporated into the site layout.

d. Courtyards, covered walkways and outdoor gathering/employee eating areas are encouraged to create a personal, intimate atmosphere.

e. Pedestrian walkways shall be provided throughout the development to encourage pedestrian movement. Walkways shall be a minimum five (5') feet wide except walkways immediately adjacent to a parking lot shall be six (6') feet wide. A minimum five (5') foot walkway is required connecting the sidewalk to the building.

f. Innovative use of night lighting will add to the neighborhood character, create a safer and more secure environment, and minimize light and glare (i.e. lighting of footpaths, water features, landscaping elements, and the buildings themselves).

g. Service and loading functions shall be located behind the building.

h. Parking areas shall be located behind building(s) to the extent possible. Parking may not be located between the building and the arterial roadway. Parking areas shall be landscaped, lighted, and provide for pedestrian circulation.

i. Parking lots shall be designed and landscaped in accordance with the Turlock Municipal Code and Design Guidelines.

j. Site design, building orientation and placement shall carefully integrate pedestrian connections to adjoining residential neighborhoods in ways that maximize ease of access and ensure the safety and security of both commercial and residential uses.

k. Trash enclosures shall be designed to the standards identified in the Turlock Municipal Code. Trash enclosures shall be screened from the view of the public right-of-way.

l. Building illumination and architectural lighting should be indirect and concealed from view. Indirect wall lighting, wall "washing" from concealed fixtures, and landscape lighting is encouraged.

m. All exterior lighting shall be directed to its intended surfaces and shielded to confine light within the site and prevent glare onto adjacent properties.

n. Provide ornamental pedestrian scale lighting sufficient to ensure secure walking conditions after dark, especially at sidewalks, plazas, and pedestrian crossing areas. The maximum height permitted for pedestrian scale lighting is sixteen (16') feet; fourteen (14') feet or less is encouraged.

o. All equipment, trash enclosures, and other similar structures shall be screened from public view.

Building Design

a. Buildings shall conform to the Turlock Municipal Code and Design Guidelines.

b. High quality architecture that respects the residential nature of adjacent development is required.

c. All sides of the building shall be architecturally articulated and receive appropriate enhancement through the use of landscape treatments and accent lighting. Exterior walls that exceed two-hundred (200') feet in length shall be provided with a change of plane, material, or texture.

d. Buildings shall have street presence and relate to human scale. Buildings exceeding two-stories shall be stepped back and vertically articulated to reduce the buildings bulk against the sidewalk.

e. Buildings shall not appear substantially taller, wider, or more massive than neighboring buildings.

f. Facades shall incorporate transparent features (windows and doors) over a minimum percentage of the surface area of street fronting facades: Ground level shall be 35% of surface area; and upper levels shall be 20% of surface area.

g. Elements such as arcades, arbors, varied parapets, changes in plane, and openings should be incorporated into the design to break-up the expansive use of walls.

h. Facades should be organized into three major recognizable components, the base, body, and cap. The base shall be no less than 18 (18") inches in height. The use of brick, stone, cast stone, tile, granite, precast concrete, slate, and other natural materials are required on the base and building entries (except service entries) to create visual interest. Concrete block and exposed metal surfaces shall not be permitted. To the extent possible, offices located adjacent to residential areas shall have a residential appearance.

i. Roofing colors shall be soft earth tones to minimize reflective glare and visual impacts. White or lighter colors are permitted on flat roofs.

j. Varied roof forms and building offsets shall be used to soften building massing. Offsets in wall lines reduce the mass of building walls, accent entry areas, and create architectural interest. Flat roofs are permitted. Flat rooflines shall be articulated by the use of varied parapet walls.

k. All rooftop equipment shall be screened from public view.

l. All utility and mechanical equipment shall be screened from view from the public street and preferably located behind a solid fence at least as tall as the equipment up to seven (7') feet in height. Ground-mounted air conditioners, coolers, and antennas are encouraged.

m. Service areas are to be separate and screened from public areas by the use of masonry walls and landscaping.

n. A mixed-use component that includes ground floor office with residential uses is allowed pending approval of a Conditional Use Permit.

Fences and Walls

a. Fences shall be open wrought-iron style grillwork with regularly spaced masonry pilasters.

b. Fences shall be solid masonry and planted with vines when adjacent to a drainage basin or Residential zone.

c. Barbed wire, razor wire, electrified fences, and other similar security are prohibited.

Landscaping

a. Landscaping shall be provided between the sidewalk and the building.

b. Landscaping within the public right-of-way shall be counted toward the landscaping setback and area requirements for a project.

c. All areas not developed as buildings, parking, driveways, or pedestrian walkways shall be fully landscaped.

Signage

a. All signs shall be externally illuminated with concealed or architecturally treated indirect lighting.

b. Lighting of all exterior signs shall be directional to illuminate the sign without producing glare on pedestrians, autos, or residential.

c. One monument sign shall be permitted for each street frontage. Monument signs shall be limited to four (4') feet in height and shall be architecturally integrated with the building.

3.6 Public Land Uses (PUB)

3.6.1 PARKS

The neighborhood parks and the drainage basin are meant to serve the neighborhood recreational needs of the residents and visitors in the Plan Area, along with the playgrounds and youth sports facilities of the future elementary school. The City of Turlock would own and operate both park sites. These are discussed more thoroughly in Chapter 5. Design of the drainage basin shall comply with the City's design standards for construction. The parks shall be designed in accordance with the Turlock General Plan. This designation also includes the Caltrans drainage basin. Barbed wire, razor wire, electrified fences and other similar security devices are prohibited. All uses shall comply with the Turlock Municipal Code and Design Guidelines.

3.6.2 ELEMENTARY SCHOOL DESIGN GUIDELINES

The elementary school will be owned and operated by the Turlock Unified School District. The location of the school site in the Plan Area has been specifically chosen so that the school will be a neighborhood focal point. The school is located central to both the Morgan Ranch community as well as the existing neighborhoods to the north. The school is located within less than a 1,500 foot radius of a vast majority of the homes in Morgan Ranch.

The following guidelines are suggested for consideration during design and construction of the elementary school:

a. The principles of crime preventive design should be employed and safety design standards should be followed. Sufficient lighting should be provided onsite to ensure safety, while being respectful of surrounding residential properties.

b. The design and siting of school facilities should take into account the aesthetic effects of the surrounding neighborhoods. An architectural style, building materials, and colors appropriate to the surrounding neighborhoods should be utilized. The design of landscaping and furnishings (e.g., lighting, signage, etc.) should complement the streetscape and other community facilities.

c. Safe access by students should be considered in the siting and design of school facilities. Travel access by bus, private car, bicycle, and by foot from residential areas should be accommodated to the school site. On-site internal pick-up and drop-off points should be provided.

d. For public space orientation and school site accessibility, the school site should be connected to the surrounding neighborhood and not introverted (backed up) to the surrounding neighborhood. Homes shall not back up to a school site. The site will be bounded by Glenwood Avenue on the north, the neighborhood park on the west, and local streets on the south and east.

e. Barbed wire, razor wire, electrified fences, and other similar security are prohibited.

3.7 Design Features

3.7.1 LANDSCAPING ALONG ARTERIAL STREETS

The General Plan identifies three areas within arterial street rights of way that are to be maintained with landscaping. Landscape strips are located between the block wall and the sidewalk. Parkways are located between the sidewalk and the curb. Medians separate the travel lanes in the middle of the roadway. The following standards shall apply to these landscaped areas along Arterial Streets.

a. The parkway and the median shall be sloped to create a bioswale in the middle that is at least two (2") inches lower than the top of the curb to create a space to capture rain runoff and prevent it from running directly into the gutter or onto the street or sidewalk.

b. The parkway landscaping shall consist of a combination of:
   - Required street trees (type determined by the City and maintained according to City Ordinance).
   - Artificial turf

- Grass – Native or no-mow turf, not to exceed thirty-six (36”) inches in height (requires the use of subsurface or low-volume irrigation system where the parkway is less than eight (8’) feet wide).
- Shrubs, not to exceed thirty-six (36”) inches in height.
- Groundcover, low-growing including annuals.
- Cobble – when used in a bioswale.

c. The landscape strip between the masonry wall and the sidewalk shall consist of a combination of:
   - Shrubs, with a maximum height of six (6’) feet and a minimum height of three (3’) feet at maturity.
   - Vines trained to cling to the masonry wall spaced every ten (10’) feet maximum.
   - Native Grasses or other grasses appropriate for bioswales.
   - The ground shall be covered with natural mulch or rubber bark (natural color only) to enhance moisture retention.

d. Gravel, asphalt, undecorated concrete, or any material that may create a slipping or tripping hazard may not be used in the landscape strip, parkway, or median.

e. Decorative or colored concrete can be used in median areas that are less than four (4’) feet wide.

f. Concrete mow strips shall be no more than four (4”) inches wide, and may be used around the base of the street trees. The mow strip must be of sufficient size (diameter or rectangle) to ensure that the growth of the tree is not impaired.

g. The ground shall be covered with natural mulch or rubber bark (natural color only) to enhance moisture retention, when not planted in turf.

h. Irrigation is to be installed to ensure that the landscaping is maintained in good condition.

i. Bubbler, drip, or subsurface irrigation fixtures are permitted for shrubs and vines.

j. Overhead spray sprinklers are not permitted if the irrigated area is less than eight (8’) feet wide.

k. No overhead spray sprinkler heads shall be placed within two (2’) feet of the hardscape.

Figure 3-4 illustrates a typical cross-section of the landscaping between the block wall and the curb adjacent to arterial roadways.

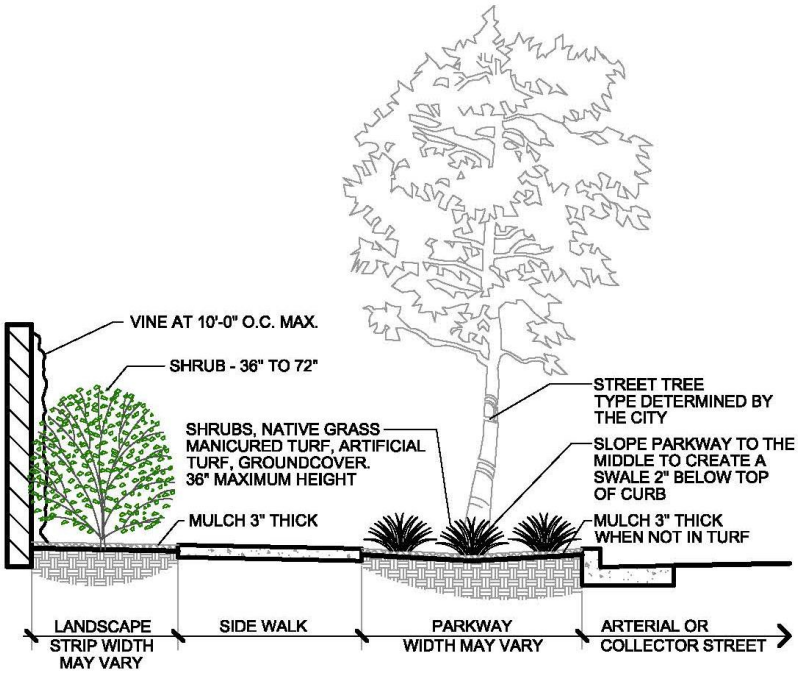
3.7.2 LANDSCAPING OF PARKWAY STRIPS FOR SINGLE FAMILY HOMES

The parkway strip is that portion of the roadway right-of-way on local and collector streets in residential areas located between the sidewalk and curb.

a. The strip should be sloped to create a bioswale in the middle that is at least two (2") inches lower than the curb to create a space to capture rain runoff and prevent it from running directly into the gutter. The strip is intended to be landscaped.

b. Property owners are required to provide the following street trees for each residence:
   - Fronting Streets: One street tree, between two (2") inch caliper and two and half (2.5") inch caliper, is required for each residence on a fronting street (type determined by the City and maintained according to City Ordinance).
   - Corner Side Streets: Two street trees, between two (2") inch caliper and two and half (2.5") inch caliper, are required for each residence on a corner side street.
   - Corner Side Streets: The area between the fence and the sidewalk shall be landscaped.

Figure 3-4
Landscaping Along Arterial Streets



c. Property owners are required to install any combination of the following landscape materials in the parkway strip area:
   - Grass - Drought tolerant manicured turf.

- Grass – Native or no-mow, not to exceed thirty-six (36”) inches in height.
- Shrubs, not to exceed thirty-six (36”) inches in height.
- Groundcover, low-growing including annuals.

d. Gravel or asphalt may not be used in the parkway.

e. Cobble may only be used at the bottom of bioswales.

f. Brick may only be used as a walkway.

g. Concrete may only be used as a walkway or as a mow strip.

h. Walkways in the parkway shall be no wider than 5 feet.

i. Concrete mow strips shall be no more than four (4”) inches wide, and shall be used around the base of the street trees when manicured turf is used. The mow strip must be of sufficient size (diameter or rectangle) to ensure that the growth of the tree is not impaired.

j. Property owners are required to provide irrigation in the parkway to ensure that the landscaping is maintained in good condition.

k. The sidewalk shall be sloped toward the parkway to capture rain runoff and prevent it from running directly into the gutter.

l. Subsurface or low-volume irrigation is required for grass areas under eight (8’) feet wide. No overhead spray sprinklers if parkway is less than eight (8’) feet wide.

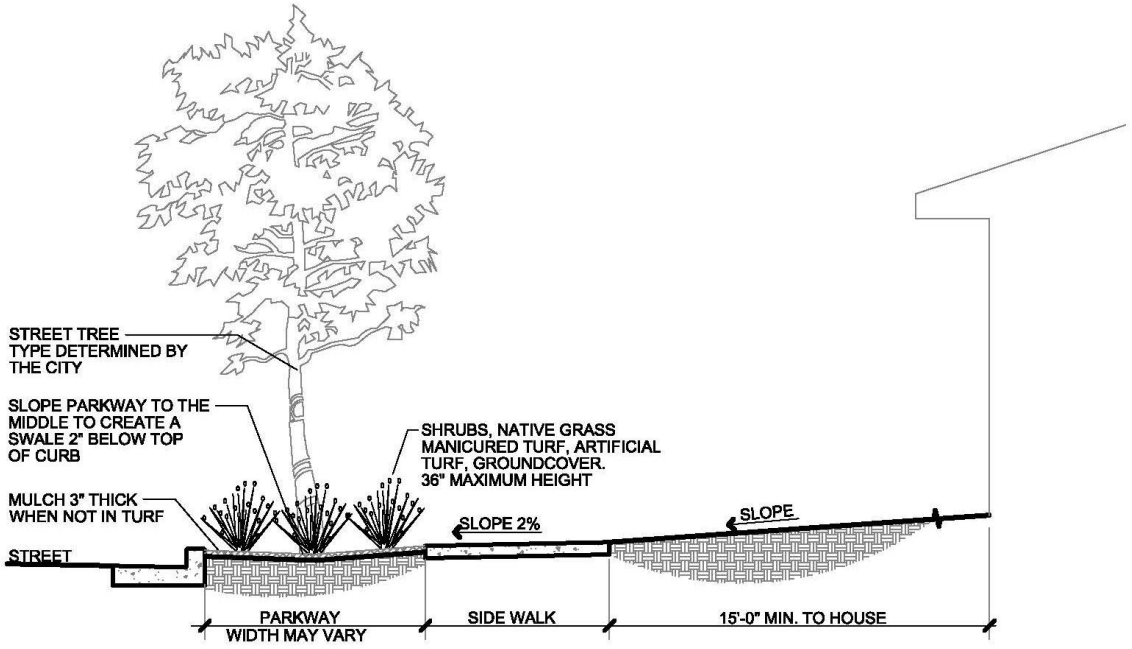
m. Bubbler, drip, or subsurface irrigation fixtures are required for shrubs and groundcover.

n. No overhead spray sprinkler heads shall be placed within two (2’) feet of sidewalks, driveways, or any hardscape. Cobble, decomposed granite, rubber bark, or other permeable decorative surface shall be installed within the two (2’) foot sprinkler setback area. All materials shall be a natural color.

o. Natural mulch or rubber bark (natural color only) may be used to enhance moisture retention.

Figure 3-5 illustrates a typical cross-section of parkways strips and the area in front of homes.

Figure 3-5
Landscaping in Parkways



3.7.3 LIGHTING

Standard "cobra-head" streetlights may be applied along the street corridors in the Plan Area. Street lighting should be appropriately spaced to provide sufficient lighting for vehicles, pedestrians, and cyclists. Lighting should not negatively interfere with Plan Area residents or surrounding neighborhoods.

a. Lighting should be provided to ensure safe environments, but should not cause areas of intense light or glare.

b. Lighting should be sensitive to adjacent land uses.

c. Architectural features or lighting fixtures that provide down-lighting and lighting that is shielded from adjacent uses should be implemented.

d. Street lighting standards should be spaced and designed in accordance in the City of Turlock's Standard Specifications and Drawings.

e. On-site lighting for parking areas and public spaces shall meet or exceed the character and quality of existing site lighting in the commercial areas.

f. Wherever possible, pedestrian lighting shall be pedestrian in scale not to exceed sixteen (16') feet in height; fourteen (14') feet or less is encouraged.

3.7.4 SIGNAGE

Signs provide an important element of community design. Proper design and application of signs help orient people and increase a community's sense of place. By directing residents and visitors to desired locations, signage improves circulation efficiency and access to important community destination points. The design and style of signage also contributes to the character and setting for commercial, residential, recreation, and public use areas.

The Plan Area should utilize thematic signage that contributes to an overall community identity and design cohesiveness. A thematic community signage system should be established and displayed at public areas of prominence such as entry gateways, commercial areas, parks, and the school site to provide identity and cohesiveness for the Plan Area.

Signage Guidelines

a. Signage design should reflect the overall architectural theme, quality, and character of the Plan Area.

b. Decorative community identity signage should be used in prominent locations such as entry gateways and shall be no taller than four (4') in height. At a minimum, the community identity signs shall be placed at the following locations:
    - Glenwood Avenue and Golf Road
    - The new arterial roadway and Golf Road
    - The Morgan Ranch Arterial and Lander Avenue.

c. Signage should be used to identify distinct land uses such as the commercial district, neighborhoods, the multi-family residential complexes, the neighborhood park, the pocket park, and the school.

d. Street signs and directional signs should consider a common design theme consistent with the quality and character of the community.

e. All signage shall meet the requirements identified in Article 9-2-500 of the City of Turlock Municipal Code and the City of Turlock Sign Design Guidelines.

Examples of permitted wall-mounted signs.

3.7.5 FENCES AND WALLS

Walls and fences are necessary elements for the Plan Area. They provide safety, security, privacy, property definition, and noise attenuation. Walls and fences can also be included in gateway features and can provide separation between residential areas and more intensive uses.

Poorly designed walls and fences can detract from the quality and character of Morgan Ranch. An attractive and uniform design to walls and fences shall be established to maintain a design consistency with the rest of the community. All wall and fence designs within the Plan Area shall be designed according to the following standards.

Examples of acceptable decorative masonry walls.

An analysis of projected future interior traffic noise levels indicate that proposed residential uses with direct exposure to State Route 99 would not meet the City's exterior noise level standard of 60 dB Ldn and interior noise level standard 45 dB Ldn without mitigation. A number of mitigation options available, and are listed in the Wall and Fence Guidelines below.

Wall and Fence Guidelines

a. A seven (7') foot high decorative masonry wall shall be provided for residential development along an arterial roadway, when a Residential zone abuts a Commercial or Public zone, or when a multi-family residential project abuts a separate residential project. Walls along arterials shall be placed on private property.

b. Interior side and rear fencing in residential developments may consist of wood, split-face decorative concrete, wrought-iron style grill work, or masonry. Chain link fencing shall not be permitted.

c. All decorative masonry walls shall be installed and coordinated with appropriate landscaping. Vines shall be required. All decorative masonry walls shall be provided with a decorative column spaced a minimum of every forty-five (45') feet.

