ROOSEVELT COMMUNITY PLAN

PREFACE

The preparation and adoption of the update of the Roosevelt Community Plan was made possible through the efforts and commitment of many individuals including members of the Fresno City Council and the Fresno County Board of Supervisors, Planning Commission members Citizen Advisory and Implementation Committee members, representatives of community organizations, interested residents of the community, and City and County staffs. Although the participants are too numerous to acknowledge in their entirety, the City of Fresno wishes to express its gratitude to the following individuals:

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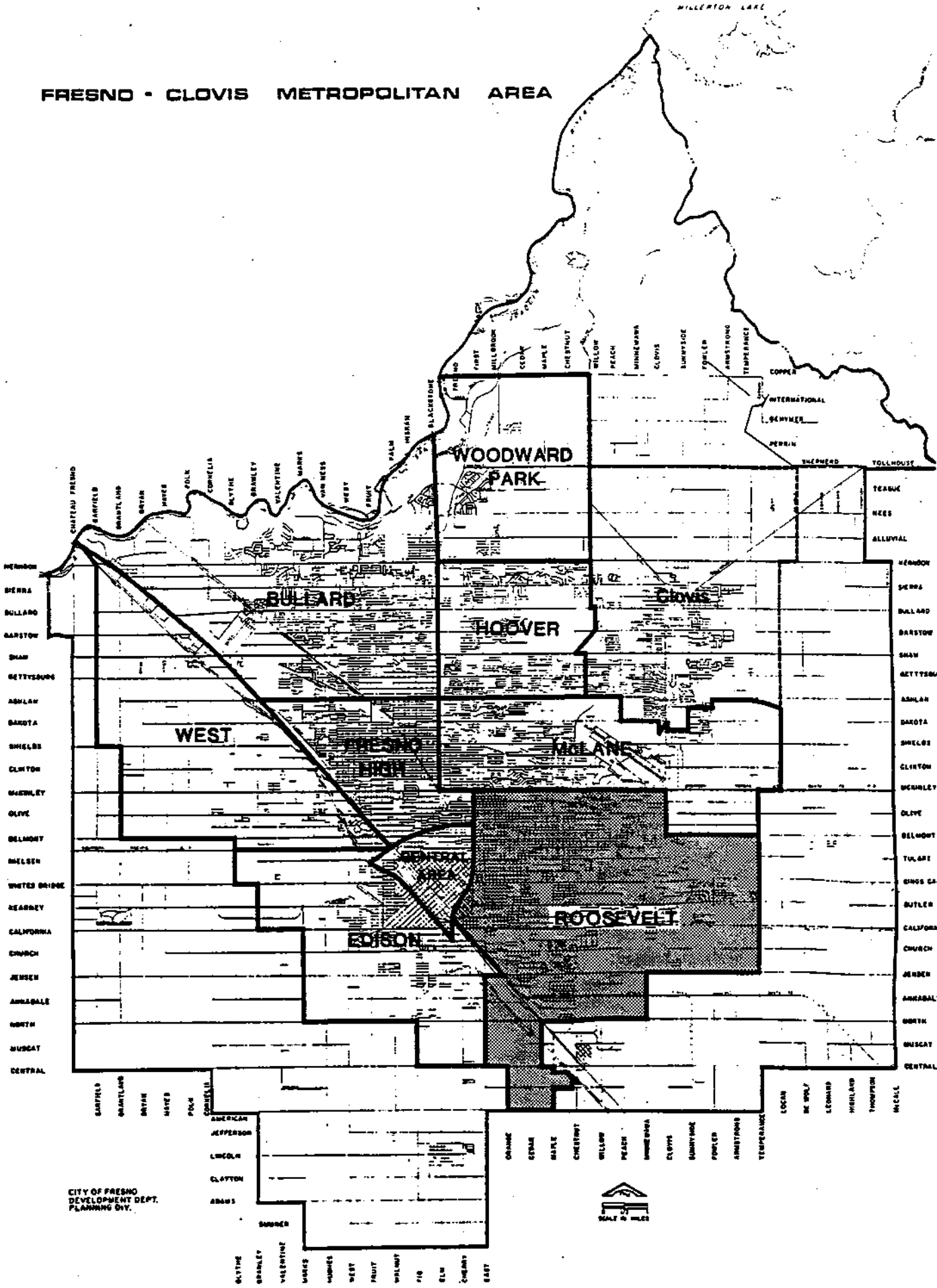


PLAN PURPOSE AND CONCEPT

This chapter provides an introduction to the Roosevelt Community Plan Update. It states the purposes of the Plan, provides a background statement, a summary of the issues to be addressed, and an overview of the Plan concept. Subsequent chapters will address land use, circulation, public facilities and environmental concerns. The final chapter of this Plan consists of the Environmental Impact Report (EIR) which will examine in detail the environmental consequences and remedial measures associated with the Plan. The EIR also provides the majority of the physical, demographic and socio-economic background information related to the Plan.

PLAN PURPOSE

The Roosevelt Community Plan area is in a transitional stage, on the verge of experiencing dramatic new growth that will reshape the community's character and enhance its livability. It is also one of the most urban communities in the metropolitan area characterized by a virtual "rainbow" of physical, cultural, economic, social, and racial diversity. This diversity may continue to serve as a valuable asset of the community. However, recent contradictory development trends in the area have threatened the community's stability.

The Roosevelt Community Plan area accommodates a diversified population, but has recently experienced only a limited variety of development. While residential densities in established portions of the community continue to increase dramatically, new single-family development has been much more limited. Residential, commercial, and office development in the community has been hampered by the City's emphasis on new growth in the northern portion of the metropolitan area, by incomplete public facilities, and by negative community perceptions.

It is, therefore, the purpose of this Plan to clearly identify and address those issues and concerns adversely affecting the community's growth and vitality, to anticipate the need for and impacts of new public facilities, and to stimulate the development of well-balanced quality neighborhoods.

This Plan has been prepared pursuant to the City's Local Planning and Procedures Ordinance as contained in Article 6, Chapter 12, of the Fresno Municipal Code. It establishes the official statement of goals, policies, and strategies which will be utilized to guide the community's continued physical development and change. The Plan also provides a focus for those public and private efforts intended to preserve and enhance the community's total living environment. In summary, the Plan is intended to do the following:

1. Identify community issues and solutions that should be addressed through a comprehensive planning program.

2. Provide a source of information for three entities; the general public, government, and private industries.

3. Establish a statement of community wide objectives.

4. Estimate future conditions.

5. Provide a decision-making guide for both public and private activities.

6. Provide a means of coordinating and enhancing public and private investment.

7. Create a plan for the enhancement of the physical environment essential for human interaction and a healthy and stable economic atmosphere.

This Plan establishes the policies and standards that will; (1) guide development of the area in a manner consistent with the 1984 Fresno General Plan and applicable specific plans; and (2) direct the physical growth and change of the Roosevelt Community for the next ten years. The policies in this Plan are intended to assure that development of individual properties will be done in a manner that enhances the community's physical growth. It sets the standards for determining the consistency of development entitlement proposals (i.e., rezonings and subdivisions) within the plan area, and strives to achieve an internally compatible land use pattern that can be adequately accommodated by the City's existing and planned public service delivery systems.

This Plan is intended to provide guidance for the orderly growth of the community. In order to address unanticipated changes in environmental, social, or economic conditions, the Plan must be continually monitored and amended when necessary to address metropolitan and community needs. However, no amendment shall be approved which is contrary to the goals and policies of this Plan.

To be effective, two additional steps must follow the adoption of the Plan. These steps are implementation and review. Implementation is the process of putting plan policies and recommendations into effect. Review refers to the process of monitoring the community and recommending changes to the Plan as conditions in the community change. Guidelines for implementation are provided in the Plan, but the actual work must be based on a cooperative effort of private citizens, City officials, and other agencies.

It is contemplated that neighborhood organizations and other citizen groups will provide the continuity needed for a sustained, effective implementation program.

BACKGROUND

This Community Plan is named after Roosevelt High School, which is located near the center of a large and complex community plan area that encompasses approximately 30 square miles located in the southeastern portion of the Fresno Metropolitan Area. The community is bound by East Avenue and Freeway 41 on the west, McKinley Avenue on the north, Temperance Avenue on the east and an irregular boundary on the south consisting of Jensen, Minnewawa, North, Barton, and Central Avenues.

The Roosevelt Community Plan Area is characterized by highly diversified residential neighborhoods and older strip commercial corridors. The eastern portion of the planning area is dominated by a low density residential development pattern. Whereas, in the northwestern areas of the community, residential densities are much higher, with existing single family homes located on smaller, more conventional lots. Pockets of intensive multiple-family residential development can be found scattered throughout the planning area.

Areas of strip commercial development, located along Kings Canyon Road, Tulare Street, and Belmont Avenue, provide a broad range of general and heavy commercial uses serving the metropolitan area. Additional commercial development, primarily in the form of neighborhood shopping centers, has occurred at eleven sites scattered throughout the community. Little in the way of regional retail commercial development exists. The community has only a relatively small inventory of office development, including a very limited amount of private medical facilities. The community, however, is home to the IRS Data Processing Center, Valley Medical Center, several Fresno County office facilities, the Fresno Pacific College, the Senior Citizens Village, and the Fresno County Fairgrounds.

Socially and economically, the community consists of a diverse population with a broad range of incomes, ethnic identities, languages, family sizes, and education. It is perhaps one of the most ethnically diverse and densely populated communities in the San Joaquin Valley. In 1989, prior to the 1990 decennial U.S. Census, it was estimated that 85,000 people (25 percent of the City's total population) resided within the plan area's 34,070 dwelling units. This estimate represented an increase of 14,000 people and 6,000 dwelling units during ten years. However, a phenomenal increase in the number of school students residing within older neighborhoods indicated that an even more substantial increase in population and household size has occurred since 1980.

Based upon new census information, it was determined that in April, 1990, the Plan area had a population of 105,000 people residing in 33,400 dwelling units. The total average household size increased significantly to 3.14 persons per dwelling unit. Much of this increase appears attributable to the immigration and secondary-migration of Latin Americans and Southeast Asian

refugees. Hispanic and Oriental ethnic groups account for 43 percent and 17 percent respectively of the planning area's population. White, black and other ethnic groups account for 32 percent, 7 percent, and 1 percent respectively of the area's population.

Many of the large families typical of the community reside within the multiple-family residences, which provide 36.2 percent of the community plan area's housing units as compared to 34 percent of the Metropolitan Area's housing stock. However, new construction over the past ten years has emphasized higher density infill development, with 70 percent of the new dwelling units within the Plan area being multiple-family as compared to 50 percent within the entire Metropolitan Area.

Historically, the Roosevelt Community has continued to experience a series of migrational waves with people entering and leaving the community over the last century. The initial impetus for growth came because of the community's proximity to both the Southern Pacific and Santa Fe Railroad Tracks and the City's central business district. The extension of the Huntington Avenue Trolley Line promoted eastward growth with much of it occurring in unincorporated areas. With each successive wave of ethnic group immigration, the Community has developed an incredible economic, social, and cultural diversity. Attracted by relatively cheap land and affordable housing, this diverse collage of ethnic groups (Caucasian, Hispanic, Black and Asian) has done more to establish Roosevelt's character and pronounced urban environment than any other single factor.

Unfortunately, intermittent migrational pressures have contributed to piecemeal growth, the exceedance of public service capabilities and the exacerbation of urban problems such as increased social conflicts and crime, overcrowded housing, traffic congestion, air pollution and inadequate school capacity. As noted, development often occurred outside of the jurisdiction of the City with less demanding development standards and limited coordination between the affected agencies.

Leapfrog development was fairly common in the area through the 1970's. Major streets like Peach, Willow, Butler, Minnewawa, Church, California, and Tulare Avenues were either inappropriately planned or were simply not constructed to urban standards as development occurred. Sewer lines were not extended to all new development. The area's water system remained a patchwork quilt of City facilities, County water districts, and private companies. The community's storm drainage system remained incomplete.

In 1974, the City of Fresno, in conjunction with the County of Fresno and the City of Clovis, jointly cooperated to develop and adopt a new general plan for the entire Metropolitan Area that called for the joint planning and coordination of public services and new development. Immediately thereafter, as part of that

plan, the City of Fresno established its community planning program to apply general goals and objectives to particular portions of the Metropolitan Area. Shortly thereafter, the City of Fresno, in cooperation with the County of Fresno, initiated work on a number of community plans including Bullard and Woodward Park. It was not until 1978 that the City Council actually adopted the first Roosevelt Community Plan.

The 1978 Roosevelt Community Plan was designed to accommodate less than 100,000 people in a predominantly suburban environment. Following the General Plan's concept of Multiple Centers, the 1978 Roosevelt Community Plan recognized the need for two community level focal points; one at Kings Canyon Road and Chestnut Avenues and the other at Kings Canyon and Clovis Avenue. The Plan provided for substantial industrial development along its southwestern fringe and low density residential development along its eastern reaches. Unfortunately, little was done to implement the comprehensive expansion of public services identified in the Plan. Without new streets and an adequate sewer system, and given the availability of such services in the northern portion of the City where expanding growth continued, the Roosevelt Community Plan was not extensively implemented. Instead, the pattern of piecemeal rezonings to accommodate strip commercial development and higher density residential uses continued. During the early 1980's, this pattern became particularly pronounced with a growing emphasis on new lower quality higher density residential uses. Exacerbating the situation was the inability on the part of area school districts and the City's Parks Department to keep pace with the area's growing population. Converging school district boundaries, as well as recent unanticipated southeast Asian immigration pressures, have made it even more difficult to provide adequate school and recreation facilities.

The County of Fresno provides a variety of services to the Roosevelt Community. These services are either provided throughout the County regardless of jurisdiction, such as the courts, jail, libraries, social services, and health services, or exclusively to the residents of the unincorporated areas of the community (Sunnyside, Easterby and Calwa), such as roads, sheriff's protection and planning and permit services.

In addition, the largest concentration of facilities operated by the County, outside of the downtown core area, is located in the Roosevelt Community. These facilities include the C.K. Wakefield School, Juvenile Hall, Juvenile Courts, District County's Purchasing Department, Computer Services, Health Services, Libraries, Probation Department, Social Services Department, Valley Medical Center (a regional medical facility) and the Agriculture Department (including the Weights and Measures Division). These facilities not only impact the community socially and economically but also impact the types of uses which would be compatible in the areas adjacent to these facilities.

The 1984 General Plan addresses many of these problems and also identifies new issues such as groundwater contamination and sewer capacity deficiencies. The General Plan identifies the need for new infrastructure in the form of upgraded water facilities, new sewer trunk mains, schools, and open space improvements. It also continues to support the concept of multiple centers and designates a substantial portion of the community's developed and undeveloped residential areas for medium density (5 to 10 units per acre) residential use. However, specific implementation strategies and funding mechanisms have not been systematically pursued.

These conditions led to a growing public reaction against new development. Area residents cited their concerns regarding the deficient quality of new development, the need to stabilize and revitalize existing neighborhoods, school overcrowding, the lack of adequate parks, and increasing circulation problems, and were influential in prioritizing the update of their community plan.

COMMUNITY ISSUES AND CONCERNS

This section identifies those important issues and concerns that must be addressed as part of the new Roosevelt Community Plan. They are as follows:

1. The community will soon be impacted by the construction of Freeway 180;

2. The City will soon construct the Fowler Trunk Sewer and make improvements to the Wastewater Treatment Facility. These actions will remove a substantial restriction on growth in southeast Fresno;

3. Area schools are experiencing significant overcrowding;

4. Groundwater reserves are uncertain, have begun to experience an increasing frequency of contamination, and cannot meet existing needs without major improvements to the community's water management and delivery system;

5. The circulation system, as built, is not capable of accommodating the vehicular demands of projected urban development, with major arterials such as Kings Canyon Road, Clovis Avenue, and Peach Avenue experiencing increased peak hour congestion.

6. Development within the community continues to remain unbalanced with little new single family construction occurring, too many apartments congregated in too small of an area, not enough service oriented office growth, and lack of substantial range of commercial services.

7. Police, fire, and emergency response times continue to increase and service levels decline as development and traffic congestion increase.

8. Existing regional public facilities create substantial impacts upon established neighborhoods while potential public facilities are being contemplated which may offer significant contributions to the community in the future.

9. The community has received a disproportionate amount of lower quality development which has generated negative perceptions about development in the Community.

10. There is a need to identify and establish viable redevelopment areas processed on a fast tract basis to eradicate physical, social and economic blight.

11. There is a need to provide affordable low-income quality housing mixed with higher market end projects to instill neighborhood harmony and economic stability.

12. There is a need to expand the Enterprise Zone to facilitate the area's economic revitalization through new environmentally safe developments that enhance job development opportunities.

13. There is a need to coordinate the implementation of economic development with the private and public sectors through an updated extensive inventory of industrial/commercial zoned properties (i.e., underutilized parcels with rezoning potential) and through high profile mareting efforts.

14. There is a need to network between the Hispanic, Southeast Asian, Black and Caucasian communities to address problems associated with crime, vehicle thefts, drugs, gang violence, gang graffiti, alcohol abuse, education and job opportunities for the at-risk youth.

While this list may not be complete, it does accurately summarize the major issues that are interacting to shape the community's land use patterns and will continue to provide a valuable point of reference against which the Plan's success or failure may be measured.

RELATIONSHIP TO OTHER ADOPTED PLANS

The Roosevelt Community Plan Area is about one-third of the City of Fresno's total area and is directly impacted by decisions and events occurring elsewhere within the City and the Metropolitan Area. In recognition of this relationship, the community is joined to the rest of the Metropolitan Area not only physically,

but by a comprehensive General Plan that prescribes the location of major land use classifications, major streets, and public facilities.

The City of Fresno's 1984 General Plan provides for broad based economic growth and stability by promoting balanced and complementary development throughout the Metropolitan Area. It designates new growth areas and identifies growth issues for the southeastern, western, and northeastern fringes of the City. For the southeastern growth area, the General Plan mandates the resolution of groundwater quality issues prior to approval of development.

To accomplish a balanced distribution of growth, the General Plan has identified the following strategies:

1. Promoting infill development in older portions of the City.

2. Facilitating the development of multiple centers at designated sites to serve as focal points for each of the City's major communities.

3. Providing for the expansion of the City's public infrastructure in an efficient and fiscally sound manner to better balance the City's urban form.

4. Limiting mid-rise development occurring outside of the City's Central Area to the Freeway 41 Corridor.

Several major amendments have been made to the General Plan since its adoption in 1984, including the substantial modification or addition of plan elements. Major modifications include defining the Mid-Rise/High-Rise Corridor policies, bolstering the Air Quality Element with an air quality improvement program and defining mineral resource conservation and recovery policies. New plan elements include the Master Parks Plan and a Trails Master Plan and Implementation Manual. The goals, policies, and implementation measures of these elements have been considered and accommodated within the Roosevelt Community Plan where appropriate. This includes the identification of appropriate locations for master plan park sites and incorporating the master planned trails into the Community Plan's open space and bikeways components.

It is essential that the Roosevelt Community Plan's land use, circulation, public facility and resource management policies be consistent with, and further advance the objectives of the General Plan. The function of a community plan, as described by the City of Fresno's Local Planning and Procedures Ordinance, is to translate broad general plan elements into more precise goals and policies applicable to a geographic component of the Fresno Metropolitan Area. Although these plans are adopted by resolution, similar to the General Plan, they may contain additional components and their policies prevail over those of the Fresno General Plan.

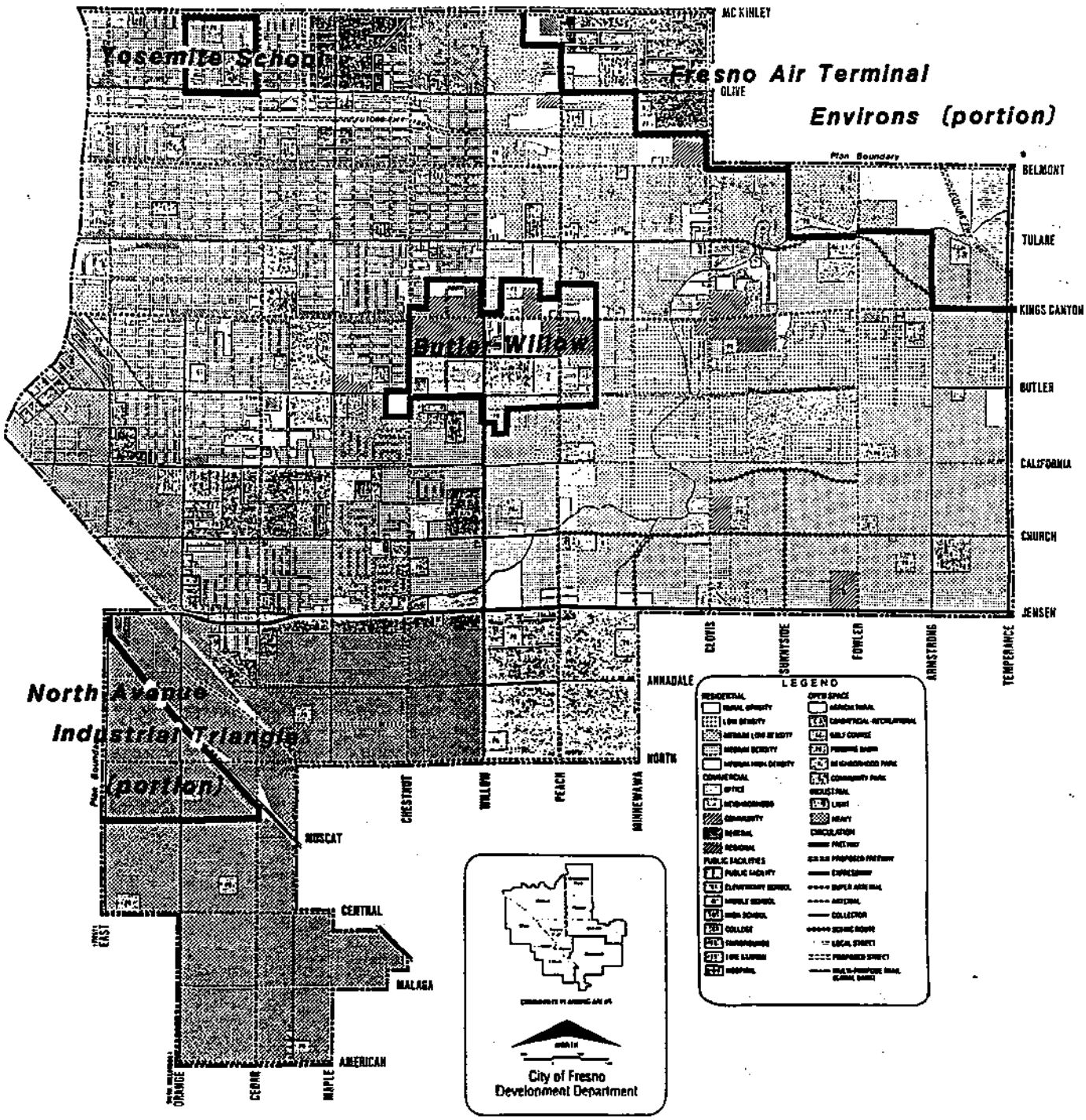
The Roosevelt Community Plan is a refinement of the Fresno General Plan. It has been designed to provide for a specific community identity within the framework outlined by the General Plan. It also serves as a bridge between the General Plan and specific development and improvement projects. Because of its narrower geographic boundaries, this Plan represents a way of "humanizing" the General Plan, bringing it down to a scale where residents can become familiar with the conditions of and plans for their specific neighborhood.

More specifically, the Roosevelt Community Plan area is contiguous to the City's historic Central Area and adjacent to the City's Mid-Rise/High-Rise Corridor. This Plan does not promote competition with the services offered or the land use intensities available in either of these two areas, but instead seeks to complement and utilize both areas to the full benefit of the entire Roosevelt Community. Moreover, the Roosevelt Community will continue to function as a primary residential support community and home to many of those employed either in the Central Area, the Freeway 41 Mid-Rise Corridor, or the City's southern industrial areas.

The most detailed level of planning is provided by a specific plan that focuses upon a narrow scope of issues for a more confined area. Therefore, their policies and standards must prevail over the goals and policies of general and community plans. The specific plans that apply to neighborhoods entirely or partially within the Roosevelt Community Plan Area are the Yosemite School Specific Plan, Butler-Willow Area Specific Plan, Fresno Air Terminal Environs Area Specific Plan, and North Avenue Industrial Triangle (see Figure 2-0, following).

These plans were prompted by the need to address the following particular issues: 1.) stabilization of a neighborhood jeopardized by excessive residential densities; 2.) protection of a neighborhood from the effects of major government office and other nonresidential development; 3.) promotion of land uses compatible with the noise and safety impacts of aircraft activity and; 4) stimulation of economic development and employment growth. These plans are adopted by Ordinance and will remain applicable to the properties within their plan boundaries. However, appropriate amendments to these specific plans, as well as the General Plan, have been processed concurrently with the adoption of the Roosevelt Community Plan to maintain internal consistency.

Figure 2-0: ROOSEVELT COMMUNITY PLAN SPECIFIC PLAN AREAS



PLAN CONCEPT

The Roosevelt Community Plan Area will soon be impacted by a number of factors. The completion of Freeway 180 eastward from the City's Central Area, the construction of the Fowler trunk sewer, the addition of new school facilities, and the advent of well-head treatment will combine to dramatically increase growth pressures throughout the community. This growth, if not planned adequately, will overburden public facilities, increase environmental degradation and adversely impact residents of the area.

In order to limit the potential for traffic congestion, land use conflicts, significant declines in air quality, and a chaotic social situation, the Roosevelt Community Plan seeks to provide for the development of a "balanced community" by: 1) limiting major intensive development to Kings Canyon Avenue between Chestnut and Sunnyside Avenues, 2) promoting the development of new office and multiple family centers adjacent to planned Freeway 180 interchanges, 3) stabilizing and reviving existing neighborhoods, and 4) balancing the need for new development with the availability of public facilities. The Plan also continues to promote the development of planned industrial areas, but in a manner compatible with nearby residential and commercial activities.

The Plan Concept is broken down into several key elements summarized as follows:

1. Kings Canyon Corridor - Major community-wide commercial services are limited to a three mile length of East Kings Canyon Road to be anchored at either end by rejuvenated community oriented commercial centers. These "bookends," located along Kings Canyon Road at Chestnut and Clovis Avenues, establish the limits of this community oriented commercial development. Due to its central location and accessibility this corridor will give the Roosevelt Community much of its character. This corridor (which already contains considerable multi-family development between Butler Avenue and Huntington Boulevard) will be bolstered by landscape and design standards, accommodate the development of new office uses where possible, and facilitate new commercial development where planned street capacity is adequate to accommodate it.

2. Freeway 180 Corridor - Along the Freeway 180 corridor, an area bounded on the north by Olive Avenue and on the south by Belmont Avenue, new plan guidelines will lower densities for new multi-family development except when sufficient land is aggregated. At each interchange, office development and/ or multi-family development of increasing intensity would be permitted subject to strict design review standards, density controls, and noise compatibility requirements. Future interchange

developments would form a "string of pearls" and would represent the most compatible use adjacent to interchanges. If designed properly, these developments will not be sensitive to the increased noise generated by freeway off ramps, and will not unnecessarily snarl traffic to and from the freeway system. Major new commercial development and/or low intensity residential uses and schools would be prohibited near the interchanges to both preserve limited north/south traffic capacity within the freeway corridor and to prevent the generation of potential noise conflicts with sensitive receptors.

3. Neighborhood Stabilization - Existing single-family neighborhoods will be preserved and strengthened where possible through the implementation of limited City sponsored proactive rezoning, the designations of developed single-family areas for medium low and medium density residential uses, and through the implementation of a proactive code enforcement program.

4. Enhanced Circulation Planning - In addition to advocating the development of State Route 180 as a freeway, to at least Clovis Avenue, and extension to Temperance Avenue at not less than expressway standards, the extension of several major streets are provided for. Several streets would be extended southward or eastward to better serve planned industrial and residential areas. These include portions of Church, Minnewawa, Armstrong and Butler Avenues which are added to the City's circulation element as planned collector streets. The Plan also supports the improvement of Peach Avenue to an arterial status in a manner consistent with the area's scenic qualities and residential character. Huntington Boulevard and Minnewawa, Peach and Butler Avenues are designated to be protected as scenic streets.

5. Public Facility Planning - In order to accommodate growth, stabilize existing neighborhoods, and minimize continued environmental degradation, the City will pursue the construction of sewer and water improvements including well-head treatment, oversized cross-town water mains, and a new Fowler trunk sewer. Implementation of new approaches to water utilization, distribution, and recharge are advocated to achieve a balanced, sustainable use of the groundwater supply.

6. Multiple-Family Residential - New multiple family development is distributed along major transportation corridors. This recognizes the capacity of particular roadways to accommodate the increased traffic associated with multiple family development and to focus intensive development along appropriate corridors to facilitate enhanced public transit. The Plan seeks to avoid

additional over-concentrations of larger apartment complexes within limited areas while improving the quality and livability through design and maintenance programs.

7. Medium, Medium-Low and Low Density Residential - New medium-low and low density development will occur primarily in areas where the City's normal grid street circulation system cannot be adequately extended or completed, such as between Fowler Avenue and Temperence Avenue, south of Kings Canyon Avenue, and in existing areas already developed at lower densities. Medium density residential development will occur in those portions of the growth area adequately served by major street extensions. Utilization of integrated master planned developments is encouraged to provide a range of housing types and design amenities.

8. New Growth Areas - The Community Plan continues to provide for new growth areas as identified by the 1984 General Plan. This Plan recommends that a substantial area outside the City's Sphere of Influence (south of Jensen Avenue to North Avenue between Temperance and Minnewawa Avenues) be reserved in agricultural use. The appropriateness of expanded urbanization will be considered by the City's next General Plan update which is scheduled for 1994.

9. New Parks - Development of a 160-acre combined active and passive regional park in the southeastern portion of the plan area, expansion of the Mosqueda Community Park, and establishment of new several community and neighborhood parks is provided for subject to the implementation of a comprehensive funding mechanism.

10. Public/Quasi-Public Uses - It is also the intent of this Plan to support the long-term reduction of some existing uses at both the Valley Medical Center site and County Fairgrounds by supporting their relocation. It is desirable to facilitate the relocation of the Valley Medical Center to the City's Central Area. In addition, those more intensive activities currently conducted at the Fairgrounds are suggested for relocation to a new site, possibly in the southern portion of the planning area. This new site would serve auto racing, tractor pulls, concerts with amplified music, and other high noise and high attendance activities that are detrimental to surrounding residential uses.

LAND USE AND URBAN FORM

This chapter explores the land use patterns present in the community and proposes a number of strategies designed to remedy identified concerns. It seeks to establish land use patterns and policies that can accommodate the community's projected population. This chapter also contains the basic definitions of land uses, the zoning consistency matrix, and the presentation of the community's planned urban form including residential, commercial, industrial, open space, and public and quasi-public land use patterns.

URBAN FORM AND EXTENT

The Roosevelt Community Plan Area accommodated a population of 105,000 people in 1991. At full development, it may be home to nearly 220,000 people. The land use element of this Plan, which includes both the goals and policies identified in this chapter together with the land use plan map, seeks to provide an improved quality of life supported by the area's planned public facilities. It also seeks to ensure that planned land uses represent the most environmentally sound planning possible, that jobs are located reasonably close to homes to help reduce commuting time and thus air pollution, and that each neighborhood is adequately designed to increase its future stability and reduce the potential for crime and need for extraordinary police services.

This section also establishes the technical requirements against which the professional planner and/or engineer can measure new projects to determine their compatibility with the plan's intent. The plan provides for this determination of compatibility at several levels. It includes a definitive statement of the plan's guiding concepts. It establishes a specific matrix of zoning for each land use designation. And, it establishes enhanced standards of design to be applied to all new development.

The specific land use designations utilized in the plan are defined and summarized as follows:

> Rural and Low Density (0 to 2.18 dwelling units per acre): The rural and low density residential designations are applied to existing neighborhoods characterized by large estate lots and rural fringe areas. Expansion of these residential densities is not anticipated with the plan update. However, development of adjacent areas may include similar lot sizes as a transition to medium low density residential densities.

Medium-Low Density Residential (2.19 to 4.98 dwelling units per acre): The medium low density residential designation, which is the plan area's predominant density, continues to accommodate a wide spectrum of housing opportunities ranging from large-lot single family estates to smaller-lot clustered planned developments. Density averaging within comprehensively designed developments can accommodate smaller lot sizes, associated with higher density designations, when determined to be compatible with surrounding uses and public facilities. This designation is applied to developed areas to protect the integrity of existing neighborhoods. In peripheral areas, this designation is used as a transition to low density residential or non-urban uses.

Medium Density Residential (4.99 to 10.37 dwelling units per acre): A variety of residential types, ranging from individual detached residences on 6,000 square foot lots to common-wall planned developments with 4,200 square foot lot sizes, are accommodated by this designation. It is applied to the many existing neighborhoods with smaller lot sizes where a majority of the community's moderately priced housing opportunities exist. It is also appropriate as a land use transition from the higher density residential and moderately intensive nonresidential areas to the less populated peripheral neighborhoods, as well as along major transportation routes such as Clovis Avenue, Jensen Avenue, and Kings Canyon Road.

Medium-High Density Residential (10.38 to 18.15 dwelling units per acre): The locations of multiple family residential areas are planned to take advantage of facilities, services and community resources necessary to provide a safe, convenient and desirable living environment. These areas are generally near other intensive urban activities with immediate access to major transportation routes.

High Density Residential (18.16 to 43.56 dwelling units per acre): This residential designation has traditionally been reserved for centers of regional or metropolitan significance such as college campuses or the central business district. Within the Roosevelt Community Plan Area, it is expected to be applied only to existing multiple-family residential developments that already exceed 18 dwelling units per acre.

Administrative, Professional and Commercial Office: A range of office development opportunities are provided to meet the local and community needs for private office space. The sites will range in size from small strips along major streets, medium-sized office centers near freeway access points and large regional sites near intensive commercial centers.

General Heavy Strip Commercial: Existing strip commercial areas along major streets will remain to meet the sales, service and repair needs of the Community. However, the expansion of strip commercial development is planned to occur only where vehicular traffic can be reasonably accommodated and design measures can be applied to reduce land use conflicts and provide a positive aesthetic contribution to the Community.

Neighborhood and Community Commercial: Retail shopping and household service needs of the various neighborhoods and the larger community will be met by planned commercial sites of five to 20 acres in size. These sites are generally located at the intersection of two arterial streets with several exceptions near the Freeway Corridor and in existing developed areas. Larger commercial centers are designated along Kings Canyon Road to accommodate retail and service activities with a community-wide market area. The amount and distribution of commercial development has been planned to adequately serve population demands while avoiding excessive traffic congestion, reducing land use conflicts and discouraging continued strip commercial development.

Regional Commercial: Regional centers provide retail commercial and service activities that attract customers from well beyond the community plan area, with many willing to travel as far 30 or 40 miles to patronize these businesses. Because the plan does not provide for a true regional center, semi-regional uses, such as theaters, will be accommodated with the Kings Canyon Corridor.

Light and Heavy Industrial: The Roosevelt Community contains approximately one third of the City of Fresno's total industrial lands inventory. Industrial land is that property designated to accommodate a full range of manufacturing, warehousing, office and wholesale activities. The community will continue to provide for a wide range of industrial activities but in a manner cognizant of the need for land use compatibility and more sensitive design.

Agricultural and Open Space: The agricultural designation permits the continued production of crops and related activities where the commitment to urban development is not yet appropriate. Open space uses are planned for those areas to be utilized for public recreation or resource management. Public parks are master planned to provide a range of recreational opportunities to serve the neighborhood community and region. Open space uses may also be applied to storm water drainage and groundwater recharge basins, canals, and flood channels.

Public and Quasi-Public: A wide range of facilities and uses are accommodated by this category ranging from a private facilities landfill (solid waste disposal) site to county hospital (Valley Medical Center). In addition to traditional public uses, such as schools, larger privately owned facilities, such as places of worship over three acres in size, will be subject to this designation when not located within an office or other nonresidential designation.

Circulation: Several existing or planned regionally significant vehicular transportation routes, including Freeways 41, 99, 168, 180, and expressway routes on the Jensen Avenue and Temperance Avenue alignments, will provide the community with an excellent circulation framework. However, traffic volumes on major streets connecting these routes to the community and major activity areas will reach the limit of the acceptable level of service and expose neighborhoods to increased traffic nuisances. Upon completion of the regional routes the community will be better served than any other community outside of the central area. These routes, particularly Freeway 180 together with little used railroad spur lines, may also serve as the framework for future mass transportation and multi-modal corridors.

The half-mile grid pattern spacing of arterial and collector streets is planned for completion where feasible. Local streets providing access to individual properties will continue to be implemented in accordance with applicable standards and policies. Existing local street grid patterns which accommodate objectionable neighborhood traffic will be considered for traffic control measures. Public transportation and nonmotorized travel alternatives will be enhanced by strategies to accommodate multi-modal transportation corridors, preserve railroad spur track rights-of-way, and implement a comprehensive bikeway system.

These land use designations are organized and presented in an overall pattern such that the development of a balanced community is facilitated. The pursuit of the balanced community idea begins with the predominant features of the community's existing or historically planned streets and highways system, land use patterns and major facilities. While these features are used as the framework for planning a balanced community, they have been reexamined and modified where appropriate to improve circulation, provide more functional land use relationships, and reduce conflicts. The foundation for the community's urban structure is provided by Freeway 99, Freeway 180, and the East Ventura Avenue/East Kings Canyon Road corridors that radiate out from the central business district. They serve the community's major concentrations of industry, commerce, and public use. The community's major street network, particularly the Jensen Avenue expressway and the Clovis Avenue arterial, also support the principal land uses and accommodate regional traffic movement.

The traditionally defined community center is more accurately described as a linear corridor of intensive commercial sites with associated office, medium-high density residential and public uses. This intensity corridor extends for over three miles along East Kings Canyon Road from Chestnut Avenue on the west to east of Clovis Avenue. Less intensive commercial and residential uses will extend out from this high intensity corridor. Freeway 180 will provide a parallel moderately intensive corridor to the north. This latter corridor will provide a wide range of residential living opportunities with supporting activity nodes at the freeway access points. Existing industrial areas will remain with more explicit efforts identified to improve land use compatibility and accommodate appropriate expansion.

Higher density residential areas will be distributed within the community to enhance the functions of urban activity areas, employment centers, and public facilities. Existing lower density residential neighborhoods will be maintained and buffered by compatible densities. Decreases from previously planned densities are appropriate where circulation limitations, public facility constraints, and land use conflicts prevent the development and maintenance of an acceptable neighborhood environment. Neighborhood strategies are identified to restore, stabilize, and maintain their residential integrity and desirability of existing neighborhood.

The following four goals, with supporting policies and implementation measures, establish the fundamental concepts upon which the other components of the Plan are based. These concepts include principal features of development capacity and function, implementation guidelines and desired characteristics of community life. This subsection is followed by the residential, commercial, open space, and public land use components.

Goal

1-1 Provide for the location, diversification, and functional relationship of land uses necessary to accommodate a projected population within the planning boundaries.

Policies and Implementation Measures

1-1.1 Planned uses shall be implemented in accordance with the plan designations shown in the Roosevelt Community Plan land use map and corresponding zone districts as set forth in Article 4, Chapter 12, "Procedures Applicable to Zoning" of the Fresno Municipal Code (including the Zoning District Consistency Table which is depicted on Table 1-1.1 of the Roosevelt Community Plan), and as modified and presented in Chapter 2 of this plan.

TABLE 1-1.1: ZONE DISTRICT CONSISTENCY

PLAN DESIGNATION	CONSISTENT ZONE DISTRICT	CONSISTENT DENSITY
RESIDENTIAL		
Rural	AE-5, AE-20, R-A	0-1.21 Units per acre
Low	R-1-A, R-1-AH, R-1-E, R-1-EH	0-2.18 Units per acre
Medium-Low	R-1-B, R-1-C, R-1-B/PD	2.19-4.98 Units per acre
Medium	R-1, MH, R-1-C/PD, R-1/PD	4.99-10.37 Units per acre
Medium-High	R-2-A, R-2, T-P, R-P*	10.38-18.15 Units per acre, subject to Plan policy 1-6.11
High	R-3-A, R-3, R-4+, C-P*	18.16-43.56 Units per acre, subject to Plan policy 1-6.11
COMMERCIAL		
Neighborhood	C-1, C-L	
Community	C-2	
Regional	C-3, C-4	
General and Heavy Strip	C-5, C-6, C-R	
Office	RP-L, R-P**, C-P**, R-P - Planned Office Development, C-P - Planned Office Development	
Commercial Recreation	C-R	
INDUSTRIAL		
Light	C-M, M-1, M-1-P	
Heavy	M-2, M-3	
OTHER USES		
Open Space	O, AE-20	
Agricultural	O, AE-20	
Public or Quasi-Public	All zone districts (except for AE-5, AE-20, R-A)	Approval subject to the review of a specific development plan

* In the R-P or C-P zone district, pursuant to a conditional use permit for a planned development, a maximum of 35 percent of the property may be developed with the nonresidential uses permitted in those zone districts.

** In the R-P or C-P zone district, pursuant to a conditional use permit for a planned development, a maximum of 35 percent of the property may be developed with the residential uses permitted in those districts.

\+ Thirty or more dwelling units per acre in the R-4 district only, subject to a conditional use permit.

Note: The method and procedure for determining zoning consistency in relation to this plan shall conform to Section 12-403 of the Municipal Code and amendments thereto.

1-1.2 Amendments of the Community Plan to change goals, policies, or planned land uses shall be processed as set forth in Article 6, Chapter 12 "Local Planning and Procedures," of the Fresno Municipal Code.

1-1.3 Within thirty days after the adoption of the Roosevelt Community Plan, a committee shall be formed and called the Roosevelt Community Plan Implementation Committee. This committee shall be appointed pursuant to the Planning Guidelines of the Local Planning and Procedures Ordinance and shall include residents of both the unincorporated and incorporated portions of the Plan Area.

The Roosevelt Community Plan Implementation Committee shall review and monitor the implementation of the Roosevelt Community Plan. The Committee shall also make recommendations to City staff, the Planning Commission, and City Council regarding the implementation of the Roosevelt Community Plan. More specifically, the Committee shall do the following:

a. On or before December 1 of each year, the Committee should present to the City Council a report which contains a performance evaluation of the Plan. If the Committee concludes that amendments to the Plan are needed to better address community issues and concerns stated in the Plan, the Committee should submit the proposed amendments to the City Council so that they can be considered for initiation by the City Council.

b. On or before April 1 of each year, the Committee should make recommendations to the City Council on the priority of Plan implementation measures that should be pursued. These recommendations can be considered for funding as part of the City's annual budget review process.

c. The Committee shall be permitted to review and make recommendations on plan amendment, development entitlement, and site plan review applications in the Roosevelt Community Plan Area (except where specific plan implementation or review committees have been established, such as for the Yosemite School Area Specific Plan) before final City action is taken on the applications.

1-1.4 Development entitlements and special permits must be found to be in compliance with applicable plans, policies, procedures and service standards in accordance with the Local Planning and Procedures Ordinance (Chapter 12, Article6 of the Fresno Municipal Code). Development entitlements and special permits for the development of zoning inconsistent with the plan shall require approval by the Planning Commission, or City Council (when appealed) with public notice provided pursuant to Fresno Municipal Code Section 12-401.

1-1.5 Continue to oppose new urban and rural-residential development east of the City's sphere of influence line, as depicted in the Roosevelt Community Plan land use plan map.

1-1.6 Examine the appropriateness of expanded urban development in the area south of Jensen Avenue between North Minnewawa and Temperance Avenues in conjunction with the City of Fresno and other affected agencies during the City's 1994 General Plan Update.

Goal

1-2 Provide for the efficient use of land and the public service delivery system while protecting established neighborhoods.

Policies and Implementation Measures

1-2.1 In undeveloped and unannexed areas, Fresno County will be urged to permit only that development which is consistent with the AE and AL zone classifications.

1-2.2 Along Kings Canyon Road in the area generally bounded by Chestnut, Lane, Argyle and Balch Avenues, an intensive office and commercial corridor shall be established as a focal point of community activities (Figure 1-2.2).

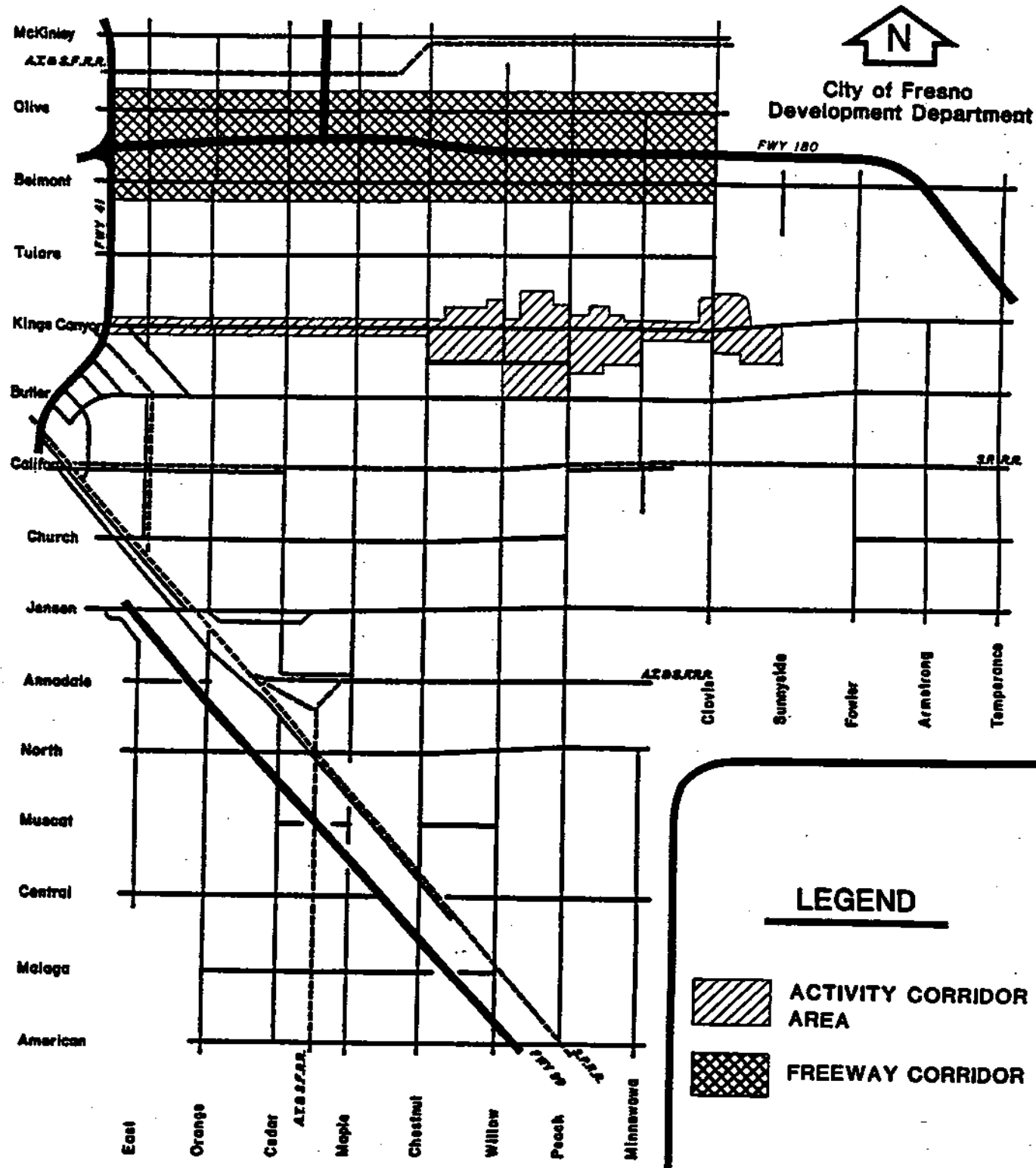
1-2.3 Along the Freeway 180 right-of-way at the location of planned interchanges, the more intensive development of office and multiple-family residential uses may be accommodated as noted in the policies established in the commercial and residential sections of this plan.

1-2.4 Moderately intensive urban development including low, medium-low, and medium density residential, limited office, and neighborhood commercial uses shall be distributed primarily outside of the above identified high intensity areas.

Figure 1-2.2

ROOSEVELT COMMUNITY PLAN UPDATE

KINGS CANYON ROAD & FWY 180 CORRIDORS



1-2.5 Continue to pursue the annexation to the City of Fresno of all developed and undeveloped property within the City's Sphere of Influence, (in accordance with applicable joint City/County agreements) subject to the ability to provide adequate public facilities and services without reducing the resources and services available to already incorporated areas.

1-2.6 Establish a cooperative referral process where all development entitlements filed in or near the Roosevelt Community Plan Area are jointly reviewed by the City and County (in accordance with joint City/County resolutions and agreements).

1-2.7 Pursue the application of common development standards by the City and County (in accordance with joint City/County resolutions and agreements).

Goal

1-3 Encourage mixed use development that provides a diversity of land uses.

Policies and Implementation Measures

1-3.1 Permit limited commercial development within "planned developments" (as defined by Section 12-306-N-21 of the Fresno Municipal Code) sufficient to meet the neighborhood commercial needs of that development.

1-3.2 Permit density transfers through the Conditional Use Permit process for a unified project developed as a "planned development" (as defined by Section 12-306-N-21 of the Fresno Municipal Code) on one parcel or contiguous or adjacent parcels.

1-3.3 Encourage mixed use development in the office land use designation and the medium-high density residential designations, using the R-P or C-P zone districts and the conditional use permit process. (As provided in policy 1-1.1)

Goal

1-4 Improve the quality of life by providing for a revitalized, self-sustaining, and holistic community.

Policies and Implementation Measures

1-4.1 In the development review process and in designing service and capital facility programs, the City should strive to create an environment in which the highest value is placed on people.

1-4.2 Public and private development shall be designed to improve the character of existing neighborhoods. Factors that cause instability or create urban barriers should be discouraged or removed.

1-4.3 Neighborhoods shall include places for interaction among residents such as parks, community centers, schools, commercial areas, churches, and other gathering points.

1-4.4 The City shall foster the participation of residents in local government decision-making and in the social, cultural and recreational activities of the community.

1-4.5 Establish a community plan area based resource allocation program that includes area characteristics (such as geographical size, physical condition, population size and long range planning objectives) to determine appropriate expenditures for public services and facilities.

1-4.6 Establish an inter-agency effort, with the City and County of Fresno taking lead roles, that focuses upon prevention and intervention strategies addressing juvenile social issues and behavioral problems such as drug use, gang participation and vandalism (graffiti).

1-4.7 Support the formation of new and expanded Enterprise Zone (as shown in Environmental Impact Report, Figure EIR-3) within the Roosevelt community; and explore submission of a joint City/County Enterprise Zone application.

Goal

1-5 Promote the visual enhancement of existing neighborhoods and developing areas.

Policies and Implementation Measures

1-5.1 Utilize a Plan wide landscape and maintenance district to maintain median island landscaping, landscaping adjacent to major streets, trails, new parks, walls and fencing along major streets, and other publicly landscaped areas.

1-5.2 Establish, where feasible and compatible with traffic engineering objections, well-landscaped median islands as distinctive entrances into developing residential areas including, but not limited to, the following locations: 1) Church Avenue extending at least 370 feet from its intersections with Clovis, Fowler, and Temperance Avenues, and 2) Armstrong, Sunnyside and Minnewawa Avenues extending at least 370 feet north of Jensen Avenue.

RESOLUTION NO. 99-16

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, APPROVING A-98-18, AMENDING THE TEXT OF THE ROOSEVELT COMMUNITY PLAN TO AUTHORIZE EXCEPTIONS ON A CASE-BY-CASE BASIS TO THE BOULEVARD SETBACK POLICY AND TO ESTABLISH CRITERIA FOR APPLYING THE EXCEPTIONS

WHEREAS, Article 6 of Chapter 12 of the Fresno Municipal Code sets forth the City's Local Planning and Procedures Ordinance (hereinafter, "LPPO"), the purpose of which ordinance is to establish comprehensive and orderly procedures for the formulation, adoption, amendment, repeal and administration of plans which collectively provide for the management of the City's physical growth and redevelopment, and to promote the public health, safety and welfare by, among other things, periodic review, amendment, and repeal of plans to ensure continuity in the development and maintenance of plans and the effectiveness of cumulative information for the physical design and development of the City; and,

WHEREAS, the LPPO commits the City to following a unique set of procedures to assure maximum public review of plan amendments, including amendments proposed by individual property owners or developers and addressed to specific instances; and,

WHEREAS, pursuant to the LPPO, the City adopted the Roosevelt Community Plan, which plan governs development in a relatively large area in Southeast Fresno; and,

WHEREAS, among the components of the Roosevelt Community Plan is the general goal to "Promote the visual enhancement of existing neighborhoods and developing areas"; and,

WHEREAS, a major chosen tool of visual enhancement is the utilization of landscaped setbacks. including one tool sometimes popularly known and referred to as the "Boulevard setback", which specifies a minimum landscaped setback on certain major streets in the plan area; and,

Adopted 1/12/99
Approved
Effective

99-16

1-5.3 Require that new residential developments make provision for and coordinate the development of integrated open space and circulation networks linking residential areas with nearby parks, schools and other public facilities.

1-5.4 Support the formation of assessment and maintenance districts to facilitate the development of public improvements and open space/recreation features within the Plan Area.

1-5.5 Wherever feasible, the City shall encourage the installation of sidewalks with park strips (large enough to accommodate street trees) in order to promote energy conservation, promote increased pedestrian use of local streets, and improve the Community's aesthetic appearance.

1-5.6 Allow application of R-M (Residential - Modifying) overlay zone district provisions in accordance with the Municipal Code.

1-5.7 Wherever feasible, encourage the development of private and/or public open space areas in the form of trails, enhanced landscaped setbacks, parks, and water features (when developed as combined recharge and or storm runoff facilities).

1-5.8 Enhance the appearance of major transportation corridors by applying the following standards and policies:

a. A 15-foot (or larger, as specified by this Plan) landscaped boulevard overlay standard along arterial and collector streets south of Belmont Avenue and east of Chestnut Avenues.

b. Support the landscaping of all freeway rights-of-way within or contiguous to the Community.

c. Encourage the development of a unified building design and landscape theme along all major streets with continuing input from the Roosevelt Community Plan Implementation Committee.

d. Encourage the use of period street lighting, older style (1930's through 1950's) freeway structure motifs and street furniture where compatible with the predominant character of the surrounding area and traffic safety requirements.

RESIDENTIAL USES

The Roosevelt Community Plan Area extends from the Metropolitan Area's core to its urban fringe, and therefore contains a full spectrum of residential densities. Over the past decade, however, new development has occurred at predominantly higher densities on bypassed or redeveloped parcels in established neighborhoods. During this time, community residents have become increasingly aware of the need to provide adequate public facilities, manage use of resources and assure functional land use arrangements to stabilize neighborhoods. Although there are many existing exceptions, the plan promotes the location of higher densities in association with other intensive land uses, employment centers, transportation corridors and adequate public facilities. Lower residential densities are planned for established neighborhoods, along scenic boulevards and the urban fringe.

Goal

1-6 Plan for the diversity of residential types, densities and locations necessary to achieve the plan concept and accomplish the plan goals to provide for adequate housing opportunities, balanced urban growth, and efficient use of resources and public facilities.

Policies and Implementation Measures

1-6.1 Low density residential uses are appropriate in those areas, such as the eastern portion of the Roosevelt Community, where the integrity of established neighborhoods with semi-rural or estate characteristics is to be maintained.

1-6.2 Medium-low density residential uses shall be designated to preserve those single-family residential neighborhoods established with moderate to large sized lots, to provide a transition between low and medium density residential areas and to reduce conflicts between urban and non-urban uses as the predominant designation within the Community's growth area.

1-6.3 Medium density residential uses shall be designated for the established neighborhoods with smaller lot sizes and along appropriate transition areas. This designation shall also be applied to stabilize many neighborhoods which have experienced a piecemeal encroachment of multiple-family residential development but lack adequate streets and public facilities to support additional population increases.

1-6.4 Medium-high density residential uses shall be distributed to avoid excessive demands upon limited public facilities and services yet provide adequate housing opportunities with immediate access to employment, shopping, services, and transportation. Appropriate areas are designated along the East Kings Canyon Road and Freeway 180 corridors and near other areas of compatible intensive activities.

1-6.5 High density residential uses shall only be designated to accommodate the rezoning of existing developments that exceed the R-2 zone district density standard. Approval of R-3 zoning shall be subject to conditions of zoning requiring participation in crime prevention, code compliance, property management, and open space acquisition programs (neighborhood parks) as identified by this Roosevelt Community Plan.

1-6.6 Density transfers may be permitted in accordance with applicable Plan policies and the Municipal Code, such that the density transfer will not reduce the desirability of surrounding areas for the continued use or development of planned uses.

1-6.7 Mixed use development of a medium-high density residential designated site may be developed using the R-P or C-P zone districts in accordance with the zoning consistency and development standards of the City of Fresno Zoning Ordinance.

1-6.8 In order to provide a desirable range and distribution of housing opportunities, the designation of additional medium-high density residential uses (by plan amendment) may be considered appropriate for sites which comply with the following criteria:

a. The site shall either have direct access to a major street or to a local street of sufficient vehicular capacity which does not pass through an existing or planned single-family residential neighborhood prior to intersecting a major street; and the site will not prevent the completion of a local street identified as necessary to serve a single family neighborhood.

b. The shape of the site is too narrow or shallow to accommodate development of local street access for single-family residential lots or its proximity to other uses is not conducive to single-family residential development (e.g., the site is bound on two or more sides by major streets, office, commercial or other nonresidential uses).

c. For sites greater than one acre but not more than two acres in size, the minimum site area per dwelling unit shall not be less than 3,200 square feet.

d. For sites greater than two acres, but not more than four acres in size, the minimum site area per dwelling unit shall not be less than 3,000 square feet.

e. For sites greater than four acres, the minimum site area per dwelling unit shall not be less than 2,700 square feet.

1-6.12 For properties zoned R-2 or R-3 but planned for medium, medium-low, or low density residential use, rezoning to a single-family residential zone district shall be pursued when the properties are vacant or are developed consistent with the planned use.

1-6.13 A building height of up to four-stories may be considered for skilled nursing, residential care, and congregate care uses within the area bound by Freeway 180 and E. Belmont, N. Helm, and N. Peach Avenues.

Goal

1-7 Establish and maintain safe, attractive and stable residential neighborhoods with compatible relationships between housing types and densities.

Policies and Implementation Measures

1-7.1 Apply the following design standards and guidelines to all development proposed within areas designated for low, medium-low or medium density residential use.

a. Arrange lot patterns and sizes to maintain compatibility with surrounding uses and improvements (either existing or planned), and to facilitate the development of adjacent parcels with similar lotting patterns.

b. Utilize guidelines (1) and (2), below, as advisory criteria in evaluating the compatibility of new residential development in areas designated for medium-low and medium density residential uses. Apply guideline (3), below, as a fixed standard for development within medium density residential designated areas:

c. Assurance that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and surrounding community, in accordance with adopted plans, policies, and development standards.

d. Compliance with other policies and development standards of the Plan which promote the compatible interface with other planned uses.

1-6.9 Residential planned developments may be appropriate for those sites that do not sufficiently meet the criteria for medium-high density residential use, but can utilize design flexibility to facilitate the desirable and compatible development of a difficult parcel without reducing the level of service provided by planned public facilities.

1-6.10 The following dwelling units per acre (gross area excluding major street right-of-way) and persons per household averages shall be used to project population holding capacity and demands upon public services:

TABLE 1-6.10: DWELLING UNITS PER ACRE AND PERSONS PER UNIT

Designation	Units/Acre	Persons/Unit
Rural	0.5	3.18
Low	1.5	3.18
Medium-Low	4.5	3.18
Medium	7.5	3.18
Medium-High	15.0	3.07
High	N/A	3.07

1-6.11 Apply the following density criteria (dwelling unit per square foot of net site area, exclusive of public rights-of-way) to special permits for multiple-family residential developments (more than one dwelling unit per lot), including those parcels already zoned R-2 or R-3 prior to adoption of the Plan.

a. The minimum parcel size necessary to develop more than one dwelling unit on a site is 7,500 square feet.

b. For sites not more than one acre in size, the minimum site area per dwelling unit shall not be less than 3,500 square feet.

(1) That a minimum of 12,500 square foot lot sizes (R-1-B zoning) or larger be required in the medium-low density residential planned areas adjacent to low density residential planned areas.

(2) That minimum lot sizes of 6,000 square feet (R-1 zoned conventional lots) or larger be developed elsewhere in medium-low density residential planned areas, except when approved as a clustered planned development.

(3) Reduced size nonclustered lots within the medium density residential designation shall be subject to a master planned development, in which nor more than 20% of the area is designed with reduced size non clustered lots.

c. Utilize landscape and design measures to make a positive contribution to the community's identity, provide variety, and avoid unsightly conditions (such as repetitive roof forms and roof mounted mechanical equipment). These measures should include enhanced landscaping along boundary and entry streets, architecturally designed perimeter walls, and variety of building placement and design.

1-7.2 The cluster planned development criteria and standards of Section 12-306-N-21 of the Fresno Municipal Code and the following design considerations shall be applied to new (and, where feasible, to expanded) multiple-family and cluster single-family residential developments through the special permits issuance and appeals process specified in Sections 12-405 and 12-406 of the Fresno Municipal Code.

a. Apply the Fresno Municipal Code requirements for usable open space.

b. The size of the proposed dwelling units, number of bedrooms, anticipated number of occupants and the site's proximity to public recreational facilities should be considered and active recreational facilities provided (such as garden areas, turfed play fields, hard surfaced game courts, recreation rooms, and swimming pools), as determined appropriate through the special permit process.

c. In order to promote attractive external appearances and appealing living environments, design measures should be utilized to avoid large scale, massive and repetitive "institutional" visual appearances, and to provide a more varied, small scale appearance suggestive of single family residential development.

The design measures should include variations of the building footprints with indentations, projections and offsets; variations in the exterior walls using a variety of materials and features such as balconies, bay windows, verandas and entryways; and varied roof forms with slopes, ridges and valleys suggestive of single-family residential structures.

An architectural theme shall be established for each development including visually enhancing architectural features and building materials (which shall be applied throughout the development, particularly where visible to street frontages and adjacent properties). Fences and walls along street frontages shall be designed to be architecturally compatible, aesthetically pleasing, and durable.

d. New development shall comply with the following design measures as well as any additional measures identified by the Police Department and Development Department (appealable in accordance with the Fresno Municipal Code) which promote controlled access and community surveillance of all common areas and facilities:

(1) Design pedestrian and vehicular entrances, walkways, parking areas, open spaces, common facilities, structures and fencing to inhibit uncontrolled access by nonresidents and facilitate surveillance by residents, property managers and law enforcement or security personnel.

(2) Provide fencing or walls of six (6) foot minimum height with gated pedestrian entrances (when walls or fences are not otherwise required by this Plan or the Fresno Municipal Code), in conjunction with the placement of structures to control pedestrian access.

(3) Vehicular access gates may be required for sites larger than one acre in size unless fully enclosed garage parking spaces are provided. Fully enclosed garages shall be provided for the required covered parking spaces on sites of one acre or less in size unless alternative design measures are approved to restrict access to parking areas by unauthorized nonresidents.

1-7.3 The following design guidelines shall be considered for application to all multiple-family residential development entitlements adjacent to land that is planned for single-family residential use. These measures are to be applied as appropriate through the special permits issuance and appeals process (Section 12-405 and 12-406 of the Fresno Municipal Code) in order to best serve the health, safety, and welfare of the community. These measures may be waived where the adjacent planned single-family residential land is developed with or approved for a nonresidential use:

a. Locate outdoor recreational areas, game courts, swimming pools, and solid waste collection areas on properties zoned for multiple-family residential uses away from single-family residential uses.

b. Separate parking areas, carports, garages, accessory structures, and access drives from abutting properties zoned or planned for single-family residential use with a landscaped setback 15 feet wide, and with a solid masonry wall six and one-half feet high along the property line.

c. Provide a 75-foot separation between multiple-family buildings greater than one story (20 feet) in height and property zoned or planned for single-family residential use.

d. Direct the orientation of second-story multiple-family windows away from adjacent single-family uses.

1-7.4 Implement a City-wide proactive program with funding source (such as a quarterly business tax charge per multi-family unit) to maintain an acceptable quality of life within residential rental property neighborhoods.

This program shall be defined and implemented in consultation with business and community interest groups (Chamber of Commerce, Rental Housing Association, Fresno Neighborhood Alliance and other neighborhood associations), and shall address: 1) proactive code enforcement; 2) crime prevention design review and consultation for existing development; and 3) participation in management training programs through industry or professional organizations such as the Rental Housing Association of Central California. Increases in such fees shall only be implemented after a public hearing has been held, with direct mail noticing to interested parties on file with the City of Fresno.

1-7.5 Pursue the implementation of City-wide fee for excessive calls for police service, to be charged to the owners of residential properties. This effort shall include advocating changes in State Legislation, if necessary, through state-wide municipal and law enforcement associations.

When implemented, these fees should be generally applied in accordance with guidelines as follows: 1) when the number of confirmed contact police calls exceeds three times the total number of dwelling units within the property during a calendar year. (for example: a five-plex times three chargeable calls equals fifteen calls per calendar year); 2) when the police calls are caused by persons creating a disturbance at their place of residence (except when an unlawful detainer action has been filed on those persons); and 3) the property owner shall be notified after the second police call to a residential dwelling unit during a calendar year. After it has been determined that the three events above have occurred, the owner shall be responsible for the full cost of all police calls as identified above. However, if an unlawful detainer action has been filed and diligently pursued against the tenant causing the disturbance, these calls will not be considered chargeable and will not be applied to the formula established above.

COMMERCIAL USES

This Community Plan is challenged by the need to define and give form to commercial development within its boundaries. Due to the community's complexity and its haphazard commercial development pattern this task will be difficult. The community contains a preponderance of service commercial and neighborhood retail uses located in either strip developments or older inefficiently designed shopping centers.

Commercial uses are not well distributed and do not represent the full spectrum of commercial activity. Important commercial uses are absent such as major department stores, a full service home improvement center, auto dealerships and service centers, theaters, service oriented office development and private medical facilities. The problems associated with a limited range of commercial activity are exacerbated by the lack of aesthetic appeal of much of the older commercial developments, thereby encouraging potential customers to shop outside of the community. Older commercial uses are generally over signed, developed without significant landscaping, fail to reflect prevalent design themes of nearby activities and do not provide for adequate buffers for abutting residential uses. Additionally, existing commercial activities are generally situated along the community's regionally important streets in a manner that significantly reduces the street's carrying capacity and renders public access inconvenient.

The Plan seeks to address these concerns by expanding the opportunities for the development of a full range of commercial uses including both retail activities and office development. It is also the Plan's intent to provide for a reasonable dispersal of neighborhood commercial uses throughout the planning area, to address the need for enhanced commercial design standards, and to establish policies to protect the main transportation arterials serving the community.

Retail commercial activities serving the community plan area will be concentrated within the East Kings Canyon Road corridor. These community commercial uses will be focused within a two and one-half mile length of East Kings Canyon road to be anchored at either end by rejuvenated commercial centers. This corridor, bolstered by landscaping and design standards, will help the community establish much of its character.

Large-scale regional office development will continue to be focused within the Central Area (Downtown). However, along the Freeway 180 corridor, (bounded on the north by Olive Avenue and on the south by Belmont Avenue), moderately intensive office development will be encouraged near major intersections and in proximity to planned freeway interchanges. New retail commercial activities would be permitted only where it can be demonstrated that planned street capacity is adequate to accommodate it.

Less intensive office uses, providing neighborhood and community services, may be accommodated along Clovis Avenue and along major streets within the community currently zoned for strip commercial development. These developments will also be subject to enhanced design to promote compatibility with surrounding uses. The effectiveness of the Plan's land use and development policies is also dependent upon continued application of the requirements and standards of the Fresno Municipal Code.

Finally, this Plan provides for the development of smaller neighborhood centers at appropriate major street intersections and within integrated planned developments to meet anticipated neighborhood demand. It also strives to preserve and enhance where possible, older thematic commercial areas such as Tulare Street, across from Roosevelt High School, Jensen Avenue in Calwa and the Butler/Orange commercial area.

Goal

1-8 Create an intensive community activity corridor by concentrating those commercial uses serving the entire Roosevelt Community Plan area along Kings Canyon Road between Chestnut and Sunnyside Avenues.

Policies and Implementation Measures

1-8.1 Concentrate community commercial uses within the Community's activity corridor area (Kings Canyon Road between Chestnut and Sunnyside Avenues).

1-8.2 Limit the designation of additional community commercial uses to sites that contribute to the function of the Kings Canyon Road activity corridor or to appropriate sites near Freeway 180, where determined to be consistent with public facility and service policies, and where appropriate to meet community-level commercial demand.

1-8.3 Establish a Boulevard Area (BA) Overlay District with a minimum 20-foot landscaped setback along Kings Canyon Road east of Chestnut Avenue to be implemented at the time of property development or major modification as defined by the Fresno Municipal Code.

1-8.4 Signs shall be architecturally compatible with, and complimentary to, the character of the development and land uses for which the signs advertise.

1-8.5 Allow C-3 zoned commercial uses (except auto dealers and meat jobbers), to primarily serve the Roosevelt Community within the community commercial designation of the activity corridor, subject to C-3 conditional zoning. A review and approval of a detailed development plan shall be required, as well as a determination that each use is consistent with the Plan's goals and policies.

1-8.6 Encourage the undergrounding of all above-ground utility lines along Kings Canyon Road, wherever possible.

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1-8.6 Encourage the undergrounding of all above-ground utility lines along Kings Canyon Road, wherever possible.

Policies and Implementation Measures

1-10.1 Require new commercial uses to be developed within planned, unified centers of not less than 2.5 acres in area, except for highway oriented service uses located at freeway on-or-off ramps or along designated areas of strip commercial development (Figure 1-10.1).

1-10.2 Distribute a limited amount of office, retail and service commercial development outside of the Kings Canyon Road commercial corridor, consistent with the demand factors and locational criteria identified as follows:

a. Limit neighborhood and community commercial unified shopping center uses to the intersection of two arterial streets or an arterial/expressway intersection. EXCEPTIONS: neighborhood commercial uses may be considered at arterial/collector street intersections; or when not more than five acres in size and included within a 50 acre or larger unified residential planned development.

b. Assure that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and the surrounding community in accordance with adopted plans, policies, and development standards.

c. Allow the location of day care centers outside of office designated areas on sites that have direct access to a major street and are specifically limited to child day care center use.

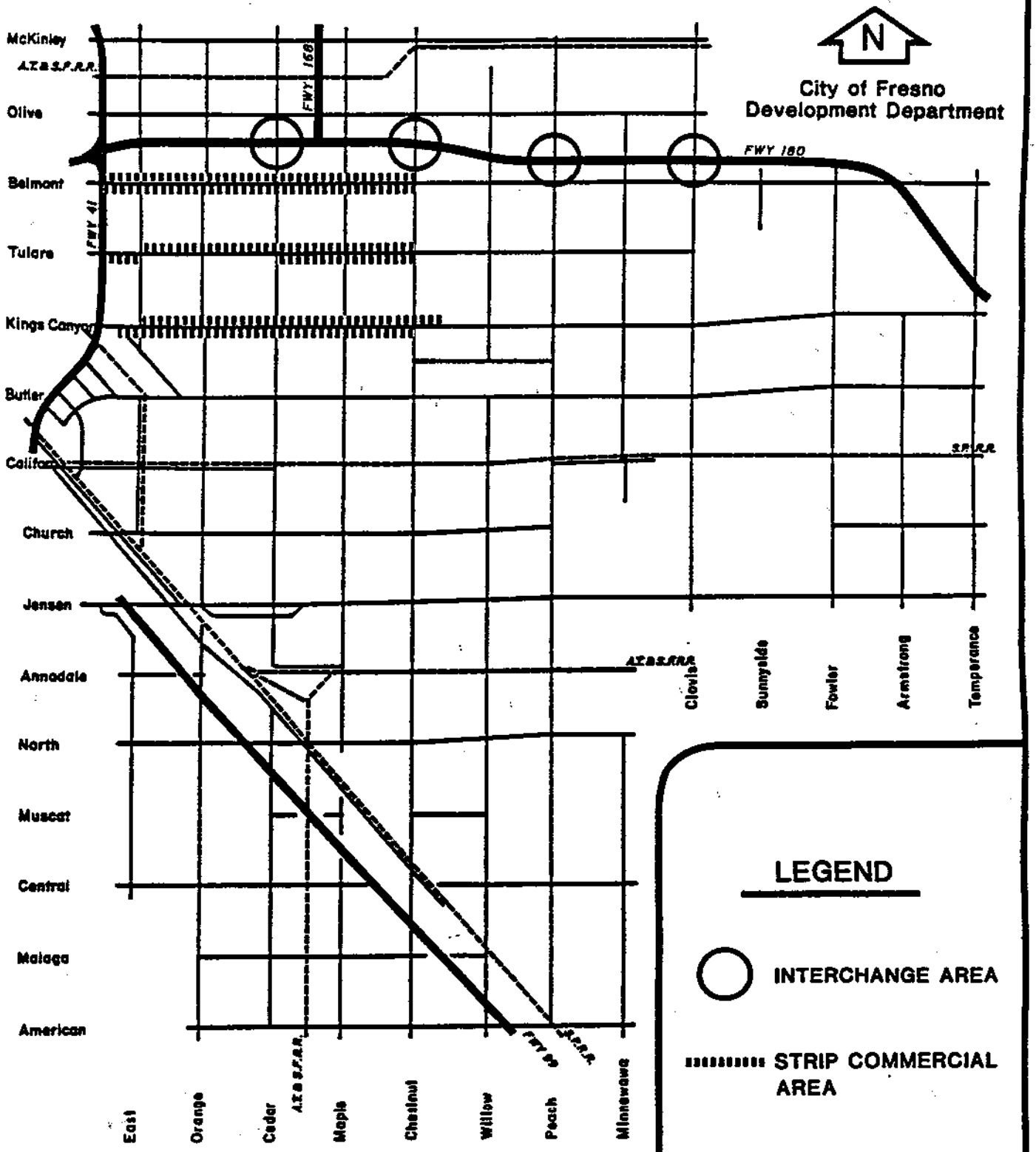
d. Locate new neighborhood commercial development away from planned schools.

1-10.3 Require the completion of a comprehensive traffic study for all proposed commercial plan amendments of five acres or more in size or in accordance with traffic study guidelines (including minimum project size) as may be established by the City of Fresno.

Figure 1-10.1

ROOSEVELT COMMUNITY PLAN UPDATE

FREEWAY INTERCHANGE & STRIP COMMERCIAL AREAS



1-10.4 Reconsider the amount and location of the commercial uses planned for the intersection of Church and Clovis Avenues, if commercial development of the northeast or northwest corners of this intersection does not occur by December 31, 1999.

Goal

1-11 Enhance the appearance and compatibility of existing and proposed commercial development.

Policies and Implementation Measures

1-11.1 Conduct an architectural and landscape review for all commercial/office developments to ensure design consistency and compatibility in scale, color, materials, design, and landscaping.

1-11.2 Apply the following property design standards to office, commercial and other nonresidential development entitlements adjacent to land that is zoned or planned for residential use. These standards are to be applied through the special permit issuance and appeals process (Sections 12-405 and 12-406 of the Fresno Municipal Code). They may be modified through the development entitlement process in order to best serve the Community's health, safety and welfare, if the Director of the Development Department, the Planning Commission or the City Council finds that appropriate architectural design, screening, noise attenuating and operational measures have been provided to adequately protect adjoining residential property. These standards may also be waived where the adjacent land is developed with a nonresidential use or the adjacent land has approved nonresidential development entitlements (zoning, special permit):

a. Where possible, loading and storage areas should not be located at the front of structures. In all cases, these areas shall be screened from view of adjoining property zoned or planned for residential uses by a combination of landscape planting and a solid masonry wall. All loading spaces shall be located not less than 150 feet from the boundary of any residential property; however, the proximity of loading areas may be reduced when adequate design and operational mitigation measures are approved to protect adjacent residential uses. All storage shall be within an enclosed structure.

b. Roof-mounted and detached mechanical equipment for commercial and office uses should be screened from view and acoustically baffled to prevent the noise level rating for the equipment from exceeding 55 Ldn measured at the nearest property line.

c. Provide a landscaped setback, at least 10 feet wide or wider (as required by the Fresno Municipal Code) and containing deciduous and evergreen trees, to be planted and maintained along the property line between all commercial or office uses and abutting properties zoned or planned for residential uses and along abutting local streets.

d. No commercial or office building shall be constructed within 50 feet of the property line of abutting properties zoned or planned for residential uses, unless alternative measures are approved in accordance with the above provisions.

1-11.3 Apply the following design standards to all office, commercial and other nonresidential development entitlements through the special permit issuance and appeal process (Sections 12-405 and 12-406 of the Fresno Municipal Code).

a. Provide wall or berm separations as follows:

(1) A masonry wall six and one-half (6½) feet in height shall be erected on or along the property line separating commercial and office uses from properties zoned or planned for residential uses (unless developed or approved for nonresidential use such as a church or public facility).

(2) To protect the integrity of adjacent residential areas, a masonry wall (or combination of masonry wall and earth berm) shall provide a continuous barrier three and one-half (3½) feet to six and one-half (6½) feet in height, and shall be erected on or along the setback line 10 to 20 feet from, and parallel with, the right-of-way line abutting local streets, as determined appropriate through the special permit process.

(3) Earth berms shall be planted with grass or ground cover and maintained by the property owner.

b. Within an area 100 feet wide abutting property zoned or planned for residential use, exterior area lighting for parking areas, carports, garages, access drives and loading areas for commercial and office uses shall be shielded to prevent line of sight visibility of the light source.

c. The design of exterior trash pads and similar accessory site elements shall be compatible with the architectural style of the main building and shall use complementary materials and colors.

d. Buildings shall have an attractive appearance on all sides, not just the front elevation. No monolithic walls shall be permitted. Implementation of design features such as the extension of the roof treatment around to the sides and back of the building, provision of pedestrian overhangs, and use of texture, relief and/or color will add interest to otherwise blank walls.

e. Front facade pedestrian walkways and protective overhangs shall be incorporated into site plans and building designs respectively.

1-11.4 Require the installation of Police Department call boxes in all new commercial developments five acres or larger.

1-11.5 Apply the following guidelines to proposals to convert residential properties along major streets to designated office or commercial uses:

a. Substantial compatibility with, and no adverse impact upon, adjacent properties can be demonstrated.

b. Satisfactory parking, vehicular access and site design measures can be demonstrated.

1-11.6 New commercial developments adjacent to an elevated freeway shall be required to have architecturally treated roofs and/or landscape screening.

1-11.7 Pursue the restoration and maintenance of the commercial small town main street characteristics of the following specific areas by establishing thematic design guidelines and improvement strategies to: 1) insure architectural and design compatibility; 2) preserve and enhance their unique character and commercial viability; and, 3) promote area-wide improvements with enhanced landscaping and new public facilities.

a. Roosevelt High School commercial area along East Tulare Street between South Eleventh Street and South Barton Avenue.

b. Calwa commercial area along East Jensen Avenue between South Ninth Street and South Roosevelt Avenue.

c. Butler/Orange commercial area along East Butler and South Orange Avenues bound by South Hazelwood Avenues, East Lyell Avenue, South Eighth Street and East Hamilton Avenue.

1-11.8 Implement the following standards and strategies to improve the appearance and compatibility of general/heavy commercial uses.

a. Establish private parking districts in areas of existing general commercial development to facilitate the provision of adequate off-street parking.

b. Support the formation of redevelopment plans encompassing Belmont Avenue between Chestnut and First Street, and Cedar Avenue between Belmont and McKinley Avenues.

c. Require the designation by the City's Parks and Recreation Department of a unified landscape theme for all areas designated for general/heavy commercial development.

d. Apply the conditional use permit findings and noticing procedures of the Fresno Municipal Code (Section 12-405-A) to all uses proposed within a C-6 "Heavy Commercial" Zone District and (ocated within 300 feet of a property that is planned or zoned for residential use; and apply all appropriate design and development measures necessary to assure that the use will not be detrimental to the public welfare or injurious to surrounding uses and improvements.

1-11.9 Identify and implement appropriate (economically feasible) incentives such as fee reduction or deferrals, permit assistance and economic development loans to rehabilitate and improve existing commercial development.

1-11.10 Pursue the establishment of an ordinance authorizing an annual review program and abatement procedure addressing commercial establishments which sell alcoholic beverages, where repeated incidents of a serious nature (such as, but not limited, to drug sales and/or use, prostitution, violent crimes) occur and are a threat to the public health, safety and welfare and are injurious to surrounding properties and their occupants. This review shall also consider chronic problems of public disturbances, drunkenness or other behavior of patrons or employees which may be harmful to nearby residents.

INDUSTRIAL USES

The Roosevelt Community Plan contains approximately one-third of the City of Fresno's total industrial land inventory dispersed in three dissimilar areas: 1) the larger, older, heavy industrial area located in the south and west portions of the Plan area 2) the smaller industrial area located in the area of Maple and Olive Avenues, 3) and a newer light industrial/business park located in the northeast, near the Fresno Air Terminal. This Plan recognizes the important role of these industrial areas in providing employment and the economic benefits to be realized from its further development. With approximately 2,800 acres of industrially planned and zoned land, the Plan area contains one of the largest concentrations of vacant industrial properties in the Metropolitan Area and potentially the best available transportation network in the entire San Joaquin Valley to support it.

The City has designated a substantial portion of the Plan area's industrial inventory for inclusion within its Enterprise Zone Program, in which businesses are offered state income tax reductions and other incentives designed to stimulate private investments and encourage the development of employment opportunities. The City has also developed and implemented near the Fresno Air Terminal, new "business park" standards applicable to light industrial uses and has facilitated the implementation of a number of assessment districts designed to extend public facilities at low costs to developing industrial areas.

However, industrial development is restrained by a lack of readily available land with the necessary services to support new industries. Vacant land, prime for industrial development and adjacent to either Freeway 99 or existing railroads, is not readily marketable either because of a lack of public facilities,

the presence of obsolete improvements or the lack of an inclination to develop. It is estimated that less than one-third of the planned industrial land inventory is immediately available or attractive for development.

In addition, a substantial portion of the older industrial developments in the areas of South Van Ness Avenue and Maple-Olive avenues suffer from blight, due to age, deferred maintenance and a lack of planning. These areas were built without landscaping or concern for the proximity of nearby sensitive uses. The problem is exacerbated by poorly maintained local streets serving both industrial and residential areas and increased illegal dumping, especially of old tires.

In response to these problems, the City will continue to promote its Enterprise Zone Program encouraging private market forces, where possible, to correct the situation. The Roosevelt Community Plan also advocates the development of industrial or business parks, particularly along the south side of Jensen Avenue near planned residential areas. The Plan continues to provide for a substantial inventory of vacant industrial property to meet the foreseeable market demand, and identifies new standards to both approve the appearance of redeveloping and new industrial areas and to protect nearby sensitive uses. The City will renew its effort to establish assessment districts necessary to extend public services such as new sewer, water, and drainage systems, and complete major streets.

It is essentially the goal of the City to concentrate industrial development along Freeway 99 and existing railroads so that the southwestern portion of the Plan area will act as an extension of the Freeway 41 land use corridor. This will provide jobs to the growing metropolitan population in a manner that minimizes long vehicle trips and facilitates the extension of mass transit services south of the City's Central Business District thereby reducing air pollution.

Goal

1-12 Provide sufficient and viable locations for light and heavy industrial development within the Roosevelt Community.

Policies and Implementation Measures

1-12.1 Facilitate new industrial development near the Fresno Air Terminal and south of Jensen Avenue between Minnewawa and Peach Avenues consistent with the uses and standards of the City's M-1-P Zone District.

1-12.2 Support industrial development on vacant properties located adjacent to existing railroads south of Jensen Avenue and along Freeway 99.

1-12.3 Prohibit the development of new residential uses in areas designated for industrial development and pursue a long-term strategy to convert non-conforming residential properties to industrial use.

Goal

1-13 Ensure that new industrial development is compatible with adjacent land uses and is not aesthetically or environmentally detrimental.

Policies and Implementation Measures

1-13.1 Industrial areas shall be designed such that industrial truck and vehicular traffic will not route through local residential streets.

1-13.2 Apply City M-1-P Zone District requirements and the following development standards to industrial development entitlements adjacent to properties zoned or planned for residential uses (except as may be modified by the Development Department in accordance with Roosevelt Plan policy 1-11.2):

a. On properties zoned for industrial manufacturing use, a landscaped setback 20 feet wide, containing deciduous and evergreen trees, shall be planted and maintained along the property line, between these properties zoned or planned for industrial manufacturing uses and any abutting properties zoned or planned for residential uses, and along the property line abutting local streets.

b. The following wall and berm treatment shall be required for industrial manufacturing uses:

(1) A solid masonry wall six and one-half (6½) feet in height shall be erected on, or along, the property line between properties zoned or planned for industrial manufacturing uses and properties zoned or planned for residential uses;

(2) A solid masonry wall, or any combination of solid masonry wall and earth berm, that provides a continuous barrier three and one-half (3½) feet in height, shall be erected on or along the setback line, 15 feet from, and parallel with, the right-of-way line of abutting local streets;

(3) Earth berms shall be planted with grass or ground cover and maintained by the property owner;

d. The provisions of the City Zoning Ordinance (applicable to an approved industrial manufacturing district) shall apply to outdoor advertising for industrial manufacturing uses.

e. Place loading docks and areas on the sides of industrial manufacturing buildings that face away from, or are not less than 150 feet from, adjacent residential property

f. Roof-mounted and detached mechanical equipment shall be screened from view and acoustically baffled to prevent the noise level of the equipment from exceeding 55 Ldn, measured at the nearest property line;

g. Within the area 75 feet wide and abutting property zoned or planned for residential use, exterior area lighting for industrial manufacturing buildings, parking areas, carports, garages, access drives, loading areas, and loading docks shall be shielded, to prevent line of sight visibility of the light source from abutting property zoned or planned for residential use.

Goal

1-14 Facilitate the timely provision of public facilities and services to all industrial areas in an equitable manner.

Policies and Implementation Measures

1-14.1 Support and encourage the establishment of a redevelopment district for the South Van Ness industrial area and Maple/Olive Avenue industrial area.

1-14.2 Establish a public improvements program (complete with specific timelines) for necessary improvements for the City's Enterprise Zone, encompassing the phased extension of water, sewer, and street improvements.

1-14.3 Promote the establishment of private assessment districts to cover the costs necessary for service extensions and maintenance costs for all industrial areas.

1-14.4 Pursue the establishment of a business license fee for all industrial areas City-wide to fund zoning enforcement costs, rubbish removal, and security training and enforcement programs.

1-14.5 Establish a landscape maintenance district for industrial areas in the Roosevelt Community.

OPEN SPACE, RECREATION, AND CONSERVATION

It is the purpose of this section to provide strategies to preserve and enhance the Plan area's open space resources, and to provide facilities to meet the Community's current and future recreation needs. This area is currently deficient in usable park space and recreation facilities. It falls below City averages for park area to population ratios and adopted City standards. This deficiency occurs throughout all categories; including City parks, support recreational facilities, multi-purpose trails, and private open space.

Open space planning is important not only because it can provide for the protection of sensitive environments such as flood zones and areas impacted by airport noise, but also because it provides for the residents psychological well-being by offering an opportunity for relaxation and a change of pace from daily tasks. Through good planning, both public and private open space resources can be organized to meet the Community's needs for hiking, jogging, organized sports, relaxation and recreational pursuits.

Specifically, this section establishes goals and policies designed to achieve a full range of park facilities, to promote the development of private and semi-public open spaces where appropriate, and to support the completion of a comprehensive network of hiking and equestrian trails. Plan policies advocate the creation of a 160-acre regional park along the plan area's southeastern fringe (west side of the Minnewawa alignment and south of Jensen Avenues), the establishment of several new community and neighborhood parks and the expansion of a number of existing recreational facilities. Expansion of the regional park to 320 acres, by adding 160 acres east of the Minnewawa alignment, may be considered as a part of the 1994 General Plan Update.

The Plan calls for the creation of both private and public open space areas, such as combined storm water run-off/recharge lakes, to be available for common use and linked together by a possible combination of trails and running water in the areas located south of the California Avenue alignment between Peach and Fowler Avenues. Multi-purpose trails and equestrian areas will also be established where feasible, along abandoned rail right-of-ways, canal banks and along major traffic corridors. Finally, the Plan recommends the development of a landscape master plan for public

area improvements. The master plan will enlarge upon the City's Central Area streetscape program by providing specific unifying design concepts for the Community's public parks, streets and open space areas.

Goal

1-15 Promote for the continuing development of a public park system to meet the Community's park and recreation needs at varying levels.

Policies and Implementation Measures

1-15.1 The public park system shall be classified as follows, to be developed in accordance with the standards specified in the City's Master Plan of Parks, Facilities, Recreation and Community Services:

Mini Parks (Pocket Parks) - Small (generally less than two acres) parks located near higher density development when adequate open space and recreational opportunities within the project area are not available.

School Grounds/Playfields - School sites comprise a large inventory of recreational open space areas providing recreational space for organized activities such as soccer, youth baseball, tennis, exercise, and gym areas.

Neighborhood Parks - Semi-active parks five to ten acres in an area designed to serve residents living within a one mile radius of the site or between 10,000 and 15,000 residents.

Community Parks - These parks service an area within a two to four mile radius of the site and serve a population of between 50,000 and 80,000 residents. They have lighted sport fields and specialized equipment not found in neighborhood parks. The community park is the nucleus of the park system, where members of the community congregate for area-wide functions or programs. At the heart of the park is the community center of 25,000 to 30,000 square feet, which provides at least the following facilities and services:

- Gymnasium (with showers and lockers)
- Multi-purpose room
- Meeting rooms
- Senior activity center
- Administrative offices
- Snack bar and kitchen facilities

Regional Parks - Regional parks are developed to serve residents living within each quadrant of the City. The park serves a population of approximately 100,000 residents with a size of generally 100 or more acres. The regional park offers nonprogrammed, nature-oriented recreational opportunities. Improvements include picnic shelters, hiking trails, lakes, streams, public gardens, and facilities not normally located in an urban setting.

Ponding Basins - The Fresno Metropolitan Flood Control District provides many open space opportunities through the public use of recharge facilities that the FMFCD maintains as open play fields. There are currently three neighborhood parks in the City located within basin areas, with several more large basins turfed by FMFCD. Because FMFCD has a continual funding source for obtaining new basins and has a good working relationship with the City, it is likely that basins will continue to provide important open space areas.

1-15.2 Pursue the implementation of the City's Master Plan for Public Parks and Recreation to achieve the following standards:

TABLE 1-15.2: RECOMMENDED CITY OF FRESNO PARK STANDARDS

Park Type	Acres/ 1,000	Size Range	Population Served	Service Area
Playfield/ Schoolground	----	1-2.5 ac.	3-5,000	1/4-1/2 mi
Neighborhood	0.75	5-10 ac.	10-15,000	1/2-1 mi
Community	0.25	15-20 ac.	50-80,000	2-4 mi
Regional	2.00	100+ ac.	100,000	1/2 hr. dr
Total	3.00			

1-15.3 Prioritize the development of new park sites to provide for, and give priority to, parks in substantially developed areas.

1-15.4 Negotiate with Caltrans (and other public agencies or private property owners) to develop remnant parcels along the freeway corridors and evaluate other underutilized parcels (such as the abandoned railroad spur track northwest of the Tulare Street and Cedar Avenue intersection) for potential mini-park sites or landscaped public areas.

1-15.5 Pursue the development of a 160-acre regional park (combining both passive and active recreation uses and centered around water features), to be located at the southwest corner of the Jensen Avenue and Minnewawa Avenue alignments. Consider designating an additional 160-acres of regional park use east of the Minnewawa Avenue alignment with the 1994 General Plan Update. No acquisition shall be pursued until a further evaluation of alternative sites is conducted by the 1994 General Plan Update and at least 75% of the site can be acquired from willing sellers.

1-15.6 Pursue the expansion of the Mosqueda Community Center westerly towards Maple Avenue.

1-15.7 Encourage the Fresno Metropolitan Flood Control District to landscape existing and future ponding basins and any designated recharge facilities for the aesthetic benefit of the community. At a minimum, the City shall advocate that the street frontage portion of all facilities be landscaped.

1-15.8 Establish joint use programs for park facilities and school playgrounds and playfields, in order to provide a wider range of recreation programs and maximize the efficient use, maintenance, and supervision of public facilities.

1-15.9 Promote safety, accessibility and compatibility between parks and adjacent residential areas through creative design, adequate maintenance, and enforcement of regulations regarding littering and drinking in public parks.

1-15.10 Require the installation of security lighting for parking, points of access, and building areas at all public recreation and park sites.

1-15.11 Pursue the development of a pocket park to the north of East Kings Canyon Road between Chestnut and Peach Avenues.

Goal

1-16 Establish a network of multi-use trails utilizing creeks, canal banks, utility power line easements, railroad rights-of-way, and highway and street corridors to maximize the community's recreational and open space resources.

Policies and Implementation Measures

1-16.1 Implement the goals, policies and standards of the City's Master Trails Plan and Multi-Purpose Trails Manual.

1-16.2 Establish an integrated effort among affected agencies to implement multi-purpose trails as identified in the Master Multi-Purpose Trails Manual and Plan, and supplemented by the following (Figure 1-16.2):

a. East McKenzie Avenue alignment between North Barton and North Clovis Avenues (bike trail).

b. Mill Ditch, located along McKinley Avenue, between Freeway 41 and Temperance Avenue (multi-purpose trail/canal bank).

c. Fancher Creek (Washington Colony and Central Canals) from Tulare and Temperance Avenues to Jensen and Chestnut Avenues (multi-purpose trail/canal bank).

d. East Ventura Avenue/East Kings Canyon Road from Cedar Avenue to Temperance Avenue (bike trail).

e. East Huntington Boulevard from Freeway 41 to Barton Avenue (bike trail).

f. Golden State Boulevard between California and North Avenues (bike trail).

g. East North Avenue from Golden State Boulevard to South Chestnut Avenue, then north on Chestnut Avenue to Jensen Avenue connecting with Fancher Creek (bike trail).

h. South Fowler Avenue from East Kings Canyon Road to East Belmont Avenue (bike trail).

i. East California Avenue from Railroad Avenue to South Willow Avenue (bike trail/railroad right-of-way), and from South Willow Avenue to South Temperance Avenue (multi-purpose/railroad right-of-way).

j. South Minnewawa Avenue between East Butler Avenue and Fancher Creek (equestrian).

k. Clovis Avenue from McKinley Avenue to Jensen Avenue (bike trail).

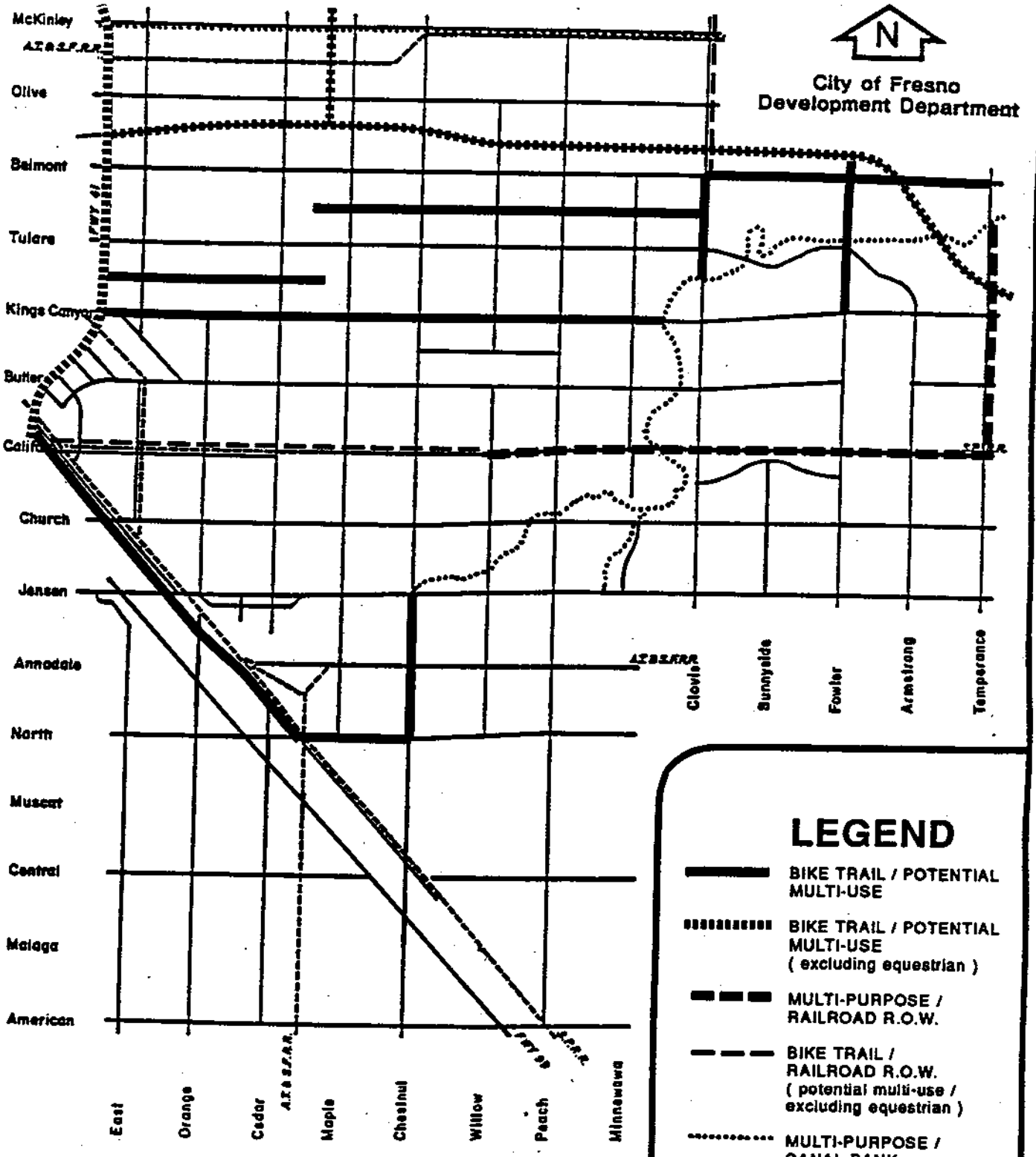
l. Adjacent to the south side of the Freeway 180 alignment between Freeway 41 and Temperance Avenues (bike trail/potential multi-use trail, excluding equestrian use).

m. Adjacent to the west side of the Freeway 168 alignment between Freeway 180 and McKinley Avenue (bike trail/potential multi-use trail, excluding equestrian use).

Figure 1-16.2

ROOSEVELT COMMUNITY PLAN UPDATE

TRAILS PLAN



1-16.3 Pursue the implementation of the master planned trails system as a requirement of property development, and pursue establishment of a trails development fee and cost reimbursement program.

1-16.4 Limit driveway crossings of multi-purpose trails to not more than two (2) per block (660-foot length) except where it is determined that there is no other feasible alternative.

1-16.5 For multi-purpose trails located adjacent to planned freeway routes, the City of Fresno's Parks and Recreation Department shall aggressively pursue state and federal funding for trail improvements.

1-16.6 Initiate efforts (in cooperation with the Fresno Irrigation District, railroads and other owners of utility easements and rights-of-way) to identify and implement measures to prevent inappropriate vehicular access to these rights-of-way.

Goal

1-17 Promote the private development of semi-public, multi-purpose, open space areas to serve neighborhood needs and to enhance the community's aesthetic character.

Policies and Implementation Measures

1-17.1 Within the area bounded by Jensen Avenue on the south, Peach Avenue on the west, California Avenue on the north, and Temperance Avenue on the east, all single-family residential developments shall designate and develop at least five (5) percent of their total project area (excluding major street right-of-way) for public or private common open space (such as, lakes combining storm water management and groundwater recharge functions, community recreation, and passive open space). Alternatively, an equivalent amount of area may be provided in conjunction with approved public or quasi-public open space within 1/4-mile of the development.

1-17.2 Development within the above area shall contribute to the construction of landscaped median islands at least 370-feet in length on collector streets at identified intersections with either Jensen or Clovis Avenues in accordance with Policy 1-5.2.

1-17.3 Single-family residential developments located outside of the above-noted boundaries, and exceeding eight (8) acres in total project area, shall designate and develop at least five (5) percent of the total project area for open space use, or contribute an equivalent amount in accordance with policy 1-7.1 of this Plan.

1-17.4 Require that all proposed water features within the Roosevelt Community either be connected with other planned water features or the nearest major street by a public trail (or landscaped pedestrian route along a local street).

1-17.5 Apply the 25 percent open space requirement of the Fresno Municipal Code to multiple-family residential development and single-family residential planned unit developments.

Goal

1-18 Provide for the development of a comprehensive equestrian trail system within the Roosevelt Community Planning Area that is free from conflict with vehicular traffic.

Policies and Implementation Measures

1-18.1 Designated equestrian trails shall be developed to minimum widths of 25 feet with a nine (9) foot clearance above ground, and shall be constructed of a suitable composite surface that can accommodate both equestrian and pedestrian traffic.

1-18.2 Provide for the development of staging (horse trailer parking) and watering areas periodically along each trail.

1-18.3 Provide for the development of equestrian trails along the California Avenue alignment between Willow and Temperance Avenues.

1-18.4 Provide for the development of an equestrian trail along South Minnewawa Avenue between Butler Avenue and the Central Canal.

1-18.5 Prior to the development of any equestrian trail, equestrian interests should secure and make available for public use no less than 20 percent of the total costs of the project.

Goal

1-19 Provide for the development of master landscape plans along all major streets within the Roosevelt Community Planning Area.

Policies and Implementation Measure

1-19.1 The City of Fresno Parks and Recreation Department shall establish landscape master plans that set forth the type of trees, shrubs and ground covers to be utilized along each major street.

1-19.2 Streetscapes within the Roosevelt Planning Area shall match those adopted for those major streets originating in the City's Central Area.

1-19.3 New development shall be responsible for the implementation and maintenance of that portion of the master landscaped area contiguous to the new project's boundaries.

1-19.4 Where new streets (either major or local) are developed adjacent to any canal, railroad right-of-way, or public easement, the development project shall be responsible for landscaping (with irrigation system) adjacent to the canal, railroad, or easement.

1-19.5 Master landscape plans shall be compatible with landscape programs established for parks and other public facilities located along each major street within the plan area.

Goal

1-20 Provide for the protection of sensitive or valuable open space areas

Policies and Implementation Measures

1-20.1 Implement the policies and programs established by the Fresno Air Terminal Environs Area Specific plan.

1-20.2 Prohibit the development of new structures within designated 100 year flood plains.

1-20.3 Support efforts to conserve prime agricultural land outside of the planned urban area and preserve those areas which contain valued natural resources and wildlife habitat or are necessary to protect the public's health, safety and welfare.

1-20.4 The area planned for agricultural use along the west side of South Temperance Avenue, south of East Butler Avenue, may be considered for a residential use through a plan amendment that establishes mitigation measures that will assure compatibility with adjacent agricultural processing uses.

PUBLIC AND QUASI-PUBLIC USES

Within the Roosevelt Community Plan area there are several large public and quasi-public uses located in close proximity to residential areas. Such uses include government owned and operated facilities such as the Valley Medical Center, the Internal Revenue Service Data Processing Center (IRS), the Fresno Fairgrounds, and Roosevelt High School. These facilities have the potential to generate significant levels of noise, traffic, air pollution and other neighborhood nuisances. Local and major street system has been modified, neighborhood circulation systems disrupted and residential areas disturbed as a direct result of the lack of long-term planning for these uses.

Substantial traffic congestion has occurred by the routing of non-residential traffic through established residential areas. Neighborhoods around Roosevelt High, the Valley Medical Facility, and the Fresno County Fairgrounds have been impacted by the failure to provide sufficient on-site parking to meet needs. In the case of the Fairgrounds, new activities have generated increased noise impacts on surrounding uses.

Therefore, the public and quasi-public designation has been applied, and policies identified to enhance the compatibility of these uses with nearby residential areas, to provide for more efficient use of these facilities and to promote the coordination of future changes or improvements with public service capacities.

It is also the intent of this Plan to provide for the long-term reduction of some existing uses at each site by supporting their eventual relocation. It is desirable to facilitate the relocation of the Valley Medical Center to the City's Central Area. In addition, the more intensive activities currently conducted at the racing, tractor pulls, and other high noise and high attendance Fairgrounds are suggested for relocation to a new site located south of the planning area. This new site could serve auto activities that are constrained by adjacent residential uses.

Goal

1-21 Guide the location and intensity of public and quasi-public uses to support the planned urban form, relationship of land uses, and community identity.

<u>Policies and Implementation Measures</u>

1-21.1 Consider the relocation of Valley Medical Center to the City's Central Area.

1-21.2 Recommend that all new County government activities relocated to the Fresno County complex at Cedar Avenue and Kings Canyon Road provide sufficient on-site parking facilities to meet both employee and clientele needs.

1-21.3 Support the formation of a joint City/County/Fair Board Committee to study the following issues:

a. Establish a 20-year relocation plan (including selection of a new facility south of Jensen Avenue) for those more intensive activities such as concerts, auto racing, tractor pulls, and other similar noise generating events.

b. Consider joint use of the existing Fairgrounds facility with City Parks and Recreation to meet the Community's active recreation needs.

1-21.4 Encourage public schools and require private schools to locate and develop with vehicular access directly onto a major street; orient pedestrian access to a controlled major street intersection or the quarter-mile point along a major street; provide on-site passenger loading areas and left-turn lanes at vehicular access points; participate in the signalization of intersections and crossings when determined to be necessary by the Public Works Department and the School District collectively through the Community School Safety Program.

1-21.5 Designate public and private school sites in excess of three acres in area for public use, to allow land use compatibility considerations and provision of adequate public services.

1-21.6 Provide for the potential expansion of the Fresno Pacific College Campus subject to implementation of an approved master plan that will provide adequate vehicular access and on-site parking compatible with the surrounding residential neighborhood. Interim conversion of residential structures to educational or school related use shall comply with applicable policies of this plan, including policy 1-11.5.

1-21.7 Locate places of worship in accordance with the criteria applicable to new multiple family residential uses (Roosevelt Plan policies 1-6.8 a,c, and d). Sites in excess of three acres are to be designated for quasi-public use or office commercial. Landscaped buffers and building setbacks shall be designed adjacent to residential property and along street frontages to promote compatibility with surrounding residential uses.

1-21.8 The Internal Revenue Service Regional Processing Center is important to the Roosevelt Community Plan Area and Metropolitan Area; therefore, a high priority shall be given to promoting its retention and expansion while maintaining compatibility with the surrounding neighborhood.

CIRCULATION

This chapter describes the Plan area's circulation systems, identifies deficiencies, and provides strategies to expand and improve their overall function. It is divided into three sections. The street circulation section, addresses the area's major street system, and presents remedial actions. The transit section discusses alternative transportation modes such as bus service and the long-term potential for mass transit. The bikeways section, identifies a number of opportunities to enhance the Community's bike routes through the establishment of a series of bike lanes and paths looping throughout the Community.

STREET CIRCULATION

In the City of Fresno, major streets are normally planned to form a grid pattern with alternating collector and arterial streets spaced at half-mile intervals. This pattern is relieved on an irregular basis by expressways and/or Freeways 99, 41, 168, and 180. In the Roosevelt Planning area, this grid system is incomplete and often interrupted by natural or man made obstacles. The area's proposed Freeways 180 and 168, while potentially funded, have yet to be constructed. Portions of major collector streets such as California, Armstrong, Butler, and Church have yet to be fully planned or, as in the case of Willow, Minnewawa and Butler, are intentionally interrupted to avoid carrying excessive traffic volumes. Some arterials, such as Peach and Fowler, continue to exist along major portions of their alignments as rural thoroughfares providing inadequate service to through traffic. Further complicating matters is the fact that where the street system has been completed and developed as planned, its function has been severely impacted by the location of major public facilities. Cedar Avenue and Kings Canyon Road serve the Valley Medical Center and numerous Fresno County offices. Peach Avenue and Kings Canyon Road serve the Internal Revenue Services Data Processing Center. The County Fairgrounds are located along Kings Canyon Road. Roosevelt High School, as well as several elementary schools, front on to Tulare Avenue.

Increased traffic congestion on major streets such as Kings Canyon Road and Cedar Avenues, has contributed to the exposure of established neighborhoods to traffic nuisances as motorists seek alternative routes. The 1978 Roosevelt Community Plan recognized the existence of this situation and proposed the development of a comprehensive series of circulation improvements designed to correct the situation. Unfortunately, those improvements, including the construction of Freeways 180 and 168, and the completion of the planned grid major street system have not been completed.

This plan incorporates many of the same strategies. It urges the construction of Highway 180 as a six-lane freeway from Freeway 41 to Clovis Avenue by the year 1996, and extended, at not less than expressway standards, to Temperance Avenue by the year 2005. The street grid circulation system is to be expanded in the undeveloped portions of the Community with the addition of Church, Butler, Armstrong, Minnewawa, and Sunnyside Avenues. Peach Avenue will be widened to four-lanes with the condition that impacts on existing trees, homes, and schools along its route be minimized. Minnewawa Avenue south of Butler Avenue will not cross Fancher Creek, but will be designated as a collector street between Jensen and Church Avenues. The scenic designations of Butler Avenue, Minnewawa Avenue, and Huntington Boulevard would remain in force.

Goal

2-1 Establish a complete and continuous street system that provides for the safe and efficient movement of people and goods throughout the plan area.

Policies and Implementation Measures

2-1.1 Implement a public street circulation system (Figure 2-1.1), classified as follows, with development to occur in accordance with adopted Public Works standards:

Freeway Multi-lane divided roadways servicing through traffic, with no access to abutting property and no at-grade intersections.

Expressways Four- to six-lane divided roadways primarily servicing through traffic, with no direct access to abutting property and at-grade intersections located at half-mile intervals.

Super Arterial Four- to six-lane divided roadways, with one full median break permitted between the half mile points, with limited access to abutting properties, and with a primary purpose of moving traffic in and out of the plan area.

Arterials Four- to six-lane divided roadways, with limited access to abutting properties, and with the primary purpose of moving traffic in and out of the metropolitan area.

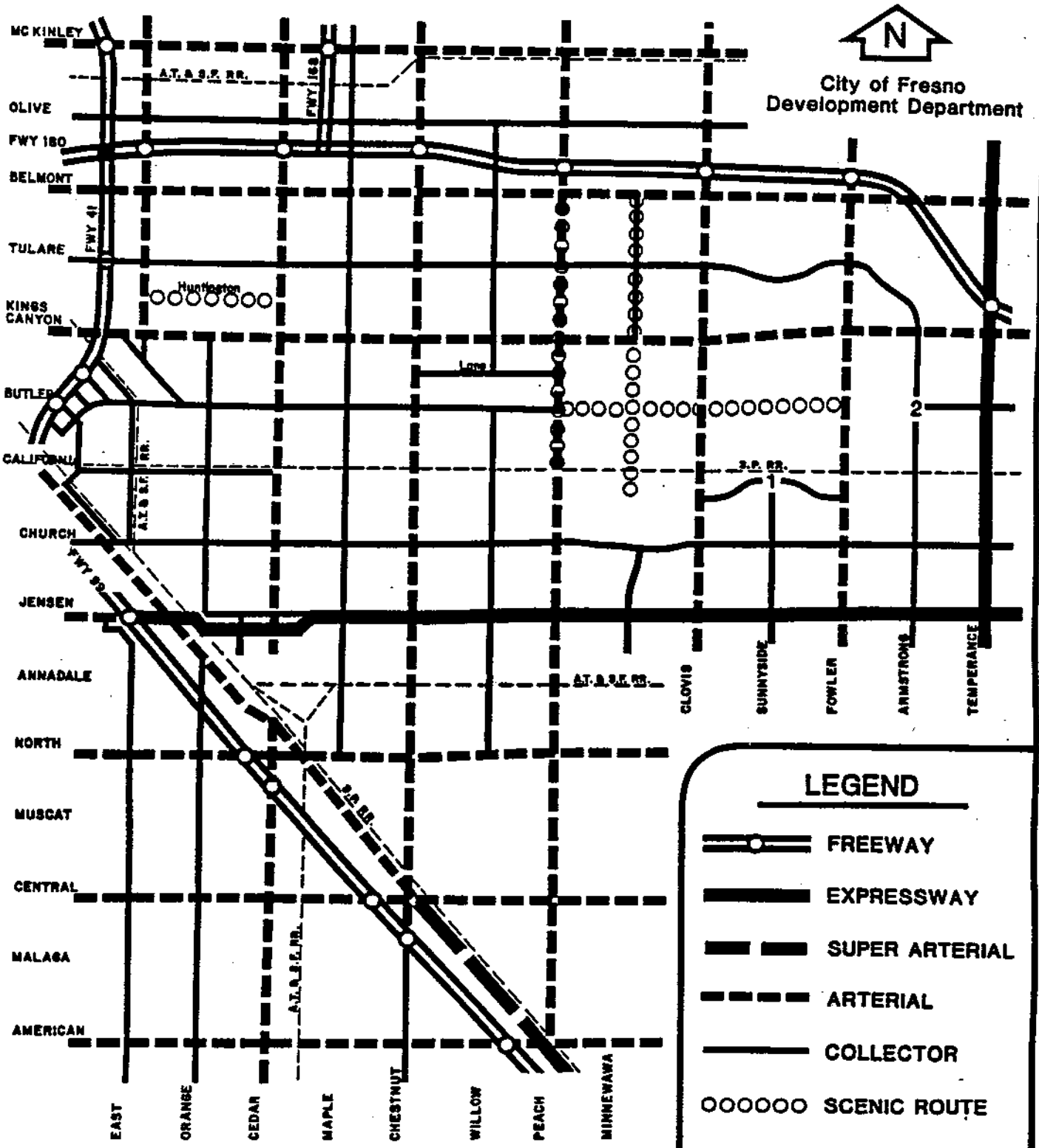
Collectors Two- to four-lane undivided roadways, with the primary function of connecting local streets with arterials and providing access to abutting properties.

Locals - Two- to three-lane roadways designed to provide direct access to properties while discouraging through traffic between major streets.

Figure 2-1.1

ROOSEVELT COMMUNITY PLAN UPDATE

CIRCULATION PLAN



2-1.2 Allow a level of service "D" (moderate congestion at peak traffic periods) as the acceptable level of traffic congestion on public streets within the Roosevelt Community Plan area.

2-1.3 Prevent streets and intersections from degrading below level of service "D" (as defined in a Level of Service Ordinance) due to new development or expansion of existing development through implementation of a three-part mitigation program: adjacent right-of-way dedication, access improvements, and an area-wide impact fee.

2-1.4 Consider the construction of grade separations for all expressway intersections unable to meet an "E" level of service.

2-1.5 Identify and pursue strategies (including reprioritization of the Measure "C" Local Transportation Fund Expenditure Plan) to develop Freeway 180, on the alignment identified by the Community Plan Circulation Map, from Freeway 41 to Clovis Avenue or Fowler Avenue in a single-phase by 1996.

2-1.6 Enforce all regulations in the City's power, and pursue all other opportunities, to reduce conflicts between railroad operations and vehicular circulation.

2-1.7 Space and synchronize traffic signals to minimize vehicular delay, particularly on East Kings Canyon Road.

2-1.8 Full median breaks on arterials may be provided only at quarter-, half-, and mile intersections, to be developed with left turn lanes at each break.

2-1.9 Provide additional right-of-way and pavement width to accommodate turn lanes at intersections in accordance with Department of Public Works standards.

Goal

2-2 Preserve major street system capacity by minimizing the impacts of high traffic generating uses, and accommodate regional traffic movement through the community while minimizing impacts upon sensitive land uses.

Policies and Implementation Measures

2-2.1 Design access to collectors and arterials from commercial and office uses to minimize traffic disruption.

2-2.2 Retail commercial development at the intersection of an expressway and a major street shall gain left-turn access from the major street at about one-eighth (1/8) of a mile, and right-turn entrance and exit not less than one-sixteenth (1/16) of a mile, from the intersection. Signalized access shall be located no closer than a quarter of a mile from an expressway, except as modified by a specific traffic study or Environmental Impact Report.

2-2.3 Prohibit the approval of additional commercial development on expressways beyond that already planned, in order to protect that classification of streets (important for a metropolitan-wide traffic carrying role).

2-2.4 The City shall continue to examine the need to install left-turn signal phases at major street intersections (such as First and Tulare Streets), and shall prioritize their installation when warranted and when funds are available for such installations.

2-2.5 Limit designated truck routes to arterials and expressways specifically signed for that purpose, or to collector and local industrial streets which directly service planned industrial areas.

2-2.6 Locate truck access to commercial property at the maximum practical distance from adjacent or nearby residential properties.

2-2.7 Apply mitigation measures to lessen the effect of major street traffic noise on adjacent residential property for all new residential uses (pursuant to the Noise Element of the City of Fresno General Plan; Title 24 of the California Administrative Code; and Section 12-224 of the Fresno Municipal Code, the Expressway Overlay District); and pursue the application of such measures for existing residential property to the extent feasible.

2-2.8 New single-family residential lots shall not be allowed to front on a major street unless it can be satisfactorily demonstrated that no feasible alternative means of access can be provided to the property. Evaluation of alternative means of access shall include the consideration of frontage roads, backup treatment, and substantial redesign of the subdivision proposal.

2-2.9 Require the completion of a comprehensive traffic study for each new shopping center in accordance with policy 1-10.3.

Goal

2-3 Establish and maintain a street system that is compatible with planned uses, creates a positive community image, and contributes to the Community's enhanced quality of life.

Policies and Implementation Measures

2-3.1 Design major street alignments and transportation improvements to adequately distribute traffic while minimizing excessive noise impacts upon adjacent uses.

2-3.2 Locate and design multiple-family residential, commercial, office and industrial development to avoid increasing traffic levels on local residential streets.

2-3.3 Where two classified streets (e.g., arterial and collector) form a "T" intersection, a local street shall not form the fourth leg of the intersection unless required to provide access to large developments.

2-3.4 Design local street systems to minimize through traffic movements and avoid excessive street lengths to discourage speeding.

2-3.5 Establish integrated local street systems within larger areas (40 acres or greater size) planned for medium or medium-low density residential uses consistent with the following design objectives:

a. Strive to provide access to as many boundary major streets as possible in a manner that maintains land use and traffic compatibility, discourages through traffic, and avoids excessive traffic volumes (more than 600 vehicle trips per day) and speeds (greater than 25 miles per hour).

b. Design local street alignments to facilitate pedestrian access to schools and parks; and promote safe, aesthetically-pleasing neighborhoods by utilizing sidewalks with park strips (of sufficient width to accommodate street trees) along both sides of local streets (except cul-de-sacs) serving densities of four dwelling units per acre or greater. Alternative sidewalk patterns without park strips may be considered subject to the design and implementation of an acceptable street landscape plan.

2-3.6 Assure the provision and maintenance of landscaping on both sides of, and in the median of, arterial streets and on both sides of collector and local streets (including the mouths of local streets where they intersect with major streets).

2-3.7 Enhance the scenic boulevard nature of Butler Avenue and address the safety hazard to Ayer School by discouraging high-speed through traffic. To accomplish this: 1) immediately synchronize traffic lights to maximize flow on Kings Canyon Road; 2) construct Freeway 180 through to Clovis Avenue by 1996; and 3) immediately install stop signs on Butler at Villa Avenue and Minnewawa Avenue intersections.

2-3.8 Apply the Expressway Area (EA) Overlay District to Jensen and Temperance Avenues.

2-3.9 Require the provision of a minimum 20-foot landscaped area from the curb line along all expressways at the time of development or major modification (as defined by the Fresno Municipal Code). An open, architecturally designed fence or solid wall shall be provided, as required through the special permit process, to restrict unsafe pedestrian access to the expressway. Apply a 15-foot (or larger) boulevard area setback to all other major streets as identified by Roosevelt Plan policy 1-5.8.

2-3.10 Pursue implementation of a landscape improvement program to install landscaping along those portions of the expressways where the street frontage has already been developed without landscaping.

2-3.11 Designate Minnewawa Avenue (which shall not cross Fancher Creek) as a scenic street to be developed with a 50-foot (measured from the right-of-way line) landscaped setback between Fancher Creek and Kings Canyon Road; and with a 20-foot landscaped setback between Church and Jensen Avenues and also between Kings Canyon Road and Belmont Avenue.

2-3.12 Designate Huntington Boulevard (between First Street and Cedar Avenue), Butler Avenue (between Peach and Fowler Avenues), Peach Avenue (between the California Avenue alignment and Belmont Avenue) and Minnewawa Avenue (between Central Canal and Belmont Avenue) as scenic routes, and preserve existing trees along these rights-of-way where possible.

TRANSIT

Due to the metropolitan area's relatively modest density of residential development and the lack of sufficiently concentrated multiple employment centers, the automobile remains the primary vehicle of transportation. However, the City of Fresno's Transit Department strives to maximize bus service throughout the Metropolitan Area via the established grid system of major streets. To increase use of public transportation in the future, the City will strive to implement land use strategies and transit systems enhancements within the Plan Area such as the following: 1) planning for land use patterns compatible with public transportation; 2) increasing the frequency of bus services along major transportation routes as funding permits; 3) establishing a transfer station at an appropriate location to improve accessibility and, 4) establishing express bus service along Freeway 180 supported by park and ride programs.

Goal

2-4 Develop a street system and land use policies that support public transportation, thereby reducing traffic congestion and improving air quality.

<u>Policies and Implementation Measures</u>

2-4.1 Provide bus turnouts along expressways, arterials, and collectors where appropriate.

2-4.2 Require new development to install indented curbs for bus turnouts, bus shelters, and other transit-related public improvements, where appropriate.

2-4.3 Develop park-and-ride lots at appropriate locations to support public transit and car pooling.

2-4.4 Develop one or more transfer stations to focus transit services within the Plan area.

2-4.5 Encourage the Fresno County Transportation Authority and the Council of Fresno County of Governments to consider the feasibility of constructing a mass transit system in the Freeway 180 and 168 corridors.

2-4.6 Pursue the implementation of increased frequency of bus service along arterial streets with funding from Measure "C", state transportation funds, and local impact fees from new development.

2-4.7 Pursue implementation of express bus service along Freeway I80 (upon its construction) supported by a park and ride program.

BIKEWAYS

The Roosevelt Community Plan Area possesses a mixture of characteristics that enhance and detract from bikeways. A positive aspect is the older, often spacious, character of much of the area that offers pleasant bicycling. The established portion of the Plan Area was built with a grid street system, enabling bicyclists to use local streets rather than the more heavily-traveled classified streets.

Negative aspects that hinder bikeway development include high vehicular traffic volumes, inadequate or varied street right-of-way/widths and the absence of standard street improvements. Bikeways also suffer from inconsistent land use patterns on many of the major streets. For example, single-family residential land uses are interspersed with commercial land uses along Ventura Avenue. Single family residential land uses are not required to make provisions for extensive off-street parking similar to the requirements for commercial land uses. Implementation of a bike lane along Ventura Avenue, would almost certainly require the exclusion of on-street parking resulting in an inconvenience to the single family residences.

In order to provide a continuous and well integrated bikeway system linking open spaces and major public uses, the Roosevelt Community Plan directs the implementation of bikeways along all newly constructed major streets. These bikeways are to be implemented primarily as bike lanes along the outside edges of the street pavement. Where an additional ten-feet of street width is not provided, this will necessitate the prohibition of on-street parking. However, it must be recognized that future increases in traffic volumes and congestion due to increasing urbanization or over-intensified development of major street intersections could generate competing demands for use of available street width.

The different physical and operational characteristics of bicycles and automobiles make it important that some sort of consideration be made when they operate in close proximity to each other. This consideration is called a bikeway, which is the generic term for the following kinds of bicycle facilities:

- <u>Bikepaths</u> have their own right-of-way and are developed exclusively for bicycle travel and are entirely separate from streets and highways.

- Bike lanes are an on-street bikeway in which separate automobile and bicycle travel lanes are designated visually by signs and street markings.

- Bike routes are a system of streets with signs denoting them as a Bike Route, warning motorists to anticipate bicycles on these streets and to indicate to bicyclists a desirable routing because of low traffic volumes or continuity to activity centers.

Goal

2-5 Provide a continuous and easily accessible bikeway system within the Roosevelt Community Plan area.

Policies and Implementation Measures

2-5.1 Develop a continuous bikeway system, as identified by Figure 2-5.1, that provides linkages between bikeway components and access to major traffic generators such as commercial centers, schools, recreational areas, and major public facilities.

2-5.2 Provide geographical coverage of the Roosevelt Community Plan area with a bikeway system developed generally at half-mile intervals.

2-5.3 Support the designation and implementation of bikeways along Freeways 41, 180, and 168.

2-5.4 Require that bikeway construction be secured as a condition of approval of new development adjacent to designated bikeways.

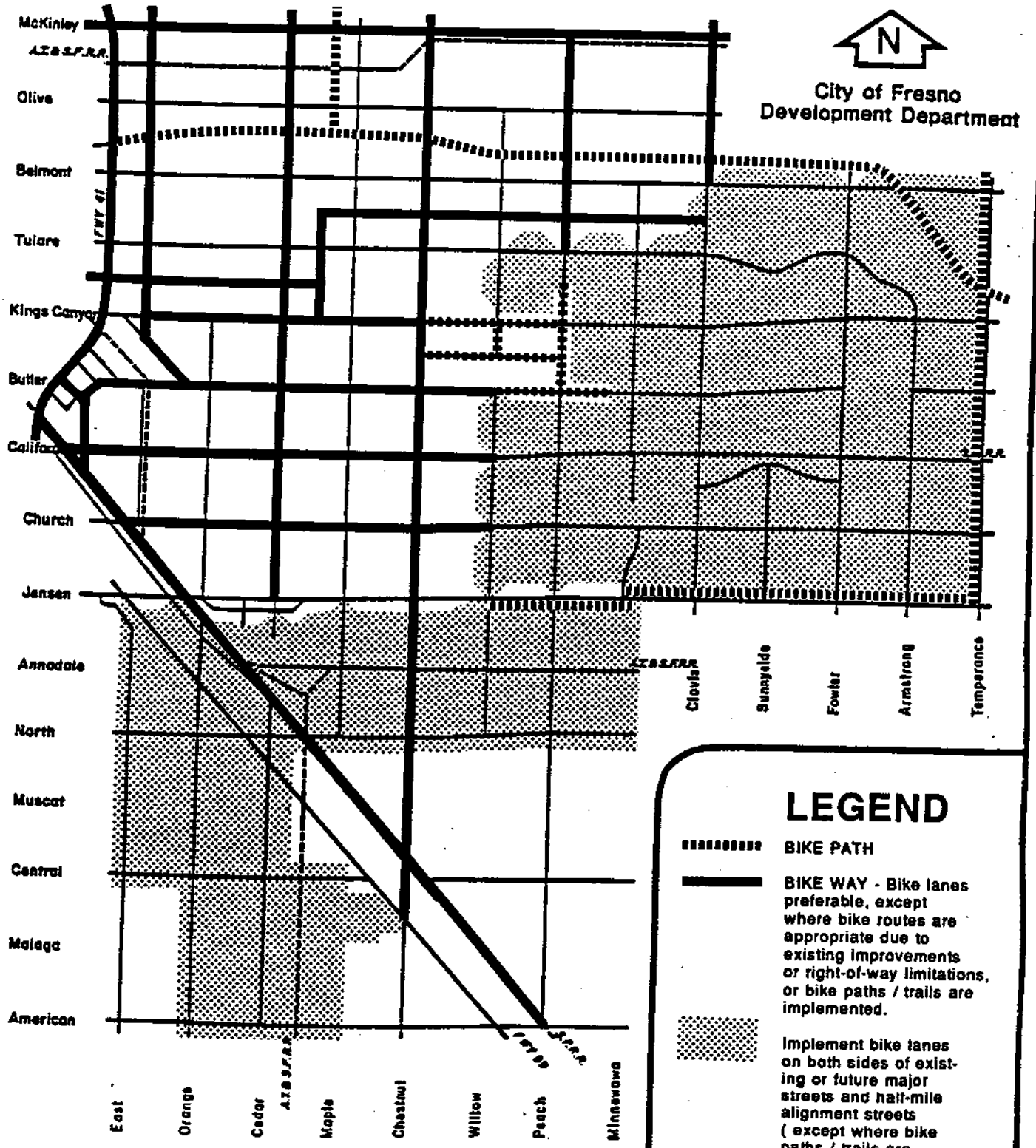
2-5.5 Provide not less than ten (10) feet of street width to implement bike lanes for designated bikeways, unless impractical due to previous street improvements; and provide adequate easement and improvements to implement separate bikepaths where designated by the bikeways plan.

2-5.6 Prohibit parking on all major streets where these streets are planned for bike lanes and adequate street width is not available to accommodate both a parking lane and a bicycle lane.

Figure 2-5.1

ROOSEVELT COMMUNITY PLAN UPDATE

BIKEWAYS PLAN



Goal

2-6 Maintain bicycle facilities so that they are safe and secure, and facilitate the linkages between cycling and other modes of transportation.

Policies and Implementation Measures

2-6.1 Incorporate bicycle locking racks at transportation facilities such as transit transfer stations or park and ride lots.

2-6.2 Provide sweeping and other necessary maintenance to clear bikeways of dirt, glass, gravel, and other debris.

2-6.3 Initiate a program to install safe drainage grates along designated routes.

2-6.4 Provide adequate lighting for routes and bicycle rack areas.

2-6.5 Adapt busses with bicycle carrying racks if feasible.

2-6.6 Require the installation of bicycle locking racks for all public and quasi-public uses which must provide at least 20 parking spaces.

2-6.7 Encourage the inclusion of bicycle locking facilities in large multiple-family developments.

NEIGHBORHOOD RESTORATION AND HOUSING

This chapter addresses the Plan Area's critical need for neighborhood stabilization and the protection of its valuable inventory of single-family residences. The neighborhood restoration subsection identifies five existing neighborhood areas that need particular attention and presents policies to address identified concerns. The housing subsection presents strategies and policies that support the development and preservation of a full range of residential opportunities within the Community.

The 1990/91 Housing Quality Survey identified the Plan Area's inventory of existing housing as being in generally good condition. However, the oldest neighborhoods, along the western one-third of the Plan Area have a higher proportion of substandard structures (10 to 19.5 %) compared to the remainder of the Plan Area (7.5 to .5%). Although structural conditions remain generally acceptable, some neighborhoods suffer from a negative image caused by poor property maintenance and unsightly conditions. An indication of this problem was also provided by the 90/91 survey, which identified 80 percent of the observed zoning and property maintenance violations as occurring in the western one-third of the Plan Area.

NEIGHBORHOOD RESTORATION

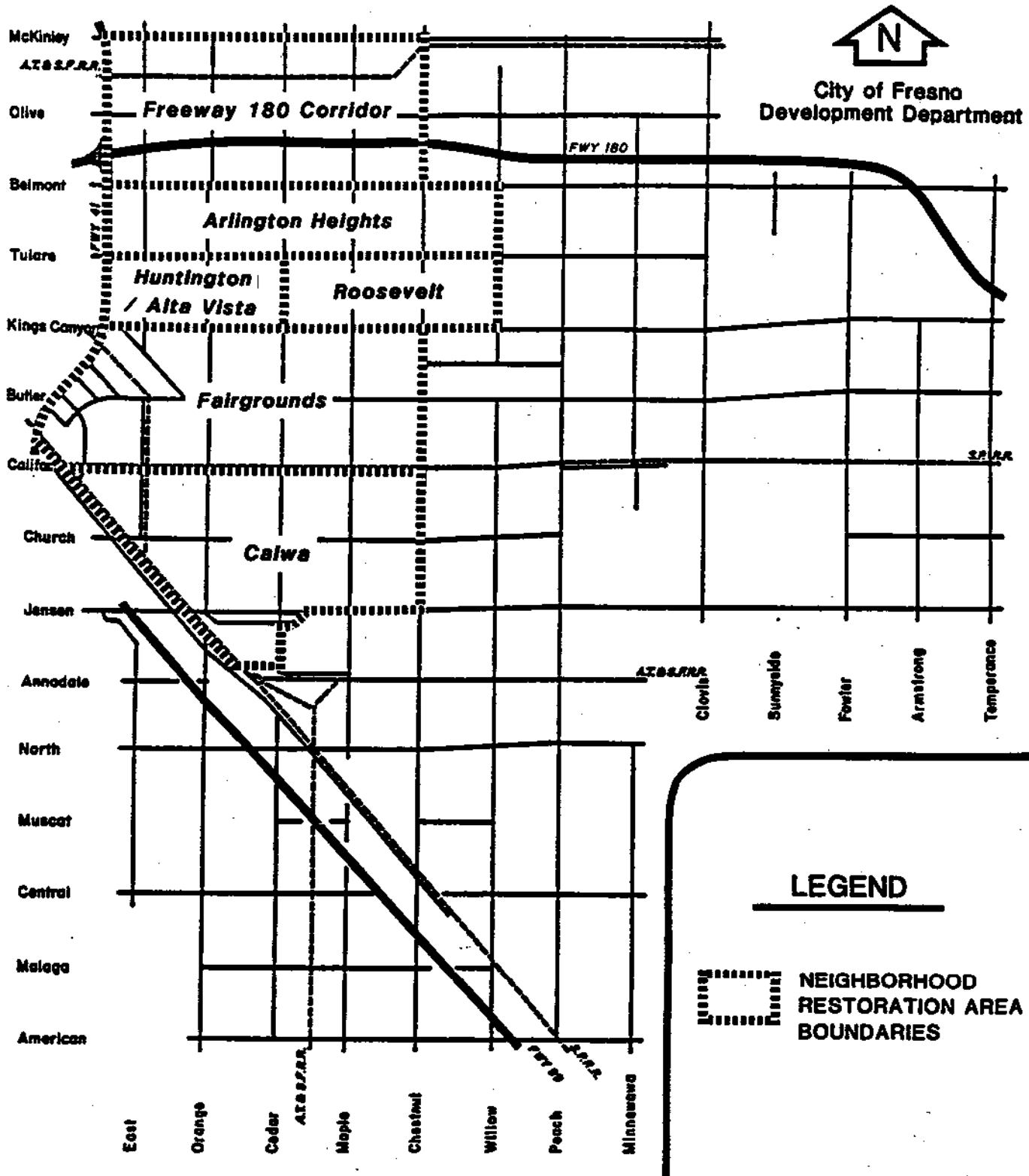
Several established neighborhoods within the Plan Area have undergone substantial change during the past 20 years. These neighborhoods contain a large proportion of the most valuable component of the Metropolitan Area's housing resources in the form of affordable single-family residences. Unfortunately, the continued viability of this housing is being jeopardized by conflicting commercial and industrial development, and multiple-family residential development that is too often distinguished by its poor design, inattentive management and deferred maintenance. These neighborhoods are experiencing congestion, increased crime rates, school overcrowding, and aging street, sewer, and water systems. In many cases, these areas lack open space comparable to more recently developed neighborhoods due to the addition of portable classrooms to school sites, the absence of City parks and the lack of stormwater drainage improvements (including landscaped ponding basis). In certain areas, such as the Yosemite School and Calwa neighborhoods, public sewer and water facilities do not extend to all parcels, lotting patterns are fragmented and conflicting development patterns have been allowed to occur.

Six particular neighborhood areas have been identified by (Figure 3-1.1). They are as follows:

Figure 3-1.1

ROOSEVELT COMMUNITY PLAN UPDATE

NEIGHBORHOOD RESTORATION AREAS



(1) The Freeway 180 Corridor area (including all of the Yosemite School Specific Plan area), is bounded by Freeway 41 and McKinley, Chestnut and Belmont Avenues. It is an area of fragmented parcelization, older declining single-family residences and newer, lower quality, multiple family development. It is characterized by high crime rates, increasing problems associated with land use conflicts, the lack of modern public infrastructure and older poorly maintained strip commercial development.

(2) The Huntington Boulevard/Alta Vista area, is bounded by First Street and Tulare, Cedar and Ventura Avenues, is a relatively well maintained, older, single-family area characterized by a number of historically significant features and homes. The Huntington Boulevard median island has been preserved as one of the Community's few remaining street car remnants. Its stately homes and mature landscaping give it a character seldom equaled within the Metropolitan Area.

(3) The Fairgrounds area is bounded by Ventura and Chestnut Avenues, the California Avenue alignment and the Roosevelt Community Plan's western boundary. It is characterized by extensive land use conflicts associated with the proximity of planned and unplanned industrial development, the Fairgrounds, the Valley Medical Center and strip commercial development along Ventura Avenue. It is impacted by noise generated by the Fairgrounds as well as industrial uses, by circulation problems associated with the area's public and quasi-public uses, and by the growing incompatibility of new multiple-family residential development within established single-family neighborhoods.

(4) The Calwa area is an older neighborhood bounded by the California alignment on the north, Chestnut Avenue on the east, the Southern Pacific Railroad on the west, and existing industrial development on the south. Developed primarily within the County, it is only partially incorporated into the City. It is characterized by fragmented groups of single-family residences, numerous illegal garage conversions, old farm labor housing and small poorly maintained apartment complexes. It is impacted by the presence of a number of smaller, dispersed industrial operations and the lack of modern public facilities. Its problems are similar to the Freeway Corridor, and include school overcrowding, land use conflicts between single-family and multiple-family developments, and a rising crime rate.

(5) The Roosevelt High School area is bounded by Kings Canyon Road and Cedar, Belmont, and Willow Avenues. It is similar to the Fairground Area, in that its residential environment has been adversely impacted by its proximity to the Valley Medical Center, the Fairgrounds, and Roosevelt High School. Its grid street system allows non-residential traffic through residential areas, the overflow of parking from nearby government facilities onto adjacent residential streets and the encroachment of commercial activities into established single-family areas. Land use compatibility, the presence of large areas of poor quality high density residential uses, rising crime rates and encroaching strip commercial development have combined to seriously threaten the stability of this neighborhood.

(6) The Arlington Heights area (named after the original subdivision east of First Street), is bounded by First Street, Tulare Street, Belmont Avenue, and extends east to Willow Avenue. It is characterized by well maintained single-family homes on quiet tree-lined streets, but is threatened by incompatible multiple-family residential zoning and heavy strip commercial development. Application of a zoning implementation program is critically important to establish R-1 single-family residential zoning consistent with the predominant uses in this neighborhood.

This sub-section provides policies to enhance the stability of these neighborhoods and to preserve their unique character through participation in programs to construct public improvements, reduce crime, and improve neighborhood appearances.

Goal

3-1 Enhance and stabilize established portions of the Roosevelt Community Plan Area by implementing restoration and maintenance programs that focus upon the attributes and problems of specific neighborhoods.

Policies and Implementation Measures

3-1.1 Identify the Freeway 180 Corridor, Huntington Boulevard/Alta Vista, Fairgrounds, Calwa, Roosevelt High and Arlington Heights areas (Figure 3-1.1) for conservation; and establish specific plans for neighborhood areas, including (but not limited to) Calwa, Belmont Avenue, and the Freeway 180 Corridor, as prioritized in consultation with the Citizens Plan Implementation Committee, to implement detailed strategies addressing unique issues and problems.

3-1.2 Prohibit the development of new multiple family residential uses inconsistent with the Plan, except when approved by the Planning Commission/City Council as authorized by the Local Planning Ordinance (Article 6, Chapter 12 of the Fresno Municipal Code), and when findings are made that the use can adequately be accommodated by public facilities, that it will not be detrimental to the public welfare, and that it will not be injurious to surrounding uses and improvements; and execute a rezoning implementation program (as prioritized by the Citizens Plan Implementation Committee) to assure that all vacant or single-family residential developed parcels (that are planned for low, medium-low, or medium density residential use) are also rezoned consistent with the planned use.

3-1.3 Establish viable redevelopment areas through the City's Redevelopment Agency, consistent with Article 6 of the City-County Memorandum of Understanding, to eradicate physical, social, and economic blight; and utilize fast-track methods, to the extent feasible, to identify redevelopment study areas including (but not limited to) the Calwa, Freeway 180 Corridor, Fairgrounds, and Roosevelt High Areas; as prioritized in consultation with the Plan Implementation Committee.

3-1.4 Pursue the establishment of a historic district encompassing the entire Huntington Boulevard/Alta Vista area.

3-1.5 Implement measures to restrict access to public alleys, including vacation of alleys as public rights-of-ways where possible, and to interrupt excessively long local streets, implementing traffic diversion measures where possible.

3-1.6 Support the termination of Millbrook Avenue at the new Freeway 180, with the provision of a pedestrian overcrossing.

3-1.7 Establish, as noted in Policy 1-11.7, small town main street programs for the existing commercial areas located along Tulare Avenue and Cedar Avenue, East Jensen Avenue at Cedar Avenue, and East Butler Avenue at Orange Avenue.

3-1.8 Support cooperative City/County efforts to relocate all, or portions of, the Valley Medical Center, County government operations, and the County Fairgrounds to appropriate sites with the City's Central Area or within planned industrial areas south of Jensen Avenue.

3-1.9 Focus particular effort to establish and maintain neighborhood watch programs and implement a proactive zoning code enforcement program.

3-1.10 Require periodic inspections or certificates of compliance to assure conformance with applicable building and zoning codes and development requirements for all multi-family residences in accordance with Policy 1-7.4.

3-1.11 Advocate for coordinated use of City and County Community Development Block Grant (CDBG) and general fund public works money to be used in a comprehensive local infrastructure repair and rebuilding program. This program should include a comprehensive needs assessment and prioritization of projects. Support the formation of City and County amortized improvement districts for streets, curbs, and gutters; and support the formation of FMFCD drainage assessment district(s) in the City and County areas to provide for the development of modern drainage facilities and new neighborhood parks within the Roosevelt Community.

3-1.12 Pursue the application of the Exterior Building Maintenance Ordinance (including removal of graffiti) to both occupied and vacant multiple-family residential and non-residential buildings to reduce the blighting effect upon neighborhoods caused by poorly maintained buildings.

3-1.13 Actively solicit the participation of community groups and organizations (such as Tree Fresno, service clubs, and philanthropic institutions) to contribute resources and expertise in a concerted effort to improve and maintain established neighborhoods.

HOUSING

The Plan area contains the most complete range of housing choices and opportunities within the Fresno-Clovis Metropolitan Area. While new construction during the 1980's emphasized infill development of lower-cost, higher-density multiple-family residences, many tranquil single-family residential neighborhoods remain. These neighborhoods provide an invaluable resource of well-maintained, lower-cost housing. This Community Plan Update supports the conservation of this asset while endorsing metropolitan wide strategies to meet present and future housing needs.

Goal

3-2 Establish a community with a complete range of residential types, styles and values to meet the housing needs of a diverse population in a manner that will support the long-term stability and desirability of its neighborhoods.

Policies and Implementation Measures

3-2.1 Provide and monitor a proportionate amount of the metropolitan area need for both rental and owner-occupied housing at affordable prices for low, moderate and median income households through the distribution of residential density designations within the Plan Area, the utilization of planned development designs and density averaging, and diligent efforts to implement programs and policies of the General Plan Housing Element.

3-2.2 Provide for the development of a diversity of housing styles throughout the Plan Area to accommodate different socioeconomic levels, family types, and sizes while maintaining compatibility with established neighborhoods through the following measures:

a. Evaluate each residential development proposal with respect to the attainment of housing goals and policies.

b. Review residential lot sizes and dwelling unit densities to provide a diversity of housing types appropriately distributed within the plan area.

3-2.3 Utilize incentives (such as express permit processing/ fast tracking, subsidized or deferred development fees and improvement districts) to stimulate rehabilitation of existing structures and construction of new dwellings in established areas, to be compatible with existing and planned neighborhood characteristics.

3-2.4 Implement development design standards and maintenance programs to provide increased resident security and safety.

3-2.5 Support efforts by the rental housing industry to allow property owners to enforce reasonable persons per household limits within a rental dwelling units (particularly in existing multi-family developments which have inadequate on-site open space).

3-2.6 Provide public facility improvements (consistent with City standards and policies and the needs and desires of area residents), with priority given supporting the restoration and maintenance of older neighborhoods.

3-2.7 Pursue the utilization of "linkage" fees to facilitate the development of low and moderate income housing in conjunction with the peripheral development of residential, commercial and industrial uses which are outside of the City's Enterprise Zones or are not immediately accessible (more than ½ mile) from the City's designated Enterprise Program Eligible Areas (economically distressed areas).

PUBLIC FACILITIES AND SERVICES

It is a fundamental goal of the City of Fresno to assure that adequate public facilities and services are provided to support a healthy and functional urban community. To achieve this goal the City may act as the direct provider, a participating agency, or indirect contributor through its urban planning guidelines and development policies. Those public facilities and services most immediately impacted by urban development and land use planning decisions include street circulation systems, public water supply, sewage collection and treatment, solid waste disposal, storm water drainage, public transportation, schools, law enforcement and fire protection.

Fresno County provides a wide range of country-wide services to residents of the Roosevelt Community Plan area; both to those who live in the City of Fresno and in the unincorporated areas. These services and facilities are an integral part of the Community fabric. Examples of direct services to the residents of the Community are those provided by two branch libraries, Mosqueda Center and Sunnyside, the Sheriff's Department and the Farm and Home Advisor.

Among the country-wide services available to the community, two include Justice and Health services. Justice System services include the District Attorney, Public Defender, Probation Department, Juvenile Hall and the Court systems, Municipal and Superior Courts. The major health services are provided by the Health Department and Valley Medical Center, a regional medical facility. Residents of the Roosevelt Community receive an estimated 22% to 25% of all medical services provided by Valley Medical Center.

The services most frequently provided by the County to the residents of the Roosevelt Community may be those provided by the Social Services Department. These services are provided to the residents of the Fresno Metropolitan and Roosevelt Community Plan Areas to a somewhat greater extent their 72% and 16% respective proportions of the County's total population. Based upon the information from the Social Services Department and published in the County's Greater Avenues for Independence (GAIN) Plan, approximately 84% of all persons receiving public assistance in the County lived in zip codes in the Fresno Metropolitan area and more than 30% of all persons receiving public assistance lived in zip codes in the Roosevelt Community Plan area. The single largest concentration of persons receiving public assistance in one zip code was located in the Roosevelt Community Plan area, and was almost 20% of all persons receiving public assistance within the County.

During the past decade, the Roosevelt Community Plan Area has experienced substantial population growth with increased demands upon incomplete, inadequate or antiquated public facilities. A considerable amount of additional urban development can now be expected with the construction of the long-anticipated Fowler Sewer Trunk and eastern extension of Freeway 180. However, the Area's arterial and collector street system does not now have sufficient capacity to accommodate substantial traffic increases. Its historically reliable groundwater resource has been jeopardized by contamination from infiltrating agricultural and industrial chemicals reducing the City's ability to provide an adequate supply of water for domestic and fire suppression purposes. The area's storm water drainage system is incomplete and will not adequately serve additional infill development. Public schools have become overcrowded requiring year-round attendance schedules, addition of portable classrooms and extensive busing.

It is the intent of this section of the Plan to establish policies and strategies designed to meet present and future service and facility needs in the face of increasing demands and potentially limited resources. These policies reflect the City's overall objective to maximize the efficient use of services and facilities by supporting planned development and managed growth.

The expansion of sewer collection systems, including the Fowler Sewer Trunk, will be designed to accommodate development within designated urban growth boundaries. Public water supplies will continue to be provided by expanding the City's production and distribution system consisting of groundwater wells and transmission grid mains. Increased demand and contamination constraints will be addressed by expanding groundwater recharge and constructing well-head treatment facilities. Water management strategies will continue to utilize surface water supplies for recharge purposes, implement water conservation measures and diligently test to detect for changes in water quality. Implementation strategies will promote efforts to complete curb, gutter, drainage pipelines and detention basins to provide adequate storm water disposal in existing neighborhoods. Plan designations and policies will support the provision of additional school sites where necessary to accommodate an increasing student population. Achievement of law enforcement and fire protection objectives will be pursued through measures to reduce exposure, enhance detection and facilitate quick responses to calls for service.

SEWAGE TREATMENT

Sewage treatment will continue to be provided by the City operated regional wastewater treatment facility. This plant presently operates at its rated average daily capacity and on occasion approaches or exceeds its design capacity. The plant must be

expanded to accommodate planned growth within the Community as well as throughout the Metropolitan Area. A major plant expansion program is scheduled for completion during the next three years. During this period, capacity enhancing modifications will be made to the existing facilities to accommodate sewage flow increases. Development of package or sub-regional treatment plants are not recommended due to the potential for degradation of the groundwater aquifer serving the Metropolitan Area and the high cost of treatment at the tertiary level, wastewater reuse, and trunk sewers.

Goal

4-1 Assure the provision of adequate sewage treatment and disposal by utilizing the City of Fresno's regional wastewater treatment plant for all existing and new development within the Roosevelt Community Plan area.

Policies and Implementation Measures

4-1.1 Provide increased wastewater treatment plant capacity in a timely manner to facilitate planned urban development within the Roosevelt Community Plan Area.

4-1.2 Implement cost effective and environmentally beneficial operational and management measures to maximize the efficiency of the regional wastewater treatment facility (such as monitored industrial pretreatment programs, computerized flow modeling, peak flow reducing measures, and water conservation measures to reduce wastewater generation).

4-1.3 Monitor wastewater treatment plant flows to the extent feasible, and consider the sewer treatment impacts of land use plan changes when evaluating plan amendment proposals.

4-1.4 Require "ability to serve" findings prior to the approval of rezoning special permits, subdivisions and parcel maps.

4-1.5 Oppose the use of septic systems, "package" treatment plants (except for industrial pretreatment) or other nonregional sewage treatment and disposal systems within the Roosevelt Community Plan Area and its groundwater influence area, if these wastewater treatment modalities would result in discharges which could result in groundwater degradation.

SANITARY SEWERS

Wastewater collection within the plan area is provided by a network of sewer mains which connect to sewer trunk lines. The precise capacity of existing trunk lines to accommodate additional urban development cannot be defined without accurate computerized flow monitoring information. However, it is generally acknowledged that they are approaching their capacity limits. It is expected that completion of the Fowler Sewer Trunk by October 1992, will accommodate full development of the southern and eastern growth portions of the plan area, if these wastewater treatment modalities would result in discharges which could result in groundwater degradation.

Goal

4-2 Assure the provision of an adequate sewer trunk line and collector main capacities to serve existing and planned urban development within the Roosevelt Community Plan area.

Policies and Implementation Measures

4-2.1 Pursue the immediate construction of the Fowler Sewer Trunk Line with capacity to serve planned urban development and existing land uses not presently connected to the public sewer system.

4-2.2 Pursue the enlargement or extension of the sewage collection system where necessary to serve planned urban development, particularly in the planned industrial areas where development has been inhibited by the lack of sewer availability.

4-2.3 Upon completion of the Fowler Sewer Trunk Line, pursue the mandatory abatement of existing septic systems and connection to the public sewage collection and disposal system.

4-2.4 Pursue implementation, if feasible, of a sewage flow monitoring system and a computerized flow modeling program to determine the availability of sewage collection system capacities to serve planned urban development. When available, this information shall be considered in the evaluation of plan amendment applications.

4-2.5 Require that a finding be made by the Public Works Department that adequate sewer services can be provided to serve each proposed development prior to the approval of rezonings, special permits, tract maps, and parcel maps.

PUBLIC WATER SUPPLY

The Fresno Metropolitan Area is expected to continue relying upon groundwater obtained through deep wells and high volume pump stations, to provide water for domestic consumption and fire protection. However, the decline of groundwater levels (due to increased consumption by a growing urban community, together with continued drought conditions), and the increased levels of contaminants, threaten the traditionally high quality of the City's public water system. Groundwater entering the Roosevelt Community Plan area has been particularly susceptible to contamination due to the upgradient proximity of industrial and agricultural activities. The aquifer underlying the Fresno Metropolitan Area is an irreplaceable natural facility which stores, conveys and purifies groundwater.

A comprehensive strategy, including conservation, expanded recharge, well-head treatment, and increased water distribution is being developed, expanded, and implemented to continue providing a reliable supply and acceptable quality of water from this aquifer. A considerable amount of additional public investment to expand and maintain the City's water production and distribution system will be necessary over the next several decades.

Initial studies have been prepared examining options such as the conveyance, storage, and treatment of surface water for direct consumption. The City is presently pursuing the initiation of a Fresno/Clovis Metropolitan Water Resource Management Plan. This study will provide a comprehensive analysis of existing water supply systems, groundwater characteristics, consumption projections, and alternative water supply and management strategies.

Goal

4-3 Ensure the continued provision of an adequate supply of potable water to serve all urban development within the planned urban area.

Policies and Implementation Measures

4-3.1 Require that a specific finding be made by the City Public Utilities Director and Fire Chief to document that an adequate supply of clean potable water can be provided to serve the domestic and fire suppression needs of each proposed development prior to approval of rezonings, special permits, tract maps, and parcel maps.

4-3.2 Pursue the implementation, if feasible, of a computerized production, distribution and demand flow program to predict and verify the service characteristics of the City's public water supply system.

4-3.3 Ensure that conditions of approval are implemented with each urban development proposal, to assure that the necessary potable water production and supply facilities are in place prior to issuance of a building permit.

4-3.4 Obtain adequately sized water well sites to accommodate well-head treatment facilities, regardless of the initial water quality test results and implement a well-head treatment facility charge for all new development.

4-3.5 Locate, design, construct, operate and maintain water well pump and well-head treatment installations which meet drinking water standards and are compatible with the surrounding uses. Landscaping, together with walls or screened fencing shall be used, as necessary, to promote aesthetic compatibility with residential, office, commercial, public or open space uses.

4-3.6 Implement water conservation programs that will result in decreased per capita water consumption.

4-3.7 Determine the optimum location of water recharge basins to maximize water recharge capacity and develop a system of recharge basins cooperatively with the Fresno Metropolitan Flood Control District, Fresno Irrigation District, and the City Water Division. Implement recharge facilities fees.

4-3.8 Require the proper construction and monitoring of facilities using or storing hazardous materials in accordance with state and federal regulations to prevent contamination.

4-3.9 Implement measures to reduce water consumption such as drought-tolerant landscape design and low water use plumbing fixture standards.

STORM DRAINAGE

Storm drainage facilities within the Roosevelt Community Plan Area will continue to be provided by the Fresno Metropolitan Flood Control District. The FMFCD has developed or proposes to develop a total of 27 ponding basins in the area. Storm water flows to each basin will be accommodated by a system of surface drainage and storm drains as planned by FMFCD. Fees and project requirements will be set by FMFCD in accordance with the Flood Control Master Plan, which is an adopted element of the Fresno General Plan.

Goal

4-4 Ensure the provision of adequate storm drainage facilities to protect residents and property within the plan area from flooding caused by storm water runoff.

Policies and Mitigation Measures

4-4.1 Coordinate with the Fresno Metropolitan Flood Control District to determine the optimum location for siting ponding basins.

4-4.2 Utilize, where possible, Fresno Metropolitan Flood Control ponding basins for groundwater recharge.

4-4.3 Develop each permanent ponding basin facility located within or near residential areas, to maximize the potential for recreational use compatible with storm water ponding and groundwater recharge functions.

4-4.4 Encourage implementation of urban runoff management practices by the Fresno Metropolitan Flood Control District, as identified in their National Urban Run-Off Program Project Report, to assure that groundwater quality will not be adversely affected by storm water ponding and recharge activities.

FIRE PROTECTION

The City has achieved a "Class 2" fire insurance rating because of its excellent fire protection operations and water service system. This rating results in lower fire insurance premiums for City residents.