Example of permitted cap & rail fencing.

d. Cap & trim residential fences shall be installed on all front facing and corner side lot lines (see Medium Density Residential Standards for Wall and Fencing). Wood fencing shall include a cap & trim and a kickboard (also known as a rot board). Posts may extend above the cap.

e. Good neighbor fencing is required along all interior side and rear property lines. Good neighbor fencing shall alternate fencing panels. A fence panel shall be installed on each side of the posts in an alternating pattern so that both sides of the fence become "the good side." Property owners are required to maintain fences in good condition.

f. All wall and fence heights and locations shall be consistent with the standards identified for each specific land use.

g. Wrought iron fencing may be installed on the street sides of a High Density Residential land use.

h. Wrought iron (tubular steel) fencing shall be constructed of three (3") inch x three (3") inch 11 GA. steel posts spaced every eight (8') feet. All other members shall be 16 GA. steel. Pickets shall be ¾" steel tube pickets spaced every four (4") inches. All steel shall be black factory powder coated.

Example of acceptable wrought iron fencing.

i. If the anticipated S.R. 99 traffic volumes in the Year 2030 (140,000 ADT), as reported in the Turlock General Plan occur, it may not be practical to achieve the exterior noise level standard of 60 dB Ldn. Barriers in excess of 18 feet may be required to achieve the noise level standard of 60 dB Ldn. As an example, a means of complying with the conditionally acceptable standard of 65 dB Ldn, barrier heights would need to be approximately 12 feet in height, while assuming a setback of approximately 250 to 300 feet from the S.R. 99 centerline. Since grading plans and tentative maps have not been completed for the project site, a more detailed analysis of required barrier heights to determine the actual height shall be required when those plans are available.

j. In order to achieve compliance with an interior noise level standard of 45 dB Ldn, residences located within 700 feet of the S.R. 99 centerline require exterior-to-interior noise level reductions ranging from 30 dB to 35 dB. This can be accomplished through one of the following design measures:

- A 30 dB exterior to interior noise level reduction may be achieved through the use of STC 35 rated window assemblies for all second floor windows with a view of SR 99.

- A 35 dB exterior to interior noise level reduction may be achieved through the use of STC 40 to 42 rated window assemblies for all second floor windows with a view of SR 99.

- Residential uses within 700 feet of the S.R. 99 centerline could be restricted to single story units.

Chapter 4
CIRCULATION

4.1 Circulation Strategy

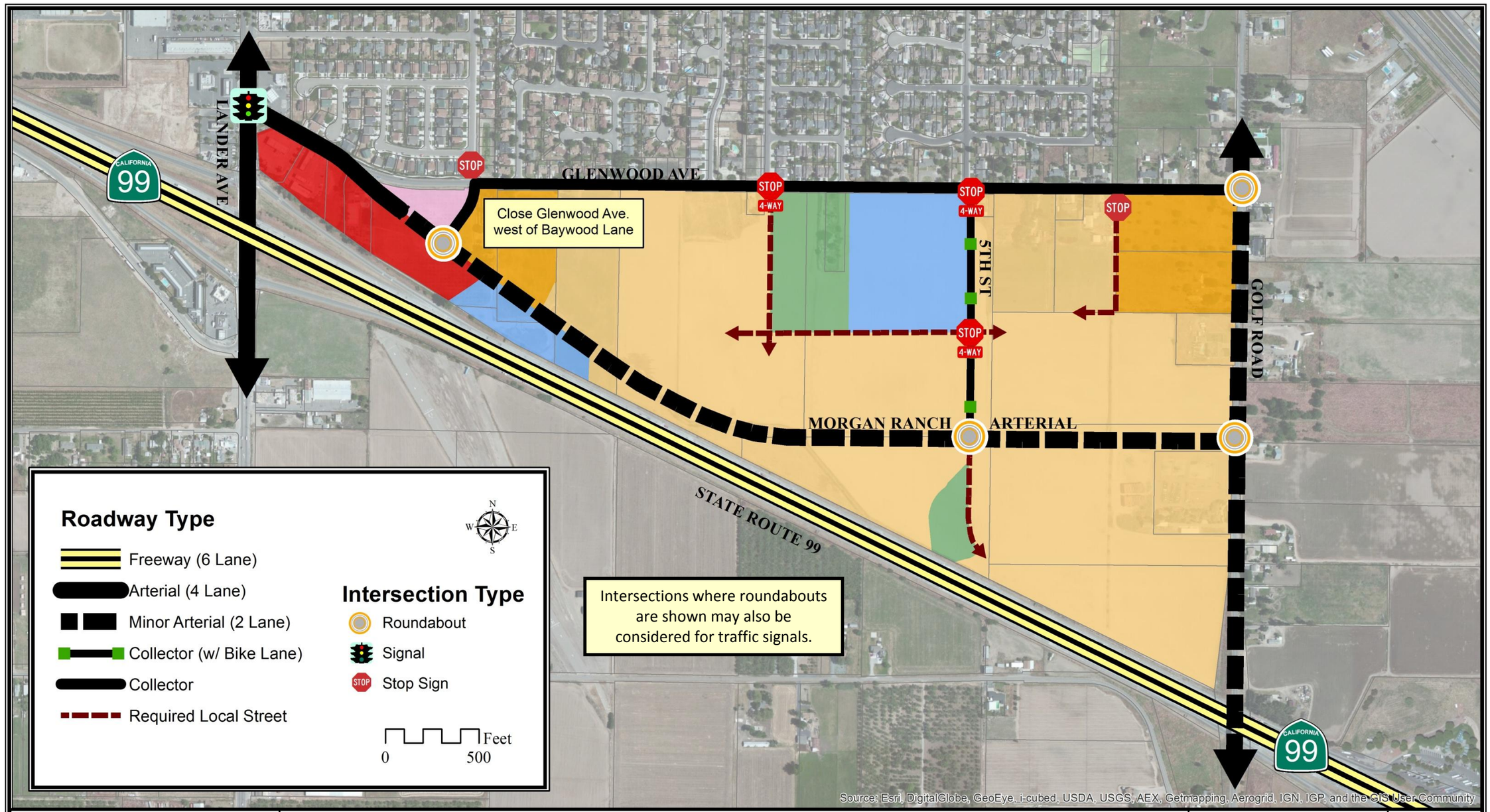
The intent of Morgan Ranch's circulation plan (Figure 4-1) is to meet the City of Turlock's goals for Complete Streets. Complete Streets are streets that promote connectivity between land uses in the Plan Area and connect to areas outside the Plan Area. They enable safe, comfortable, and attractive access for all users in a form that is compatible with, and complementary to, adjacent land uses. The road is designed to accommodate all expected users, including pedestrians, motorists, bicyclists, and transit riders of all ages and abilities.

The new Morgan Ranch Arterial roadway is the most important circulation design feature within the Plan Area. This as yet unnamed street directly serves most of the land uses in the Plan Area, and connects Lander Avenue to Golf Road. The alignment of the roadway will remove most of the through traffic from the Glenwood Avenue collector, which would otherwise continue to function as an undersized arterial. The Morgan Ranch Arterial road alignment is planned to allow it to be extended east past Golf Road when the SE4 Master Plan is developed during Phase II of the Turlock General Plan.

All streets within the Plan Area will have sidewalks on both sides. The required minimum width of the sidewalk is intended to allow two persons to walk side by side. Parkway strips with street trees serve to separate pedestrians from motor vehicles and provide shade relief on warmer days.

Pedestrian and bicycle access to and from the proposed elementary school site is an important feature in the Plan Area. The Plan assumes that once the elementary school is constructed and operating its enrollment boundary will encompass all of the Plan Area. The location, type, and width of roadways have been planned to encourage walking and bicycling to and from the school in a safe manner.

Four single-lane roundabouts are planned. They will be located along the new Morgan Ranch Arterial at Glenwood Avenue, 5th Street, and Golf Road, and also at Glenwood Avenue / Golf Road. (For the purpose of describing the required roadway standards in this Master Plan, the roadway connecting the roundabout with the existing Glenwood Avenue / Baywood Lane intersection shall be considered Glenwood Avenue. Actual street naming will be determined by the City Planning Division and may be different.) Travelling eastbound from Lander Avenue, the Morgan Ranch 4-lane Arterial will transition to two lanes just before entering that roundabout. Traffic signals may also be considered as an option at these locations.



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CITY OF TURLOCK INC. 1908

CIRCULATION PLAN

Morgan Ranch Master Plan

Figure 4-1

The Federal Highway Administration (FHWA) has documented that roundabouts typically result in a 37% overall reduction in traffic collisions over signalized intersections, including a 90% reduction in collisions involving a fatality. This is due primarily to lower traffic speeds and the one-way travel that eliminates the possibility of T-bone and head-on collisions.

Golf Road currently crosses over State Highway 99 with an overpass, but does not connect to the freeway. Converting the overpass to a freeway interchange has been previously discussed. However, the decision has been made to instead focus on an area near Highway 99 and Harding Avenue, southwest and about ½ mile outside of the Plan Area. Therefore, there are no plans to modify the Golf Road overpass.

4.2 Arterial Roadways

Arterials collect and distribute traffic from freeways and highways to collector streets, and vice versa. They are designed to move large volumes of traffic at moderate speeds between neighborhoods. Arterials in the Plan Area are Lander Avenue, Golf Road, and the Morgan Ranch Arterial. In accordance with the General Plan, these roads are designated as truck routes.

Lander Avenue: This major street connecting Highway 99 to Turlock's downtown is already built out to its ultimate width (4 lanes with curb, gutter, and sidewalk) in the Plan Area. Therefore no improvements are needed or proposed for this Arterial.

Morgan Ranch Arterial: This roadway does not yet have an officially adopted street name, and is therefore referred to as the Morgan Ranch Arterial throughout this Master Plan. This roadway will be constructed as a 2-lane Minor Arterial, although a portion of the roadway near Lander Avenue will be 4-lane. The 4-lane portion will be built to commercial arterial standards, with modifications as needed to fit in the existing right of way. The 2-lane portion will be built to residential arterial standards. A masonry wall constructed per the Land Use and Development Standards is required to be located adjacent to the right of way (R/W) line on the single family residential zoned properties. If the intersections with Glenwood Avenue, 5th Street, and Golf Road are constructed with traffic signals instead of roundabouts then the entire length of the Morgan Ranch Arterial from Lander Avenue to Golf Road shall be constructed with four lanes.

Golf Road: This Arterial will be constructed with 2 lanes. A masonry wall constructed per the Land Use and Development Standards is required to be located adjacent to the right of way (R/W) line on the single family residential zoned properties.

Figure 4-2 describes the roadway geometrics and the access restrictions along the Arterial roadways, in addition to providing a cross-section schematic of each of these Arterials.

Figure 4-2
Arterial Roadway Geometrics and Access Restrictions

Morgan Ranch Arterial (from Lander Avenue to Golf Road)

Roadway Geometrics	2-lane*	4-lane*
Right of way (R/W):	90’	124’
Landscape Strips (LS):	4’	7’
Sidewalks (S/W):	5’	8’
Parkway Strips (PS):	6’	None
Parking Lanes (PL):	0’	8’
Bicycle Lanes (BL):	6’	6’
Travel Lanes (TL)	16’	25’
Median (M):	16’	16’

Motor Vehicle Access Restrictions

No intersections with local streets.

Roundabout at intersection with Glenwood Avenue.

No access point to office site unless specifically approved by City Engineer

Shared access unless determined by the City Engineer to be infeasible.

Minimum 300 feet between any access point and beginning or ending of curb of roundabout deflection.

* Morgan Ranch Arterial will be 4 lanes from Lander Ave. to just west of roundabout, and 2 lanes from just west of roundabout to Golf Road. If traffic signals are constructed instead of roundabouts then the section from Glenwood Avenue to Golf Road will be a residential standard 4-lane roadway. Block walls are to be located on private property just outside of the public right of way.

2-lane Looking East

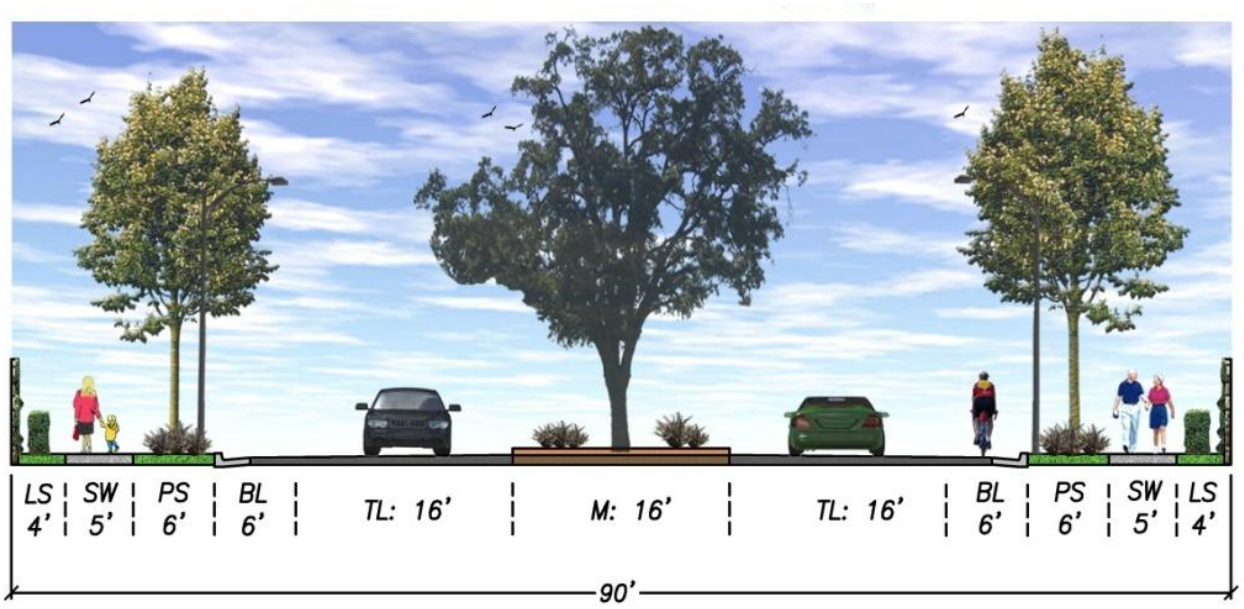


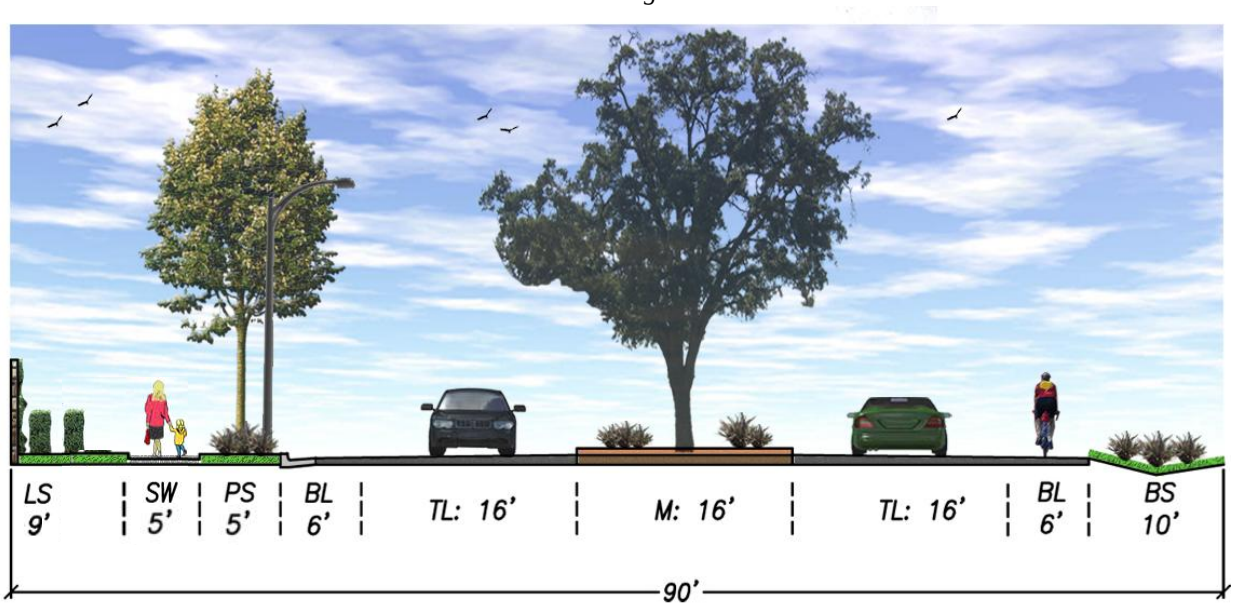
Figure 4-2 (continued)
Arterial Roadway Geometrics and Access Restrictions

Golf Road (from Highway 99 overpass to just north of Glenwood Avenue intersection)

Roadway Geometrics*		Motor Vehicle Access Restrictions
Right of way (R/W):	90’	No intersections with local streets.
Landscape Strip (LS):	9’ (west only)	No access point to multi-family site.
Sidewalk (S/W):	5’ (west only)	
Parkway Strip (PS):	5’ (west only)	No new single-family residential access points shall be allowed.
Parking Lanes (PL):	None	
Bicycle Lanes (BL):	6’	Existing access points may remain.
Travel Lanes (TL):	16’	
Median (M):	16’	Parcels located on the east side of the Golf Road within the unincorporated area shall be allowed a maximum of one access point per parcel.
Bio-swale (BS)	10’ (east only)	
The west side landscape strip and sidewalk area (14’ total width) shall also serve as a Turlock Irrigation District easement for irrigation pipe.		Left turns shall not be permitted between Glenwood and Highway 99 except at the intersections with roundabouts.

* All construction shall occur within the existing City Limit to full City standard. Block walls are to be located on private property just outside of the public right of way.

2-lane Looking North



4.3 Collector Roadways

Collectors provide a link between residential neighborhoods and arterials. Collectors typically provide two travel lanes, on-street parking, and bicycle lanes. Collectors also provide access to adjacent properties. Driveway access to residential uses is not restricted, but should be discouraged through site design. One example of this would be that corner lots at collector / local street intersections access the lot from the local street. Direct access to commercial, office, and school uses is permitted. Driveways should be spaced at roughly three-hundred (300') foot intervals in commercial areas. In residential areas, driveways may be provided to each parcel facing onto the collector. Bicycle lanes are typically provided on Collector streets.

For the purpose of describing the required roadway standards in this Master Plan, the roadway connecting the roundabout with the existing Glenwood Avenue / Baywood Lane intersection shall be considered Glenwood Avenue. Actual street naming will be determined by the Turlock Planning Division and may be different.

Glenwood Avenue: This street is currently built out on the north side. Development of this Master Plan requires construction of Glenwood Avenue to its ultimate width of 62 feet. The existing power poles along the south side of the street will be undergrounded to accommodate the widening of the street. A Class III bike route is planned for Glenwood Avenue. Bike route signs will be erected along its entire length. The section of Glenwood Avenue west of Baywood Lane will be abandoned once the new Morgan Ranch Arterial and Glenwood Avenue connection are constructed.

5th Street: This street is important because it provides a north-south connection between the new school and the residences. This street will have Class II bicycle lanes. Houses can front onto 5th Street subject to the stated access restrictions.

Figure 4-3 describes the roadway geometrics and the access restrictions along the Collector roadways, in addition to providing a cross-section schematic of each of these Collectors.