In order to ensure the continuation of this rating, the City has established guidelines setting the permanent service area of fire stations at a two-mile "running" distance. Moreover, to reflect the effects of congestion on local streets, it is the City's intent to provide a five-minute average response time for structure fires.

Goal

4-5 Provide a sufficient level of fire protection to maintain the City's Class 2 fire insurance rating.

Policies and Implementation Measures

4-5.1 Provide additional fire stations (Nos. 15 and 19), in accordance with the Urban Growth Management program, to serve developing areas.

4-5.2 Provide for an average response time of not more than five minutes for all emergency requests for service within the Community Planning area.

4-5.3 Assure that adequate water supplies and hydrants are available for fire suppression within all existing urban areas as well as newly developing areas.

4-5.4 Work with the various fire protection districts bordering the City to establish coordination in communications and fire suppression.

4-5.5 Review all development proposals with the Fire Department in order to ensure the inclusion of adequate on-site fire protection provisions.

4-5.6 Implement multi-lingual fire prevention education programs.

4-5.7 Adopt and enforce construction and fire Codes that restrict the level of risk to life and property from fire, commensurate with the fire suppression capabilities available to the City.

4-5.8 Maintain a well-trained and equipped fire suppression force, commensurate with the level of service necessary to adequately protect life and property within the Roosevelt Community Plan area.

POLICE PROTECTION

The Fresno City Police Department has a dressing station at 1617 South Cedar Avenue which serves the southeast community based policing area. The department currently provides a full range of police services to the incorporated portions of the Roosevelt Community Plan Area. Among the field services provided are the uniformed patrol response to calls for service, crime prevention, tactical crime enforcement, and traffic enforcement/accident prevention. The provision of these services is supplemented by the Operations Support Division, which investigates criminal cases, provides juvenile crime enforcement and prevention, and is actively involved in vice/narcotics control and enforcement.

In addition to these enforcement-related services, the Police Department also provides extensive crime prevention assistance to the community, including residence and business security inspections, neighborhood and business watch group formation, and public presentations. The Fresno County Sheriff's Department provides similar law enforcement and crime prevention services to the unincorporated portions of the Plan Area.

The Fresno City Police Department has identified law enforcement and public safety concerns that are addressed by the Plan through land use policies, design guidelines, property maintenance measures and neighborhood involvement strategies. These concerns are generally described as follows:

(1) Need to retrofit existing development with crime prevention and access control, and apply guidelines to new development to assure adequate crime prevention design with open space parking, lighting, and observability.

(2) Remove refuse, old tires, abandoned vehicles and painted graffiti to improve safety and health. Gang activity is associated with auto theft and burglary, drugs, vandalism and graffiti. Improved property maintenance, particularly graffiti removal by property owners, would establish a less accepting environment for gang activity.

(3) Large events at the Fresno Fairgrounds and Sunnyside Swap Meet are associated with traffic congestion, safety conflicts, and vehicle theft and burglary, which generate an excessive demand upon police resources.

Goal

4-6 **Provide the level of law enforcement and crime prevention services necessary to maintain a safe, secure and stable urban living environment.**

Policies and Implementation Measures

4-6.1 **Facilitate Police Department participation in the implementation of Roosevelt Plan policies and the application of crime prevention design measures, to reduce the exposure of neighborhoods to nonresidents and to promote community surveillance of common areas.**

4-6.2 **Maximize communication with residents and businesses in order to learn about crime problems and to educate people on crime prevention measures and programs.**

4-6.3 **Maximize coordination between the Police Department and the Sheriff's Department to address crime problems in neighborhoods divided by the City's incorporated boundary.**

4-6.4 **Identify and pursue measures to improve public safety services, such as establishment of a new police substation and/or increased staffing of the existing police substation, to accommodate public access. Explore the feasibility of providing a combined police, fire and sheriff's public safety facility.**

SCHOOLS

The City of Fresno cooperates with school districts and supports their efforts to establish adequate school facility sites to serve projected student populations. School district site location criteria and service objectives are incorporated to the extent feasible into the City's comprehensive plans and policies. Public schools are an integral component of an efficient urban community. Therefore, school district site preferences are supported by planning for compatible land uses, adequate access, and appropriate public facilities and services while reducing exposure to excessive noise, traffic, or safety conflicts.

The Roosevelt Community Plan Area is served by five different school districts. The Fresno Unified, Sanger Unified, and Clovis Unified School Districts serve the major residential portions of the planning area. Fowler Unified School District, Washington Union High and Orange Center School Districts primarily serve the industrial portions of the plan area. The multitude of school districts serving the Plan Area is a significant obstacle to reinforcing and expanding a positive community-wide identity.

In recent years, dramatic changes have occurred in those factors that affect the planning and development of public schools facilities. The simultaneous occurrence of phenomenal population growth, changing demographic characteristics and reduced availability of funding has resulted in an excessive demand for student capacity in both newly developing and established urban areas.

This has necessitated the acquisition of already developed properties within existing neighborhoods and redeveloping these sites for school use. Student population projections completed by the Fresno Unified School District in 1991 indicate a need for an additional 14 elementary schools, 4.5 middle schools and 3.6 high schools within the District by the 2000-2001 school year. In addition to the four new elementary school sites acquired by the District within the Plan Area, the Plan designates two additional areas for major school facility developments. These sites have been designated in response to the District's request (based upon school site studies), and consist of 90 acres on the south side of East Kings Canyon Road (between Peach and Minnewawa Avenues) and 50 acres on the west side of South Willow Avenue (between Church Avenue and the California alignment).

The Fresno Unified School District has identified the 90-acre "Kings Canyon/Peach" site as its preferred high school campus site. This site is adequate to accommodate an athletic stadium an adjoining middle school campus. An alternative high school location would be the "Church/Willow" site, which is the District's preferred elementary school location. An adjoining middle school campus could also be accommodated here. An alternative elementary school site has been identified by the District and is on the south side of East Church Avenue (between Willow Avenue and the Helm Avenue alignment).

The District has also indicated that additional student capacity may be required in the future. Potential sites for consideration are "Maple/Church," "Elk's Lodge" (south side of Kings Canyon Road, east of Willow Avenue) and the north side of Kings Canyon Road, east of Willow Avenue. In addition, the expansion of existing elementary school campuses, such as to the north of Calwa Elementary and east of Ayer Elementary, may be pursued.

This plan also identifies a substantial amount public facility use to accommodate development of additionally needed elementary, middle, and high school campuses.

Goal

4-7 Cooperate with school districts to plan for the location and development of school sites necessary to meet the educational needs of the entire community.

Policies and Implementation Measures

4-7.1 Consult with affected school districts in the early stages of the land use, circulation, and public facility planning processes.

4-7.2 Continue to designate appropriate school sites on the land use plan map based upon the following locational criteria:

a. Use the criteria below to establish school attendance areas and school site sizes:

Grade	Attendance Radius	Minimum Site Size
K- 6	1 mile	10-20 acres
7- 8	2 miles	20-40 acres
9-12	2-3 miles	40-60 acres

b. Locate elementary school sites to provide safe and convenient access to a major street (policy 1-21.4) and reduce neighborhood traffic conflicts, excessive noise, and incompatible land uses.

c. Locate middle and high school sites immediately adjacent to major streets. High school sites with stadiums should have access to an arterial street if possible.

d. Locate school sites centrally with respect to their planned attendance areas.

e. Avoid locating school sites adjacent to conflicting uses and facilities (such as multiple-family residential, and commercial developments), when possible.

f. Encourage school districts to request the designation of needed new school sites on the Community Plan map, at the earliest time possible, in order to facilitate planning for compatible land uses and better assure that future school sites can be accommodated.

g. Pursue the cooperative development and utilization of school sites with adjacent neighborhood parks for both school activities and non-school-related recreational and child care activities.

4-7.3 Pursue strategies and support school district programs to efficiently and consistently provide a high quality of education throughout the Plan Area. These strategies and programs may include the realignment of school district boundaries to enhance the efficient development of school facilities, with the City Fresno initiating efforts to promote inter-agency cooperation and communication.

SOLID WASTE DISPOSAL

This section presents policies to address the land use compatibility, public sanitation and community aesthetic consequences associated with solid waste management technologies and practices. A primary concern of this Community Plan Area is the need to assure a consistent community-wide level of service for refuse collection, neighborhood clean-up, sanitation enforcement and recycling programs that will provide an acceptable standard of health, safety and appearance.

Goal

4-8 Provide adequate solid waste facilities and services for the collection, transfer, recycling, and disposal of refuse.

Policies and Implementation Measures

4-8.1 Establish community sanitation programs to provide neighborhood cleanup and nuisance abatement services throughout the plan, area including both incorporated and unincorporated areas.

4-8.2 Pursue expansion of the neighborhood cleanup program to serve single- and multiple-family residences three times per year; and develop and implement additional programs as necessary.

4-8.3 Support programs and new techniques of solid waste disposal (such as recycling, composting, and waste separation), to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.

4-8.4 Establish a public solid waste transfer station (which may be privately operated) utilizing locational, development and operational measures to protect the public health, safety, welfare and aesthetic interests.

4-8.5 Prohibit additional private or public waste disposal facilities and transfer stations which would generate an excessive amount of waste transportation and processing detrimental to the area's health, safety, welfare and aesthetic well-being.

4-8.6 Pursue the implementation of measures to eliminate illegal tire dumping (which is an obvious and significant problem within the Roosevelt Plan area), such as: 1) requiring tire disposal plans for all tire sales and installation businesses; 2) requiring licensing of all tire disposal haulers; 3) requiring tires sold within the City or County (with cooperation of Fresno County) be permanently marked to identify point of sale and to implement a refundable deposit to be repaid upon return of the tire to a tire business or redemption center; and 4) pursuit of grants and other programs for neighborhood tire clean-up and disposal.

ENVIRONMENTAL CONCERNS

Continued urbanization of the Fresno Metropolitan Area will result in environmental impacts such as loss of open space and agricultural land, increased groundwater consumption and potential exposure to water contamination, generation of sewage and solid waste, and production of additional air pollution and noise. However, the Roosevelt Community Plan Area is ideally located to accommodate a substantial portion of this urban growth in a manner that minimizes environmental impacts. Proximity to regional office and industrial employment centers, immediate access to major transportation routes may reduce the generation of travel related pollutants and consumption of energy. Access to a more productive groundwater aquifer and surface water channels will facilitate water management practices. Completion of planned stream channel flood control projects will minimize the threat of flood damage.

This chapter identifies goals, policies and strategies that implement local community level measures or support broader more comprehensive programs necessary to reduce impacts upon regionally important environmental resources.

WATER QUALITY AND QUANTITY

The Fresno Metropolitan Area, including the Roosevelt Community Plan Area, relies upon a subsurface aquifer, which provides groundwater for both domestic consumption and fire suppression. Traditionally, groundwater has been pumped directly from this aquifer into the distribution system without storage or treatment due to its high quality and readily accessible quantity. Recharge of this aquifer has historically occurred through the percolation of rainwater and snowmelt water that falls upon open land on the valley floor and on the western slopes of the Sierra Nevada Mountain Range; percolation of irrigation water applied to agricultural crop land; and percolation of water being transported by the San Joaquin and Kings Rivers, intermittent streams and irrigation canals. During the past 25 years, additional groundwater recharge has been induced by directing rain and snowmelt runoff to stormwater detention basins and specially designed recharge ponds (such as "Leaky Acres," north of the Plan Area).

Increased consumption due to population growth, and decreased natural recharge due to the conversion of open land to urban uses could jeopardize the sustained yield of this aquifer. The continued development and implementation of comprehensive water management programs will be necessary to protect the capacity of this aquifer. The City of Fresno has assumed a principal role in the effort to establish a multi-agency Fresno-Clovis Metropolitan Area Water Management Plan.

In addition to the increased demands for groundwater use and reduced natural recharge, groundwater quality has been threatened by the percolation of contaminants such as private sewage disposal discharges (nitrates), agricultural pesticides (such as dibromo-chloropropane, or DBCP), industrial waste liquids (such as trichloroethylene, or TCE) and stored petroleum fuels. Costly water treatment facilities are now being implemented to restore contaminated groundwater to safe drinking water standards. Implementation of comprehensive prevention, detection and remediation programs must be pursued in order to maintain the quality of our groundwater resources.

Goal

5-1 Manage all sources of water available to the planning area to ensure that safe and sustainable water resource will remain available to accommodate planned urban development.

Policies and Implementation Measures

5-1.1 Determine the optimum location of water recharge basins to maximize water recharge capability and develop a system of recharge basins cooperatively with the Fresno Metropolitan Flood Control District, Fresno Irrigation District, and the City Water Division.

5-1.2 Utilize all available surface water for groundwater recharge purposes (particularly in high precipitation years) to balance the groundwater aquifer's long-term sustainable yield with projected consumption demand.

5-1.3 Work towards resolving the problem of groundwater resource deficiencies in the eastern portions of the planning area.

5-1.4 Protect planning area groundwater resources from further quality degradation. Prohibit urban development in areas not served by the regional sanitary sewer system.

5-1.5 Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation.

5-1.6 Achieve a continuing balance between competing demands for water resource usage.

5-1.7 Consider each proposal for water resource usage within the context of total planning area needs and priorities (i.e., the need to transport water, the need for groundwater recharge, flood control requirements, recreational needs, and riparian habitat preservation).

5-1.8 Maintain effective cooperative planning programs to manage water resources within the planning area.

5-1.9 Pursue adoption of a regional water management program to utilize surface and groundwater resources in a manner that ensures a long-term sustainable supply of safe drinking water and coordinate efforts to conserve surface and groundwater supplies, both local and imported.

5-1.10 Continue to pursue a cooperative multi-agency (City of Clovis/County of Fresno/City of Fresno/FMFCD/FID) water study to identify aquifer characteristics and capacity; and strive to develop the best management tools feasible (including a computerized groundwater capacity and consumption model), to provide a regional water management program that would maximize water resources and minimize the potential for groundwater contamination.

5-1.11 Determine the feasibility of pursuing the conjunctive use of stormwater and recharge basins, canals, and water channels to provide community open space features such as small lakes, riparian flood channels, and wetland environments.

AIR QUALITY

The Roosevelt Community Plan is located along the east side of the San Joaquin Valley. This valley, together with the Sacramento Valley, forms the Great Valley which is boxed in by mountain ranges rising from 4,500 to 14,000 feet in height. This "basin" configuration combines with the Valley's climate, temperature inversions, and lack of air movement create serious air quality problems. Because of these characteristics and the use of the automobile as the prime mode of transportation, Fresno County was not expected to comply with the National Ambient Air Quality Standards for photochemical oxidants (ozone), carbon monoxide (CO) and particulate matter by the mandated 1985 deadline, and was designated a nonattainment area. The Fresno County Air Pollution Control District (APCD) was required to prepare an Air Quality Maintenance Plan (AQMP) and Nonattainment Area Plan (NAP) in 1979 which were updated in 1982.

Based upon the air quality monitoring performed by the APCD, it has been determined that Fresno County has not achieved compliance with the National Ambient Air Quality Standards for ozone, carbon monoxide and particulates as required. On June 29, 1987, the EPA announced a sanction on 14 regions, of which six were in California, including Fresno County. This action prohibits the construction of new stationary uses (industrial plants) that would have the potential of emitting 100 or more tons annually of

volatile organic compounds (key elements in the formation ozone) or carbon monoxide. This sanction was reversed with the passage of the Federal Clean Air Act Amendments in 1990, but further sanctions--such as discontinuance of federal funds for highway and sewer improvements--are possible.

The State of California adopted a Clean Air Law in 1988 which identified Fresno County as being a severe air quality noncompliance area. In order to achieve the 5 percent annual reductions in air pollution required by state law, significant constraints may be imposed upon the use of hydrocarbon based compounds such as fossil fuels, solvents, paints and paving materials. Continued reliance upon the private automobile for transportation within a relatively low density residential metropolitan area maximizes the amount and length of vehicle trips resulting in congestion and increased pollution. The Roosevelt Community Plan Update pursues a distribution and intensity of urban uses together with transportation improvements intended to reduce vehicle use, congestion and pollution.

Goal

5-2 Attain and maintain State and Federal air quality standards in cooperation with other agencies.

Policies and Implementation Measures

5-2.1 Support and encourage local, regional, state and federal programs and actions for the improvement of air quality.

5-2.2 Continue to support the unification of air pollution control districts in the San Joaquin Valley Air Basin to achieve maximum implementation of existing laws and to provide the best available technology for air quality improvement.

5-2.3 Develop and incorporate air quality maintenance considerations in the review of all land use and development proposals.

5-2.4 Provide land use strategies and related implementation processes to facilitate the integration of compatible land uses within mixed-use developments.

5-2.5 Integrate compatible land uses, and concentrate development along major streets and near major employment areas, to reduce vehicle miles traveled.

5-2.6 Develop the means to obtain or use land for on-site bus turnouts and parking areas, with attendant employee and passenger facilities.

5-2.7 Support and encourage the priority construction and improvement of Freeway 180 to Clovis Avenue as set forth in the Fresno County Transportation Improvement Act and policy 2-1.5 of this Plan.

5-2.8 Support and encourage employer implementation of staggered work hours and employee incentives to use carpools, public transit and other measures to reduce vehicular use and congestion.

5-2.9 Continue to implement measures approved by the City in its 1990 Air Quality Policy Program, including requirements for transportation management plans for new development with more than 50 potential employees.

5-2.10 Support efforts to enforce vehicle registration requirements and compliance with vehicle emission standards, and the removal of older vehicles by industrial uses as an air pollution off-set or reduction strategy.

NOISE

Noise generated within urban communities can be a significant form of environmental pollution that disrupts biotic communities and impairs many human activities. Excessive noise exposure can even pose a human health risk.

Noise can be defined as unwanted sound and is a subjective reaction to a physical phenomenon. However, sound levels can be measured by scientific instruments and are defined in units of measurement called decibels (db). Two composite (average) noise descriptors commonly used today are the Ldn (Day-Night Noise Level) and CNEL (Community Noise Equivalent Level). The Ldn is average sound level based upon an average hourly sound level taken over a 24-hour day with a +10dB weighting added to nighttime (2200 hours-0700 hours) sound level. CNEL is also based on an average hourly sound level over a 24-hour day with an additional +5dB penalty applied to evening (1900 hours-2200 hours) hourly sound levels. For planning purposes the CNEL and Ldn descriptions are similar enough to be interchangeable.

Different land uses have varying degrees of sensitivity to noise, and the time and type of noise can alter the impact of noise on land uses. The most sensitive land uses include residential dwellings, schools, hospitals, and churches. Moderately sensitive land uses include motels, commercial, and office uses. Agriculture, parking facilities, warehouses, and industrial uses are considered to be land uses that are largely insensitive to noise.

The major noise sources within the Roosevelt Community Plan Area are transportation routes, (freeways, expressways, major streets,

railroads) commercial activities and industrial processes. As growth and development occurs, noise levels will continue to increase. The noise contours analysis in the General Plan Noise Element takes this into account and makes predictions for roadway and rail contours based upon a year 2000 prediction.

Goal

5-3 Minimize the impact of noise on people through the implementation of noise reduction and suppression techniques, and appropriate land use policies.

Policies and Implementation Measures

5-3.1 Identify areas of the Community exposed to existing or projected exterior noise levels exceeding Ldn/CNEL 60 dB as noise-impacted areas.

5-3.2 Prohibit new development of residential or other noise-sensitive uses in noise-impacted areas, unless effective mitigation measures are incorporated into the project design to reduce noise levels in outdoor activity areas to Ldn 60 dB or less and interior noise levels to Ldn 45 dB or less in noise-sensitive rooms.

5-3.4 Incorporate effective mitigation measures to minimize adverse noise impacts on surrounding noise-sensitive land uses through design techniques such as:

a. Use of barriers Barriers such as walls, berms, or other buildings can reduce noise exposure when placed between the noise source and the receiver.

b. Site design Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by sound reflection.

c. Unit design An acceptable interior noise environment can be achieved by placing the noise-sensitive portions of a dwelling on the side of the unit farthest from the noise source.

d. Building design The shape of building facades, as well as the orientation of the building, can influence reflected noise levels affecting adjacent buildings.

e. Noise reduction by building facades When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades.

f. Use of vegetation Although vegetation is not a practical method of noise control unless large tracts of dense foliage are part of the existing landscape, it can be used to acoustically "soften" the intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increase the attenuation of sound with distance.

g. Sound-absorbing materials Absorptive materials, such as fiberglass, foam, cloth, and acoustical tiles or panels are used to reduce reflection or reverberation in closed spaces. Because such materials are easily damaged by sunlight and moisture, their application as an outdoor noise control tool is limited to special cases where the control of reflected noise is critical.

h. Inclusion of noise attenuation techniques in the design of all new arterial streets.

i. Preventing the use of outdoor mechanical equipment (and other consumer products) that generate noise levels in excess of the City's exterior noise level standards.

j. Allowing commercial drive-through uses only when consistency with the City's exterior noise level standards and compatibility with adjacent land uses can be demonstrated.

5-3.5 High priority shall be given to reducing noise and aesthetic impacts of freeways upon neighborhoods through efforts to work with Caltrans, to assure the implementation of freeway design measures (including the most appropriate grade design, noise barriers, and landscaping buffers) that will protect neighborhoods to the extent feasible, balancing physical and economic resource constraints while minimizing noise and aesthetic impacts upon neighborhoods.

FLOODING

Flooding from storm water runoff or snow melt runoff could potentially pose a threat to human life and property within the Fresno Metropolitan Area if appropriate precautions and considerations were not incorporated into urban development decisions. The potential for flooding within the Roosevelt Community Plan area originates from channel overflows of the Fresno Stream Group which drains the lower foothills of the Sierra Nevada Mountains between the San Joaquin and Kings Rivers. The

Roosevelt Community Plan area is primarily threatened by potential overflows of the Redbank and Fancher Creek channels.

Some portions of the planning area have been designated as flood-prone, requiring the application of building restrictions. However, the Fresno Metropolitan Flood Control District and the United States Army Corps of Engineers are now developing the Redbank-Fancher Creek Flood Control Project which will establish a series of reservoirs and basins. The completion of this project, and the continued maintenance of retention and conveyance facilities, will essentially remove the reasonable threat of flooding from these sources.

Goal

5-4 Protect existing and future residents and property improvements within the Roosevelt Community Plan area from flood related hazards.

Policies and Implementation Measures

5-4.1 Support the completion of the Redbank-Fancher Creek Flood Control Project and the continued maintenance of flood water retention and conveyance facilities.

5-4.2 Design new development to provide protection from potential impacts of flooding during a "100 year" flood event.

ENERGY

Residents of the Roosevelt Community Plan area are affected by energy usage but have little direct control over decisions affecting its cost and distribution. However, the City can influence the amount and type of energy sources its residents consume. The City's General Plan includes policies to reduce energy consumption through the mix of land uses and the design of transportation systems that provide a more efficient movement of people and goods.

Fresno can also affect energy supplies and consumption by reducing the energy consumed for City operations, by using renewable energy sources, where feasible, and by supporting the development of appropriate renewable energy sources.

Goal

5-5 Foster development that, by its location and design, reduces the need for nonrenewable energy resources.

Policies and Implementation Measures

5-5.1 Promote development in areas served by public transit and other existing services. Higher residential densities should be encouraged to locate in areas served by primary public transit routes and close to the major employment centers.

5-5.2 Public facilities should be encouraged to locate in areas easily served by public transportation.

5-5.3 The energy-efficiency of new development should be considered when land use and development review decisions are made. The City's design techniques include provisions for solar access, for siting structures to maximize natural heating and cooling, landscaping to aid passive cooling, protection from prevailing winds, and maximum year-round solar access.

5-5.4 Encourage owners and residents of existing developments to implement programs to use energy more efficiently and to explore alternative energy source.

DU:SB:flh:vs
+1216

Revised 3-4-93

SUMMARY OF LEGISLATIVE ACTIONS FOR PLAN ADOPTION

FRESNO COUNTY AIRPORT LAND USE COMMISSION, November 18, 1991

- Made a determination that the Roosevelt Community Plan update is consistent with the Fresno Air Terminal Land Use Policy Plan.

CITY PLANNING COMMISSION RESOLUTION NO. 10267, January 22, 1992

- Recommended Certification of Final Environmental Impact Report (EIR), City EIR No. 10113 / State Clearinghouse No. 900212385.
- Listed impacts identified as significant, with mitigation measures to reduce impacts to the extent feasible.
- Listed impacts found not to be significant, with mitigation measures to address area concerns.
- Made a Statement of Overriding Considerations.
- Listed procedures for water, sewer, and traffic circulation capacity findings, and mitigation monitoring checklist.

CITY PLANNING COMMISSION RESOLUTION NO. 10268, January 22, 1992

- Recommended approval of the Roosevelt Community Plan Update, as recommended by the Citizens Advisory Committee and the Plan Implementation Committee, with several modifications requested by property owners.
- Recommended that the 1984 Fresno General Plan, Fresno-High Roeding Community Plan, Butler-Willow Specific Plan, and Fresno Air Terminal Environs Area Specific Plan be amended.

CITY COUNCIL RESOLUTION NO. 92-140,* April 7, 1992

- Certified Final EIR, City of Fresno EIR No. 10113 / State Clearinghouse No. 900212385.
- Listed impacts identified as significant, with mitigation measures to reduce impacts to the extent feasible.
- Listed impacts found not to be significant, with mitigation measures to address area concerns.
- Made a Statement of Overriding Considerations.
- Listed procedures for water, sewer, and traffic circulation capacity findings, and mitigation monitoring checklist.

CITY COUNCIL RESOLUTION NO. 92-141,* April 7, 1992

- Adopted the Roosevelt Community Plan Update as a refinement of the 1984 Fresno General Plan.
- Amended the 1984 Fresno General Plan.
- Amended the Fresno High-Roeding Community Plan, repealing that portion of the plan east of Freeway 41.

CITY COUNCIL ORDINANCE NO. 92-23,* April 7, 1992

- Amended the Butler-Willow Specific Plan.

CITY COUNCIL ORDINANCE NO. 92-24,* April 7, 1992

- Amended the Fresno Air Terminal Environs Area Specific Plan.

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* Copies of these City Council legislative actions are included in this Appendix.

FRESNO CITY COUNCIL

RESOLUTION NO. 92-140

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE CITY OF FRESNO ROOSEVELT COMMUNITY PLAN UPDATE (CITY OF FRESNO EIR NO. 10113; STATE CLEARINGHOUSE NO. 90021238).

WHEREAS, the Fresno City Council on July 16, 1991, held a duly noticed public hearing to introduce the draft Roosevelt Community Plan Update, and heard written and oral evidence and testimony related thereto; and

WHEREAS, City of Fresno EIR No. 10113 relating to the draft Roosevelt Community Plan Update has been prepared in compliance with the California Environmental Quality Act (CEQA); and

WHEREAS, the City Planning Commission commenced duly noticed public hearings on November 6, 1991, and continued these hearings through November and into December of 1991 and January of 1992, and during these hearings considered Final EIR No. 10113 and the City of Fresno staff and Citizen Committee recommendations, written comments, and testimony received regarding Final EIR No. 10113; and

WHEREAS, on January 22, 1992 the Planning Commission completed its series of hearings on the Roosevelt Update and its EIR, and adopted Resolution No. 10267, recommending that City of Fresno EIR No. 10113 be certified by City Council; and

335 5-5-92

PASSED 4/7/92

EFFECTIVE

92-140

WHEREAS, the City Council commenced duly noticed public hearings on February 4, 1992, and continued these hearings through February, March, and into April of 1992, and during these hearings considered Final EIR No. 10113 and the City of Fresno staff, Fresno County Board of Supervisors, and Citizen Committee recommendations, written comments, and testimony received regarding Final EIR No. 10113;

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Fresno finds that Final EIR No. 10113 has been completed in compliance with the California Environmental Quality Act, the State CEQA Guidelines, and the City of Fresno's Environmental Quality Ordinance; and that the City Council has reviewed and considered the information contained in Final EIR No. 10113 prior to considering approval of the Roosevelt Community Plan; and

BE IT FURTHER RESOLVED, that the City Council finds that certain mitigation measures which will substantially lessen or avoid potential significant adverse environmental effects identified in Final EIR No. 10113 will be incorporated into the project by adoption of the Roosevelt Community Plan Update and Certification of Final EIR No. 10113, as identified in attached Exhibit "A" and incorporated herein by reference; and

BE IT FURTHER RESOLVED, based upon substantial evidence in the record of these proceedings, that specific economic, social and other considerations make infeasible the "No Project Alternative" for the reasons stated in the separate Statement of Overriding Considerations incorporated herein by reference and attached as Exhibit "C"; and

BE IT FURTHER RESOLVED, that reporting and monitoring procedures, in the form of verification findings and a mitigation monitoring checklist, necessary to implement the environmental impact mitigation measures established by Certification of Final EIR No. 10113 and adoption of the Roosevelt Community Plan and to ensure compliance during project implementation, shall be established in accordance with attached Exhibit "D" incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the Council of the City of Fresno hereby Certifies Final EIR No. 10113 prepared for the City of Fresno Roosevelt Community Plan Update.

BE IT RESOLVED, that the Clerk of the City hereby is authorized and directed to make and attest to the appropriate certification upon originals of these documents and file the same as a permanent record in the office of the City Clerk.

KEY TO EXHIBIT MATERIAL FOR CITY COUNCIL RESOLUTION No. 92-140

Because the Exhibits for City Council Resolution No. 92-140 reproduced material from the Roosevelt Community Plan Final Environmental Impact Report (EIR), the text of these Exhibits is not reproduced here (in the interest of saving space in this plan document). The reader is referred to the appropriate pages in the EIR document, which is bound with this plan:

EXHIBIT A: See Roosevelt Community Plan EIR, pages -FEIR-5- through -FEIR-33-.

EXHIBIT B: See Roosevelt Community Plan EIR, pages -FEIR-34- and -FEIR-35-.

EXHIBIT C: See Roosevelt Community Plan EIR, pages -FEIR-36- and -FEIR-37-.

EXHIBIT D: See Roosevelt Community Plan EIR, Appendix F, pages - F-1 - through - F-39 -.

RESOLUTION NO. 92-141

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO ADOPTING THE ROOSEVELT COMMUNITY PLAN AS A REFINEMENT OF THE 1984 FRESNO GENERAL PLAN AND AMENDING THE 1984 FRESNO GENERAL PLAN, AND THE FRESNO HIGH-ROEDING COMMUNITY PLAN

WHEREAS, the Fresno City Council on November 20, 1984, and December 1, 1977, adopted the General Plan and the Fresno-High Roeding Community Plan respectively; and

WHEREAS, community plans are essential to the refinement of the General Plan; and

WHEREAS, the Council directed that the Roosevelt Community Plan be updated; and

WHEREAS, the Roosevelt Community Plan Update has been prepared pursuant to the Local Planning and Procedures Ordinance (LPPO) and was formulated by staff with the help of a 16-member Citizens Advisory Committee and with substantial public input and was initiated by the Fresno City Council on July 16, 1991, all in conformance with applicable provisions of State Planning Law, the LPPO and guidelines promulgated under it; and

WHEREAS, the Fresno City Planning Commission, at its meeting of January 22, 1992, adopted Resolution No. 10268 recommending adoption of the Roosevelt Community Plan as recommended by the Citizens Advisory Committee and including several modifications and plan change requests and

PASSED 4/7/92
EFFECTIVE

MICROFILMED
Reel 335 Date 5-5-92

92-141

Resolution No.
Roosevelt Community Plan

WHEREAS, the Council of the City of Fresno, on December 4 and 17 of 1991, February 4, 11, 18 and 25 of 1992 and March 3, 17, 24 and 31 of 1992, held a duly noticed public hearing to consider the draft Roosevelt Community Plan and Final Environmental Report (EIR) No. 10113, and at the public hearings considered all information contained in the draft Roosevelt Community Plan and EIR No. 10113, and all written and oral evidence and testimony related thereto; and

WHEREAS, prior to taking action on this project, Council adopted a resolution certifying City of Fresno Final EIR No. 10113 (State Clearinghouse No. 90021238) as required by the California Environmental Quality Act; and

NOW THEREFORE BE IT RESOLVED, that the Council of the City of Fresno:

1. Finds that the Roosevelt Community Plan Update has been the subject of analysis and review by the Roosevelt Community Plan Update Citizens Advisory Committee, Development Director, Planning Commission and City Council, all of whom have reviewed and considered the plan's recommendations; and the Council finds that the discussion found in the Plan Update and EIR No. 10113, justify a change to the previous community plan's recommendations; and
2. Approves Exhibit A, Roosevelt Community Plan map, with related modifications and changes as contained in Exhibit B, attached hereto and incorporated herein by reference; and
3. Approves amendments to the 1984 Fresno General Plan and the repeal of that portion of the Fresno High-Roeding Community Plan

MICROFILMED
Reel 335 Date 5-5-92

within the Roosevelt Community Plan as depicted on Exhibits C and D, attached hereto and incorporated herein by reference; and

4. Approves policy additions and amendments, as contained in Exhibit E, attached hereto and incorporated herein by reference; and

5. Approves the Roosevelt Community Plan document, consisting of maps and written statements of goals, policies and implementation measures, as contained in Exhibit F attached hereto and incorporated herein by reference.

CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, Jacqueline L. Ryle, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 7th day of April, 1992.

JACQUELINE L. RYLE
City Clerk

APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

BY: _____ DEPUTY

By _____ Deputy

SC:flh:PLN435/+1108

Attachments
Exhibit A - Roosevelt Community Plan Map
Exhibit B - Plan Modifications and Requested Changes
Exhibit C - 1984 Fresno General Plan Amendment Map
Exhibit D - Fresno High-Roeding Community Plan Map
Exhibit E - Policy Additions and Amendments
Exhibit F - Roosevelt Community Plan Text and Final EIR No. 10113

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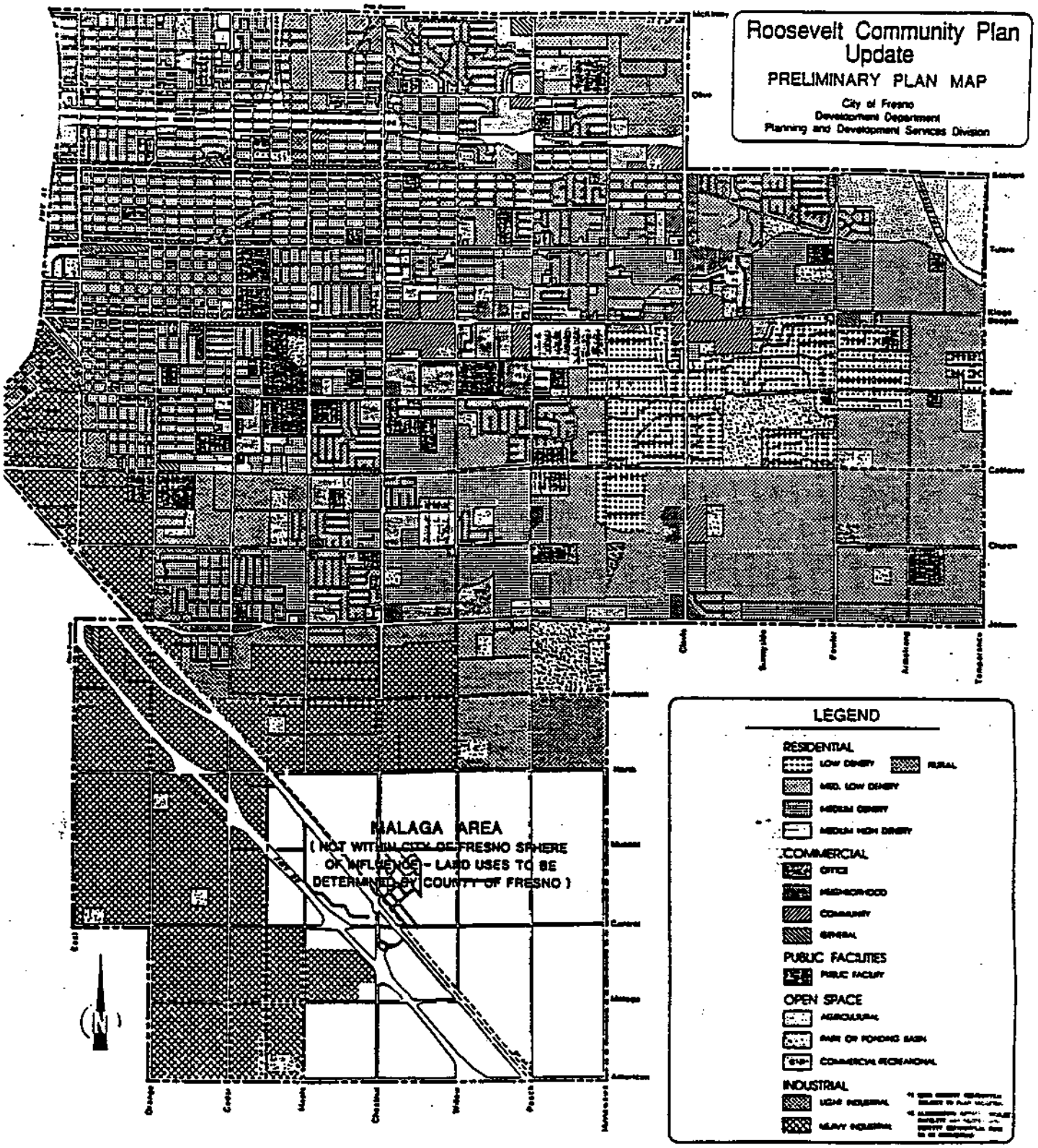
Reel 335 Date 5-5-92

EXHIBIT A



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Reel 335 Date 5-5-90

PLAN MODIFICATIONS

	MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	CITIZENS ADV. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
No. 1	Valley Conservative Partners-(3.07± ac) NE cor. S. Maple and E. Church Aves	NC	MLDR	NC (deny mod.)	MLDR (approve revised mod.)	MLDR	Approve revised modification for MLDR use & include one acre remnant at the corner
No. 2	Stephen Investments (29 ± ac.) NE cor. E. Kings Canyon & S. Adler Aves	O.C.-(19.3+ ac) MDR-(9.7± ac)	C.C.-(15.5± ac) O.C.-(9.7± ac) O.S. (3.8± ac)	C.C.-(15.5± ac) O.C.-(9.7± ac) O.S (3.8 ± ac) (approve revised Mod.)	same as staff	same as staff	Approve revised modification for C.C., O.C. & O.S uses recommended by staff
No. 3	Collins-Ginder Dev. (4.6± acres) W/s Clovis Avenue bet. E. Tulare and E. Belmont Aves.	O.C.	MHDR	O.C. (deny mod.)	same as staff	same as staff	Approve MHDR use (implemention to be consistent with development concept presented 3/3/92)
No. 4	Richard Waring (0.56+ acres) SW cor. S. Clovis Ave. E. Montecito Ave.	LDR	MDR	MDR (approve mod.)	same as staff	same as staff	Approve MDR use

EXHIBIT B

MICROFILMED
Reel 335 Date 5-5-8

LEGEND

LDR - Low Density Residential
MLDR- Medium Low Density Residential
MDR - Medium Density Residential
MHDR- Medium High Density Residential

OC - Office Commercial
NC - Neighborhood Commercial
CC - Community Commercial
RC - Regional Commercial
GC - General Commercial

PF - Public Facility
NP/OS - Neighborhood Park/Open Space
RP/OS - Regional Park/Open Space
Ag/OS - Agricultural/Open Space

LI - Light Industrial
HI - Heavy Industrial

	MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	CITIZENS ADV. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
No. 5	Sunnyside Ranch (26.5± ac.) NW and SW cor. S. Clovis and E. Church Aves.	O.C.-(9.9+ ac) MLDR-(13.2± ac) MDR-(3.4± ac)	O.C.-(5.5± ac) N.C.-(9.9± ac) MHDR (3.0± ac) MDR (8.1± ac) modified alignment of Minnewawa	O.C.-(5.5± ac) N.C.-(9.9± ac) MLDR (11.1 ± ac) original plan line for Minnewawa (approve revised mod.)	same as staff	same as staff	Approve revised modification for O.C., N.C. & MLDR uses the & Plan Update alignment for Minnewawa Ave.
No. 6	George F. Belyea (157± acres) Area bounded by E. Jensen, S. Fowler, E. Church and S. Sunnyside Aves.	MLDR-(118± ac) MDR-(39± ac)	MLDR- (77+ ac) MDR-(35± ac) MHDR-(15+ ac) CC- (30+ ac.)	plan update (deny mod.)	same as staff	MLDR-(92+ ac) MDR-(35+ ac) C.C- (30± ac) (approve revised mod.)	Approve revised modification for C.C., MDR & MLDR uses as presented 3/24/92 meeting
No. 7	Fresno 70, a partnership (20± ac) SW cor. E. Butler and S. Temperence Aves.	Ag/O.S.	MLDR	Ag/O.S. (deny mod.)	same as staff	MLDR (approve mod.)	Deny this modification and retain the Ag/OS use of the Plan Update
No. 8	Leo H. Avedikian (9.2± ac.) S/s Jensen Ave. bet/ S. Willow and S. Chestnut Aves.	LI	HI	HI	same as staff	same as staff	Approve HI use (implementation to consider plan policies & consultation with Plan Implementation Committee)

MICROFILMED
Reel 335 Date 5-5-92

	MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	CITIZENS ADV. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
No. 9	Park Circle/ Sunnyside/Alta Neighborhood Group (16± ac.) Vicinity of the SE cor. E. Kings Canyon Rd. and S. Clovis Ave	C.C.	MLDR	C.C. (deny mod.)	same as staff	RC (deny mod)	Deny this modification and retain regional commercial designation of the Plan Update
No. 10	Mosesian Land Co./ Baccarat Corp (50± ac) SE cor. E. Kings Canyon Rd. and S. Peach Aves.	P.F. (middle School and High School)	R.C.-(40± ac) MLDR - (8± ac) O.C.- (2± ac)	P.F. (high school) (deny mod.)	same as staff Staff with automatic change to commercial if school is not developed.	same as staff	Approve "dual designation" depicting RC, OC & MLDR uses with PF (high school) as an alternative use
No. 11	Kiyo Uchida, Shigeki and Masako Mochizuki and Mary & Thomas Mouradick (43± ac) SW cor E. Kings Canyon Rd and S. Minnewawa Ave.	P.F. (middle school and high school)	MLDR (18± ac) MDR (25± ac)	MLDR (18± ac) for the Uchida Mochizuki properties (approve mod.) P.F. (middle school & H.S. (25+ ac) for the Mouradick property (deny mod.)	same as staff with automatic change to MDR if school is not implemented	same as staff	Approve "dual designation" depicting MDR use with PF (high school) as an alternative use for the Mouradick property (westerly 25 acres) & approve MLDR uses for the Uchida/Mochizuki properties (easterly) 18 acres)

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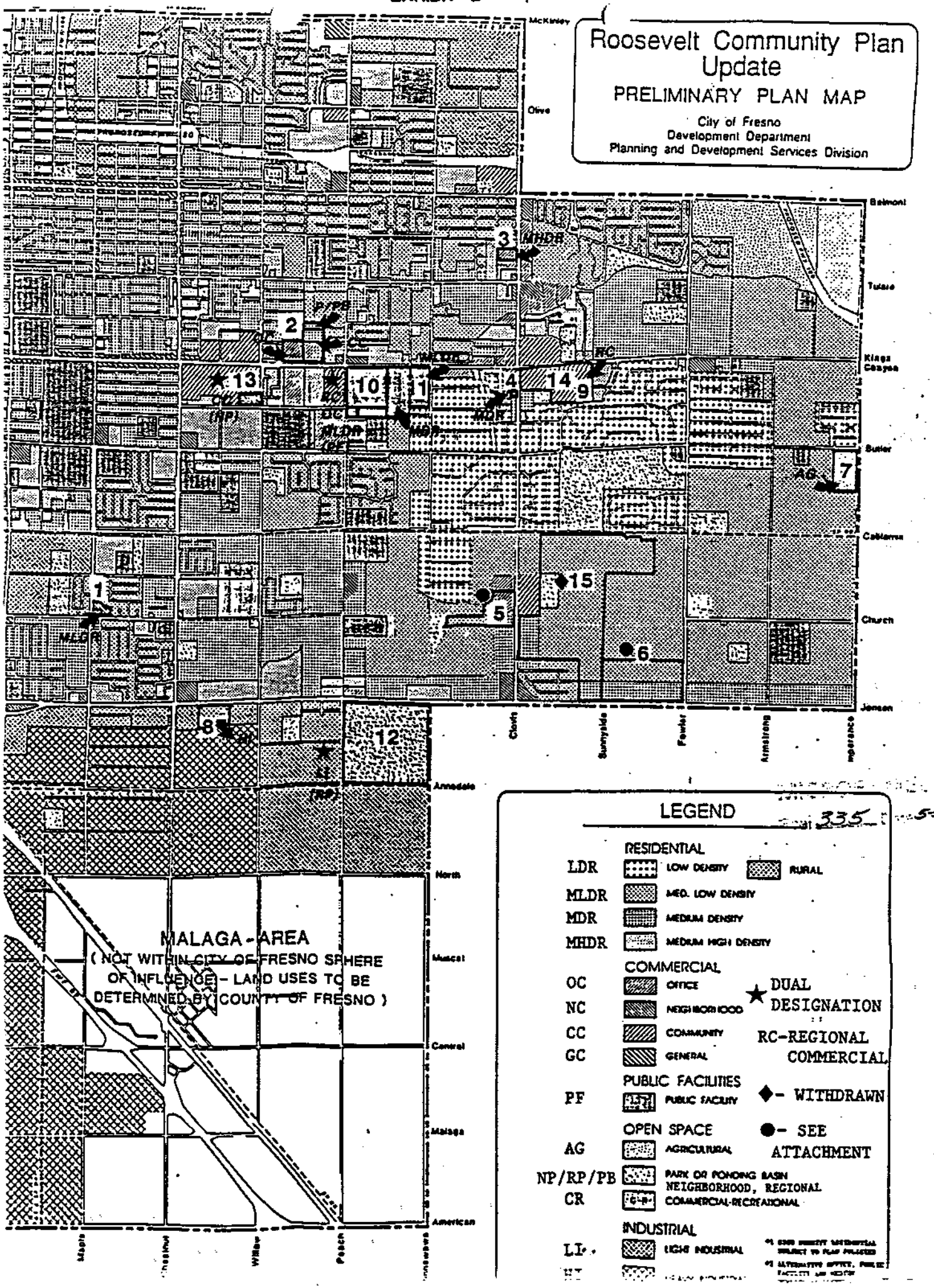
5-5-92

	MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	CITIZENS ADV. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
No. 12	Larry Shapazian (160± acres) Area bounded by E. Jensen, S. Minnewawa; E. Annadale and S. Peach Avenues	R.P./O.S.	HI	R.P./O.S. (deny mod./add conditions)	HI (approve mod./ designated fair-grounds as alternative)	HI (approve mod.)	Approve "dual designation" depicting LI use with alternative RP/OS use
No. 13	Stephen Investments (7± ac.) NW cor. S. Willow and E. Lane Aveues	N.P/O.S.	C.C.	N.P./O.S. deny mod.	same as staff	same as staff	Approve "dual designation" depicting CC use with NP/OS as an alternative use
No. 14	Hosesian Land Co./ Bacarrat Corp. (49± ac.) SE cor. E. Kings Canyon Rd. and S. Clovis Avenue	C.C.	R.C.	C.C. (deny mod.)	same as staff	RC (approve mod)	Approve RC use
No. 15	Jeff Roberts (261± ac) E/s of S. Clovis Av bet. Jensen and The California Alignment	MLDR - (220± ac) MDR- (25± ac) O.S./p.b.- (16± ac)	MDR -(241± ac) p.b./.N.P. (20± ac)	Approve	Approve density implementation guidelines	same as Committee	Modification withdraw approve Plan Update uses and approve residential density transition guidelines as advisory policies
Note:	This modification request has been withdrawn						

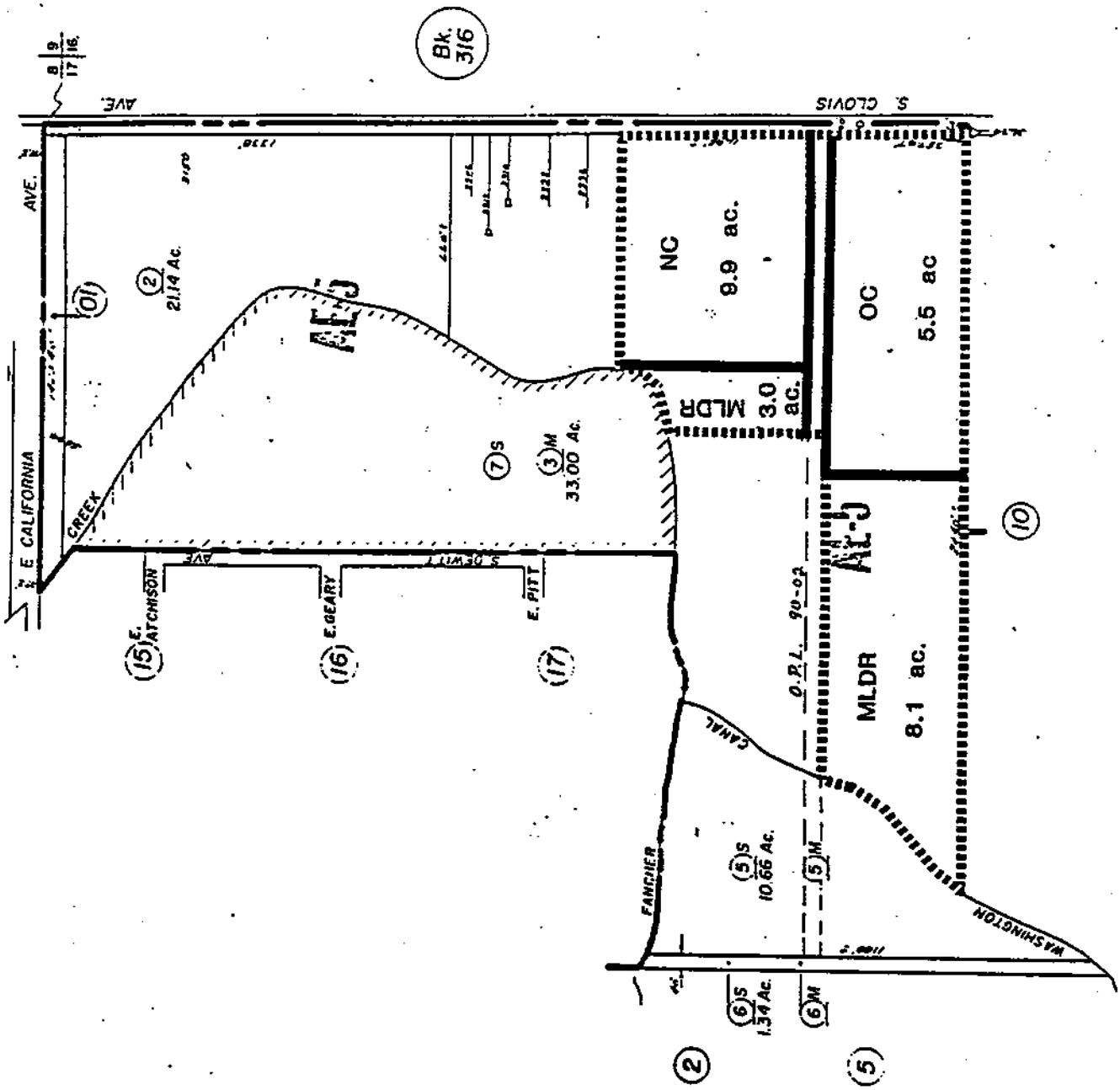
EXHIBIT B



Roosevelt Community Plan Update
PRELIMINARY PLAN MAP
City of Fresno
Development Department
Planning and Development Services Division
McKinley
Olive
Belmont
Tulare
Kings Canyon
Butler
California
Church
Jensen
Annadale
North
Muscat
Central
Malaga
American
Maple
Chestnut
Willow
Peach
Clovis
Sunnyside
Fowler
Armstrong
Imperance
MALAGA - AREA
(NOT WITHIN CITY OF FRESNO SPHERE OF INFLUENCE - LAND USES TO BE DETERMINED BY COUNTY OF FRESNO)
LEGEND
RESIDENTIAL
LDR LOW DENSITY
RURAL
MLDR MED. LOW DENSITY
MDR MEDIUM DENSITY
MHDR MEDIUM HIGH DENSITY
COMMERCIAL
OC OFFICE
NC NEIGHBORHOOD
CC COMMUNITY
GC GENERAL
PUBLIC FACILITIES
PF PUBLIC FACILITY
OPEN SPACE
AG AGRICULTURAL
NP/RP/PB PARK OR PONDING BASIN NEIGHBORHOOD, REGIONAL
CR COMMERCIAL-RECREATIONAL
INDUSTRIAL
LI LIGHT INDUSTRIAL
★ DUAL DESIGNATION
RC-REGIONAL COMMERCIAL
◆- WITHDRAWN
●- SEE ATTACHMENT
335

EXHIBIT B

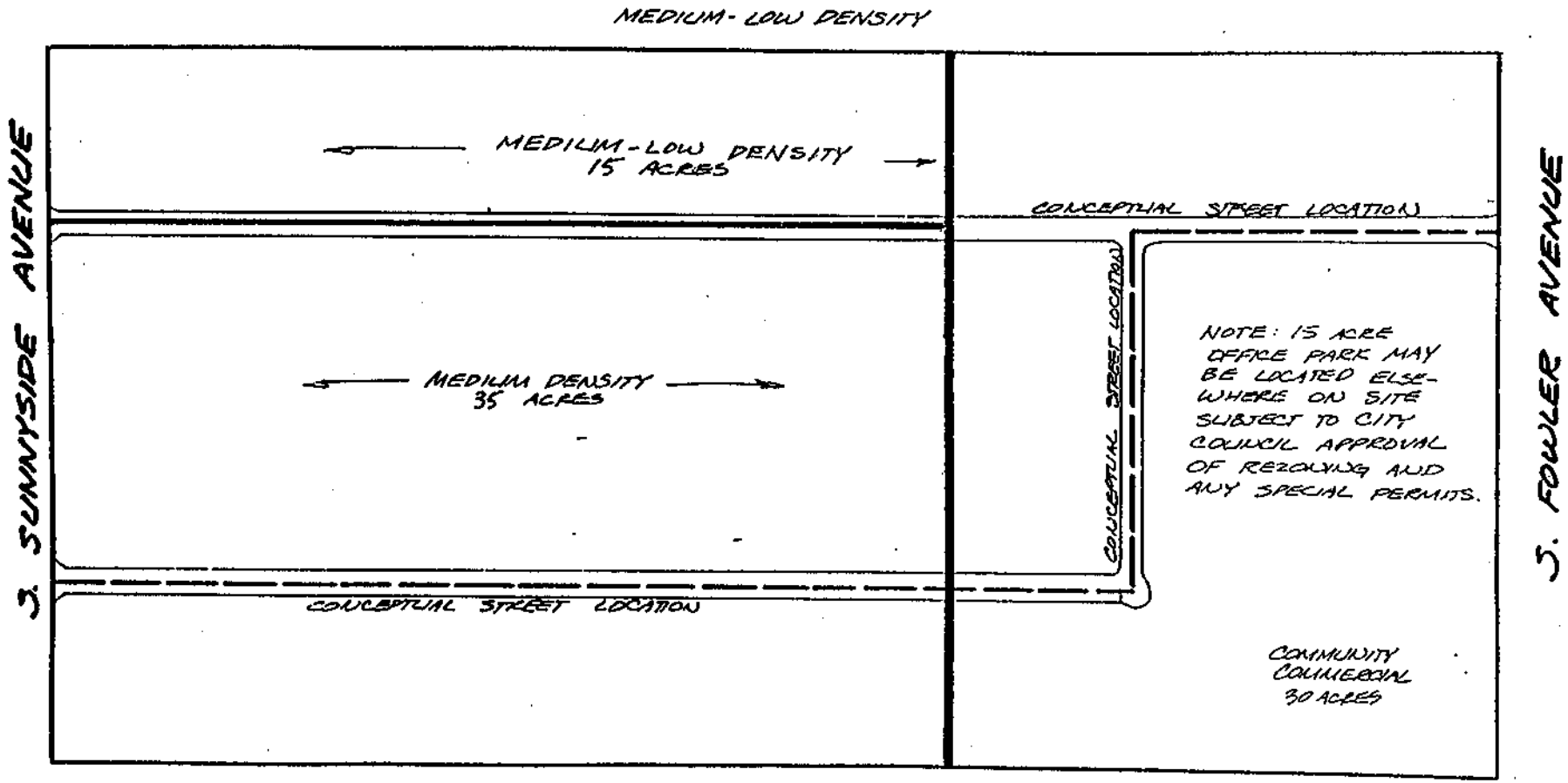
PLAN MODIFICATION NO. 5



ANNEXATION-996

335 5-5-92

PLAN MODIFICATION NO. 6



PROPOSED NOTE ON PLAN: ON 80 ACRES BETWEEN S. FOWLER AVE. AND S. SUNNYSIDE AVE, COMMUNITY COMMERCIAL (30 ACRES) DESIGNATION SHALL BE LOCATED AT THE CORNER OF JENSEN AND FOWLER AND SHALL ACCOMMODATE THE DEVELOPMENT OF A 15 ACRE COMMERCIAL CENTER AND 15 ACRES OF OFFICES. ACCESS TO SUNNYSIDE AVE. SHALL BE PROVIDED.

NORTH
1" = 200'

335 5-5-80

EXHIBIT B

REQUESTS FOR PLAN CHANGES NOT FILED AS MODIFICATIONS

	PLAN MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	PLAN IMP. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
A.	Tatkin Investment Co./Richard Waring (.94± acs) S/s Hamilton bet. S. Maple & S. Chance Aves.	MDR	MHDR (allow 29 U/A per R-3 zoning & day care)	Plan Update (deny request)	MHDR (16 U/A & day care)	same as Committee	Approve MHDR use (16 units/ acre & potential day care accessory use)
B.	Roy & Ruth Katsura- (8.43± acs.) S/s of Kings Canyon bet. S. Minnewawa & S. DeWitt	O.C.	LDR	Plan Update (deny request)	OC (limited to R-P zoning)	same as committee	Approve OC use (limited to R-P zoning implementation) for the two parcels immediately east of S. Minnewawa Ave. & retain LDR for the remaining four extending east to S. DeWitt Ave.
C.	Jack, Robert & Richard Papazian (16.69± acs.) N/s of E. Belmont & S/s of E. Olive bet. N. Minnewawa & N. Clovis Aves.	NP/OS, OC & LI	NP/OS, CC	NP/OS, CC (approve request)	same as staff & Committee	same as staff & Committee	Approve CC & NP/OS uses as requested
D.1	Chilingerian/Logan & Assoc.-(18.48± acs) NE Cor S. Maple & E. Butler	NC, MHDR & MDR	GC, CC, NC MHDR	Plan Update (deny request)	same as staff	same as staff & committee (tie vote)	Approve request that planned uses allow existing zoning to be implemented subject to referral of development plans to Plan Implementation Committee

EXHIBIT B

MICROFILMED
Reel 335 Date

	PLAN MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	PLAN IMP. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
D.2	Chilingerian/Logan & Assoc.-(.99± acs) SW Cor E. Tulare & S. Peach Aves.	MDR	NC	Plan Update (deny request)	MDR (allow exist. C-1 zoning to remain)	same as committee	Approve NC use for existing C-1 zoning at the corner parcel
E.1	Westcal Inc.- (3± acs) SW cor E. Belmont & N. Fowler Aves	OC & MLDR	OC & MHDR	Plan Update (deny request)	Same as staff	Same as staff & Committee	Approve Plan Update with acknowledgement that development of existing zoning may be considered as permitted by the local Planning & Procedures Ordinance
E.2	Westcal Inc.- (13± acs) NE cor E. Jensen & S. Maple Aves	MHDR	MHDR (allow 29 U/A per R-3 & R-3-A zoning)	Plan Update (deny request)	Same as staff	Same as staff & Committee	"
E.3	Westcal Inc.- (4.7± acs) S/s E. Church Ave bet. S. Chestnut & S. Willow Aves.	MDR	MHDR (allow 29 U/A per R-3 zoning)	Plan Update (deny request)	Same as staff	Same as staff & Committee	"
F.	Gilbert & Gladys Mendez -area S. of E.Heaton Ave. & E. Fowler Ave.	MLDR	LDR or 14,200 s.f. min. lot size	Plan Update (deny request)	MLDR (Plan Update w/ condition)	same as committee	
G.	Ellis Daniels (.6± acs) W/s Ninth Jensen Ave & Jensen Ave. bypass	NC	LI (limited to warehouse)	LI (approve request)	same as staff & Committee	same as staff	Approve LI use (limited to warehouse)

MICROFILMED
Reel 335 Date 5-5-82

REQUESTS FOR PLAN CHANGES NOT FILED AS MODIFICATIONS

PLAN MODIFICATION	PLAN UPDATE	REQUESTED CHANGE	STAFF RECOMMENDATION	PLAN IMP. COMMITTEE	PLANNING COMMISSION	CITY COUNCIL ACTION
Vy Horn/Monterey Properties, Joe B. Anaya -(.13± acs.) NW cor. E. Olive & N. Eighth Aves.	HDR	NC	Plan Update (deny request)	Refer to Yosemite Specific Plan Neighborhood Committee	Same as Committee	Deny request (refer to the Yosemite Specific Plan Neighborhood Comm. for review)

MICROFILMED
Reel 335 Date 5-5-87

LEGEND

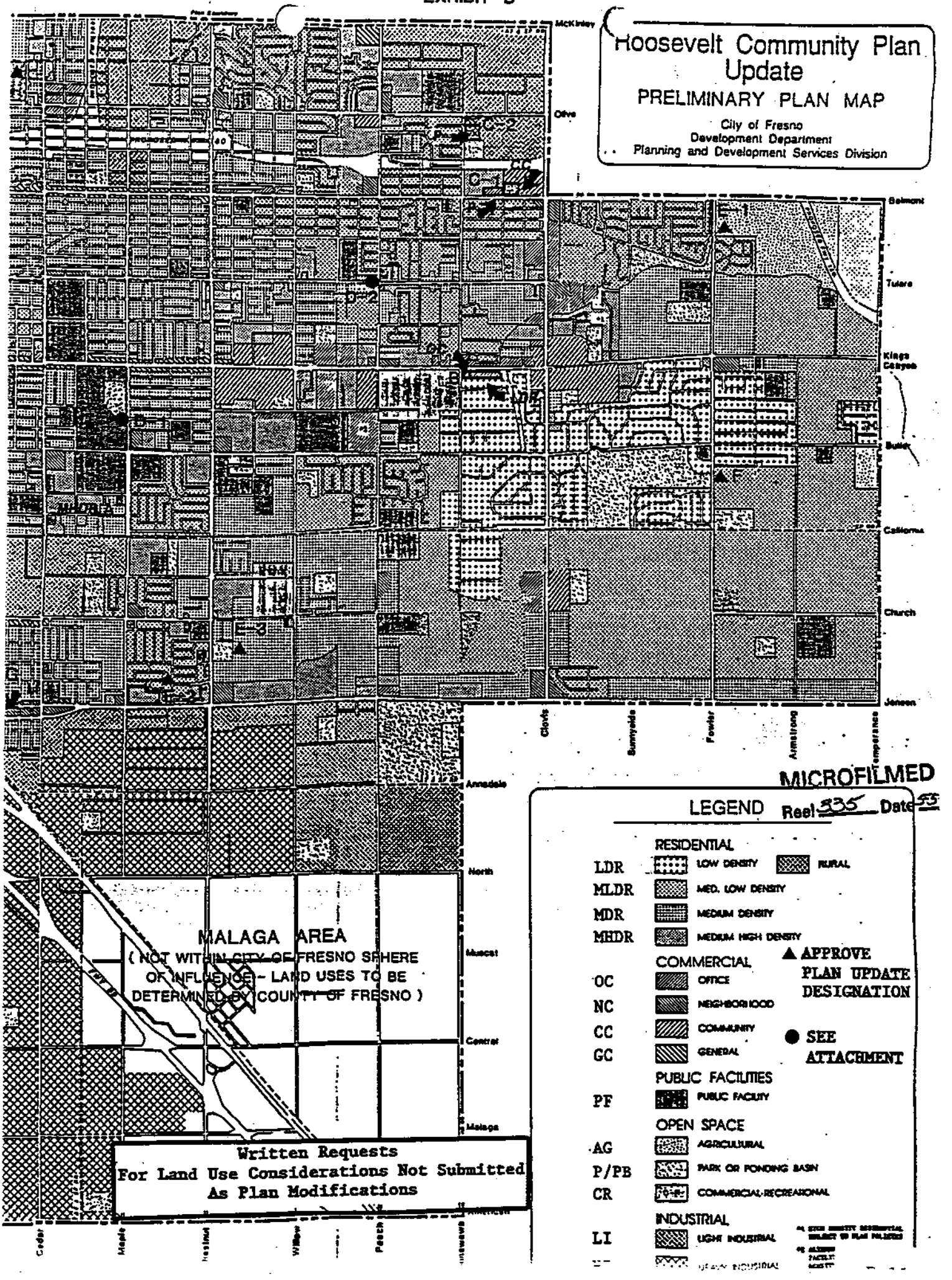
LDR - Low Density Residential
MLDR- Medium Low Density Residential
MDR - Medium Density Residential
MHDR- Medium High Density Residential

OC - Office Commercial
NC - Neighborhood Commercial
CC - Community Commercial
RC - Regional Commercial
GC - General Commercial

PF - Public Facility
NP/OS - Neighborhood Park/Open Space
RP/OS - Regional Park/Open Space
Ag/OS - Agricultural/Open Space

LI - Light Industrial
HI - Heavy Industrial

EXHIBIT B



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Reel 535 Date 55

EXHIBIT B

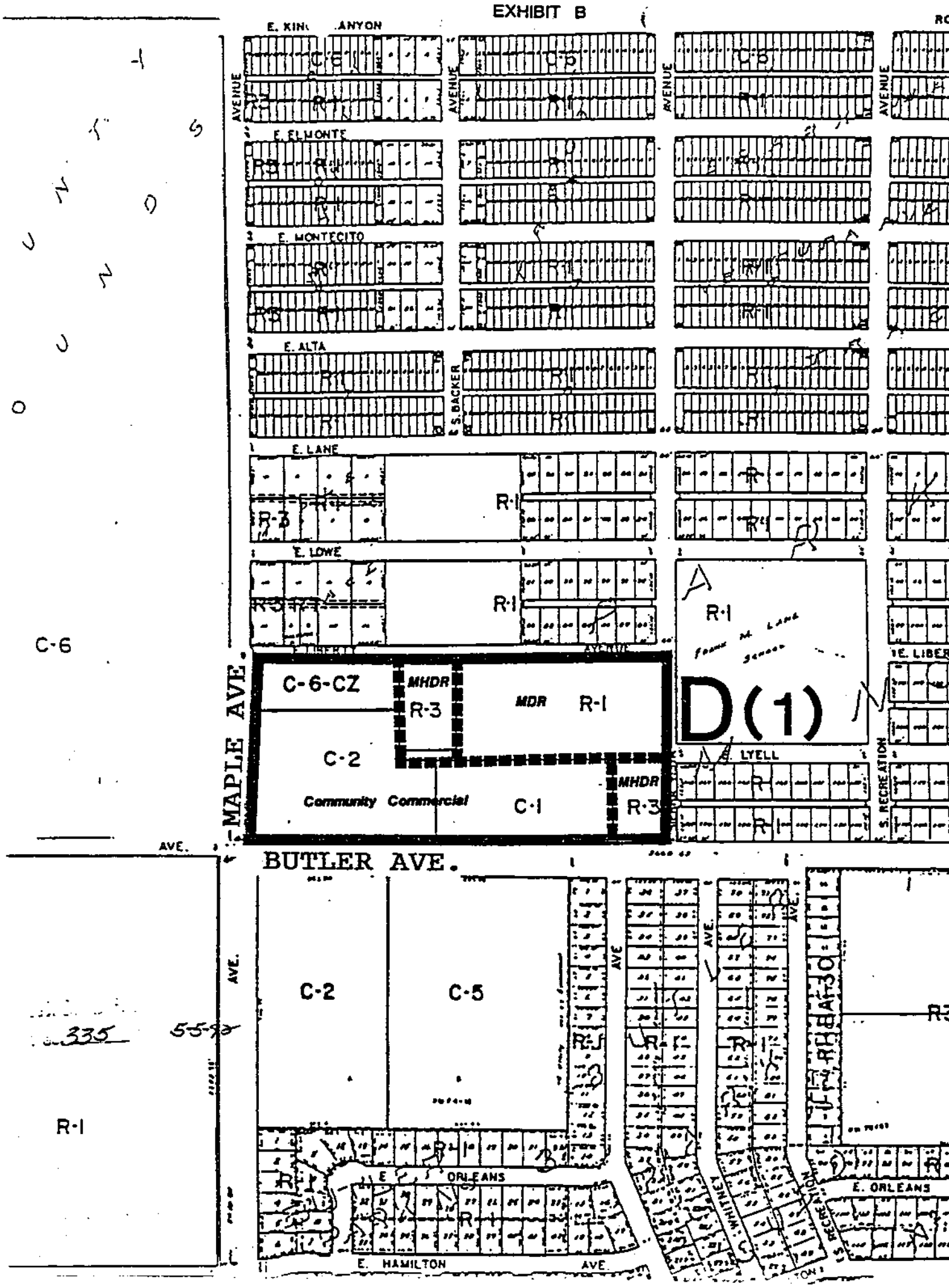
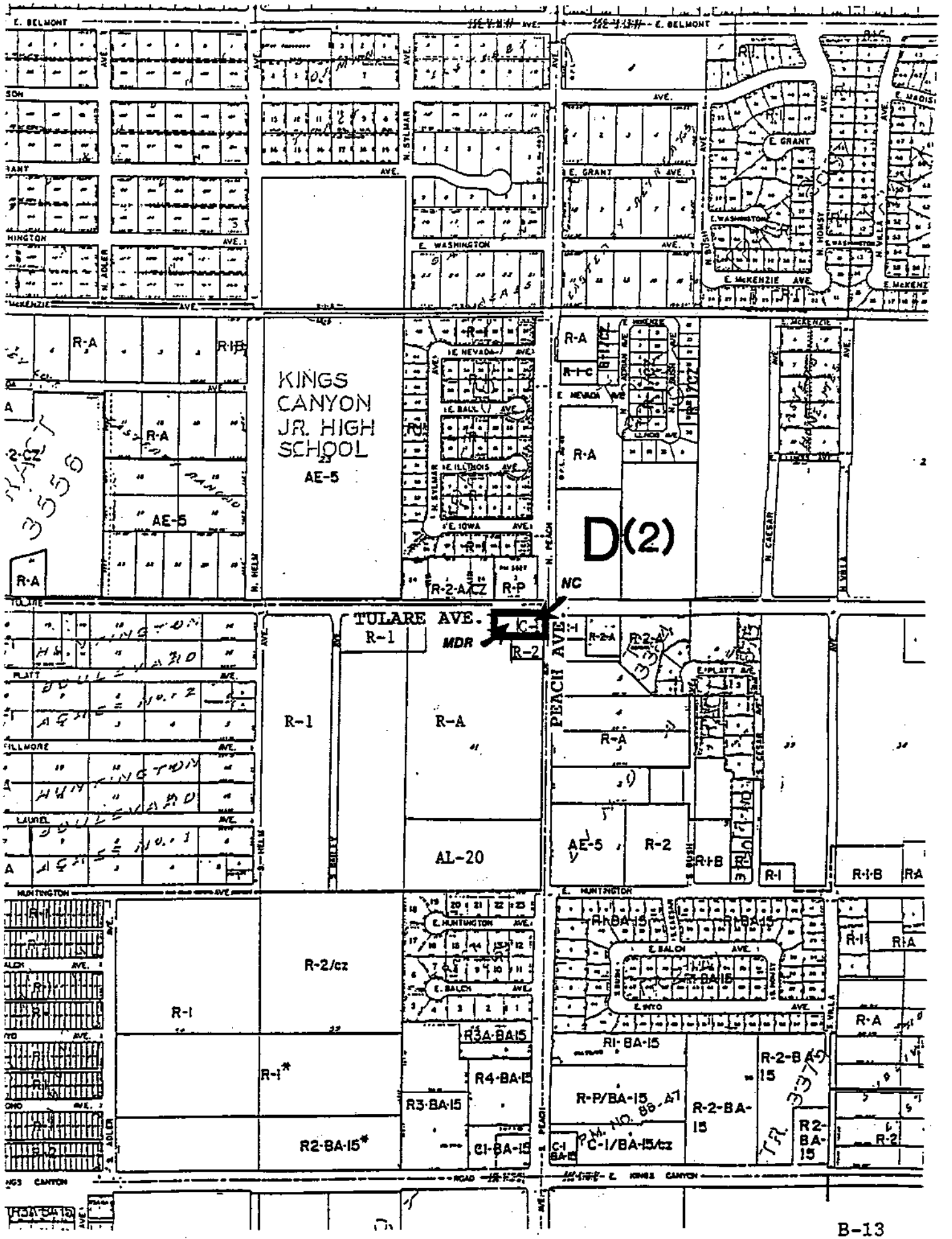

E. KING CANYON
AVENUE
E. ELMONTE
E. MONTECITO
E. ALTA
S. BACKER
E. LANE
E. LOWE
E. LIBERTY
AVENUE
C-6-CZ
MHDR
R-3
MDR
R-1
C-2
Community Commercial
C-1
MHDR
R-3
MAPLE AVE.
C-6
R-1
D(1)
E. LYELL
S. RECREATION
BUTLER AVE.
AVE.
C-2
C-5
R-1
335
E. ORLEANS
E. HAMILTON
AVE.

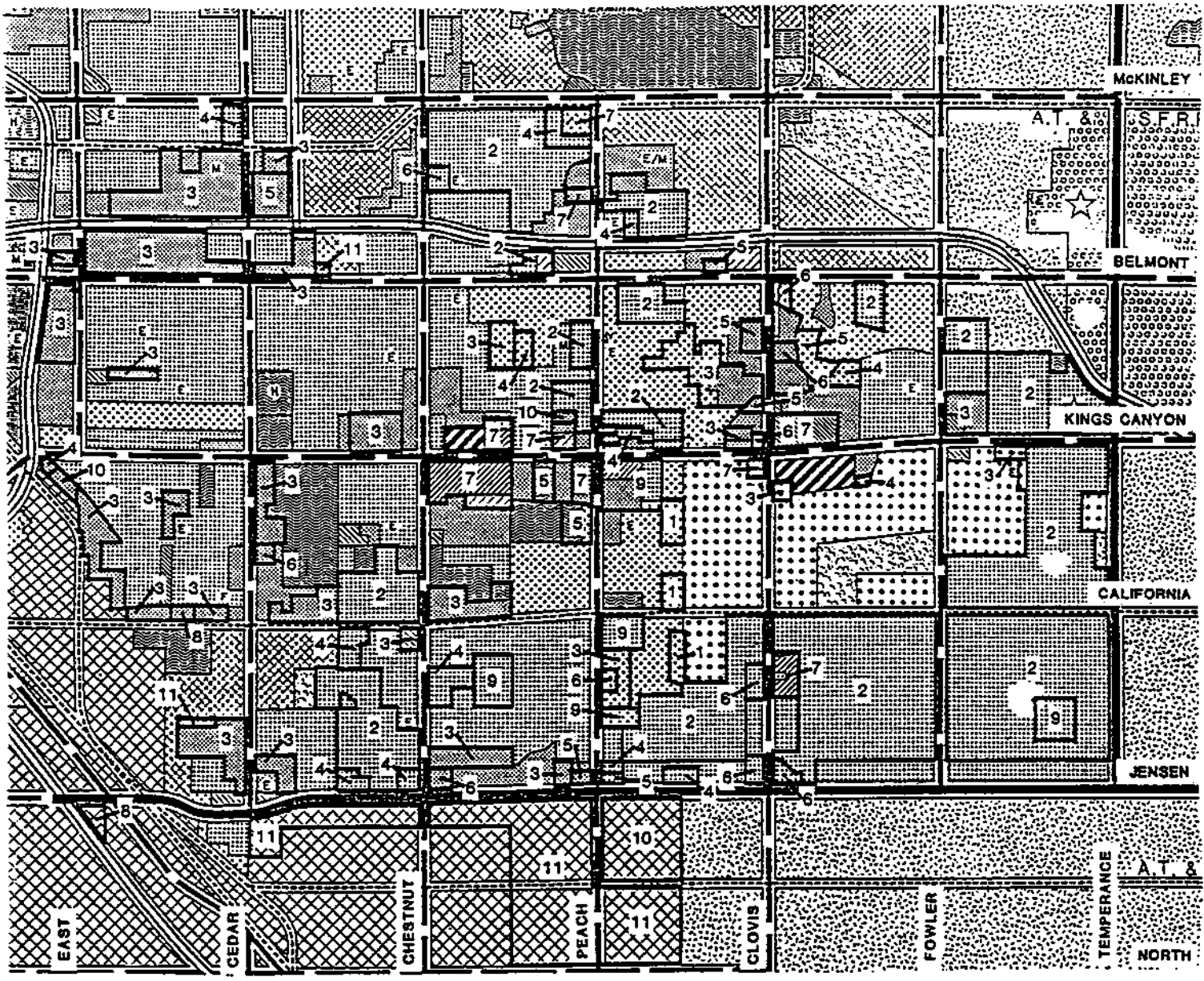
EXHIBIT B



E. BELMONT
E. GRANT
E. WASHINGTON
E. McKENZIE
N. SYLMAR
N. HOMSY
N. VILLA
N. ADLER
N. BUSH
N. PEACH
N. CAESAR
N. HELM
KINGS CANYON JR. HIGH SCHOOL
AE-5
R-A
R-1-B
R-1-C
R-1
R-2-A/CZ
R-P
D(2)
NC
TULARE AVE.
MDR
C-1
R-2
PEACH AVE.
R-2-A
E. PLATT AVE.
R-1
R-A
AL-20
AE-5
R-2
R-1-B
R-1
R-1-B
R-A
E. HUNTINGTON
E. HUNTINGTON AVE.
E. BALCH AVE.
E. INYO AVE.
R-2/cz
R-1
R-1*
R2-BA-15*
R3A-BA15
R4-BA-15
R3-BA-15
C1-BA-15
R1-BA-15
R-P/BA-15
C-1/BA-15/cz
R-2-BA-15
R2-BA-15
R-2
E. KINGS CANYON

EXHIBIT C

CHANGES TO 1984 FRESNO GENERAL PLAN



MICROFILMED
335 5-59

LEGEND

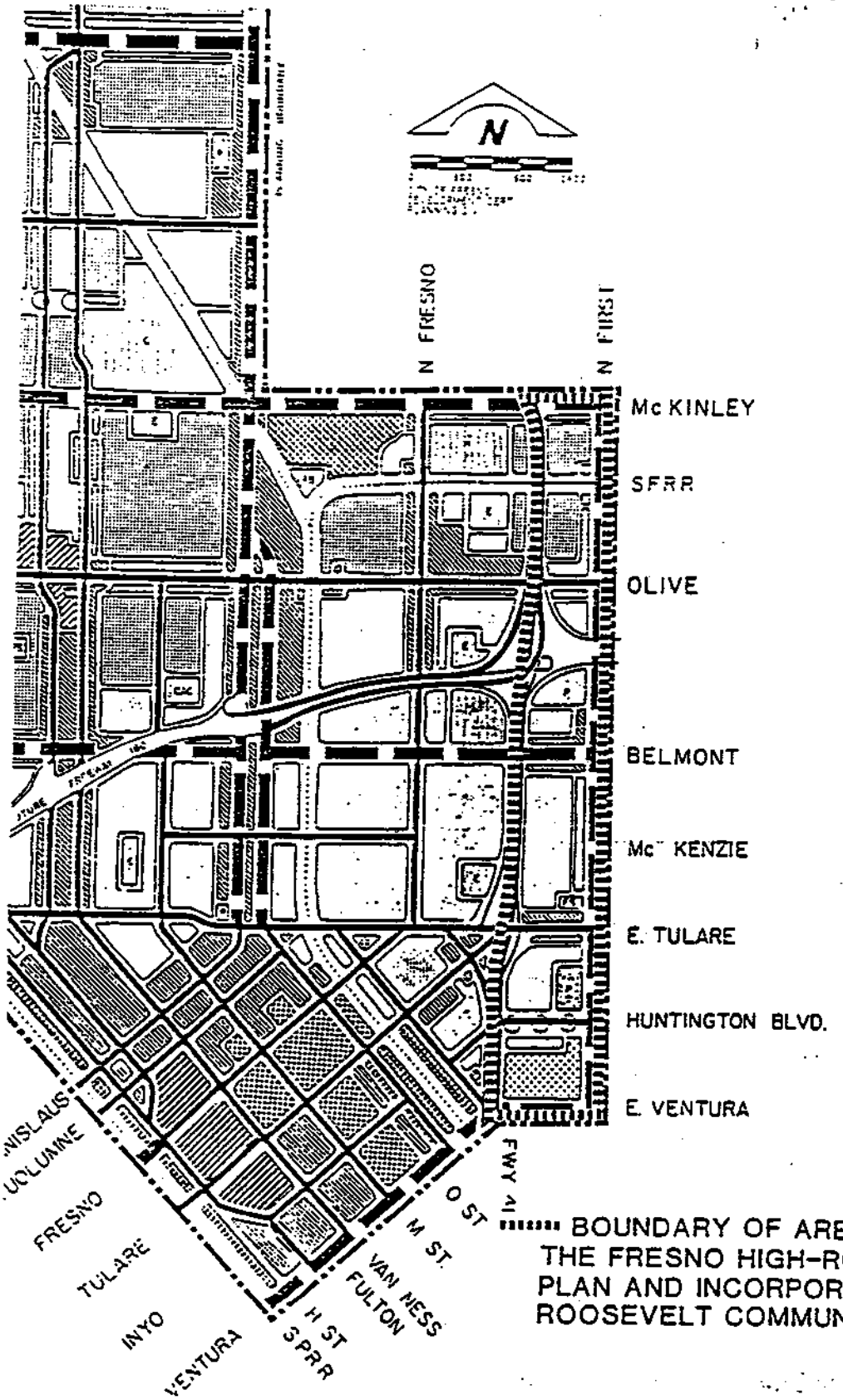
EXISTING DESIGNATION	PROPOSED DESIGNATION	
		RURAL RESIDENTIAL
	1	LOW DENSITY RESIDENTIAL
	2	MED OW DENSITY RESIDENTIAL
	3	ME DENSITY RESIDENTIAL
	4	MEDIUM HIGH DENSITY RESIDENTIAL
		HIGH DENSITY RESIDENTIAL
	5	OFFICE COMMERCIAL

EXISTING DESIGNATION	PROPOSED DESIGNATION	
	6	NEIGHBORHOOD COMMERCIAL
	7	COMMUNITY COMMERCIAL
	8	GENERAL COMMERCIAL
		REGIONAL COMMERCIAL
	9	PUBLIC FACILITY
	10	PARK OR PONDING BASIN
	11	LIGHT INDUSTRIAL
		HEAVY INDUSTRIAL

*The number indicates the amended land use plan designation.

EXHIBIT D

BOUNDARY AMENDMENT TO THE FRESNO HIGH-ROEDING COMMUNITY PLAN



BOUNDARY OF AREA DELETED FROM THE FRESNO HIGH-ROEDING COMMUNITY PLAN AND INCORPORATED INTO THE ROOSEVELT COMMUNITY PLAN UPDATE.

335 5-5-92

EXHIBIT E

ROOSEVELT COMMUNITY PLAN UPDATE
CITIZENS IMPLEMENTATION COMMITTEE
POLICY AMENDMENTS

1. (Revised) 1-1.3 p. 18

Within thirty days after the adoption of the Roosevelt Community Plan, a committee shall be formed and called the Roosevelt Community Plan Implementation Committee. This committee shall be appointed pursuant to the Planning Guidelines of the Local Planning and Procedures Ordinance and shall include residents of both the unicorporated and incorporated portions of the Plan Area.

The Roosevelt Community Plan Implementation Committee shall review and monitor the implementation of the Roosevelt Community plan. The Committee shall also make recommendations to City staff, the Planning Commission, and City Council regarding the implementation of the Roosevelt Community Plan. More specifically, the Committee shall do the following:

A. On or before December 1 of each year, the Committee should present to the City Council a report which contains a performance evaluation of the Plan. If the Committee concludes that amendments to the Plan are needed to better address community issues and concerns stated in the Plan, the Committee should submit the proposed amendments to the City Council so that they can be considered for initiation by the City Council.

B. On or before April 1 of each year, the Committee should make recommendations to the City Council on the priority of Plan implementation measures that should be pursued. These recommendations can be considered for funding as part of the City's annual budget review process.

C. The Committee shall be permitted to review and make recommendations on plan amendment, development entitlement, and site plan review applications in the Roosevelt Community Plan Area <u>(except where specific plan implementation or review committees have been established, such as for the Yosemite School Area Specific Plan)</u> before final City action is taken on the applications.

2. (New) 1-4.5 p. 23

Establish a community plan area based resource allocation program that includes area characteristics (such as geographical size, physical condition, population size and long range planning objectives) to determine appropriate expenditures for pubic services and facilities.

335 559a

3. (New) 1-4.6 p. 23 — Establish an inter-agency effort, with the City and County of Fresno taking lead roles, that focuses upon prevention and intervention stratergies addressing juvenile social issues and behavioral problems such as drug use, gang participation and vandalism (graffiti).

4. (New) 1-4.7 p. 23 — Support formation of new and expanded Enterprise Zone within the Roosevelt community (as shown in EIR Figure EIR-3); and explore submission of a joint City/County Enterprise Zone application.

5. (Revised) 1-8.4 p. 33 — Signs shall be architecturally compatible with and complimentary to the character of the development and land uses for which the signs advertise. ~~Limit/all/new unified/shopping/center/development/along/Kings/Canyon Road/between/Chestnut/and/Sunnyside/Avenues/to/one monument/style/free/standing/sign/per/street/frontage not/to/exceed/eight/feet/in/height/or/be/located/closer than/ten/feet/from/the/street/property/line/~~

6. (New) 1-8.7 p. 34 — Identify a site, which is appropriate and consistent with overall plan gaols and policies for a planned unified regional shopping center, of sixty (60) acres or more in size, througj the 1994 General Plan Update process or through the redevelopment planning process.

7. (Revised) 1-11.8d p. — Apply the conditional use permit findings and noticing procedures of the Fresno Municipal Code (Section 12-405.A) to all uses proposed within a C-6 "Heavy commercial" Zone District (located within 300 feet of a property that that is planned or zoned for residential use), and apply all appropriate design and development measures necessary to assure that the use will not be detrimental to the public welfare or injurious to surrounding uses and improvements.

8. (New) 1-15.12 p. 48 — Initiate efforts, in cooperation with the Fresno Irrigation District, railroads and other owners of utility easements and right-of-way, to identify and implememt measures to prevent inappropriate vehicular access to these rights-of way.

9. (Revised) 1-11.9 p. 40 — ~~Consider/the/allowance/of~~ Identify and implement appropriate (economically feasible) incentives such as fee reductions or deferrals, permit assistance and economic development loans to rehabilitate and improve existing commercial development.

335 5-5-90

10 (New) 1-11.10 p. 4 — Pursue the establishment of an ordinance authorizing an annual review program and abatement procedure addressing commercial establishments which sell alcoholic beverages, where repeated incidences of a serious nature (such as but not limited to drug sales and/or use, prostitution, violent crimes) occur and are a threat to the public health, safety and welfare and injurious to surrounding properties and their occupants. This review shall also consider chronic problems of public disturbances, drunkeness or other behavior of patrons or employees which may be harmful to nearby residents.

11. (Revised) 1-13. 2-d p. 43 — The provisions of the City Zoning Ordinance applicable to an approved industrial manufacturing district shall apply to outdoor advertising for industrial manufacturing uses.

12. (New) 1-21.8 p. 59 — The Internal Revenue Service's Regional Processing Center is important to the Roosevelt Community Plan Area and Metropolitan Area; therefore, a high priority shall be given to promoting its retention and expansion while maintaining compatibility with the surrounding neighborhood.

13. (Revised) 2-1.5 p. 58 — ~~Support/all/efforts~~ Identify and pursue strategies (including reprioritization of the Measure "C" Local Transportation Fund Expenditure Plan) to develop Freeway 180, on the alignment identified by the Community Plan Circulation Map ~~as/a/Measure/7C7/priority/project~~, from Freeway 41 to Clovis Avenue or Fowler Avenue in a single-phase by 1996.

14. (Revised) 2-2.7 p. 59 — b. ~~Require~~ Apply mitigation measures to lessen the effect of major street traffic noise ~~along expressways~~ on adjacent residential property for all new residential uses (Pursuant to the Noise Element of the General Plan, Title 24 of the California Administrative Code and the Expressway Overlay District, Section 12-224 of the Fresno Municipal Code) and ~~encourage~~ pursue the application of such measure for existing residential property to the extent feasible.

15. (Revised) 3-1.1 p. 69 — ; and establish specific plans for neighborhood areas, including but not limited to Calwa, Belmont Avenue and the Freeway 180 Corridor (as prioritized in consultation with the Citizens Plan Implementation Committee), to implement detailed strategies addressing unique issues and problems.

335 5-5-89

.6. Revised) 3-1.11 p. 71 — Advocate for coordinated use of City and County Community Development Block Grant (CDBG) and general fund public works money to be used in a comprehensive local infrastructure repair and rebuilding program. This program should include a comprehensive needs assessment and prioritization of projects. Support the formation of City and County amortized improvement districts for streets, curbs, and gutters; and support the formation of ~~comprehensive~~ (a) FMFCD drainage assessment district(s) in the City and County areas to provide for the development of modern drainage facilities and new neighborhood parks within the Roosevelt Community.

7. Revised) 3-1.2 p. 69 — Prohibit the development of new multiple family residential uses inconsistent with the Plan, except when approved by the Planning Commission/City Council as authorized by the Local Planning Ordinance (Article 6, Chapter 12 of the Fresno Municipal Code) and findings are made that the use can be adequately accommodated by public facilities, that it will not be detrimental to the public welfare, an that it will not be injurious to surrounding uses and improvements; and execute a rezoning implementation program (as prioritized by the Citizens Plan Implementation Committee) to assure that all vacant or single-family residential developed parcels (that are planned for low, medium low, or medium density residential use) are also rezoned consistent with the planned use.

8. Revised) 3-1.3 p. 71 — Establish viable redevelpment areas through the City's Redevelopment Agency, consistent with Article 6 or the City-County Memorandum of Understanding, to eradicate physical, social, and economic blight; and utilize fast-track methods, to the extent feasible, to identify redevelopment study areas including but not limited to (Calwa, Freeway 180 Corridor, Fairgrounds area, and Roosevelt High Area) as prioritized in consultation with the Citizens Plan Implementation Committee.

9. New) 3-1.13 p. 72 — Actively solicit the paricipation of community groups and organizations (such as Tree Fresno, service clubs, and philanthropic institutions) to contribute resources and expertise in a concerted effort to improve and maintain established neighborhoods.

FILMED
335 5-5-93

20. (Revised) 3-2.1 p. 72 ~~Plan/for~~ Provide and monitor a proportionate amount of the Metropolitan Area need for both rental and owner-occupied housing at affordable prices for low, moderate and median income households through the distribution of residential density designations within the Plan Area, utilization of planned development designs and density averaging and diligent efforts to implement programs and policies of the General Plan Housing Element.

21. (Revised) 3-2.2 p. 72 ~~Plan~~ Provide for the development of a diversity of housing styles throughout the Plan Area to accommodate different socioeconomic levels, family types, and sizes while maintaining compatibility with estab lished neighborhoods through the following measures:

a. Evaluate each residential development proposal with respect to the attainment of housing goals and policies.

b. and review residential lot sizes or dwelling unit densities to provide a diversity of housing types appropriately distributed within the plan area.

22. (New) 3-2/6 p. 72 Pursue the utilization of "linkage" fees to facilitate the development of low and moderate income housing in conjunction with the peripheral development of residential, commercial and industrial uses which are outside of the City's Enterprise Zones or are not immediately accessible (more than 1/2 mile) from the City's designated Enterprise Program Eligible Areas (economically distressed).

23. (Revised) 3-2.3 p. 72 ~~Pursue~~ Utilize incentives such as express permit processing (fast tracking), subsidized or deferred development fees and improvement districts to stimulate rehabilitation of existing structures and construction of new dwellings in established areas compatible with ~~existing~~ existing and planned neighborhoods characteristics.

24. (New) 4-7.3 p. .84 Pursue strategies and support school district programs to efficiently and consisently provide a high quality of education throughout the Plan Area, including the realignment of school district boundaries to inhance the efficient development of school facilities (with the City of Fresno initiating efforts to promote inter-agency cooperation and communication).

335 5-5-80

25. (New) 4-6.4 p. 58 Identify and pursue measures to improve public safety services such as establishment of a police substation and/or increased staffing of the police changing station to accommodate public access. Explore the feasibility of providing a combined police, fire and sheriff's public safety facility.

26. (Revised) 4-8.1 p. 84 ~~Provide a neighborhood cleanup program (comparable to the City's) throughout the Plan Area, including the unincorporated portions.~~

Establish community sanitation programs to provide neighborhood clean-up and nuisance abatement services throughout the plan area including both incorporated and unincorporated areas.

27. (Revised) 4-8.6 p. 85 Pursue the implementation of measures to eliminate illegal tire dumping (which is an obvious and significant problem within the plan area) such as: 1) requiring tire disposal plans for all tire sales and installation businesses; 2) require licensing of all tire disposal haulers; 3) require tires sold within the City or County (with cooperation of Fresno County) be permanently marked identifying point-of-sale~~s~~ and implementing a refundable deposit to be repaid upon return of the tire to a tire business or redemption center; 4) pursue grants and other programs for neighborhood tire clean-up and disposal.

28. (New) 5-3.5 p. 92 High priority shall be given to reducing noise and aesthetic impacts of freeways upon neighborhoods through the following efforts:

a. Work with Caltrans to assure the implementation of freeway design measures (including the most appropriate grade design), noise barriers and landscaping buffers that will protect neighborhoods to the extent feasible (balancing physical and economic resource constraints while minimizing noise and aesthetic impacts upon neighborhoods).

DU:flh
PLN420/+1040

335 5-5-8

ROOSEVELT COMMUNITY PLAN ADDITIONS

1. The following community issues and concerns shall be added to those listed on pages 6 and 7 of the Draft Plan:

   - There is a need to identify and establish viable redevelopment areas processed on a fast track basis to eradicate physical, social and economic blight.

   - There is a need to provide affordable low-income quality housing mixed with higher market end projects to instill neighborhood harmony and economic stability.

   - There is a need to expand the Enterprise Zone to facilitate the area's economic revitalization through new environmental safe developments and enhance job development opportunities.

   - There is a need to coordinate the implementation of economic development with the private and public sectors through an updated extensive inventory of industrial/commercial zoned properties (i.e., underutilized parcels with rezoning potential) and through high profile marketing efforts.

   - There is a need to network between the Hispanic, Southeast Asian, Black and Caucasian communities to address problems associated with crime, vehicle thefts, drugs, gang violence, gang graffiti, alcohol abuse, education and job opportunities for the at-risk youth.

2. The following Policy shall be incorporated into the Draft Plan.

   Within thirty days after the adoption of the Roosevelt Community Plan, a committee shall be formed and called the Roosevelt Community Plan Implementation Committee. This committee shall be appointed pursuant to the Planning Guidelines of the Local Planning and Procedures Ordinance.

   The Roosevelt Community Plan Implementation Committee shall review and monitor the implementation of the Roosevelt Community Plan. The Committee shall also make recommendations to City staff, the Planning Commission, and City Council regarding the implementation of the Roosevelt Community Plan. More specifically, the Committee shall do the following:

   A. On or before December 1 of each year, the Committee should present to the City Council a report which contains a performance evaluation of the Plan. If the Committee concludes that amendments to the Plan are

needed to better address community issues and concerns stated in the Plan, the Committee should submit the proposed amendments to the City Council so that they can be considered for initiation by the City Council.

B. On or before April 1 of each year, the Committee should make recommendations to the City Council on the priority of Plan implementation measures that should be pursued. These recommendations can be considered for funding as part of the City's annual budget review process.

C. The Committee shall be permitted to review and make recommendations on plan amendment, development entitlement, and site plan review applications in the Roosevelt Community Plan Area before final City action is taken on the applications.

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PLN415/+942

DOCUMENT
335 Date 5-5-92

ROOSEVELT COMMUNITY PLAN UPDATE
DENSITY TRANSITION GUIDELINES

Policy 1-7.1a...Utilize guidelines one and two, as advisory criteria, in evaluating the compatibility of new residential development in areas designated for medium low and medium density residential uses; and, apply guideline three as a fixed standard for development within medium density residential designated areas.

1. That a minimum of 12,500 square foot lot sizes (R-1-B zoning) or larger be required in the medium low density residential planned areas adjacent to low density residential planned areas.

2. That minimum lot sizes of 6,000 square feet (R-1 zoned conventional lots) or larger be developed elsewhere in medium low density residential planned areas, except when approved as a clustered planned development.

3. Reduced size nonclustered lots within the medium density residential designation shall be subject to a master planned development, in which not more than 20% of the area is designed with reduced size nonclustered lots.

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plan.600

MICROFILMED
335 5-5-87

BILL NO. B-25

INTRODUCED BY COUNCILMEMBER Padilla

ORDINANCE NO. 92-23

AN ORDINANCE OF THE CITY OF FRESNO, CALIFORNIA, AMENDING THE BUTLER-WILLOW AREA SPECIFIC PLAN

WHEREAS, on December 19, 1971, by Ordinance No. 71-116, the Council adopted the Butler-Willow Area Specific Plan; and

WHEREAS, specific plans are essential to the refinement of the Community Plan; and

WHEREAS, the Council directed that the Roosevelt Community Plan be updated; and

WHEREAS, the Roosevelt Community Plan Update has been prepared pursuant to the Local Planning and Procedures Ordinance (LPPO) and was formulated by staff with the help of a 16-member Citizens Advisory Committee and with substantial public input and was initiated by the Fresno City Council on July 16, 1991, all in conformance with applicable provisions of State Planning Law, the LPPO and guidelines promulgated under it; and

WHEREAS, the Fresno City Planning Commission, at its meeting of January 22, 1992, adopted Resolution No. 10268 recommending adoption of the Roosevelt Community Plan as recommended by the Citizens Advisory Committee and including several modifications and plan change requests and

WHEREAS, the Council of the City of Fresno, on December 4 and 17 of 1991, February 4, 11, 18 and 25 of 1992 and March 3, 17, 24 and 31 of 1992, held a duly noticed public hearing to consider the draft Roosevelt Community Plan and Final Environmental Report (EIR)

PASSED 4/7/92

EFFECTIVE 5/8/92

335 5/5/92

92-23

No. 10113, and at the public hearings considered all information contained in the draft Roosevelt Community Plan and EIR No. 10113, and all written and oral evidence and testimony related thereto; and

WHEREAS, prior to taking action on this project, Council adopted a resolution certifying City of Fresno Final EIR No. 10113 (State Clearinghouse No. 90021238) as required by the California Environmental Quality Act;

NOW, THEREFORE THE COUNCIL OF THE CITY OF FRESNO DOES ORDAIN AS FOLLOWS:

SECTION 1. The Council hereby amends the Butler-Willow Specific Plan as depicted on Exhibit A incorporated herein by reference, in order to maintain consistency between the Roosevelt Community Plan and the said Specific Plan.

SECTION 2. This Ordinance shall become effective and in full force at 12:01 a.m. on the thirty-first day after its passage.

CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, Jacqueline L. Ryle, City Clerk of the City of Fresno, certify that the foregoing Ordinance was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 7th day of April, 1992.

APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

BY: _____ DEPUTY

JACQUELINE L. RYLE
City Clerk

By _____ Deputy

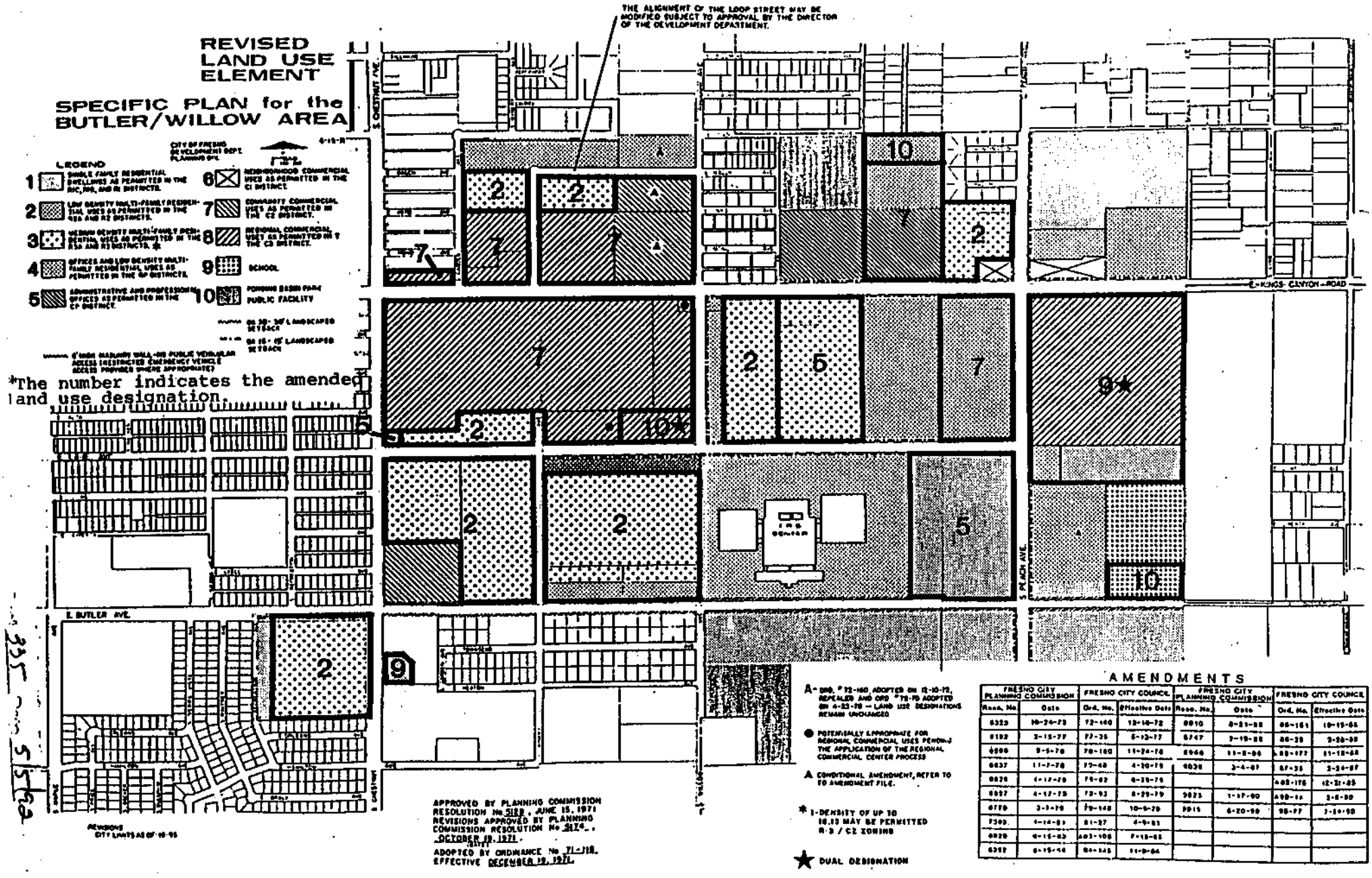
SC:flh:PLN435/+1108

Exhibit A

EXHIBIT A

ROOSEVELT COMMUNITY PLAN UPDATE

PROPOSED AMENDMENTS TO BUTLER / WILLOW SPECIFIC PLAN



APPROVED BY PLANNING COMMISSION RESOLUTION No. 5128, JUNE 15, 1971
REVISIONS APPROVED BY PLANNING COMMISSION RESOLUTION No. 5174, OCTOBER 19, 1971.
ADOPTED BY ORDINANCE No. 71-118, EFFECTIVE DECEMBER 19, 1971.

A - ORD. #72-160 ADOPTED ON 12-10-72, REPEALED AND ORD #72-70 ADOPTED ON 4-23-70 — LAND USE DESIGNATIONS REMAIN UNCHANGED

● POTENTIALLY APPROPRIATE FOR REGIONAL COMMERCIAL USES PENDING THE APPLICATION OF THE REGIONAL COMMERCIAL CENTER PROCESS

▲ CONDITIONAL AMENDMENT, REFER TO TO AMENDMENT FILE.

* 1-DENSITY OF UP TO 18.13 MAY BE PERMITTED R-3 / C2 ZONING

★ DUAL DESIGNATION

AMENDMENTS

FRESNO CITY PLANNING COMMISSION		FRESNO CITY COUNCIL		FRESNO CITY PLANNING COMMISSION		FRESNO CITY COUNCIL	
Resn. No.	Date	Ord. No.	Effective Date	Resn. No.	Date	Ord. No.	Effective Date
6323	10-24-73	72-160	12-10-72	8810	8-21-88	88-161	10-15-88
6192	3-15-77	77-35	5-13-77	8747	3-19-88	88-28	3-28-88
6596	9-5-78	78-160	11-24-78	8946	11-8-88	88-177	11-18-88
6637	11-7-78	77-48	4-20-79	9038	3-4-87	87-35	3-24-87
6828	4-17-79	79-62	6-29-79			85-176	12-31-85
6827	4-17-79	79-93	8-29-79	9825	1-17-90	90-14	2-8-90
6770	3-7-79	79-148	10-9-79	9915	6-20-90	90-77	7-20-90
7303	4-14-81	81-27	4-9-81				
6828	4-15-83	83-108	7-15-83				
6352	6-15-84	84-145	11-8-84				

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BILL NO. B-26

INTRODUCED BY COUNCILMEMBER Padilla

ORDINANCE NO. 92-24

AN ORDINANCE OF THE CITY OF FRESNO, CALIFORNIA, AMENDING THE FRESNO AIR TERMINAL ENVIRONS AREA SPECIFIC PLAN

WHEREAS, on January 20, 1987, by Ordinance No. 87-14, the Council adopted the Fresno Air Terminal Environs Area Specific Plan; and

WHEREAS, specific plans are essential to the refinement of the Community Plan; and

WHEREAS, the Council directed that the Roosevelt Community Plan be updated; and

WHEREAS, the Roosevelt Community Plan Update has been prepared pursuant to the Local Planning and Procedures Ordinance (LPPO) and was formulated by staff with the help of a 16-member Citizens Advisory Committee and with substantial public input and was initiated by the Fresno City Council on July 16, 1991, all in conformance with applicable provisions of State Planning Law, the LPPO and guidelines promulgated under it; and

WHEREAS, the Fresno City Planning Commission, at its meeting of January 22, 1992, adopted Resolution No. 10268 recommending adoption of the Roosevelt Community Plan as recommended by the Citizens Advisory Committee and including several modifications and plan change requests; and

WHEREAS, the Council of the City of Fresno, on December 4 and 17 of 1991, February 4, 11, 18 and 25 of 1992 and March 3, 17, 24 and 31 of 1992, held a duly noticed public hearing to consider the draft Roosevelt Community Plan and Final Environmental Report (EIR)

PASSED 4/7/92

EFFECTIVE 5/8/92

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No. 10113, and at the public hearings considered all information contained in the draft Roosevelt Community Plan and EIR No. 10113, and all written and oral evidence and testimony related thereto; and

WHEREAS, prior to taking action on this project, Council adopted a resolution certifying City of Fresno Final EIR No. 10113 (State Clearinghouse No. 90021238) as required by the California Environmental Quality Act;

NOW, THEREFORE THE COUNCIL OF THE CITY OF FRESNO DOES ORDAIN AS FOLLOWS:

SECTION 1. The Council hereby amends the Fresno Air Terminal Environs Area Specific Plan as depicted on Exhibit A incorporated herein by reference, in order to maintain consistency between the Roosevelt Community Plan and the said Specific Plan.

SECTION 2. This Ordinance shall become effective and in full force at 12:01 a.m. on the thirty-first day after its passage.

CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, Jacqueline L. Ryle, City Clerk of the City of Fresno, certify that the foregoing Ordinance was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 7th day of April, 1992.

JACQUELINE L. RYLE
City Clerk

APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

BY: _____ DEPUTY

By _____ Deputy

SC:flh:PLN435/+1157

Exhibit A

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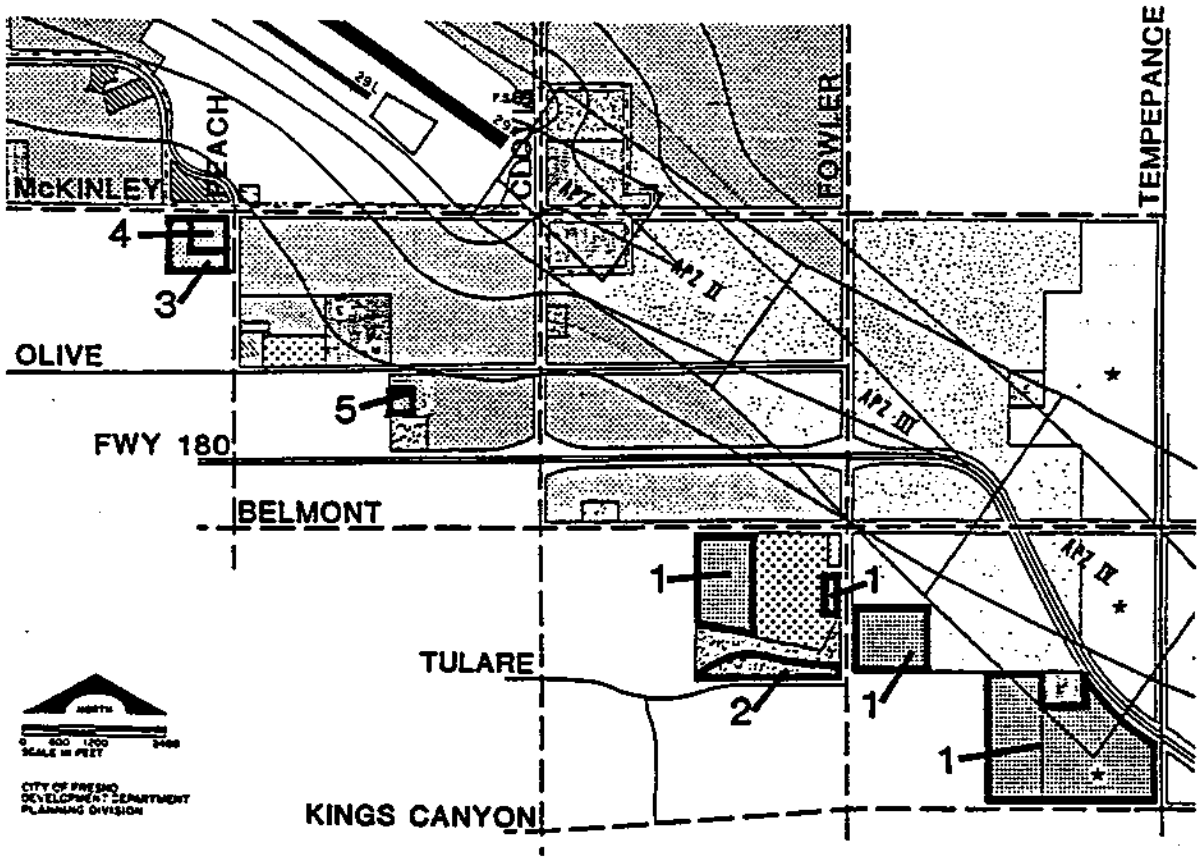
EXHIBIT A

AMENDMENTS TO FRESNO AIR TERMINAL ENVIRONS AREA SPECIFIC PLAN PROPOSED BY ROOSEVELT COMMUNITY PLAN UPDATE



LEGEND

RESIDENTIAL (UNITS/GROSS ACRE)

- RURAL DENSITY (0-1.21)
- LOW DENSITY (0-2.18)
- 1 MEDIUM-LOW DENSITY (2.19-4.98)
- 2 MEDIUM DENSITY (4.99-10.37)
- 3 MEDIUM-HIGH DENSITY (10.38-18.15)

COMMERCIAL

- 4 GENERAL

PUBLIC FACILITIES

- PUBLIC FACILITIES

INDUSTRIAL

- LIGHT

OPEN SPACE

- AGRICULTURAL
- 5 PARK / PONDING BASIN

*The number indicates the amended land use plan desidnation.

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1991 ROOSEVELT COMMUNITY PLAN UPDATE

FINAL ENVIRONMENTAL IMPACT REPORT

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1991 ROOSEVELT COMMUNITY PLAN UPDATE
FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)

PREFACE

This portion of the 1991 Roosevelt Community Plan Update document constitutes the Final Environmental Impact Report (EIR) required by the California Environmental Quality Act (CEQA) and its implementing guidelines. In accordance with Sections 15089(a) and 15132 of the CEQA Guidelines and the City of Fresno's Environmental Quality Ordinance, the Final EIR consists of the following:

1. A summary of findings, listing significant environmental impacts and their mitigation measures; listing impacts determined not to be significant and mitigation measures to address area concerns; and a statement of overriding considerations.

2. A list of agencies and organizations consulted during preparation of this EIR.

3. A list of agencies and persons submitting written comments on the Draft EIR.

4. Written comments received on the Draft EIR.

5. City of Fresno responses to significant environmental points identified through the Draft EIR review process.

6. The Draft EIR, as revised in response to the review process.

SUMMARY OF FINDINGS

This section briefly describes the proposed project, its potentially significant environmental effects, corresponding mitigation measures, and appropriate findings as required by CEQA Guidelines.

PROJECT DESCRIPTION

The project, as evaluated in City of Fresno EIR No. 10113, is the 1991 Roosevelt Community Plan Update. This plan update consists of written goals and policies, with accompanying maps and diagrams. The 1991 Roosevelt Update refines and implements the 1984 Fresno General Plan as it applies to the Roosevelt Community Plan Area of the City of Fresno. This community plan area is located in the southeastern portion of the Fresno Metropolitan Area and covers approximately 18,480 acres.

The primary objective of the community plan update is to establish the goals and policies/implementation measures necessary for the City of Fresno to guide anticipated urban development and judiciously manage public facilities and resources. The plan's concept and purpose, and the significant issues it addresses are described in detail by the introductions to the plan and the Draft EIR. These descriptions identify the plan's intention to address major community issues and to balance anticipated development with the capacities of public facilities and available resources. In addition, the plan update identifies its intention to guide urban development in a manner compatible with the community's natural and man-made characteristics.

The Roosevelt Community Plan Area has experienced considerable population growth and urban development over the past decade. The Joint Resolution on Metropolitan Planning, adopted by the Cities of Fresno and Clovis and the County of Fresno, provides the potential for substantial additional urban expansion, as implemented through the Fresno General Plan. A land use plan (with alternatives for various portions of the community plan area) is presented by the 1991 Roosevelt Plan Update to guide this potential urban growth. It accommodates current growth trends with policies to more effectively manage the process of urban expansion.

Inherent in continued urban development are various potentially significant environmental effects. These environmental issues were examined by the 1984 Fresno General Plan and its EIR (City of Fresno No. 10085). These effects and corresponding mitigation measures are again discussed in detail by the 1991 Roosevelt Community Plan Update and its EIR. In most cases, potentially significant environmental effects will be substantially mitigated by development standards and policies/implementation measures identified by the community plan update. However, there are certain effects caused by urban development and subsequent urban activities that are unavoidable, although they may be partially mitigable.

Environmental Impact Report No. 10085 for the 1984 Fresno General Plan identified the following eight significant environmental effects: a) emitted air pollutants; b) potential hazards due to groundwater contamination; c) depletion of groundwater resources; d) conversion of agricultural Class I and II soils to urban uses; e) consumption of nonrenewable energy resources; f) consumption of nonrenewable materials for construction; g) increases in traffic-generated noise; and, h) agricultural and urban land use conflicts. The 1991 Roosevelt Community Plan Update EIR revisits these issues and analyzes other impact categories.

The 1991 Roosevelt Community Plan Update has been prepared to provide more explicit guidelines and strategies for urban development in a manner responsive to previously and currently identified environmental impacts and mitigation measures. The community plan and its related EIR use new data and new analysis tools to address resource constraints and community issues such as limited sewer trunk capacity, vehicular circulation and circulation capacity constraints, intensive land use designations, public safety services, school facilities, and land use conflicts.

This plan would allow urban development compatible with current development trends and community conditions. The identified mitigation measures are generally adequate to reduce significant potential environmental impacts to an acceptable level. However, the emission of air pollutants, generation of traffic congestion and noise, deficiencies in school capacity, and the conversion of agricultural land caused by urban development cannot be fully alleviated. These impacts result from the conversion of open agricultural land to roads, urban structures, public facilities, and recreational open space. The accompanying urban activities, vehicle travel and use of hydrocarbon fuels can be reduced, but not avoided, given current technology, fiscal resources, and standards of living. School capacity is provided by funding mechanisms not entirely within the City of Fresno's control; other public agencies and the electorate also determine funding for school construction.

Additional environmental issues of concern within the Roosevelt Community include groundwater resources, sewer capacity, public safety services, school facilities, overintensification of development, and land use conflicts. These issues can be addressed through the diligent implementation of the proposed plan policies and EIR mitigation measures to manage urban growth, provide public facilities and services, and allocate finite natural resources. However, unforeseen events or changing conditions could result in deficiencies, reduced levels of service or inadequate capacities.

Requested Modifications: These are requests which generally propose more intensive urban uses in locations other than those shown in the recommended community plan's land use element. Modifications are described in the EIR's "Impacts of Plan Modifications" subsection (Chapter "U"). These modifications generally increase vehicle traffic and associated air pollution, congestion and noise. Increased demands on water and sewer systems will also generally occur. The growth-inducing tendencies of these uses in combination with the plan update could accelerate urban development in some portions of the plan area, because generally applicable plan policies and mitigation measures may become less effective or less feasible to implement.

SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Section 15091 of the CEQA Guidelines requires that no public agency shall approve or carry out a project for which an environmental impact report has been completed unless one or more of the following written findings are identified for each of the significant effects, accompanied by a statement of facts supporting each finding:

1. Changes or alterations have been required in, or incorporated into, the project which mitigates or avoids the significant environmental effects thereof as identified in the Final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency.

3. Specific economic, social or other considerations make infeasible the mitigation measures identified in the Final EIR.

The significant potential environmental impacts associated with the proposed plan update are discussed in detail in the following EIR text, and are summarized below. Unvoidable impacts are so noted. Specific mitigation measures set forth in the Roosevelt Community Plan EIR follow the impacts, and those pertaining to plan modifications are also listed for the special cases (modifications) where they may apply.

ROOSEVELT COMMUNITY PLAN UPDATE FINAL EIR NO. 10113, STATEMENT OF POTENTIAL SIGNIFICANT ADVERSE ENVRIONMENTAL EFFECTS, AND ASSOCIATED MITIGATION MEASURES TO BE REQUIRED BY OR INCORPORATED INTO THE PROJECT IN ORDER TO AVOID OR SUBSTANTIALLY LESSEN SIGNIFICANT ADVERSE EFFECTS:

GROWTH-INDUCING IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will induce further urban growth in the Roosevelt Community Plan Area (UNAVOIDABLE IMPACT).**

Mitigation Measures:

- **Urban Growth Management policies; agricultural land preservation policies; community plan density designations; and plan policies, including the requirements for environmental analysis and specific service capacity Findings for water, sewer, and transportation as detailed in Appendix F of this Environmental Impact Report (EIR).**

LAND RESOURCE IMPACTS

Agricultural land:

- **Implementation of the 1991 Roosevelt Community Plan Update could result in the eventual conversion of over 5,000 acres of agricultural land (UNAVOIDABLE IMPACT).**

Although General Plan goals and strategies strive to minimize the loss of agricultural land, the distribution of urban growth throughout the metropolitan area necessitates the conversion of some productive or prime agricultural land to urban use.

Mitigation Measures:

- The Development Department shall continue implementation of urban growth management (UGM) policies, water/sewer Findings, and property development standards which discourage the premature development of land.

- Agricultural/urban reserve areas shall only be converted to urban uses in accordance with growth and public facility policies of the 1991 Roosevelt Update. Agricultural land conservation policies of the 1991 Plan Update shall be implemented by the Development Department (Policy Nos. 1-20.3 and 1-20.4).

- The Development Department shall utilize major streets, where possible, as boundaries between areas designated for urban development and agriculture. When land proposed for urban development directly abuts actively farmed land that is in an agricultural preservation contract, the development project shall include design features which buffer the agricultural/urban interface: densely landscaped strips, designated open space (including, but not limited to: full-width multi-use trails or bikeways, boundary streets, on-site flood control facilities, and/or building setbacks with fencing).

Park Land:

- **Implementation of the 1991 Roosevelt Community Plan Update will result in a continued shortage of park space, as evaluated according to park space standards identified in the City of Fresno Master Plan for Parks and Recreation (MAY BE UNAVOIDABLE, IF POLICIES AND MITIGATION MEASURES ARE NOT FULLY IMPLEMENTED).**

Mitigation Measures:

- The Development Department and the Parks, Recreation, and Community Services Department shall jointly update the Master Plan for Parks and Recreation after the preliminary results of the next decennial census have been made available.

- The Development Department shall amend and utilize the Fresno Municipal Code (Zoning Ordinance) as necessary to implement the City's Master Multipurpose Trails Manual by classifying multipurpose trail elements as permitted uses in all zone districts that trails may intersect.

- The Development Department shall implement 1991 Roosevelt Plan Update policies for usable on-site open space at residential developments and for open space conservation (Policies 1-7.3.a; 1-15.1 through 1-15.11; 1-16.1 through 1-16.6; 1-17.1 through 1-17.5; and 1-18.1 through 1-18.5).

- **The Development Department shall continue implementation of the UGM process, which requires payment of fees upon development of property in order to provide neighborhood park facilities in a timely manner. The City Parks Division shall commit to developing a neighborhood park within two years of the time that 95 percent of the UGM service area funds are collected for that park.**

- **Approval of Requested Plan Modifications Nos. 1, 3, 4, 5, 6, 7, 9, and/or 11 would allow an increase in the intensity of residential development, potentially leading to increased demand for park space**

Mitigation Measures:

- **Generally applicable mitigations, as listed above.**

- **Approval of Requested Plan Modification No. 12 would remove the designated Regional Park site from the Roosevelt Community land use map**

Mitigation Measures (may not be mitigated within the City's Roosevelt Community Plan Area):

- **Generally applicable mitigations, as listed above.**

- **The Development Department and the Parks, Recreation, and Community Services Department shall select alternate regional park land to serve the Roosevelt Community.**

- Approval of Requested Plan Modification No. 13 would remove a neighborhood park site in the vicinity of Willow and Lane Avenues

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development and the Parks, Recreation, and Community Services Department shall select an alternate neighborhood park site for this Master Parks Plan Service Area.

WATER RESOURCES/WATER SERVICE IMPACTS

- Implementation of the 1991 Roosevelt Community Plan Update could result in further groundwater overdraft, groundwater contamination, and water service deficiencies (MAY BE UNAVOIDABLE, IF POLICIES AND MITIGATION MEASURES ARE NOT FULLY IMPLEMENTED).

Substantial mitigation will require continuing geologic and hydrologic studies, coordinated regional groundwater recharge practices and integrated intergovernmental policy programs over an indefinite period of time and expanded geographic area, in cooperation with the various agencies which oversee surface water and groundwater.

Mitigation Measures:

- The Development Department and Public Works Department shall implement the 1991 Roosevelt Community Plan Update, including policies on water service (Policy nos. 4-3.1 through 4-3.9) and water quality and quantity protection (Policy nos. 5-1.1 through 5-1.11).
- Building permits shall not be issued by the Development Department until an adequate water supply has been fully developed to serve those units (wells and/or surface supply will be constructed, on-line, and providing water of acceptable quality).
- The Public Works Department Water Division shall prepare an annual "water budget" and capital improvement program which projects water consumption demand, water delivery capability, and water well improvement commitments.
- All practical water conservation measures shall be required by the Development Department and Public Works Department, including installation of water meters on all existing and new water services; establishment of industrial/commercial water conservation standards; establishment of practicable low-volume plumbing fixture standards for new construction; and establishment of water-efficient landscape (xeriscape) requirements.

- In order to maintain effective water quality control program enforcement in areas which may influence Fresno's Sole Source Aquifer, the Development Department and Public Works Department shall work with, and provide information to, agencies which have authority over potential sources of contamination and potential causes of groundwater overdraft.

- In order to preserve aquifer and surface water quality, development shall not be allowed in areas influencing the groundwater of the metropolitan area, when this development relies on wastewater treatment or disposal systems known to discharge any inadequately treated wastewater (i.e., containing high concentrations of salts, nitrates, nitrites, heavy metals, and/or organic compounds deemed to be drinking water contaminants).

- The Public Works Department, in cooperation with the FID and the FMFCD, shall implement and maintain a groundwater recharge program to ensure long-term groundwater balance and promote water quality improvement objectives. Groundwater recharge programs shall be developed, funded and maintained to mitigate the impacts of residential and industrial groundwater extraction.

- The City Public Works Department shall study the concept of a groundwater replenishment district to fund the portion of recharge activities necessary to recharge water extracted by private and public well operators who are not currently recharging groundwater.

- Before a well is developed, the Public Works Department shall subject the potential well site to at least a Level I hazardous substance assessment.

- In any development adjacent to FID canals, the Development Department shall ensure that patent canal rights-of-way shall be preserved, FID ability to convey stormwater shall be preserved, and the ability of FID to deliver irrigation water on schedule shall be preserved. Development proposals and applications shall continue to be routed to FID and FMFCD for their review. Per Fresno Municipal Code Section 12-306-O, irrigation canals shall be piped (when adjacent property is developed) to maintain public safety and water quality.

- The Public Works Department, FMFCD, and FID shall cooperate to increase recharge within the Roosevelt community as indicated by the Metropolitan Water Resource Management Plan and approved FID/City recharge projects.

- Proposed FMFCD stormwater and recharge basins shall be subjected to a Level I hazardous materials assessment to determine proximity to known and suspected areas of soil and groundwater contamination. Protection and remediation measures shall be instituted before these basins are used for recharge or before area-wide storm drainage is directed to and allowed to percolate into these basins.

- The City Manager's Office, the Development Department, the Public Works Department and the City Attorney's Office shall cooperate on efforts to evaluate, abate, and mitigate contamination as expeditiously as possible, with the goal of assuring that water delivered to customers complies with federal and state drinking water standards.

- The Public Works Department shall continue efforts to avoid and remove groundwater contaminants that affect the Roosevelt area water supply, by: water well rehabilitation; adjusting pumping rates to match specific yield of water-bearing zones; drilling wells outside of degraded water areas; equipping new/rehabilitated wells with deeper seals; and by instituting wellhead treatment to remove contaminants from drinking water and from the aquifer.

- The Public Works Department shall develop a timetable and funding mechanism for amortizing and replacing water transmission grid mains, to provide for upgrading capacity, to prevent leakage from deteriorated pipe, and to maintain water quality.

- Specific mitigation measures and existing regulations and policies identified in EIR chapters relating to flood control/drainage, sewer service, and hazardous materials would also protect and preserve groundwater and water service capacity.

- Backwash water, used GAC slurry, and other solid waste or liquid effluent created by wellhead treatment shall be properly handled and/or disposed of according to its waste hazard classification. If the carbon material is reconditioned, the public Works Department shall ensure that the GAC recycling facility has proper handling and disposal procedures, in order to limit the City's "cradle to grave" responsibility for potentially hazardous materials. Documentation of proper "chain of custody" of used GAC shall be a condition of any carbon change-out contracts. If the GAC is to be regenerated or incinerated, the Public Works Department shall ensure that the regeneration facility is fully permitted for the designated procedure and that a certificate of regeneration or destruction is obtained for each GAC load.

- In consultation with Department of Health Services' Office of Drinking Water, the Public Works Department shall develop contingency plans for effective public (customer) notification in the event of an exceedance of drinking water standards, when a well must be left in service in order to maintain adequate pressure and fire flow.

- City water service shall not be extended to areas planned for new development (residential subdivisions, commercial, or industrial) outside the incorporated city limits. EXCEPTIONS: (a) City water connections required under Section 14-115 of the Fresno Municipal Code; and (b) the existence of extraordinary circumstances; in which case City water service must be approved by both City and County legislative bodies. Existing commitments for water service outside the city limits shall continue to be honored.

- **Approval of Requested Plan Modifications Nos. 1, 3, 4, 5, 7, and/or 9 would allow for intensification of urban uses (beyond levels of intensity in the 1991 Roosevelt Update) in a manner that potentially would increase water resource and water service impacts.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- **Approval of Requested Plan Modification No. 6 would increase residential density and commercial intensity, increasing water demand in an area with elevated levels of groundwater contamination.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department shall require a water service study for any nonresidential site plan or development entitlement at this site. This study shall address: cost of water supply infrastructure; cost of developing adequate water supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant/sprinkler head pressure.

- **Approval of requested Plan Modification No. 12 would change the land use designation on some 157 acre from regional park to heavy industrial. This would potentiate a large increase in water comsuption in an area with elevated groundwater contamination.**

Mitigation Measures:

- **Generally applicable mitigations, as listed above.**
- **The Development Department shall require a water service study for any nonresidential site plan or development entitlement at this site. This study shall address: cost of water supply infrastructure; cost of developing adequate water supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant/sprinkler head pressure.**

- **Approval of Requested Plan Modification No. 15, as the proposal is currently arranged, would not have water impacts beyond those identified for the 1991 Roosevelt Update's plan designation on this property. However, if the ponding/percolation basin were to subsequently be relocated, there would potentially be more groundwater contamination and water service demand could increase due to multi-family housing which could be built on the ponding basin's underlying zoning.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- Any subsequent proposal to relocate the ponding basin (FMFCD Basin BH), or to use the ponding basin site for other than drainage and open space uses, shall require a plan amendment application. As part of this plan amendment application, the Development Department and Public Works Department shall require a water quality, drainage, and recharge feasibility study, to ensure that relocation of the ponding basin does not have adverse effects on drainage for FMFCD drainage district BH, on recharge activities, or on groundwater quality. The impacts and feasibility of R-2 zoning (multi-family) development on this parcel shall also be re-evaluated, and appropriate zoning and density controls applied as found to be appropriate.

AIR QUALITY IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update could result in increased stationary source air pollution, increased mobile source air pollution, and increased particulate matter air pollution in an area which has been in non-attainment for ozone, carbon monoxide, and particulate matter (UNAVOIDABLE IMPACT).**

Applicable air quality improvement policies and strategies have been incorporated into the plan update. However, substantial mitigation is dependent upon cooperative regional, statewide, and federal efforts, more efficient consumption of hydrocarbon fuels and products, and potentially dramatic contraints upon commonly accepted recreational, domestic and business activities which generate air pollution. Such constraints may not prove socially or economically feasible.

Mitigation Measures:

- **The City of Fresno shall analyze, and implement as necessary, Clean Air Act Attainmnent Plans and other proposed Valley-wide air pollution agency rules and policies to ensure that local and regional air quality improvement can be achieved.**

- **The Development Department, Public Works Department, and Fresno Area Express shall support beneficial regional clean air plans, policies, and rules by drafting appropriate ordinances and instituting administrative practices required to implement Valley-wide air quality measures.**

- The City of Fresno shall continue to uphold 1984 Fresno General Plan Policies and related land use regulations:

  (a) Urban Referral Policy - residential, commercial and industrial development shall be accommodated within incorporated cities; to reduce vehicle miles traveled and provide for mass transit.

  (b) Contiguous Urban Expansion - to reduce vehicle miles traveled.

  (c) Urban Infill - to reduce vehicle miles traveled.

  (d) Mixed Land Use - utilizes Local Planning and Procedures Ordinance to achieve well-integrated, compatible mixed residential, commercial and office uses; to reduce vehicle miles traveled.

  (e) Density Transfer - Utilizes Local Planning and Procedures Ordinance to reallocate dwelling unit densities in selected areas; to reduce vehicle miles traveled.

  (f) Intensity Corridors and Nodes - Evaluates the feasibility of "transportation corridors" that would enhance investment in areas bordering the City's freeways. This would support the City policy of concentrating development along major streets which can accommodate traffic, mass transit, and other alternative transportation modes.

  (g) Traffic Flow - Ongoing improvement of traffic signals to reduce vehicle emissions from excessive vehicle idling (optimized signal timing, interconnected signals, traffic-actuated signals, computer-based controls, channel intersections, additional turn lanes.)

  (h) Transit - On-site (at major shopping centers, other locations) bus parking and loading lanes with passenger and driver facilities to reduce vehicle miles traveled, engine idling and improved traffic flow.

  (i) Bicycle Alternative - Bicycle lanes, bikeway design and planning with attendant safety and convenience facilities to reduce vehicle miles traveled.

  (j) Develop and incorporate air quality maintenance considerations in the preparation of community and specific plans and in the review of land use and development proposals.

- The City of Fresno shall continue to implement its Air Quality Policy Program (See EIR Appendix C).

- The City of Fresno shall implement the air quality improvement policies in the 1991 Roosevelt Community Plan Update (Policy nos. 5-2.1 through 5-2.10).

- The Development Department, Fresno Area Express, and the Public Works Department shall implement 1991 Roosevelt Community Update policies for land use, transportation, and energy conservation (Policy nos. 1-1.1 through 1-1.6; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-8.1 through 1-8.3; 1-8.5 through 1-8.7; 1-9.1 through 1-9.4; 1-10.1 through 1-10.4; 1-12.1 and 1-12.2; 1-16.1 through 1-16.6; 1-20.3; 1-21.2 through 1-21.6; 2-1.1 through 2-1.9; 2-2.1 through 2-2.9; 2-4.1 through 2-4.7; 2-5.1 through 2-5.6; 2-6.1 through 2-6.7; and 5-5.1 through 5-5.4).

- To address potential additional fine particulate matter pollution which could be generated by the 1991 Roosevelt Update, the following specific improvements, requirements, and design standards shall be applied in the community plan area to prevent and reduce entrained dust:

  (a) No new unpaved alleys, roadways, driveways, vehicle parking, loading, vehicle sales, or vehicle storage areas shall be permitted in any zone district. No new "temporary" unpaved parking areas shall be permitted, and no existing "temporary" unpaved parking area permits shall be extended under Fresno Municipal Code Section 12-306-I.7.

  EXCEPTIONS:

  (i) Temporary, on-site construction equipment storage lots may be permitted during construction periods, provided that they satisfy City and air district requirements for siting and dust control.

  (ii) Unpaved agricultural roads may be permitted, provided that they satisfy air district requirements for dust control.

  (b) Utilizing pro-active code enforcement, existing illegal and nonconforming unpaved driveways, parking areas, and loading areas shall be amortized and removed (or properly improved). Existing unpaved road gutters shall be upgraded to provide paved curb and gutter areas for roadside parking. (1991 Roosevelt Update Policy nos. 1-14.1, 1-14.2, 3-1.5, 3-1.9, and 3-1.11.)

- **Approval of Requested Plan Modifications Nos. 2, 5, 6, 7, 11, 12, and/or 13 could increase vehicle trips, potentially increasing mobile source air pollution beyond that which would otherwise be potentiated by the 1991 Roosevelt Community Plan Update.**

<u>Mitigation Measures</u>:

- Generally applicable mitigations, as listed above.

- Various trip reduction measures and traffic flow improvements more fully described below under Transportation Impacts.

HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCE IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update could result in the destruction and alteration of historic and prehistoric sites (UNAVOIDABLE IMPACT).**

Mitigation Measures:

- The Development Department shall survey redevelopment areas for possible historic property which would be adversely affected by the redevelopment proposal. Detailed assessments shall be done on Local/National Register candidate properties, and recommendations forwarded to the Historic Preservation Commission and to Redevelopment planning staff.

- Notices and Orders issued for violations of the Housing Code, Dangerous Building Ordinance, and Exterior Building Maintenance Ordinance, as related to structures 50 years of age and older, shall be made available to the Historic Preservation Commission for their recommendations on surveying, assessing, and preserving potential historic resources.

- Before the issuance of any formal demolition order by the City, properties over 50 years old shall be assessed for historic value, and potential Local Register listing resolved.

- In any public works project, work shall stop immediately if archaeological and/or fossil material is encountered on the project site.

  If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations made to the City as to any further site investigation or site avoidance/preservation.

  If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontoligist determines the material to be significant, it shall be preserved.

- The following paragraphs shall be added as a condition to subdivisions, special permits, and entitlements issued in the Roosevelt Community Plan Area:

  > "If archaeological and/or animal fossil material is encountered during project surveying, grading, excavating, or construction, work shall stop immediately.
  >
  > "If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains

or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations made to the City as to any further site investigation or site avoidance/preservation.

"If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontoligist determines the material to be significant, it shall be preserved."

ENERGY CONSUMPTION IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will result in increased energy consumption, although analysis indiates that this energy usage will not be wasteful (UNAVOIDABLE IMPACT).**

The increased consumption of nonrenewable energy sources is an unavoidable consequence of population growth and the activities necessary to sustain healthy living conditions.

Mitigation Measures:

- 1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and at preventing traffic congestion.

- Implement the objectives and policies of the Fresno General Plan Energy Conservation Element; California Title 24 Energy Efficiency Standards; Fresno Municipal Code sections relating to landscaping, shaded parking, and woodburning; and 1991 Roosevelt Update policies 5-5.1 through 5-5.4.

- **Approval of Requested Plan Modifications Nos. 1, 2, 4, 5, 6, 7, 11, 12, and/or 13 would allow for intensification of urban uses (beyond levels of intensity in the 1991 Roosevelt Community Plan Update) and potentially would increase energy consumption.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

TRANSPORTATION IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will lead to increasing extent and intensity of urban uses, with concomitant increases in population and traffic volume, in an area where the major street system may not be uniformily developed to accommodate estimated build-out traffic volumes. This situation would potentiate traffic congestion and decreased levels of service on segments of the major street system, and would potentiate additional mass transit demand (UNAVOIDABLE IMPACT).**

Localized traffic impacts can be mitigated within the scope of the plan. However, the accommodation of future traffic volumes resulting from continued local and regional population growth and traffic increases will require implementation of long-term regional transportation system improvements, and the involvement of other agencies which have oversight of land use and transportation issues.

Mitigation Measures:

- **1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and fostering alternative transportation through provision of bikeways and trails.**

- **The Development Department, Public Works Department, and Fresno Area Express shall implement the plan concept (land use design) and policies of the 1991 Roosevelt Community Plan Update to establish balanced land uses with supportive circulation and transportation facilities, in order to reduce vehicle trips and traffic congestion.**

- **The Development Department and Public Works Department shall implement the policies, development standards, and mitigation measures of the 1991 Roosevelt Community Plan Update and its EIR, to minimize exposure to noise and glare from traffic.**

- **The City of Fresno shall continue to implement the City Air Quality Policy Program and its related Municipal Code provisions to minimize air pollution from traffic (see EIR Appendix C).**

- **The City of Fresno shall continue to evaluate proposed congestion management measures and mobile source air pollution control proposals, and shall continue to pursue and implement measures which can beneficially reduce traffic and vehicle-related pollution (including synchronized traffic signalization and mass transit system improvements).**

- **As part of its next General Plan Update, the City of Fresno shall evaluate and institute funding and financing mechanisms for needed major street and urban freeway augmentations, and for development of specific plans for freeway interchange areas, to better coordinate transportation and land use planning in these sensitive areas.**

- The City of Fresno shall advocate for timely changes and additions in future Measure C expenditure programs, to fund freeway improvements that are demonstrably necessary to accommodate existing and planned population growth and development, such as:

  (a) Completion of urban Freeway 180 to the Clovis or Fowler Avenue alignment before the end of this decade.

  (b) Expansion of Freeway 99 to eight lanes from the Freeway 41 interchange to Jensen Avenue.

  (c) Expansion of planned Freeway 180 to eight lanes between Freeway 41 and the Freeway 168 interchanges.

- The City of Fresno shall strongly advocate that Cal-Trans mitigate impacts of its freeway improvement projects, including use of such measures as noise and glare reduction, air quality protection, and capacity enhancements for City streets affected by interchange traffic.

- All applications for development entitlements within 660 feet of a planned or existing freeway interchange shall be routed to Cal-Trans and the Council of Fresno County Governments for their review and comment.

- The Public Works Department shall monitor the need for, and shall initiate as required, the following improvements in City street segments with potentially deficient service levels:

  (a) Kings Canyon Avenue to six lanes between the downtown area and Minnewawa Avenue.

  (b) Kings Canyon Avenue to four lanes between Fowler and Temperance Avenues.

  (c) Butler Avenue to four lanes between Hazelwood Boulevard and Peach Avenue.

  (d) Church Avenue to four lanes between the Southern Pacific Railroad tracks and Fowler Avenue.

  (e) Jensen Avenue to six lanes between Freeway 99 and Fowler Avenue.

  (f) Chestnut Avenue to six lanes between McKinley and North Avenues. (This may affect planned bike lanes.)

  (g) Willow Avenue to four lanes between Olive and Lane Avenues, and between Butler and North Avenues.

  (h) Peach Avenue to four lanes between McKinley and Jensen Avenues.

  (i) Clovis Avenue to six lanes between McKinley and Jensen Avenues. (This may affect planned bike lanes.)

  (j) Fowler Avenue to four lanes between Belmont and Jensen Avenues.

- Any proposed encroachments/driveways within 300 feet of a planned or existing freeway interchange shall require a design exception, granted only after consultation with Cal-Trans.

- A specific Findings procedure shall be employed to evaluate each development entitlement application (See EIR Appendix F) to ensure that acceptable levels of service are maintained.

- In consultation with Cal-Trans and the Council of Fresno County Governments, the Public Works Department shall develop guidelines for traffic studies and shall continue to review all entitlements for traffic impacts.

- The Development Department and Public Works Department shall maintain subdivision design standards which require one subdivision (street system) access point to a major street or local collector for each 100 dwelling units.

- The Development Department and Public Works Department shall evaluate and implement development access policies suggested by the Council of Fresno County Governments for land at the corners of intersecting major streets where direct access is not permitted (e.g., the intersection of Jensen and Temperance expressways), and for land served by existing nonconforming driveways on Jensen and Temperance Avenues.

- **Approval of Requested Plan Modifications Nos. 4, 11 and/or 13 would allow urban uses to intensify beyond levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

<u>Mitigation Measures</u>:

- **Generally applicable mitigations, as listed above.**

- **Approval of Requested Plan Modification No. 2 would allow urban uses beyond intensity levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

<u>Mitigation Measures</u>:

- **Generally applicable mitigations, as listed above.**

- **The Development Department shall require a specific traffic study for any site plan and development entitlements at this site, to assess the need for: deceleration/accelera- tion lanes on Kings Canyon Avenue; a synchronized 1/4 mile interval signal on Kings Canyon; and required improvements on Willow and Peach Avenues.**

- **Approval of Requested Plan Modification No. 5 would allow urban uses beyond intensity levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

Mitigation Measures

- Generally applicable mitigations, as listed above.
- The Development Department shall require a traffic study for any site plan or development entitlements at this site, to assess the need for deceleration/acceleration lanes on Clovis Avenues.

- **Approval of Requested Plan Modification No. 6 would allow urban uses beyond intensity levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

Mitigation Measures

- Generally applicable mitigations, as listed above.
- The Development Department shall require a traffic study for any site plan or other entitlements at this site, to provide adequate internal circulation and to assess the need for deceleration/acceleration lanes and signalization on Fowler Avenue.

- **Approval of Requested Plan Modification No. 10 would allow urban uses beyond intensity levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department shall require that application for any site plan or development entitlement for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.

- **Approval of Requested Plan Modification No. 12 would allow urban uses beyond intensity levels, creating the potential for additional traffic impacts and mass transit demand.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department and Public Works Department shall require that any nonresidential development on the eastern half of this property shall be conditioned upon dedication and improvement of the Minnewawa Avenue right-of-way to at least the City's local industrial street standard.
- Prior to, or concurrent with, the approval of any nonresidential site plan or development entitlement, project applicants shall develop and secure City of Fresno approval of a local street circulation design for this entire 157-acre site.

- **Approval of Plan Modification No. 14 would allow urban uses beyond intensity levels designated in the 1991 Roosevelt Update, creating the potential for additional traffic impacts and mass transit demand.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department shall require that any applications for site plans or development entitlements for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.

SEWER SERVICE IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update would increase demand for sewer line capacity and sewage treatment, potentially exceeding service capabilities.**

Mitigation Measures:

- The Development Department and Public Works Department shall implement 1991 Roosevelt Update policies for evaluating and improving sewer service (Policy Nos. 4-1.1 through 4-1.5 and 4-2.1 through 4-2.5).
- The Public Works Department shall continue to expand its preventive maintenance schedule for sewer line cleaning and obstruction (root) removal.
- A policy for sewer line amortization and replacement funding shall be developed by the Public Works Department to prevent infrastructure deterioration and sewer pipe failures in the Roosevelt community.

- Redevelopment plans shall include provisions for upgrading and/or replacing inadequate sewer lines, as well as an amortization timetable and funding mechanisms for eventual replacement of any new lines installed.

- Development proposals south of the North Avenue alignment shall include plans for improvements required to convey wastewater to a secondary or tertiary treatment plant. On-site wastewater disposal systems shall not be permitted with the following exceptions:

  EXCEPTIONS:

  (a) Industrial pretreatment plants will be permitted when they are under permit to discharge to the Fresno-Clovis Regional Wastewater Treatment Facility.

  (b) On a case-by-case basis, when the Public Works Department finds that no permanent connection to the Regional Facility is feasible, and when the wastewater contains no industrial processing wastes, on-site and/or package treatment systems--which discharge adequately treated wastewater (with acceptable levels of nitrates, nitrites, salts, microbes, and organic constiuents)--may be considered and approved if acceptable to the City Water Division, State and County Health Departments, Regional Water Quality Control Board, and the EPA.

- The Public Works Department and Development Department shall implement sewer fees, as necessary, for new development to finance proportionate shares of needed sewer line and sewer treatment plant enhancements.

- The Public Works Department and Development Department shall implement water conservation strategies, as identified by the EIR Water Section.

- Industrial facility development and expansion proposals shall be environmentally assessed by the Public Works Department (Wastewater Management Division) to determine whether a wastewater pretreatment system shall be required. If one is required, detailed plans and operating parameters for this pretreatment system shall be approved by Public Works before the entitlement can be granted. When pretreatment is initially required for a project, or is later required when wastewater discharges fail to meet quality criteria, continued maintenance of a valid Fresno Regional Wastewater Treatment Facility Discharge Permit shall be a condition of the entitlement.

- City sewer service shall not be extended to areas planned for new development (i.e., residential subdivisions, commercial or industrial facilities) outside the incorporated city limits of Fresno and Clovis; except under extraordinary circumstances; in which case such service must be approved by both City and County legislative bodies. All existing commitments for sewer service outside the City limits shall continue to be honored, so long as industrial facilities abide by their discharge requirements.

- Approval of Requested Plan Modifications Nos. 1, 3, 4, 5, 6, 7, 8, 9, 11, 12, and/or 13 would provide for intensification of urban uses in a manner which potentially would increase sewage generation and, therefore, could increase sewer service impacts.

Mitigation Measures:

- Generally applicable mitigations, as listed above.

SOLID WASTE

- Implementation of the 1991 Roosevelt Community Plan Update will increase the volume of waste which requires collection and transport, and will utilize additional landfill capacity (UNVOIDABLE IMPACTS).

Mitigation Measures:

- The Public Works Department and Development Department shall implement 1991 Roosevelt update policies for maintaining adequate solid waste disposal service (Policy Nos. 4-8.1 through 4-8.6).
- The Public Works Department and Development Department shall implement the City-wide Source Reduction and Recycling Element and other plans and policies necessary to comply with Assembly Bill 939.
- The Development Department shall require that designs for multi-family residential projects include functional recycling container space.
- The Public Works Department shall extend community clean-up rubbish pickup service to multi-family residences, and shall consider increasing the frequency of this service to four times per year.
- The Public Works Department shall institute a system for collecting recyclables, yard waste, and other compostable organic material.
- The Development Department shall require that designs for recreational, institutional, commercial and industrial projects shall include adequate secure space to segregate and store recyclable material.
- The Parks and Recreation Department shall institute policies on food and beverage containers (and recycling) at parks and other community recreation facilities.
- The Development Department shall add a condition to all development entitlements requiring that any asphalt and concrete removed furing construction or demolition activity shall be recycled.

- Approval of Requested Plan Modifications Nos. 1, 3, 4, 5, 6, 7, 10, 11, and/or 12 would potentiate increased solid waste disposal impacts.

Mitigation Measure:

- Generally applicable mitigations, as listed above.

SCHOOL IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update could potentiate continued student capacity deficiencies (UNAVOIDABLE IMPACT).**

Student capacity deficiencies are the result of population dynamics, school construction funding shortfalls, and existing State limits on building permit controls and development impact fees. Full mitigation of student capacity deficiencies would require responsible agencies (primarily school districts) to obtain sufficient construction funds from several sources, to serve areas already developed as well as new residential areas.

Mitigation Measures:

- The Development Department shall implement policies of the 1991 Roosevelt Update to reduce residential dwelling unit densities and to mitigate high levels of potential student generation.

- In order to provide capital improvement funding, the City of Fresno and impacted school districts shall consider the use of Mello-Roos districts and other assessment districts and financing mechanisms for school construction.

- The City of Fresno shall assist and support school districts' efforts to plan for and locate additional school sites as they are needed.

- The City of Fresno shall advocate for the application of historic, scenic, and neighborhood preservation policies of the 1991 Roosevelt Update when school sites are developed.

- The City of Fresno shall continue to assure collection of school construction fees for residential and non-residential projects.

- When school district analysis of a proposed residential development project indicates that there will be school capacity deficiencies, the following advisements shall be provided to all prospective purchasers of property within the proposed project:

  > "The schools serving this property may not have adequate capacity for students from the area. Students could be bused to other schools within the District; or school attendance areas may be adjusted within the District, requiring students to attend another school. Students might attend new facilities when and if such facilities are constructed. Students could, therefore, change elementary, middle, and/or high schools during their years of enrollment in the District. Students could also have to attend elementary, middle, and/or high school on year-round, extended-day, and/or double-session schedules."

- Approval of Requested Plan Modifications Nos. 1, 3, 4, 5, 6, 7, 9, 10, and/or 11 could increase the potential for school capacity shortfalls.

Mitigation Measure:

- Generally applicable mitigations, as listed above.

PUBLIC LIBRARY IMPACTS

- Implementation of the 1991 Roosevelt Community Plan Update could potentiate continued library space and service level deficiencies, as evaluated according to standards in the 1990 Fresno County Library Capital Facilites Assessment (UNAVOIDABLE IMPACTS).

Mitigation Measure:

- The City of Fresno shall cooperate with the Fresno County Library in evaluating funding mechanisms needed to construct the new library facilities planned to serve the Roosevelt Community.

- Adoption of Requested Plan Modifications Nos. 1, 3, 5, 6, 7, 9, 10, and/or 11 could further increase population in the Roosevelt plan area, thereby potentiating further library service deficiencies.

Mitigation Measure:

- Generally applicable mitigations, as listed above.

FIRE AND PARAMEDIC SERVICE IMPACTS

- Implementation of the 1991 Roosevelt Community Plan Update could increase service demand and expand areas requiring these services beyond the City's present capacity to provide these services.

Mitigation Measures:

- The City of Fresno shall implement existing policies and standards as well as 1991 Roosevelt Update policies/ implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities, and management of water resources.

- The Development Department shall continue to support, and shall uphold UGM requirements for funding needed to implement, the findings of the 1975 Fire Station Location Program Study.

- The City of Fresno shall consider using Mello-Roos or other types of assessment districts to maintain staffing and service levels for City Fire Stations.

- The Fire Department shall continue to revise and update fire station location scenarios, as appropriate, in response to changing land uses and population.

- **Approval of Requested Plan Modifications Nos. 1, 2, 3, 4, 5, 6, 7, 8, 11, and/or 13 would intensify urban uses beyond the intensity levels outlined in the 1991 Roosevelt Community Plan Update, and so would increase the potential for firefighting and paramedic service deficiencies.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- **Approval of Requested Plan Modification No. 6 would intensify planned urban uses in an area outside of the nonresidential service area of planned City Fire Station No. 15.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of the site's commercial property at Jensen and Fowler Avenues.

- **Approval of Requested Plan Modification No. 12 would intensify planned urban uses in an area outside of the nonresidential service area of planned City Fire Station No. 19.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of nonresidential uses at locations which exceed the permissible running distance.

FLOOD CONTROL AND STORMWATER DRAINAGE IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will lead to increasing extent and intensity of urban uses. Potentially, stormwater drainage facilities could prove inadequate to deal with increased runoff volume or could be inadequately improved to prevent groundwater contamination from infiltration of contaminated runoff.**

Mitigation Measures:

- The City of Fresno and the FMFCD shall jointly implement 1991 Roosevelt Update policies relating to storm drainage (Policy Nos. 3-1.11 and 4-4.1 through 4-4.4).

- Whenever feasible, temporary on-site drainage basins shall be located so that they may be easily dewatered to an adjacent irrigation facility.

- The Development Department shall include provisions for area-wide drainage facilities in redevelopment plans.

- The Public Works Department shall continue to consider drainage needs when outlining street, curb, and gutter improvement districts.

- The Development Department shall continue code enforcement activities which prevent vehicles from traversing and parking on unpaved areas, to prevent undue compaction, and to prevent loss of landscape plants and erosion of silt into the drainage system.

- Pursuant to EPA regulations, the Development Department shall incorporate NPDES stormwater discharge permit requirements by reference into its conditions for industrial projects and all construction sites of five or more acres. The NPDES permit requirements shall be included in special permits, grading permit review, and building permit plan check review.

- The Development Department and Parks and Recreation Department shall consult with FMFCD and the Public Works Department's Water Division on their drainage and ground- water recharge needs before designating any basin site for conjunctive recreational uses.

- The FMFCD shall perform a Level I Hazardous Waste assessment before acquiring new basin sites or commencing use of new basin sites in order to avoid exacerbating the effects of contamination in an area when basins are placed into service for drainage and recharge activities.

- **Approval of Plan Modifications No. 2, 4, 7, 10, 11, and/or 13 would generate more runoff than uses proposed in the 1991 Roosevelt Community Plan Update, and therefore would have an increased potential for inadequate improvement of drainage facilities.**

<u>Mitigation Measure</u>:

- Generally applicable mitigations, as listed above.

- **Approval of Plan Modification No. 5 would increase density of urban residential uses, generating more runoff in an area which presently has no developed drainage facilities. This would increase the potential for inadequately improved drainage facilities.**

<u>Mitigation Measures</u>:

- Generally applicable mitigations, as listed above.

- The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

- **Approval of Plan Modification No. 6 would increase density of residential uses and create intense urban uses (community shopping center), generating more runoff in an area which presently has no developed drainage facilities. This would increase the potential for inadequately improved drainage facilities.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

- **Approval of Plan Modification No. 8 would increase intensity of urban uses by changing the designation of 9.2 acres planned for light industrial to a heavy industrial designation. This would potentially generate more industrial runoff.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department and the Public Works Department shall require that temporary on-site basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

- **Approval of Plan Modification No. 12 would increase intensity of urban uses by changing the designation of some 160 acres from regional parkland to industrial. This would potentially generate much more runoff (industrial runoff) in an area which presently has no developed drainage facilities. This would increase the potential for inadequately improved drainage facilities.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

LAW ENFORCEMENT SERVICE IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update would allow for increased urban development with concomitant population increases and an enlarged area requiring police coverage. This potentially would reduce law enforcement service levels by increasing response time and decreasing the ratio of sworn officers to citizens (UNAVOIDABLE IMPACT).**

It is financially infeasible to maintain a particular ratio of population to sworn officers, given the rate of population increase in this region. All aspects of the law enforcement system are impacted, from field personnel to legal/judicial entities to incarceration facilities operated by other agencies. The following mitigation measures are intended to prevent/discourage crime and to maximize the resources and efficiency of the Fresno Police Department.