Figure 4-3
Collector Roadway Geometrics and Access Restrictions

Glenwood Avenue (between roundabout and Golf Road)

Roadway Geometrics	
Right of way (R/W):	62’
Landscape Strips (LS):	None
Sidewalks (S/W):	5’
Parkway Strips (PS):	6’
Parking Lanes (PL):	8’
Bicycle Lanes (BL):	None[1]
Travel Lanes (TL)	12’
Median (M):	None

Motor Vehicle Access Restrictions

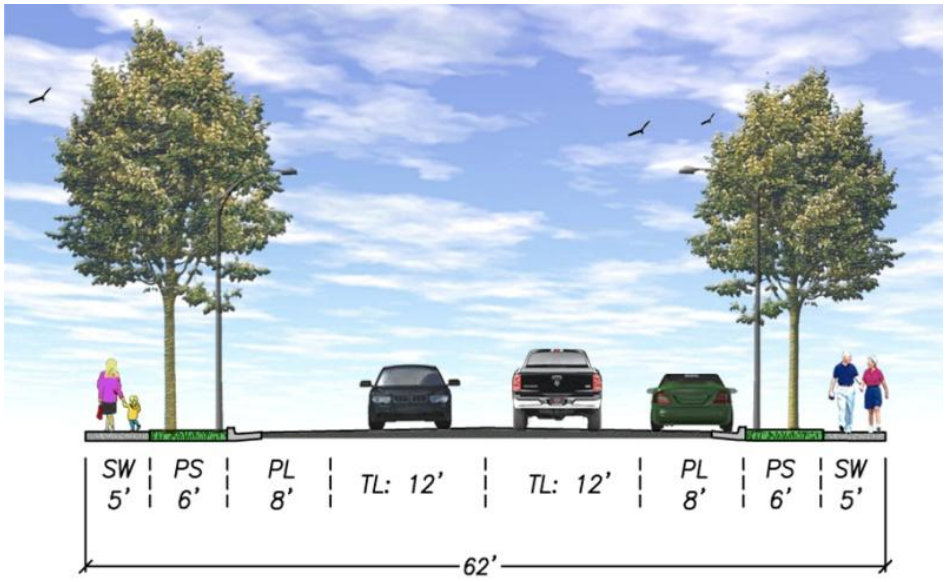
Minimum 50 feet between access point and curb return of intersection.

Access to Commercial Office (C-O) zoned site only via a leg of existing Glenwood Avenue/ Baywood Lane intersection.

Maximum one access point per R-H zoned site. No access to R-H zoned site between roundabout and Baywood Lane.

No access points to the school site shall be provided unless reviewed and approved by City Engineer.

Looking East



[1] This segment is a Class III bike route and bike route signs shall be posted.

Figure 4-3 (continued)
Collector Roadway Geometrics and Access Restrictions

5th Street (between Glenwood Avenue and Morgan Ranch Arterial)

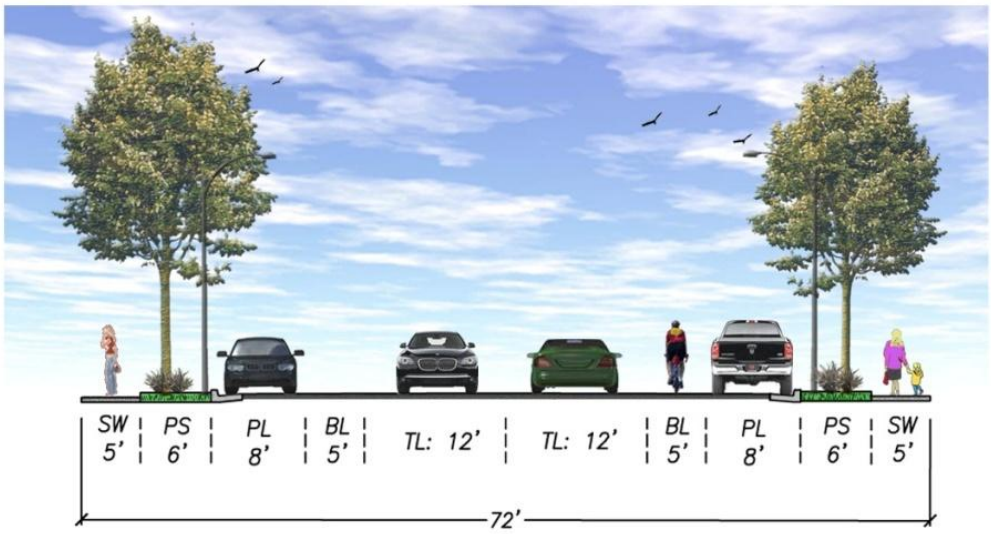
Roadway Geometrics	
Right of way (R/W):	72’
Landscape Strips (LS):	None
Sidewalks (S/W):	5’
Parkway Strips (PS):	6’
Parking Lanes (PL):	8’
Bicycle Lanes (BL):	5’
Travel Lanes (TL)	12’
Median (M):	None

Access Restrictions

Minimum 50 feet between access point and curb return of any intersection.

Access points to school site to be reviewed and approved by City Engineer.

Looking North



4.4 Local Roadways

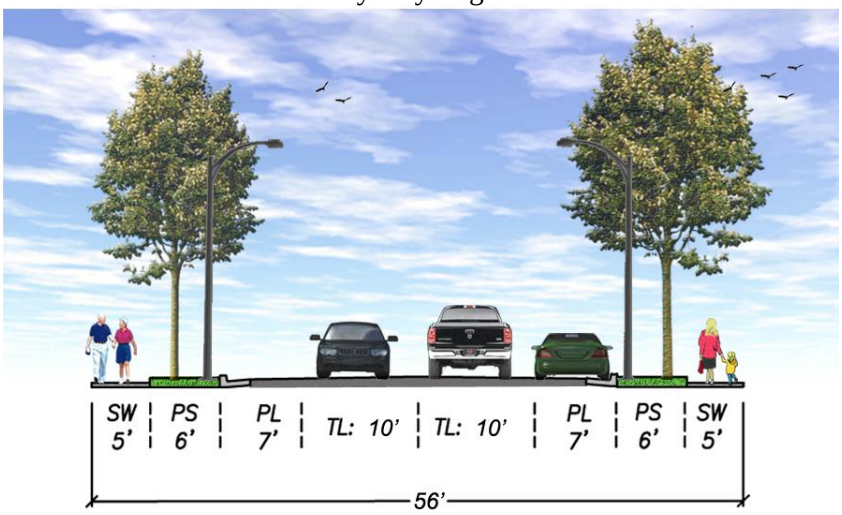
Local streets constitute the largest part of the Plan Area's circulation system. They provide direct access to adjacent properties. Per Section 6.3 of the Turlock General Plan, the local street pattern shall be a gridded network that minimizes the use of cul de sacs, and with block sizes and street spacing in accordance with recommended standards. Local streets provide two travel lanes, landscaped parkway strips, and sidewalks. Bicycle lanes are not required on local streets because of their low traffic volume. Figure 4-4 illustrates the roadway geometrics and the access restrictions along the Local roadways, in addition to providing a cross-section schematic for local streets. Local streets shall be required in the following locations:

- Along the south and west sides of the neighborhood park.
- Along the south side of the elementary school.
- Along the west side of the R-H zoned site in the northeast corner of the Plan Area.
- As an extension of 5th Street, south of the Morgan Ranch Arterial along the east side of the park/drainage basin.

Figure 4-4
Local Street Geometrics and Access Restrictions

Local Streets (within Plan Area)

Roadway Geometrics		Access Restrictions
Right of way (R/W):	56'	Minimum 50 feet between access point and curb return of intersection with arterial or collector street.
Landscape Strips (LS):	None	
Sidewalks (S/W):	5'	Minimum 40 feet between access point and curb return of local/local street intersection.
Parkway Strips (PS):	6'	
Parking Lanes (PL):	7'	Maximum one access point per R-M zoned site.
Bicycle Lanes (BL):	None	
Travel Lanes (TL)	10'	Maximum two access points per R-H zoned site.
Median (M):	None	
		Access points to school site to be reviewed and approved by City Engineer.



4.5 Alleyways

Use of alleyways in the Plan Area is not recommended, but is also not prohibited. If alleyways are proposed, they will be evaluated on a case-by-case basis during review of tentative subdivision map applications. If alleyways are proposed, they shall be designed to promote active use by residents. An example of this would be to require all units abutting the alleyway to have alley-loaded garages. If used for garbage collection, permission must be granted by the City's waste collection company. Such alleyways shall not be public streets and shall be maintained under a recorded agreement by all property owners abutting the alleyway. A homeowners association registered with the Department of Real Estate (or other similar financing structure approved by the City) shall be established to ensure the ongoing financing, maintenance, and management of the alleyways. Alleyways shall be a minimum 20 feet wide and shall be fully paved.

4.6 Roadway Intersections and Traffic Control

Lander Avenue / Future Morgan Ranch Arterial Intersection: A traffic signal is currently located at the intersection of Lander and Glenwood Avenues. This signal is expected to remain. In order to maintain an acceptable level of service at this intersection, the northbound approach will be modified to add a dedicated right turn lane. This will require that additional right of way be acquired.

Morgan Ranch Arterial / Glenwood Avenue Roundabout: This intersection would be a single-lane roundabout with three legs, two for the Morgan Ranch Arterial, and one for Glenwood Avenue. The slower speeds in the roundabout allow bicyclists to use the roundabout in the same manner that motor vehicles do. However, bicyclists who want to avoid vehicles within the roundabout may choose to take special ramps connecting the bicycle lane with the sidewalk. This allows bicyclists to cross through the roundabout at the pedestrian crossings instead.

Morgan Ranch Arterial / 5th Street Intersection: This intersection would be a single-lane roundabout with four legs. A traffic signal may be considered as an alternative; this alternative would require the Morgan Ranch Arterial to be four lanes. Pedestrian crosswalks will be clearly marked in either design. This intersection would be the primary pedestrian connection between the north and south sides of the Plan Area. Flashing beacons and other safety devices will be required to ensure pedestrian and bicycle safety.

Morgan Ranch Arterial / Golf Road Intersection: This intersection would be a single-lane roundabout with three legs (at completion of the master plan) but potentially 4 legs in the future.

A traffic signal may be considered as an alternative; this alternative would require the Morgan Ranch Arterial to be four lanes.

Golf Road / Glenwood Avenue Intersection: This intersection would be a single-lane roundabout with three legs (at completion of the master plan) but potentially 4 legs in the future. A traffic signal may be considered as an alternative; this alternative would require a reevaluation of Golf Road that may result in a requirement that it be constructed with four lanes.

Glenwood Avenue / 5th Street Intersection: This existing 3-way intersection will become a 4-way intersection with implementation of this Master Plan. It will likely be signed as a 2-way stop for 5th Street traffic, but could be modified to the 4-way stop if/when traffic warrants are met. Pedestrian crossings will be clearly marked due to the proximity to the elementary school.

Glenwood Avenue / Baywood Lane Intersection: This existing intersection will be the most heavily modified of all the existing intersections in the Plan Area. The 3-way intersection will have a fourth leg constructed south from the intersection to the roundabout, between the C-O and R-H zoned properties. Then the existing west leg of Glenwood Avenue will be abandoned. This leg could be modified to be a driveway access for the C-O zoned site.

Typical Collector Street / Local Street Intersection within Plan Area: Local streets will be allowed to intersect with Glenwood Avenue and 5th Street, the Collector streets, subject to the access restrictions in Figure 4-3. These intersections are required at the southeast corner of the school site, the northwest corner of the neighborhood park, and the northwest corner of the R-H zoned property on Golf Road. These will likely be 2-way stop intersections, unless a different determination is made by the City Engineer.

Typical Local Street / Local Street Intersection within Plan Area: The local / local street intersection will be the most prevalent within the Plan Area. The intersections will have stop signs as determined by the City Engineer.

Golf Road / Linwood Avenue Intersection (outside Plan Area): This existing 3-way intersection currently is unsignalized. Without improvements, development in the Plan Area will increase traffic at this intersection to an unacceptable level. In order to maintain an acceptable level of service a signal will be installed.

Golf Road / First Street Intersection (outside Plan Area): This existing 3-way intersection currently is unsignalized. Without improvements, development in the Plan Area will increase traffic at this intersection to an unacceptable level. In order to maintain an acceptable level of service a signal will be installed.

Golden State Boulevard and Berkeley Avenue Intersection (outside Plan Area): This intersection is currently operating at an unacceptable level even without any development in the Plan Area. Without improvements, the existing problem will increase due to development in the Plan Area. In order to maintain an acceptable level of service a number of improvements are currently being considered, that include roadway realignments and a new signal.

4.7 Bicycle Circulation

Turlock's topography and weather are ideal for walking and bicycle riding most of the year. The Turlock General Plan identifies the three classes of bikeways:

Class I bikeways: Paved paths separated from motorized traffic.

Class II bikeways: Paved dedicated bicycle lanes that are striped next to motorized traffic lanes.

Class III bikeways: Roadways identified by signs and arrows that encourage motorized vehicles and bicycles to share the road.

Within the Plan Area there are no plans for Class I bikeways. However, Class II and Class III bikeways are designated in the follow locations:

Class II bikeway locations:

- Golf Road, the entire length of the Plan Area
- The Morgan Ranch Arterial, from Lander Avenue to Golf Road
- 5th Street, from Glenwood Avenue to the Morgan Ranch Arterial

Class III bikeway locations:

- Glenwood Avenue, from the roundabout to Golf Road

4.8 Walkability

The elements of the circulation plan combine to promote walkability. The major streets, especially 5th Street, have been located to encourage walking to and from the elementary school site. The requirement for sidewalks set back from the curb with street trees and landscaping provide a calm environment for walking, even along larger streets. Finally, the Plan's land uses provide many interesting places to walk. The school, the neighborhood parks, and the community commercial / office area all are designed at a scale that encourages walking as the simplest form of transportation. Consistent with the General Plan standards, street trees in landscape strips and parkways strips must be placed near enough to the sidewalk to provide a shade canopy. In commercial and office areas street trees shall be located within public right-of-

way behind the sidewalk. In residential and other areas street trees shall be located within the parkway strip.

4.9 Public Transit

The City does not anticipate Public Transit fixed routes to serve the Plan Area as soon as the Area develops. However, the Plan Area's circulation system is designed to allow for the City to add bus service in the future, if needed and desired. Future bus stop locations would likely be located at:

- Future Morgan Ranch Arterial (existing Glenwood Avenue), east of Lander Avenue
- Morgan Ranch Arterial, near 5th Street
- Morgan Ranch Arterial, near Golf Road
- Golf Road, south of Glenwood Avenue

Bus turnouts and other amenities shall be required as determined by the City Engineer.

Chapter 5

PARKS AND RECREATIONAL OPEN SPACE

5.1 Neighborhood Parks

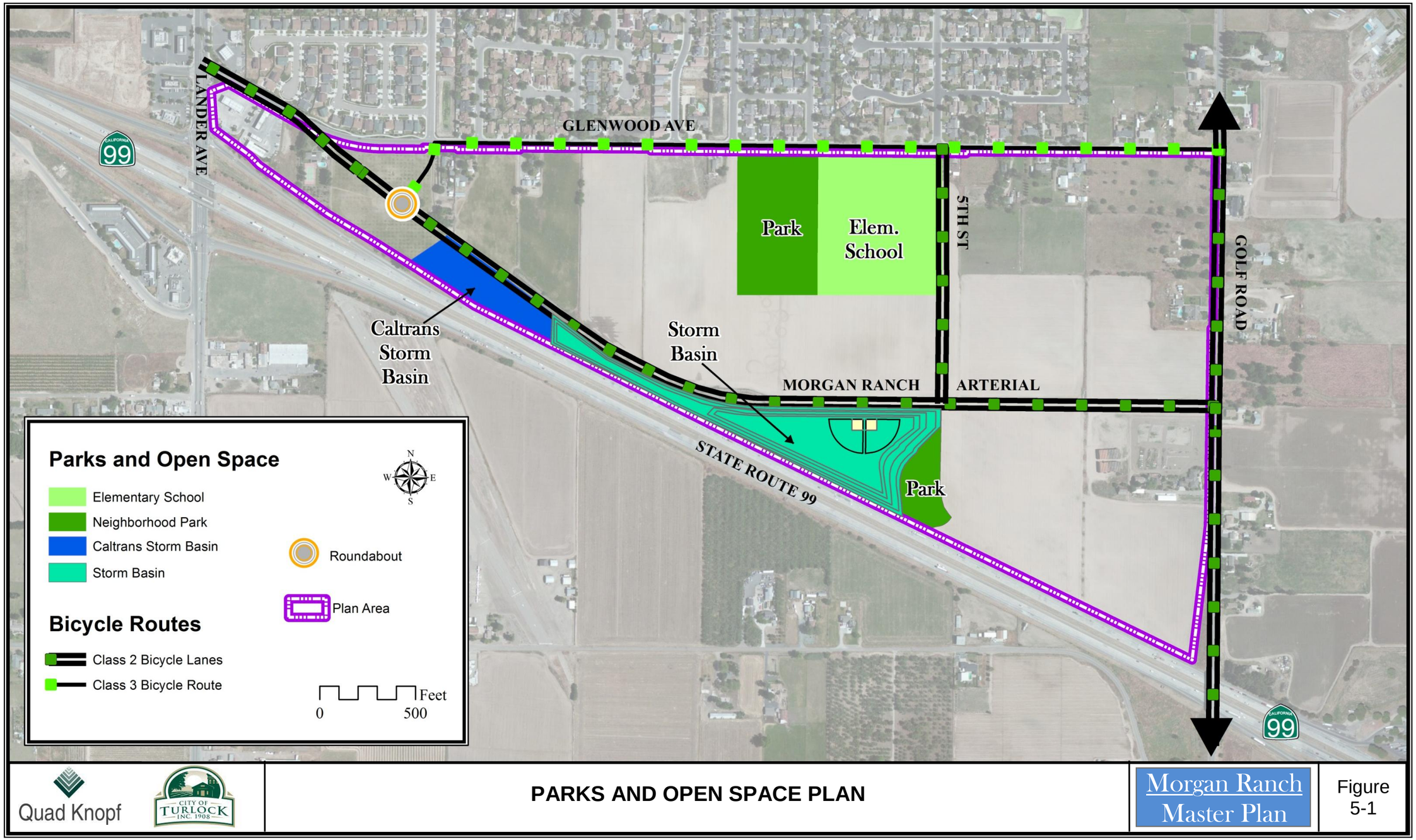
This Master Plan provides areas for two parks that will serve residents in Morgan Ranch as well as residents in adjacent neighborhoods. A neighborhood park is located at the southeast corner of the Glenwood Avenue/English Avenue intersection, directly west of the proposed elementary school site. The second park, considered a pocket park, is located east of the storm basin in the south central portion of Morgan Ranch. Neighborhood park requirements described herein are based upon the conceptual subdivision diagram for the Morgan Ranch Master Plan area.

The 7.2-acre neighborhood park[1] will be located next to the elementary school site in order to take advantage of the ability to share facilities. The neighborhood park will provide children's play areas, shaded landscaping, benches, and picnic areas. The neighborhood school park at the elementary school will provide outdoor basketball courts and ball fields for baseball, soccer, and other organized and semi-organized team sports. Together the two sites will provide facilities for the full range of outdoor park activities and meet the combined 11-acre combined play area identified in the City's General Plan for combined neighborhood and neighborhood school parks. The City and the School District intend to enter into an agreement so that the school can use the neighborhood school park during the weekday for outdoor learning activities and the public can use it after school and on weekends for sports activities.

The roughly 1.5-acre pocket park[1] south of the Morgan Ranch Arterial will also expand its utility by being designed together with the storm water drainage basin needed for the Plan Area. This park will be built at street level with children's play area, benches, and picnic tables. A storm water drainage basin will be built, adjacent to the pocket park, designed as a shared use facility that allows for recreational use in the basin when there are no storm events. This park/basin concept has been implemented successfully in other areas of the City.

Connectivity to the parks and open space is a priority of this Master Plan. The Master Plan design provides pedestrian/bicycle links from neighborhoods to the recreation facilities with safe and easy access. Figure 5-1 illustrates the park and open space locations, as well as the location of bicycle lanes and routes.

[1] The total acreage required for neighborhood parks will be based on the density of the actual development's projected population. This could result in the amount of park land being greater than the acreages identified. See Park Design Guideline 5.1.1.a on page 5-3.