Mitigation Measures:

- The Development Department and the Fresno Police Department shall implement 1991 Roosevelt Update policies to enhance crime prevention activities (Policies 1-7.4 and 1-7.5; 1-11.4 and 1-11.5; 1-11.10; 3-1.9; and 4-6.1 through 4-6.4).

- The Development Department shall promptly forward details of approved annexations to the City of Fresno Police Department, the Fresno County Sheriff, and to respective City and County Public Safety Answering Points (dispatch centers).

- The Development Department shall consider using UGM fees, Mello-Roos districts, and other special assessments to fund capital costs and operational expenses for providing police services when new development is proposed that will require additional police facilities and services.

- The Development Department shall implement 1991 Roosevelt Update policies for neighborhood preservation, traffic congestion prevention, and open space/recreation.

- The Development Department shall route all residential subdivision, site plan, and conditional use permit applications to the Fresno Police Department for their review of security design, emergency access, traffic/pedestrian safety, and impact on police service needs.

- Police service impacts shall be added to the Development Department Environmental Review checklist for evaluation purposes.

- The Development Department shall require that land use entitlements for "swap meets" and large public gathering or special event facilities be conditioned upon these activities providing their own security force which will provide crowd and traffic control.

- The Development Department shall require that multi-family developments containing over 50 dwelling units provide and maintain an on-site police call box.

- Adoption of Requested Plan Modifications Nos. 3, 4, 5, 6, 7, 10, and/or 11 would increase the allowable intensity of urban uses, with concomitant increased population and police service demands.

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- Adoption of Requested Plan Modification No. 2 would increase the allowable intensity of urban uses and would locate park space in juxtaposition with intense urban uses, increasing potential police service demands.

Mitigation Measures:

- Generally applicable mitigations, as listed above.
- The Development Department and Parks Department shall require design standards for the site's park/shopping center and park/residential interfaces to promote public safety and reduce park maintenance requirements.

HAZARDOUS MATERIAL IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will provide for increased levels of development (including industrial development) and increased population. This could increase the potential for exposure to hazardous materials and will require additional disposal capacity for hazardous materials (UNAVOIDABLE IMPACT).**

Mitigation Measures:

- 1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and water quality, and designed to ensure proper disposal of solid waste, wastewater, and stormwater.
- The City of Fresno Development Department Public (Permit) Counter shall continue to implement California Government Code Sections 65850.2 and 65962.5, to provide for adequate assessment and mitigation measures on listed hazardous material sites, and to prevent future hazardous material releases.
- The City of Fresno shall continue to support special household hazardous waste collection activities, to reduce the amount of hazardous material being improperly discarded.
- The City of Fresno shall, as may be appropriate, require Level I and further assessments before annexing property, before acquiring property, and before approving the development of property in the Roosevelt Community Plan Area.
- The City of Fresno shall continue to prevent, assess, and seek remediation of any hazardous material contamination on property owned by the City.

- The Development Department shall condition all commercial and industrial special permits upon proper use, containment, safeguarding, and disposal/discharge of hazardous materials.

- The Development Department and the City Attorney's office shall work with the appropriate regulatory agencies and/or shall exercise their police power and land use regulation authority to amortize and to abate nonconforming and illegal land uses which threaten public health, safety, and general welfare by illegal or unacceptable use, containment, safeguarding, or disposal/discharge of hazardous materials.

- The Development Department and the Public Works Department shall continue to ensure that funding is provided for required signalizing of railroad grade crossings as land is developed for urban uses.

- **Approval of Requested Plan Modifications Nos. 2, 5, 6, 8, 10, 12, and/or 13 would allow nonresidential development which could provide for increases in hazardous materials at these locations or could provide for additional disposal capacity requirement for hazardous waste. Approval of Requested Plan Modification No. 7 would allow increased residential development adjacent to a facility which stores and uses hazardous materials.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

NOISE IMPACTS

- **Implementation of the 1991 Roosevelt Community Plan Update will provide for increased urban development and population with a concomitant increase in traffic volume and industrialization. This will increase the potential for noise exposures (UNAVOIDABLE IMPACT).**

Increased ambient noise levels generated by traffic and intensive urban activities cannot be entirely mitigated by on-site mitigation measures such as barriers and building insulation. Long-term reductions of ambient noise levels would necessitate unforseen technological improvements of equipment and vehicles and increased regulation of noise producing activites. Presently, complete attenuation of all added noise is financially infeasible.

Mitigation Measures:

- The Development and Public Works Departments shall implement noise control measures proposed in the 1991 Roosevelt Community Plan Update (Policy nos. 5-3.1 through 5-3.5).

- The Development and Public Works Departments shall implement circulation policies of the 1991 Roosevelt Community Plan Update, to reduce exposure to traffic-generated noise.

- The Development Departments shall implement noise policies of the Fresno Air Terminal Airport & Environs Specific Plan (see Appendix B).

- The City of Fresno and the Twenty-first District Agricultural Association (Fresno Fair) Board shall evaluate potential noise sources for events proposed at the Fresno Fairgrounds and pursue relocation of nuisance-level noisy activities to a less-sensitive location (1991 Update Policy nos. 1-21.3 and 3-1.8).

- The City of Fresno shall require appropriate noise mitigation structures and landscaping for urban freeways 168 and 180 as each segment is built.

- For commercial, industrial, and public facility special permit applications, the Development Department's environmental assessment shall include noise generated by on-site truck traffic. Potential noise impacts upon the industrial area and upon nearby sensitive receptors shall be evaluated. Operational controls (e.g., limited hours of specified activities), on-site acoustic measures, and off-site acoustic measures shall be employed to prevent nuisance noise episodes and to keep within limits set forth in Fresno Municipal Code Section 8-302.

- The Development Department shall require that all fences and walls constructed for residential uses which back or side onto major streets without a frontage road meet the standards of Fresno Municipal Code Section 12-306-N-19.

o **Approval of Requested Plan Modifications Nos. 2, 3, 5, 6, 7, 8, 10, and/or 12 would allow more intense urban uses which, by generating traffic or by locating increased sensitive receptors in noise-impacted corridors, would potentiate noise impacts beyond those inherent in the 1991 Roosevelt Community Plan Update.**

Mitigation Measures:

- Generally applicable mitigations as listed above

o **Approval of Requested Plan Modification No. 4 will allow intensification of residential uses in a corridor subject to high levels of traffic-generated noise.**

Mitigation Measures:

- The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.

- **Approval of Requested Plan Modification No. 7 would allow for creation of further residential area on Temperance Avenue across from an agricultural processing facility that is located outside the City of Fresno's Sphere of Influence.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- The Development Department shall require that any residential development site plan or entitlement application shall include a detailed anaysis of potential nuisance impacts relative to the residential development's configuration, and shall incorporate design measures to mitigate dust, noise, odors, and light/glare associated with adjacent agricultural uses (processing and farming).

- **Approval of Requested Plan Modification No. 8 will allow for institution of heavy industrial uses on Jensen Avenue across from residential uses.**

Mitigation Measures:

- Generally applicable mitigations, as listed above.

- Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all heavy industrial special permit applications submitted within the area covered by Modification No. 8.

- **Approval of Requested Plan Modification No. 11 will allow residential development in a corridor subject to high levels of traffic-generated noise.**

Mitigation Measure:

- Generally applicable mitigations, as listed above

- The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.

- **Approval of Requested Plan Modification No. 12 would create a heavy industrial designation on some 157 acres bound by Peach, Jensen, and Minnewawa Avenues and the Annadale Avenue alignment. This would potentially have impacts on adjacent residential property.**

Mitigation Measure:

- Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all nonresidential special permit applications submitted within the area covered by Modification No. 12.

SUMMARY OF IMPACTS FOUND NOT TO BE SIGNIFICANT AND MITIGATION MEASURES TO ADDRESS AREA CONCERNS

Analysis of the 1991 Roosevelt Community Plan Update revealed no significant impacts in the following subject areas. The following mitigation measures are intended to address area concerns:

LAND RESOURCE IMPACTS

Housing Impacts

Mitigation Measures:

- The Development Department and the Housing and Community Development Department shall implement housing preservation and residential development policies as outlined in the 1991 Roosevelt Community Plan Update (Policy Nos. 3-1.1 through 3-1.13; 3-2.1 through 3-2.7; 1-6.1 through 1-6.12; and 1-7.1 through 1-7.5) and the Housing Element of the City of Fresno General Plan.

- In conformance with State Planning Law, the Development Department shall review the City's Density Bonus Ordinance. Any proposed Density Bonus Ordinance revisions shall be subject to detailed environmental review that assesses impacts on infrastructure, services, and resources in the Roosevelt Community and on larger planning consideration areas.

Commercial and Industrial Impacts

Mitigation Measures:

- Implement 1991 Roosevelt Community Plan Update policies for urban form and extent as they relate to commercial and industrial development (Policy Nos. 1-1.2 through 1-1.5; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-4.1 through 1-4.4; 1-4.7; and 1-5.1 through 1-5.8).

- Implement 1991 Roosevelt Community Plan Update policies for commercial and industrial development (1-8.1 through 1-8.5; 1-8.7; 1-9.1 through 1-9.5; 1-10.1 through 1-10.4; 1-11.1 through 1-11.10; 1-12.1 through 1-12.3; 1-13.1 and 1-13.2; and 1-14.1 through 1-14.5).

PLANT AND WILDLIFE IMPACTS

Mitigation Measures:

- The Development Department shall implement open space, landscaping, and conservation policies/implementation measures of the 1991 Roosevelt Community Plan Update to provide and improve habitat and to preserve natural resources of the area.

- The Development Department shall implement 1984 General Plan policies for conserving land important to the continued existence of plant and wildlife species.

- For drainage basins in agricultural or industrial areas, and for those basins where geometry or other factors preclude developed recreational uses, FMFCD and the City of Fresno shall consider development of habitat areas for native plants and wildlife, in consultation with the State Department of Fish and Game.

- In 100-year flood plain areas along water courses, the City of Fresno shall consider development of conjunctive habitat and trail/recreational uses.

- If the California Department of Fish and Game requires habitat replacement as a condition of, or mitigation for, any project in the Roosevelt Community Plan area, such replacement or mitigative habitat shall be located within the Fresno-Clovis Metropolitan Area or on a water course directly contiguous to the FCMA.

AIRPORT SAFETY IMPACTS

Mitigation Measure:

- The Development Department shall continue to implement safety and avigation protection provisions in the Fresno Air Terminal Environs Specific Plan.

SEISMIC SAFETY IMPACTS

Mitigation Measure:

- The City of Fresno and the Fresno County Office of Emergency Services shall update its emergency/disaster plans to accommodate the expanded population and inventory of structures in the Roosevelt Community.

STATEMENT OF OVERRIDING CONSIDERATIONS

Final EIR No. 10113 for the
1991 Roosevelt Community Plan Update

Pursuant to Section 15093 of the California Environmental Quality Act Guidelines, the City of Fresno hereby determines that the benefits of the 1991 Roosevelt Community Plan Update outweigh its unavoidable adverse environmental effects and states the following reasons for such determination:

1. The Roosevelt Community Plan Area was identified as one of several appropriate urban growth areas by the 1984 Fresno General Plan based upon the "Joint Resolution on Metropolitan Planning," which was adopted by the Cities of Fresno and Clovis and Fresno County to promote balanced growth. This Resolution commits the City of Fresno to plan for managed urban growth in a manner which will provide for the continuation of existing agricultural operations.

2. Managed urban development of the Roosevelt Community with a potential population capacity of 222,370 to 223,750, as provided for by the recommended plan, will fully utilize public facilities and resources and accommodate an appropriate portion of the projected Fresno Metropolitan Area population increase over the next ten years. The proposed plan update is necessary to reduce the community's ultimate population holding capacity to a level substantially less than that potentiated by the 1984 Fresno General Plan, in order to avoid excessive demands upon limited sewer, streets, schools, safety services, and water facilities and resources.

3. The application of the recommended Plan will provide land uses, circulation components, policies and implementation measures, which, together with existing development standards and urban growth management service delivery requirements, will provide for managed use of public facilities to the extent appropriate economically feasible.

4. If the Roosevelt Community Plan Update is not adopted, urban development may continue to occur without the benefit of policies and implementation measures providing for the integration of compatible land uses in a manner which will promote the community's continued well-being. The "no project" alternative would not reduce or avoid environmental impacts, as urban development could continue to occur at a higher intensity and with less comprehensively applied mitigation measures.

5. The occurrence of increased demands upon facilities and resources and their related environmental impacts might be avoided within this community by adopting a plan update prohibiting any further urban development in this community plan area. However, population growth would continue within the plan area, while expanded development would occur elsewhere in the metropolitan area or in the adjacent rural region where the construction of public facilities has not yet been committed. Facilities within the Roosevelt Community's interior portions would experience worsened overcrowding and service level deficiencies, while facilities in the eastern and southern fringes of the community would remain incomplete or underutilized. Long-term negative impacts upon groundwater resources, increased traffic, and generation of air pollution caused by urban growth would still occur, and would be more adverse than those anticipated from implementation of the 1991 Roosevelt Community Plan Update.

6. The management and maintenance of groundwater quantity and quality must be pursued on a comprehensive region-wide basis in cooperation with other responsible public agencies as advocated by the plan.

7. It is economically, socially, and technologically infeasible at this time to reduce the generation of air pollution created by increased population and urban activities within the Roosevelt Community to a greater extent than that achieved in the metropolitan area through implementation of the Fresno General Plan Air Quality Element, California and Federal Clean Air Acts, and the City of Fresno Air Quality Policy Program.

8. Student capacity deficiencies are the result of population dynamics, school construction funding shortfalls, and existing State limits on permit controls and development fees. Full mitigation of student capacity deficiencies would require responsible agencies (primarily school districts) to obtain sufficient construction funds from several sources, to serve areas already developed as well as new residential areas.

The above stated reasons are based on the information presented in Final Environmental Report Number 10113 and accompanying documents presented to the Planning Commission and the City Council, and in all written evidence and testimony presented to the Planning Commission and the City Council on this matter.

AGENCIES CONSULTED IN PREPARATION OF DRAFT EIR NO. 10113

Federal Agencies

U.S. Department of Agriculture, Soil Conservation Service
Federal Emergency Management Agency
U.S. Environmental Protection Agency, Region IX

State Agencies

California Department of Fish and Game
Regional Water Quality Control Board--Central Valley Region
Cal Trans
Office of Emergency Services
State Department of Education
Office of Hazardous Material Information
Department of Health Services
Air Resources Board
Department of Mines & Geology
Office of Planning & Research
Cal-OSHA
UC Extension
Waste Management Board

County of Fresno

Public Works & Development Services
Fresno County Library
Health Department, Environmental Health Services
Department of Education
Agricultural Commissioner
Department of Social Services
Fresno County Airport Land Use Commission

City of Fresno

Development Department
Fire Department
Police Department
Public Works Department
Parks, Recreation, and Community Services Department
Economic Development Department
Fresno Area Express
City Manager's Office

Local Agencies, Districts, and Utilities

Bakman Water Company
Malaga County Water District
Council of Fresno County Governments
Fresno Irrigation District
Fresno Metropolitan Flood Control District
San Joaquin Valley Unified Air Pollution Control District
Fresno Unified School District
Clovis Unified School District
Sanger Unified School District
Fowler Unified School District
Orange Center Elementary School District
Washington Union High School District
Twenty-First District Agricultural Association (Fresno Fair)
Pacific Gas & Electric
Southern Pacific Railroad
Santa Fe (ATSF) Railroad
Mid-Valley Fire Protection District
Fresno County Farm Bureau

LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES SUBMITTING WRITTEN COMMENTS ON DRAFT EIR 10113 BY THE OCTOBER 10, 1991 DEIR COMMENT DEADLINE:

During the Draft EIR public review period mandated by the California Environmental Quality Act, the following submitted written comments on the Draft Environmental Impact Report:

COMMENTING ENTITY	Page	Comment Nos.
Fresno County Public Works and Development Services	FEIR-40	1 thru 18
State of California Resources Agency, Department of Conservation	FEIR-49	19 thru 28
Dole Dried Fruit and Nut Company	FEIR-51	29 thru 41
State of California Environmental Protection Agency, California Integrated Waste Management Board	FEIR-75	42 thru 48
Fresno Metropolitan Flood Control District	FEIR-78	49 thru 57
City of Fresno Public Works Department	FEIR-82	58 thru 81
State of California Department of Transportation (Cal-Trans)	FEIR-88	82 thru 96
Jack Papazian, J.R. Papazian Enterprises	FEIR-95	97
Herb Shapazian, Mary Shapazian, and Jayne Shapazian	FEIR-96	98 thru 127
Fresno Fairgrounds	FEIR-104	128 and 129

COMMENT NUMBERING SYSTEM:

The boldface numbers added to the left margin of the following comment letters indicate separate points made by commentors. These numbers have been coded to correspond with the Response to Comments Section incorporated into this Final Environmental Impact Report.

County of FRESNO

Inter Office Memo

OCT 10 1991

Planning & Development Services

DATE: October 9, 1991

TO: Pete Harkins, Senior Staff Analyst
Development Services Division

FROM: Roy Kubley, Staff Analyst III
Community Development & Planning Division

SUBJECT: COMMENTS ON THE DRAFT CITY OF FRESNO ROOSEVELT COMMUNITY PLAN UPDATE AND ENVIRONMENTAL IMPACT REPORT

We have reviewed the draft Roosevelt Community Plan update and draft Environmental Impact Report and have the following comments:

1 1. Under Goal 1-2 and in conjunction with Policy 1-2.5, an additional policy statement should be added to reflect how inhabited annexations will be handled, to what extent existing County land use policies will remain in effect, or what changes might be required or negotiated. Such a policy would be consistent with Paragraph 8 of the Joint Resolution on Metropolitan Planning and may act to allay the concerns of unincorporated area residents.

2 2. It is recognized that the City is responsible for planning and the provision of urban services within the sphere of influence, as set forth in the Joint Resolution and the Memorandum of Understanding. However, agricultural land makes up a significant proportion of the existing land use within the Community Plan area (28.8 percent, second only to single family residential). Although these agricultural areas are planned for conversion to urban uses, continued agricultural operations are feasible and should be encouraged on the individual parcels where urban development is not imminent, rather than allowing the land to become fallow, unattended open space.

This would be complementary to the County's City Fringe Area policy of permitting continued agriculture. The Joint Resolution allows the City to designate some areas within the urban boundary as appropriate for interim agriculture.

3 3. Policies 1-2.6 and 1-2.7 should be rewritten to reflect that the existing City Fringe Area policies of the County General Plan and the requirements of Article IV of the Memorandum of Understanding already provide for a cooperative referral process and, under certain circumstances, for use of the City's development standards and codes.

4 4. New retail commercial activity should only be permitted under circumstances where the carrying capacity of the regionally significant streets would not be compromised.

5 5. The Community Plan update and draft Environmental Impact Report focus primarily on the impacts which may occur because of the proposed development within the Plan boundaries. The Plan should also include

5 specific policies concerning the rural/urban interface areas and any regional issues originating beyond the Plan boundaries but impacting the Plan area, such as traffic circulation.

The EIR should analyze the impacts of the Plan on the region and the regional impacts on the Plan area and provide mitigation measures for these regional impacts of the Plan. Included with this should be discussions related to agricultural production and commerce, fiscal impact on County countywide services, and regional transportation facilities. If City staff feels that the regional impacts of the Plan have adequately been addressed in EIR No. 10085 for the 1984 General Plan, a statement acknowledging that must be made.

6 6. The draft EIR should include a discussion of the fiscal impacts on other agencies, including the County, resulting from the ultimate annexation and development of the Plan area. The County will include such a discussion in the EIR for the County's Roosevelt Plan update, and the City's document should include it also.

7 7. The EIR estimates that at 90 percent of total buildout of the designated residential areas a population of approximately 220,000 people would be accommodated (page 24 of the EIR). The Community Plan states that the Plan would provide for 175,000 (page 13 of the Plan). This discrepency should be reconciled.

8 8. The Joint Resolution on Metropolitan Planning sets a population figure for the Fresno-Clovis area at 588,000. Although this is intended to be reviewed in 1993, how do the Roosevelt Community Plan population figures affect the distribution of population throughout the City?

9 9. Mitigation measure (3) on page 53 of the EIR should be incorporated into the Plan as a policy. This should also be expanded to include general measures for development adjacent to or near agricultural industrial uses.

10 10. The EIR indicates that there are two alternatives, one of which is the proposed plan. Does this comply with Section 15126 of the CEQA Guidelines? In effect there is only the project and one alternative to the project, "No-project." Presumably, Section 15126(d)(5) was used to justify limiting the alternatives to this one. A discussion of the process leading to this conclusion should be included.

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10/9/91

County of
FRESNO

Public Works & Development Services Departmen

Richard D. Welto
Directo

October 28, 1991

6

Mr. Darrell Unruh
Development Department
City of Fresno
2326 Fresno Street
Fresno, CA 93721

Dear Mr. Unruh:

Attached are our comments related to the fiscal impact of the Draft Roosevelt Community Plan Update and Environmental Impact Report. If you have any questions concerning these comments, please feel free to contact Mary Pranzo or John Popp at 488-2992.

Very truly yours,

Carolina Jimenez-Hogg, Manager
Community Development & Planning Division

Roy A. Kubley

Roy A. Kubley, Staff Analyst III
Planning Office

RAK:sg
0152C-259
10/28/91

Attachment

c: Richard Perkins, Development Services Division

2220 Tulare Street, Sixth Floor/Fresno, hone (209) 453-5010
Equal Employment Opporo. tion — Handicap Employer

6

FISCAL IMPACT COMMENTS
DRAFT
ROOSEVELT COMMUNITY PLAN and EIR

Provision of County wide services and Municipal services

Page 5 of the DRAFT Roosevelt Community Plan acknowledges the provision of County wide services and Municipal services to residents in the Plan area. The text on page 5 should be expanded to identify these services in greater detail.

A. Countywide Services

Countywide services are predominantly population driven. The County provides the following services to all residents and property owners throughout Fresno County:

Detention Facilities
District Attorney
Public Defender
Courts
Probation
Grand Jury
Coroner
Clerk, Elections, Recorder
Social Services
Health Department
Valley Medical Center
Farm and Home Advisor
Ag. Commissioner, Sealer
LAFCO
Refuse Disposal
Veterans Service
Board of Supervisors
Assessor
Auditor, Controller,
Tax Collector
Parks
Library

In fiscal year 1991-92 the net county cost per person to provide these services was $253.71 for residents of the City of Fresno and $95.93 for residents in the unincorporated area. Net county cost is the total expenditure for the providing county department less the revenues received from outside sources. The result is the County general fund contribution or net county cost to provide the service.

B. Municipal Services

The County provides the following services to all residents and property owners in the unincorporated areas of Fresno County:

Sheriff's Patrol
Sheriff's Detectives
Sheriff's Crime Lab
Planning and Zoning
Surveyor
Building and Safety
Roads

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In fiscal year 1991-92 the net county cost per person to provide these services in the unincorporated area was $172.34.

Net Fiscal Impact of Land use Changes

The Roosevelt Community Plan Update proposes changes in land use patterns. These changes reflect the Plan Concept, page 9, which seeks to provide for the development of a balanced community. The net fiscal impact of the 1991 update compared to the 1978 plan is a $9,629,800 reduction in the Net County Cost to provide County wide services and Municipal services to residents in the Plan area.

Currently, it costs the County $6,409,238 more to provide services than it receives in revenues from the Roosevelt Community Plan Area. Under the 1978 Roosevelt Community Plan land use pattern, it would cost the County $26,210,105 more to provide services than it receives in revenues at full development. The land use pattern proposed in the 1991 Update would cost the County $16,580,305 more to provide services than it receives in revenues at full development. This amount represents a cost reduction of $9,269,800. The revenue estimates made for this analysis are consistent with the provisions of the MOU between the County and City of Fresno.

The land use pattern proposed in the 1991 Update improves the economic balance in the Community. Residential land use, which tends to require a level of service above the amount of revenue generate is reduced. Commercial land use, which returns revenues in excess of the service levels required are increased. The net result is a reduction in the population driven demand for services coupled with an increase in revenues generated to pay for services.

County of
FRESNO

Public Works & Development Services Department

Richard D. Welton
Director

October 11, 1991

Darrell Unruh, Supervising Planner
City of Fresno Development Department
2326 Fresno Street
Fresno, CA 93721

Subject: Review and Comment Roosevelt Community Plan Update and Draft Environmental Impact Report (DEIR)

Dear Mr. Unruh:

The Fresno County Public Works and Development Services Department has completed its review of the Roosevelt Community Plan Update and DEIR and offers the following comments:

11 Development Services Division Staff states that a discussion of the cancellation procedure for lands subject to California Land Conservation Act (Williamson Act) Contracts should be included in the EIR. Cumulative impacts of contract cancellations on adjacent agricultural lands, both contract and non-contract, should be addressed. The specific findings and pubic hearing process for cancellation requests (See attached Government Code Sections 51282 and 51284) should be discussed.

The DEIR text refers to the cancellation or termination of contracts resulting from filing a Notice of Non Renewal by a landowner (Pages 49 and 51). A contract expires on the last day of February either nine or ten years from the recording of the Notice of Non Renewal per Government Code Section 51245. Text changes should be made to replace the cancellation/termination terms with expiration when referencing the Notice of Non Renewal to avoid confusion with the cancellation process. The reference to the 20-year contract should be deleted.

12 It should be noted that only a 33.59-acre portion of Contract No. 6916, which comprises 85.05 acres, was affected by the Notice of Partial Non Renewal filed by the property owner. The remaining 51.46 acres will remain subject to the contract provisions beyond 1998.

13 The impact from farmland conversion resulting from adoption of the Plan should be fully analyzed. Topics to be discussed include type, amount and location of farmland converted, impact on current and future agricultural operations, cumulative and growth-inducing impacts on farmland in the immediate and surrounding area, and the economic impacts.

14 Of the proposed land use designation changes, only the site located at the northwest corner of Kings Canyon Road and Temperance Avenue is within the Primary Review Area of the Fresno Air Terminal Land Use Policy Plan. Airport Land Use Commission review is required on the project prior to final approval to insure consistency with the Fresno Air Terminal Plan. Any questions regarding these comments should be directed to Richard Perkins at 453-5055.

2220 Tulare Street, Sixth Floor/Fresno. Phone (209) 453-5055

Equal Employment Opportunity – Affirmative Action – Handicap Employer

RECEIVED

MAR 04 1991

COUNTY OF FRESNO
PUBLIC WORKS & DEVELOPMENT SERVICES DEP

WILLIAMSON ACT CANCELLATIONS

GOVERNMENT CODE

SECTIONS 51282 AND 51284

51282. Cancellation as to all or part of land; conditions for approval.

(a) The landowner may petition the board or council for cancellation of any contract as to all or any part of the subject land. The board or council may grant tentative approval for cancellation of a contract only if it makes one of the following findings:

(1) That the cancellation is consistent with the purposes of this chapter (California Land Conservation Act of 1965; Williamson Act); or

(2) That cancellation is in the public interest.

(b) For purposes of paragraph (1) of subdivision (a) cancellation of a contract shall be consistent with the purposes of this chapter only if the board or council makes all of the following findings:

(1) That the cancellation is for land on which a notice of non-renewal has been served pursuant to Government Code Section 51245.
(2) That cancellation is not likely to result in the removal of adjacent lands from agricultural use.
(3) That cancellation is for an alternative use which is consistent with the applicable provisions of the city or county general plan.
(4) That cancellation will not result in discontiguous patterns of urban development.
(5) That there is no proximate non-contracted land which is both available and suitable for the use to which it is proposed the contracted land be put, or, that development of the contracted land would provide more contiguous patterns of urban development than development of proximate non-contracted land.

As used in this subdivision, "proximate, non-contracted land" means land not restricted by contract pursuant to this chapter, which is sufficiently close to land which is so restricted that it can serve as a practical alternative for the use which is proposed for the restricted land.

As used in this subdivision "suitable" for the proposed use means that the salient features of the proposed use can be served by land not restricted by contract pursuant to this chapter. Such nonrestricted land may be a single parcel or may be a combination o contiguous or discontiguous parcels.

OCT 10 1991

Planning & Development Services

(c) For purposes of paragraph (2) of subdivision (a) cancellation shall be in the public interest only if the council or board makes the following findings: (1) that other public concerns substantially outweigh the objectives of this chapter; and (2) that there is no proximate noncontracted land which is both available and suitable for the use to which it is proposed the contracted land be put, or, that development of the contracted land would provide more contiguous patterns of urban development than development of proximate noncontracted land.

As used in this subdivision "proximate, noncontracted land" means land not restricted by contract pursuant to this chapter, which is sufficiently close to land which is so restricted that it can serve as a practical alternative for the use which is proposed for the restricted land.

As used in this subdivision "suitable" for the proposed use means that the salient features of the proposed use can be served by land not restricted by contract pursuant to this chapter. Such nonrestricted land may be a single parcel or may be a combination of contiguous or discontiguous parcels.

(d) For purposes of subdivision (a), the uneconomic character of an existing agricultural use shall not by itself be sufficient reason for cancellation of the contract. The uneconomic character of the existing use may be considered only if there is no other reasonable or comparable agricultural use to which the land may be put.

(e) The landowner's petition shall be accompanied by a proposal for a specified alternative use of the land. The proposal for the alternative use shall list those governmental agencies known by the landowner to have permit authority related to the proposed alternative use, and the provisions and requirements of Section 51283.4 shall be fully applicable thereto. The level of specificity required in a proposal for a specified alternate use shall be determined by the board or council as that necessary to permit them to make the findings required.

(f) In approving a cancellation pursuant to this section, the board or council shall not be required to make any findings other than or in addition to those expressly set forth in this section, and, where applicable, in Section 21081 of the Public Resources Code.

51284. Public hearing; notice and publication.

No contract may be canceled until after the city or county has given notice of, and has held, a public hearing on the matter. Notice of the hearing shall be published pursuant to Section 6061 and shall be mailed to the Director of Conservation and every owner of land under contract, any portion of which is situated within the same agricultural preserve and within one mile of the exterior boundary of the land upon which the contract is proposed to be canceled.

Development Engineering Staff offers the following comments:

15 1. The Preliminary Draft Circulation of the Roosevelt Community Plan (Figure 2-1.1) is substantially different from the Fresno County Circulation System. The two circulation plans should be reconciled to avoid any conflict in street designation.

16 2. The Roosevelt Community Bikeways Plan is also substantially different from the Fresno County Bikeways Plan adopted on May 3, 1977. In order for the City and County to pursue the adoption of common development standards, these plans should be reconciled.

17 3. This DEIR does not address the existence of driveway approaches of businesses and residences on Temperance and Jensen Avenues other than the half-mile street intersection. It is recommended that the Council of Fresno County Governments should also evaluate the development access policies of existing driveways onto expressways.

18 4. Page 12, Item 10; County staff needs to review and comment on the concept of relocating VMC and the fairgrounds. Likewise, relocating the fairgrounds to the south implies that the City of Fresno may be planning uses outside the existing sphere of influence.

For further information regarding these comments contact Casey Cheng at 453-5122.

Resources Division Staff offered no comment regarding solid waste management and groundwater resources.

Design Division Staff and Planning Division Staff comments are attached. Questions regarding Design Division comments should be directed to Erwin Ohannesian at 453-5109 and Planning Division comments to Roy Kubley at 453-5010.

Thank you for the opportunity to comment on the Draft EIR.

Very truly yours,

Jerry K. Boren
Development Services Manager

Richard Perkins
Staff Analyst II

RP:gah
7472K

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Planning & Development Services
Department
City of Fresno

State of California THE RESOURCES AGENCY OF CALIFORNIA

Memorandum

To : Mr. Douglas P. Wheeler
Secretary for Resources

Mr. Darrell Unruh
City of Fresno
2326 Fresno Street
Fresno, CA 93721

Date : October 3, 1991

Subject: Draft Environmental Impact Report (DEIR) for Roosevelt Community Plan
SCH# 90021238

From : Department of Conservation—Office of the Director

The Department of Conservation is responsible for monitoring farmland conversion on a statewide basis, and administration of the Williamson Act. The Department has reviewed the above DEIR and has the following comments.

The project involves the updating of the Roosevelt CP which covers an 18,840-acre area. The DEIR notes: (1) 3,575 acres of the CP area are Prime Farmland; (2) 290 acres are Farmland of Statewide Importance; and (3) 330 acres are under Williamson Act contract. Full development of the CP would result in 5,070 acres of agricultural land conversion. The DEIR also notes the conversion of agricultural land as significant, unavoidable, irreversible, cumulative and partially mitigable impact.

The Department recommends that the Final Environmental Impact Report (FEIR) discuss the following issues to provide a comprehensive analysis of the project's impacts.

Agricultural Character and Williamson Act Contract Issues

19 • Types and relative yields of crops grown in the affected areas, or in areas of similar soils under good agricultural management.

20 • A map which identifies the location of agricultural preserves in the project area, the number of acres and type of land in each preserve (i.e., prime/non-prime). This information could easily be shown on Figure EIR-5.

21 • A discussion of the effects that any cancellation of Williamson Act contracts would have on nearby properties also under contract.

• A discussion of the specific requirements for contract cancellations (Government Code Sections 51282 and 51284; attached).

Farmland Conversion Impacts

22 • The type, amount, and location of farmland conversion that would result from implementation of the project.

• The impact on current and future agricultural operations.

• The cumulative and growth-inducing impact of the CP on farmland in the planning area.

Mitigation Measures and Alternatives

Some additional mitigation measures and alternatives that would at least lessen the direct, cumulative and growth inducing farmland conversion impacts of the project are:

23 • Directing urban growth to lower quality soils in order to protect prime agricultural land.

24 • Increasing densities or clustering residential units to allow a greater portion of the site to remain in agricultural production.

25 • Protecting other, existing farmland of equivalent, or better, quality through planning policy that relies on an active and strategic use of the Williamson Act.

26 • Establishing buffers such as setbacks, berms, greenbelts and open space areas to separate farmland from urban uses. Many communities have considered 300 feet as a sufficient buffer for impacts such as pesticide spraying, noise and dust.

27 • Implementing right-to-farm ordinances to diminish nuisance impacts of urban uses on neighboring agricultural operations, and vice-versa.

• Adopting a farmland protection program, under the auspices of a farmland trust, that utilizes such land use planning tools as transfer of development rights and purchase of development rights or conservation easements.

28 The City should also consider a discussion of any monitoring/reporting criteria ensuring compliance with adopted mitigation measures.

The Department appreciates the opportunity to comment on the DEIR. We hope that the above issues are given adequate consideration in the FEIR. If I can be of further assistance, please feel free to call me at (916) 322-5873.

Sincerely,

Stephen E. Oliva
Environmental Program Coordinator

Attachment

cc: Ken Trott
Office of Land Conservation

EK:SEO

Dried Fruit and Nut Company
Post Office Box 28900 • Fresno, CA 93710-8900 • Phone (209) 449-6500 • FAX (209) 449-6750

October 4, 1991

By Federal Express

Planning Division
Development Department
City Hall
2326 Fresno Street
Fresno, California 93721
Attn: Darrell Unruh
Supervising Planner

Re: Draft Environmental Impact Report (EIR No. 10113, SCH 90021238) for the 1991 Roosevelt Community Plan Update

Gentlemen:

On behalf of Dole Dried Fruit and Nut Company ("Dole"), as its general counsel, I hereby submit the following as Dole's comments on the content and adequacy of the referenced Draft Environmental Impact Report ("Draft EIR"):

Letter dated October 3, 1991 from Tenera Environmental Services to Dole.

In addition, I hereby submit the materials described below, which had been previously submitted to the City of Fresno Planning Division and the Roosevelt Community Plan Update Citizens Advisory Committee in connection with their preparation of their recommendations for the Roosevelt Community Plan Update. These materials set forth in detail the various environmental issues which are raised if the 20 acre parcel lying immediately west of Dole's Locans Raisin Plant, and situated southwest of the intersection of East Butler Avenue and South Temperance Avenue, is rezoned for medium-low density residential development, as set forth in Requested Plan Modification No. 7. The materials also generally describe environmental conflicts which occur between agriculture and residential development.

March 7, 1991 Assessment of Selected Environmental Considerations Relating to the Rezoning of Lands in the vicinity of the Dole Locans Raisin Plant Prepared by Tenera Environmental Services.

7170 North Financial Drive • Fresno, CA 93710
A Castle & Cooke Company

April 19, 1991 Response to Comments on Above-Referenced Assessment Prepared by Tenera Environmental Services.

29 Various materials relating to the importance of agriculture, particularly the grape and raisin industries, to the economy of Fresno County, and the State of California, and the growing threat of urbanization and residential development to the agricultural industry upon which the economy of Fresno depends.

Proposed California legislation to provide protection to food processing facilities against residential development (1991 CA A.B. 1190).

Representatives of Dole plan to attend the Public Information Meeting to be held by the City of Fresno Planning Division on October 9, 1991 relating to the Draft EIR, and will provide oral testimony in support of Dole's position.

Please do not hesitate to contact the undersigned prior to October 9, 1991 if you have any questions on the enclosed submissions.

Sincerely,

Effie F. Anastassiou

Effie F. Anastassiou
Vice President and General Counsel
Dole Dried Fruit and Nut Company

Encls.

cc: Mr. Timothy R. Barron
Mr. Dennis Bell
Mr. Gus Bonner
Mr. Mike Hill

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OCT 07 1991
Planning & Development Services
Development Department
CITY OF FRESNO

TENERA

October 3, 1991

Effie F. Anastassiou, Esq.
Vice President and General Counsel
Dole Dried Fruit and Nut Company
7170 North Financial Drive
Fresno, California 93710-8900

Subject: Comments on the Draft Environmental Impact Report (EIR No. 10113, SCH 90021238) for the 1991 Roosevelt Community Plan Update (City of Fresno Development Department, July 16, 1991)

Dear Effie:

This transmittal is provided pursuant to your letter request to document TENERA's review of the subject EIR, and to forward our comments on the document in specific regard to its treatment of Requested Plan Modification No. 7 (RPM No. 7) involving a change of zone for that 20 acre portion of land lying immediately west of the Locans Raisin Plant and situated southwest of the intersection of East Butler Avenue and South Temperance Avenue in the City of Fresno. Our comments have been based on a detailed review of the 7/16/91 Roosevelt Community Plan and Draft EIR circulated for comment by the City of Fresno Development Department on 8/26/91, and on review of applicable provisions of the State CEQA Guidelines.

Summary

The 20 acre portion of land of interest in this communication is currently zoned AE-20, and was so designated by the City of Fresno in the last Roosevelt Community Plan update, among other things, to provide a buffer zone or zone of land use interface between the agricultural processing operations of the Locans Raisin Plant owned by Dole Dried Fruit and Nut Company and non-agricultural uses. The proposed 1991 Roosevelt Plan Update again designates that portion of land for agriculture/open space use; however, RPM No. 7 included in the EIR would change the zoning designation to medium-low density residential use.

TENERA's principal comments regarding the EIR's treatment of this potential change in zone are that 1) we do not believe that the EIR adequately considers alternative planning approaches, their impacts or mitigation measures as they relate to the transition or interface between urban and agricultural uses, and 2) we do not believe that the level of impact/mitigation analysis given RPM No. 7 is adequate in relation to the requirements of the State CEQA Guidelines to establish a basis for approval of the zone change by the Planning Commission or the City Council.

1995 University Avenue, Berkeley, California 94704, (415) 84 (415) 845-8453

General Consideration of Alternatives

30 The State CEQA Guidelines require that reasonable alternatives to a proposed action or project be considered in the EIR, and that the discussion of alternatives focus on those capable of eliminating any significant effect of an action or project or reducing the effects of an action or project to a level of insignificance. In view of the particular importance and relevance of the matter of the transition or interface between urban and agricultural uses in the City of Fresno planning area, we believe that this issue should generally be more clearly addressed and substantially expanded upon in the EIR. The balancing of urban growth demands with existing agricultural uses is attempted to be accomplished in the Roosevelt Community Plan and the accompanying EIR. The EIR states on page 48 that "[m]anagement of the agricultural-urban interface is important for preventing potential nuisances and for actual implementation of the California Civil Code's "Right to Farm" provisions (Civil Code Section 3482.5)." Indeed, the agricultural land resource impacts of the Roosevelt Community Plan were given specific treatment in the document. However, we do not believe that the discussion presented or the mitigation measures identified in the EIR adequately address the matter of the interface between urban development and adjoining agricultural uses.

31 It was identified as a mitigation measure in the EIR that major streets would be used, where possible, as boundaries between areas designated for urban development and areas designated for agriculture. It was also identified in the EIR that design features (dense landscaping, designated open space - such as trails or bikeways, boundary streets, on-site flood control facilities, and building setbacks with fencing) would be incorporated into urban developments where they directly abut actively farmed land that is in an agricultural preservation contract (i.e. Williamson Act lands). There is, however, no discussion in the EIR which establishes the basis or the reasons why these mitigation measures will be effective in eliminating or reducing the impacts of the Roosevelt Community Plan on pre-existing agricultural uses, nor is there any discussion which considers alternative mitigation approaches toward providing buffer zones or transition zones between conflicting land uses. Further, we believe that the mitigation measure is overly restrictive in limiting its application to actively farmed land that is in an agricultural preservation contract. A mitigation measure directed toward reducing impacts at the urban/agricultural interface should be more broadly stated to consider the range of agricultural uses which are encountered in the Roosevelt Planning area, including without limitation, agricultural processing facilities, agricultural service uses, and lands which have historically been under agricultural use but are not necessarily designated as agricultural preserve lands. Further, the EIR should not limit its focus to agricultural land impacts within the boundaries of the Roosevelt Planning area, but should also address the impacts of the Roosevelt Community Plan on land uses which adjoin the boundaries of the planning area.

Requested Plan Modification No. 7

32 The State CEQA Guidelines provide that the level of detail of the impact analyis presented in the EIR should be appropriate to the project or action under consideration by the agency, and should be to a sufficient degree of analysis to provide decision-makers with adequate information concerning the environmental consequences of a project. Thus, the level of discussion and analysis for a general plan EIR would normally be less detailed and site specific than an EIR for a specific development project. In this regard, TENERA notes that a number of specific development proposals have been included in the Roosevelt Community Plan Update EIR as Requested Plan Modifications, with summary analyses of the expected impacts of the proposals.

33 In the case of RPM No. 7, it is incorrectly noted that the prior Roosevelt Community Plan designated this area for medium-density residential. This area was in fact designated agricultural/open space in past plans for the same reason it has been so designated in the current draft of the Roosevelt Community Plan - to provide a buffer between an agricultural processing facility and residential use. Further, the EIR states that the Development Department would adopt but one mitigation measure for the proposed residential development that would encompass design features to "mitigate dust, noise, odors, and light/glare associated with adjacent agricultural uses". This summary impact analysis is not completed to a level of detail consistent with the requirements of the State CEQA Guidelines for development proposals, and, in TENERA's interpretation is inappropriate as a basis for granting a change in zone of the 20 acre portion of land of interest in the Roosevelt Community Plan.

34 Please also note that item "r." on page 269 states that there is potential exposure of residents to "large quantities of corrosive refrigerants and dessicants" used by the agricultural processing facility. First, this comment is incorrect as no "corrosive refrigerants or dessicants" are used at the facility. Perhaps, this is an inaccurate reference to the facility's use of fumigants. Nonetheless, there is no discussion of proposed mitigation measures relating to the facility's use of fumigants.

35 TENERA also notes that the comparison of impacts of the Requested Plan Modifications in Table EIR-32 (page 247) indicates "no discernable difference" in the impact of RPM No. 7 on residential/non-residential interface. Yet this contradicts the statement that this is "a difficult interface" in the specific impact analysis (page 268). The specific impact analysis of RPM No. 7 also indicates that the development would remove some 20 acres of non-prime agricultural land from the planning area, yet this area is shown as Farmland of Statewide Importance in Figure EIR-4-B (page 50). With regard to the consistency of RPM No. 7 with the general planning approach, and mitigation measures addressed in

TENERA

the EIR, we note that such determination cannot be made without a more thorough discussion and analysis of the buffer/interface zone issue as addressed in our comment above under General Consideration of Alternatives.

For all of the above reasons, we believe that the proposal of the 1991 Roosevelt Plan update to retain designation of the 20 acre portion of land at issue as agriculture/open space use should be supported. The EIR has not adequately addressed the impacts and mitigation measures applicable to the issue of buffer zones or transition zones between conflicting land uses.

We appreciate the opportunity to review the Draft Environmental Impact Report for the 1991 Roosevelt Community Plan Update, and are prepared to answer any questions you may have concerning this transmittal.

Sincerely,

James C. Saucerman
Vice President

ASSESSMENT OF SELECTED ENVIRONMENTAL CONSIDERATIONS RELATING TO THE REZONING OF LANDS IN THE VICINITY OF THE DOLE LOCANS RAISIN PLANT

Submitted to:

Dole Dried Fruit and Nut Company
P.O. Box 28900
Fresno, California 93710

March 7, 1991

E1-886.0

TENERA
Environmental Services
1995 University Avenue, Berkeley, California 94704, (415) 845-5200
FAX: (415) 845-8453

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1.0 INTRODUCTION

1.1 General

36 This report has been prepared for Dole Dried Fruit and Nut Company by TENERA Environmental to address selected environmental considerations associated with the contemplated rezoning of lands adjacent to Dole's Locans Raisin Plant, and to provide recommendations regarding the maintenance of a buffer zone for inclusion in the City of Fresno General Plan through the Roosevelt Community Plan.

This section provides a brief overview of TENERA's understanding of current plans for rezoning of the area as expressed in the proposed update to the Roosevelt Community Plan. Section 2.0 provides a description of key operations at Dole's Locans Raisin Plant, and existing land use conditions in the vicinity of the plant. Section 3.0 includes discussion concerning the principal environmental features involved with operations at the Locans Plant as they should be considered in evaluating the impacts of rezoning of lands in the vicinity of the site, and provides recommendations concerning the incorporation of a land use buffer zone into a portion of the Roosevelt Community Plan area near the Locans Plant. The planning issues considered in this report are summarized in Section 4.0.

1.2 Background

It is TENERA's understanding that the City of Fresno is currently contemplating an update to the Roosevelt Community Plan which, among other things, is expected to result in a change of zoning of certain lands lying immediately west of Dole's Locans Raisin Plant in the southeastern portion of the City of Fresno. The land of specific interest to this evaluation comprises an area of approximately 160 acres bounded on the north by East Butler Avenue, on the west by South Armstrong, on the east by South Temperance, and on the south by planted agricultural land. A 20 acre portion of the 160 acre area, forming a strip from East Butler southward along the west side of South Temperance is currently zoned as AE-20, which zoning was adopted in the last Roosevelt Community Plan in order to provide a land use buffer between the Locans Plant and non-agricultural users.

At this time, the current draft of the proposed update to the Roosevelt Community Plan would amend the zoning of this quarter-section area to provide for Medium-Low Density Residential (MLDR). Such use designation would permit residential development to a density of from 2 to 5 dwellings per acre. In view of the potential change in zone and the density of residential development that would be accommodated by the plan, it was deemed desirable by Dole to identify environmental factors and planning considerations which would either support the adequacy of the existing 20 acre buffer or would provide a basis for revising the buffer provision.

In order to achieve this assessment it was believed appropriate to focus on selected environmental characteristics of the operations at the Locans Plant, and recognized in the State CEQA Guidelines for the analysis of environmental impacts. Such considerations are addressed in the following sections of this report.

2.0 PLANT FACILITIES AND OPERATIONS

37 ## 2.1 Location

Dole's Locans Raisin Plant is located in Fresno County at 568 South Temperance Avenue near the southeastern portion of the City of Fresno, and occupies a frontage of approximately 1,300 ft along the east side of South Temperance Avenue southward from its intersection with East Butler. The plant site and the associated wastewater disposal areas are situated in the southwest quarter of Sec. 11, T 14S, R 21E MDB&M.

2.2 Historical Uses

The Locans Plant is dedicated to the processing and packaging of raisins, and involves raisin washing as well as coating operations using vegetable oils and glycerine. The original plant facilities were constructed in 1926, and were subsequently expanded to occupy the current site. Portions of the current plant site were historically used for the production of crops such as grapes.

Those lands surrounding the plant site have historically been dedicated to agricultural uses, and are currently planted in crops on all properties adjacent to and surrounding the site with exception of an approximate 40 acre single-family residential development (Sunnyside Green) northwest of the site at the intersection of East Butler and South Temperance Avenue, and several single family lots north of the plant along East Butler. Such dedicated agricultural uses extend a minimum distance of one-quarter mile on all sides of the plant site.

2.3 Plant Facilities and Operations

The Locans Plant is normally in operation throughout the year with 24 hour per day, three shift operations typically occurring five days per week. As a result of the nature and requirements of packing activities at the plant, a number of features and operating characteristics of the facility are of particular note as they bear on the assessment of a suitable buffer zone from adjoining land uses.

One such feature consists of the exterior lighting for yard, perimeter, and travel areas around buildings which is needed to provide for site security at night, and safety for personnel and vehicle movements on-site. Some high intensity lights have been removed in the past at various points around the facility to reduce the off-site impact of light and glare on sensitive receptors (i.e. residential dwellings). However, the site's ability to further reduce such lighting sources is constrained by basic plant requirements for security and safety. Such required lighting thus represents some degree of off-site impact that should be considered in determining the nature, location, and design configuration of adjoining land uses.

A second feature of the plant operation which bears on the assessment of a suitable buffer zone from adjoining land uses consists of nuisance odors generated periodically in connection with the application of plant wastewaters to the disposal areas east and southeast of the plant building complex approximately 700 ft east of South Temperance. Frequent odor complaints from residents near the plant had been received during the early 1970s, and the plant subsequently installed a wastewater management system which has been permitted by the Central Valley Regional Water Quality Control Board. That system involves the collection of process and plant cleanup wastewaters, conveyance to a series of impoundments, and the application of wastewater to land through a system of sprinklers. This system has been effective in substantially reducing the generation of odors from plant wastewaters. However, some odors are still generated during certain times and conditions of plant operation, and can impact adjoining lands under adverse wind conditions.

A third feature of plant operation relevant to this assessment concerns the impact on ambient sound levels from plant-related truck traffic along South Temperance, machinery operations within the plant, and warning devices in use at the facility. The impact of such noise sources on adjacent uses should also be considered in determining the nature, location, design configuration, and suitability of adjoining land uses particularly in relation to the Noise Compatibility Criteria employed by the City of Fresno Planning Department.

3.0 DISCUSSION

3.1 General

For purposes of addressing those features and operating characteristics of the Locans Plant identified in Section 2.0 as they bear on the assessment of a suitable buffer zone from adjoining land uses, it is noted that the contemplated improvement of South Temperance as an expressway adjacent to the facility could presumably provide some land use buffering through landscaping along the corridor, and through set backs and easement necessitated for realignment of the road. Such improvement would also, however, alter existing traffic circulation patterns for vehicles entering the plant site, and would warrant special consideration in regard to the designation of zoning and development in this portion of the Roosevelt Community Plan.

38 ## 3.2 Light and Glare

The need to maintain exterior lighting sources for yard, perimeter, and travel areas around the Locans Plant site to provide for site security at night, and safety for personnel and vehicle movements could be perceived as a potential adverse impact on residential dwellings where the lighting sources could be seen from newly developed areas. For example, one development plan currently under consideration for the property immediately west of the Locans Plant across South Temperance Avenue would involve the construction of residences at minimum distances ranging from 115 ft to 230 ft (depending upon the right-of-way width assumed for South Temperance) from the shipping dock side of the plant. Such residences would be exposed to certain high-intensity light sources from the plant unless intervening landscaping was provided to a minimum height of 20 ft to 30 ft above existing ground level on the west side of South Temperance.

The existing 20 acre buffer zone incorporated into the current zoning of this land provides for a set back of about 660 ft westerly of South Temperance, and serves to mitigate the potential impact of light and glare. The incorporation of an intervening landscaping requirement should, however, be considered in the event that the zoning of the land is changed to permit non-agricultural development closer to the plant site than now allowed.

39 ## 3.3 Nuisance Odors

The planning policy expressed in the Roosevelt Community Plan to provide a reduction in the intensity of development when the planning area adjoins agricultural uses may be an appropriate planning guide, but should warrant special land use compatibility considerations when applied to an agricultural plant or facility use. For example, the potential for nuisance odors generated periodically in connection with the application of plant wastewaters to the disposal areas east and

southeast of the Locans Plant should be a significant consideration supporting the maintenance of a buffer zone adjoining the west side of the plant.

An analysis of the potential impact of nuisance odors from the Locans Plant wastewater disposal areas was done in order to evaluate the adequacy of the existing buffer zone provision in the Roosevelt Community Plan, and to provide specific input into the City of Fresno's considerations for rezoning these lands. This analysis involved consideration of the nature of odor emissions generated from plant wastewater, the detectability of such emissions in relation to established odor threshold levels, and the expected dispersion and transport of odors based upon modeling.

Extensive analytical data on the composition and chemistry of wastewater applied to the land disposal areas east of the plant building complex have not been developed. However, it is believed that the decomposition of organic compounds within the wastewater system (i.e. pipelines, impoundments, and soil disposal areas) occurs under both aerobic and anaerobic conditions. Under anaerobic conditions (such as times when wastewater is held in a section of pipeline with limited oxygen entrainment), the biological decomposition of organics can lead to the production of gases such as hydrogen sulfide.

Hydrogen sulfide (H_2S) is a colorless gas with a characteristic rotten-egg odor which can be harmful at high concentrations. Such concentrations are not expected under conditions experienced at the Locans Plant, but detectable levels may be present during certain periods of plant operation. Based on information presented in Occupational Health Guidelines (NIOSH-OSHA, 1978), the odor threshold of H_2S is 0.13 ppm. The gas is described as faint but noticeable at a concentration of 0.77 ppm.

In order to assess the potential impact of odor emissions from the Locans Plant on the area of interest in this assessment, a dispersion modeling analysis was made using the EPA SCREEN air quality model. The modeling analysis indicated that a peak ground level concentration of 0.52 ppm H_2S would be experienced at the western property line of the Locans Plant during worst case meteorological conditions assuming a 1 gm/sec emission rate from the disposal area. This level would decrease to 0.21 ppm H_2S at a distance of 800 m (2,625 ft) west from the source. Although the actual emission rate of odorous gases from the disposal area is not known, the analysis would suggest that that property lying west of the plant site is likely to periodically experience detectable levels of odors over the entire area between South Temperance and the western margin of the site, and should therefore retain some buffer provision to reduce the impact on such land in the event of residential development.

The existing buffer zone extending a distance of about 600 ft west of South Temperance would contribute to a 30 percent reduction in ambient concentration from that level experienced at the plant property line, and could be supplemented with the planting of trees, such as eucalyptus or other varieties of trees which are

39

tall, dense and non-deciduous, to enhance mechanical turbulence which could act to dilute ambient concentrations of odors.

40 ## 3.4 Noise Levels

The impact on ambient sound levels from plant-related truck traffic on South Temperance Avenue, machinery operations within the plant, and warning devices in use at the facility should also be considered in formulating compatible adjoining land uses within the 160 acre property west of the plant site. Truck access and entrance to the facility is now from the west side of the site along South Temperance, and results in the generation of noise from the acceleration and deceleration of vehicles entering and leaving the plant. Reduction in the visibility of the plant entrance during periods of fog in this area also results in turning movements which impact local traffic circulation, safety, and noise levels. Thus, the potential for ambient sound level impacts from noise sources associated with operations at the plant should also be a significant consideration supporting the maintenance of a buffer zone adjoining the west side of the plant, and could provide a basis for considering mitigation measures that should be adopted in regard to residential building setbacks, fencing, and landscaping of the South Temperance corridor.

A simplified analysis of the potential impact of noise from the Locans Plant was done in order to evaluate the adequacy of the existing buffer zone provision in the Roosevelt Community Plan, and to provide specific input into the City of Fresno's considerations for rezoning these lands. This analysis involved consideration of a single large noise source at the plant (i.e. the site shift change warning horn) and was compared with the Noise Compatibility Criteria of 60 db(A) employed by the City of Fresno Planning Department for outside activity areas for noise sensitive uses (e.g. residential). This analysis indicated that the noise level of the site shift change warning horn would be reduced to the level of 60 db(A) at a distance of about 500 ft west of South Temperance assuming a source level of 100 db(A) at 50 ft from the source. This distance would represent a buffer zone somewhat less than that currently provided for under the current zoning of the property, but neglects any other sources of noise such as those with increased traffic on an upgraded South Temperance expressway. This consideration would suggest that the existing buffer zone should be adequate as a means of mitigating the potential noise impact on residential developments from plant operations, and should be retained in land use considerations associated with the current rezoning plans for the property.

4.0 SUMMARY

41 ## 4.1 General

This assessment of selected environmental conditions associated with operations at the Dole Locans Raisin Plant suggests that potentially significant environmental impacts could be expected in connection with the MLDR rezoning of the 160 acre area west of the plant site, and further that the maintenance of a buffer zone in the Roosevelt Community Plan should be considered in this planning area. In view of these conclusions, TENERA would provide the following recommendations pertinent to each of the three major environmental topics discussed in Section 3.0.

4.2 Light and Glare

The potential adverse impact on residential dwellings from lighting sources at the Locans Plant could be reduced or eliminated through the adoption of mitigation measures involving residential building orientation, yard landscaping, fences, and landscaping of open areas within the MLDR zone. The incorporation of an intervening landscaping requirement to include grading and/or the planting of trees to a minimum height of 20 ft to 30 ft above existing ground level on the west side of South Temperance should be considered in the event that the zoning of the land is changed to permit non-agricultural development closer to the plant site than now allowed.

4.3 Nuisance Odors

The potential for nuisance odors generated in connection with the disposal of plant wastewaters would be expected to impact residential developments west of the plant site, and would support the maintenance of the existing buffer zone extending a distance of about 600 ft west of South Temperance. This land area could be supplemented with the planting of tall, dense and non-deciduous trees to enhance mechanical turbulence which could act to dilute ambient concentrations of odors.

4.4 Noise Levels

The potential for noise and ambient sound level impacts from plant-related truck traffic, machinery operations within the plant, and warning devices in use at the facility would also be expected to impact residential developments west of the plant site, and would support the maintenance of the existing buffer zone as a means of mitigating the potential noise impact on residential developments from plant operations.

Parsons Rourke & Walker

Planners, Engineers, Landscape Architects

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March 28, 1991

Ms. Effie F. Anastassiou
Vice President and General Counsel
Dole Dried Fruit and Nut Company
P.O. Box 28900
Fresno, CA 93710-8900

Re: "SIERRA VISTA" A proposed residential community
Roosevelt Community Plan Area Fresno, Ca.

Dear Effie,

We are in receipt of a copy of your March 11, 1991 cover letter to Mr. Ray Beach of the City of Fresno Planning Department for the March 7, 1991 report entitled "Assessment of Selected Environmental Considerations Relating To The Rezoning Of Lands In The Vicinity Of The Dole Locans Raisin Plant" prepared by your consultant, Tenera of Berkeley, California. Also included in the information you sent us were copies of excerpts from various agricultural articles and reports highlighting the economic importance of agriculture in Fresno.

We appreciate you forwarding this information and your Tenera report to us and have reviewed both with interest. We had the understanding, based on the discussion in the Monday, February 4, 1991 meeting at your Fresno office with you, your staff members, Gus Bonner and Phil Reidy that you would be sending the blueline prints of the plans and sections we left with you to your consultant for them to evaluate and comment on in the report you were having prepared. You will recall we followed up that meeting by mailing you full size blueline prints of Proposed Alternate Land Plans A & B and large scale street cross sections of East Butler, South Armstrong and South Temperance indicating the proposed 8' high masonry sound wall with earth berming, heavy landscape screening, extra wide right-of-way to accommodate South Temperance as a 4 lane divided expressway in addition to maintaining existing South Temperance as a frontage road for trucking activity associated with the Dole plant operation.

90004LTR.004

We did not see where the report directly comments on the merits of our planning efforts and proposed improvements designed to address your concerns of light and glare, nuisance odors and noise, which are currently generated by the plant operation.

The report states that it was prepared for Dole to address selected environmental considerations associated with the contemplated rezoning of lands adjacent to Dole's plant and its charge was to provide recommendations regarding the maintenance of a ± 20 acre agricultural buffer zone located immediately west of South Temperance and the Dole plant.

This buffer zone is designated for an agricultural land use in the current Roosevelt Community Plan. As we understand it, this agricultural area was designated by the City of Fresno at Doles request during a past Roosevelt Plan update. According to Gus Bonner (2/4/91) this ± 20 acre area boundary was not determined by any scientific method or testing. As you know, we have formally requested by letter dated September 13, 1990, addressed to Alvin Solis, that the subject area be designated as Medium - Low Density Residential (4.9 du/ac) from the current agriculture designation, which is consistent with the planning staff's position. Farming a ± 20 acre size parcel with existing residential land uses located to the north and a future residential area to the west is not likely to be desirable or financially feasible from the point of view of meaningful agricultural production efforts.

Regarding the Tenera Report, we make the following comments and observations. With respect to the impact of light and glare, the report notes that future residences would be exposed to certain high intensity light sources from the plant unless intervening landscaping was provided. The report also states that the existing 20 acre buffer zone incorporated into the current zoning provides for a set back of about 660 feet westerly of South Temperance which serves to mitigate the potential impact of light and glare. We would be interested in knowing the methodology (i.e. measuring devices, calculations, etc.) in determining the seemingly precise distance of 660 feet which mitigates the impact.

With regard to the issue of nuisance odors generated periodically in connection with the disposal of wastewater to areas east and southeast of the plant, the report states that an analysis was done of the potential impacts of these nuisance odors and concludes that the existing buffer zone extending 600 feet west of South Temperance would support the maintenance of such. The analysis was apparently based upon modeling. The report notes that extensive analytical data on the composition and chemistry of the wastewater applied to the land disposal areas located approximately 700 feet east of the plant have not been developed. Further, it notes that the Occupational Health Guidelines (NIOSH - OSHA, 1978) odor threshold of hydrogen sulfide is 0.13 ppm and that the gas would be faint but

noticeable at a concentration of 0.77 ppm. The modeling analysis indicated that a peak ground level concentration of 0.52 ppm of hydrogen sulfide would be experienced at the plant's west property line during worst case meteorological conditions. The 0.52 ppm appears to be considerably less, even in the worst case meteorological condition, than the 0.77 ppm which was noted to be faint. This doesn't seem to be worth the sacrifice of a ±20 acre buffer zone. The report acknowledges that the actual emission rate of odorous gases from the disposal area is not known. Therefore it appears that this analysis was based on hypothetical or assumed values. If this is not the case we would be interested in reviewing the date, source and recorded historic frequency of events establishing the base information and the assumptions used in the modeling to reach its conclusion.

The third and last issue of concern is for noise levels generated from the plant operation that could potentially impact future residents. The report states that a simplified analysis of the potential impacts was done. The analysis involved consideration of a single large noise source at the plant which was the shift change horn. The simplified analysis indicated that the noise level of the shift change horn would be reduced to 60 db at a distance of 500 feet west of South Temperance assuming a source level of 100 db at 50 feet from the horn. From this analysis, based on assumed data, it was suggested that the existing ± 20 acre buffer zone should be adequate to mitigate the noise impacts generated from the plant. Was there a reason, other than cost, that assumptions for the noise analysis were used rather than actual field measurements?

While the report was informative, it quickly drew the conclusion on each of the issues of light and glare, nuisance odors and noise levels that the existing 20 acre buffer should remain to mitigate these impacts. It should be pointed out that there is not adequate evidence presented to establish nexus between the existing impacts created by the plant and the need for our project to mitigate those impacts. We believe that our initial project design and the extra measures illustrated in the plans mailed to you, more than adequately mitigate the impacts typically associated with the development of a residential neighborhood such as this one. Through our proposed design we have gone beyond what is typically required to make a good faith effort to mitigate the impacts from the Dole plant on our property.

It is clear to us that the impacts identified in the report are all impacts or problems that are currently generated by the plant operation and as such, it should be Dole's responsibility to mitigate the impacts it creates. If an environmental review were untaken now for a permit renewal or plant expansion CEQA (as a minimum) would require you to mitigate the impacts your uses or project creates.

90004LTR.004

As we understand your position, you are suggesting that the City of Fresno deny our request for the land use change and that they take the ± 20 acre agricultural zone (which represents approximately 28% of our total acreage) out of our proposed development to protect the Dole plant, which we will oppose. We would prefer to meet with you again, preferably outside the public arena, to see if we can close the gap in our divergent goals. If this sounds reasonable and is acceptable to you, please let me know when we might meet. I look forward to your position response.

Sincerely,
Parsons Rourke & Walker / Associates, Inc.

James Parsons

James C. Parsons
Principal

cc: Mr. Philip Reidy
Mr. Ray Beach

90004LTR.004

TENERA
Environmental Services

April 19, 1991

Effie F. Anastassiou, Esq.
Vice President and General Counsel
Dole Dried Fruit and Nut Company
639 South Sanborn Road
P.O. Box 1759
Salinas, California 93902

Subject: Response to Comments on TENERA's 3/7/91 Assessment Relating to the Roosevelt Community Plan

Re: Parsons Rourke & Walker letter of 3/28/91

Dear Effie:

This transmittal is provided to summarize TENERA's responses to comments and issues presented in the referenced letter relating to our 3/7/91 assessment report concerning the proposed rezoning of lands in the vicinity of the Locans Raisin Plant.

We would first note that TENERA did receive a copy of the Parsons Rourke & Walker (PRW) blueline showing the 10/1/90 proposed layout of lots for Tract 4296, along with a separate cross section showing an alternative right-of-way, street, and landscaping configuration for the section through South Temperance. The alternative section was presumably for discussion purposes, and was evidently based on the case where South Temperance would be extended as an expressway. Since the alternative section differed from that shown on the blueline, and the plans for actually extending South Temperance as an expressway have not been proposed, we do not know which cross section is being proposed by the developer at this time. Nonetheless, it is important to recognize that our 3/7/91 assessment report was not intended to constitute an environmental impact analysis of the proposed development. Rather the report was addressed to the issue of the proposed change in zoning of the lands lying immediately west of the plant. The change of zone through updating of the Roosevelt Community Plan is the action under consideration by the City, and is the action which is subject to review in accordance with the State CEQA Guidelines. The conclusions reached in the assessment report suggest that elimination of all or a portion of the existing 20 acre buffer zone may be inappropriate on the basis of environmental considerations.

As to the comments on page 2 of the PRW letter concerning the lack of a scientific basis for establishment of the existing 20 acre buffer zone, we note that bases for evaluating the impacts of a proposed change in zone exist in the form of the various topics which are considered in the CEQA environmental impact report process. Such topics and the land use

1995 University Avenue, Berkeley, California 94704, (415) 845-5200, Telecopy: (415) 845-8453

planning process do not entail prescribed scientific methods and calculations to yield precise determinations of land use buffer zones, but do set forth technical considerations which must be weighed by land use decisionmakers in determining the appropriateness of a change or designation in zone. The comments in the PRW letter concerning the undesirability and potential financial infeasibility of farming in the 20 acre buffer illustrate the difficulty in adhering to a strict scientific basis for land use planning.

For example, it is indicated in the letter that farming is not likely to be desirable adjacent to a future residential area. Given that the area proposed for development is currently under farming use, it could be concluded that residential development would not desirable in this area. Again considering that the area is already under agricultural use, it could also be concluded that the size of the buffer zone should be increased to permit farming to be done in a financially feasibility operation. From a practical standpoint, the farming of a 20 acre parcel could indeed be done in a financially feasibility operation depending upon the commodity grown (e.g. citrus) and the growers method of operation (e.g. a 20 acre block farmed in conjunction with other nearby acreage would permit financially feasible operations). Obviously, these and other related considerations must be weighed both qualitatively and quantitatively in order to acheive balanced decisions involving the zoning of lands.

As to the specific comments in the PRW letter concerning our report, we have summarized below the key topics addressed on pages 2 and 3 of the letter, and have provided responses to the key issues noted.

Mitigation of the impact of light and glare over distance (Page 2)

We would first note that the 660 ft distance referenced in our report and in PRW's letter is simply the approximate east-west dimension of the 20 acre agriculturally zoned area now maintained as a buffer, and was not a distance calculated to acheive a specified reduction in light intensity. It was stated in our report that the existence of the 660 ft distance would serve to mitigate the potential impact of light and glare. This statement was based on the facts that 1) the intensity of light from a source at the plant would be less at a distance of 660 ft than that at the 221 ft distance indicated in the alternate section drawing through South Temperance, and 2) the viewing angle between an observer and a light source would also be less at a greater distance thereby decreasing the perceptability of plant lights by residents. Aside from this point, it was concluded in Section 4.0 of the report that the potential impact of light and glare could be mitigated through the use of landscaping and other measures.

Comments regarding modeling analysis of odors (Page 3)

As indicated in our report, extensive analytical data on the composition and chemistry of wastewaters applied to the land disposal areas east of the plant building complex have not been developed. It is thus important to recognize that 1) the 1 gm/sec emission rate used in the disperson modeling is unlikely to be representative of the actual rate of volatilization of organic compounds from the disposal area (the actual emission rate of gases over the 15 - 20 acre disposal area would be expected to be many times that value), and 2) other organic gases with different levels of detectability are expected to be generated in addition to the H_2S referenced in our report. For these reasons, the modeling analysis was done not to determine the absolute concentrations of odor producing compounds from the disposal area, but to assess the degree of attenuation (i.e dilution) of gases over the distance of the existing buffer zone area. It was concluded that the existing buffer zone east-west dimension of about 600 ft would contribute to a 30 percent reduction in the ambient concentration of odorous gases in the buffer zone. At a distance of 330 ft from the eastern edge of South Temperance, the reduction in concentration would only be about 15 percent. This analysis does not provide a scientific or technical basis for the establishment of a 660 ft set back zone, but also does not support a reduction in the size of the existing buffer provision in the Roosevelt Community Plan.

Comments regarding the analysis of noise levels (Page 3)

With regard to the question of using assumed versus measured values for the simplified noise analysis, it is noted that a common convention for expressing the sound level rating of devices such as the plant shift change horn is sound level (in decibel units) at a distance of 50 ft. The selection of 100 db(A) for the shift change horn at the Locans Plant was based on discussions with plant personnel. As to the merits of conducting field measurements for purposes of the report, it was determined that such a program was unnecessary at this time to assess existing background conditions. Considerable documentation on typical background noise levels in rural agricultural areas exists, and indicates that daytime ambient sound levels in such areas range from 40 db(A) to 45 db(A). As to the conduct of a field survey for purposes of detailing actual noise level conditions in relation to the noise compability criteria of the City of Fresno, it is assumed that such surveys would be done as part of the environmental impact report process for a specific development project in this location, such as the expansion of South Temperance as an expressway.

TENERA

We appreciate the opportunity to respond to PRW's comments on TENERA's 3/7/91 assessment report, and are prepared to answer any questions you may have concerning this transmittal.

Sincerely,

James C. Saucerman
Vice President

State of California

California Environmental Protection Agency

Memorandum

Date: October 8, 1991

To : Russ Colliau
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Darrell Unruh
Development Department
City of Fresno
2326 Fresno Street
Fresno, CA 93721

From : George H. Larson, Manager
Waste Generation Analysis & Environmental Review Branch
California Integrated Waste Management Board

Subject: SCH #90021238: Draft Environmental Impact Report (DEIR) for the Roosevelt Community Plan, City of Fresno, Fresno County.

California Integrated Waste Management Board (CIWMB) staff have reviewed the DEIR for the document cited above and offer the following comments:

In consideration of the California Environmental Quality Act (CEQA) section 15205(c) CIWMB staff will focus comments on specific issues involving waste generation and disposal.

In order to help decision-makers 1) identify potential impacts from construction and demolition projects, 2) determine whether any such impacts are significant, and 3) ascertain whether significant impacts can be mitigated to a level of insignificance, CIWMB staff request that the Final Environmental Impact Report (FEIR) include the following information:

42 A.) Identification of the final disposal site(s) for the community plan's anticipated waste generation.

43 B.) Identification of the anticipated types and quantities of solid wastes to be generated upon implementation of the plan; both during construction phases and at the project completion, including additional sewage sludge generated, which would require landfilling.

44 C.) Identification of the potential impacts of these quantities on remaining landfill capacities and the calculated landfill site-life associated thereof.

45 D.) Identify any past or present areas of unpermitted landfilling and/or dumping at the project site and how these areas will be mitigated.

New residential and commercial developments increase the amount of waste being sent to landfills. To minimize the amount of solid waste going into landfills, staff recommends that the following measures be considered in the FEIR:

46 A.) Implementation of a curbside recycling program in the residential development areas.

B.) Provide information to residents about the recycling services in the development area(s). Identify buy back centers and possible markets for recyclables in the area(s). Suggest to residents and businesses that they recycle glass, metal, paper, cardboard, and other materials to the maximum extent feasible.

C.) Promote the use of insulation and other products made of recycled materials in the construction of development structures.

D.) Promote the inclusion of recycle storage areas into the design of the residential units.

E.) Suggest to residents and businesses that they utilize products made from recycled materials to the maximum extent possible.

47 It is stated that a solid waste transfer and recycling facility will be built to serve the greater Fresno-Clovis Metropolitan Area. Please follow the guidelines provided in the solid waste Resource Recovery and Transfer Facility EIR Checklist to comply with the California Integrated Waste Management Board's requirements.

Mitigation Monitoring and Implementation Schedule (MMIS):

48 When an EIR is adopted, preparation of a MMIS is required by the Public Resources Code, section 21081.6. When an MMIS is prepared, please forward a copy to Board staff for review.

Thank you for the opportunity to review and comment on the DEIR for the Roosevelt Community Plan. If you have any questions regarding these comments, please contact Yasmin satter of the Board's Waste Generation Analysis & Environmental Review Branch at (916) 323-5361.

RECEIVED
OCT 11 1991
Planning & Development Services

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

October 15, 1991

File No. 410.26

DARRELL UNRUH
CITY OF FRESNO
DEVELOPMENT DEPARTMENT
2326 Fresno Street
Fresno, CA 93721

Dear Mr. Unruh,

EIR NO. 10113
ROOSEVELT COMMUNITY PLAN UPDATE

The following are District comments related to the land use and circulation proposals shown on the proposed Roosevelt Community Plan.

LAND USE

49 Requested Plan Modification No. 2 (Page 254)

This site is located northeast of Willow and Kings Canyon and will consist of 25.2 acres of Community Commercial and 3.8 acres of open space. This site lies within Drainage Area "Y". The site is currently proposed for rezoning under application number 91-49. The runoff generated by the commercial area can be accommodated because of its proximity to Basin "Y". There is an opportunity for the 3.8 acres of open space to be integrated into part of Basin "Y" for use as a park site.

50 Requested Plan Modification No. 3 (Page 257)

This site is located on the west side of Clovis Avenue north of Tulare Avenue and lies within Drainage Area "Y". The community plan calls for 4.6 acres of medium high density residential use. A portion of the Master Plan facilities to serve this site are existing and are not designed for this proposed land use. A future parallel storm drain in Minnewawa Avenue or on-site peak reducing facilities may have to be constructed in order to accommodate the higher land use if this proposal is approved.

51 Requested Plan Modification No. 10 (Page 275)

This site is located on the southeast corner of Peach and Kings Canyon and lies within Drainage Area "PP". The community plan calls for 42 acres of commercial and 8 acres of medium low density residential. A hydrology study was undertaken when rezoning application 90-13 was submitted to the District for this area. It

51

was determined that upsizing of a proposed 24" storm drain in Peach Avenue to 30" will be necessary to accommodate the proposed land use.

52 The District understands that there are numerous other land changes within the community plan update. Most of these land changes represent a decrease in density and will have little or no impact on the storm drainage system. The District requests to review any additional changes in the community plan which would result in increasing land density.

53 There are several locations noted on the preliminary plan map (page 20) in which Basin sites are not shown and the land use designation indicated on two of the sites is incorrect. Please use the attached map for the location of these sites. Please add these sites to the plan prior to adoption.

Circulation

The major streets within the Roosevelt Community Plan Update fall in the typical half mile grids and for the most part have been established for quite some time. The District's Master Plan storm drainage system is structured to be compatible with this circulation system . The District will need to review and comment on any plan to change Arterial, Collector or tributary streets as storm drainage easements may need to be retained.

54 Storm Drainage (page 78)

Reference is made to six ponding basins to be developed or having been developed in the Roosevelt Plan area. There are 27 existing and proposed basins in the Plan area.

Please add a statement in this section that FMFCD Storm Drainage and Flood Control Master Plan is an element of the Roosevelt Plan.

Flood Control And Drainage Section N

Page 209

55 Paragraph 3 refers to FEMA mapping of the 50 year floodplain area. FEMA does not map the 50 year flood plain, therefore, these references should be deleted.

Paragraph 5 refers to the new flood control impoundments on Fancher Creek, Dry Creek and Redbank Creek. It should be noted that these impoundments are designed to control storm runoff generated by a 200-year storm event upstream of the impoundment.

56 Page 212

Paragraph 2 refers to the NURP study this should be National Urban Runoff Program, not Pollution. In paragraph 4, the Table reference should be EIR 29.

57 Table EIR-29 (page 213)

Several corrections should be made to Table EIR-29. The fifth column should be titled "Pipeline System Completed". Under this heading, Drainage Areas "A" and "Z" should be marked in addition to Drainage Area "G". The property for Basin "BD" has been acquired.

We thank you for the opportunity to comment on the subject community plan. Please feel free to contact us regarding any further information needed.

Sincerely,

Bob Notley

Bob Notley
Design Technician IV

BN/pp

Attachments

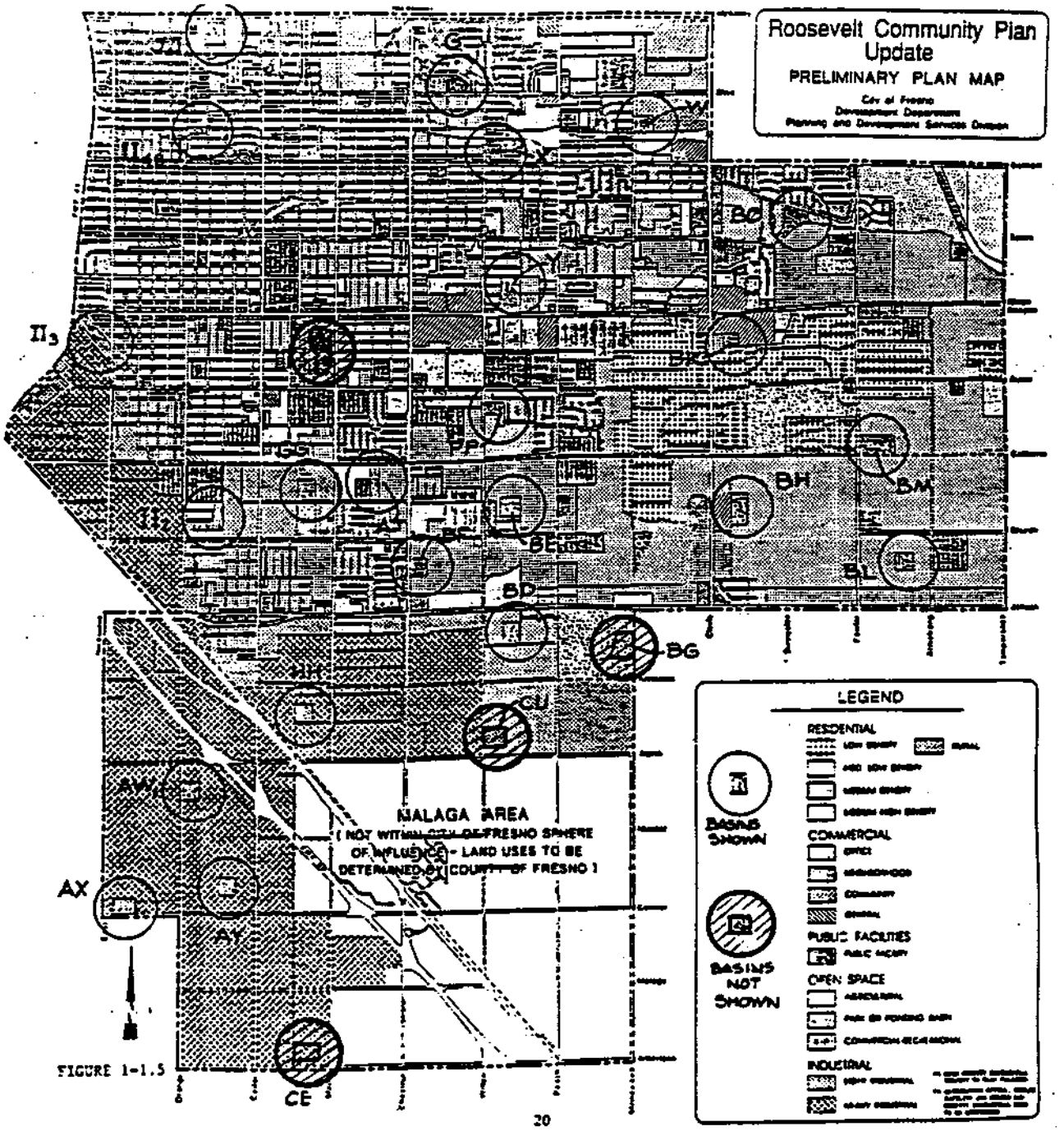

Roosevelt Community Plan Update
PRELIMINARY PLAN MAP
MALAGA AREA
(NOT WITHIN CITY OF FRESNO SPHERE OF INFLUENCE - LAND USES TO BE DETERMINED BY COUNTY OF FRESNO)
LEGEND
RESIDENTIAL
COMMERCIAL
PUBLIC FACILITIES
OPEN SPACE
INDUSTRIAL
BASINS SHOWN
BASINS NOT SHOWN
BG
BH
BM
BL
BD
BE
CU
AX
AY
CE

FIGURE 1-1.5

City of
FRESNO

Public Works Department

OCTOBER 9, 1991

TO: ALVIN P. SOLIS, Director
Development Department

FROM: MARVIN D. JOHNSON
Public Works Department

SUBJECT: ROOSEVELT COMMUNITY PLAN UPDATE AND DRAFT ENVIRONMENTAL IMPACT REPORT

Attached is the Public Works Department's collective response regarding the draft Roosevelt Community Plan and Environmental Impact Report. Please review the attached comments and have staff make the changes, additions, or corrections indicated.

should you have any questions please contact me.

MDJ/JJB/MFH/wp51/roos-eir

58 Page 97, REIR, Surface Water Supplies and Utilization, first sentence, first paragraph, the word access should be deleted.

59 Page 163, REIR, the second paragraph should be revised to say; "and flow rate at peak flow times (generally occur twice a day from 6 a.m. to 8 a.m. and 5 p.m. to 7 p.m.) ."

60 Page 98, REIR, first sentence, first paragraph, add: and is available 12 months a year.

61 Page 100, REIR, Paragraph 5, add: FID canal maintenance requires several months of time and can not be conducted during periods of heavy storm water runoff.

62 Page 171, REIR, mitigation measure (5) should provide for exceptions on a case by case basis when a permanent solution is not feasible, the development proposal contains no processing wastes and/or on-site disposal systems as an interim solution when approved by the County Health Department. Also in situations where treatment at the regional wastewater treatment plant is not feasible, a package treatment plant which recycles wastewater (i.e. irrigation of a golf course or by other means) may prove to be a viable alternative.

63 Page 172, REIR, mitigation measure (9) may violate the Joint Powers Agreement and Regional Sewer Agreement with the County.

64 Page 251, REIR, maximum heavy industrial sewage generation of 10,500 gpd is high. The recommended quantity is 10,180 gpd.

65 Page 272, REIR, paragraph k. Sewer:, the word "potentially" has been duplicated.

*RCPU-ROOSEVELT COMMUNITY PLAN UPDATE

*REIR-ROOSEVELT ENVIRONMENTAL IMPACT REPORT

Public Works Department

October 9, 1991

66 Solid Waste Management Division's only comment regards the estimated time that waste disposal systems will reach capacity. Waste facilities are estimated to reach capacity in mid-1994 not mid-1993 (see top of page 176, REIR).

City of
FRESNO

PUBLIC WORKS DEPARTMENT

DATE: October 8, 1991

TO: JIM BIER, Supervising Engineering Technician
Public Works Department/Utility Design

FROM: MARTIN R. MCINTYRE, Water Systems Supervisor II
Public Works Department/Water Division

SUBJECT: ROOSEVELT COMMUNITY PLAN AND EIR REVIEW

I have reviewed the Plan and EIR and have the following comments:

PLAN

67 p. 87, 5-1
change to read- "ensure that safe and sustainable water resources will remain...." (Future water supplies to the Plan area may well include a combination of treated surface and groundwater)

p. 87, 5-1.2
delete "entitlements" (This is simply more accurate, as portions of the City's "entitlements" may be used for other purposes such as treatment and delivery. This "in lieu" recharge is every bit as effective as direct recharge in establishing long term sustainable groundwater yields)

p. 88, 5-1.11
change to read- "Determine the feasibility of pursuing..." (grammatical only)

EIR

68 p 83, paragraph 1, line 6
delete "taken" (grammatical only)

69 p 83, paragraph 4, line 1
change to read- "Another contamination problem that...." (more accurate)

70 p 105, paragraph 2
change to read- "any future plant may also supply some treated water to the City of Clovis." (While this is a possibility it certainly is not a given)

71 p 105, paragraph 3
(This section could use a little rework. I am not disputing the general conclusion [any future water supply configuration must include a groundwater component].

72 However, FID 10 year average delivery has been 2.25 acre ft. per acre. In addition there is the Bureau of Reclamation entitlement of 60,000 acre ft. annually.

73 p 107, (4)
change to read- "All practical water conservation ...." (All "possible" is too broad.)

74 p 107, (6)
delete "small package wastewater plants" (Some "package" plants are very effective. Package plants could be a desirable component of future water reuse programs. Other language in this section addresses "inadequately treated wastewater".)

(I don't know that we can prohibit upgradient development as this section calls for.)

75 p 107, (10)
delete this section- 12,000 acre ft. is the estimated volume of recharge water planned in the joint FID/City Southeast recharge study. The project has not yet been formally proposed or funded. Water resource management in the Plan area may include more or less than 12,000 acre ft. of artificial recharge. The Metropolitan Water Resource Management Plan which is in development may identify other more effective alternatives. Number (7) on page 107 adequately addresses the objective of this section; namely to assure long term sustainable groundwater yields and adequate safe water supplies for the Plan area.

76 p 108, (12)
change to read- "mitigate contamination as expeditiously as possible, with the goal of assuring water delivered to consumers complies with all Safe Drinking Water Act standards." The "goal of removing all contaminants which threaten or cause water to exceed safe drinking water maximum contaminant levels" is not practical.

77 p 108, (16)
delete- "Documentation of proper chain of custody of used GAC shall be included with the entitlement application for any well-head treatment installation." This should be a condition of future carbon change-out contracts and not entitlement applications. Only the contractor can document chain of custody.

MRM/dg
Doc.MM#352

c: Daniel Trafican, Assistant Public Works Director
William E. Burmeister, Water Systems Manager

COMMENTS ON EIR

Page 148 78 There are errors in the third paragraph - the intersections of "California Avenue" at Fowler and Clovis (not Butler) will not be at the ordinary half-mile point but instead will be far enough away from the railroad crossings so that the intersections are not impacted by railroad operations. In the interior of the area served, the collector may be closer to the California alignment.

The fourth paragraph suggests that Butler is subject to realignment at both Armstrong and Temperance. The possibility of the realignment of Armstrong north and south of Butler should also be mentioned.

Page 158 Mitigation Measures

79 No. 5 Again, the City is directed to advocate construction of Freeway 180 to Clovis (or Fowler) and no mention is made of Freeway 168 construction. These are in conflict with the Measure C Expenditure Plan. (See General Comments.)

Page 159 80 No. 7k Should read, "Fowler Avenue to four lanes between Belmont and Jensen Avenues.

81 No. 9 Should read in part, "...access point to a major street or local collection..."

OCW/GSA/ocd
ROOSEVELT.GSA
10/8/91

STATE OF CALIFORNIA – BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
P.O. BOX 12616
1352 WEST OLIVE AVENUE
FRESNO, CA 93778-2616
TDD (209) 488-4066

October 4, 1991

2131 IGR/CEQA
6-FRE-GEN
SCH 90021238

91 OCT -9 PM 2:13

Mr. Al Solis, Director
City of Fresno Development Department
2326 Fresno Street
Fresno, CA 93721

Attention: Ray Beach, Senior Planner

Dear Mr. Solis:

Thank you for the opportunity to review the Draft Roosevelt Community Plan and Draft Environmental Impact Report. This plan area is of great concern to Caltrans because of its impact to State Routes 41, 99 and 180.

We have reviewed the proposed plan and environmental document and have compiled a list of comments to specific items (see Attachment), as well as the following concerns:

82 As noted in our response to the Notice of Preparation of the Environmental Impact Report, dated November 30, 1990, our principal concern was that impacts and mitigation measures to State highways be addressed. The analysis needs to address the ultimate transportation network (including local and freeway/interchange facilities) needed to accommodate the proposed land use at an acceptable level of service. Then once determining the ultimate network a funding and phasing mechanism needs to be established to insure its construction at the appropriate time. The environmental analysis did not accomplish this or offer any mitigation.

The land use element provides for substantial growth, at the same time the circulation element points out current and expected deficiencies in the State highways serving the plan area. Further, the element's only policy for rectifying the situation is to "lobby for funds" from Caltrans. No funding sources were otherwise identified. It is our understanding a plan can not simultaneously identify substantial shortcomings in the circulation system, offer no viable funding source or growth management policy to remedy the problem, and still achieve legally mandated correlation with its land use and circulation elements (California Environmental Quality Act, Section 65302b).

There appears to be a misunderstanding of how the transportation planning and programing decision making process takes place. Caltrans is not a source of funds and

does not ultimately determine what is programed. It is in fact the Council of Fresno County Governments (COFCG) that has the most significant programing responsibility for this area, with the final decision making lying with the California Transportation Commission. The plan goes on the assumption that substantial funds will be available and within a reasonable time frame. We do not believe this to be the case and suggest that the City confer with COFCG, Caltrans and the Fresno County Transportation Authority (Measure "C") to assess transportation priorities for the near term as well as the foreseeable future. Without determining the fiscal soundness of the Plan, the land use and circulation elements will continue to be inconsistent.

The Congestion Management Program (CMP) is a new effort to improve the relationship between land use, circulation and air quality. We are concerned that the City will be caught by this new legislation resulting in the need to expend resources to alleviate congestion caused by their land use decisions.

83 If the City is concerned about traffic generated by Fresno County developments entering the plan area and causing degradations to the local circulation, the City may want to consider using the CMP mechanism for addressing a coordinated growth strategy. This would entail expanding the CMP network to encompass regionally significant County roads entering the City. A meeting to discuss the draft Fresno County Congestion Management Program is scheduled for October 10, 1991, at 3 PM in the COFCG office.

Caltrans suggests that the City consider adopting a transportation impact pact fee comparable to one recently being considered in Bakersfield. The adoption of the Metropolitan Bakersfield Plan in 1990 included a circulation element which depicted a transportation network needed to support the land use element at a Level of Service "C". The existing financing programs were found to inadequately fund the identified transportation facilities needed to support the land use element. The City of Bakersfield has concluded that an impact fee is necessary to assure internal consistency of the General Plan and meet the requirements of CMP legislation.

84 In lieu of not identifying needed improvement and secure funding sources the City may want to consider adding growth management policies that ties the approval of development to the provision of a specified level of service.

85 Access control measures are needed along local streets near the ramps of State Route 180. These access control measures should include the use of frontage roads or limiting traffic access to side streets for sites located within 300 feet of a ramp. These measures will facilitate the eventual

signalization of the interchange as well as provide for higher ingress/egress traffic volumes to adjacent commercial developments. Additionally, Caltrans would like the opportunity to review all development projects within 660 feet of a ramp.

We look froward to meeting with City staff on these issues as soon as possible. Additionally, we would like a copy of the Final Environmental Impact Report. Should you have any questions on this matter, please call Steven Curti at (209) 488-4151.

Sincerely,

Steven Curti

for MARC BIRNBAUM, Chief
Advance Planning & Program
Development

Draft Roosevelt Community Plan

86 Page 6. COMMUNITY PLAN ISSUES AND CONCERNS -
1. The Roosevelt Community will soon be impacted by the construction of Freeway 180;

Comment: It should also be noted that State Route 180 is being constructed in order to mitigate urban growth planned within the Roosevelt Community Plan.

87 Page 10. Plan Concepts
2. Freeway 180 Corridor -
.."If designed properly, these developments will not be sensitive to the increased noise generated by the freeway off ramps, and will not necessarily snarl traffic to and from the freeway system."

Comment: The Plan indicates a "F" Level of Service at the interchanges and offers no mitigation. Unless some method of mitigation is implemented, traffic to and from State Route 180 will become heavily congested as intense development occurs in the corridor as planned.

88 Page 24. Policy and Mitigation Measures -
1-5.4 Support the formation of assessment and maintenance districts to facilitate the development of public improvements and open space features within the plan area.

Comment: The Plan fails to specifically advocate the formation of local funding mechanism to facilitate the development of public improvements including needed traffic congestion mitigation measures at freeway interchanges.

89 Page 34. Commercial Policies and Implementation Measures -
1-9.1 Concentrate new office development along the proposed Freeway 180 corridor (an area bounded by Freeway 41, the quarter-mile alignment north of Olive Avenue, Clovis Avenue, and the quarter-mile alignment south of Belmont Avenue)..

Comment: Since the City's stated goals are to encourage intense development along the State Route 180

89 corridor and interchanges, mitigation measures for the resulting local traffic are imperative.

90 Page 47. Open Space Conservation Policies and Implementation Measures -

1-15.4 Negotiate with Caltrans (and other public agencies or private property owners) to develop remnant parcels along the freeway corridors and other underutilized parcels (such as the abandoned railroad spur track northwest of the Tulare Street and Cedar Avenue intersection) for potential mini-park sites or landscaped public areas.

Comment: Caltrans welcomes the opportunity to consider the use of remnant parcels along the freeway corridors for public areas.

91 Page 58. Street Circulation Policies and Implementation Measures -

2-1.3 Prevent streets and intersections from degrading below Level of Service "D" due to new development or expansion of existing development through implementation of a tree-part mitigation program: adjacent right-of-way dedication, access improvements, and an area-wide impact fee.

Comment: Caltrans strongly supports the use of local funding mechanisms including an area-wide impact fee to prevent local streets as well as State Highways, interchanges and ramps from degrading below an acceptable level of service.

<u>Draft Environmental Impact Report 1991 Roosevelt Area Community Plan Update</u>

92 Page 145. Table EIR-19: 1991 Roosevelt Update Major Street System -

Comment: Note that Freeway 180 is programed for Fiscal Year 1995-96.

93 Page 153. Land use and circulation strategies:

1. Reduced residential densities throughout a majority of the plan area with higher density residential neighborhoods and more intensive non-residential uses focused around those major transportation corridors which can accommodate more traffic.

2. Designation of intensity corridors on major street, intended to contain sufficient activity and density of high-traffic land uses to

93 support enhanced mass transit service.

3. Reducing commercial development intensity outside of designated intensity corridors.

4. Integration of the major street system with regional transportation routes and surrounding grid street pattern.

Comment: The Plan strategy appears to be that in order to reduce congestion more intensive non-residential uses are focused around major transportation corridors. These intensive land uses will substantially impact existing and planned freeways and interchanges. Since these traffic impacts are locally generated State funding participation will most likely not be justified. Mitigation should be proposed relying on local funding sources (including assessment districts and development impact fees).

94 Page 155. Paragraph 5;
While freeways may reduce the burdens of parallel major streets, they heavily impact interchange streets and they have growth-inducing effects which, overall, may increase traffic.

Comment: It is the stated strategy of the proposed plan to increase development density in the freeway corridor resulting in increased traffic congestion. If you do not wish to change your strategy, you may wish to change this wording.

In regards to the "growth inducing" effects of the freeway, the environmental analysis conducted for Proposed State Route 180 found that the overall accessibility in the region would be improved by the proposed State highway improvements and accessibility to employment centers would be rearranged from existing conditions. The cumulative growth inducing impact of the proposed highway projects is insignificant given that planned growth would occur without the State highway project.

95 Page 156. Table EIR-21: STREET SEGMENTS WHERE 1991 ROOSEVELT UPDATE LAND USE DESIGNATIONS WOULD POTENTIATE "E" OR LOWER LEVELS OF SERVICE -

Comment: Major segments of State Route 41, 99 and 180 as well as their interchanges with local streets were determined to be over capacity ("F" Level of Service) at full build. However, the proposed plan does not discuss what improvements would be

95 necessary to accommodate the Level of Service "D" standard or offer any mitigation.

Additionally, please confirm if Proposed State Route 168 and Proposed State Route 180 east of Chestnut Avenue is not a Level of Service "E" or lower.

96 Page 158. Transportation Proposed Mitigation Measures -
3.(6) The City of Fresno shall strongly advocate that Caltrans mitigate impacts of its freeway improvement projects, including use of such measures as noise and glare reduction, air quality protection, and capacity enhancements for City streets affected by interchange traffic.

Comment: Caltrans welcomes the opportunity to work with the City of Fresno in developing a local funding mitigation mechanism addressing traffic impacts at freeway interchanges. The proposed plan should address specific mitigation measures, funding sources and mechanism for phasing.

JRP

J. R. PAPAZIAN ENTERPRISES
REAL ESTATE DEVELOPMENT

October 9, 1991

Darrell Unruh
Fresno City Hall
Development Department
Planning Division
2326 Fresno St.
Fresno, Ca. 93721-1899

RE: Neighborhood Park at Belmont and Clovis Location

Dear Mr. Unhuh:

This is a follow up letter after the September 30, 1991 meeting with the planning staff and the Plan Update Citizens' Advisory Committee. I want to again express my opposition to the neighborhood park proposed for the Belmont and Clovis location for the following reasons:

97 1 - Environmental - The safety of the users of the park at a busy intersection and a Arterial and Freeway Exchange

2 - Reduced Commercial Area - This park would reduce the size of this shopping center and create a need for more commercial land elsewhere in a less favorable area.

3 - Cost of Land and Condemnation - Verses a alternate location with much less land cost with a agreed upon acquisition for the park to avoid condemnation. I am proposing the location next to the ponding site on Minnewawa between Belmont and Olive Avenues. This ponding site can be used in conjunction with a smaller park to provide the same results.

Sincerely

Jack Papazian

RECEIVED
OCT 09 1991
Planning & Development Services
Development Department
City of Fresno

497 West Shaw, Suite 101
P.O. Box 9784
Fresno, CA 93794
(209) 225-6000

JRP/sg

October 8, 1991

OCT 0 9 1991

Mr. Darrell Unruh, Supervising Planner
Planning and Development Services Division
Fresno City Hall
2326 Fresno Street
Fresno California 93721

Dear Mr. Unruh:

Enclosed please find the following documents:

1. *Questions regarding Environmental Impact Report.*

2. *Comments regarding Plan Modification No. 12.*

As you are aware, we oppose a Regional Park in our area. We believe the attached documents demonstrate that a Regional Park should <u>not</u> be placed at the Jensen/Peach area.

We appreciate your prompt attention to this matter.

Sincerely,

Herb Shapazian

Herb Shapazian

Mary Shapazian

Jayne Shapazian

QUESTIONS REGARDING ENVIRONMENTAL IMPACT REPORT

98 1. *Have you considered the fog in this area "Jensen/Peach" during the winter time?*

a. Isn't the fog denser in the Jensen/Peach area than the surrounding areas?

b. Doesn't this create a dangerous condition of public property for a location for a park?

99 c. Does the plan for a Regional Park plan provide for lakes?

d. Isn't it true the lakes create more denser fog conditions?

1. This will make Jensen avenue a more dangerous roadway to commute and drive on.

2. Isn't the City of Fresno creating a dangerous condition of public property?

100 2. ***It is our understanding that the north side of Jensen Avenue is planned to have residential housing. For example, housing is presently being developed at the intersection of Peach and Church Avenue "Sunnyside Glen". The housing appears to be starter homes; therefore, families with very young children will live on the north side of Jensen Avenue. Jensen Avenue is a very dangerous thoroughfare.***

a. Won't children be attracted to cross Jensen Avenue to go to the Regional Park?

b. Isn't it true that the combination of Jensen Avenue and a Regional Park on the south side of the street creates a dangerous condition of public property?

c. Won't children be encouraged to jaywalk and cross Jensen Avenue?

d. Isn't it true that accidents are foreseeable due to the danger of Jensen Avenue?

100

e. Doesn't the park on the south side of the dangerous roadway create a dangerous condition of public property?

f. Even if cross-walks and fences are set up, isn't it foreseeable that children will climb the fences and still jaywalk, thereby still creating accidents?

101 3. *As one travels east on Jensen Avenue from Fresno, the roadway bends after you pass Peach Avenue.*

a. Isn't it foreseeable that vehicles traveling east on Jensen will not see children darting out into the street because the road bends?

b. Doesn't' the combination of Jensen Avenue bending and the Regional Park on the south side of the street create a dangerous condition of public property?

102 4. *Is the City of Fresno creating a dangerous condition of public property by placing a Regional Park immediately south of a busy and dangerous roadway?*

103 a. Isn't alternative site #2 "Fresno County Fairgrounds" a safer location for a Regional Park because it is not located near a busy thoroughfare?

b. Isn't alternative site #3 a safer location for a Regional Park because it is not being placed on a busy thoroughfare?

c. Isn't alternative site #4 a safer location for a regional park because it is on the north side of Jensen avenue.

104 5. *The area on Peach and Jensen Avenue is prime farmland and is currently being used for agriculture, and businesses.*

a. Isn't it better to save our good soil for agriculture?

b. Isn't it true that alternative site #2 is not prime farmland?

c. Isn't it true that alternative site #3 is not prime farmland?

d. Isn't it true that alternative site #4 is not prime farmland?

e. Why didn't the city of Fresno advise the residents in the Peach and Jensen area that they can protect their area under the Agriculture Land Conservation Act?

105 7. *It is our understanding there is a water shortage in Fresno.*

a. Isn't it true the City of Fresno will be using valuable water for the Regional Parks lakes which can be used for valuable farmland or for residential areas?

106 8. *Isn't it true that the Regional Park on Peach and Jensen Avenue will increase crime in the area.*

a. Explain.

b. Identify the persons knowledgeable of these facts.

c. Identify the documents you rely upon for your position.

d. Therefore, doesn't the Regional Park at Jensen and Peach avenue create a dangerous condition of public property to persons using the property?

e. Isn't it true that Alternate sites #2, #3, and #4 are more suitable for a Regional Park?

107 9. *Isn't it true the park will increase noise in the area due to heavier traffic and the parties that will be going on in the park along with the possibilities of riots?*

a. Isn't alternative site #2 more suited to handle heavy traffic and people at the park?

b. Isn't alternative site #3 more suited to handle heavy traffic and the noise at the park?

c. Isn't alternative site #4 more suited to handle the heavy traffic and noise?

108 10. *Isn't it true that the Peach and Jensen Avenue alternative will create more traffic accidents compared to alternative 3 & 4?*

109 11. *Isn't it true by placing a Regional Park on Peach and Jensen Avenue, will increase gang activities?*

a. Bulldog Gang - Roeding Park. Didn't the Fresno Bee state that the Bulldog gang operates around Roeding Park?

b. Isn't it true that the increased gang activities in the Jensen/Peach Avenue area will create a dangerous condition of public property for the neighborhood?

110 12. *Isn't it true that a Regional Park will displace the residents and eventually deteriorate the neighborhood ?*

111 13 *Isn't the area on Jensen and Peach prime farmland.*

a. Isn't it true that alternative sites #2, #3, and #4 are better choices for the park since these areas are not prime farmland?

112 # COMMENTS REGARDING PLAN MODIFICATION NO. 12

A. POPULATION CAPACITY:
The regional park will displace the residents in the Jensen Peach area; including the surrounding neighbors. By leaving the area under the current zoning, this will prevent displacement of the residents.

B. HOUSING CAPACITY:
The regional park will displace residents in the area. The requested modification prevents the primary housing displacement of the current residents in the Sunnyside area.

113 C. AGRICULTURAL LAND:
By leaving the area in its present capacity, we save prime farmland. Thereby, preventing destruction of valuable farmland in the County of Fresno.

Additionally, this land is protected in the Agricultural Land Conservation Act. The owner's (Herb Shapazian) land has been renewed under the Act.

114 D. OPEN SPACE FOR PARK:
The park must be moved to a more suitable area. Modification No. 12 prevents destruction to presently developed area on Jensen/Peach. Finally, the Jensen/Peach avenue area would be a dangerous condition of public property for the location of a Regional Park.

115 E. COMMERCIAL/INDUSTRIAL LAND:
Input is minimal; the area is currently used for agriculture. Owner (Herb Shapazian) intends to use his land for agriculture.

116 F. WATER RESOURCES/SERVICE:
Since the Fresno area suffers from a water shortage, a Regional Park will adversely deplete water which is needed for agriculture and residential areas.

117 G. AIR QUALITY:
The air quality near the Regional Park will become poorer. Due to the obvious increase in traffic, this will significantly increase the air pollution in the area.

118 H. ENERGY:
The park will increase energy consumption because people will travel to the park. By leaving the area in its current use (primarily agriculture), there will be significant energy saving; thereby benefiting the economy and society.

119 I. PLANTS AND WILDLIFE:
Under Plan Modification No. 12 we will have an increase in habitats since many wild birds and animals reside on the farm land. Clearly, the wild animals, birds and reptiles would not be allowed in the park; since they would create a danger to park residents and human beings. This area contains many birds, rabbits, reptiles, and plants which would be detrimentally displaced by the park. The park destroys the current ecosystem.

120 I. TRANSPORTATION:
There will be no insignificant impact to transportation by leaving this area in its present form under Modification No. 12. However, a Regional Park will create transportation problems in the area.

121 K. SEWER:
This area is primarily being used for agriculture purposes. Owners intend to continue to use it for agriculture purposes in the future. Thus, no increase in sewage.

122 L. SOLID WASTE:
The park will increase pollution . Under Modification No. 12, this problem will never occur.

M. SCHOOLS:
No difference in student capacity impacts.

N. LIBRARY:
No difference in impacts.

123 O. FIRE AND PARAMEDIC:
Since parks generally have a history of bringing about problems such as drugs crimes, GANGS, etc., there will be an increased demand for fire and paramedic services in this area. Therefore, the Regional Park at Jensen/Peach will cause higher taxes and higher expenses for the City of Fresno.

124 P. FLOOD CONTROL/DRAINAGE:
No significant impact.

125 Q. POLICE:
A Regional Park will require a substantial increase in police protection. Without the park, the potential police in this area will remain the same. As is, the city of Fresno does not have enough police protection for Fresno.

R. HAZARDOUS MATERIALS

126 S. NOISE

A park will create significant increase in noise in this area. At the present time, this is a very quiet area and peaceful area because it is developed primarily to a farming area. If a Regional Park is put in this area, the surrounding residents will lose the peace and quiet. This is why they live in this area; away from the city noise.

T. AIRPORT AND SEISMIC SAFETY

No difference in impacts.

127 CONCLUSION:

The Regional Park located in the Jensen/Peach avenue area will create a dangerous condition of public property.

OCT 0 4 1991
Planning & Development Services
Planning Department
City of Fresno

Fresno Fairgrounds
Chance Avenue, Fresno, California 93702, (209) 453-3247, FAX 453-3226

The Big Fresno Fair

October 1, 1991

Mr. Darrell Unruh, Supervising Planner
Roosevelt Community Plan
Planning Division, Development Department
City Hall
2326 Fresno Street
Fresno, CA 93721

Dear Mr. Unruh,

We are in receipt of a draft of the Roosevelt Community Plan dated July 16, 1991 and we thank you for your courtesies.

128 We have noticed in Chapter I, Plan Concept Key Elements, Number 10, located on Page 12, the intent of the plan suggests relocation of the Fairgrounds to another planning area.

129 It has been determined that three hundred (300) acres would be required for relocation. This would assure sufficient area for facilities replacement, parking and buffering acreage to eliminate the possibility of residential encroachment that has occurred at the present Fairgrounds over a period of years.

It has also been determined that Three Hundred Million Dollars ($300,000,000) would be necessary to complete the project in a satisfactory manner.

Thank you for the opportunity of responding.

Sincerely,

RONALD D. MILLER
GENERAL MANAGER

RDM:lw

An Equal Opportunity Employer

RESPONSES TO COMMENTS ON THE DRAFT EIR FOR THE 1991 ROOSEVELT COMMUNITY PLAN UPDATE

The following paragraphs are responses keyed to issues raised in the preceding comments. The number to the left of each response corresponds to the numbering system used in the left margin of the preceding comments.

1. This has been added to the 1991 Roosevelt Community Plan Update.

2. The City supports continued agricultural production by recognizing agricultural land conservation contracts, and by providing interface buffering policies which exceed those of Fresno County (EIR page 52, Mitigation Measures). However, neither the City nor the County has the power to prevent a property owner from fallowing his agricultural land. The City does not "allow" this, nor can the City prevent an owner from deciding to take land out of production.

   Due to rapid population growth and the feasibility of providing sewer and water service to the formerly "starred" portion of the Roosevelt Plan area, the urban reserve area is now available for development under the terms and conditions of the 1984 General Plan, as modified by the 1991 Roosevelt Community Plan Update and its EIR. "Interim" agriculture is recognized in policies of the 1984 General Plan and this 1991 Community Plan Update and EIR; however, a formal land designation or overlay is neither necessary nor appropriate, given other policies which protect agricultural uses.

3. The Roosevelt Community Plan Update has been modified to reflect this.

4. A requirement for a Transportation Finding has been added, (Appendix F), and mitigation measures protecting traffic capacity of major streets are identified in EIR chapters D ("Air Quality") and H ("Transportation").

5. As a community plan update, the City's 1991 Roosevelt Plan and its EIR are, of course, subsidiary refinements to the City's General Plans and EIRs, which previously evaluated general "regional" impacts of City development in relation to Fresno County. A statement to this effect has been added to the Draft EIR (page 31). The EIR for the 1991 Roosevelt Update revisits environmental issues, using updated analysis tools, data, and new environmental regulation information. Fiscal impacts on county-wide services have not been considered relevant to environmental impact analyses. An attempt has been made in this EIR to identify County services relevant to topics analyzed, but "fiscal" issues are too speculative and changeable to attempt detailed analysis and conclusions.

6. We have included Fresno County's "fiscal impact comments" submitted on October 28, 1991. The Development Department does not necessarily support or agree with this fiscal analysis.

   The basis for the large difference in "net county cost per person" for county-wide services in City vs. County areas is not presented or explained. The source(s), amounts, and potential increases of "revenues received from outside sources" are not detailed.

   Finally, if county-wide plus county municipal services equals $268.27 for unincorporated area residents, but the sum of these service category costs for City residents is only $253.71, it is unclear how Fresno County concludes there would be any negative fiscal impact accruing to the County from annexation and urban development in the Roosevelt Community Plan area under either the 1991 Plan Update or the no-project (1978/84 Roosevelt Plan) alternative.

   Regardless, the "fiscal impact comments" submitted by Fresno County do not appear to present or establish the nexus, required by CEQA Section 15131, that economic issues must relate to significant physical changes in the environment (e.g., infrastructure contruction costs) in order to be a required issue for analysis and discussion in an Environmental Impact Report.

7. The text of the 1991 Roosevelt Plan Update has been corrected. The current estimate of projected, ultimate population holding capacity, at eventual full build-out of planned residential densities, would be approximately 220,000.

   However, as family dynamics and demographics change in the future, this estimate will be refined in subsequent general and community plans on the basis of updated census statistics and land use plans.

8. The 1991 Roosevelt Community Plan Update reduces planned residential densities in much of the plan area. This is an attempt to balance population growth among community plan areas in the City. The primary determinants of population growth are housing construction and family size; only the former is amenable to City land use planning and policy.

9. These mitigation measures will all be included in a monitoring checklist (EIR Appendix F) used to evaluate each project. Therefore, it is not necessary to list measures redundantly.

   "Agricultural industrial" uses are, essentially, industrial uses. The source of raw materials is not really relevant; after all, most industries could claim to be "agricultural" in one way or another. Policies in the 1991 Roosevelt Community Plan Update put the onus of nuisance control and neighborhood preservation on the industrial development.

10. Within the 18,840-acre Roosevelt Community Plan area, an "infinite" series of plan alternatives could have been generated. However, these would not have been reasonable alternatives, because they would not have been reflective of past and current development trends. The proposed plan (the "project alternative") is the result of two years of consultation with citizens, project proponents, City, County, and state agencies. The plan is, therefore, a reasonable alternative. Within this general "big picture," several alternative land uses are explored: alternate sites for a regional park, alternate high school/middle school sites, and alternate uses for specific areas within the Roosevelt Community (the Requested Plan Modifications).

    The other "big picture" major alternative, referred to as the "1978/84 Roosevelt Plan" or the "no project alternative", suggests and analyzes a scenario of denser residential development and more intense nonresidential uses, as would occur if the 1978/84 Roosevelt Plan were left in place.

    A scenario of very reduced densities (reduced to levels lower than those suggested in the 1991 Update) was not deemed feasible, because the City has an obligation and a commitment for efficient utilization of resources (particularly agricultural land) and must provide a compact urban form to support cost-efficient infrastructure construction, to provide affordable housing, and to make air quality protection measures (e.g., mass transit) more feasible.

    Similarly, a "no-build alternative" was not feasible because of demonstrable population growth and crowding now existing in the City's Roosevelt Community Plan area.

11. The EIR language has been corrected (pages 50 through 52) to reflect that "cancellation" was an improper term and is not the action being undertaken on Agricultural Land Conservation Contracts 4190, 6353, and a portion of 6916. Cumulative impacts of all contract nonrenewals, and impacts associated with eventual urbanization of all agricultural land within the City's Roosevelt sphere of influence, have been considered in this EIR and were previously considered by the City and County of Fresno in the EIR for the 1984 General Plan.

12. This correction has been made in the EIR.

13. The type, amount, and location of farmland to be converted are outlined in EIR pages 47 through 52, which includes Figure EIR-5. An attempt was made to discover crop acreages and yields; however, neither the Fresno County Agriculture Commissioner nor Fresno County Public Works and Development Services map or track this data according to soil types or Agricultural Land Conservation Contracts.

14. Comment noted. The 1991 Roosevelt Update and its Final EIR are scheduled to be presented to the Airport Land Use Commission before the scheduled City Council hearing on the Plan and Final EIR.

15. These changes in circulation element designations are not, in fact, substantial. The circulation system in this community plan area has been modified very little from that shown in the 1984 General Plan. These modifications are necessary and appropriate to address urban growth outlined in the 1984 General Plan. They address concerns identified in public community plan development meetings. As the lead planning agency within its sphere of influence, the City of Fresno can designate circulation element classifications. The City agrees that Fresno County's circulation plan should be updated to reconcile any differences.

16. As with the abovementioned street circulation element, the City of Fresno is the lead planning agency within its sphere. The 1984 General Plan bikeways component and the subsequently adopted City Master Trails Manual provide the basis for bikeways planning in community plan areas. In order to serve new and existing urban growth, the 1991 Roosevelt Community Plan Update has expanded bikeways, responding to increased population and development, in order to provide a more comprehensive network of bikeways.

17. Existing driveway approaches have been added to the expressway-related policy review mitigation measure in the EIR (page 157). It is anticipated that Fresno County will also process development entitlements in accord with Council of Fresno County Council of Governments recommendations.

18. As discussed in the Roosevelt Plan and its EIR, any relocation of uses (possibly of facilities) would only be done in consultation with affected agencies. It is noted that Fresno County has been a participant in a regional medical center redevelopment planning proposal which would relocate Valley Medical Center out of the Roosevelt Area to the City's Central Area.

    Mention of relocating some fairground uses "to the south" referred to the existence of areas planned for industrial uses south of Jensen Avenue. Much of this land remains within the City's sphere of influence, and may be more suitable for uses which presently have demonstrable negative effects on neighborhoods adjacent to the Fairgrounds.

19. A listing of types of crops known to be grown in the City's Roosevelt Community Plan area is on EIR page 47. As was previously noted, there is no geographic data base maintained by Fresno County (nor by the State Resources Agency, the University of California Agricultural Extension Service, nor the Federal Soil Conservation Service) which tracks crop varieties or yields. Because Fresno County's annual <u>Crop Report</u> yield data is very general, is based on a very small and randomly-selected sample of farmers, is not keyed to soil types or regions within Fresno County, and is a self-reporting system, it would not be accurate or appropriate to assign these yield values to the Roosevelt Plan area or to specific parcels therein.

20. Comparison of Figures EIR-4-B and EIR-5 show the soil types encompassed by Agricultural Land Conservation Contracts. In the interest of clearer graphics, the two figures have not been superimposed. The listing below names soil classification type for each Williamson Act contract:

Fresno County Contract No.	Acres	Agricultural Soil Type(s)
8	238.45	Prime (entirely)
28*	20.0	Prime (entirely)
3257	79.0	Prime (entirely)
4190*	58.78	Non-Prime; not of statewide importance
6063*	59.75	Prime (partially)
6342	40.0	Prime (entirely)
6353*	40.0	Prime (entirely)
6442	40.0	Non-Prime; not of statewide importance
6451	20.0	Non-Prime; not statewide importance
6468	39.49	Prime (only a fragment)
6852	20.0	Prime (entirely)
6916	85.05	Prime (entirely)
7151	20.0	Prime (entirely)

* denotes contracts presently outside the City of Fresno Sphere of Influence, located on land under planning control of Fresno County in the Malaga County Water District Sphere of Influence.

21. As was previously noted "cancellation" was inappropriately used in the Draft EIR instead of the proper terminology, which was "Notice of Non-Renewal filing." The previous comment by Fresno County included those California Government Code sections governing land conservation contract cancellation. The EIR chapter on agricultural land has also been rewritten to better address these issues.

    Cancellation of one contract may or may not affect "nearby" parcels under contract. As has been previously noted, all land in the City of Fresno Sphere of Influence has been designated by the City and by Fresno County for eventual urbanization, as jointly agreed and analyzed in the 1984 City of Fresno General Plan and the Fresno County General Plan.

22. This information is given on EIR pages 47 through 52, including Figures EIR-4-B and EIR-5.

    Impacts of converting this farmland on overall agricultural activities in the County or State are expected to be insignificant, given the relatively minor acreage involved in this urban community plan update. There are 5,070 acres of agricultural land in the City's Roosevelt

Community Plan area, as compared to 2,149,851 total Fresno County acres under cultivation in 1990; and 330 acres under Williamson Act contract in the plan area, as compared to 1.6 million acres under Williamson Act in Fresno County.

Drought and market conditions notwithstanding, Fresno County continues to increase its total acreage under cultivation: In 1990, 41,764 more acres were farmed than in 1989. Eventual conversion of farmland within the City's Sphere of Influence is more than balanced by this County-wide trend toward increasing acreage under cultivation (1990 Fresno County Crop Report data).

Furthermore, urban development supports agriculture by providing worker housing, services, transportation, and urban service capacity for industrial processing facilities.

Within the Roosevelt Plan area, the effect of this community plan will be to convert all agricultural land within the City's sphere eventually, in accordance with mitigations and growth control ordinances and policies. However, the cumulative effect in Fresno County and Statewide will be to protect other, more suitable agricultural land from urban conversion, by directing and accommodating urban growth within a City's sphere of influence. This is the County's established strategy for protecting valuable agricultural land, as stated in the Fresno County General Plan.

23. Because the geographic configuration of soil types is not usually in a pattern complimentary to the City's urban form and established utility and circulation systems, it is infeasible and has too many secondary impacts to make agricultural soil type a prime determinant for City planning.

24. There are density transfer provisions possible within larger developments; however, densification in the Roosevelt Community's growth area is often difficult, in part due to groundwater supply contamination by the formerly used agrichemical DBCP.

25. The City supports use of the Williamson Act both within and outside its sphere of influence, and recognizes that agricultural land conservation contracts are most beneficial in protecting agricultural land from growth-inducing influences extending beyond designated urban area boundaries.

26. The mitigation measures proposed in the EIR include buffering techniques. A specific distance is not part of City policy, and would have to be held to the nexus standards established in recent court decisions on exactions. Distance required for a particular buffer zone would depend on the type of adjacent crops being cultivated, subdivision design, and so forth.

27. As previously stated, the City of Fresno and Fresno County have agreed that urban growth shall be accommodated within cities, protecting land outside of these spheres of influence for agricultural uses. Right-to-Farm ordinances and farmland protection programs are, therefore, appropriate measures for Fresno County to use outside of urban spheres of influence.

28. Mitigation monitoring for agricultural land policies will be part of project review for all pertinent development applications. Implementation is automatic, as plan policies and ordinances (e.g., the City's Urban Growth Management Program) are applied to all new urban development subject to City of Fresno review and approval in this plan area.

29. This information, as described in the comment, is available for public review in the City of Fresno Development Department, Planning Section, City Hall, 2600 Fresno Street, in the file for Roosevelt Community Plan Update Modification No. 7.

30. The alternatives considered in Requested Plan Modification No. 7 are reasonable, because they consist of (1) retaining an agriculture/open space plan designation on the subject property; and (2) allowing residential development within the City's sphere by giving the subject 20-acre property a residential plan designation as has been done on parcels immediately north, south, and west. (CEQA Section 21085 holds that residential units shall not be lost as a mitigation measure if other measures may be used to address significant impacts.) Because this parcel is not in an intensity corridor or planned industrial region, this parcel is not presently considered by the City to be suitable for industrial or commercial development. It is too small for a regional park, is too peripheral to make a good community park, and is not included in the City-wide 1989 Parks Master Plan as a potential community park site. The EIR, therefore, considers the two reasonable alternatives for this property. The proposed mitigation measures for residential development of this property exceed even the strict policies applicable to other residential growth on the ag/urban interface, because this parcel's mitigation measure addresses overall site design, not only boundary measures, and gives special consideration to an industrial facility as though it were a type of agricultural activity.

31. The EIR has been augmented by adding a statement on EIR page *50* which further explains the basis for mitigation measures proposed. Extension of the mitigations on EIR page *52* to "lands which have historically been under agricultural use but are not necessarily designated as agricultural preserve lands" could not be justified, given that buffering measures may be costly for residential development, and the City could not require an exaction of this type, within an urban sphere of influence, unless the City had the assurance provided by an extant

agricultural land conservation contract that farming would continue after the residential development is occupied and, therefore, such buffering mitigations would be beneficial and necessary to protect public health, safety, and general welfare. Mitigation measure #3 on EIR page 52 is not restricted to consideration for land under agricultural preservation contract within the City's Sphere of Influence; this policy would apply equally to land under agricultural preservation contract outside the City's Sphere of Influence, if City residential development were proposed on such adjacent land. (However, if this residential development application were processed by Fresno County, City policies and mitigation measures would only pertain to the development as applied by Fresno County.) As was previously explained in response to Fresno County's comments on "agricultural industries," the City's 1991 Roosevelt Community Plan Update views agricultural industrial uses as industrial uses which happen to service (or utilize raw materials from) farming. It is the 1991 Update's policy that industrial development should mitigate its own impacts. Special consideration has been extended to the Dole Locans plant, because it is outside the City's Sphere of Influence and is, therefore, not subject to City industrial development policies. This special consideration is the mitigation measure which would apply to the approval of Modification No. 7. This situation is unique, according to the City's knowledge and belief, and therefore, there is no justification for making this special mitigation a generally applicable policy.

32. The Requested Plan Modifications in the Roosevelt Community Plan and EIR are not specific development proposals; they seek plan designations on property, and generally do not specify the number of residential units; they do not show site design or building features; and nonresidential modification requests generally do not state proposed zone districts or zoning code uses of land.

33. The EIR text has been corrected (page 258) to reflect that the previous Roosevelt Plan designated the subject property for agricultural use. Other corrections and augmentations have been made in the text of the Requested Plan Modification No. 7 analysis, to more precisely describe the setting of this alternative land use request. Whether the mitigation measure is stated as one paragraph listing environmental issues to be addressed in site design, or whether it is split into separate paragraphs for each issue, is immaterial. Because mitigative measures for this modification most heavily depend on design for any future residential development, the mitigative measure in this EIR cannot be highly specific at this stage in the process (the community plan level).

34. In consultation with TENERA and Fresno County Environmental Health, the Draft EIR text has been corrected (page 260). Under State law, the user of a hazardous material is responsible for containment, proper use, proper disposal, and emergency procedures related to that material. This is explained in EIR Chapter P (Hazardous Materials).

35. If the subject property remains in agricultural use, it will create ag/residential interfaces on its north, west, and south boundaries. If Modification No. 7 were approved, and if this 20 acres became residential, it would only present an interface on its east boundary. Accordingly, the EIR has been amended to reflect the actual reduction in linear extent of interface which would result from approval of Modification No. 7. The agricultural soil type designation for this property has been revised (page *258*) in accordance with Figure EIR-4-B.

36. As was mentioned previously, the action under consideration in Requested Plan Modification No. 7 is not a rezoning, but is a change in plan designation.

37. This discussion fails to mention that railroad tracks lie between the Dole Locans plant and Temperance Avenue.

38. Lighting intensity decreases with distance (the inverse square law of physics). The nearest residences would be farther than 115 feet from plant property, given the rights-of-way of Temperance Avenue and the railroad, and the minimum landscaping and yard setbacks required for residential development in the City of Fresno. The mature heights of approved street trees would be 20 to 30 feet. Also, window heights in single-family housing typically do not exceed 8 feet on the first storey, so a visual barrier would not have to be much over 10 feet tall if located within even 10 feet of a window. Additionally, homeowners would simply use shades or curtains to block any annoying light levels, as is done elsewhere when street lights or neighbors' yard lights produce glare. (Temperance Avenue will eventually have street lights, per City development standards.)

39. Regional Water Quality Control Board regulation of the on-site wastewater plant demonstrates that proper management and functioning of the plant is expected, and nuisance odors from H_2S generation will not be permitted, regardless of the use of the 20 acres west of the Dole Locans facility. Prevailing air movement conditions are northwest to southeast, and over the distance between the plant wastewater disposal fields and the 20-acre parcel, significant dilution would occur.

40. Traffic and train-related noise levels adjacent to this 20 acres immediately west of the Temperance expressway would already require construction techniques to maintain interior noise levels below 45 dB. Permissible indoor and outdoor noise levels are intended to be averaged over significant time spans and are not determined by the maximum volume of transitory events such as vehicles backfiring, emergency vehicle sirens, or shift change warning horns. The Dole Locans plant, being outside of the City of Fresno's jurisdiction, would not come under City regulation or prosecution for its shift change horn (until or unless Fresno County adopts complimentary ordinances and participates in a cooperative enforcement program). However, any

shift change warning horn as loud as 100 dB could come under OSHA and CAL-OSHA regulation to protect the hearing of plant employees.

41. As was established in subsequent correspondence between Parsons Rourke and Walker and TENERA, TENERA'S proposed "buffer zones" of 600 feet (or 500 feet) were not grounded in analysis of actual conditions, but were "modeled" with assumptions not substantiated by current operating data (scientific measurement). Therefore, mandatory use of this entire particular 20-acre parcel for a "buffer" is not supported by substantive evidence in the record.

42. This information was provided in the EIR (pages *172* and *173*).

43. This information was given in the EIR (pages *169* through *173* for solid waste generation; and Table EIR-23, page *166*, for sludge generation).

44. This information was given in the EIR (pages *172* and *173*).

45. This information is listed in Appendix A of the EIR. No other unpermitted waste disposal sites are known to the City, other than those which have been listed as potential hazardous material sites.

46. Policies regarding recycling and promotion of recycled products are included in the City's Assembly Bill 939 plans. Inclusion of recycling storage areas in residential development will be implemented by both AB 939 and by project application review.

47. This information has been forwarded to the City's Solid Waste Division in the Public Works Department, which is in the process of preparing the EIR for this facility.

48. The Mitigation Monitoring Checklist is included in Appendix F of this EIR. As noted in the checklist, verification of mitigations will be done at the time of project review, when physical changes in the environment (through development) are imminent and most policies and designations of the Roosevelt Plan Update are actually implemented. Other measures and policies are part of ongoing and future City programs. The timelines for these programs are noted in the text of the EIR.

49. This information has been added to page *246* of the EIR.

50. This information has been added to page *248* of the EIR.

51. This information has been added to page *267* of the EIR.

52. Present routine City development application processing involves routing projects to FMFCD for review.

53. These basin locations have been added to the Roosevelt Plan Map.

54. This correction has been made in the text of the Roosevelt Plan Update.

55. These corrections have been made in the EIR (page *204*).

56. These corrections have been made in the EIR (page *207* and in sections discussing Requested Plan Modifications).

57. These corrections have been made in Table EIR-29.

58. This correction has been made in the EIR text (p. *96*).

59. This correction has been made in the EIR text (p. *160*).

60. This correction has been made in the EIR text (p. *96*).

61. This correction has been made in the EIR text (p. *100*).

62. This correction has been made in the EIR text (p. *168*).

63. No substantive information was produced which indicated that any extant Agreement(s) is/are violated by this mitigation measure.

64. This correction has been made in the EIR text (p. *241*).

65. This correction has been made in the EIR text.

66. Consultation with the Fresno County Resources Division of Public Works and Development Resources revealed that one landfill may reach capacity in 1993 and one may reach capacity in 1994; there is some uncertainty as to closure dates, because the effectiveness of AB 939 waste reduction plans may prolong landfill life. The text of the EIR has been amended to reflect this uncertainty (p. *172*).

67. This correction has been made in the text of the Roosevelt Community Plan.

68. This correction has been made in the EIR text.

69. Because this is the first inorganic contaminant mentioned (as opposed to preceding discussions of organic chemical contaminants), the EIR text is correct as is.

70. This correction has been made in the EIR text (p. *103*).

71. Because the conclusion is valid, the EIR paragraph has not been reworked.

72. This information has been added to the EIR (p. *103*).

73. This correction has been made in the EIR text (p. *105*).

74. This correction has been made in the EIR text (p. *105*).

75. This correction has been made in the EIR text (p. *106*).

76. This correction has been made in the EIR text (p. *106*).

77. This correction has been made in the EIR text (p. *107*).

78. These corrections have been made in the EIR text (p. *144*).

79. Because construction of Freeway 168 from Freeway 180 to Shaw Avenue is in the 1991 (imminent) funding and construction program of the Fresno County Transportation Authority and Cal-Trans, it was not deemed necessary to add "Freeway 168 construction" to the list of mitigations necessary for implementation of the Roosevelt Community Plan. Freeway 168 construction in the Roosevelt area is a fait accompli, and has been identified as such in the discussion portion of the EIR chapter on Transportation.

    The City's position on the 1991 Measure C Expenditure Plan was developed before 1990 Census data was available. However, 1990 Census data was used for the 1991 Roosevelt Community Plan Update and its EIR. Through this Roosevelt EIR, it was discovered that southeast Fresno, even at reduced development densities proposed in the Update, would experience severe traffic congestion if Freeway 180 were not completed at least to Clovis Avenue before the construction date currently proposed for the Chestnut-to-Clovis Avenue segment of Freeway 180. Because the Measure C Expenditure Plan will be updated at least every two years, this mitigation measure is intended to lead City policy in a new direction, aimed at responding to new Census information and a major transporation need identified through this EIR.

80. This correction has been made in the EIR text (p. *157*).

81. This correction has been made in the EIR text (p. *157*).

82. A "funding and phasing mechanism" for State highways and local interchange streets is beyond the scope of a community plan update, and would constitute program- matic/mitigation "piecemealing" if only considered for and imposed on one community plan area.

    The City agrees that funding and phasing need to be comprehensively addressed; a mitigation measure has been added to require that such a mechanism be part of the next City General Plan Update. Since significant congestion from full-build of the 1991 Roosevelt Plan Update is not expected to occur before that General Plan Update, this policy is not an avoidance of the issue, nor it it "bootstrapping."

    The City, further, would advocate for Cal-Trans to exert its regulatory and oversight authority to ensure that funding and phasing mechanisms are employed equally by cities, Fresno County, and adjacent counties as appropriate. It would make little sense for the City of Fresno to employ, for instance, a "transportation impact fee," if the effect of this fee would be to drive urban development into an unincorporated area where no fee is charged and transportation system impacts were to be created but not be addressed.

83. It is the City's understanding that, in future updates of the Fresno County Congestion Management Plan (CMP), the CMP road network will be significantly expanded to include several more major streets in the County and cities.

84. To address some funding and phasing mechanisms, a requirement has been added for the City Traffic Engineer (Public Works) to make a transportation finding in order for completion of the environmental assessment for, and approval of, a development project. This is the mechanism employed in other city community plan areas (e.g., the Woodward Park Community Plan area). While not comprehensive in scope, it does give a standard of scrutiny (monitoring) for each project, and ensures that deficient levels of service on streets will be mitigated as level of service threatens to become unacceptable.

85. Mitigation measures have been added to address these access control measures (EIR pages *156* and *157*).

86. Comment noted. Freeway 180 is also being planned and constructed to accommodate through-traffic traversing the urban area.

87. Mitigation measures have been added to require maintenance of an acceptable level of service, to formulate specific plans for interchange areas, and to prevent inappropriate encroachments in the vicinity of interchanges.

88. As was mentioned previously, any funding mechanism would have to cover a broader area than one city community plan area. This funding mechanism concept will become part of the work program for the City's next General Plan Update.

89. This has been addressed above.

90. Thank you.

91. This has been addressed above.

92. This correction has been made in the EIR (Table EIR-19, pages *142* and *143*).

93. The intent of this clustering in a designated peri-highway intensity corridor is to provide use densities which would support mass transit measures, such as express bus service, park-and-ride, perhaps eventual light rail development. The east-west orientation of this intensity corridor is also designed to facilitate local street access from all portions of the Roosevelt Plan area, obviating the need for Roosevelt's citizens to use the freeway system to obtain goods and services in other, more distant, portions of the City.

94. Wording has been changed to reflect that these impacts are possible, but not certain (EIR pages *145* and *149*).

The City of Fresno's use of new Freeway 180 as the "backbone" for an intensification corridor is one example of how freeway construction may have growth-inducing impacts. Land use designations are often shifted in response to new or upgraded major streets, to take advantage of the improved transportation service afforded by these streets.

95. In response to this comment, and after consultation with Cal-Trans and the Council of Fresno County Governments, EIR Chapter H has been extensively rewritten to reflect new and more generally-accepted standards for street capacities and levels of street service.

The EIR notes that the computerized MINUTP traffic model appears to "dump" vehicle trips onto freeways, and does not "smooth out"

street utilization between freeways and City streets. This "smoothing out," or balancing of street utilization, is the expected drivers' behavior.

The EIR also notes that actual "D" level of service is not expected on urban freeways in the City of Fresno, except for limited times of the day or under unusual conditions.

As identified in the referenced Measure C program, freeway expansions may be considered as demonstrable need arises. As was mentioned above, a comprehensive funding program (in addition to Measure C and other existing revenues) will be explored in the next City General Plan Update.

Tables EIR-20 and EIR-21 have been revised to show major street segments potentially impacted under the new capacity and level of service standards given in the EIR.

96. Comments noted.

97. The City has a policy of locating parks on major streets, to facilitate access and visibility. (This proposed neighborhood park is not, in fact, adjacent to the freeway interchange.) Typically, pedestrian control such as designated crosswalks, walls/fencing, walkways, and landscaping are used in park design to discourage unsafe street crossings.

98. The Public Works Department Traffic Division, has checked accident records and does not find an unusual number of accidents in this location. There are no comparative "fog density" monitors in Central California, so the question regarding "denser fog" cannot be answered. Fog is a transitory and mobile weather condition, and "denser" fog would not be confined to a particular neighborhood.

    Use of the subject property for a regional park would be no more a "dangerous condition of public property" than would use of this property for a network of streets serving industrial uses. Because park use would entail less truck traffic and less through-traffic than residential or industrial development of this property, any "fog hazard" would be less from regional park use.

99. A detailed Regional Park plan for this property has not been developed. However, since the Fresno Metropolitan Flood Control District has designated a portion of this site for a flood control/percolation basin, the site will contain some land that has impounded water at least some months of the year. As was mentioned above, there is no basis for stating that impounded water in this location would make worse fog conditions than exist elsewhere, or would make Jensen Avenue "more dangerous." Because the Flood Control District has chosen a basin location here, any fog evolved would occur regardless of the use designation of the property.

100. Any development of a regional park would be accompanied by appropriate signalization on Jensen Avenue and pedestrian traffic controls (such as fencing, walls, landscaping, and walkways), which would discourage inappropriate pedestrian behavior. Such methods are employed at the City's other regional parks (Woodward Park and Roeding Park), both of which have adjacent residential areas with major streets between residences and the parks. Neither regional park has constituted any particular danger to/from jaywalkers.

101. Line-of-sight improvements can be utilized as necessary in the vicinity of Peach Avenue.

102. It is City of Fresno policy to locate major public facilities, such as regional parks, on major streets. This is done to provide adequate public access and to avoid use of local (e.g., residential) streets for public facility access.

103. Kings Canyon Road, a designated major street abutting the Fresno County Fairgrounds (alternative regional park site #2), is projected to have more daily vehicle trips on the segment bordering the Fairgrounds than Jensen Avenue is projected to have in the vicinity of the designated regional park site at Jensen and Minnewawa (see Figures EIR-17 and EIR-18).

Alternative site #3 is bisected by the right-of-way for future Freeway 180, which will have much more vehicle traffic than Jensen Avenue. This site is also bound on three sides by major streets: the Temperance expressway, the Belmont arterial, and the Fowler Avenue arterial.

Alternative Site #4 would necessitate additional miles of travel for City residents attempting to use the regional park. Since accidents can be considered a function of total vehicle miles traveled in an area, it cannot be considered "safer." Moreover, the major street access to this site would require traveling on Jensen Avenue itself, or on Fowler or Armstrong Avenues (which are less improved for increased traffic).

104. In 1984, the City and County agreed that, within the Fresno City Sphere of Influence, land will be best used for urban development. Use of land for "business" would irreversibly convert the prime farmland of alternative park site #1, whereas use of this land for a regional park would not cover the land with streets and structures--conceivably, it could be brought back under cultivation, should the need arise.

Alternative site #2 has long been urbanized and its soil is not presently evaluated as "prime" (the original applicable soil rating is not known). Alternative site #3 is not presently evaluated as "prime." Alternative site #4 is approximately three-fourths "prime" farmland (see Figure EIR-4-B).

The 1984 City of Fresno General Plan refers to and supports provisions of the Agricultural Land Conservation Act (the Williamson Act), which is the enabling legislation for agricultural land conservation contracts. The City of Fresno does not administer or process applications for agricultural land conservation contracts. Interested persons must contact the Fresno County Public Works and Development Services Department, which, with the Fresno County Assessors Office, administers and monitors these contracts (see EIR pages *49* through *52*).

105. Given the xeriscape and water conservation standards of the City of Fresno Parks administration, the regional park would be expected to use less water than either residences or agricultural land. Since the "no-project" or "underlying" or "Modification No. 12" use designation for this property would be "heavy industrial," regional park potential water consumption should be compared to <u>that</u> use. While heavy industrial water consumption varies widely by the specific industry developed, heavy industrial use is generally considered to consume high volumes of water. Moreover, industrial uses carry a greater potential for groundwater contamination, which would potentially reduce water available for any residential or urban uses.

106. To research this question, the Development Department contacted the City of Fresno Police Department and requested 1990 total crime statistics from their Cadmis R-23 Reporting System. Lieutenant Lindstrom of the Fresno Police Department's Southeast Command provided the following information.

In Police Reporting Zone No. 2452, which encompasses Roeding Park, there were 1,025 service calls recorded in the Cadmis system. Of these, 635 (over half) were self-initiated activity on the part of the Police Department, a component of their "cruising control" program (a special enforcement action requested by citizens and businesses in various parts of the City). Thus, only 390 service calls were initiated by citizens. In the Roeding Park reporting zone, a total of 270 police reports were logged (resulting from service calls); 87 of those reports were from the Police Department's self-initiated cruising control program. Thus, only 183 reports were filed pursuant to citizen service calls.

In Police Reporting Zone No. 0856, which encompasses Woodward Park, a total of 295 service calls were recorded in 1990, resulting in 34 police reports filed. None of these service calls or reports were the result of Police Department self-initiated activity. Because Woodward Park is of a more up-to-date park design and abuts neighborhoods with newer homes, it would more closely resemble a City regional park constructed on alternative regional park site #1 south of Jensen Avenue.

In this comparison, the Police Department's Cadmis system indicates relatively higher levels of crime in industrial areas. Police Reporting Zone No. 2361, bound by McKinley, Chestnut, Olive, and Maple Avenues, tallied 566 service calls and 180 police reports filed. (This area is primarily industrial and is virtually the same size as alternative regional park site #1). None of these calls or reports were from Police Department self-initiated activity.

In Police Reporting Zone No. 2364, also the same size as alternative park site #1, 369 service calls and 94 police reports were logged by the Cadmis system in 1990. This Reporting Zone is bound by McKinley, Clovis, Olive, and Peach Avenues. As with the above industrial site, no calls or reports were from Police Department self-initiated activity.

The conclusions which may be reasonably drawn from these statistics are that industrial development may require more police service than a regional park, and that crime at a regional park location is influenced greatly by the surrounding neighborhood. There is no basis for claiming that a regional park would create any "dangerous condition of public property."

107. Regional park noise expected at alternative site #1 would be less than heavy industrial noise expected. Traffic volume (and concomitant noise) would be less from a regional park at this location. ("Heavy traffic" is not generated by typical park use.) There is no basis for expecting "riots."

Alternative site #2, because it is smaller and is surrounded by dense residential development, is already a greater noise problem than would be site #1, in part because Kings Canyon Road is already experiencing heavy average daily traffic, and is projected to be further impacted in the future. These conditions do not make it "better suited."

Alternative site #3 is also smaller than site #1 and has adjacent urban residential development. This park site would be heavily impacted by Freeway 180 traffic noise.

Alternative site #4 is the same size as site #1, so a park located on this site could be designed to better contain any noise associated with recreational use. However, the greater distance of site #4 from the more urbanized area makes it less accessable to park users, and the lower level of development of major streets accessing this park would be less able to deal with traffic.

108. This has been addressed previously, in above responses.

109. The Fresno Bee has noted that the "Bulldog Gang" appears to be headquartered in an older residential area south of Roeding Park.

There is no basis to believe that a park itself has caused, or will cause, gang activities. Because park access can be controlled (more easily than street access in an industrial area), there is no basis for stating that use of alternative site #1 for a park would foster more gang activity than the planned industrial use of this property.

110. Removing the regional park designation from this property would leave its pre-existing plan designation, "heavy industrial" (see following discussion and EIR analysis of requested Plan Modification No. 12 in Chapter U). Development for heavy industrial uses would also eventually displace residential uses and could "deteriorate" residential neighborhoods.

111. This issue has been previously addressed, in the EIR and in the above response to comment #104.

112. What is under consideration in the 1991 Roosevelt Community Plan Update and its EIR is the plan designation for this site, not an imminent rezoning program or park site acquisition by purchase or eminent domain.

Industrial development on this property, which is the plan designation sought by Modification No. 12, would also displace existing residential uses.

113. Requested Plan Modification No. 12 does not propose to "leave the land in its present capacity." Approval of this modification would provide for development of "heavy industrial" uses and would not save prime farmland.

Only a portion of the property involved in alternative park site #1/Modification No. 12 is covered by an Agricultural Land Conservation Contract. It is noted that property owners have already requested nonrenewal of a portion of this Agricultural Land Conservation Contract (#6916); 14.91 acres covered by this nonrenewal request is on alternative park site #1. This nonrenewal will become effective in 1998.

114. These issues have been addressed previously, in responses to comments #98 through #113.

115. There are several owners involved in the land under consideration for alternative park site #1/Modification No. 12.

116. This is not substantiated (see above response to comment #105).

117. While the URBEMIS computer program does not give data on pollution per acre of farmland, the estimated vehicle trips from park use are far fewer than the estimated vehicle trips from heavy industrial development. Even the present agricultural (and "business") uses of this site generate more estimated air pollution, in the form of fine particulate matter, than would be expected from a regional park.

118. Again, this modification would potentiate heavy industrial development. As the present agricultural uses would give way to industrial development under the plan designation requested by this modification, energy consumption would rise sharply and would far exceed energy consumption from park use.

119. A regional park would provide habitat far more diverse and richer than monoculture orchards or row crops. Regional parks, according to City Parks Master Plan description, are intended to provide significant wildlife habitat. Animals are not banned from regional parks; animals are not considered "a danger" to humans. Wildlife would be less displaced and disturbed by park site development than by industrial development (or, in many respects, by continued agricultural uses).

120. Again, Modification No. 12 does not provide for leaving the land "in its present form." It provides for potential heavy industrial development, with traffic impacts heavier than those associated with park use.

121. Intent of present owners would not prevent sewer service impacts from industrial development by subsequent owners. Furthermore, an application for M-3 (heavy industrial) zoning on a portion of this site was recently submitted by one of the owners.

122. Potential heavy industrial development would create more solid waste than potential regional park development. The present agricultural uses are associated with significant solid waste, at least some of which is burned (see under Air Quality).

123. Expected fire and paramedic service demand is higher from industrial development than from regional park development.

124. Fresno Metropolitan Flood Control District has indicated that approval of Modification No. 12 would have an impact, although the impact is completely and automatically mitigable by FMFCD's project review and design requirements.

125. Police service demand would not remain at present (agricultural) levels, because industrial growth is allowed under Modification No. 12.

126. The issue of noise has been previously addressed above, in response to comment #107.

127. Substantial evidence in the public record does not support this conclusion. Nor does it support the conclusion that a heavy industrial designation, as requested by Modification No. 12, would be any "less dangerous" a condition.

128. The plan concept reference did not propose relocating the entire Fresno Fairgrounds. It only outlined some uses for which relocation may be the only solution to excess noise and other deleterious effects which emanate beyond Fairgrounds property to the detriment of surrounding neighborhoods.

129. The acreage requirement and cost factor suggested by the Fresno Fairgrounds General Manager are, however, considerations for evaluating the Fairgrounds as a possible regional park site (pages 57 through 59 of the Roosevelt Community Plan Update EIR).

REVISED DRAFT ENVIRONMENTAL IMPACT REPORT
1991 ROOSEVELT AREA COMMUNITY PLAN UPDATE

Augmented and Amended
in Response to Public Comments Received

I. INTRODUCTION AND PROJECT DESCRIPTION

A. AUTHORITY AND PURPOSE OF THE EIR

This Environmental Impact Report (EIR) examines the environmental consequences of the City of Fresno's adoption and implementation of the 1991 Roosevelt Community Plan Update.

This EIR is intended to fulfill the City's obligations as set forth in the California Environmental Quality Act ("CEQA," California Public Resources Code Sections 21000 et seq.) and in the CEQA Guidelines (Title 14 of the California Administrative Code, Sections 15000 through 15387). CEQA holds that adoption and implementation of a community plan update is a "project," and environmental analysis is required for the city plan update's implications, and that measures may be needed to remedy or avoid significant adverse environmental effects of the plan update.

Environmental conditions in the Roosevelt Community Plan Area are primary considerations for its well-being and growth. These considerations include: water quality and delivery capacity; hazardous waste sites; sewage treatment and sewer trunk line capacity; traffic congestion and air quality; population density and school overcrowding; law enforcement service capacity; open space needs; incomplete or outmoded infrastructure; historical resources; some aging, deteriorated neighborhoods; and land use conflicts between public facilities and surrounding neighborhoods.

Conclusions and recommendations of this EIR must be considered by the City of Fresno prior to adoption of the Roosevelt Area Community Plan Update. Significant adverse environmental effects must be eliminated, substantially reduced, or formally determined to be unmitigable due to overriding economic, social, or other considerations.

Approval and certification of this EIR provides a public record of the projected environmental consequences of pursuing City policies and the proposed community plan update, and delineates specific obligations of the City, other responsible public agencies, and private parties to minimize deleterious environmental effects where mitigation is required.

B. PROJECT DESCRIPTION

The 1991 Roosevelt Community Plan Update revises comprehensive land use designations and policies for an 18,480-acre portion of southeast Fresno. The Roosevelt Area is bounded on the north by McKinley and Belmont Avenues; on the east by Clovis, Temperance, and Minnewawa Avenues; on the south by Jensen, North, and American Avenues; and on the west by East Avenue, the Southern Pacific Railroad tracks, and Freeway 41. This Roosevelt Community Plan Update EIR will also consider potential impacts from areas east and south of the above boundaries, in order to evaluate demographics, land uses, hydrology, traffic, and hazardous sites waste and substances as they relate to the Roosevelt Area.

The Roosevelt Community Plan Update includes all or part of several smaller Specific Plan areas: the Fresno Air Terminal Environs; Butler-Willow; Yosemite Junior High; and North Avenue Industrial Triangle. Adoption of the 1991 Update will modify land use designations and policies for these specific plan areas.

A small portion of land (between First Avenue and Freeway 41) is detached from the Fresno High-Roeding Community Plan Area and is added to the Roosevelt Community Plan Area through this update of the Roosevelt Community Plan.

Preparation of the 1991 Roosevelt Community Plan Update was authorized by the Fresno City Council in response to existing conditions and in anticipation of growth pressures coming to bear upon this area.

The 1991 Roosevelt Community Plan Update consists of background information, illustrations, goals, policies, and implementation measures to refine and ensure realization of the broad goals and policies of the Fresno General Plan. The level of detail and precision in this community plan update are consistent with requirements for specific plans, as so forth by California State Planning Law (California Government Code Sections 65450 et seq.).

The Roosevelt Community Plan Update specifies the extent and location of a range of urban and open space uses with supporting major street circulation systems. Criteria and standards for land development, allocation of supporting public facilities, and utilization/conservation of resources are also delineated. Implementation measures are identified and include regulations, public facility management programs and financing measures.

A description of the Plan Update's function and purpose, factors and events contributing to the status of the plan area, and significant issues jeopardizing the area's ability to provide a healthy and desirable environment are summarized in the Introduction to the Roosevelt Community Plan Update (pages 1-12). That Introduction summarizes the purpose and focus of the Plan Update within the ten-year planning horizon of the City's community plan update cycle, subject to some modification by subsequent plan amendment applications when the 1994 City of Fresno General Plan Update is prepared. Included in the Introduction is a thematic plan concept, which establishes the major assumptions and priorities upon which plan update goals and strategies are based.

The 1991 Plan Update's goals and policies/ implementation measures are organized into five major categories: land use and urban form; circulation; neighborhood restoration and housing; public facilities and services; and environmental concerns. The statements and accompanying maps which comprise the plan update establish guiding principles by which the City of Fresno and other agencies will determine the appropriateness of future land development proposals and the need for providing public facilities and other improvements.

C. PROBLEM STATEMENT

1. Historical Context

The western portion of the Roosevelt Community Plan Area has been planned for urban uses since Fresno's early days. This area was part of the City of Fresno's original incorporation in 1885. In the northwestern part of the plan area, residential enclaves were developed by the turn of the century. Many houses, and even some relatively intact neighborhoods, have survived from Fresno's early era, creating numerous present-day historical resources in need of preservation.

The "middle part" of the plan area's western half has commercial uses concentrated on its major streets (it was part of Fresno's original central area). In the late 1800's, a trolley line was built from this downtown area paralleling Ventura Avenue to Clovis Avenue. This established a "strip commercial" pattern that has been extended as development has spread eastward.

The southwestern portion of the plan area has traditionally been favored for industrial uses, due to the useful proximity of major rail and highway transportation corridors. Few development standards were applied to early commercial, institutional, and industrial sites, potentiating future problems with aesthetics, parking, noise, and pollution.

The eastern portion of the plan area was formerly in agricultural and rural residential uses. Rapid postwar subdivision and growth vastly expanded residential uses eastward, sometimes in a "leapfrog" pattern both inside and beyond incorporated city boundaries. These developments often ran ahead of coordinated urban infrastructure improvements. Municipal infrastructure needs were either not addressed (i.e., no drainage improvements, streets not built for planned capacity, individual septic systems allowed) or were inadequately addressed by a patchwork of public and private service operations which were unable to keep pace with regulations and service demands.

In 1974, the City of Fresno, City of Clovis, and Fresno County adopted the cooperative 1974 Fresno-Clovis Metropolitan Area General Plan. Pursuant to this 1974 General Plan, the City instituted its Urban Growth Management (UGM) program to fund infrastructure construction as fringe areas are converted from raw land to urban uses. While successful in its designated scope, the UGM program does not address the full range of public service needs. It is not designed to fund ongoing operational expenses. It also does not apply to infill or redevelopment areas, where infrastructure is often in need of expensive upgrading.

To further define General Plan objectives in Southeast Fresno, the first Roosevelt Community Plan was adopted in 1978. This Roosevelt Community Plan projected a 10,000 person gain in population over a twenty-year "planning horizon" from 1978 to 1998, anticipating that the number of area residents would increase from some 60,000 to 70,000 over that time. However, the 1980 Census pegged the Roosevelt area's population at over 70,000 persons; and by 1990 (about halfway through the "planning horizon" period), there were over 105,000 people in the plan area. Thus, population growth in this area vastly exceeded expectations of the 1978 community plan (and the 1984 General Plan).

That 1978 Community Plan designated two "community centers," at Kings Canyon and Chestnut Avenues and at Kings Canyon and Clovis Avenues, with some strip commercial on other major streets in southeast Fresno. Two park sites were proposed. Industrial development was supposed to be contained in areas with compatible uses. Revitalization of older areas was to be done, and "practical administration" of city ordinances, code enforcement, and housing programs was to stabilize the area. In ensuing years, it has become apparent that the 1978 Roosevelt Plan did not sufficiently ensure the balanced, coordinated growth and public service improvements that had been intended.

One reason for plan inadequacies was increasing fiscal pressure in the City. In 1978, California Ballot Proposition 13 was passed by the voters. This initiative rolled back assessed valuation of all property in the state to 1975 levels, severely limited re-assessment opportunities, allowed only a 2% per year automatic increase in base valuation, and set property tax rates at 1% of valuation across the board. Immediate fiscal impacts were felt at the local government level. Property tax revenue could neither keep pace with inflation nor with population growth and service demands.

Special assessment districts to generate additional revenue for public improvements require approval by over two-thirds of the voters; therefore, these assessment districts were not often formed, unless created by the original subdivider to lighten his initial outlay of money in new development areas.

At the same time that local property tax revenue was curtailed, Federal sources of funds for local governments were reduced or eliminated. The resulting fiscal squeeze forced the City of Fresno to again examine its growth and public service funding policies.

The 1984 City of Fresno Plan attempted to address infrastructure concerns and had to consider additional issues such as groundwater contamination.

During the 1984 General Plan Update, a portion of the (1978) Roosevelt Community Plan Area was removed from the City of Fresno sphere of influence: the land south of Jensen Avenue and east of Minnewawa Avenue. There were also concept and policy refinements which had the effect of somewhat modifying the 1978 Roosevelt Plan.

The '84 General Plan outlined a basic pattern for new Roosevelt Community Plan Area development, and proposed to improve older residential areas by infill and densification. However, specific implementation strategies were not complete and did not fully address mitigative development standards or public improvement funding mechanisms for existing developed areas.

Pursuant to an increased need to ensure the availability of adequate water and sewer service in new growth areas, the Southeast Growth Area policy was established. This policy required the resolution of water quality issues for development proposals in the identified ("starred") area outside of urbanized Fresno (but within the area in the city's sphere of influence). The objective was to ensure that new development on the southeast urban fringe would only occur if the level of water and sewer service required for urban uses could be provided.