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PARKS AND OPEN SPACE PLAN

Morgan Ranch Master Plan

Figure 5-1

5.1.1 PARK DESIGN GUIDELINES

Following are additional park design guidelines included in the Plan Area.

a. Neighborhood parks shall be provided and developed at a ratio of 2.6 acres per 1,000 residents, but in no case less than 7 acres. (Park sizes in this master plan are based on the conceptual subdivision plan and will be modified based on actual planned population.)

b. Neighborhood park designs shall accommodate a variety of semi-active and passive recreational features that meet the needs of residents of all ages, abilities, and interests.

c. The approximately 7.2 acre neighborhood park abutting the elementary school shall be provided with improvements as required by the Parks Master Plan.

d. A 1.5 acre pocket park shall be located on the south side of the Morgan Ranch Arterial, shall abut the storm basin, and shall be improved with landscaping, including turf, ornamental plantings, and trees that provide ample shaded areas, play equipment, picnic tables, and benches. The pocket park shall be considered part of the public park system and shall be counted toward meeting the neighborhood park requirement for the Master Plan Area.

e. Parks and dual use storm basins shall not be fenced.

f. There shall be no residential or commercial property directly adjacent to either park. A local street must separate a park from residential uses to allow for on-street parking.

g. Residential areas across a local street from a park shall be designed with homes facing the park.

h. All parks shall be connected to neighborhoods through either sidewalks or trails, and shall provide connections to bicycle routes within the Master Plan Area

i. Park safety and maintenance standards shall comply with City and ADA standards.

j. All park and open space improvements shall be designed by a licensed landscape architect, as required by State Law.

k. Parks shall be designed to Cal Green standards, landscaped for easy maintenance and water efficiency. Play and picnic areas shall be provided with an adequate amount of shade.

l. Native and drought tolerant plants shall be utilized when possible.

m. Existing, mature trees shall be retained to the greatest extent possible.

n. Site furniture and structures shall be selected based on durability, vandal resistance, and ease of maintenance.

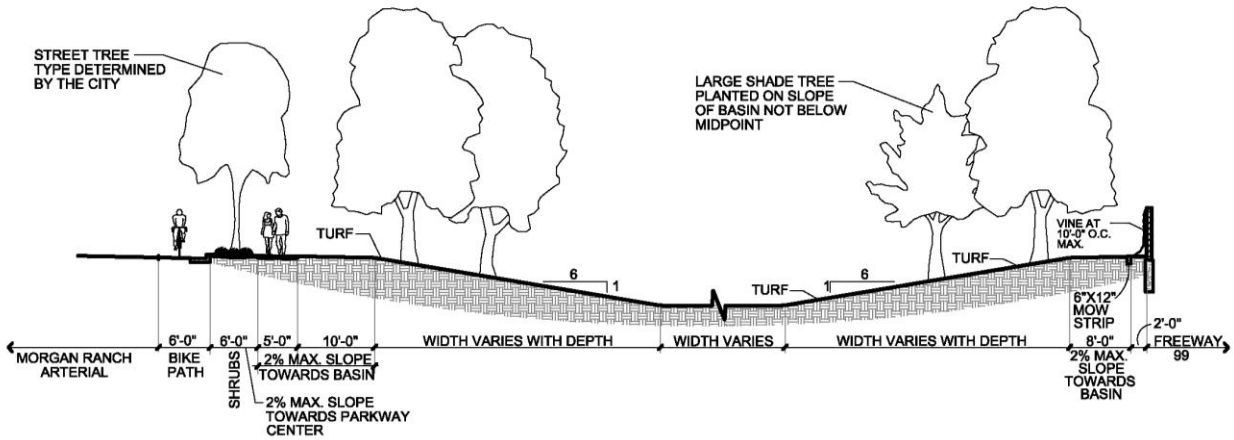
o. All new development shall pay an in-lieu community park development fee to construct future community parks identified in the General Plan

5.2 Storm Basin

Stormwater flows will be collected in a new storm basin within the Plan Area. Due to the nature and location of the storm basin within the Plan Area, the basin is an excellent opportunity for passive recreation that the storm basin is anticipated to be in use for stormwater run-off for only a few weeks out of the year. This creates a nearly year-round opportunity to utilize the vast acreage for other recreational activities. The basin is located next to a proposed pocket park. The embankment area next to the park can be terraced gradually into multiple levels that could provide spaces for picnicking, sitting, and open play (i.e., baseball, soccer, Frisbee toss, etc.).

Any new development within the Plan Area requires that developers submit, along with the subdivision improvement plans, grading and erosion control plans to the City Engineer. Since basins are generally utilitarian in nature, and are not accessible to the public, this detention basin should be developed for the purposes of creating a visual amenity for the residents and visitors to the community and not an eyesore. Figure 5-2 illustrates a cross-section of the storm basin.

Figure 5-2
Storm Basin Cross Section (looking east)



5.2.1 STORM BASIN DESIGN GUIDELINES

Following are the design guidelines applicable to the development of the storm basin:

a. The storm drainage basin shall be constructed to City standards and in accordance with the Turlock General Plan.

b. The storm basin shall be designed as a dual use facility and shall be designed to accommodate recreational open space uses while keeping its primary purpose intact.

c. The storm basin shall include trees along the perimeter following the City spacing requirements, irrigated turf on the slopes and bottom, and other improvements that are similar to, and visually compatible with, the adjacent landscaping. The portion of the storm basin between the larger basin and the Caltrans storm basin, along the south side shall be planted with a combination of trees, shrubs and groundcovers to discourage recreational use and to act as a visual screen to State Highway 99.

d. The storm basin shall be designed to allow for a grassed play area at the bottom of the basin.

e. The storm basin slopes shall not be steeper than 1:6 (17%) to allow for safe access into and out of the park/basin area.

f. A combination of shrubs and vines shall be used along both sides (basin side and freeway side) of the masonry sound wall along Highway 99 to discourage graffiti.

g. Design and maintenance of the storm basin shall meet all of the standards identified in the General Plan for dual use basins.

h. The Caltrans storm basin shall be designed to State standards; however, if a fence is required around the Caltrans basin the City encourages Caltrans to consider installing a wrought-iron style fence and to fully landscape the basin to enhance its visual attractiveness.

i. The design of any structures or buildings shall be architecturally compatible with the adjacent neighborhood.

j. Any pump stations, equipment, or other structures shall be located and screened to minimize the visual impact to adjacent uses and from the public rights-of-way.

k. Development standards and design guidelines applicable to the Medium Density Residential zone (or adjacent zoning district) shall apply.

l. Fencing shall be of wrought-iron grill work design or similar material approved by the City Development Services Director, or designee, and shall include a minimum three (3') foot landscape area to support a combination of vines and shrubs to function as screening materials.

Chapter 6

PUBLIC FACILITIES AND SERVICES

The Master Plan identifies all of the public facilities and services needed for development to occur in the Plan Area. This key component of the Master Plan allows the Plan Area to be built in multiple phases as the market deems appropriate and ensures that infrastructure is comprehensively approached, and correctly sized for ongoing phases of development.

The master plans for infrastructure show the backbone of the system to serve the Plan Area. Utility infrastructure will be constructed, dedicated, and easements will be provided consistent with this Master Plan, project agreements, and other applicable standards and requirements of the City of Turlock. Additional project-level infrastructure will be built at developer expense and will be designed during the tentative map and improvement plan process. The master-planned backbone lines will be funded by a combination of citywide developer impact fees and the Master Plan impact fee program that is being established concurrently with this Master Plan. A reimbursement system will be used to reimburse the first developers who will likely need to install more than their fair share of the backbone infrastructure.

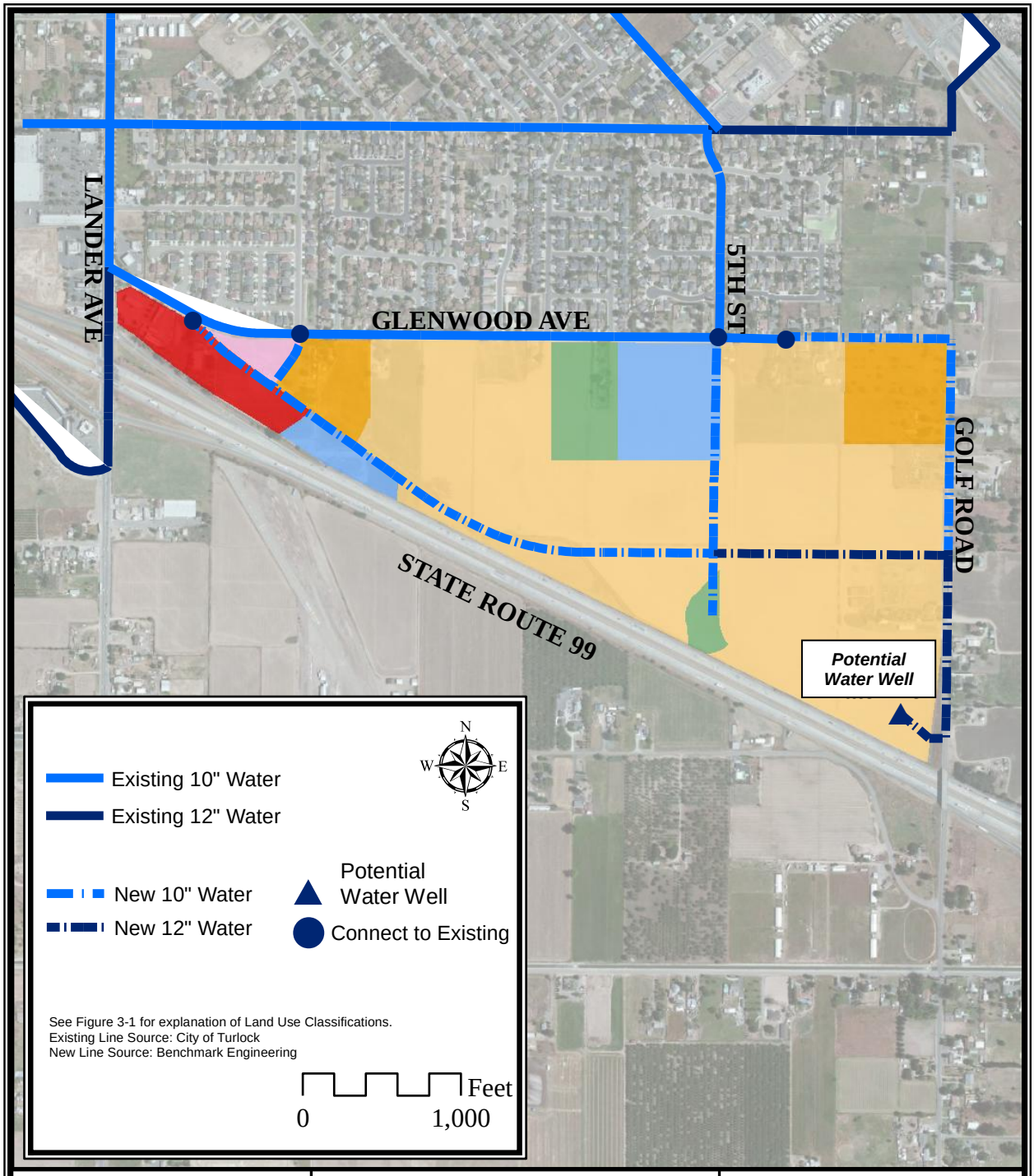
6.1 Domestic Water System

The City of Turlock will provide domestic water services for the Plan Area. A twelve (12') inch water line is located in Lander Avenue. A ten (10') inch water line is located in Glenwood Avenue from Lander Avenue to approximately four-hundred (400') feet east of 5th Street. Fire hydrants are located on the north side of Glenwood Avenue from Lander Avenue to 5th Street near each street intersection.

A water supply system of ten (10") inch and twelve (12") inch lines will be constructed and looped into the City's existing water system and four connection points. A new City water well will be drilled within the Plan Area. A potential well site location is depicted in the northwest corner of Highway 99 and Golf Road, near the overpass. The final location will be determined based upon pilot well results. Figure 6.1 shows the location of the existing and new water lines. All development is subject to the provisions of California Government code Section 66473.7 which requires a water supply assessment by the City prior to approving subdivision maps in the plan area, including, but not limited to, verification of the location, quality, and production levels of the proposed potable wells identified in Figure 6.1.

The City of Turlock has implemented numerous water conservation measures to conserve water and reduce water waste. Following is a list of actions and policies that the City has adopted for water conservation:

- In 2009, the City of Turlock became a member of the California Urban Water Conservation Council and is required to implement the CUWCC's MOU through the implementation of a number of BMPs (Best Management Practices).
- Compliance with water conservation associated with the Water Conservation Bill of 2009.
- The Turlock City Council, in the interest of fairness and to encourage water conservation, chose to install water meters at all accounts. The installation of meters began in 2007 and meter-based (volumetric) billing for all water users commenced on January 1, 2011.
- In 1991, the City adopted a "Water Conservation and Education Ordinance" that included a program of mandatory prohibitions related to water conservation. In concert with the meter installation project, the City developed a public education campaign to encourage water conservation.
- The City has implemented an "Emergency Water Shortage Plan" on a perpetual basis by electing to remain in "Conservation Stage 1: Mandatory Conservation" even during years where there is no apparent water shortage. This has had a significant impact in reducing landscape water waste.
- The City has various water conservation programs. The programs include ultra low flush toilet (ULFT) replacements and surveys of water use for all accounts.
- The City of Turlock Municipal Code (Chapter 6-7 Water Conservation and Education) has had a water wasting prohibition for many years. This Code section prohibits specific water wasting fixtures (such as "once-through" cooling systems and "slip-n-slides") and general water waste and also requires proper maintenance of water pipes and fixtures to prevent leaks.
- As required by the State of California, the City of Turlock has implemented the new Statewide Model Water Efficient Landscaping Ordinance.
- The City conserves potable water from the deep aquifer by using recycled water for landscape irrigation and for power plant cooling.
- The City also uses shallow groundwater (non-potable water) and stormwater runoff for landscape irrigation, which further conserves potable water.
- Development projects shall comply with the requirements of SB 610 and SB 221. Well testing shall be performed prior to subdivision map approval to determine the location of a new water well that meets these requirements and can serve the entire Morgan Ranch Master Plan area.



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WATER SERVICE PLAN

Figure 6-1

Morgan Ranch Master Plan

6.2 Solid Waste

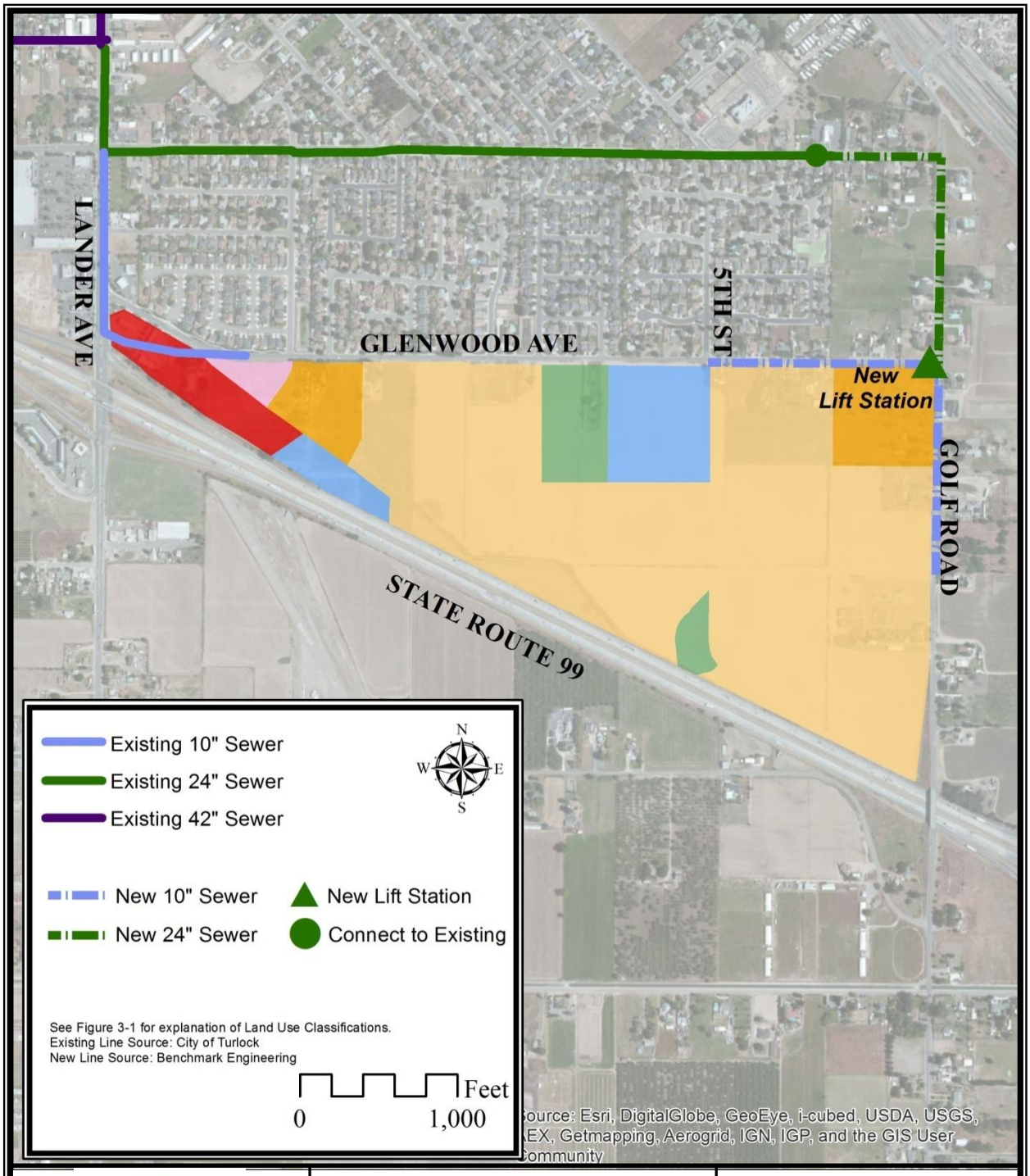
The City of Turlock will provide solid waste services to the Master Plan Area through their existing contract with the Turlock Scavenger Company. Solid waste will be collected and delivered to an approved, licensed landfill. A three cart collection system is used which includes a blue can for commingled (non-sorted) recyclables, a can for green waste, and a can for all other waste. This same system will be utilized in the Master Plan Area.

6.3 Sewer Collection System

Sewer service is provided by the City of Turlock. The Turlock Regional Water Quality Control Facility is located at the northwest corner of Linwood Avenue and Walnut Avenue, approximately one mile west of the Plan Area. The Facility's capacity is 20 million gallons per day (MGD). Currently the facility treats 13 MGD. No additional improvements are anticipated at the Facility due to development of the Master Plan Area. A sewer fee is charged to all new development to cover infrastructure costs at the Facility.

Sewer lines run through portions of Glenwood Avenue to service existing residences only. Sewer lines also currently service existing commercial uses from a sewer main located in Lander Avenue. New development in the Plan Area will need to install a new system of sewer lines connected to the City's existing collection system. The nearest sewer trunk line is a twenty-four (24") inch line in Linwood Avenue. This line runs east-west approximately ¼ mile north of the Plan Area. The sewer trunk line currently terminates approximately seven-hundred (700') feet west of the Linwood Avenue / Golf Road intersection.

The Linwood Avenue trunk line will be extended east to Golf Road then south in Golf Road to the Golf Road / Glenwood Avenue intersection. A sewer lift station will be installed at this location. From there, a trunk line would continue from the Golf Road / Linwood Avenue intersection to the new Golf Road / Morgan Ranch Arterial intersection. Local collection lines serving properties south of the Morgan Ranch Arterial would connect at this point, while properties north of the Morgan Ranch Arterial would connect from the lift station via Glenwood Avenue. Figure 6-2 shows the location of the existing and new sewer lines.



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SEWER SERVICE PLAN

Figure 6-2

Morgan Ranch Master Plan

6.4 Storm Water Drainage

Storm drainage facilities are maintained by the City of Turlock. The majority of the Plan Area will drain to the new pond basin located on the southerly side of the Plan Area adjacent to State Highway 99. The exceptions are the existing gas station and car wash sites that currently drain to existing storm drain lines in Lander Avenue, and the north side of Glenwood Avenue, which drains to drop inlets with lines that carry storm water to existing basins in the existing neighborhoods north of the Plan Area.

The planned new storm drainage lines are shown in Figure 6-3. A thirty (30") inch line is planned to run from the outfall structure at the new basin to an existing forty-two (42") inch storm drainage line in Lander Avenue.