In already-developed portions of the Roosevelt Community, lack of jurisdictional unification and lack of uniformity of ordinances and policies has been a longstanding impediment to comprehensive improvements. Significant amounts of the plan area were urbanized while still in the County, and slow, piecemeal progress has been made toward annexing these areas into the incorporated City.

In 1988, The Fresno County Local Agency Formation Commission and the City of Fresno approved creation of a new separate sphere of influence for the Malaga portion of the plan area. Thus, most of the southern portion of the City's 1978 Roosevelt Community Plan Area was removed from the City's planning jurisdiction. This action also removed a great deal of existing and potential industrial land from the Roosevelt Area.

In 1987, the tax-sharing and annexation agreement between the City of Fresno and Fresno County was terminated. For nearly four years, annexations could not be processed. This had the effects of halting urban unification and of limiting growth on the urban fringes. In 1991, a new tax-sharing and annexation agreement was approved, re-opening possibilities that urban uses would be established on the plan area's unincorporated land. The 1991 Memorandum of Understanding between the City of Fresno and Fresno County reaffirms the City's primacy in land use planning and in establishing development standards within the City's sphere of influence.

While groundwater has been generally plentiful in southeast Fresno, the quality of this groundwater has become problematic. Some neighborhoods in the plan area are served by wells with moderately hard water. Other areas have experienced high levels of nitrate, apparently leached from individual septic systems. Solid waste sites and improper storage and disposal of commercial and industrial facilities' waste, fuels and process chemicals have generated numerous "toxic hot spots" which threaten groundwater. At the southern edge of the plan area, groundwater shows indications that slightly radioactive minerals exist naturally in water-bearing strata.

By far the major groundwater problem facing the plan area stems from widespread infiltration of dibromochloropropane (DBCP). Despite being banned in 1977, this chemical (formerly an agricultural nematicide) has persisted in eastern San Joaquin Valley groundwater and has spread widely into the Roosevelt Area. DBCP and other organic compounds have been postulated to pose significant health risks, prompting State and Federal agencies to restrict drinking water levels of these compounds to fractional parts per billion. Indications are that permissible levels will be further reduced by the State.

Operation of public community water systems is overseen by State and Federal agencies whose water quality regulations set ever-lower limits on chemical and bacterial content of drinking water and require ever-increasing amounts of expensive water testing. The City of Fresno became responsible for monitoring and for providing potable water that meets State and Federal Standards.

In 1988, the City of Fresno attempted to unify and upgrade water service by assuming operation of County Waterworks Districts in the Roosevelt Community Plan Area. The City inherited many producing wells, but also got the responsibility for groundwater problems in those neighborhoods and several water distribution systems which were not constructed up to City standards. The only non-City public community water system currently remaining in the Roosevelt Plan Area is the Bakman Water Company.

Changes in the Federal Safe Drinking Water Act in the late 1980's required that public, non-community water systems also take steps to address water contamination problems. The plan area has several such systems, primarily serving businesses and public facilities (such as schools) on the southern urban fringes. The on-site wells of many of these small public water systems exceed safe drinking water standards for organic chemicals, and several show indications of low-level gross alpha radiation contamination.

An event with major effects on the plan area is approval of the Fowler Trunk Sewer Main project. This large-diameter sewer line is planned to serve the Roosevelt Area's southeastern quarter, and part of the City of Clovis. This long-anticipated sanitary improvement is a major "trigger" for urban growth on the eastern edge of the Plan area.

However, just as construction is slated to begin on the Fowler trunk line, the California Regional Water Quality Control Board has put the City of Fresno on notice that its wastewater treatment operations must be improved. The City wastewater treatment plant is reaching its rated capacity, effluent quality is not consistently up to standards, and the lack of a City pretreatment enforcement program has allowed industrial plants to impact the main treatment plant by discharging inadequately pretreated waste. A wastewater plant expansion and improvement program is underway, and the pretreatment program is being upgraded.

Another spur to development in the Roosevelt Community Plan Area is highway construction. As early as the 1960's, Cal-Trans had begun to acquire property along the designated right-of-way of the future urban Freeway 180. Some of these acquired properties were demolished and others were rented on a temporary basis. Public policies prohibit issuance of building permits in highway rights-of-way, so building improvements were not generally made. In the 30-year span between right-of-way determination and highway construction, affected neighborhoods (mostly residential) became more and more blighted.

These deteriorating conditions should be resolved when the freeway is built, and then a reverse situation will occur: the freeway will induce more development in proximal areas, due to the transportation benefits accruing to property adjacent to a freeway.

As construction of Freeway 180 impends, street improvement deficiencies become critical for the plan area streets which will interchange with the highway. Freeway 180's growth-inducing impacts may overwhelm the plan area's circulation system, even though the freeway's purpose was to relieve traffic congestion on the old 180 alignment (Ventura/East Kings Canyon Road).

The ultimate result of these historical events has been a convergence of trends and establishment of development patterns which have resulted in the major issues and concerns outlined in pages 6 and 7 of the 1991 Roosevelt Area Community Plan Update and in the following EIR.

2. Current Problem Status

The Roosevelt Community Plan Area is experiencing an accelerated increase in population density and service demand. Past patterns of development and poor coordination of growth and infrastructure have created areas within the Roosevelt Plan Area which are deficient in many types of service capacity and/or development standards. These older areas have often been perceived as blighted or less desirable; thus, these areas are not able to attract capital for revitalizing development and have been unable to self-fund large-scale infrastructure improvements.

Lack of coordinated service delivery has also proven detrimental to the plan area's vacant developable land. Sewer treatment, public water system and public school capacities are presently problematic. The street network is not fully developed to its planned capacity.

The required network of flood control and storm drainage facilities are largely incomplete. A lack of pro-active code enforcement programs has allowed public nuisances to proliferate, further degrading quality of life, community image, real estate values, and development potential. Limited wastewater treatment and public sewerage system capacity has reduced opportunities for large new single-family housing developments at the urban fringe. Longstanding uncertainty about the precise alignment and construction timetable of the new urban Freeway 180 segment has paralyzed development and infrastructure improvements in a wide swath through the plan area. Part of the plan area's southeastern edge is outside the Fire Department's three-mile rapid-response radius.

In the development that has occurred, certain types of uses have not been created at a rate concomitant with the pace of the Roosevelt Area's population growth. This has led to an irregular or skewed distribution of housing types and commercial service categories. Single-family residential development has not kept pace in this plan area; compared to the northern and western parts of the Fresno-Clovis Metropolitan Area, single-family housing starts lagged through the 1980's. Regional commercial developments have not become well-established; the commercial areas which have been built offer a limited range of goods and services. Office development has been virtually nil. Usable open space recreational land is severely deficient in this area.

In the heart of the plan area are public uses which have grown and expanded in use beyond their ability to adequately contain their public facilities. These institutional sites include the Fresno County Fairgrounds, the Valley Medical Center/Fresno County Social Services complex, the Juvenile Hall/Probation Department complex, Roosevelt High School, and other sites.

When built, these facilities were determined adequate for Fresno County needs. However, massive population growth has drawn unforeseen numbers of people to these sites. Negative impacts have resulted from inadequate on-site parking, traffic congestion, noise, dust, light and glare, and increased crime. These public institutions have been unwilling or unable to modify their sites and operations, leading to reduced values and deterioration of the neighborhoods around these facilities.

Other important problems affecting the plan area's quality of life and development potential are air quality and groundwater contamination.

The Fresno Metropolitan Area has been in chronic violation of air pollution standards for carbon monoxide, ozone, and particulate matter. It has been determined that this high level of air pollution is rated "severe" and poses an unacceptable health risk. Stringent measures are being proposed to reduce sources of these pollutants (primarily, forced reductions in vehicle traffic and industrial emissions).

Water quality regulations have necessitated closure of several water wells in the plan area and have required periods of public notification to inform some neighborhoods that their water supply has chemical contamination. This has potentiated low water pressure episodes and has engendered expensive programs to build new wells, rehabilitate existing wells, and treat well water before pumping it into municipal supply lines.

In the face of these problems, the plan area is about to be subjected to significant growth pressures, particularly stemming from completion of the Fowler Sewer Trunk Line, construction of the new Freeway 180, and population/immigration dynamics already at work in the plan area.

Plan Concepts outlined on pages 8 through 11 of the 1991 Roosevelt Community Plan Update and ensuing detailed goals and objectives in the rest of the plan outline measures deemed necessary to address present and future issues that must be dealt with for full implementation of the General Plan. This EIR is designed to identify the implications of the environmental setting and the measures proposed in the 1991 Roosevelt Plan Update.

D. PHYSICAL AND JURISDICTIONAL SETTING

The 1991 Roosevelt Community Plan Update covers approximately 18,480 acres. This area comprises the southeastern quadrant of the Fresno-Clovis Metropolitan Area, and constitutes about 20 percent of Fresno's 146 square mile urban area (sphere of influence). The Roosevelt Area is the largest of the city's nine community plan areas. It interfaces with four other community plan areas: the McLane Community on the north, the Central Area on the northwest, the Edison Community on the west, and the Fresno High-Roeding Community on the northwest. The 1991 Update adjusts boundaries with the latter community plan area.

The Roosevelt Community Plan Area extends eastward from Freeway 41, the Southern Pacific Railroad tracks, and East Avenue; southward from McKinley Avenue and Belmont Avenue; and west from Temperance Avenue. It has an irregular southern boundary: west of Malaga, American Avenue; then

North Avenue between Barton and Minnewawa Avenues; then Jensen Avenue between Minnewawa and Temperance.

The plan area has the Fresno downtown/central area on its west side, the Fresno Air Terminal on its northern edge, and productive agricultural land immediately east and south. The plan area is traversed by State Highway 180, State Highway 99, Southern Pacific Railroad, and is bordered on the northwest by State Highway 41. An interchange of new State Highway 168 and the realigned Freeway 180 will be in the northwest portion of the Roosevelt area.

Topography of the area is generally level, with a very gradual slope from east to southwest. There is a slightly elevated area in the northwest. Roosevelt area soils are generally well-drained loams and sandy loams; many are rated as high-quality agricultural soils.

Fancher Creek runs through the eastern portion of the Roosevelt Area, and Redbank Creek flows into Mill Ditch along the northern boundary of the plan area. Numerous irrigation canals traverse the rural eastern and southern reaches of the plan area; in urbanized areas, these are usually enclosed in pipes by City zoning regulations (except Mill Ditch). Due to the area's low elevations and the influence of these creeks, several portions of the plan area are in the designated 100-year flood zone.

Descriptions of the overall Fresno Metropolitan Area and of the Roosevelt Community Plan Area environmental setting have been presented in several environmental impact reports, including the EIR for the 1984 City of Fresno General Plan Update (State Clearinghouse No. 81102254; City of Fresno EIR No. 10085); and the EIR for the 1978 Roosevelt Community Plan (SCH No. 78013113; City of Fresno EIR No. 10064). The present Roosevelt Community Area description differs from those earlier descriptions, due to City sphere of influence boundary modifications in the 1980's. The land south of Jensen and east of Minnewawa, and the Malaga area were removed from the City of Fresno sphere. (Both areas, however, have been retained in Fresno County's Roosevelt Plan Area.)

Approximately 60 percent of the City's Roosevelt Plan Area has been annexed into the incorporated City of Fresno, while almost 7,000 acres remains unincorporated and in Fresno County's administrative purview. The Roosevelt Community contains significant unincorporated acreage on its southern and eastern rural fringes; furthermore, there are large, urbanized unincorporated "islands" in a wide swath down the central part of the plan area.

In accordance with the Joint Resolution on Metropolitan Planning, the City of Fresno has primary responsibility for land use planning, urban-level development, and provision of urban services within the designated Roosevelt Community Plan boundary. Fresno County and the Airport Land Use Commission also have land use planning responsibility and authority which influence portions of the plan area.

Six school districts serve the Roosevelt Community Plan Area: Fresno Unified, Clovis Unified, Sanger Unified, Fowler Unified, Orange Center Elementary, and Washington Union High School. The first three serve most of the plan area's residential areas; the latter three have territory in the plan area's southern industrial reaches.

Several other special districts have service areas and jurisdiction in the Roosevelt Community: Fresno County Public Library [District], Fresno Metropolitan Flood Control District, Mid-Valley Fire Protection District, Fresno Irrigation District, Fresno Mosquito and Vector Control District, Consolidated Mosquito Abatement District, Calwa Recreation and Park District, and Malaga County Water District.

E. PRESENT LAND USES

Some 11,000 acres of the Roosevelt Community Plan Area are presently urbanized. (Four-fifths of the urbanized area is inside the incorporated city limits.) About 7,500 acres (approximately 41 percent) of the Roosevelt plan area within the urban sphere of influence boundary is presently vacant or in agricultural uses. Land uses and acreages devoted thereto are categorized in Table EIR-1, following.

Urbanization in this area has occurred primarily through conversion of farmland. Growth in the plan area began in a fairly well balanced manner, with industrial facilities along the railroad/Highway 99 corridor and in the McKinley-Maple area south of the Fresno Air Terminal; extensive strip and neighborhood commercial centers; and residential development.

The Roosevelt Community Plan Area hosts a diverse range of residential development. Most rural agricultural parcels have at least one dwelling unit. In the eastern portion of the area, large-lot rural residences have been developed. The southeastern portion has enclaves of estate-sized lots and medium-density subdivisions (typically, 6,000 square foot lots). A high proportion (as high as 10% in some neighborhoods) of single-family residences was found to host a second dwelling unit on the garage or in an accessory structure. There are planned unit developments, condominiums, "zero lot line" tracts, and various types of one- and two-story apartment

Table EIR-1: EXISTING LAND USES IN THE ROOSEVELT COMMUNITY PLAN AREA (MAY, 1990)

Land Use*	Acres
Agricultural	5,304
Open Space	188
Public Facilities	683
Quasi-Public Facilities**	226
Single-Family Residential	5,426
Duplex or Detached 2-Family Residential	261
Multi-Family (Triplex, Fourplex, Apartments)	733
Office (Commercial)	28
Retail (Commercial)	155
Mixed Use Shopping Center (Commercial)	164
Service (Commercial)	87
Light Industrial	571
Heavy Industrial	1,581
Arterial and Collector Streets	812
Freeways 180 and 168 Rights-of-Way and other vacant land	2,229

* Acreages dedicated to local streets and other sub-collector rights-of-way are included with the land use acreages that border these rights-of-way.

**Skilled nursing facilities, fraternal lodges etc—privately owned but serving large numbers of people.

complexes. More intensive residential uses are concentrated in the northwestern and central parts of the plan area. While the amount of the plan area devoted to multi-family construction is not disproportionate, the rate of this construction was very fast in the last decade (compared to single-family construction).

Commercial development recently surged as well, particularly along East Kings Canyon Road. However, a troubling amount of vacant shopping center space exists in the area's older centers, and the range of commercial goods available in the overall plan area is somewhat limited.

Except for the large government installations (the IRS data processing center and County facilities), office space is almost nonexistent in the plan area.

The Area hosts industrial uses along the Railroad/Highway 99 corridor and in the McKinley-Maple area south of the Fresno Air Terminal. The area has huge amounts of land set aside for further industrial growth in existing industrial areas and in the Jensen Avenue corridor at the southern edge of the community. Rail and highway access are available for most of this land, but other necessary services are presently undeveloped.

Usable open space and developed public recreation areas are severely deficient. The four major public recreational facilities in the area are: Calwa Park (operated by the Calwa Recreation and Park District), Fresno Fairgrounds (operated by the 21st District Agricultural Association Board), Mosqueda Community Center, and the East Fresno Boy's Club. The Fairgrounds is tightly scheduled for particular events and is not developed for general recreational pursuits.

Only one plan area ponding basin (Carozza Park) has been improved for recreation. School yards are heavily used. There is no regional park to serve this community. The trail system is not complete, though some bridle paths and urban trails do exist, mostly along rail and irrigation canal rights-of-way.

While much of the plan area's undeveloped land has historically been in productive agricultural use, and is very suitable for permanent crops such as vineyards and orchards, significant amounts of this land are being taken out of production by owners who anticipate urbanizing their land. Interim agricultural uses, such as short-term vegetables and fruits (e.g., strawberries) are being established on vacant parcels in both urban and rural parts of the plan area.

II. POPULATION GROWTH, DEMOGRAPHICS, HOLDING CAPACITY AND SOCIOECONOMIC CONDITIONS IN THE ROOSEVELT PLAN AREA

A. POPULATION GROWTH AND DEMOGRAPHICS

The 1990 population of the Fresno-Clovis Metropolitan area was estimated by the U.S. Census to be 477,400, and the 1990 population of the Roosevelt Community Plan area was estimated to be 105,200 (preliminary data, subject to correction and refinement). The community plan area population figure was derived from a block-specific boundary analysis of the Roosevelt Plan Area.

Between 1980 and 1990, the Roosevelt community added 34,900 new residents--an increase of 50% above the 1980 Census figure of 70,300 for this area. This ten-year population growth increment was larger than the 1978 Roosevelt Community Plan envisioned for twenty years. Percentage-wise, Roosevelt is not the fastest-growing community plan area, but it does lead the City in the number of new residents added over the last decade.

Based on the 1984 General Plan, a continuing annual growth rate of 1.4 percent was predicted for the Fresno-Clovis Metropolitan Area (FCMA) through the year 2005. Overall Metro Area population was anticipated to reach a total of 588,100 in the year 2005. What actually occurred from 1984 to 1990 was an annual population growth rate of over 3% in the FCMA, double the estimated rate.

In the 1984 General Plan, the Roosevelt Community Plan Area was projected to accommodate 14,751 new people during that 20-year span, and to have an annual average population growth rate of about 1% (based on the Development Department's 1984 population estimate of 77,457 for the Roosevelt Community). In reality, the 1984 to 1990 population increase was 27,743, averaging 6% per year for the latter half of the 1980-1990 decade. The Roosevelt Community's population has, therefore, expanded about six times faster than the 1984 General Plan anticipated for this part of Fresno.

Conversion of agricultural land to more intensive residential uses, development of multi-family housing, immigration, and a high birth rate have established population growth trends in this area. These trends can be expected to continue, even in the face of limiting public facilities and resources. However, this annual rate of population growth may decrease, due to the reduction of planned densities in the 1991 Rossevelt Community Plan Update.

For most population-based demographic parameters, U.S. Census Tracts are the data collection units used. Census Tract boundaries do coincide with the sphere of influence boundary which defines the Fresno-Clovis Metropolitan Area; however, Census Tract boundaries do not coincide with the City's incorporation boundary. To render Census Tract data into community plan-sized "packets," labor-intensive analysis of Census block units is required. This level of detailed analysis is not performed for most Census parameters.

For reasons of data management and comparison, sixteen Roosevelt Area 1980 Fresno Census Tracts (numbers 4, 5, 12, 13, 14.01, 14.03, 14.04, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30) and seventeen Roosevelt Area 1990 Census Tracts (4, 5, 12, 13, 14.03, 14.04, 14.05, 14.06, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30) are used to describe demographics in the Roosevelt area in this EIR. Figure EIR-2 depicts the relationship of 1980 and 1990 Census Tract boundaries to the Roosevelt Plan Area. For facility of handling data, entire Census Tracts' statistics will be used even though this means including some data from outside the plan area boundaries.

Postal zip codes have also been used to collect some types of data. Four zip codes blanket southeastern Fresno: 93702, 93703, 93725, and 93727. Figure EIR-3 shows the relationship of these postal zip codes to the plan area and the city limits. Because zip code areas are much larger than Census Tracts, approximating zip code boundaries to plan area boundaries is an even cruder way to tie demographic data to the Roosevelt Community.

The main benefit of zip code-based data is that it tends to be updated more frequently than the ten year U.S. Census interval. Social service agencies generally track their program utilization by zip code, and marketing studies and mail surveys are also usually done this way.

A 1990 Market Profile Analysis prepared by the Donnelly Marketing Information Services (A Dunn & Bradstreet Corporation) characterized the four southeast Fresno zip code areas as follows:

Table EIR-2: 1990 NUMBER OF HOUSEHOLDS AND POPULATION IN FOUR SOUTHEAST FRESNO ZIP CODES (DONNELLY MARKETING INFORMATION)

ZIP CODE	NUMBER OF HOUSEHOLDS	POPULATION
93702	13,947	39,214
93703	9,409	22,629
93725	5,848	18,798
93727	16,626	45,475
Total	30,827	126,116

Figure EIR-1

ROOSEVELT AREA CENSUS TRACTS

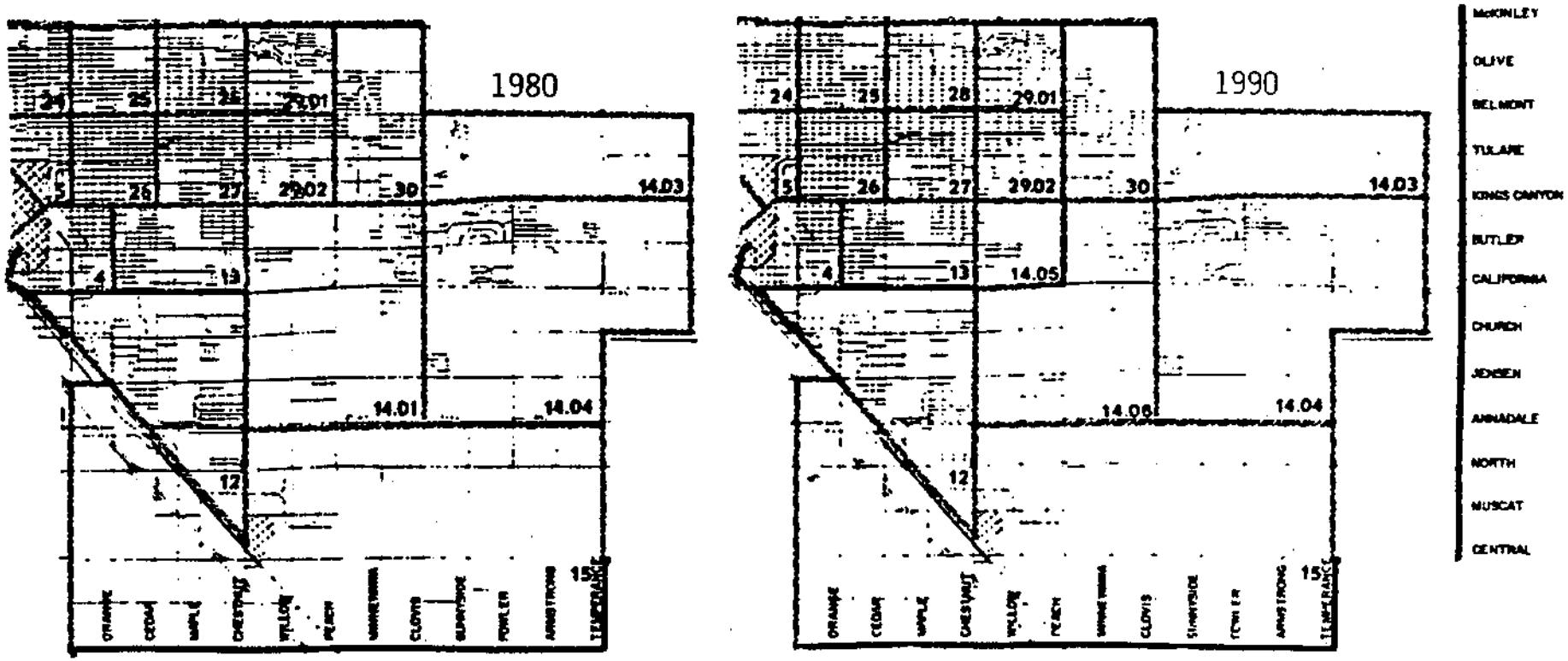
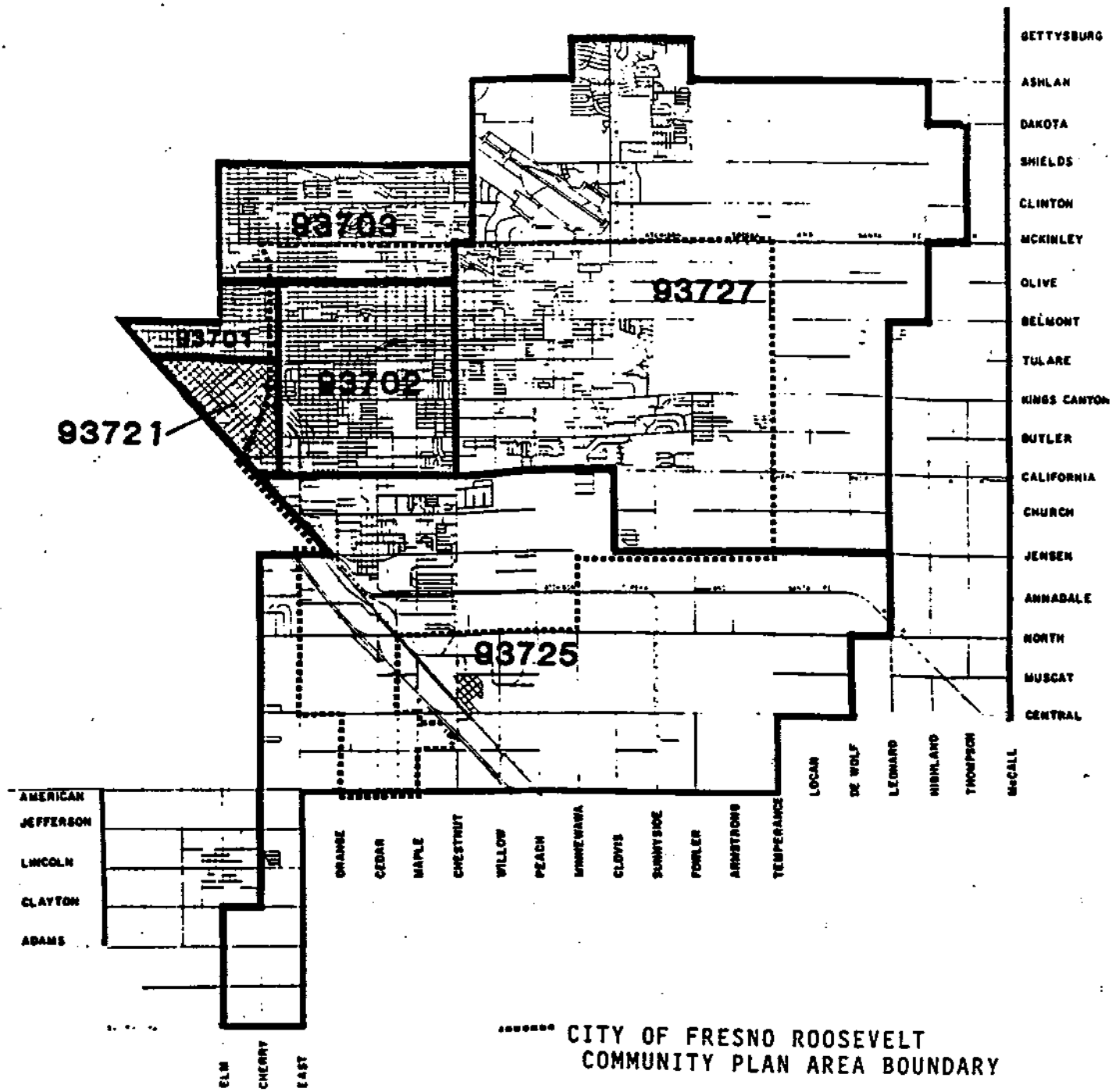


Figure EIR-2

ROOSEVELT AREA ZIP CODES



Of course, the figures in Table EIR-2 do not match the those from the Census tracts covering the Roosevelt Area, because the zip codes blanket a larger area. (Only about one-fourth of zip code 93703 is inside the Roosevelt Community boundary, for instance). For the seventeen 1990 Census tracts which bracket the community plan area, there were 33,812 occupied housing units, not counting institutional and other "group quarters" rooms.

The plan area has a diverse ethnic composition, with no one ethnic group constituting a majority of 50% or more. To that extent, this community appears to have achieved a significant measure of racial balance. Table EIR-3 below presents preliminary 1990 Census data on ethnic composition in the plan area:

Table EIR-3: 1990 CENSUS DATA ON ETHNICITY OF PERSONS RESIDING IN SEVENTEEN U.S. CENSUS TRACTS* IN THE ROOSEVELT AREA.

ETHNICITY	NUMBER OF PERSONS	PROPORTION OF PLAN AREA POPULATION
Hispanic Origin	51,379	43.97%
Not of Hispanic Origin:		
White	36,330	31.09%
Asian or Pacific Islander	19,774	16.92%
African-American	8,088	6.92%
Native American and other	1,286	1.10%
TOTAL	116,857	100.00%

*Census Tracts 4, 5, 12, 13, 14.03, 14.04, 14.05, 14.06, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30.

Ethnic distribution of the under 18 age group differs from that of the overall plan area population. Table EIR-4 gives ethnicity data on this age group:

Table EIR-4: 1990 CENSUS DATA ON ETHNICITY OF PERSONS UNDER AGE 18 RESIDING IN SEVENTEEN U.S. CENSUS TRACTS* IN THE ROOSEVELT AREA.

ETHNICITY	NUMBER OF PERSONS	PROPORTION OF PLAN AREA POPULATION UNDER AGE 18
Hispanic Orign	21,645	49.00%
Not of Hispanic Origin:		
Asian or Pacific Islander	11,115	25.16%
White	7,385	16.72%
African-American	3,559	8.06%
Native American and other	467	1.06%
TOTAL	44,171	100.00%

*Census Tracts 4, 5, 12, 13, 14.03, 14.04, 14.05, 14.06, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30.

Many of the cultural/ethnic groups living in the plan area are recent emigrees from Southeast Asia and Latin America. Over 30 percent of Fresno's Southeast Asians live in the Roosevelt Plan Area. Language barriers and cultural differences tend to foster isolation and lead to "closed communities" or distinct enclaves in the Plan Area. Social Service, education, health, law enforcement, and elected government personnel need to make special efforts to communicate with and involve these groups. The diversity of languages and a lack of skilled translation service has hampered these efforts in the past. "Newcomer" programs in the elementary and secondary schools, adult education, cooperative community-based organizations, and a strong affirmative action commitment are needed to assist in the acculturation process.

Age distribution in the Roosevelt Community Plan Area appears to differ from that of the overall Fresno-Clovis Metropolitan Area (FCMA). The seventeen Roosevelt Area 1990 Census Tracts show 44,171 persons under age 18 (37.80% of the Roosevelt Area's population). In comparison, the 1990 Census shows that only 31.74% of the overall Fresno-Clovis Metropolitan Area (FCMA) is under age 18 (112,427 in this age group in the FCMA).

The Roosevelt Plan Area, therefore, houses about one-third of all the minor-age children in the Fresno-Clovis Metropolitan Area even though it contains only about 22% of the total FCMA population. Table EIR-5 below contrasts Roosevelt Community Plan Area age group composition with that of the City of Fresno.

Table EIR-5: DETAILED AGE GROUP ANALYSIS OF RESIDENTS IN SEVENTEEN 1990 U.S. CENSUS TRACTS* IN THE ROOSEVELT COMMUNITY PLAN AREA.

	CITY OF FRESNO		ROOSEVELT PLAN AREA*	
Age Groups	Pop.	Proportion of City Pop. in that Age Group	Pop.	Proportion of Roosevelt Pop. in that Age Group
0-4 yrs	35,539	10.03%	14,307	12.24%
5-17 yrs	76,888	21.71%	29,864	25.54%
18-64 yrs	205,971	58.15%	61,244	52.38%
65 yrs and over	35,804	10.11%	11,502	9.84%
Total (All ages)	354,202	(100%)	116,917	(100%)

*1990 U.S. Census Tracts 4, 5, 12, 13, 14.03, 14.04, 14.05, 14.06, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30; incorporated and unincorporated portions.

The 1990 Census revealed that, since 1980, average household sizes have changed significantly. The FCMA average number of persons per single-family house increased from 2.77 to 2.93; the FCMA average number of persons per multiple-family dwelling unit increased from 1.89 to 2.33. (Respective vacancy rates of these dwelling unit types are included in these calculations).

In the Roosevelt Community, the 1990 Census revealed even greater differences in average household sizes. For single-family dwelling units, the average occupancy is 3.18 people per unit; for multiple-family units, there are 3.07 people per unit.

Average household sizes are major determinants for full build-out projections and for determining impacts of proposed projects on neighborhoods. The above data demonstrate that, by reducing planned densities in much of the Roosevelt Community, potential population impacts are lessened.

B. POPULATION HOLDING CAPACITY OF THE ROOSEVELT PLAN AREA

In the 1991 Roosevelt Community Plan Update, residential plan densities provide for a potential of 70,769 dwelling units (assumes eventual 90% build-out of all land planned for residential uses). This dwelling unit capacity is divided into 47,522 single-family residences and 23,247 multi-family units.

The 1991 plan Update predicts that, at full (90%) development, the area could eventually be home to some 222,370 people. ("unlimited" planning horizon, current household sizes). This estimate is based only on land use designations and does not take into account any constraints upon development, except to acknowledge that about 10% of land planned for residential uses will probably be used non-residential purposes (churches left vacant, and so on). The 1991 Roosevelt Update's potential population increase would amount to a 111-percent increase beyond 1990 population.

The "no project" alternative to the 1991 Roosevelt Community Plan Update would mean that the 1991 Update would not be adopted, leaving the 1978 Roosevelt Community Plan in place (as modified by the 1984 General Plan and subsequent plan amendments). Adoption of no-project alternative would have impacts even beyond those anticipated in 1978 and 1984, since household size for multi-family units has far exceeded earlier projections.

If all planned residential land in the plan area were 90% developed to the densities shown in the 1978 Roosevelt Plan, 82,772 dwelling units would exist (53,882 single-family and 28,890 multi-family units).

In that "no project" scenario, land use designations and population growth potential would remain as they are under the current General Plan/Roosevelt Community Plan (excepting, of course, individual plan amendment entitlements). Including the population growth which could occur in the "starred" areas, total, ultimate, "no-project" build-out for the Roosevelt area would be over 259,890 people.

Leaving the existing Community Plan in place would provide for construction of enough dwelling units to eventually increase the population of southeast Fresno by 150%. This "no project" alternative would allow for 37,525 more people in the area than the 1991 Roosevelt Update's holding capacity.

For the Roosevelt Community under the 1991 Update, the annual population growth rate is projected to be 4.5% in the absence of limiting fiscal, infrastructure, or environmental constraints. This 4.5% is close to the current yearly population increase, and represents some decrease due to density reductions in the 1991 Update.

When the holding capacity for the plan area is reached ("full build-out"), further population growth could then only be attained by increasing household size -- or by redeveloping land at higher density or adding land to the community plan area. Both of the latter would require plan amendments and related environmental analyses.

Higher density residential development (as from widespread application of State Density Bonus Law), rapid completion of the urban freeways, construction of the Fowler Trunk Sewer Line and wastewater treatment plan expansion, and urbanization of the Southeast Growth (urban reserve) Area are land use factors which could act to accelerate the plan area's population increase and eventually push population levels beyond 222,369.

Factors which could slow the community's rate of population growth are: acculturation, resulting in decreased family and household sizes; curtailed development due to limited sewer treatment capacity; limited supply or delivery capacity of acceptable-quality water; and economic conditions which could make it infeasible to develop residential and non-residential property in the Roosevelt Community. A more distant possibility is the imposition of Federal or State environmental sanctions such as building permit bans.

C. SOCIOECONOMIC CONDITIONS IN THE ROOSEVELT COMMUNITY

Socio-economic conditions in the Roosevelt Community Plan Area are reflective of the community's role as home to newcomer populations, as well as the affordability of housing in the area.

The California State University Fresno (CSUF) Valley Business Center compiles income statistics as part of its Annual Housing Report. Households were surveyed and Census Tracts' median incomes are shown below in Table EIR-5.

Table EIR-5: 1990 MEDIAN INCOME LEVELS FOR HOUSEHOLDS IN ROOSEVELT AREA CENSUS TRACTS.

CENSUS TRACT	1990 MEDIAN HOUSEHOLD IMCOME
4	$16,772
5	15,834
11	16,424
12	21,233
13	17,820
14.03	23,851
14.04	49,349
14.01	23,171
15	21,250
24	15,243
25	16,289
26	18,487
27	18,461
28	16,798
29.01	30,329
29.02	25,618
30	30,520

Data courtesy of the CSUF University Business Center 1991 Annual Housing Report, Fresno/Clovis.

These median incomes are significantly lower than the Fresno County median income of $31,900 (1989-90). Only one plan area Census Tract had a household income level above the County-wide median.

Low income combined with large family size creates situations where families may be formally determined to be in poverty. The Fresno County Social Services Department expends significant resources assisting households in Southeast Fresno. This caseload is tracked using postal zip codes. Table EIR-6 shows utilization of public assistance programs in the four zip code areas which bracket the plan area:

Table EIR-6: FRESNO COUNTY SOCIAL SERVICE PROGRAM UTILIZATION IN SOUTHEAST FRESNO ZIP CODES AND IN FRESNO COUNTY AS A WHOLE.

	SOUTHEAST FRESNO AREA (FOUR ZIP CODES)				ENTIRE COUNTY OF FRESNO	
PROGRAM	CASES (HOUSEHOLDS) IN ZIP CODE AREAS		PERSONS SERVED IN ZIP CODE AREAS		CASES (HOUSEHOLDS)	PERSONS SERVED
AFDC*	93702	5,118	93702	17,653		
	93703	2,286	93703	7,172		
	93725	2,746	93725	8,443		
	93727	1,277	93727	3,771		
		11,427		37,039	27,572	108,435
USDA Food Stamps (Aside from AFDC)	93702	1,953	93702	3,226		
	93703	734	93703	1,063		
	93725	1,099	93725	1,492		
	93727	793	93727	1,381		
		4,579		7,162	10,790	27,042
Medi-Cal (Aside from AFDC)	93702	559	93702	1,193		
	93703	178	93703	365		
	93725	218	93725	463		
	93727	188	93727	435		
		1,143		2,456	16,596	34,222

***AFDC is the abbreviation for Aid to Families with Dependent Children. It usually consists of a monthly cash grant, food stamps, and Medi-Cal.**

Social service program utilization information courtesy of Fresno County Department of Social Services. Data is current as of December, 1990.

Using the zip code-based R.H. Donnelly Marketing estimates for 1990 numbers of households and residents, it is possible to estimate that over one-third of the households in Southeast Fresno received AFDC in December of 1990, and an additional 15% received food stamps. Southeast Fresno accounted for over 40 percent of both Fresno County's entire AFDC caseload and its separate food stamp program.

Educational achievement in the Roosevelt Community Plan Area is somewhat lower than in the rest of the City or County. Table EIR-7 below summarizes 1980 Census data collected on educational background (1990 data is not yet available from the Census Bureau).

Table EIR-7: EDUCATIONAL ACHIEVEMENT LEVELS IN FRESNO COUNTY, CITY OF FRESNO, AND SIXTEEN ROOSEVELT PLAN AREA CENSUS TRACTS* (DATA FROM 1980 CENSUS)

HIGHEST LEVEL OF EDUCATION ATTAINED	PROPORTION OF POPULATION ATTAINING THAT EDUCATIONAL LEVEL		
	IN FRESNO COUNTY	IN CITY OF FRESNO	IN ROOSEVELT AREA
Less Than 8th Grade	15.3%	12.1%	17.9%
To 8th Grade Only	7.1%	6.4%	8.5%
3 yrs or Less High School	13.8%	13.6%	17.0%
High School Diploma Only	28.5%	28.9%	28.0%
3 yrs or Less College	20.0%	22.5%	17.1%
4+ Yrs or College	15.2%	16.5%	11.4%
Total High School Grads	63.7%	67.9%	56.5%

*1980 Census Tracts 4, 5, 12, 13, 14.01, 14.03, 15, 24, 25, 26, 27, 28, 29.01, 29.02, and 30. Census Tract boundaries do not all conform to plan area boundaries or City incorporation limits.

There is an unusually high number of adults in the Roosevelt Area who did not complete eight years of elementary school: of the roughly 15,000 such people found in 1980 in the City of Fresno, half lived in the Roosevelt plan area. This statistic is strongly indicative of the number of immigrants from underdeveloped countries living in Southeast Fresno. It highlights the need for English language training, adult literacy programs, and adult education for GED/diploma. Expected continuing waves of immigration will increase these needs in the future.

The large number of people who did not complete elementary school of course depresses the Roosevelt Area's proportion of high school graduates. Dropout rates are also a significant concern in this area. The two high schools which primarily serve Southeast Fresno, Roosevelt High School and McLane high School, both had 1988-89 dropout rates in excess of 30%.

However, aside from the large numbers of adults who were not able to attend school or who did not stay in their educational systems up to the high school level, a relatively large proportion of the remainder in the Roosevelt area did graduate from high school and did attend college. This is indicative of high cultural values placed on advanced education and leads to the expectation that the Roosevelt area will provide many trained and trainable workers for the future.

The 1980 Census revealed that, in the sixteen Roosevelt Area Census Tracts, about 50% of all persons aged 16 and over were employed. Forty-three percent were not in the labor force; a significant portion of these are probably retirees. About 6% were unemployed at the time that the 1980 Census was taken.

The 1980 Census also tracked which segments of the economy these workers were employed in. Again using 1980 Census tracts, Table EIR-8 below was abstracted from the data:

Table EIR-8: FRESNO-CLOVIS METROPOLITAN AREA AND ROOSEVELT AREA 1980 DISTRIBUTION OF WORKFORCE (WORKERS AGED 16 AND OVER)

TYPE OF INDUSTRY	PROPORTION OF WORKFORCE EMPLOYED IN THAT INDUSTRY	
	FRESNO-CLOVIS METROPOLITAN AREA	ROOSEVELT AREA
Services	31.7%	31.0%
Retail Trade	17.8%	15.5%
Wholesale Trade	5.7%	6.2%
Total Sales Trade	23.6%	21.7%
Durable Goods Manufacturing	6.4%	8.7%
Non-Durables Manufacturing	4.9%	6.9%
Total Manufacturing	11.3%	15.6%
Finance, Insurance, Real Estate	7.8%	4.5%
Public Administration	7.7%	9.3%
Transportation, Communications, Public Utilities	7.0%	6.2%
Construction	6.5%	5.6%
Agriculture	4.5%	6.0%

*1980 Census Tracts 4, 5, 12, 13, 14.01, 14.03, 14.04, 15, 24, 25, 26, 27, 28, 29.01, 20.02 and 30.

There is a tendency for people to live near their jobs and to find jobs near their homes. This may account for the Roosevelt area's higher levels of manufacturing and agricultural employment.

The plan area's lack of non-governmental office space and limited range of commercial centers seems to show up in workforce distribution figures as lower than average employment in finance/insurance/real estate and retail trade. Educational preparedness and language skills probably also play a role in the Roosevelt job distribution. Workers with less formal education and/or with English language difficulty find it much easier to secure jobs in manufacturing and agriculture than in information-intensive fields.

Of 21,772 workers aged 16 and over living in Roosevelt area who reported a work location on their 1980 Census forms, 70% were employed in the City of Fresno, 28% worked elsewhere in Fresno County, and 2% commuted to a work location outside of Fresno County. These figures closely match averages for the entire Fresno-Clovis Metropolitan Area, and point out the obvious potential for increased utilization of the City's mass transit system to move the workforce.

Prospects for the plan area's economy are good. Southeast Fresno is uniquely positioned to provide prospective industries with a large, trainable labor pool, highway and rail transit, marketing opportunities, attractive/affordable lifestyle for employees, and proximity to raw materials.

In addition to these intrinsic incentives, the City of Fresno, Fresno County, and the Fresno County Economic Development Corporation are actively recruiting and assisting new firms to locate in Fresno.

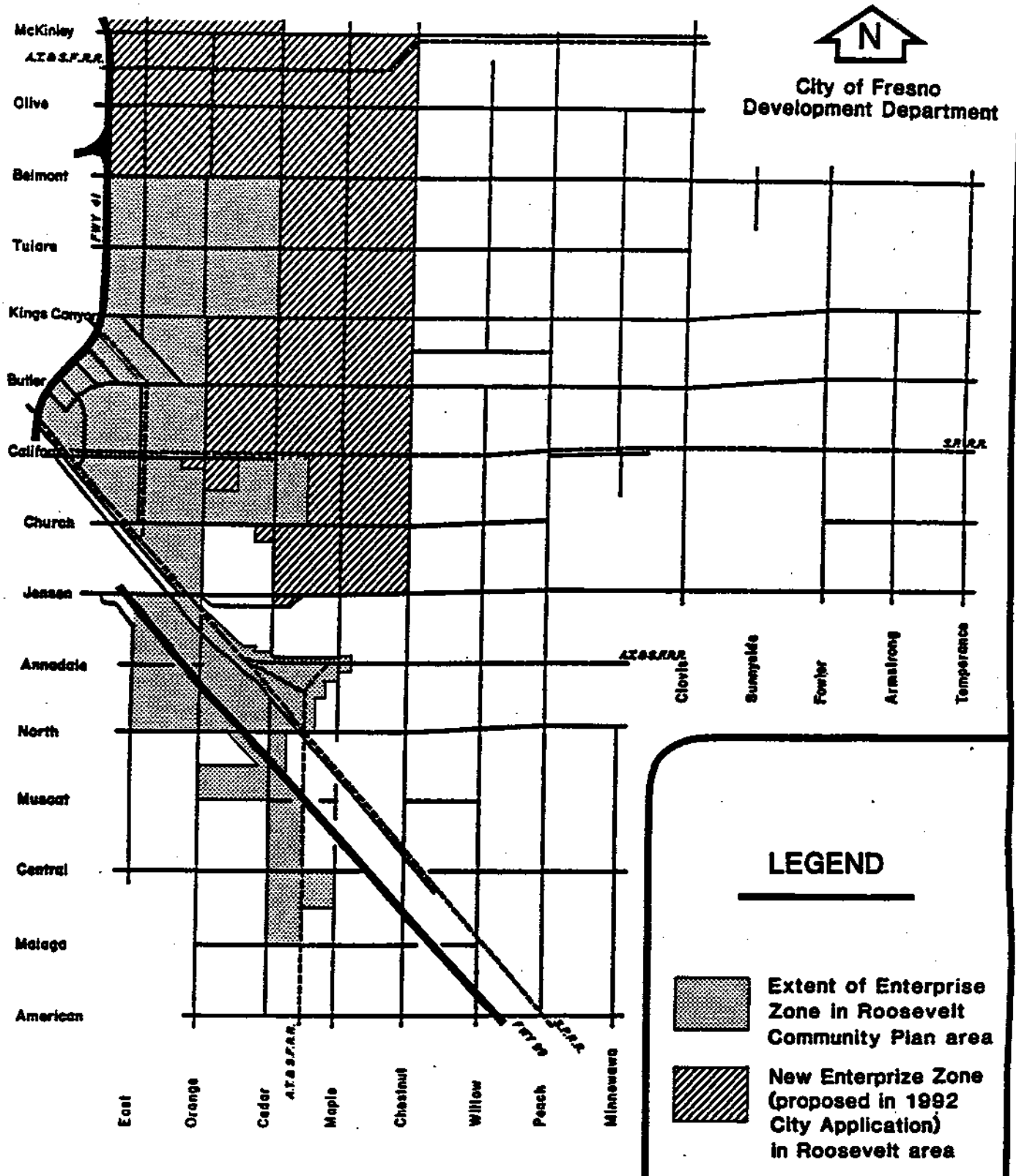
One major incentive for firms to locate in the plan area is the state-designated Enterprise Zone. These zones may be established by the State in certain defined geographical areas where specific economic distress parameters are demonstrable by Census data. The purpose of an Enterprise Zone is to create an area where state tax reductions and other incentives can encourage development of employment opportunities and stimulate private capital investment.

Figure EIR-3 shows the extent of existing Enterprise Zone territory in the plan area. (City of Fresno EIR No. 10112 was prepared in 1991 for a proposed expansion of the Enterprise Zone).

Figure EIR-3 (CORRECTED 1/14/92)

ROOSEVELT COMMUNITY PLAN UPDATE

ENTERPRISE ZONE



Within Enterprise Zones, there are State tax credits and other benefits for businesses and employees. The City of Fresno augments State benefits with local incentives. Table EIR-9 lists the incentives available:

Table EIR-9: STATE OF CALIFORNIA AND CITY OF FRESNO ENTERPRISE ZONE INCENTIVES

State:	Employer hiring credit Employee tax credit Sales tax credit Expensing up to $10,000 depreciable property Operating loss carryover Non-Taxable investment (interest income) for lenders State procurement contract preference Priority for small business loans Marketing assistance
City:	Expedited processing of plans and permits Reduction of permit and inspection fees Reduction of Industrial Development Bond (IDB) fees Encouragement of job training programs Marketing and promotion Adoption of redevelopment plans Infrastructure development assistance in the industrial area Extension of urban services, including facilitation of improvement district formation Reduction in, and targeted allocation of, City business "license" (tax) fees

The City of Fresno is seeking to create an additional Enterprise Zone. Figure EIR-3 shows the area within the Roosevelt Community which is included in the City's 1992 Enterprise Zone application to the State Department of Commerce. Once approved, Enterprise Zones remain in force for 15 years and can be extended by City Council actions (up to 15% more area can be added; these additions may be done at different times in different locations). These extensions of the Enterprise Zone can accommodate annexations of industrial land in the Roosevelt Area.

III. ENVIRONMENTAL IMPACT ANALYSIS

A. SUMMARY OF IMPACTS

1. Significance and Mitigability of Impacts

The 1991 Roosevelt Community Plan Update is a refinement of the 1984 Fresno General Plan and an update of the 1978 Roosevelt Community Plan for which environmental impact reports were prepared examining the environmental consequences of urban development.

City of Fresno EIR No. 10085 (State Clearinghouse No. 81102254), prepared for the 1984 General Plan and for the revised City of Fresno Sphere of Influence, identified environmental impacts and mitigation measures related to expanded and intensified urban development which generally remain applicable to the community plan update. These environmental issues included: a) vehicle-emitted air pollutants; b) potential hazards due to groundwater contamination; c) depletion of groundwater resources; d) conversion of agricultural Class I [prime] and Class II [statewide importance] soils to urban uses; e) consumption of nonrenewable materials for construction; g) increases in traffic generated noise; and h) agricultural and urban land use conflicts. EIR No. 10085 considered these issues in relation to the entire City of Fresno and County of Fresno, using the best data available at that time (1984).

The 1991 Roosevelt Community Plan Update has been prepared to provide more explicit guidelines and strategies for urban development in a manner responsive to updated information on population and new environmental regulations, as well as to previously identified environmental impacts and required mitigation measures.

In addition, this community plan and related EIR readdress resource constraints and community issues such as limited sewer service capacity, vehicular circulation and capacity constraints, public safety, solid waste disposal, school facilities, land use conflicts, and growth-inducing implications.

Table EIR-10-A, following, summarizes the potentially significant environmental impacts associated with adoption and implementation of the 1991 Roosevelt Update and this Environmental Impact Report.

TABLE EIR-10-A: SUMMARY OF SIGNIFICANT IMPACTS

Potential Impacts	Unavoidable	Irreversible	Short-Term Use / Long-Term Effect	Cumulative	Mitigable
Growth-Inducing Effects	*	*		*	Partially
Land Resource Impacts:					
Conversion of agricultural land	*	*	*	*	Partially
Continued shortage of park space	(*)			*	Partially
Housing - X - No significant environmental impacts identified in this analysis					
Commercial/Industrial Land - X - No significant impacts identified in this analysis					
Water Resources/Service Capacity:					
Groundwater overdraft	(*)		*	*	Fully
Groundwater contamination	(*)	(*)	*	*	Partially
Service level deficiencies	(*)			*	Fully
Air Quality:					
Increased stationary source pollution	(*)		*	*	Fully
Increased mobile source pollution	*		*	*	Partially
Increased particulate matter pollution	(*)		*	*	Partially
Historic, Archaeological, Paleontological:					
Destruction and alteration of historic and prehistoric sites	(*)	(*)	*	*	Partially
Energy:					
Increased energy consumption	*	*	*	*	Partially
Plants and Wildlife - X - No significant environmental impacts identified in this analysis					
Transportation:					
Traffic congestion and reduced street service levels	(*)			*	Partially
Increased traffic volumes	*			*	Partially
Increased mass transit service demand	(*)			*	Fully
Sewer Service:					
Over-demand for sewer capacity	(*)		*	*	Fully
Solid Waste:					
Increased volume to be transported	*			*	Partially
Utilization of landfill capacity	(*)	*	*	*	Partially
Schools:					
Continued student capacity deficiencies	*			*	Partially [1]

[CONTINUED]

TABLE EIR-10-A: SUMMARY OF SIGNIFICANT IMPACTS (continued)

Potential Impacts	Unavoidable	Irreversible	Short-Term Use / Long-Term Effect	Cumulative	Mitigable
Library:					
Continued library space deficiencies and service level reductions	*			*	Partially
Fire and Paramedic Services:					
Reduction of service level				*	Fully
Flood Control and Stormwater Drainage:					
Inadequately improved stormwater drainage facilities					Fully
Law Enforcement Services:					
Reduction of service level	*			*	Partially
Hazardous Materials:					
Increased exposures to hazardous materials					Fully
Increased utilization of hazardous material disposal/repository capacity	*	*	*	*	Partially
Noise:					
Increased exposure and increased noise levels	*	*		*	Partially

Airport Safety - X - No significant environmental impacts identified in this analysis

Seismic Safety - X - No significant environmental impacts identified in this analysis

"(*)" Denotes an impact which may occur if mitigations are not fully implemented

1/ The mitigability of this impact was amended in Planning Commission hearing (Jan. 22, 1992)

2. Long-Term Implications of the Proposed Project

a. Relationship Between Short-Term Uses and Long Term Productivity/Cumulative Impacts

Development of the Roosevelt Community will result in physical changes to the community's environment as agricultural and vacant land is Converted to urban uses. This conversion to urban use is not a short-term allocation of resources and land, rather, it is a long-term commitment to provide residential, business, educational and recreational facilities for the community's expanding population.

Although the 1991 Update in some ways facilitates continuation of short-term development trends, it recognizes the implications of southeastward growth related to cumulative and long-term reductions in the productivity of land and other resources. Implementation measures and strategies are incorporated within the 1991 Roosevelt Update and this EIR to discourage the premature commitment of land and resources to urban activities. These strategies include determination of resource capacities and management practices necessary to sustain a healthy urban community.

However, certain long-term and cumulative impacts of urban development and related human activities are inevitable. Those impacts which are of significance in the Roosevelt Community are identified as follows:

(1) Conversion of prime and statewide-significant agricultural land to urban uses.

(2) Depletion of groundwater resources and increased water quality degradation/contamination if off-setting water recharge and water quality/hazardous material management methods are not implemented.

(3) Generation of air pollution in proportion to increased population and the number of vehicles, if off-setting air quality improvement methods are not fully implemented.

(4) Increased energy consumption, including consumption of non-renewable energy sources, in proportion to increased population and attendant urban activities.

(5) Consumption of natural resources for the construction of private and public facilities.

(6) Generation of wastewater in proportion to increased population and industrial development which induces a demand for larger or improved collection systems and treatment facilities.

(7) Continued school overcrowding, given that school construction lags behind the residential development which generates students, and that development does not presently generate sufficient school construction funds to take care of all student capacity needs.

(8) Increased noise along major thoroughfares in proportion to increased vehicular traffic.

(9) Generation of additional quantities of solid waste that will require landfill capacity.

(10) Generation of additional hazardous waste that will require treatment and/or disposal.

b. Irreversible Environmental Changes

The continued development of urban uses within the Roosevelt Community would result in an irreversible loss of agricultural land. Other irreversible commitments of resources would involve the consumption of non-renewable energy resources; the use of construction materials obtained from non-renewable resources (sand, gravel, cement, metals); and the use of capacity in landfills and hazardous waste repositories. Finally, the creation of an urban community (with associated activities) results in increasing levels of pollution, noise and artificial lighting or glare which have historically been irreversible without significant regulatory, technological, or lifestyle changes.

c. Unavoidable Impacts

The 1991 Roosevelt Community Plan Update provides for continued urban development and increased urban activities which consume natural resources, require public facilities and services, and cause changes in existing physical conditions. Although mitigative measures may be implemented to reduce the consequences of urban life, the consequences cannot be entirely avoided given current fiscal and technological capabilities, social practices or legal constraints. The following list identifies those impacts considered to be unavoidable:

(1) Conversion of agricultural land.

(2) Consumption of non-renewable energy resources.

(3) Consumption of non-renewable natural resources for construction materials.

(4) Increased air pollution generated by additional mobile and stationary sources.

(5) Increased traffic volume and congestion on regional routes serving areas in addition to the Roosevelt Community.

(6) Increased traffic-generated by additional mobile and stationary sources.

(7) School capacity deficiencies.

(8) Increased light and glare from artificial lighting.

3. Growth-Inducing Impacts of the Proposed Plan

The 1991 Roosevelt Community Plan Update is intended to guide the continuation of current urban development trends over the next ten years in a manner compatible with community characteristics, resource constraints and public facility capacities. It is reasonable to expect that, if adequate resources and services are available, urban development will continue beyond this ten year planning period, ultimately resulting in the complete development of the planning areas.

Implementation of plans and policies during this ten year planning period is expected to have long-term environmental consequences which may either enhance or reduce opportunities to achieve a healthy and efficient urban community. This EIR has focused both upon the immediate impacts of current development trends and the long-term impacts of the urban growth which may be prompted by implementation of the 1991 Update.

The extent, intensity and timing of urban development and the associated growth-inducing implications will vary with economic conditions and other resource limitations and controls in the 1991 Roosevelt Community Plan Update and mitigation measures adopted in the Final EIR for the 1991 Roosevelt Update.

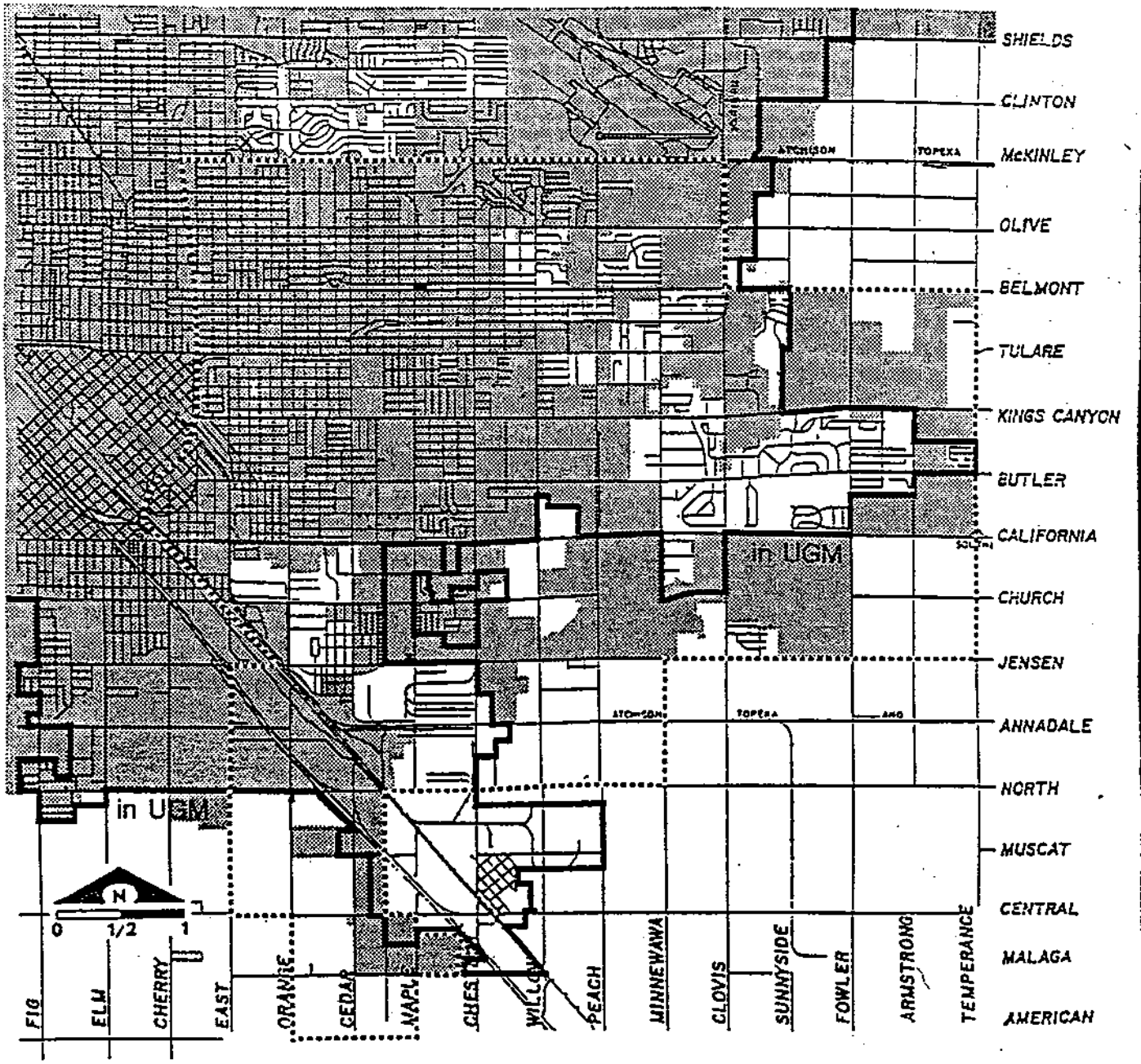
The 1991 Memorandum of Understanding between the City and County of Fresno, which sets forth policies to guide annexation of unincorporated land and development of land within the City's sphere of influence, provides urban growth regulatory mechanisms in that it reaffirms the City's lead role for planning within its sphere of influence and invokes City development standards and policies for development of this land.

Most of the Roosevelt Community's urban reserve land is included within the City of Fresno's designated Urban Growth Management (UGM) Area. Figure EIR-4-A shows this UGM area in and around southeast Fresno. The City has extensive growth control and infrastructure funding requirements for its UGM areas. Fresno Municipal Code Sections 12-4.500 et seq. (Article 4.5 of the Zoning Code) detail UGM regulations.

Figure EIR-4-A

ROOSEVELT COMMUNITY PLAN UPDATE

URBAN GROWTH MANAGEMENT AREA



City of Fresno Incorporated Area

Urban Growth Management Area Boundary

Roosevelt Community Plan Area Boundary

Implementation of the plan update with the designation of some 1500 acres of light industrial area, 3600 acres of heavy industrial, and 650 acres of retail/office commercial uses could encourage continued urban development beyond the plan boundaries. In addition to the large total area, these planned uses include highly intensive and regionally important business and employment opportunities such as two major industrial centers, a commercial intensity corridor, and federal and county governmental/medical facilities. These planned uses are intended to provide employment and services for the eventual Roosevelt Community population of 222,000, but could reasonably serve and employ additional persons.

Pressure for semi-rural and suburban residential development to the north, south, and east of the community can be anticipated. Expanded and intensified residential development in these fringe areas would exacerbate the environmental impacts associated with development of the Roosevelt Community. These effects include inadequate facilities for wastewater collection and treatment, groundwater quantity and quality degradation, traffic congestion, deteriorating air quality, noise, agricultural and grading/watershed land conversion, and further demands on public facilities and services.

Although substantial areas of residential use have already been proposed or approved for rural residential and suburban satellite communties, further development of these types should be prevented to assure the sustained viability and productivity of public facilities and resources.

4. Plan Elements Found Not to Have Significant Negative Impacts

As shown in Table EIR-10-A, analysis of the 1991 Roosevelt Plan Update did not identify any potential significant negative impacts upon housing, upon commercial and industrial land, upon plants and wildlife (EIR Chapter G) and upon airport and seismic safety (EIR Chapters R and S).

Due to a lack of consistent governing standards for evaluating impacts of electromagnetic and radiofrequency radiation, determinative impact analysis could not be attempted (Chapter T).

Environmental Impact Report No. 10085 prepared for the 1984 Fresno General Plan identified general categories of policies and implementation strategies which were not considered to have a significant environmental effect. Many policies do not involve environmental issues and do not lead directly or indirectly to significant physical changes. Those categories which apply to the 1991 Roosevelt Park Community Plan Update are identified as follows:

1. Policies supporting, encouraging or coordinating actions to the City of Fresno, other governmental agencies and the private sector to achieve objectives of common interest, including those related to planning and environmental quality in particular.

2. Providing for the establishment or continuation of adequate programs, facilities and services.

3. Creation or modification of planning and development processes.

4. Strategies to provide funding sources to implement planned facilities and improvements. Identification and utilization of non-City funding sources.

5. Recommendations for the subsequent planning or further analysis of areas, resource capacities or environmental issues.

6. Integration of environmental regulations and mitigation measures into plans, policies and development standards.

7. Policies to protect and conserve natural resources, historic buildings and sites and sensitive habitats for scarce plant and animal species.

8. Procedures which do not involve substantial physical changes.

5. Alternative Plan Concepts

This section examines alternative plan concepts in land use terms in order to compare the relative environmental consequences associated with different possible urban development and scenarios. Although a limitless number of alternative plan concepts can be conceived, those chosen for evaluation are representative of contrasting development possibilities ranging from less intense, relatively constrained to intense and relatively unconstrained (unmitigated) growth.

This Environmental Impact Report considers two major alternatives for land use in the Roosevelt Community: The 1991 Roosevelt Plan Update, as initiated by the City Council; and the "No-Project" Alternative, which leaves in place current land use designations as they were assigned in the 1978 Roosevelt Plan, modified in the 1984 General Plan, and subsequently amended by approval of specific plan amendment applications after 1984.

In general, the 1991 Roosevelt Update and proposed mitigation measures respond to changing population demographics by including mitigation measures such as: reductions in land use intensities; requirement for development to be guided by availability of resources and services; and development standards intended to enhance and preserve quality of life and valuation in the community plan area.

The "no-project" alternative would continue the more intense existing land use pattern in the community, not accompanied by (and generally less amenable to) mitigating measures which would better link growth with resource/service capacity. The "no-project" alternative (1978/84 Roosevelt Plan) does not include specific development standards designed to address problems which have arisen in the community.

A discussion of specific 1991 Update impacts and "no-project" (1978/84 Roosevelt Plan) impacts is included in each subsequent chapter of this EIR, where comparisons may be drawn. Table EIR-10-B, following, presents comparative impact data (that which can easily be reduced to numerical terms). Derivation and explanation of this data is contained in the following chapters of this EIR.

Several lesser alternatives, possible permutations of the 1991 Roosevelt Update, are also analyzed in the following chapters. These lesser alternatives present various potential locations for a regional park in the Roosevelt Community; different scenarios for residential water metering (and its impacts on water supply and sewer service); and alternative sites for a new Fresno Unified School District high school and middle school.

Specific small-scale alterations requested in the 1991 Roosevelt Update are addressed as Plan Modifications, detailed in Chapter U of this EIR.

Table EIR-10-B: COMPARISON OF POTENTIAL IMPACTS FROM COMPLETE BUILD-OUT OF PLAN ALTERNATIVES

	1991 ROOSEVELT UPDATE	1978/84 ROOSEVELT PLAN
Acreage of Agricultural Land	230	230
Acreage of Open Space Recreational Land (Parks)	440	139
Acreage for School Facilities	487	292
Acreage for Residential Uses	10,883	11,613
Total Dwelling Unit Capacity (except group qtrs.)	70,769	82,772
Multi-Family Units (% d.u. capacity)	23,247 (32.8%)	28,890 (34.9%)
Single-Family Units (% d.u. capacity)	47,552 (67.2%)	53,882 (65.1%)
Population Capacity	222,370	259,890
Housed in Multi-Family Units (% pop.)	71,300 (32.1%)	88,642 (34.1%)
Housed in Single-Family Units (% pop.)	151,070 (67.9%)	171,198 (65.9%)
Public Water Supply Required Annually		
With Single-Family Dwellings Unmetered	23.8 billion gallons (72,951 acre-feet)	27.8 billion gallons (85,320 acre-feet)
With All Single-Family Dwellings Metered	19.0 billion gallons (58,361 acre-feet)	22.2 billion gallons (68,210 acre-feet)
Annual Vehicular Air Pollution Emmissions		
Total Organic Gases	1,644.7 tons	1,658.6 tons
Nitrogen Oxides	2,820.3 tons	2,791.8 tons
Carbon Monoxide	17,483.2 tons	17,553.9 tons
Fine Particulate Matter (PM-10)	1,215.6 tons	961.1 tons
Sulfur Oxides	302.0 tons	299.4 tons
Annual Vehicular Fuel Consumed	63,890,432 gallons	63,327,014 gallons
Student Generation (total potential students)		
Kindergarten through 12th Grade ("K-12"	26,270 to 82,151	31,949 to 97 196
Preschool-aged children	16,236 to 40,785	19,205 to 48,689

[Continued]

Table EIR-10-B: COMPARISON OF IMPACTS FROM COMPLETE BUILD-OUT OF PLAN ALTERNATIVES* [Cont'd.]

	1991 ROOSEVELT UPDATE	1978/84 ROOSEVELT PLAN
Tons of Solid Waste Generated Annually	333,555	389,835
Millions of Gallons Per day of Wastewater Generated	25.57 mgd	29.89 mgd
Tons of Sewage Sludge Generated Daily	13.9	16.2

*Full build-out is projected to occur at Year 2010, if current rate of population growth holds steady in the intervening two decades, and if the City's sphere of influence does not enlarge the extent of the Roosevelt Community Plan Area.

B. LAND USE IMPACTS

Land is the major resource affected by the land use planning process. This EIR section, therefore, examines effects of the 1991 Roosevelt Community Update on this resource. Table EIR-11 (following) compares 1990 observed land use acreages with both the 1978 Roosevelt Plan (as amended by the 1984 General Plan) and the 1991 Roosevelt Update land use designations.

A basic assumption used in analysis of a land use plan is that all land develops as shown on the plan. Holding this assumption enables analysis of "full build-out," a maximum development impact scenario. Inaccuracies in this scenario will arise from subsequent deviations from plan designations and from altered background statistics (e.g., family size goes up or down).

Another constraint of the "full-build" scenario is that not all land will be developed according to the plan. Land use designations can be approved on paper, but nonconforming properties (developed before the plan) will remain on the ground until or unless the property owners redevelop that land in conformance with a new plan. Zone district designations which predate the City's Local Planning and Procedures Ordinance may be exercised until or unless the City or the property owners rezone land in conformance with the new plan. Due to owner preferences, environmental, legal, and financial situations, some property designated for urban uses will always remain vacant or in agricultural use.

Forecasting a rate of growth is even more uncertain. Historically, City of Fresno plans have underestimated population growth. This EIR has, instead, projected continuation of a high rate of population increase for the Roosevelt community. It is anticipated that urban development of vacant and agricultural land within the sphere of influence will parallel the population growth rate over the long-term.

In the short term, rapid growth is likely to follow completion of key infrastructure (e.g., the Fowler Trunk Sewer Line). Conversely, development could be severely limited by nationwide or local economic difficulties or because of insoluble environmental and service delivery problems.

For these reasons, forecasting of plan impacts is far from exact. Nonetheless, the scenario evalutated in this EIR is one of maximum impacts potentiated by complete implementation of the land use plan within its ten-year time frame.

The Roosevelt community is already experiencing impacts of its existing and historical land use designations. The 1991 Update has focused on preventing negative impacts in future development, and ameliorating negative impact trends in existing developed areas. Following are analyses of some "highlighted" land use impact issues which are now occurring and which could occur from the 1991 Update.

TABLE EIR-11

EXISTING AND PLANNED LAND USE
ACREAGES FOR THE ROOSEVELT COMMUNITY PLAN AREA

Land Use	1990 Land Use Survey	1978 Roosevelt Plan	1991 Roosevelt Update	Effect of 1991 Update
Agricultural	5,304	230	230	None
Open Space (Recreational and Multi-Use)	188	139	440	+301
Elementary Schools	93	180	200	+20
Middle Schools	41	64	153	+89
High Schools	37	48	134	+86
Other Public Facilities and Quasi-Public	549 1*	467	496	+29
Rural Residential	5,426 2*	80	100	+20
Low Density Residential		1,016	1,057	+41
Medium-Low Density Residential		1,538	3,015	+1,477
Medium Density Residential		6,919	5,089	-1,830
Medium-High Density Residential	994 2*	2,140	1,722	-418
High Density Residential	0	0	0	None
Office Commercial	28	62	195	+133

TABLE EIR-10 (Continued)

EXISTING AND PLANNED LAND USE
ACREAGES FOR THE ROOSEVELT COMMUNITY PLAN AREA

Land Use		1990 Land Use Survey	1978 Roosevelt Plan	1991 Roosevelt Update	Effect of 1991 Update
Neighborhood Commercial	3*		107	160	+53
Community Shopping Center	3*		117	236	+119
General Commercial	3*		40	63	+23
Regional Shopping Center	3*		85	0	-85
Light Industrial		571	1,019	1,497	+478
Heavy Industrial		1,581	4,702	3,594	-1,108
Vacant		2,229			

FOOTNOTES:

1* Includes County facilities, churches, private educational institutions, medical facilities, pump stations, non-park drainage basins, etc.

2* The land use survey only distinguished between single-family and multi-family uses on parcels without attempting precise analysis of lot sizes and densities.

3* The land use survey tabulated functional commercial categories: 155 acres retail commercial; 164 acres mixed use shopping center; 87 acres service commercial.

Acreages in each column do not add up to the same total due to the 1991 Update's provision for additional freeway and major street additional rights-of-way.

[corrected 7-17-91]

1. AGRICULTURAL LAND

a. Agricultural Land Resource Impacts of the Roosevelt Community Plan

It requires approximately 1,000 acres of farmland somewhere in the world to feed and clothe every person, making high-quality agricultural farmland a key land resource. The importance of agriculture in the San Joaquin Valley is well known. This area is one of the highest in productivity in the nation due to soil quality, water availability, and suitable climate. Agriculture is a dominant factor in the economy of Fresno County and contributes to the region's rural character and quality of life. Since 1950, the County has consistently ranked first in the nation for dollar value of agricultural production.

Sprawling or unregulated urban expansion is a serious threat to this natural resource and should be avoided within practical limits. The loss of prime farming soils is almost entirely irreversible once such land is converted to urban use. Farmland may often be purchased and taken out of use for possible speculative gain rather than for its continued agricultural production.

In the past, "leapfrog" development occurred in the Metropolitan Fresno Area, with urbanization allowed in the midst of agricultural uses. In some cases, this has hampered or precluded optimal crop production due to urban/agricultural conflicts such as vandalism or farm-generated dust, noise, and odors.

City of Fresno general plans and the determination process for the City's Sphere of Influence (urban boundary) have successively considered the agricultural impacts of urban growth in the City of Fresno. City of Fresno EIR No. 10085 for the 1984 General Plan last considered the overall agricultural impacts of Roosevelt Community development. Pursuant to 1978 and 1984 City of Fresno General Plans, policies have been instituted to provide a contiguous urban boundary and to conserve land: the Urban Growth Management Policy; Local Agency Formation Commission regulations and policies; and use of an "urban reserve" designation to encourage infill of existing urban areas and prevent premature development of farmland.

When the urban area (Sphere of Influence) boundary was drawn by City/County agreement, large segments of agricultural land were included in the area planned for eventual urban use. It was realized that it is better to accommodate urban growth by direct expansion of City limits and infrastructure, rather than by allowing leapfrog growth or carving new urban centers out of distant agricultural land.

City of Fresno efforts are directed toward avoiding urban sprawl and possible premature divestment of farming operations where future growth is anticipated, but development may not occur for serveral years.

The 1984 General Plan contained safeguards against premature conversion of agricultural lands by requiring that water quality and other infrastructure issues be resolved in the Roosevelt Community's urban reserve areas before development proposals could be entertained. These urban reserve areas were designated by a star on the 1984 General Plan map.

The City's Urban Growth Management and required water/sewer Findings processes provide further safeguards against premature conversion of agricultural land, by requiring that infrastructure and urban services be in place to serve proposed urban developments.

In 1978, a land use survey showed that almost 10,000 acres (45 percent) of the (then) 22,250-acre Roosevelt Community Plan Area were being used for agriculture.

A 1990 land use survey of the Roosevelt community showed 5,300 acres to be in some kind of agricultural use: 31 percent of the present 18,000-acre City of Fresno Roosevelt Community Plan Area.

During the twelve-year period from 1978 to 1990, the Roosevelt community's population increased 76 percent (it went from 59,700 to 105,200). City of Fresno policies have, therefore, been successful at preserving agricultural land and using converted agricultural land very efficiently to accommodate needed urban uses.

Figure EIR-4-B shows that approximately 3575 acres, 19 percent of the present City's Roosevelt Community Plan area, is "prime farmland:" land classified as excellent farmland capable of producing excellent crop yields. (1200 acres of the Malaga County Water District is comprised of "prime" farmland.)