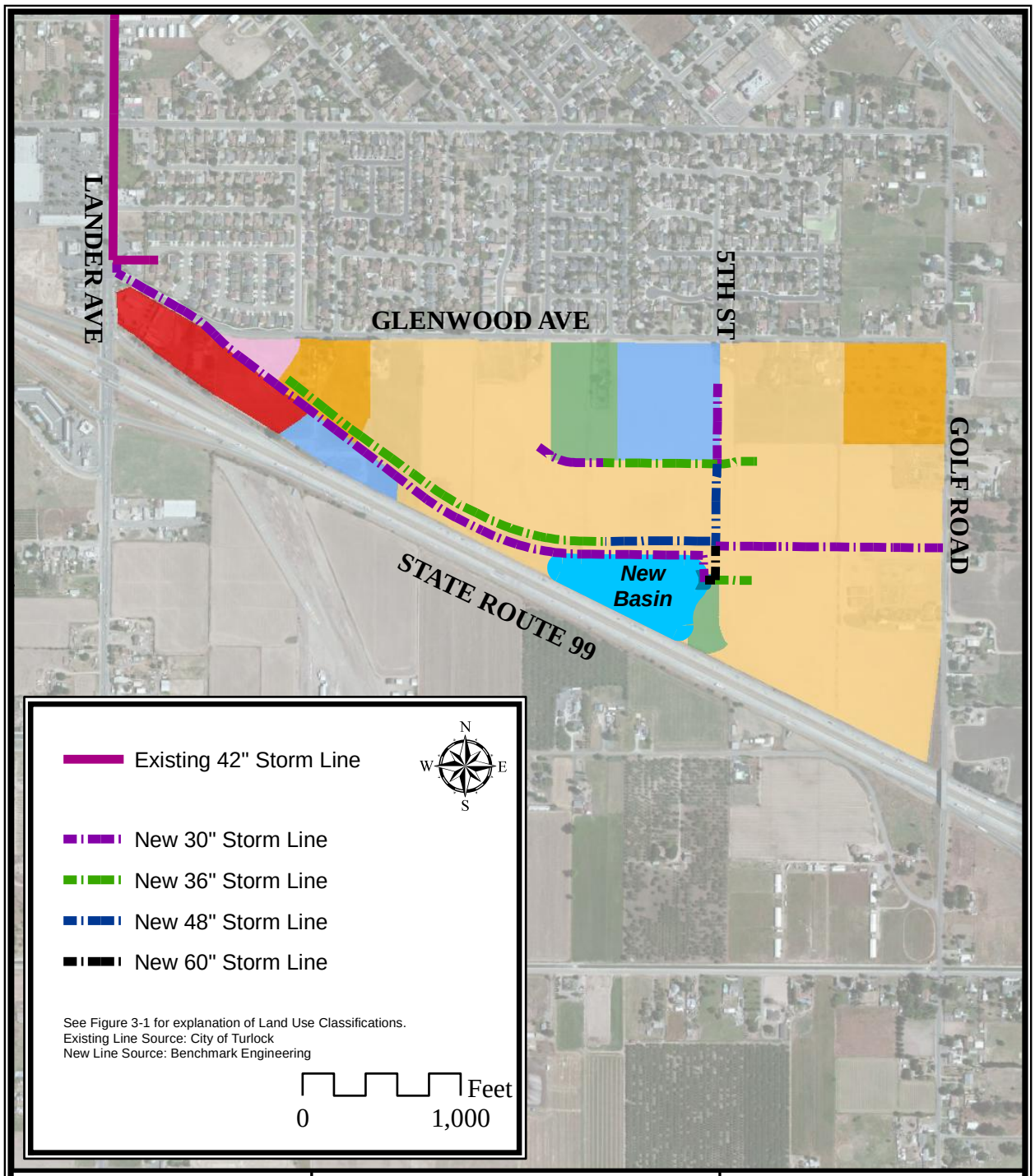
6.5 Irrigation Water

The Turlock Irrigation District (TID) provides irrigation water for agricultural purposes within the Plan Area and to other nearby properties outside the Plan Area. Two irrigation lines currently run through the site. District 34A, known as the Casey, flows south to north from under State Highway 99 and continues in a northwesterly direction until eventually crossing under Glenwood Avenue. The pipeline continues from there to serve other downstream parcels. Within the Plan Area, the facility is comprised of a forty-two (42") inch diameter cast-in-place pipe and an open ditch.

District 247B, known as the Goldberry-Conyers, runs south to north from under State Highway 99 for approximately four-hundred (400') feet before turning east to continue for about 350 feet. From there, the pipeline runs northeasterly for roughly four-hundred (400') feet before turning north to cross under Glenwood Avenue. Within the Plan Area, the facility is comprised of a thirty-six (36") inch diameter cast-in-place pipe and appurtenances.

TID also operates a drainage pump, and well, known as Pump 112 approximately six-hundred (600') feet west of Golf Road, on the south side of Glenwood Avenue. The pump discharges into a structure box located to the east on the Goldberry-Conyers pipeline, for the purpose of controlling groundwater elevations in the area.

The irrigation lines provide water not only to the Plan Area but also to properties beyond the Plan Area; therefore, a plan is needed to maintain service even as the Plan Area develops. This means that the Casey and Goldberry-Conyers lines will need to be relocated as development occurs. Figure 6-4 shows the existing locations and the planned relocations.



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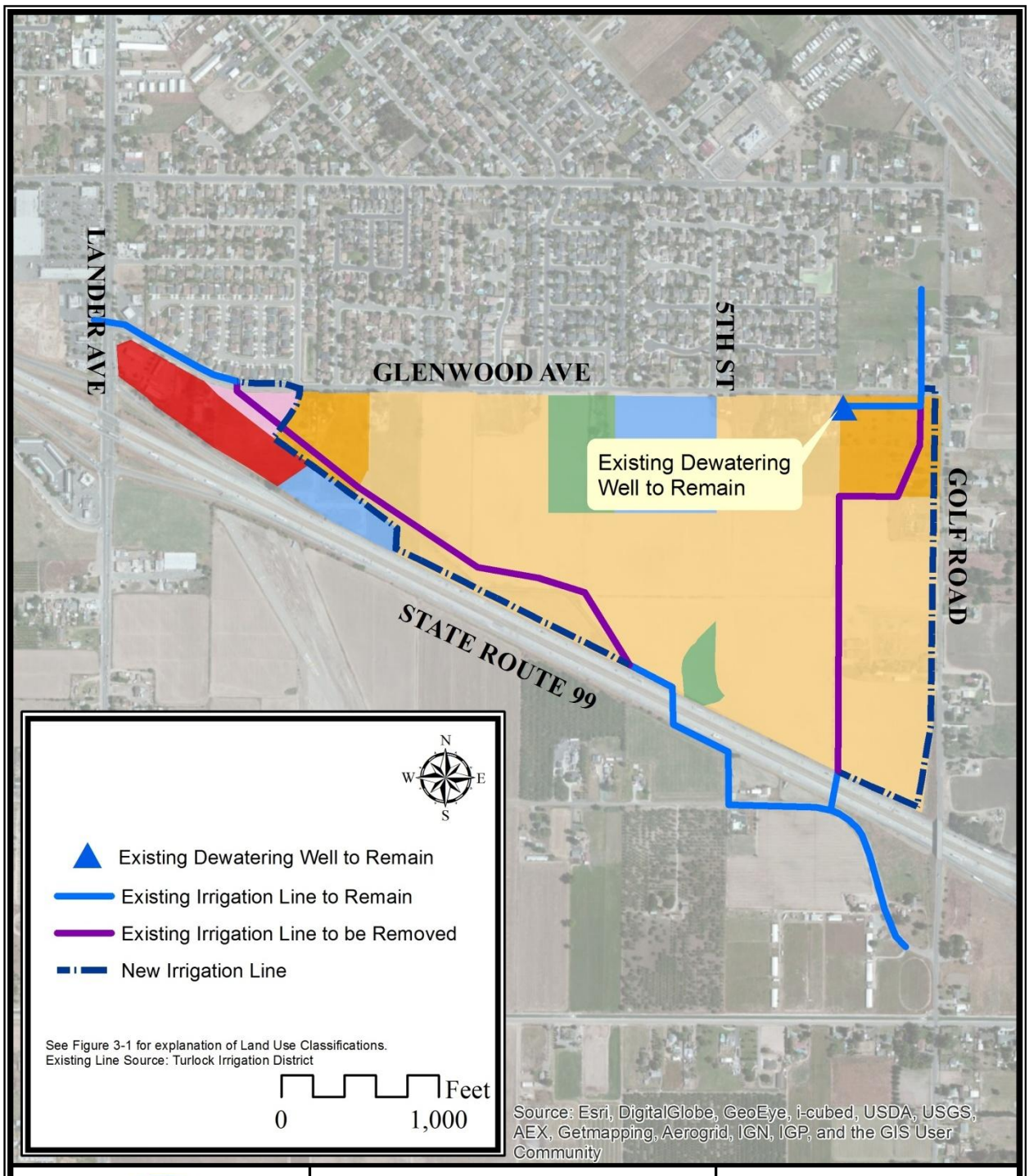
STORM WATER DRAINAGE PLAN

Figure 6-3

Morgan Ranch Master Plan



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AGRICULTURAL IRRIGATION WATER PLAN

Figure 6-4

Morgan Ranch Master Plan

Both irrigation lines will be relocated within public land uses or public road rights-of-way. These facilities will not be located within a public utility easement on private property. However, if necessary, to accommodate the relocated lines and any required safety clearances required by the TID, additional space may be provided by increasing the size of the parkway or landscape strip in only the affected roadway segments to avoid siting these facilities on private property. For example, the sidewalk along the west side of Golf Road will be 10 feet wide to accommodate the new irrigation pipeline, as reflected in Figure 4-2 in Chapter 4. The existing dewatering well that is located on the south side of Glenwood Avenue, between 5th Street and Golf Road will remain a part of the system.

In addition to, but separate from, the above-described agricultural irrigation system, there are two agricultural wells on the site that will remain and will be converted for use as a non-potable water source to irrigate the city parks and Morgan Ranch Arterial landscaping. The location of the existing wells and the new non-potable water lines that shall be installed is shown in the Parks/Landscape Irrigation Water Plan in Figure 6-5.

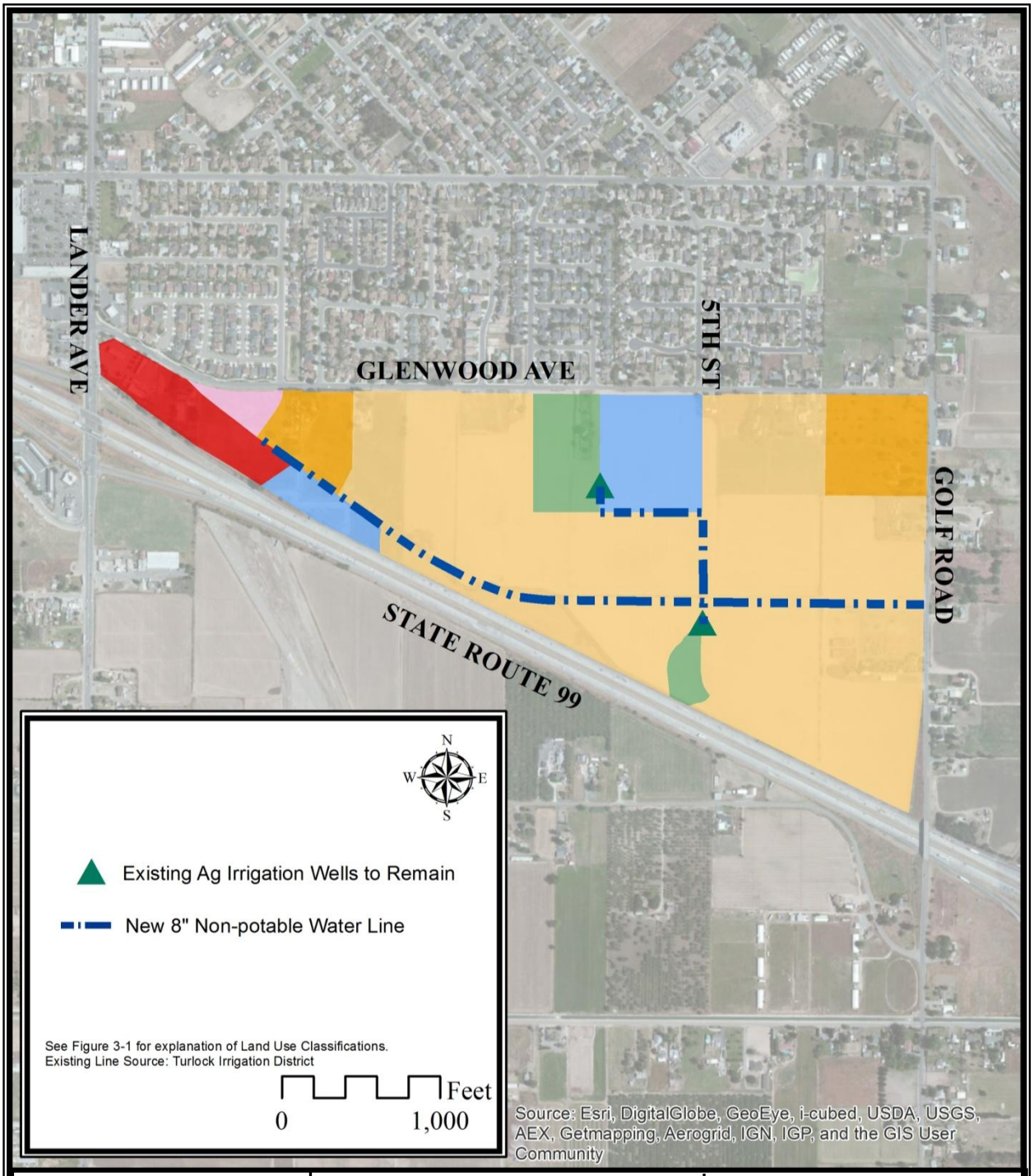
6.6 Dry Utilities

Electricity service in Turlock is provided by Turlock Irrigation District (TID). There are existing 69 KV overhead power lines along the west side of Golf Road. There are also existing 12 KV overhead power lines along the south side of Glenwood Avenue. TID is expected to abandon the 69 KV overhead lines prior to implementation of the Master Plan; however, the Glenwood Avenue overhead lines and power poles will need to be relocated and undergrounded to accommodate road widening.

Natural gas is provided by PG&E. A six (6") inch gas main is located in Lander Avenue. Three (3") inch gas mains are located in both Glenwood Avenue and Golf Road. Each developer will be responsible to work with PG&E to provide extensions of these lines into the Plan Area.

AT&T has existing underground communication lines starting south of State Highway 99 along Golf Road and continuing briefly north until converting to overhead lines. The overhead lines continue north on Golf Road and turn westward along the south side of Glenwood Avenue before going underground just east of 5th Street on Glenwood Avenue The underground line continues west on Glenwood Avenue, turning to continue north and south along Lander Avenue.

Charter Communication has existing underground cable located on the north side of Glenwood Avenue running just behind the sidewalk from Lander Avenue to Golf Road. An existing overhead cable on the electrical poles is located on the south side of Glenwood Avenue, from Lander Avenue to Golf Road.



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PARKS/LANDSCAPE IRRIGATION WATER PLAN

Figure 6-5

Morgan Ranch Master Plan

All improvements to dry utilities to accommodate development in the Plan Area will be completed by the developer as projects occur. City policy requires undergrounding of all utilities; therefore, the costs for undergrounding existing power, cable and telephone lines, and any special accommodations required to maintain service to existing customers outside the Plan Area, will be included in the Master Plan Fee Program.

6.7 Public Safety Services

The Plan Area is served by the City of Turlock Police Department and the City of Turlock Fire Department.

The Police Department provides all operations and patrols out of its central station located at 900 North Palm Street, approximately 2 miles north of the Plan Area. Projects proposed as part of this Master Plan will comply with City of Turlock Police Department recommendations regarding safety and security.

As of 2011, the Turlock Police Department has a total staff of 125, including 81 sworn patrol officers. As of 2011, the Turlock Police Department has a staff of 125, 81 of whom are sworn officers. The Police Department provides all operations and patrols out of its central station located at 244 North Broadway, approximately 2 miles north of the Plan Area. The new public safety facility was completed in October of 2013 as a result of a space needs study conducted in 2007 which confirmed existing facilities and staffing were not adequate to maintain a sufficient level of service for future population growth. The new facility will accommodate a projected staff of 242 by 2030, as calculated in the Space Needs Assessment.

In 2011, there were 1.2 sworn officers per 1,000 persons in Turlock, up from 0.8 in 2006. As development continues in Turlock it will be necessary to ensure that police service adjusts to an increased population.

The Fire Department provides fire protection, suppression, emergency medical services, and hazardous materials management to the Master Plan Area. The Plan Area will continue to be served by both Fire Stations No. 1 and No. 2. Fire Station No. 1 is located approximately 1½ miles north of the Plan Area at 540 East Marshall Street and Fire Station No. 2 is located approximately 1 ½ miles west of the Plan Area at 791 S Walnut Avenue.

The primary responder for the Plan Area will be Engine 31 coming from Fire Station No. 1. The average response time to the Plan Area from Fire Station No. 1 is 4:01 minutes while the average response time from Fire Station No. 2 is 5:35 minutes. Many departments strive to achieve the national target response time of 5:00 minutes, 90% of the time. The services provided from Fire Station No. 1 meet and exceed this target. An additional station, Fire Station No. 5, is proposed

to be added in the general vicinity of the Plan Area, thus helping with response times in this part of the City.

The City has also adopted a Community Facilities District (CFD) #2 on new residential developments to cover the cost of providing additional police and fire services. This fee also covers the additional maintenance costs for public parks. Assessment districts are implemented to pay for the cost of street and landscaping maintenance, street lights, and other public services impacted by development in the master plan area.

Chapter 7
MASTER PLAN IMPLEMENTATION

7.1 Implementation Challenges

All attempts to develop new urban areas are faced with development challenges. Three basic requirements must all positively align for new privately financed development to occur. First, an investor must be willing to become a landlord by investing in real estate at a price that will generate an acceptable return on his/her investment. The investment could be the purchase of a commercial building that can be rented out to a retail tenant or it could be the purchase of an apartment complex with units that can be rented. The investment could also be the purchase of a home for use as a primary dwelling at a price that the homeowner can afford at his/her income level. If there is no opportunity to gain financially from the purchase of improved property then there will be no demand for new properties to be developed.

Second, the opportunity must exist for a developer to develop a piece of undeveloped property with reasonable assurance that he/she can sell that property for more than it costs to buy and invest in its development. This means that the buyer/investor of properties must be willing to pay a price that will cover the developer's costs and leave him/her with an acceptable profit that correlates to the amount of financial risk that the developer is taking. The developer's costs include acquisition of land, entitlement processing, design costs, financing costs, land development construction, and building construction. If the cost to develop land is higher than a buyer/investor is willing to pay, then development will not occur because developers, like most people, do not purposefully invest in things that they know will lose money.

Finally, the third requirement for development to occur is successful resolution of the regulatory and entitlement processes. Land development projects must secure approved entitlements from the local jurisdiction. New development must be consistent with a community's General Plan, Turlock Municipal Code, Design Guidelines, the Master Plan, and with State laws that regulate development. Elected community leaders have the authority, under California law, to deny development projects that do not conform to the community's adopted General Plan, Zoning, Design Guidelines, State land use laws, and State environmental laws.

Nothing written in this Master Plan can positively or negatively affect the first requirement. The City of Turlock, the State of California, and the nation in general are still engaged in a slow economic recovery and high unemployment rate that has driven down real estate values; although signs of improvement have begun to emerge. It is likely that implementation of this

Master Plan may occur slowly, or may even wait until a much broader economic recovery gets underway.

This Master Plan attempts to streamline the third requirement for development -- the regulatory and entitlement process. This Plan brings together the City of Turlock's General Plan policies, Zoning Ordinance regulations, and Design Guidelines into one cohesive interpretation of how development can occur in a manner that is acceptable to the City. Many entitlement issues that can hold up other development projects are not an issue for Morgan Ranch. The site is already inside the City limits, and approval of the Master Plan will grant the zoning and development rights for projects located within its boundary. Development is not prohibited by any environmental constraints. The Plan Area has no property within the Williamson Act. The standards put in place through this Master Plan enable entitlement processing to occur with only subdivision maps needing discretionary approval.

The second basic requirement--the ability to develop property at a cost that can return a profit--could be the biggest challenge to implementation. An investment in infrastructure is required prior to a developer being able to sell improved property and realize a return on his/her investment. These improvements must be paid for by the developers in one of two ways, either indirectly by the payment of school district, Citywide and/or Master Plan fee programs, or directly as the project occurs. The Master Plan fee program serves as a way to equitably distribute the necessary costs among all of the developers that benefit, thereby avoiding the burdening of one property with an inequitable amount of improvement costs.

7.2 Development Process

The Plan Area is already inside the City limits, it has been planned and zoned for development, and the provision for necessary infrastructure has been planned. None of the Plan Area includes property within the Williamson Act. This Master Plan is consistent with the City of Turlock General Plan. Development consistent with the Master Plan is therefore consistent with the General Plan. Development Standards for residential units were specifically included in this Master Plan to avoid the need for special discretionary approvals for small-lot development. These deviations from the City's typical development standards are pre-approved. This means that approval of a tentative subdivision map is required to entitle a site for residential development and developers will be required to submit lot fit plans, house floor plans and elevations. In accordance with the City's Zoning Ordinance, some commercial uses will require a discretionary permit. The application process shall be determined by the Turlock Planning Division in consultation with other City Departments.

7.3 Phasing

Phasing of the Plan Area will occur in the order that landowners choose to develop. At the time development is proposed, the City will determine the phasing of infrastructure improvements. A focused traffic study will be required to determine whether the development proposed will trigger the need to make any of the anticipated off-site traffic or road widening improvements.

The implementation of the Master Plan Fee Program provides an infrastructure financing mechanism to reimburse developers that build more of the infrastructure above their equitable share. Property owners and developers will need to work together to implement much of the infrastructure improvement program, a process that has proven successful in other City of Turlock master plan areas.

7.4 Public Facilities Financing

The City of Turlock will use a combination of development impact fees, community facilities district fees, and landscape and lighting district fees to fund the construction and maintenance of the public facilities in the Plan Area. Many of these fee programs serve as mitigation for impacts caused by the new development within the Plan Area; others pay for the backbone infrastructure and ongoing services required to support development in the master plan area.

Development Impact Fees are applied to new development, redevelopment, expansions, and tenant improvements. The fees are collected by the City at the issuance of a building permit to provide funding for the improvement and expansion of City infrastructure, such as streets, water, reclaimed water, sanitary sewer and storm sewer facilities, parks, libraries, schools, public safety facilities, and other local government facilities. Each quarter the City updates the development impact fee schedules to account for the increase in the cost of infrastructure construction.

Turlock has a two-tiered development impact fee system. There are fee programs that apply consistently to any new development in the City. The City-wide Infrastructure Fee program funds street lights, the wastewater treatment plant, sewer trunk lines, water wells, major water lines, and major stormwater collection facilities. The Capital Facilities Fee program is a city-wide program that funds transportation facilities, police and fire facilities, and general government facilities. The Parks Facilities Fee funds construction of parks.

There are also fees programs that apply only to development in the site's particular master plan area. Fees based on the master plan area typically cover costs for major road improvements and new infrastructure that are specific to the needs of the master plan area.

As was done with other master plans in Turlock, an infrastructure analysis and impact fee study will be prepared immediately following adoption of this Master Plan to determine the exact facilities that will be included in the Morgan Ranch Master Plan fee program. Likely facilities to be included are:

- Morgan Ranch Arterial
- Golf Road widening
- New traffic signals in the Plan Area
- New off-site intersection improvements and road widening, as determined by the Morgan Ranch Traffic Impact Study and Environmental Impact Report
- Stormwater basin
- Major stormwater lines
- Water well and major water lines
- Major sewer lines
- Irrigation ditch/line relocation
- Dry utility relocation and undergrounding

The Turlock Unified School District also collects impact fees on residential and commercial development for use in new construction of school facilities. These fees serve as mitigation of the impacts of development within the Plan area on school facilities. However, impact fees rarely cover all the costs of new school facility development. While Turlock approved school bonds in 1996, 2002, and 2006, these monies cannot be used for the new elementary school in the Plan Area. Additional local and/or state bond money may be needed depending on the overall facility needs within the District.

As development occurs, properties will be required to annex to a Citywide Community Facilities District (CFD) as a funding source to pay for the on-going operational costs of the City that result from increased development in the Plan Area. These fees typically fund community parks, public safety facility maintenance, and general government maintenance. The specific maintenance areas will be determined in an analysis following adoption of this Master Plan.

A Landscape and Lighting District (LLD) will be created within the Plan Area as the funding source to maintain street trees and landscaping, lighting, and irrigation systems along the arterial and collector streets located within the Plan Area. This LLD will also be used to provide maintenance funding for the landscaping and irrigation systems in the storm drain basin and neighborhood parks. It will also include funding that can be set aside for street tree trimming, street sweeping, and street pavement maintenance. Other funding mechanisms may also be put in place by the developers of the properties.

7.5 Consistency with Environmental Document

This Master Plan shall only be adopted after an EIR is certified by the City of Turlock, in accordance with the California Environmental Quality Act (CEQA). All mitigation measures that are identified in the EIR shall be requirements of new development, in addition to those policies and standards that are in this Master Plan.

Each subsequent development project shall be reviewed to ensure compliance with the California Environmental Quality Act (CEQA). The Master Plan EIR serves as the base environmental document for subsequent entitlements within the Master Plan Area. Development applications will be reviewed on a project-by-project basis to determine consistency with the Master Plan EIR.

Appendices

A. GENERAL PLAN POLICIES

B. SAMPLE CIRCULATION AND LOT LAYOUT

A. General Plan Policies

Following are the General Plan policies applicable to the Morgan Ranch Master Plan.

In order to provide consistency and minimize confusion, the titles and numbering in this Appendix are per the General Plan. At the end of each policy section is a summarization identifying how the Morgan Ranch Master Plan is consistent with the respective policies identified for each chapter. Chapter 1 – Introduction is not included in this summary.

City of Turlock
General Plan

Chapter Number	Chapter Title
2	Land Use and Economic Development
3	New Growth Areas and Infrastructure
4	Parks, Schools, and Community Facilities
5	Circulation
6	City Design
7	Conservation
8	Air Quality and Greenhouse Gases
9	Noise
10	Safety

2. LAND USE AND ECONOMIC DEVELOPMENT

Guiding Policies

2.5-a Housing type diversity. Increase the diversity in the citywide mix of housing types by encouraging development of housing at a broad range of densities and prices, including small-lot single-family, townhouses, apartments, and condominiums. Aim to achieve an overall housing type mix of 65 percent traditional single family, 35 percent medium and higher density housing types. *The current mix is 70 percent single family and 30 percent medium and high density.*

2.5-b New neighborhood character. Foster the development of new residential areas that are compact, mixed use, and walkable, with a distinct identity, an identifiable center, and a "neighborhood" orientation.

2.6-b Neighborhood and community commercial areas. Facilitate the development of neighborhood and community commercial areas, which will: (a) conveniently serve current and future residential needs, (b) provide employment opportunities, (c) contribute to the attractiveness of the community, and (d) contribute to the City's tax base. Mixed use commercial areas are also encouraged, and shall be incorporated into new master plan areas.

2.6-d Pedestrian orientation of commercial areas. Emphasize compact form and pedestrian orientation in new community and neighborhood commercial areas, in locations that many residents can reach on foot, by bicycle, or by short drives.

Implementing Policies

2.5-f Master planning required. Require comprehensive master planning of new residential neighborhoods in expansion areas consistent with the requirements in the General Plan. Also require that 70 percent of one master plan area is completed (building permits issued) before another starts. *See Chapter 3: New Growth Areas and Infrastructure.*

2.5-g Locations for high density development. Maintain the highest residential development intensities Downtown, along transit corridors, near transit stops, and in new neighborhood centers.

2.5-h Transit and pedestrian accessibility from housing. Work with developers of affordable and multifamily housing to encourage the construction of transit-oriented and pedestrian-oriented amenities and appropriate street improvements that encourage walking and transit use.

2.6-g Local-serving shopping in new neighborhoods. In new master-planned residential neighborhoods, ensure development of neighborhood-oriented mixed-use centers that provide convenience shopping for nearby residents. Local shopping centers should be collocated with uses such as parks, schools, offices, and community facilities in order to create a neighborhood center where multiple tasks can be accomplished in one trip.

Consistency with Morgan Ranch Master Plan - The Morgan Ranch Master Plan has been prepared in accordance with the City's General Plan requirement that a Master Plan be prepared for this area. Additionally, the Morgan Ranch Master Plan has incorporated a mixture of land uses including both medium and high density residential, office, community commercial, parks, and a new elementary school. The high density residential sites have been located adjacent to Glenwood Avenue, providing for reduced vehicular trip generation to access this collector, easy access for pedestrians and bicyclists to travel between home, school, and the park; and, one of the high density sites and a majority of the medium density residential home are located within a ten minute walk from the nearby commercial designated properties to provide for live/work and neighborhood retail goods and service convenience opportunities. The neighborhood park and elementary school are located within a ten-minute walk of all residents within Morgan Ranch. Chapter 3 of the Morgan Ranch Master Plan provides more detail on land use orientation and development standards.

3. NEW GROWTH AREAS AND INFRASTRUCTURE

Guiding Policies

3.1-c Promote good design in new growth areas. Design new growth and development so that it is compact; preserves natural, environmental, and economic resources; and provides the efficient and timely delivery of infrastructure, public facilities, and services to new residents and businesses.

3.1-d Maintain fiscal stability. Ensure that costs associated with new growth do not exceed revenues, and the City's fiscal stability is maintained.

3.1-f Provide adequate public services. Ensure the adequacy and quality of public services and facilities for all residents.

3.1-g Master Plan Areas. Plan for growth in phases and discreet master plan areas, so that neighborhoods are fully planned and at least 70 percent of building permits issued prior to the construction of the next master plan area.

3.1-h Provide a range of housing types. Ensure a balance of housing types affordable to the complete range of income and age groups.

Principal Master Plan Area Policies

Size and Boundaries

3.2-a Master plan size. A new master or specific plan should be approximately 200 to 400 acres in size, and occupy a logical area, contiguous to the city limits.

3.2-b Rights of way within planning boundary. Rights of way, utilities, and agricultural buffers shall all be included within the master plan boundary.

3.2-c Urban/rural edge. Where master plan areas meet the edge of the study area boundary (outside of which land remains in agricultural use), deep landscaped setbacks and agricultural buffers shall be used to screen the edge of urban development. Acceptable buffer types and setback requirements are found in Section 6.1.

Phasing

3.2-d Phase I (Southeast area) develops first. The master planning, pre-zoning, and annexation of new development areas shall proceed in accordance with the phasing plan shown in Figure 3-2 and Table 3-2, beginning with Morgan Ranch (Southeast 1) and followed by Southeast 2 and 3.

Land Uses, Intensities, and Mix

3.2-f Minimum average densities established for master plan areas. Each master plan, or portion of a master plan, must be built to achieve the minimum average residential density specified on the Land Use Diagram and may go up to an overall average density that is 20 percent higher. (If the developer of a master plan area wishes to build to a higher density than 20 percent above the minimum, then a General Plan amendment and an analysis of environmental impacts would be required.) The minimum density calculation does not apply to land that is to be used for public parks, schools, or other non-residential uses.

3.2-g Mix of housing types and densities required. Each area will have a required mix of housing types, including traditional single family, small-lot single family, townhouse, and apartments/condos. The housing mix must achieve the minimum average density specified for each master plan. Regardless of the minimum average density, every master plan must include a minimum of 15 percent multi-family units.

3.2-h Neighborhood centers required. A "neighborhood center" location shall be zoned and required, and will include a park, school, local-serving retail and/or office uses, and some upper-level or adjacent multifamily residential development. The zoning ordinance shall also be updated to reflect and allow this type of mixed use designation. Appropriate non-residential land uses for neighborhood centers in residential areas include, but are not limited to, those in the following list. Drive-through establishments are strongly discouraged.

- Retail sales
- Personal services
- Banks and financial institutions
- Restaurants, coffee shops, and cafes
- Upper level residential
- Business and professional offices

- Medical and dental offices
- Day care centers
- Community centers
- Cultural institutions (libraries, museums, theaters)
- Parks and schools

Schools, Parks, and Public Facilities

3.1-i Parks and trails provided in new neighborhoods. The master plan areas will include park sites, a pedestrian/bicycle network of trails, and a multi-use agricultural buffer along the edge (serving park, stormwater detention, trail, and buffer purposes). When a school is present, a neighborhood park shall be located adjacent to it whenever feasible. The minimum amount of gross land area in a master plan devoted to parks and public facilities shall be 10 percent, and should generally be higher.

Parks are to be provided according to the citywide size and distribution standards listed in the Turlock General Plan Section 4.1.

3.2-j Schools in new neighborhoods. Neighborhoods shall include sufficient schools to support the residential population. Schools shall be located along local, collector, or arterial streets, but entrances may not be located on arterials.

Schools are to be provided according to the citywide size and distribution standards listed in the Turlock General Plan Section 4.3.

In most cases, these will be elementary schools; however, given expected population growth, a new middle and high school will also be needed. The master plan areas in which these secondary schools belong are described in the subsequent sections. For some master plan areas, existing schools near new development have sufficient capacity to support the new population, and where that is the case, new schools will not be required.

3.2-k Dedication for public uses. Based on the proportional impacts of development on the demand for public services and facilities, a portion of any new residential neighborhood shall be conveyed or voluntarily committed in fee simple title to the City for public uses, including but not limited to schools, libraries, and police and fire stations. These conveyances must be in a development agreement or other form approved by the City Attorney.

Land needs for these public uses shall be determined by the citywide standards and policies described in the Turlock General Plan Section 4.2 (Community Facilities) and Section 10.4 (Public Safety).

Streets, Blocks, and Connectivity

3.2-l Consistency with General Plan circulation diagram. In order to ensure connectivity to the existing city, through new neighborhoods, and to the freeway, collector and arterial streets in master plan areas must be designed, and sufficient right-of-way reserved, to comply with the citywide circulation plan described in Chapter 5. Minor deviations may be approved provided that they have no negative impact on the overall circulation network.

3.2-m Maximum block sizes. Encourage a fine-grained street pattern, vehicular and pedestrian connectivity, and a human scale of development by requiring maximum block sizes, measured from street centerline to street centerline:

- In low density residential areas, block length shall not exceed 660 feet.
- In medium and high density residential areas, block length shall not exceed 500 feet, with the ideal block length around 300-400 feet.

3.2-n Limit Cul-de-sacs. Cul-de-sacs, hammerheads, or similar dead-end streets shall not make up more than 10 percent of the total length of all streets in a master plan area. Pedestrian connections through the ends of cul-de-sacs to adjacent through streets are encouraged, especially where such pathways would facilitate connections to parks or schools.

3.2-o Local street connections between neighborhoods. Where a new residential subdivision occurs adjacent to undeveloped land, which is planned to be developed as part of a master plan, stubs must be provided for future connections to the edge of the property line. Where street stubs exist on adjacent properties, new streets within a new subdivision shall connect to these stubs.

3.2-p Pedestrian and bicycle connections. Continuous and convenient pedestrian and bicycle connections shall be provided from every home in a master plan area to the nearest neighborhood center, school, and park. Pedestrian connections may be in the form of sidewalks, linear parks, or Class I multi-use trails. Bicycle connections may be in the form of Class I, Class II, or Class III bicycle facilities (refer to Section 5.3), and local streets.

Consistency with Morgan Ranch Master Plan - The size of the 170-acre Master Plan area is within the General Plan requirement that these plan areas be 100 to 200 acres in size. In compliance with the General Plan, Morgan Ranch is located contiguous to the City Limits so as to provide for the availability of infrastructure. The Master Plan proposes two neighborhood centers—one with retail sales and services and the second with a school and a neighborhood park. Circulation is linked to adjacent neighborhoods and block lengths shall be designed to the lengths specified in the General Plan or less. The Master Plan incorporates many General Plan policies for the design of new neighborhoods, including block sizes, limited cul de sacs, and local street connections.

Guiding Policies

3.3-c Meet projected needs. Promote the orderly and efficient expansion of public utilities and the storm drainage system to adequately meet projected needs, comply with current and future regulations, and maintain public health, safety, and welfare.

3.3-d Coordinate infrastructure provision with growth. Coordinate capital improvements planning, design, and construction for all municipal service infrastructure with the direction, extent, and timing of growth.

3.3-e Utility Rates. Continue to establish water and wastewater rates that are sufficient to operate, maintain, and upgrade (for current and future regulatory requirements) the City's water, wastewater, and stormwater infrastructure.

3.3-f Development Impact Fees. Continue to equitably distribute costs associated with serving new development through the Development Impact Fee program.

Implementing Policies

Potable Water

3.3-l Infrastructure Construction. Design and construct water system infrastructure as needed to meet current and future water demands and system requirements.

3.3-m Conservation. Continue to implement the comprehensive water conservation program for both new development and existing residences and businesses. Revise and improve the program as needed. Continue

water conservation efforts, including the watering schedule, monitoring by Municipal Services staff, and advisory notices to households and businesses in violation of water conservation standards. Continue to reduce per capita consumption through ongoing education and outreach efforts.

3.3-n Recycled Water. Continue and expand the use of recycled water from the Turlock Regional Water Quality Control Facility for non-potable purposes, including power plant cooling, landscape irrigation, agricultural irrigation, and other uses. Plan, design, and construct infrastructure needed to increase the use of recycled water.

Wastewater Systems

3.3-u Rate and Fee Studies. Supplement the wastewater system master plans with rate and fee studies to ensure adequate funds are collected through the City's wastewater rates and development impact fees. Implement rate and fee increases as needed.

3.3-v Infrastructure Construction. Design and construct wastewater system infrastructure as needed to safely convey, treat and recycle, and dispose of current and future wastewater flows and achieve future regulatory and system requirements.

Stormwater

3.3-x Rate and Fee Studies. Supplement the stormwater master plan with rate and fee studies to ensure adequate funds are collected through the City's stormwater rates and development impact fees. Implement rate and fee increases as needed.

3.3-y Infrastructure Construction. Design and construct stormwater system infrastructure as needed to safely convey, detain, and dispose of current and future stormwater flows, protect water quality, and meet regulatory requirements.

3.3-z Detention Basin Locations. Develop new detention basins to be compatible with adopted land use plans, such as within agricultural buffer strips, parks, or in dedicated detention basin sites. Only a fraction (not over 25 to 30 percent) of any park should be used for detention basins.

3.3-aa Detention Basin Joint Uses. Where feasible, allow joint uses within the detention basins such as recreational open space, parks, and athletic fields.

3.3-ac Fencing around and near basins. Fencing is not to be used around basins in dual-use areas. Fencing may be used around equipment needed for basin operation, such as pumps. In these cases, it should be of a decorative material that also discourages graffiti (such as wrought iron), screened, and landscaped. In cases where fencing around basins is necessary (for basins where there is no dual use functionality, such as adjacent to the RWQCF), the fencing should be designed to ensure safety and enhance the overall aesthetic value of the detention basin site.

Waste Management and Recycling

3.3-ag Reduce Solid Waste. Maintain the City's long-standing commitment to innovative solutions that reduce solid waste and increase diversion rates. Continue to expand diversion opportunities to ensure that the City, through participation in the Stanislaus County Regional Solid Waste Planning Agency, continues to surpass State targets for solid waste reduction.

Consistency with Morgan Ranch Master Plan - The Morgan Ranch Master Plan addresses design issues in Chapter 3 and existing infrastructure in both Chapters 2 and 6. Land uses, the circulation system, identification of a new elementary school site, location of two new parks, design guidelines, and development standards were all prepared to be in conformance with the

City's General Plan. The new elementary school site is proposed adjacent to a new public park, both located along the Glenwood Avenue corridor to promote easy and safe access via transit, pedestrian, bicycle, or vehicle.

Design of the water, wastewater, and drainage systems has been developed in conjunction with design of the circulation system and land use diagram for the Morgan Ranch Master Plan Area (Plan Area). A separate fee study has been prepared concurrently identifying the costs and funding mechanisms associated with development of the Plan Area. Chapter 7 of the Morgan Ranch Master Plan identifies the funding mechanisms, and the infrastructure is included in the impact fee program. Design guidelines are included in Chapter 5 of the Morgan Ranch Master Plan and are applicable to the development of the storm basins. These guidelines include the requirement for a dual use facility for recreational uses, landscaping, design, and maintenance all consistent with the policies of the General Plan. The dual use facility will not include fencing so that it can be accessed by the community for recreational use. Proposed infrastructure will observe all other relevant policies of the General Plan.

4. PARKS, SCHOOLS, AND COMMUNITY FACILITIES

Guiding Policies

4.1-a High-Quality Park System. Develop a high quality, diversified public park system that provides a variety of recreational opportunities for all City residents.

4.1-c Cooperation With School District. Continue cooperative efforts with the Turlock school district through joint use agreements for park and recreational facilities.

Although school parks are not available for public use at all times and do not contain complete park facilities, substantial cost savings justify shared use.

4.1-d Park Fees and Land Dedication. Follow the City's Park Improvement Fee Nexus Study in determining the collection and use of park fees and park land dedication, and periodically update to ensure equitable distribution of cost between existing and new residents, businesses, and property owners.

Implementing Policies

4.1-h Neighborhood-Serving City Parks. Acquire and develop eight new neighborhoods serving city parks, including three in the Southeast 2 Master Plan Area, two in the Northwest, and one each in the Southeast 1, 4, and 5 Master Plan Areas. Place neighborhood parks at the core of new neighborhoods and co-locate parks and school sites where possible, as depicted on the Parks diagram.

4.1-i Neighborhood School Parks. Maintain joint-use relationship with Turlock Unified School District allowing public access to and use of school playfields during nonschool hours. Coordinate with the School District in the location and design of school properties to facilitate flexible use of play fields.

4.1-k Recreation Corridors and Greenways. Develop a system of linear corridors designed to provide pedestrian and bicycle linkages through and between neighborhoods, connections between major open spaces and recreational facilities and greenbelts at the City's edge. In new development areas (see Chapter 3), these must be continuous, as shown on Figure 4-1.

Neighborhood-serving city parks, neighborhood school parks, pocket parks, and recreation corridors are all counted as Neighborhood Parks for the purpose of acreage distribution standards.

4.1-l Community and Neighborhood Parks. Provide 3.5 acres of park land per 1,000 residents, aiming for a citywide ratio of between 2-to-1 and 3-to-1 for neighborhood and community park land. Neighborhood parks include public neighborhood-serving city parks, neighborhood school parks, and recreation corridors.

4.1-n Park Location Criteria. Locate public parks in visible and accessible locations, in accordance with location criteria specified in this Element. Park locations may be adjusted within each master plan sub-area, but must remain within the boundaries of the sub-area.

4.1-o Minimum Park Buildout. All new parks must be developed to the minimum standards established in the Park Improvement Nexus Fee Study. These standards may be periodically updated.

4.1-p Design for Park Safety. Ensure safety of users and security of facilities through lighting, signage, fencing, and landscaping, as appropriate and feasible, following guidelines established in the *Parks, Recreation and Open Space Master Plan*.

4.1-q Park Improvement Fees. Following the specifications of the Park Improvement Nexus Fee Study, calculate park fees to enable purchase of acreage and provision of off-site park improvements for 3.5 acres of parkland per 1,000 residents added and require payment of these fees and/or land dedication as a condition of all new residential development. This park land may not be used for dual-use storm drainage basins.

California Government Code Section 66477 (Quimby Act) allows the City to require dedication or payment of in-lieu fees sufficient to buy and provide off-site improvements for a maximum of 3 acres per 1,000 new residents; if the amount of existing parks exceed this limit, then the existing amount, up to a maximum of 5 acres per 1,000 residents, may be adopted as the standard.

4.1-z Native Plants. Landscaping should use native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, conserve water, and provide habitat.

4.3-f New School Sites. Require that school sites are designated and reserved for school use as part of future master plans. The General Plan anticipates one future elementary school in each of the following Master Plan areas: Southeast 1, 2, 3 and 5, and Northwest; and one within the existing City. A new high school and middle school in the Southeast 3 Master Plan Area is also anticipated. The middle and high school sites should be acquired by the end of the 2012-13 fiscal year, as stated in the 2008 Capital Facility Financing Plan; future capital plans should detail a schedule for additional site acquisition. Provide needed facilities concurrent with phased development.

Consistency with Morgan Ranch Master Plan - In accordance with the General Plan Master Plan policies the Morgan Ranch Master Plan incorporates a new elementary school adjacent to a new park, located along a collector (Glenwood Avenue). This park/school facility is located central to the two high density residential sites and is surrounded by medium density residential land uses. A new collector roadway is proposed along the eastern boundary of the school site, including bicycle lanes, which provides access to the medium residential neighborhoods, and provides access to the pocket park adjacent to the new pond basin. Although the General Plan does not require location of a community park in the Morgan Ranch Master Plan, a requisite for payment of an in lieu fee was identified in Chapter 5. Additionally, Chapter 7 identifies payment of fees as determined by implementation of the Morgan Ranch Master Plan Public Services Financing Study that is being prepared concurrently with this Master Plan. Parks, the school, and other community facilities will observe all other relevant policies of the General Plan.

5. CIRCULATION

Guiding Policies

5.2-a A safe and efficient roadway system. Promote a safe and efficient roadway system for the movement of both people and goods.

5.2-d Design for street improvements. The roadway facility classifications indicated on the General Plan circulation diagram (Figure 5-2) shall be the standard to which roads needing improvements are built. The circulation diagram depicts the facility types that are necessary to match the traffic generated by General Plan 2030 land use buildout, and therefore represent the maximum standards to which a road segment or intersection shall be improved.

5.2-e Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the circulation diagram.

5.2-g Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled.

5.2-h Circulation System Enhancements. Maintain projected levels of service where possible, and ensure that future development and the circulation system are in balance. Improve the circulation system as necessary, in accordance with the circulation diagram and spacing/access standards, to support multimodal travel of all users and goods.

5.3-a Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.

5.3-b Meet the needs of all users. Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations.

5.3-c Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.

5.6-b Minimize impacts and hazards. Plan and design electricity, gas, oil, and telecommunication transmission facilities to minimize visual impacts, preserve existing land uses, avoid natural and cultural resources, and minimize safety risks.

Implementing Policies

5.2-r Follow circulation plan diagram. Locate freeways, expressways, and arterials according to the general alignment shown in the Circulation Plan Diagram. Slight variation from the depicted alignments for collectors will not require a General Plan amendment.

5.2-s Trigger for improvements. Require improvements to be constructed where adequate ROW is available and impacts to adjacent land uses can be avoided or adequately mitigated to General Plan standards when LOS is projected to drop below LOS D (on an average daily trips basis).

5.2-s Follow adopted City standards. Build freeways, expressways, arterials, and collector streets in accordance with adopted city standards. Where these standards deviate from those set forth in the General Plan, amend the city standards to be consistent with the General Plan.

5.2-t Roundabouts. Roundabouts may be used in place of signalized intersections on any roadway facility or intersection type. Roundabouts are particularly encouraged at the intersection of two collector streets.

5.2-aa Impacts of new development. No new development will be approved unless it can show that required service standards (accessibility, spacing and capacity in the circulation diagram and in Section 5.2) are provided on the affected roadways.

5.2-ae New development pays fair share. Continue to require that new development pay a fair share of the costs of street and other local transportation improvements based on traffic generated and impacts on service levels. New development in unincorporated areas that benefit from Turlock's transportation infrastructure shall also pay to support the system, through the Area of Influence fee (see Policy 5.2-p).

5.2-ai Landscaping requirements. Where roadway facilities are designed with landscaping adjacent to the property line, the property owner shall be able to credit the landscaping in public right of way towards their landscaping requirement on their property. In return, the property owner is held responsible for the maintenance and upkeep of the landscape frontage.

5.2-aj Street Trees. Street trees in landscape strips and parkways strips must be placed near enough to the sidewalk to provide canopy. In commercial and industrial areas, street trees shall be located within public right-of-way behind the sidewalk. In residential areas, street trees shall be located within the parkway strip.

See policies in Section 6.8, Urban Design, for location and placement of street trees.

5.2-ak Medians. Medians shall be planted with street trees.

5.2-ao Right of Way consistency. To the extent possible, new roadways shall be designed so that they maintain a consistent right of way along the length of the facility, regardless of adjacent land use changes. In other words, for example, a two-lane collector that passes through a residential area and then a commercial area shall not change width as the land uses change.

5.3-d Integration of land use planning. Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving.

The neighborhoods described in the Land Use and City Design elements are designed to promote non-motorized transportation and to make it easy for those people who cannot or choose not to drive to be independent.

5.3-e Provision of bicycle facilities. Facilities for bicycle travel (Class I bike/multiuse paths; Class II bike lanes, and Class III bike routes) shall be provided as shown on Figure 5-3. Bike lane width shall follow the standards in tables 5-4 and 5-5. In cases where existing right of way constraints limit development of Class II facilities, Class III signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall only be permitted at the discretion of the City Engineer.

5.3-h Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility and use universal design concepts.

5.6-e Identify corridors in master plans. New transmission corridors should be identified to the extent feasible in all master plans created for new growth areas.

Consistency with Morgan Ranch Master Plan - The General Plan designates Lander Avenue and Golf Road as 4-lane arterials. However, since the General Plan no longer plans for urban growth east of Golf Road and due to the limited ability to acquire right of way outside the Master Plan area, the Master Plan is showing Golf Road as a 2-lane arterial. The General Plan also designates a new 4-lane arterial to run east-west through the Plan Area from near the Lander Avenue/Glenwood Avenue intersection to Golf Road, halfway between Glenwood Avenue and the highway overpass. This future arterial does not have an official name, and is identified as the "Morgan Ranch Arterial" in the General Plan.

The General Plan designates Glenwood Avenue as a 2-lane collector. It also designates the future extension of 5th Street from Glenwood Avenue to the "Morgan Ranch Arterial" as a 2-lane collector.

Table 5-4 in the General Plan designates the typical street elements and widths for arterials, collectors, and local streets. The General Plan designates Golf Road, 5th Street, and the "Morgan Ranch Arterial" as Class II Bikeways. It also designates Glenwood Avenue from Baywood Lane to Golf Road as a Class III Bikeway. In addition, a roundabout is planned for the Morgan Ranch Arterial at Glenwood Lane.

All of these development standards and designations have been incorporated into the preparation of the Morgan Ranch Master Plan, as identified in Chapter 4. The roadway system, pedestrian routes, bicycle lanes, and landscaping have all been designed to meet the standards identified in the General Plan, and to meet the needs for ultimate build out of the Morgan Ranch Master Plan, with the land uses, public facilities, and amenities as proposed in Chapter 3. The roadway system of Morgan Ranch will observe all other relevant policies of the General Plan.

6. CITY DESIGN

Guiding Policies

6.1-c Promote compact growth. Maintain a compact growth pattern to avoid sprawl and preserve agricultural land and open space.

6.2-a Develop complete neighborhoods. Encourage new residential growth in the form of neighborhoods, characterized by a mix of housing types and a well-defined neighborhood center.

The Plan proposes a major portion of residential growth in neighborhoods — areas that share a common identity — designed and developed through the master planning process, with a well-defined core or center.

6.2-b Promote housing type diversity and land use mix. Require diversity of housing types in each neighborhood and a mix of uses in the neighborhood centers.

Figure 6-4, Illustrative Housing Types, illustrates the range of possible housing types for the different residential designations in the Plan. While the location, land uses, and size of centers is motivated by considerations of proximity and walking distances, the principal purpose is to provide focus and a sense of community to the neighborhoods.

6.2-d Encourage community orientation. Improve the community orientation of new residential developments.

A community orientation calls for greater attention to the relationship between residences and shared spaces and does not require sacrifice of privacy or amenities.

6.3-d Provide attractive, landscaped streetscapes. Enhance the visual attractiveness of the community by providing attractive streetscapes, particularly along major expressways, arterials and collector streets. Utilize landscaping that is native and drought-tolerant, and that minimizes upkeep and maintenance.

6.4-c Conserve energy and water. Reduce demand for and consumption of energy and water through site planning techniques.

6.7-e Pedestrian scale and neighborhood character. Require buildings and signs to be scaled to a neighborhood character and designed to encourage pedestrian activity and comfort.

6.7-f Support transit. Ensure that neighborhoods are designed to support transit stops in proximity to neighborhood centers and/or clusters of higher density residences.

6.7-g Safety through design. Ensure that new development is designed in such a way that public safety is preserved and enhanced.

Implementing Policies

6.1-f Contiguous growth. Continue present policies of requiring growth to be contiguous to existing urban development.

These policies have worked well to ensure a compact and contiguous pattern of growth and efficient provision of services to new developments.

6.2-h Design Principles. Ensure that development in the new neighborhoods is in accordance with the design principles established in Section 6.8, the policies specific to each master plan area established in Section 3.3, and any subsequent guidelines that may be established.

6.3-e Block size and maximum street spacing. Streets in neighborhoods should be designed to maximize connectivity for automobiles, cyclists, and pedestrians. Maximum spacing between local streets, or intersections of local streets with larger roads, shall be 660 feet. The preferable, typical block size in a residential neighborhood is in the range of 200 by 600 feet. As a condition of project approval, require circulation patterns of all residential and neighborhood centers to conform to maximum spacing between through-streets (exclusive of alleys), as depicted in Figure 6-5 and Section 5.2, unless access conditions and standards prevent their attainment. Cul-de-sacs are generally discouraged.

The intent of these standards is to prevent development of introverted neighborhoods, provide flexibility in circulation, and promote access for bicyclists and pedestrians. Figure 6–5 illustrates typical and maximum block sizes, and preferred and discouraged street connectivity configurations.

6.3-j Undergrounding of utility wires. Continue to require undergrounding of utility lines in new developments.

6.4-f On-site stormwater management. Facilitate groundwater recharge and natural hydrological processes by allowing stormwater to infiltrate the ground on-site and/or be collected for reuse in landscaping. Any on-site stormwater drainage facilities must be designed to drain fully within 72 hours. Update the standards, specifications, and drawings, as well as the development review process as needed to reduce peak-hour stormwater flow and increase groundwater recharge. These may include provisions for best practices including:

- "Rain gardens" or bioretention areas in yards, parks, and parking lots
- Landscaped drainage swales along roadways
- Green roofs
- Permeable pavers for walkways and parking areas; and using porous materials such as porous asphalt, modular paving, gravel, and lattice concrete blocks with soil and grass in the interstices in place of impervious surfaces. (see also Policy 6.4-e above)
- Rain barrels for harvesting runoff from rooftops Tree box filters for on-street filtration
- Constructing parking areas and parking islands to allow stormwater flow into vegetated areas
- Grading that lengthens flow paths and increases runoff travel time to reduce the peak flow rate

- Installing cisterns or sub-surface retention facilities to capture rainwater for use in irrigation and non-potable uses

6.7-i Public orientation of development. Ensure that new development facilitates access, is oriented to streets and public spaces and is integrated with the surroundings.

- Where connections to other roads are feasible, use of dead-end streets is discouraged.
- Gated projects restricting public access should not be permitted, unless designed in accordance with adopted standards for private residential communities.

Design standards for gated communities are found at the end of this section, beginning on page 6-40.

- Project edges should be designed to facilitate integration with the surroundings. • Sound walls should be used only along designated freeways, expressways and arterials if needed, and should be completely screened from the outside by shrubs and trees located within the project property. Alternatives to sound walls, such as landscaped frontage roads, are encouraged where feasible.
- "Dead" uses, such as storage, parking lots, garages, and service areas should be located away from public streets and off-site view. In commercial areas, alleys should be used to access parking and service uses where feasible.
- Corner lots should locate access driveways on the street with the least traffic volume.
- Buildings should be oriented to streets and public spaces; inward looking developments are discouraged.

6.7-j Multi-modal access and movement. Require new projects to facilitate pedestrian and bicycle movement and aid transit.

- Planning should anticipate and provide for future local and regional transit service even if the service is not feasible at the time of project plan preparation.
- Development may not be at intensities below the density ranges stipulated in the General Plan.
- Bikeways should be provided as designated in Figure 5-3.
- Pedestrian and bicycle connections to through-streets should be provided at the end of cul-de-sacs. (See Figure 6-7.)

6.7-k Design for public safety. Promote public safety and welfare through urban design. New development should be designed in such a way that emphasizes access and connectivity, minimizes dead-end streets, provides ample visibility and lighting in public spaces, and encourages social interactions.

6.7-l Fine grain of development. Provide a fine-grained urban environment with streets and sidewalks sized and designed to promote outdoor use and walking.

- Provide a network of closely spaced streets in neighborhood centers. Maximum spacing between local streets is 660 feet apart; in neighborhood centers, spacing closer to 400 feet is preferable. Intersections should be consistent with the access standards established in Table 5-6 of the Plan.
- Provide sidewalks along all streets, public and private, except along alleys. Sidewalk width, including a curbside planting area for street trees, should be at least 15 feet along retail/professional office areas and 10 feet elsewhere in the neighborhood centers. Street trees should be planted at a maximum interval of 30 feet.
- Keep the number of private driveways and curbcuts along principal streets to a minimum.
- Cul-de-sacs, where connection to other streets is feasible, are not permitted.
- No sound walls shall be used in the neighborhood centers.

6.7-m Design and placement of parking areas. Ensure that parking areas do not impede pedestrian access and are adequately shaded and screened.

- Parking or service areas, screened or otherwise, should not be located between sidewalks and buildings. Pedestrians should not have to walk through or along a parking lot to access any building in a neighborhood center, but should be provided with independent sidewalk access.
- Screen all off-street parking, surface or structured, from pedestrian view by trees and shrubs. Walls should not be used as screening devices.

- Provide at least one large-canopy tree per five parking spaces and/or other paved area to shade cars, reduce glare and screen barren lots.
- Provide bicycle parking in neighborhood center parking lots, at an approximate ratio of one bicycle parking space per 10 automobile parking spaces.

6.7-n Retail center location and design. Ensure that all retail in a neighborhood center is contiguous and along streets pedestrians can cross safely and without unduly impeding traffic.

- Neighborhood retail, shown as Community Commercial (or Neighborhood Center in master plan areas) on the General Plan Diagram at the intersection of two principal streets, should be oriented to front along the street expected to carry the lesser amount of traffic.
- When neighborhood retail abuts lands designated as Low Density Residential, special consideration should be given to techniques that properly buffer each use from the other.

6.7-o Building to street relationship. Require buildings to define street and sidewalk edges, provide scale to streets, engage pedestrians and promote active use of sidewalks and outdoor space.

- All structures with non-residential uses at the ground level should be built to provide a continuous frontage along public rights-of-way.
- Buildings should be set back from sidewalks only if a pedestrian plaza or patio, not separated from a sidewalk by a wall, fence, shrubs, etc., is provided.
- Frequent entrances to buildings are desirable. Entrances to the rear of buildings from parking courts should not substitute for entrance(s) from a street.
- Blank walls, reflective glass and other opaque surfaces at the ground level along street frontages should be avoided. Store interiors should be visible from the outside.
- Overhangs, awnings or other devices to shade the sidewalks of building frontage are to be provided. Colonnaded walkways, where provided, should be at least 8-feet wide clear, and run the entire length of a block, or store front.

6.7-p Neighborhood center uses. Ensure that uses in neighborhood centers provide for residents' daily needs for goods and services, and are compatible with surrounding neighborhood uses, design, and scale. Examples of uses appropriate in neighborhood centers are found in Policy 3.2-h. Additionally:

- Mixed-use (horizontal and vertical) developments are encouraged in neighborhood centers.
- Automobile-oriented commercial facilities, such as drive-through restaurants and gas stations should not be located in neighborhood centers. However, limited drive-through facilities may be permitted for financial institutions, pharmacies, dry cleaners, and other similar personal service facilities. The appropriate location for automobile-oriented facilities is in areas designated Heavy Commercial on the General Plan Diagram, not in neighborhood centers.

Figure 6-8 illustrates the development pattern of a neighborhood center that could result from application of design principles established in this section.

6.7-q Visual interest and compatibility in residential design. Residential projects, single family or multifamily, should include visual interest and variety. The size, scale, proportion, color, placement, and detailing of architectural features should be carefully considered to complement the overall massing and scale of the single-family or multifamily building. Multifamily projects should be designed and detailed to be compatible with neighboring single family homes and commercial centers. Single family projects should include architecture and landscaping that is complimentary and creates a neighborhood identity with visual interest and variety.

6.7-r Housing fronting collector streets. To maximize public orientation of streets and neighborhoods, housing is encouraged to front onto collector streets. The following provisions shall apply:

- Driveway designs that allow for turn-around space (to minimize cars backing out onto collector streets) are encouraged.
- Driveways shared by more than one residence are encouraged, to limit the number of driveway entrances to the street.

6.7-s Street standard adherence. Ensure that streets are provided consistent with the provisions of the Plan.

Arterial and collector streets are depicted on the General Plan Diagram. Local streets should meet spacing requirements for through-streets stipulated in Section 6.3 and Section 5.2. (See Table 5-6) Intersections design should be in accordance with access standards established in Table 5.6. Requirements for dedicated through-streets apply to all multifamily and single-family projects.

6.7-t Pedestrian linkages. Develop clear pedestrian linkages between and within neighborhoods.

Each project application should demonstrate connections from the project to the bikeways system depicted in Figure 5–2 and the linear park network depicted in Figure 4-1.

6.7-u Sidewalks and the pedestrian environment. Provide sidewalks consistent with intended use, and trees to shade streets and pedestrians.

- Sidewalks should be provided on both sides of all streets, public and private. Sidewalk width shall be a minimum of 5 feet in residential areas and 8 feet in commercial and industrial areas (see Tables 5-4 and 5-5). In residential areas, parkway strips in between the street and sidewalk shall be provided to provide greater distance between pedestrians and the roadway.
- In areas designated Very Low Density Residential, consider establishment of a more rural residential style of street-side public improvements.
- Street trees should be planted curb-adjacent and be consistent with the species stipulated in the Street Tree Master Plan and be no greater than 30 feet apart. Trees along local streets should be appropriately selected and planted no greater than 30 feet apart.

6.7-v Relationship of parks and surrounding uses. Provide parks and open spaces consistent with the Plan.

- Parks should be sized and designed in accordance with criteria established in Chapter 4: Parks, Schools, and Community Facilities.
- Provide urban-agricultural buffers in areas when required by Policy 6.1-k and policies found in Section 3.2.

6.7-w Residential parking design. Reduce the visual dominance of garages and parking.

- Garage width openings facing public streets will normally be limited to no more than 20 feet or one-third the lot width, whichever is less; recessed garages can be wider so long as the visible width from the front does not exceed the maximum. Alternatives to front garages, such as access from alleys, side drives with parking in the rear, and tandem parking are also permitted.
- Consolidated parking in higher density residential projects should be located away from the streets and should share one or two entrances/exits from the property in order to minimize curb cuts.

6.7-x Public orientation of medium and high density development. Development should be oriented to streets, sidewalks and public spaces; introverted projects are discouraged.

- Site planning and architectural design should ensure that developments provide street frontages with interest for both pedestrians and neighboring residents.
- Sites should not be fenced or walled off with a solid barrier; at least 50 percent shall have an open fencing design.
- Buildings should be oriented to public streets and each dwelling must have direct visual access to either a public sidewalk, landscaped courtyard or a garden space.
- Some dwellings on each site must front and face the adjoining public street and sidewalk.
- If entrance to individual buildings or dwellings is through a courtyard, the courtyard should open directly to a public street or sidewalk.

6.7-y Visual variety. Promote fine-grained development that provides individuality and distinction. Projects should be integrated with surroundings, not closed off from them.

- Developments should generally be broken down into small clusters, independently accessible and integrated with the surroundings with direct circulation and visual connection between buildings,

streets, sidewalks and open space. Superblock–style developments with large-scale internal circulation systems are discouraged.

- The number of units sharing a directly accessible building entrance or stairway should be limited to eight, except for high density housing and assisted living facilities.

Consistency with Morgan Ranch Master Plan - The Morgan Ranch Master Plan was designed to incorporate the City's desired land use patterns, circulation system, and development policies as identified in the General Plan. Chapter 3 of the Morgan Ranch Master Plan includes detailed standards and design guidelines addressing a variety of factors including neighborhood layout; lot configuration; building orientation for all land uses; garage orientation and the requirement for recessed garages; landscaping design and materials; bicycle and pedestrian routes providing connectivity between land uses, including neighborhoods, the school, and the two parks; and detailed standards for lighting, signage, and fencing. The Master Plan identifies guidelines for quality residential development for both medium and high density development. The standards and guidelines meet, and often times exceed, the General Plan policies relating to the design of the City and the General Plan requirements for the development of a master plan for the Morgan Ranch area. The Urban Design components of the Master Plan will observe all other relevant policies of the General Plan.

7. CONSERVATION

Guiding Policies

7.1-a Dual-Use Storm Drainage Basins. Continue to coordinate the storm drainage system and the park system in new master plan areas, and optimize the use of drainage basins as recreational open space.

7.4-a Increase Biological Diversity. Make efforts to enhance the diversity of Turlock's flora and fauna, including street trees.

Implementing Policies

7.1-b Requirements for Water Detention. Basins must function effectively for the detention (not the retention) of water, and include underground piping for quick removal of water following storm events.

7.1-c Open Space Character and Functionality. Design all dual-use drainage basins to suit a recreational purpose, such as a playing field, or an environmental amenity, such as a water feature. Basins should be varied in shape, and well-landscaped around the edges. Basins must not have slopes steeper than 1:6.

7.2-n Minimize Soil Erosion. Require new development to implement measures to minimize soil erosion related to construction. Identify erosion-minimizing site preparation and grading techniques in the zoning code.

7.4-b Sensitive Site Planning. Protect mature trees and natural vegetation and features wherever feasible in new development areas.

7.4-c Urban Trees. Protect and expand Turlock's urban forest through public education, sensitive maintenance practices, and a long-term financial commitment adequate to protect these resources. Continue to require the planting of appropriately-spaced street trees in new development areas.

Consistency with Morgan Ranch Master Plan - The Morgan Ranch Master Plan includes identification of the parks in Chapter 3 and storm basins in Chapter 5. The storm basin, located along State Highway 99, has been designed as a dual use facility and will be further designed to accommodate recreational uses. Specific standards and guidelines for this basin, and the Caltrans storm basin, including fencing and landscaping, are identified in Chapter 5.

Chapter 7, of the Morgan Ranch Master Plan, includes requirements for construction of improvements, payments of fees, and compliance with the standards identified in the City's Municipal Code. The Master Plan will observe all other relevant conservation policies of the General Plan.

8. AIR QUALITY AND GREENHOUSE GASES

Guiding Policies

8.1-a Prioritize Air Quality in Local Planning. Continue efforts to improve air quality in Turlock by integrating air quality analysis and mitigation in land use and transportation planning, environmental review, public facilities and operations, and special programs.

8.2-b Decrease Vehicle-Miles Travelled. Promote a broad range of transportation, land use, and site design measures that result in a decrease in the number of automobile trips and vehicle-miles travelled.

8.2-c Facilitate Energy-Efficient Buildings. Encourage energy efficiency through good urban design and site-planning practices, as well as through building design, maintenance and retrofit.

Implementing Policies

8.1-d Transportation and Residential Density. Designate residential land uses to be higher density than in the past in order to meet population demand and reduce total vehicle miles travelled.

8.1-e Establish Land Use Pattern That Supports Trip Reduction. Establish land use pattern that enables alternatives to automobile use and reduces trip lengths, including transit oriented, mixed use development and neighborhood commercial areas.

8.1-f Plant and Maintain Trees in Streets and Parks. Adopt a comprehensive tree-planting and maintenance program that recognizes the effect of air pollutants on trees and the role trees can play in removing particulate matter and gaseous pollutants. Provide a viable financing program, particularly in older neighborhoods that are not in a landscape and lighting assessment district.

See also policies in Sections 5.2: Roadway Network, Standards and Improvements and 6.3: Street Design and Connectivity relating to street trees. Studies have shown that immediately adjacent to arterial streets, the lead content of air can be about 15 times as high as "normal." Hardy trees, or those adapted to such conditions, are likely to do much better over time with less care than trees that are unsuited. Rows of trees planted close together and selected and spaced to provide a buffer between the streets and the surrounding areas (such as by a combination of low and high branching trees planted in alternate rows) can be effective in filtering fumes and particulate matter.

The update of the street tree ordinance should also consider reducing existing spacing standards between trees. Spacing standards vary from 40 to 60 feet for all streets on the list; in older areas, such as along Sycamore Street, tall trees are planted as close as 20 feet apart.

Shade trees also reduce radiation heating (the "heat island effect,") helping to cool the urban environment and reduce peak energy use, and consequently reduce both ozone formation and greenhouse gas production.

8.1-k Air Quality Improvement Fee. In the Capital Facilities Fee (CFF) program, establish a fund to collect a fee to be paid by all new development to assist in the funding of local projects that contribute to the enhancement of air quality.

8.2-g Develop Circulation System That Facilitates Alternative Transportation Modes. Promote alternatives to automobile use by establishing a Circulation Plan and street design standards that enable safe, comfortable, and attractive access and travel for pedestrians, bicyclists, motorists, and transit users of all ages and abilities. Plan Elements include a citywide bike network and traffic calming street design. See Chapter 5, Circulation.

8.2-h Establish Connective Street Network to Minimize Trip Length. Minimize vehicle-miles travelled by establishing a connective circulation network providing multiple, direct paths. See Chapter 5, Circulation.

8.2-i Provide Bicycle Facilities. Require minimum bike parking for multi-family residential and commercial development, and encourage provision of additional end-of-trip facilities.

8.2-l Establish Land Use Pattern That Supports Trip Reduction. Establish a land-use pattern that enables alternatives to automobile use and reduces trip-lengths, including increased residential density, transit-oriented and mixed-use development, neighborhood commercial areas, and pedestrian realm enhancements.

8.2-m Pedestrian-Oriented Site Design. Orient development to encourage pedestrian and transit accessibility. Strategies include locating buildings and primary entrances adjacent to public streets; placing parking at the rear of sites or in structures above retail; and providing clear and direct pedestrian paths across parking areas.

Consistency with Morgan Ranch Master Plan - The land use pattern identified in Chapter 3, the circulation system identified in Chapter 4, and the implementation measures required in Chapter 7, of the Morgan Ranch Master Plan, all were developed in accordance with the policies of the City's General Plan. The new school and new park facility were located adjacent to one another, midway between the two high density residential designated properties, along two collector roadways both with bicycle lanes and pedestrian paths, and surrounded by medium density residential all as part of a plan to encourage alternative modes of transportation to the vehicle. Although a new arterial "Morgan Ranch Arterial" is proposed to be constructed as part of development of the Morgan Ranch Master Plan, this arterial is identified in the General Plan Circulation Element as a key component to the City's overall circulation network. A roundabout has been proposed as part of the design of this arterial near the westerly high density residential site and proposed commercial areas.

Chapter 4 includes provision for a bus route and bus stop locations within Morgan Ranch. The Plan Area's circulation system is designed to allow for bus service to be added in the future, if needed and desired.

The design of the storm basin, near State Highway 99, is to include joint use as a recreational area, as identified in Chapter 5. The circulation network identified in Chapter 4, includes a new collector, with bicycle lanes, linking this joint use facility with the new school/new park facility.

Additionally, Chapter 3 includes public landscape strips along arterials and landscaping of parkway strips in the residential neighborhoods. Trees will also be required in the pond basin. The payment of fees is identified in Chapter 7 and with implementation of the Public Services Financing Study. The Master Plan will observe all other relevant policies of the General Plan to improve air quality and reduce greenhouse gases.

9. NOISE

Guiding Policies

9.4-a Land Use Compatibility. Ensure that new development is compatible with the noise environment, by continuing to use potential noise exposure as a criterion in land use planning.

9.4-c Protect Residential Areas and Sensitive Uses. Minimize excessive noise exposure in residential areas and in the vicinity of such uses as schools, hospitals, and senior care facilities.

Implementing Policies

9.4-d Required Noise Analysis. Use the noise and land use compatibility matrix (Table 9-1) and Future Noise Contours map (Figure 9-2) as review criteria for all new development. For proposed development located where projected noise exposure would be other than "normally acceptable," and which require discretionary review, require that a noise analysis be conducted.

A required noise analysis should:

- Be prepared by a certified noise consultant or acoustical engineer;
- Be funded by the applicant;
- Include a representative, on-site day and night sound level measurement;
- Include a delineation of current (measured) and projected (10 years) noise contours with and without the proposed project, ranging from 55 to 75 dBA (Ldn) within the proposed development site; and
- Include a description of adequate and appropriate noise abatement measures where sound measurements exceed Table 8.4-A standards for the proposed use.

A list of accredited noise consultants is available from the State Department of Health Services, Office of Noise Control.

9.4-e Noise-Attenuating Features. For all projects that have noise exposure levels other than "normally acceptable" and which require discretionary review, require site planning and architecture to incorporate noise-attenuating features. With mitigation, development should meet allowable outdoor and indoor noise exposure standards in Table 9-2. In particular, new residential, transient lodging, school, library, church, hospital, and convalescent home development should be designed to provide a suitable interior noise environment of no greater than 45 dB CNEL or Ldn.

Site planning measures include setbacks, building placement in relation to topography, and orientation of sensitive indoor and outdoor activity areas away from noise sources.

Building measures may include:

- Facades constructed substantial weight and insulation;
- Sound-rated windows and doors;
- Active cancellation;
- Acoustic baffling of vents for chimneys, fans, and gable ends;
- Ventilation system affording comfort under closed-window conditions;
- Double doors and heavy roofs with ceilings of two layers of gypsum board on resilient channels.

9.4-f Vibration Reduction. For all sensitive land uses located where they would have noise exposure levels other than "normally acceptable," and where an EIR is mandated, require construction features that reduce vibration-reducing construction features such as insulation, soundproofing, staggered studs, double drywall layers, and double walls.

9.4-j Transportation Noise Buffers. Where feasible, develop and implement noise reduction measures when undertaking improvements, extensions, or design changes to City streets. Measures may involve some combination of setbacks, earth berms, solid noise walls, placement of non-occupancy accessory structures or windowless building sites towards the noise source, and building insulation techniques.

Mitigation through the design and construction of a noise barrier (wall, berm, or combination wall/berm) is the most common way of alleviating traffic noise impacts. Noise barriers often have the disadvantage of unsightliness; however, properly landscaped berms or walls shielded with climbing vines can, over time, become visual assets. The use of noise barriers should be minimized.

Consistency with Morgan Ranch Master Plan - The land use pattern prepared for the Morgan Ranch Master Plan is identified in Chapter 3. This land use pattern was developed by locating the high density residential properties along the Glenwood Avenue collector. The westerly high density site is located adjacent to the commercial properties while the easterly high density site is located at the intersection of Glenwood and Golf Roads. These locations provide for easy access to the sites and also function as buffers for the medium residential properties. Both sites are located away from State Highway 99.

The new school/new park facility is also located along the Glenwood Avenue corridor, at least 900 feet away from State Highway 99. To further mitigate potential noise impacts a minimum seven foot high masonry wall is required to be constructed adjacent to arterials and along State Highway 99, as noted in Chapter 3. The Master Plan will observe all other relevant policies of the General Plan to minimize excessive noise exposure in residential areas and in the vicinity of the elementary school.

10. SAFETY

Guiding Policies

10.1-d Incorporate Safety Considerations Into Land Use Policies. Coordinate land use policies with concerns about potential hazards.

10.2-a Minimize Geologic and Seismic Risk. Continue to use building codes as the primary tool for reducing seismic risk in structures.

10.3-a Protect the Community from Flood Hazards. Protect the community from risks to life and property damage posed by flooding.

10.4-d Establish Equitable Funding Mechanisms. Continue to implement and review existing, and consider establishing new, equitable methods for minimizing public facility and service costs associated with new development. Take advantage of State and federal funding and grant opportunities as they become available.

Implementing Policies

10.1-k Locate Buildings With High-Public-Occupancy at Safe Distance from Railroad and Highway. To the extent feasible, locate new buildings of high public occupancy — particularly schools, hospitals, civic and institutional uses at least 100 feet from main railroad alignments and the highway, to minimize risks to life and property in the event of a hazardous cargo accident.

10.2-b Meet Most Current Seismic Standards. Continue to require all new buildings in the City to be built under the seismic requirements of the latest adopted California Building Code.

10.2-h Require Erosion Control Plans. Require new development to include grading and erosion control plans prepared by a qualified engineer or land surveyor.

10.3-c Reduce Stormwater Runoff from Private Development. Integrate new standards into the Municipal Code that would Update Zoning Ordinance and development review process as needed to reduce peak-hour stormwater flow and increase groundwater recharge.

See Section 6.4: Sustainable Site Planning for policies on stormwater Best Management Practices.

10.3-d Improve Stormwater Management from Streets. Update City street design standards to allow for expanded stormwater management techniques. These may include:

- Canopy trees to absorb rainwater and slow water flow.
- Directing runoff into or across vegetated areas to help filter runoff and encourage groundwater recharge.
- Disconnecting impervious areas from the storm drain network and maintain natural drainage divides to keep flow paths dispersed.
- Providing naturally vegetated areas in close proximity to parking areas, buildings, and other impervious expanses to slow runoff, filter out pollutants, and facilitate infiltration.
- Directing stormwater into vegetated areas or into water collection devices.
- Using devices such as bioretention cells, vegetated swales, infiltration trenches and dry wells to increase storage volume and facilitate infiltration.
- Diverting water away from storm drains using correctional drainage techniques.

10.4-j Coordinate Facilities Planning With Urban Expansion. Within two years of adoption of the General Plan, determine appropriate locations for new fire stations/facilities, based on the configuration and phasing of new development and urban expansion. Ease of access and efficient service areas should be major determinants. When preparing master plans, assess the ability of the Fire Department to meet established service standards, and identify strategies to mitigate potential service impacts. Ensure that the Capital Facility Fee program, the Community Facilities District #2 and any other funding mechanisms are updated to provide adequate funding of required facilities, equipment, apparatus and services.

10.4-m Maintain Appropriate Urban Design Standards. Roadways shall be developed in accordance with General Plan standards contained in Chapter 5 of the General Plan. Deviations from roadway standards shall not be granted unless it is determined by the Fire Department and the City Engineer that is shall have no impact on the delivery of fire services to the affected area.

10.4-w Coordinate Facilities Planning With Urban Expansion. When preparing master plans, assess the ability of the Police Department to maintain service levels, and identify strategies to mitigate potential service impacts. Ensure that the Capital Facility Fee program, the Community Facilities District #2 and any other funding mechanisms are updated to provide adequate funding of required facilities, equipment, apparatus and services.

This may include implementation of the second phase of the Public Safety Building pursuant to the Space Needs Assessment.

Consistency with Morgan Ranch Master Plan - The Morgan Ranch Master Plan includes a land use pattern, a set of development standards, and design guidelines, Chapter 3; a circulation system, Chapter 4; a park system, Chapter 5; a storm water system and identification of other public facilities/services, Chapter 6; and, identification of implementation measures, Chapter 7. Consistency with the City's General Plan safety policies can be found in each of these chapters.

The new school, a high occupancy use according to the General Plan, is located approximately 900 feet from Highway 99. The General Plan requires a minimum of 100 feet. The circulation system includes a new arterial "Morgan Ranch Arterial" as required by the General Plan, and new collector streets which include sidewalks for pedestrians and bicycle lanes. Streets will be designed according to the City's roadway standards as required in the General Plan. The infrastructure needs have been assessed based on the proposed land use pattern and circulation network, including a storm water basin along State Highway 99. A Fee Nexus Study was prepared as part of the Morgan Ranch Master Plan, and includes not only identification of infrastructure needs, but the costs and potential funding mechanisms as well. Chapter 7 requires implementation of this Study, along with the appropriate payment of fees, and construction of necessary infrastructure. The Master Plan will observe all other relevant policies of the General Plan to ensure public safety.

B. Sample Circulation and Lot Layout

A sample layout was prepared by Benchmark Engineering in 2010 to illustrate one potential lot layout of the undeveloped portion of the Morgan Ranch site. This sketch was used in part during preparation of the land use layout of Morgan Ranch. However, the sketch itself was not evaluated for compliance with all of the policies and standards that are included in the Master Plan. It is being shown here as an example of one possible, future outcome, but is not intended to confer any preapproval of a particular design for the Plan Area.