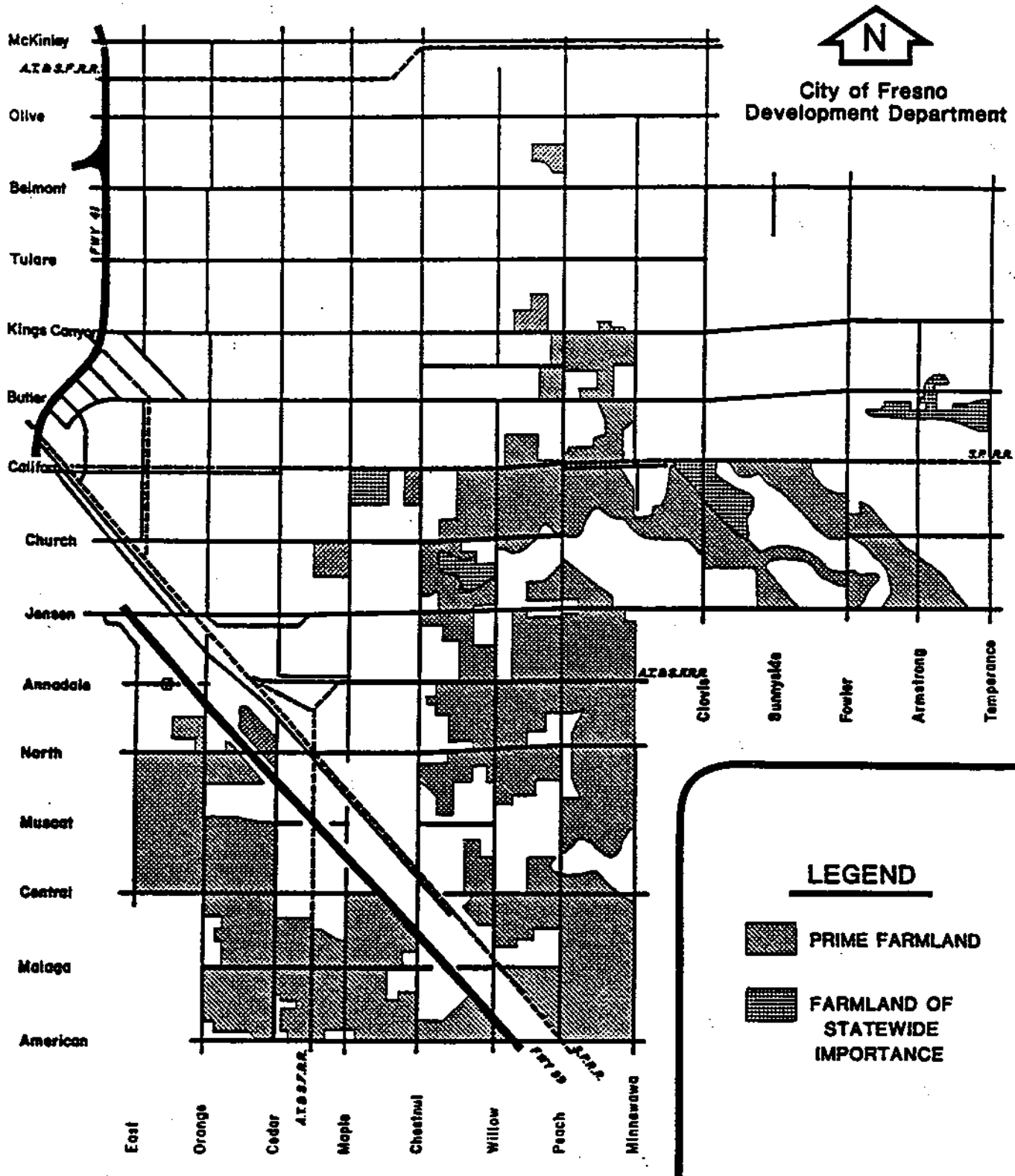
About 290 acres of the City's Roosevelt Plan Area is classified as "farmland of statewide importance," land that has a good combination of physical and chemical characteristics for producing certain types of food and feed and is available for these uses.

Much of this land is in active agricultural production. Roosevelt area agriculture is extrememly diverse, with citrus, stone fruit, nuts, olives, vines, berries, seasonal row crops, forage, and horses; there is even an eighty-cow dairy on the northeast boundary of the plan area with the last on-site glass milk bottling plant operating in the state.

Figure EIR-4-B

ROOSEVELT COMMUNITY PLAN UPDATE

PRIME FARMLAND



The Fresno County Agricultural Commissioner does not utilize a map-based Geographic Information System to track agricultural activity by parcel or by regions within Fresno County, so it is not possible to detail acreages of each type of farming. Yield information is done by self-reporting on a county-wide survey of a very small sample of people who report pesticide applications on particular crops; this information is also not keyed to parcels, regions of the County, nor soil types and so cannot be specifically applied to the Roosevelt Community.

Population pressure has increased in the Roosevelt community, water treatment facilities are being installed, and Fowler Trunk Sewer Line construction is underway. Under these conditions, the "star" can be removed from Roosevelt's urban reserve. (The UGM process and other growth control mechanisms will remain.)

The 1991 Draft Plan Update reduces urban densities and provides more open space designations in the urban reserve area, but still would convert agricultural land. The Draft Update's land use scheme is changing the plan designation on only eleven acres of planned agricultural use to a planned urban use (a drainage facility, which is considered an urban public facility under present land use classifications--even if the drainage facility is leased back for some conjunctive agricultural use).

The 1991 Plan Update focuses on the growth potential of the Roosevelt community and the possibility that most or all of its remaining agricultural property will be moved out of reserve and developed for urban uses. In anticipation of these trends, many farms have already been taken out of active production, with permanent crops removed and agricultural preservation contracts allowed to expire. However, not all land will be urbanized simultaneously, and it is the policy of the City of the Fresno to encourage maintenance of agricultural productivity until land is utilized for urban development.

Full development of the Roosevelt community would convert the remaining 5,070 acres of agriculture to other uses. However, by sparing agricultural land outside the sphere of influence, and by keeping down the number and length of vehicle trips generated by new urban growth, the conversion of this proximal farmland accommodates population growth in a more beneficial manner.

Under National Environmental Policy Act procedures, urban development of even prime agricultural land is not considered to be a significant impact on agriculture when that farmland was already in a designated urban area, planned for urban land uses. However, the State Resources Agency does consider loss (conversion) of agricultural land to be a significant impact under CEQA.

Management of the agriculture-urban interface is important for preventing potential nuisances and for actual implementation of the California Civil Code's "Right to Farm" provisions (Civil Code Section 3482.5).

The primary means of managing this interface is the prevention of premature urbanization of farming areas. Design and development standards for urban projects can also be utilized so that normal farming activities are less disturbing to urban neighbors. Real estate disclosure is important for informing potential buyers of the neighborhood conditions. Agricultural operations also need to be as cooperative as possible, preventing and controlling potential health and safety impacts--because zoning case law has established the principle that planned land uses are legitimate uses, and a neighboring pre-existing use may not cause health and safety problems simply by virtue of being there first.

Most interface buffering policies rely on simple distance and physical barriers (structures or vegetation) to separate agricultural and residential uses. Distance and barriers provide for attenuation and dissipation of noise, glaring lights, dust, pesticide overspray, insects, and odors. Distance and barriers also reduce or block visibility, helping to preserve the privacy of homeowners and agribusiness.

Another opportunity to retard the premature converstion of farmland is provided through the California Land Conservation Act (Williamson Act). Fresno County Public Works and Development Services Department (Development Services Division) administers this program. Owners of agricultural land within designated agricultural preserve areas may enter into contracts to obtain preferential tax assessments on the land if the owner agrees to hold the land in agricultural use for not less than 10 years. The contract is automatically renewed each year, unless terminated by request of the landowner by the filing of a Notice of Nonrenewal. The Landowner must then wait the succeeding ten years to convert the land to another use.

Under very limited circumstances, at generally considerable cost to the landowner, and only after a public hearing where the appropriate findings are made (as required by California Government Code Sections 51282 and 51284), agricultural land conservation contracts may be cancelled before the scheduled expiration date.

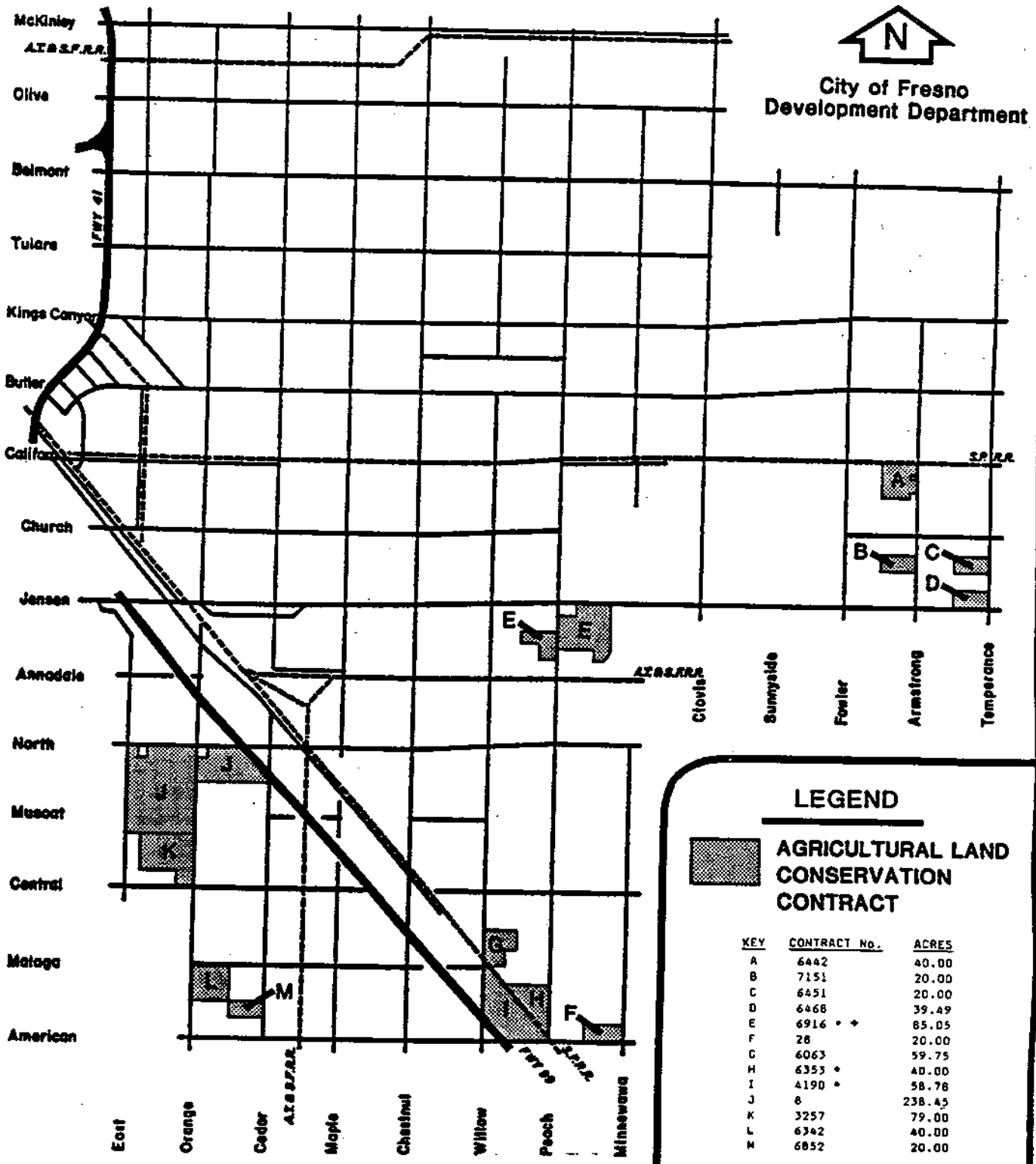
From a planning perspective, the Williamson Act functions most beneficially as a "fringe policy," controlling growth-inducing effects just outside of established urban area boundaries and preventing unplanned urban growth in agricultural areas.

Approximately 180 acres in the Malaga County Water District sphere of influence is under four agricultural land conservation contracts. Requests for nonrenewal have been filed on contract Nos. 4190 and 6353 (58.78 and 40 acres), which will expire, respectively, in year 2000 and in 1995.

Figure EIR-5

ROOSEVELT COMMUNITY PLAN UPDATE

AGRICULTURAL LAND CONSERVATION CONTRACTS



KEY	CONTRACT No.	ACRES
A	6442	40.00
B	7151	20.00
C	6451	20.00
D	6468	39.49
E	6916 * +	85.05
F	28	20.00
G	6063	59.75
H	6353 *	40.00
I	4190 *	58.78
J	8	238.45
K	3257	79.00
L	6342	40.00
M	6852	20.00

*denotes agricultural land conservation contracts for which a non-renewal request has been filed

+ denotes partial nonrenewal

Fresno County has over 7,000 total Williamson Act agricultural land conservation contracts, encompassing over 1.6 million total acres. Approximately 330 acres of the City of Fresno Roosevelt Community Plan area is currently under agricultural land conservation contract (Figure EIR -5). To date, only one request for nonrenewal has been received in the City's Roosevelt area, affecting 33.59 acres of Contract No. 6916 (85.05 acres total in contract). This partial expiration will be effective in 1998.

b. Mitigation Measures

(1) The Development Department shall continue implementation of urban growth management (UGM) policies, water/sewer Findings, and property development standards which discourage the premature development of land.

(2) Agricultural/urban reserve areas shall only be converted to urban uses in accordance with growth and public facility policies of the 1991 Roosevelt Update. Agricultural land conservation policies of the 1991 Update shall be implemented by the Development Department (Policy Nos. 1-20.3 and 1-20.4).

(3) The Development Department shall utilize major streets, where possible, as boundaries between areas designated for urban development and agriculture. When land proposed for urban development directly abuts actively farmed land that is in an agricultural preservation contract, the development project shall include design features which buffer the agricultural/urban interface: densely landscaped strips, designated open space (including but not limited to: full-width multi-use trails or bikeways, boundary streets, on-site flood control facilities, and/or building setbacks with fencing).

2. PARKS, RECREATIONAL FACILITIES, AND OPEN SPACE LAND

a. Status of the Roosevelt Community

The Roosevelt community is served by the Calwa Recreation and Park District and the Fresno City Parks, Recreation, and Community Services Department (Parks Division) which manage and maintain parks and open space areas, operate organized recreation programs, and provide other cultural, leisure and community service activities.

Other community recreational needs in the Roosevelt Area are served by the East Fresno Boys Club; the Mosqueda Community Center; eight designated school play fields; trails, paths and equestrian bridle paths (some improved and some improvised); quasi-public golf courses at Sunnyside Country Club, the Village Green planned unit development, and Hank's Par Three; and the Fresno Fairgrounds which hosts the annual Big Fresno Fair and a year-round variety of special events open to the public.

The City of Fresno's 1989 Master Plan for Parks and Recreation uses the following heirachy to classify park and recreational facilities:

- **Mini-Parks**/"Pocket Parks": small, specialized facilities focusing on the needs of the immediate neighborhood. Mini-parks are used when larger park development is not possible. Because size is so limited, only a narrow range of recreational needs can be accommodated. They are also costly and less efficient to manage within a park system. The Roosevelt community does not presently contain any City-owned or operated mini-parks.

- **Neighborhood parks** are generally five to ten acres in size, are often developed adjacent to schools, and usually include landscaping, playfields, several lighted tennis or multipurpose courts, and restroom/equipment storage buildings. There are four neighborhood parks in the Roosevelt community: Carozza park, Holmes Playground, Romain Playground, and Yosemite Middle School (30.73 acres, total). The City has purchased a five-acre site near Butler and Villa Avenues for a future park site. At present, no sites have been purchased in the Roosevelt community using Urban Growth Management (UGM) funds.

- **Community parks** are generally 10 to 20 acres in size and, in addition to neighborhood park facilities, are intended to include a gymnasium and multipurpose buildings. Calwa Park (not owned or operated by the City of Fresno) is listed as a "special use" in the 1989 Master Parks document, but this 20-acre facility performs functions analogous to the "Community Park" category.

- **Regional parks** are substantially larger and have large picnic or special facilities which attract visitors from throughout the metropolitan area. The Roosevelt community has no regional park; Roeding Park is presently the closest regional park facility to serve Roosevelt's population.

The 1989 Master Plan for Parks and Recreation set target ratios for park acreage to population. Existing park space was evaluated for its conformity with these standard ratios.

The 1989 Master Plan for Parks and Recreation apparently underestimated Roosevelt community population at 69,500, thus overestimating the existing ratio of park space to population. Table EIR-12, following, compares the 1990 existing ratios of population to park space with the adopted standard (optimal) ratios.

As Table EIR-12 shows, the Roosevelt community is at a severe deficit for Neighborhood and Regional park space. Its community park needs are not being satisfied by the City of Fresno Parks Division.

The Urban Growth Management (UGM) process requires the payment of a park fee at the time property develops in a UGM area, in order to provide for the acquisition and partial improvement of neighborhood parks.

The UGM fees, however, are not assessed for development of community or regional park facilities. These facilities have been established in the past through general fund allocations, state or federal bond and grant funds, and private donations. The 1989 Parks and Recreation Master Plan suggests that local bond measures and special district programs be pursued to finance community park improvements as well as regional park facilities.

In addition to unfunded park improvement needs throughout the metropolitan area, the Parks Division has had to reduce the level of maintenance provided to parks and other public landscaped areas due to budget constraints. The City has expressed a reluctance to construct new parks if reliable maintenance funding cannot be anticipated.

City-wide special district funding for maintenance of public landscaping and other open space areas has been preliminarily considered by the City Council. Fees have also been instituted for admission and for picnic table reservations at the City's two existing regional parks (Roeding and Woodward).

b. <u>Impacts of the Roosevelt Community Plan</u>

Increasing population and urban development in the Roosevelt Area will create a requirement for additional open space to supply residents' recreational, exercise, and psychological needs. Existing park and recreational facilities will be subject to more intensive use. Overcrowding at these sites could induce many of the problems which the facilities were intended to alleviate or prevent.

Table EIR-12: EXISTING (1990) ROOSEVELT COMMUNITY PARK ACREAGE, AS COMPARED TO PARK SPACE REQUIREMENTS SET FORTH IN THE CITY OF FRESNO 1989 MASTER PLAN FOR PARKS

CATEGORY OF PARK	ACRES OF EXISTING PARK SPACE	EXISTING RATIO OF PARK SPACE TO POPULATION	MASTER PLAN STANDARD SET FOR RATIO OF PARK SPACE TO POPULATION	FOR 1990, STANDARD PARK SPACE REQUIREMENT
NEIGHBORHOOD	35.73 *	.34 Acres/1,000	.75 Acres/1,000	79 Acres
COMMUNITY	30.00**	.28 Acres/1,000	.25 Acres/1,000	26 Acres
REGIONAL	0	0 Acres/1,000	2.0 Acres/1,000	210 Acres

* The five acres acquired and designated for a neighborhood park at Butler & Villa have been included in this figure.

** Calwa Park, which is not part of the City of Fresno Parks Division, and the two Roosevelt area community/recreational centers comprise the total shown for community parks. However, these facilities are not, technically, community parks; if their acreage were deleted from this total, there would be no community park acreage in the Roosevelt Community Plan Area.

To the extent that the 1991 Roosevelt Update reduces planned densities and potential (full build-out) population, overcrowding and park space shortfalls would be less severe than under the no-project alternative (1978/84 Roosevelt Plan). The 1991 Update also proposes to implement the open space acreage standards proposed by the 1989 Master Plan for Parks and Recreation. These standards would provide a total 3.0 acres per 1,000 people, consisting of: .75 acre/1,000 for neighborhood parks, .25 acre/1,000 for community parks, and 2.0 acres/1,000 for regional parks.

At eventual full build-out under the 1991 Plan Update, almost 700 acres of designated park and recreational space would be required to conform with the 1989 Master Plan for Parks: approximately 170 acres of Neighborhood Parks; approximately 56 acres of Community Parks and Community/Recreational Centers; and some 440 acres of Regional Park.

Table EIR-13 below lists the proposed parks and school playfields designated in the 1991 Roosevelt Update and in the 1989 Master Plan for Parks and Recreation. (The Roosevelt community is comprised of Park Planning Areas 10, 11, and 12.)

Table EIR-13: NEW PARK AND SCHOOL PLAYFIELDS PROPOSED FOR THE ROOSEVELT COMMUNITY

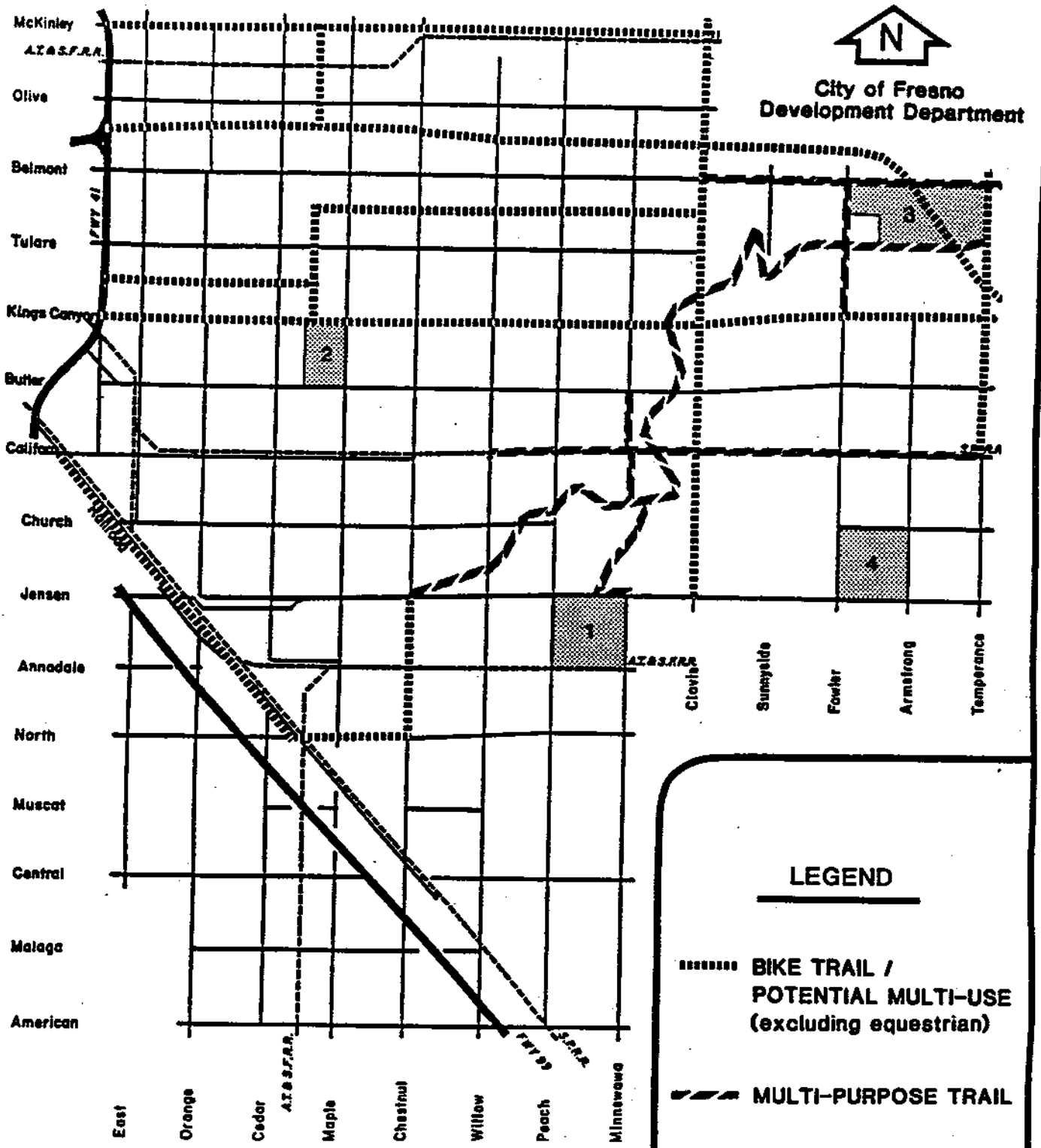
Name	Type	Acres
Regional Park	Regional	160/320
Mosqueda	Community	10.0
Tulare/Fowler	Community	20.0
Butler/Villa	Neighborhood	5.0
Cedar/Belmont	Neighborhood	5.0
Church/Fowler	Neighborhood	7.5
Church/Willow	Neighborhood	7.5
Minnewawa/Belmont	Neighborhood	7.5
Kings Canyon/Willow	Neighborhood	5.0
Jackson Elementary School	Playfield	----
Lane Elementary School	Playfield	----
Mayfair Elementary School	Playfield	----
Rowell Elementary School	Playfield	----
Washington Elementary Sch	Playfield	----

The 1991 Update supports creation of a 320-acre Regional Park at the southeastern portion of the Roosevelt community, and formally designates a preferred initial 160-acre portion bound by Jensen, Minnewawa, Annadale, and Peach Avenues. While this quarter-section of land is over 250 acres short of the ultimate regional park space objective for the Roosevelt community, it is hoped that the site could be expanded in the 1994 General Plan Update process. Figure EIR-6 shows alternate regional park sites, in relation to bicycle and multi-purpose trails:

Figure EIR-6

ROOSEVELT COMMUNITY PLAN UPDATE

TRAILS AND REGIONAL PARK SITE ALTERNATIVES



- **Alternative Site No. 1** consists of 160 acres and is located on prime agricultural land. Much of this land is included in Agricultural Land Conservation Contract No. 6916, 14.91 acres of which is due to expire in 1998 (request for non-renewal received). This land is currently designated for industrial use, but is the farthest industrial land from freeway access. This site abuts a section of the designated multi-purpose trail network. It is bounded on the south by a rail line and on the east by an unclassified (non-major) street; the Jensen Avenue expressway comprises its northern boundary, and the Peach Avenue arterial street is on its west. Site No. 1 is traversed by the Washington Canal and includes a proposed stormwater drainage basin, making the site generally suitable for inclusion of water features such as lakes or ponds (with the potential for conjunctive groundwater recharge). However, the northeastern edge of Site No. 1, and potential expansion area eastward across the Minnewawa alignment, contains the Demirjian property, listed in Appendix A as a potential hazardous waste site. Requested Plan Modification No. 12, analyzed in Chapter U of this EIR, discusses the comparative impacts of using this site for regional parkland versus for heavy industrial development.

- **Alternative Site No. 2** is the Fresno County Fairgrounds, an intensively developed public facility with 90 acres of large structures, stables, race track, and parking areas. The infield area of the track is a designated flood control basin; however, there is no connection between this ponding basin and an irrigation channel to provide surface water delivery for water features (this site is the only alternative not in the Fresno Irrigation District, and so has no surface water rights). Site No. 2 is entirely surrounded by intensely developed urban uses and public facilities, leaving no feasible means of expanding the site to provide additional required acreage to serve regional park needs. Full development of regional park facilities would require removal of many existing fairgrounds uses and structures, as well as revegetation of the cleared and paved site.

- **Alternative Site No. 3** consists of some 280 acres of non-prime agricultural land. This site is traversed by Fancher Creek and the Briggs Canal, making water features feasible. Most of this site is in Airport Safety Zone IV, and some of the site is in Airport Safety Zone III. A small portion (the northwest corner) is in the Federal Aviation Regulations Part 77 horizontal surface. Over half of the site would be exposed to airport noise levels of 60 to 65 dB CNEL. Presently, the site hosts a variety of uses: agriculture, rural residential, commercial (veterinary clinic; nursery and gardening supplies), church, equipment, storage yard, flood control ponding basin, and a quasi-public horticultural demonstration site (the Duncan Water Gardens). In the 1991 Plan Update, this alternative park site is designated for agriculture, public facility (ponding basin), and rural residential (only 19 acres). Freeway 180 is proposed to bisect this site on a diagonal from northwest to southeast. As currently proposed by Cal-Trans, this portion of Freeway 180 would be constructed at-grade. Designated bike trails and multi-use trails surround and traverse this site. Full development of regional park facilities here would require removal of a few homes and an equipment storage yard, and conversion or removal of the commercial and church structures. About 160 acres of non-prime cropland would also be converted for park use.

Any future expansion of this 280-acre site would involve crossing or expanding the City's Sphere of Influence boundary on the north and east, or would encroach on institutional, residential, and/or historic property to the south and west.

- **Alternative Site No. 4** consists of 160 acres, three-quarters of which is prime agricultural land (20 acres is under an agricultural land conservation contract). In the 1991 Plan Update, this site is proposed to have 40 acres of medium-density residential use and 110 acres of medium-low density residential (potentially totalling over 700 single-family homes); there are also some 11 acres designated for public facilities (park/ponding basin, water well site). This site is bounded on the south by the Jensen Avenue expressway and on the west by an arterial (Fowler Avenue). No FID irrigation canals pass through or near this site, making water features infeasible. This site is not on a designated bike trail and is not near a section of the multi-purpose trailway. Future expansion of this site would be problematic. Expansion to the north or east would require crossing a collector street and converting more land planned for housing. Additional prime agricultural land would be converted for park use, and other agricultural land conservation contracts could be affected. More planned housing acreage would be lost. A designated high school site on the east side of Armstrong could also be affected.

The Community Plan provides for the establishment of a network of public open space and landscaped areas including major street buffers, median islands, pedestrian/bikeway and equestrian trails. These landscape area facilities may necessitate public maintenance in those instances when the property owner does not have direct access to the landscaped area, or when maintenance by individual property owners would be detrimental to the integrity of the landscaped area.

The 1991 Plan Update proposes that open space needs be partially met at residential developments by on-site usable open space for active and passive recreation. Such facilities would serve to fill the same function as "mini-parks," allowing small and easily supervised play areas to serve adjacent housing units.

Planned park sites, together with the designated elementary schools and open space bike path/multipurpose trails, are intended to provide adequate opportunities for neighborhood open space and recreation facilities. Underestimation of Roosevelt area population in the 1989 Master Plan for Parks has led to some deficiencies in new park site designations. These deficiencies can be remediated through use of additional school playfields, additional drainage facilities, the potential acquisition of land from the California Department of Transportation, possible conversion of part of the Fresno Fairgrounds, and increased UGM park site designations when the Master Plan for Parks and Recreation is updated.

Upon development, park sites will attract vehicle traffic and accommodate recreational activities which could be considered nuisances by adjoining properties. Implementation of multipurpose pedestrian/bikeway paths, equestrian trails, and vista points will allow public access which could cause conflicts with nearby properties.

The "no project alternative" (the 1978 Roosevelt Community Plan) predated the 1989 Master Parks document, and had proposed only two new park sites (one in the Malaga County Water District area). This alternative's would not be in conformance with the goals and policies of the City's 1989 Master Plan for Parks and Recreation.

c. Mitigation Measures

(1) The Development Department and the Parks, Recreation, and Community Services Department shall jointly update the Master Plan for Parks and Recreation after the preliminary results of the next decennial census have been made available.

(2) The Development Department shall amend and utilize the Fresno Municipal Code (Zoning Ordinance) as necessary to implement the City's Master Multipurpose Trails Manual by classifying multipurpose trail elements as permitted uses in all zone districts that trails may intersect.

(3) The Development Department shall implement 1991 Roosevelt Plan Update policies for usable on-site open space at residential developments and for open space conservation (Policies 1-7.3.a; 1-15.1 through 1-15.11; 1-16.1 through 1-16.6; 1-17.1 through 1-17.5; and 1-18.1 through 1-18.5).

(4) The Development Department shall continue implementation of the UGM process, which requires payment of fees upon development of property in order to provide neighborhood park facilities in a timely manner. The City Parks Division shall commit to developing a neighborhood park within two years of the time that 95 percent of the UGM service area funds are collected for that park.

3. HOUSING

a. Housing Status in the Roosevelt Area and Impacts of the Proposed 1991 Roosevelt Update

The 1978 Roosevelt Community Plan set aside 11,693 acres for residential uses. At the time this plan was modified by the 1984 General Plan, it was assumed that, at full build-out, the Roosevelt community's residential land would have accommodated 82,772 dwelling units: 23,970 multi-family units (housing 45,300 people (35 percent of the population), and 42,360 single-family residences housing another 129,260 people.

Under 1978/1984 planning assumptions (1.89 persons per multi-family unit and 2.77 persons per single-family unit; 80% of residential land is put to residential use) the "human density" of planned residential land would have averaged 14.93 people per acre. The 1984 General Plan predicted that the population growth rate for Roosevelt would be less than one percent per year, and only about 50 percent of the population holding capacity would be achieved by the year 2005.

Implementation and development of residential land under the 1978/1984 Roosevelt Plan did not proceed as anticipated.

By 1990, two-thirds of the Roosevelt area's planned residential acreage had been developed (not all of it up to its maximum potential density). Due to the increasing cost of development and to infrastructure distribution, a higher proportion (90%) of land designated for residential uses actually was being built as housing (rather than 20% of this land being involved in nonresidential uses as had been assumed in 1984).

Family dynamics also underwent drastic change. By 1990, there were 13,415 multi-family housing units, with an average of 3.07 people per multi-family unit (housing 37,900 people, 36 percent of the 1990 population); and 18,818 single-family units, with an average of 3.18 persons per single-family unit (housing 63,610 people). The population growth rate was climbing toward 5 percent per year, with the fastest trend being increasing household size for multi-family dwelling units.

If the Plan area were allowed to continue building out under the 1978/1984 land use designations, with current household sizes, there would be 88,240 people in multi-family units (34 percent of the population), 255,490 people overall, and a "human density" of 21.9 people per residential acre. The Roosevelt community would reach its 1984-estimated total holding capacity by the latter part of this decade.

Under the 1991 Update, land use is designed to be more efficient and to serve a wider range of human needs. The 1991 Update (as compared to the '78 Roosevelt Plan) houses roughly the same proportion of people in multi-family units, reduces the intensity of infrastructure burdens in new development areas, and provides policies and redevelopment goals for upgrading and preserving existing residential areas.

The 1991 Plan Update not only deals with growth management for the urban reserve area; it also realigns residential land use designations to balance population distribution and to adjust for household size trends, in an attempt to ameliorate effects of past growth and development patterns.

The 1991 Update designates a total of 10,900 acres for residential use. (Some formerly residential-designated acres have been planned for recreational open space, schools, and other necessary public facilities to serve surrounding residential growth).

At full build-out of the 1991 Draft Update's land use designations, the 1991 Update proposes 23,247 multi-family units (which, with 1990 household sizes, would shelter 71,370 people--33 percent of the population). The 1991 Update would reduce the potential number of multi-family dwelling units in the Roosevelt area by 721 (as compared with the intent of the '78 plan).

Over 80 percent of this reduction will occur in the existing urbanized area. Primarily, the effect will be to prevent additional multi-family construction in single-family neighborhoods that had formerly been targeted for conversion to higher-density residential use under the 1978 Plan.

Over 1600 nonconforming, small, R-2 through R-4 (multi-family) zoned parcels, comprising almost 350 acres of land, would be located in the urbanized areas proposed, for medium and medium-low density (single-family) residential designations in the 1991 Plan Update. Currently, 1640 such parcels are developed with single-family uses, or are vacant. They are, therefore, candidates for a rezoning program. To the extent that their zoning may predate adoption of the City's Local Planning and Procedures Ordinance, these R-2 through R-4 zoned parcels could be developed for multi-family residential use until or unless rezoning of these parcels occurs. Small sizes and discontinuous locations of these parcels, combined with Roosevelt Update policies which advocate for limiting the number of multi-family dwelling units on smaller parcels, may limit exercise of nonconforming multi-family zoning to yield more duplexes and triplexes, and fewer "complexes," on these parcels which obtained multi-family zoning before the adoption of the City's Local Planning and Procedures Ordinance.

In neighborhoods where planned residential density is being reduced, there are also pre-existing higher-density multi-family residential developments whose zoning is not proposed to be changed. These properties would continue in multi-family use, but could not be rezoned to further intensify multi-family construction. Other potential sources of multi-family housing are the State Density Bonus Law (discussed on p. 64) and density transfer. Density transfers are feasible in larger residential developments, where units may be more clustered in some portions and more dispersed in other portions of a development.

The 1991 Update provides for 44,810 new single-family residences (housing 142,490 people, according to 1990 household population sizes). This is 2,450 more single-family residences than were envisioned under the 1978 plan. The increase is partly due to a revised planning assumption: 90 percent, not 80 percent, of land that is planned for residential uses will actually become housing. The 1991 Roosevelt Update encourages this efficient land use by designating other land to serve residential needs (schools, parks), and by implementing City infill and agricultural land conservation policies.

In the former urban reserve area, about 2,000 acres has been "down-densified" by the 1991 Update, from medium to medium-low residential use. This will ease the burden of supplying water in the southeastern urban fringe, which has been heavily impacted by DBCP contamination (see EIR Sections III.C 1. and 3). At medium-low density, water consumption of residents can be balanced by water rights acquired through development of land in the Fresno Irrigation District.

In the former urban reserve area, a greater diversity of overall land uses is proposed (compared to the 1978 plan's homogenous "medium density residential" plan for the starred area). A net 375 acres will be converted from potential single-family housing to other uses.

Overall, the 1991 Plan Update projects a potential "human density" of 19.6 people per residential acre, comparable to the "no project alternative" (build-out of the 1978 plan). This concentration of people will facilitate cost-effective extension of mass transit routes into residential areas.

In 1990, the State legislature passed a new Density Bonus Law (California Government Code Section 65915). This planning law mandates that local governments give developers a "bonus" of at least 25 percent more dwelling units per acre (over and above the project's planned density) if the developer agrees that:

- Twenty percent of the project's units will be used for lower-income households; or
- Ten percent of the project's units will be used for very low-income households; or
- Fifty percent of the units will be used for senior citizens.

A local government is also required to provide at least one additional incentive to the developer, or "(a) financially equivalent incentive(s)."

A full and detailed environmental analysis of potential impacts of applying density bonuses is beyond the scope of this EIR. However, it can generally be stated that implementation of the density bonus law, with the general socioeconomic background of the Roosevelt Community Plan Area, could lead to higher residential densities than are proposed in the 1991 Plan Update.

The City of Fresno's General Plan Housing Element is presently being updated. A housing quality survey conducted in 1990-91 revealed that some 10 percent of the residential structures in the overall Roosevelt community appeared to be "substandard:" six percent in need of minor rehabilitation, one percent needing major rehabilitation, and one percent not salvageable (demolition quality). This means that the Roosevelt community has a valuable resource: a large inventory (90 percent) of existing housing units are rated as good-quality.

However, some areas of blighted housing were revealed within the Roosevelt Community Plan Area. Sanitation and Zoning Ordinance violations were also tabulated, and about 2,300 sanitation/zoning nuisances were spotted by cursory survey (almost a quarter of all such violations found in the City of Fresno). Without efforts to maintain quality residential areas, these problems could expand.

The 1991 Roosevelt Update proposes enhanced preservation and enforcement activities, and provides a means of funding these activities. Due to budgetary constraints, code enforcement and preservation activity could not proactively address problems (or even fully handle the volume of complaints reported). Therefore, the funding mechanisms proposed in the 1991 Plan Update will be needed to ensure that planning, zoning, and sanitation standards are maintained in southeast Fresno.

b. Mitigation Measures

While no significant negative housing impacts have been identified in this analysis, the following measures are included to address area concerns:

(1) The Development Department and the Housing and Community Development Department shall implement housing preservation and residential development policies as outlined in the 1991 Roosevelt Community Plan Update (Policy Nos. 3-1.1 through 3-1.13; 3-2.1 through 3-2.7; 1-6.1 through 1-6.12; and 1-7.1 through 1-7.5) and the Housing Element of the City of Fresno General Plan.

(2) In conformance with State Planning Law, the Development Department shall review the City's Density Bonus Ordinance. Any proposed Density Bonus Ordinance revisions shall be subject to detailed environmental review that assesses impacts on infrastructure, services, and resources in the Roosevelt community and on larger planning consideration areas.

4. COMMERCIAL AND INDUSTRIAL LAND

a. Status of the Roosevelt Community Plan and Impacts of the Proposed 1991 Roosevelt Update

The 1978 Roosevelt Community Plan showed an aggregate 5,900 acres of land for commercial and industrial uses in the (present) City of Fresno's Roosevelt Community Plan Area.

Fresno County's Roosevelt Plan includes the Malaga Sphere of Influence, predominantly designated for industrial uses. This land in Malaga has been deleted from the City of Fresno's Sphere of Influence and planning area.

Despite the large population capacity envisioned for southeast Fresno, the 1978 Plan only allocated 411 acres for all commercial uses. Only 60 acres were designated for commercial offices, and the other 349 acres were allocated for various types of commercial retail and services.

Perhaps because of the paucity of land originally set aside for office commercial, only 28 acres of non-governmental office commercial uses have been developed over the life of the 1978 Roosevelt Plan. This has forced southeast Fresno residents to leave the community to meet many of their business and medical needs. It has also had a dampening effect on the economic development of the Roosevelt community: fewer residents employed in the business, financial, professional, and real eastate sales segments of the economy.

The 1991 Plan Update attempts to strengthen the City's General Plan concept of multiple community centers within the City. The update increases the amount of land needed to provide adequate and balanced commercial goods and services, and provides development controls and safeguards against continued overbuilding of commercial space.

Because additional office commercial space is needed to both serve and to employ local residents, the 1991 Plan Update designates 195 acres for office commercial uses. This land use typically uses very little water, generates easily-sorted solid waste, and produces relatively little wastewater. Its major potential impacts arise from work force commuting; but these impacts are mitigable by using transportation control measures (see EIR Chapter D and Appendix C).

The built-out proportion of retail and service commercial acreages was relatively high: the 1978 Plan designated a potential 349 acres of neighborhood, community, general, and regional commercial development, of which 206 acres built out. (Another 200 acres of commercial uses were developed on non-commercially planned land). However, several large commercial facilities have lost major tenants, leading to underutilization and deterioration of this space.

In the 1991 Update, total acreage planned for retail and service commercial uses is increased by about one-third. The intent is to allow sufficient amount and diversity of goods and services to serve the residents of the Roosevelt community. Re-designating Regional commercial land to Community commercial does not impair the goal of providing a broad array of merchandise for the community. However, it does provide an element of oversight and development control through the application of plan policies.

Development proposals for Community commercial center land must provide a detailed site/development plan for the entire property, helping to assure that the center functions as an integrated whole. Prevention of overbuilding, reduction of traffic impacts, and consideration for adjacent residential neighborhoods are other reasons which support redesignating regional commercal areas as Community commercial.

The major impacts of increasing commercial acreage involve potential additional traffic and air pollution. Commercial facilities have smaller work force to customer ratios than do office facilities, making some mitigations (such as ridesharing) less useful for air quality improvement.

The 1978 Roosevelt Community Plan set aside massive amounts of the Roosevelt community for heavy industrial uses. Even after the subsequent City sphere of influence changes, 4474 acres (seven square miles) within the City's sphere of influence remained under a "heavy industrial" planning designation. A lesser amount (1011 acres) was set aside for light industrial uses. As detailed in Table EIR-1, almost 1,600 acres of heavy industrial development and almost 600 acres of light industrial development have already occurred in the City's Roosevelt plan area.

The proximity of rail freight service, major transportation corridors, work force, and raw materials still makes the Roosevelt community prime for industrial development, so the 1991 Update maintains industrial use designation for a total of about 5,100 acres of land. On the community fringe, 160 acres at Jensen and Minnewawa Avenues has been designated for regional park use. This land comprises the industrial area most distant from the freeway system.

Due to water supply constraints, sewer service capacity, air pollution, and general economic conditions, planned acreage has been re-allocated between heavy and light industrial uses: land planned for light industrial uses has been increased to 1,497 acres, and planned heavy industrial acreage has been decreased to 3,594.

The major benefits of these changes will occur in the area of water consumption and sewage generation. Whereas light industrial uses can daily generate 1,750 to 2,200 gallons of sewage per acre, heavy industrial uses can generate up to 10,120 gallons of sewage per acre every day--with concomitant water consumption. The overall reduction in potential sewage is some 8 million gallons per day (comparing full-build industrial development scenarios of the 1978 Roosevelt Plan and the 1991 Update).

c. Mitigation Measures

While no significant negative impacts have been identified in this analysis of plan update effects upon commercial and industrial land, the following measures are included to address area concerns:

(1) The Development Department and Public Works Department shall implement 1991 Roosevelt Community Plan Update policies for urban form and extent as they relate to commercial and industrial development (Policy Nos. 1-1.2 through 1-1.5; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-4.1 through 1-4.4; 1-4,7; and 1-5.1 through 1-5.8).

(2) The Development Department and Public Works Department shall implement 1991 Roosevelt Community Plan Update policies for commercial and industrial development (1-8.1 through 1-8.5; 1-8.7; 1-9.1 through 1-9.5; 1-10.1 through 1-10.4; 1-11.10 through 1-11.10; 1-12.1 through 1-12.3; 1-13.1 and 1-13.2; and 1-14.1 through 1-14.5).

C. WATER RESOURCES AND WATER MANAGEMENT

Fresno's water supply is both a resource and an essential City service; therefore, both aspects of water are consolidated in this chapter of the EIR. Water is, perhaps, Fresno's most important resource. Protection and management of this resource determine whether and how the City will prosper, grow, and fulfill its urban service commitments.

1. Aquifer Characteristics and Groundwater Quality

The City of Fresno is located in a valley which receives five to ten inches of rain per year and has a hot, dry climate in which some 50 inches per year of evapotranspiration losses could occur from exposed water. Sufficient water is only available for intensive agricultural and urban uses in Fresno because the west slope of the nearby Sierra Nevada collects some 30 annual

inches of precipitation and funnels it to the valley, where it occurs as surface water (creeks, rivers) and as a vast underground reservoir that has been accumulating through geologic time.

San Joaquin Valley groundwater originates from precipitation (rainfall/snowmelt), irrigation water, and surface water (creeks, rivers, ponding basins) which percolate downward and laterally through soil into deeper geologic formations. This water collects above deep, impervious " bedrock," forming an aquifer ("water table"), which is a connected series of water-saturated soil zones (usually sand or gravel) occurring between less permeable layers (usually clay or rock). Below the plant root zone, this aquifer water is protected from evapotranspiration.

The process by which surface water and atmospheric moisture gets into the ground is called "groundwater recharge". It occurs naturally and can be augmented by human efforts (such as directing runoff water into sandy-bottomed ponding basins).

Fresno County sits above one of the few EPA-designated "Sole Source Aquifers" in the United States. Except for the western portion of Fresno County, all individuals, businesses, and cities on the Valley floor currently derive their municipal water supplies from wells drilled to tap this Sole Source Aquifer. Fresno is one of the largest cities in the nation which draws its water supply exclusively from groundwater.

As of March 1, 1991, the City of Fresno had 240 water production wells in its public water system (not all of them presently in operation and on-line). The Roosevelt area contains 46 of those water wells (again, not all currently operating and on-line). The Bakman Water Company, located in the Roosevelt community, has seventeen water wells (ten on-line). South of the City's Roosevelt Community Plan Area, the Malaga County Water District has four large wells operating. Numerous businesses, institutions, and agricultrual operations in and around the Roosevelt community have their own wells with large pumps; numerous residences in the rural portions of the Roosevelt community have individual water wells with smaller pumps.

Geologic Setting

The subsurface geology under Fresno and the Plan area is highly variable but is characterized by two principal geologic units: consolidated (dense, compacted) rock and unconsolidated (permeable) alluvial deposits. The surface of the consolidated rock units are roughly 2,000 to 13,000

feet deep under central Fresno. Water bearing properties of these units are largely unknown, but these formations are not considered significant potential sources of groundwater for urban or agricultural uses due to the practical difficulties of locating and pumping water from such great depths.

The unconsolidated geologic material deposited above the consolidated rock units contains most of the groundwater under Fresno, and perhaps all of the usable groundwater. The two most important divisions in these unconsolidated geologic units are referred to as Quaternary upper alluvium and Tertiary-Quaternary continental deposits. These units are comprised of alluvial materials formed through erosion from the Sierra Nevada and deposition by Kings and San Joaquin rivers and the intermittent streams in between.

Coarser deposits, with their greater pore sizes, have more water stored in their interstitial spaces; water can also flow more easily through large pores. Clays and silts are more consolidated (less pore space between small and densely packed partiles). Clay and silt deposits can be saturated, but do not admit a high proportion of water; they also transmit (move) water more slowly.

Highly permeable loams, sand, and fine gravels are commonly found in the top 20 feet of the Roosevelt community's soil profile. In several locales, finer silt/clay particles consolidate to "hardpan" just below the ground surface and intermittently below that at 30 to 60 foot depths. Beneath the Roosevelt Plan area, coarser-grained deposits of alluvium predominate between 100 and 400 feet in depth.

Compared with northeast Fresno, the Roosevelt area has thicker and more numerous layers of water-bearing sand and gravel, partially separated by discontinuous clay layers ("lenses"). This subsurface configuration has created an area where wells have been generally capable of usable municipal production--some able to draw up to 1,500 gallons per minute (gpm) for sustained periods.

The Roosevelt area has historically obtained a good supply of high quality groundwater, typically using wells drilled 100 to 300 feet into the upper part of the water-bearing strata. In the Malaga area, groundwater can be reached at 50 feet.

In many places, occurring somewhat irregularly between 400 and 600 feet in depth below the Roosevelt community, are substantial clay lenses; below that, further water-bearing strata 50 to 150 feet thick may be found. Water found at deeper levels often has percolated farther into the earth's crust and has been in contact with minerals for a longer period than the shallow aquifer water; therefore,

it is often more mineralized. It has generally higher hardness; more carbonates, chlorides, calcium, sodium; and a greater specific electrical conductivity (SEC).

The underlying continental deposits (to about 1200 feet under the Roosevelt area) are characterized by finer grained materials and greater interbedding of clays and silts. Although the upper alluvium is the more productive unit in the aquifer (porosity estimated between 30-50%), reasonably high capacity wells can be developed in continental deposits.

Much deeper water-bearing strata may occur, but are not usually usable due to thin, unproductive water-bearing sand layers, heavy mineralization, and the practical difficulties of reaching and extracting the water. At levels of 2,000 to 13,000 feet, solid crystalline (consolidated) granitic "bedrock" is reached under the Roosevelt area. Potential for usable water yield in that layer is very low.

Depth to Groundwater: The "Water Table"

Below the water table (static water level) groundwater saturates the pore spaces between particles of geologic materials. Once a well is drilled, there tends to be a flow of groundwater from the aquifer strata into the hollow well bore.

The well must be allowed to equilibrate (to recover from pumping drawdown) before an accurate water level reading may be obtained. The depth to the water table is generally measured by dropping a probe down a well until it electrically registers contact with water.

During periods of high groundwater pumpage (May through October), accurate static water levels are difficult to measure, due to proximity of adjacent public and private wells, which affect local groundwater elevations when operating.

Groundwater in the aquifer underlying the Fresno area is principally unconfined; i.e., groundwater in the area is generally not confined under pressure beneath or between impermeable, continuous layers. Therefore, nearby wells drilled into identical strata show more or less the same groundwater elevations.

Because surface topography changes, static water levels throughout an area may appear to differ when, in fact, the static water level is uniform when evaluated against a fixed surveying baseline. Thus, the term "groundwater elevation" is being increasingly used to describe the water table with respect to the unchanging elevation of mean sea level (U.S. Geologic Survey datum). Instead of

describing a well's static water level as "x feet below the surface," it would be described as "y feet above sea level." Thus, whether a well is drilled on a hill or in a hollow, the true location of the water table can be determined. The City of Fresno has developed software and surveying data which will facilitate routine calulation of groundwater elevation for all wells in the metropolitan area.

Some localized areas and depths in the Fresno area water table demonstrate characteristics of a "semi-confined" aquifer, created by intermittent restricting clay lenses. In these instances the restricting lenses are sufficiently thick and laterally extensive to cause differences in observable water levels between nearby wells completed to varying depths. However even large, thick clay lenses are permeable and saturated and do slowly transmit water and contaminants.

Water movement and contaminant transport through these clay lenses is a complex interplay of hydraulics and geochemistry.

In the Roosevelt area, wells have been drilled and rehabilitated by special methods which access deeper water-bearing strata while sealing off contaminated shallow layers. This is a good, although interim, means of providing acceptable-quality municipal water.

As part of the City's enhanced water management practices, the Public Works Department has begun constructing multiple completion (multiple-level) monitoring wells at most new well sites. To date, over 25 of these have been installed. This will facilitate collection of more comprehensive groundwater elevation data and more aquifer parameter information.

March 1991 groundwater elevation measurements in the Plan area indicated a water table varying between 40 and 100 feet beneath the surface. As part of an ongoing joint FID/City of Fresno recharge and DBCP extraction study, groundwater elevations were calculated from these measurements, using USGS topographic maps and surveys of City well sites.

It is difficult to precisely estimate the cumulative impacts of rainfall and human activites on the Valley's Sole Source Aquifer, due to its vast size (estimated at 500 million acre-feet of total underground storage). At best, localized effects may be observed by testing static water levels, and mathematical models may be used to attempt to predict groundwater behavior.

Aquifers are subsurface "reservoirs" of groundwater, and although not closed systems, they can be depleted. Prolonged droughts, well pumping in excess of recharge (overdrafting), and out-of-area diversion of potential recharge water away from aquifer origins can all lead to a decline in static water level and/or depletion of aquifers.

It has been shown that a "cone of depression" exists in the water table under the Fresno/Clovis Metropolitan area, caused by decades of groundwater pumping in excess of groundwater recharge. (Fresno County's 1984 "205-J" Study estimated overdraft under the metropolitan area at 5,000 acre-feet annually.) The water table literally slopes downward into this cone of depression.

Overdrafting, diversion, and drought have operated in the Fresno/Clovis Metropolitan Area to cause a significant decline in static water level during the past few decades. Figure EIR-7 charts the decline of Fresno's "water table" from the early 1930's to the late 1980's, contrasted with City water consumption during that period.

When an aquifer declines, wells can become unproductive, and the soil structure can collapse or compress. This process of ground sinking is known as "subsidence." Despite the seventy-foot decline in its water table, the City of Fresno has not experienced documented ground level subsidence.

As the average static groundwater level has declined under Fresno, very shallow wells (less than 100 feet deep) have become less useful and have often been abandoned, not always in conformance with State Department of Water Resources and County Environmental Health requirements. (These requirements are intended to limit hazards and prevent cross-contamination of water-bearing strata.)

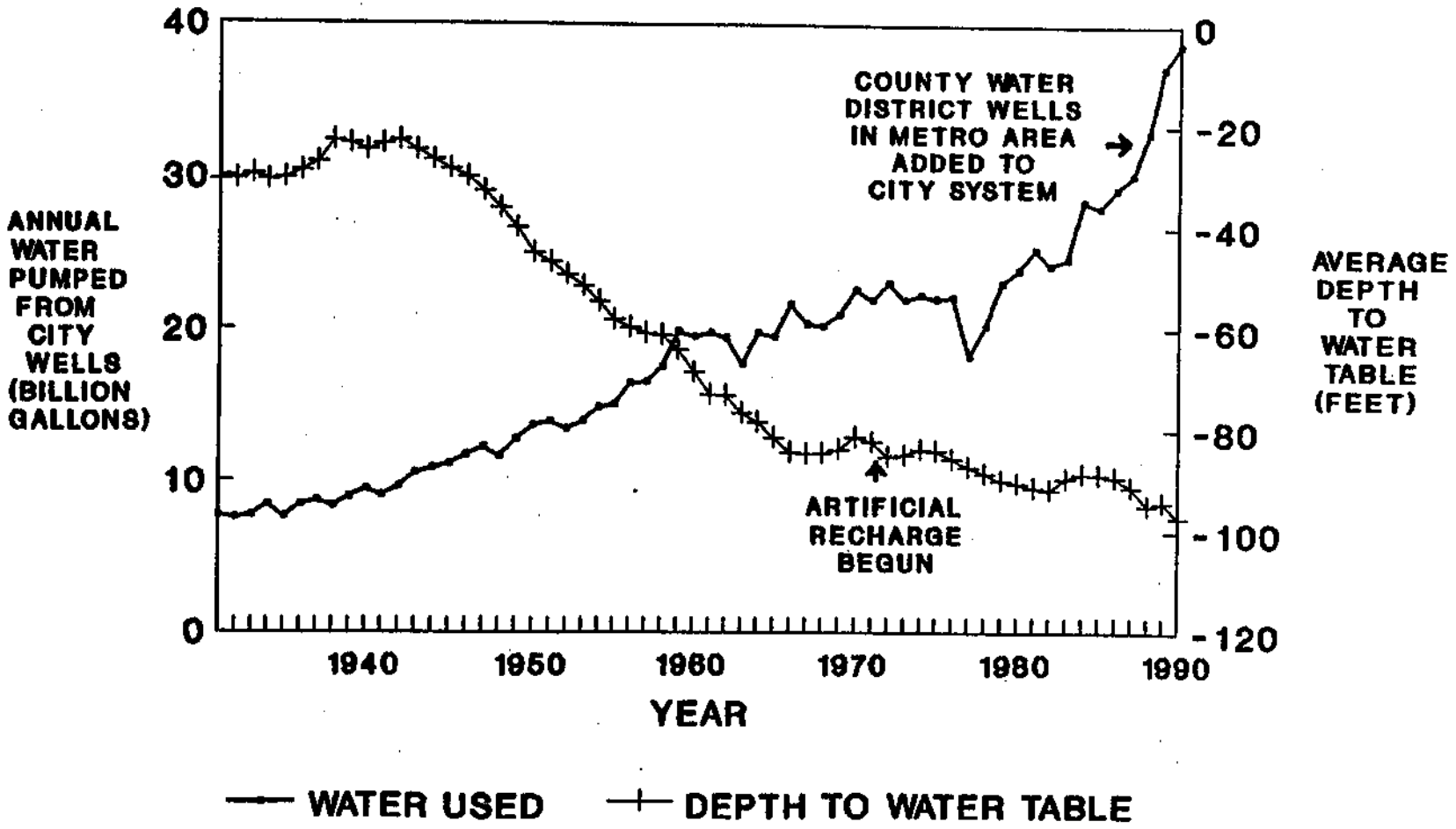
Based on past trends, additional development and population growth in the FCMA and the Roosevelt Community would be expected to provide a continuing decline in the water table. This trend would only be halted or reversed if significantly more water were added to the aquifer, either through natural or artificial (manmade) means.

Groundwater Recharge

Groundwater under the Fresno-Clovis Metropolitan Area (FCMA) is recharged through:

- Subsurface inflows from ouside of the FCMA
- Infiltration from canals and intermittent stream courses

FIGURE EIR-7: MUNICIPAL WELL PRODUCTION AND DECLINE OF THE WATER TABLE IN THE CITY OF FRESNO



- Stormwater detention (infiltration from drainage basins)
- Precolation of rainwater
- Artificial recharge (surface water directed into drainage basins during the spring and summer)

In March 1991, calculations were performed to estimate the groundwater inflow into a portion of the Plan area. Across a 3.5 mile cross-section, from Jensen and Orange Avenues on the southwest to Tulare and Fowler Avenues on the Northeast, subsurface inflow was estimated at 12,000 acre-feet annually.

It is also estimated that approximately half of the water which is collected in urban stormwater drainage basins during the rainy season percolates into the groundwater supply.

Realizing that protracted aquifer overdrafting and water table decline is a problem, Fresno instituted an "artificial" groundwater recharge program in the early 1970's. This recharge program appears to have somewhat slowed the rate of decline during the past two decades; in the 1980's, some gains were even observed. Fresno's sole dependence on groundwater makes artificial recharge a high priority.

Even during the past two drought years, the City-wide artificial recharge program has applied a volume of water that exceeds 40% of the groundwater volume withdrawn by City wells. Subsection 3 of this EIR Chapter discusses the City's use of its surface water supplies for the artificial recharge program.

The consolidated clay layer which is sometimes found at 30 to 60 foot depths makes it infeasible to do artificial groundwater recharge in all parts of the Roosevelt Community Plan Area. However, in many places it is possible to use strategically impounded water to help replenish the aquifer.

Recharge can be successful in those portions of the Roosevelt area where permeable soil provides for adequate water transmissivity. The "down side" to these permeable geologic conditions is this area's proven susceptibility to groundwater contamination.

Expansion of the urban stormwater (flood control) basin network and creation of recharge basins in irrigation districts would facilitate aquifer replenishment. Additional urban development in the Roosevelt plan area will provide funds for completion of additional stormwater retention/recharge basins, additional opportunities to retain and recharge water within the community.

Development of major flood control projects on Big Dry Creek, Red Bank Creek, and Fancher Creek could provide for impoundment of precipitation runoff and/or surface water east and northeast of the Roosevelt community. These projects may significantly alter Sole Source Aquifer dynamics.

Groundwater Movement

Groundwater moves in response to gravity. It moves from areas of high elevation to areas of lower elevation. This movement is referred to as a "groundwater gradient," and is usually graphically represented by flow vectors. The gradient is affected by localized pumping and regional geography.

Typically, aquifers have gradients, prevailing directions of lateral underground flow. On large and small scales, gradients are determined by the relative positions of recharge and extraction processes, by water pressure in the aquifer, by gravity, and by the configuration of subsurface geology. "Upgradient" is a term that refers to the direction of the source or origin of the groundwater flow; "downgradient" is analogous to "downstream".

Groundwater movement is also affected by site specific geology. Aquifer materials (sands, silts, clay etc.) have different permeabilites; the relative velocity of water moving through these deposits varies greatly. Varying permeabilites affect both the vertical and horizontal movement of water. Not only the direction of flow, but the rate of flow is variable.

Unconsolidated geologic strata are comprised of discontinuous layers of sands, gravel, cobbles, silts and clays. The organization of these layers, although quite variable, results in typically lower vertical permeability when compared to horizontal or lateral permeabilities. Because of this, groundwater usually moves through the aquifer faster laterally than vertically. This characteristic is a significant factor in estimating groundwater recharge, contaminant migration and transport, and general aquifer behavior.

Historically, groundwater gradients in Fresno and the Roosevelt Plan area were from the Northeast to the Southwest, due to gravity and natural hydrogeologic conditions. Municipal and agricultural pumping and recharge have modified hydraulic gradients, and consequently, the directions of groundwater flow.

The rate of lateral groundwater movement in the Fresno-Clovis Metropolitan Area has been observed to range from 100 to 500 feet per year, and averages about 300 feet per year.

At the time of the March, 1991 water table measurements, Ken Schmidt and Associates, working with Provost and Prichard, identified the direction of groundwater flow in the plan area as generally west in areas north of East Kings Canyon Road, and west-northwest to northwest in areas south of East Kings Canyon Road. A record search of toxic spill site assessments indicated that, in the south-western portion of the Roosevelt plan area, the gradient has turned to flow almost directly toward the north.

On a smaller (localized) scale, gradients can be altered in the vicinity of specific influences: a high rate of groundwater extraction at a well location may bend and accelerate local flow toward that well; or, a high rate of water percolation out of a ponding basin or irrigation canal can cause flow vectors to emanate from that localized high pressure -- even if this local influence is contrary to the general gradient. These conditions have been observed to shift localized gradient directions within short time periods (in some cases, within days or weeks).

By natural connections and manmade perforations (wells), different water-bearing zones may directly communicate with each other, providing for accelerated vertical movement of water. Naturally occurring communication of water-bearing zones appears to be limited across the (vertical) aquifer profile in portions of the Roosevelt plan area, due to the occurrence of some sizable clay lenses. However, there are numerous man-made perforations through these clay layers.

Groundwater Contamination and Potential Health Impacts

As water percolates downward or moves laterally, it tends to pick up soluble minerals from soil and rock, or carries along human-introduced chemicals from septic systems, "dry wells" used for disposal, landfills, leaking underground tanks, farmland, unlined ponds, or surface spills which were never cleaned up. Depending on the amount and solubility of the chemicals and their persistence, such chemical constituents may penetrate deeply, travel far laterally, and/or endure in the groundwater for centuries.

No water is completely "pure" (except distilled, deionized water); all municipal supplies contain bacteria and trace elements from natural and manmade sources. Regulatory agencies determine what are acceptable levels and types of constituents in water.

The current regulatory term for an acceptable (legal) concentration of a regulated substance in water is "Maximum Contaminant Level." A water well or water system can have a concentration of an element up to the MCL, and still be considered legal to supply the public. Health impacts from low-level groundwater contaminant exposure are statistically estimated on the basis of life-long exposures.

Historically, the City of Fresno was considered to have a municipal supply of excellent quality. Maintaining these high standards has become very difficult in recent years, due to groundwater contamination and increasingly stringent water quality standards. Availability of an adequate supply of potable groundwater has primarily been threatened by infiltration/spreading of chemicals introduced by human activities.

The City of Fresno monitors its water quality assiduously, with sampling intervals that would detect contamination quickly. Wells are deactivated if they produce water with contamination at or beyond "action levels" or maximum contaminant levels.

In rare cases, it is necessary to leave some of these wells on-line to provide minimum fire hydrant pressures; in that case, warning notices are distributed to households in the service areas for those wells. These situations are remedied as promptly as possible, by well rehabilitation or new replacement wells, in order to prevent the health effects projected to occur from long-term exposure to contaminants.

The City's major water quality problem is due to contamination by the agricultural chemicals dibromochloropropane (DBCP) and ethylene dibromide (EDB). Widespread agricultural and horticultural activity in and around the City of Fresno was responsible for introduction of these pesticides into the aquifer. DBCP was widely used in California to control nematodes which damage the roots of trees and vines. In 1977, the State of California became aware of DBCP's reproductive toxicity to humans, and use/sale of the chemical was banned.

Further research indicates that DBCP is also a suspected human carcinogen (a statistical link to cancer has been established). An MCL has been set for public water systems. Initially, the "action level" was set at 1.0 micrograms per liter (or parts per billion, "ppb"); this was revised downward in 1989 by establishing an MCL of 0.2 ppb. Presently, consuming water with 0.2 ppb DBCP over a 70-year lifespan is theorized to cause one additional case of cancer per 10,000 population.

DBCP has proven to be soluble, mobile in soils, and persistent in groundwater. In the early 1980's, DBCP began to be detected in water wells in and around California's agricultural regions. By 1989, 71 of the City's wells showed at least trace (detectable) levels of DBCP. Seventeen of those wells had DBCP levels greater than or equal to 0.2 ppb. By March 1, 1991, the City of Fresno had fifteen (out of its total of 240) water wells closed down due to high DBCP concentrations, and DBCP was detectable in many wells throughout the City. Figure EIR-8 shows locations of wells (in the Roosevelt community) where DBCP levels exceed the MCL.

Due to the proximity of agricultural land and permeable soil strata, much of the shallow groundwater beneath the Roosevelt community has detectable levels of DBCP. By 1989, thirteen Roosevelt area wells had DBCP concentrations of 0.2 ppb or higher; another 19 wells had over 0.02 ppb but less than 0.2 ppb. As of March 1, 1991, thirteen of the Roosevelt area's 45 wells were closed because they exceeded State safe drinking water standards for dibromochloropropane. (Three of these wells belong to the Bakman Water Company.)

Several small community and non-community public water systems exist in the fringe of the Roosevlet plan area, serving rural subdivisions, industrial, and institutional properties that are not connected to City water lines. Many of these water systems have to drill new wells or treat their water because of high DBCP contamination. It is likely that the City of Fresno will increasingly be asked to serve neighboring small public water systems which cannot comply with new water quality standards.

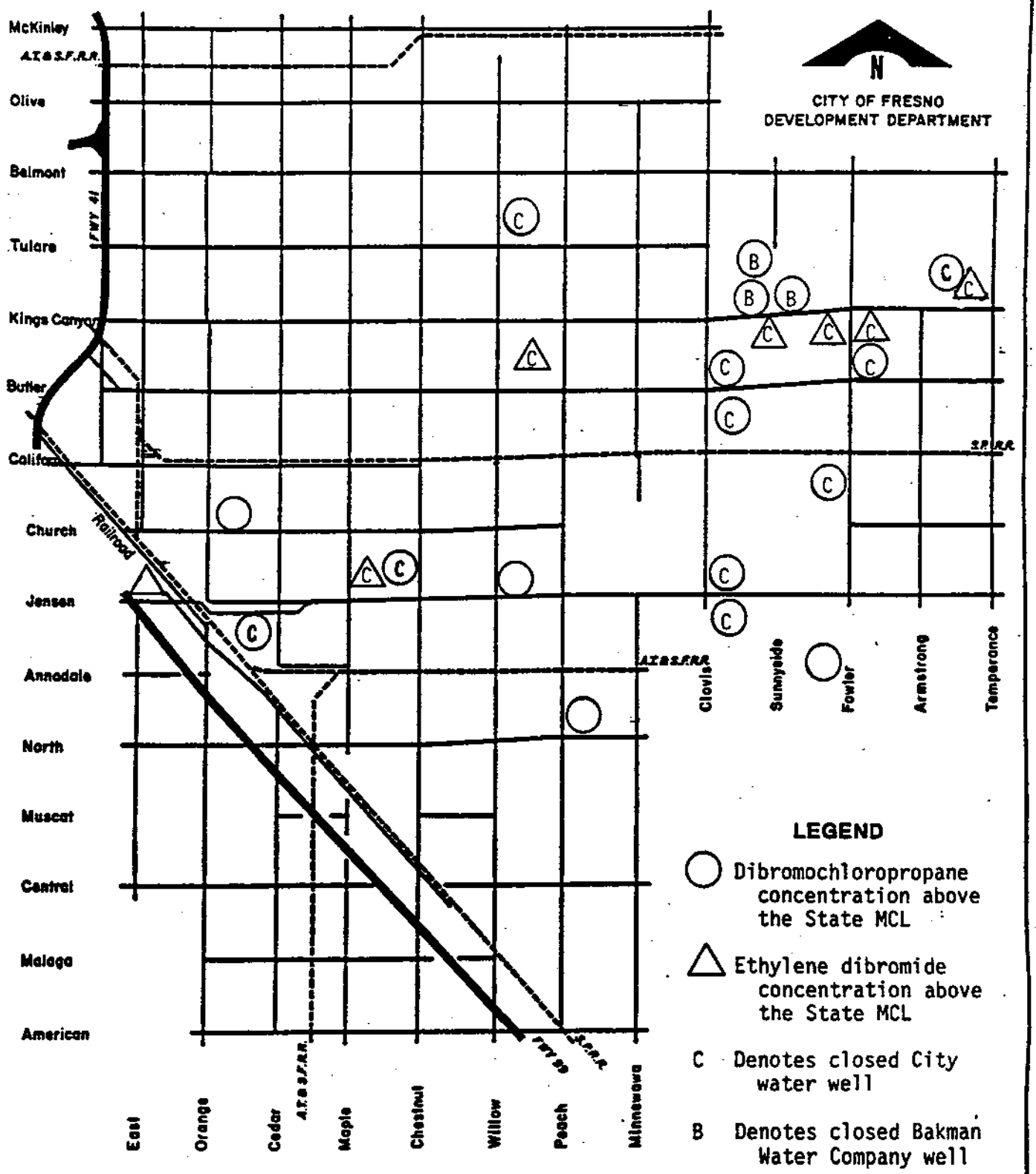
Ethylene dibromide (EDB) is another formerly used hazardous pesticide that has been found in groundwater. Not as widely used on cropland as DBCP, EDB was used mainly to fumigate citrus and stored grains. In 1984, its further use was banned by the Federal government. However, like DBCP, EDB proved soluble, mobile in soils, and persistent in groundwater. In 1989, nine City of Fresno wells showed detectable EDB residues. Eleven City wells were closed on March 1, 1991 due to EDB contamination. Six of these wells are in the Roosevelt area. Figure EIR-8 also depicts the locations of EDB-closed City water wells and other public wells with unacceptably high EDB levels.

Urban development of the eastern reaches of the Roosevelt Community Plan area will require extending City water service into areas with higher concentrations of DBCP (and, possibly, EDB). The following EIR subsection discusses measures that will be used to supply urban water needs in areas with widespread DBCP groundwater pollution.

Figure EIR-8

ROOSEVELT COMMUNITY PLAN UPDATE

Locations of Water Wells Which Exceed DBCP and EDB Limits



Two other organic chemicals that have significantly impacted City of Fresno water wells are trichlorethylene (TCE) and tetrachlorethylene (PCE). Both are used in a wide range of industrial and commercial applications as powerful solvents/degreasers. State studies have concluded that dry cleaning establishments are the primary point sources of PCE contamination: inadvertent releases and effusion through storage tanks and waste discharge lines. Improper solvent and degreaser disposal also contributed heavily (casual disposal of these materials was not formerly considered to be improper or a potential groundwater threat). Figure EIR-9 shows the location of closed wells and small public water systems where unacceptably high TCE and PCE residues have been detected.

In 1989, twenty-five City wells had detectable residues of PCE; twelve City wells had detectable levels of TCE. By March 1, 1991, six City wells were shut down due to excessive PCE levels; two of these six were in the Roosevelt area. On that same date, eight City wells had been deactivated due to TCE contamination; half of these were in the Roosevelt area (one well had excess PCE and TCE).

Maximum Contaminant Levels are constantly being established and revised for a widening array of organic chemicals, including other pesticides and solvents. As new MCLs are set, it can be expected that additional wells will have to be taken out of production because their untreated water fails to meet Safe Drinking Water Act standards.

Inorganic chemical contamination has also affected Fresno's groundwater, though not as many wells have been as severely affected. There are no wells in the area known to be contaminated by non-radioactive heavy metals such as lead or arsenic.

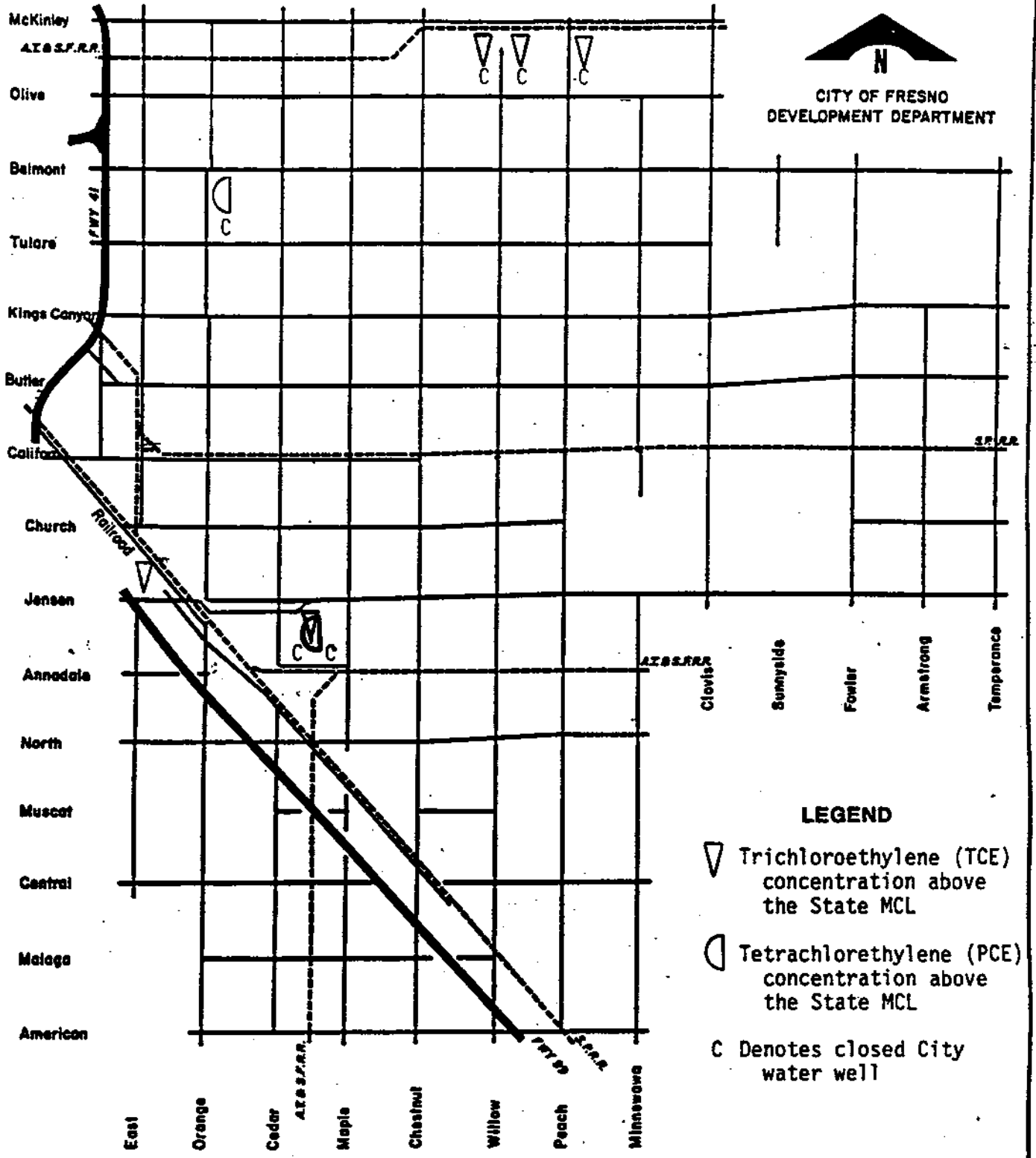
An inorganic contamination problem that has become evident in well water on the southern edge of the Roosevelt plan area is naturally occurring gross alpha radiation. Several non-community systems at the southern urban fringe have tested positive for elevated gross alpha radiation, close to or in excess of the State MCL of 14 picocuries per liter. No City water wells have revealed gross alpha radiation in excess of established MCLs. (There are no City wells yet south of Annadale Avenue.)

Observed instances of this water radioactivity increase toward the southwestern portion of the Roosevelt area. Figure EIR-10 shows the location of water wells which have tested at or above the MCL for gross alpha radiation.

Figure EIR-9

ROOSEVELT COMMUNITY PLAN UPDATE

Water Wells Which Have Exceeded TCE and PCE Limits



In the general vicinity of the North Avenue alignment, shallower water-bearing strata appear to be imparting low-level gross alpha radiation to groundwater. In some wells the unacceptably high radiologic content has been speciated and the cause appears to be dissolved uranium. This radioactive element occurs naturally in Sierra granite. Uranium-bearing sediments appear to have eroded into certain strata in the Valley's geologic formations. Uranium is a naturally occurring heavy metal which has regionally variable proportions of the radioactive isotope U-235. Radioactive or not, uranium is highly toxic to kidney tissue. When radioactive, uranium in drinking water is a suspected human carcinogen.

Other radioactive elements (radionuclides) related to uranium, such as radium and radon gas, also dissolve into well water. Levels of these elements may exceed future MCLs set by the State and Federal EPA.

Radioactive atoms are inherently unstable and tend to "decay", rearranging their atomic structure while emitting charged particles and gamma rays. These particles and rays can damage body cell structures such as chromosomes.

Uranium and radium are two alpha radiation emitters that can be removed from drinking water using filtration through ion exchange resins. They can also be adsorbed by GAC filters. Radon gas (which dissolves into well water) and its radioactive mineral decay products ("radon daughters") can adsorb to carbon filter material, but the approved method for removing radon from drinking water is to aerate the water and let the radon off-gas. This method requires a subsequent disinfection step (chlorine is the usual disinfectant).

At this time in Fresno County, public water systems have not attempted to deal with gross alpha contamination by treating or filtering their water. Instead, they have drilled new wells in search of uncontaminated groundwater, or have gone to bottled water supplies.

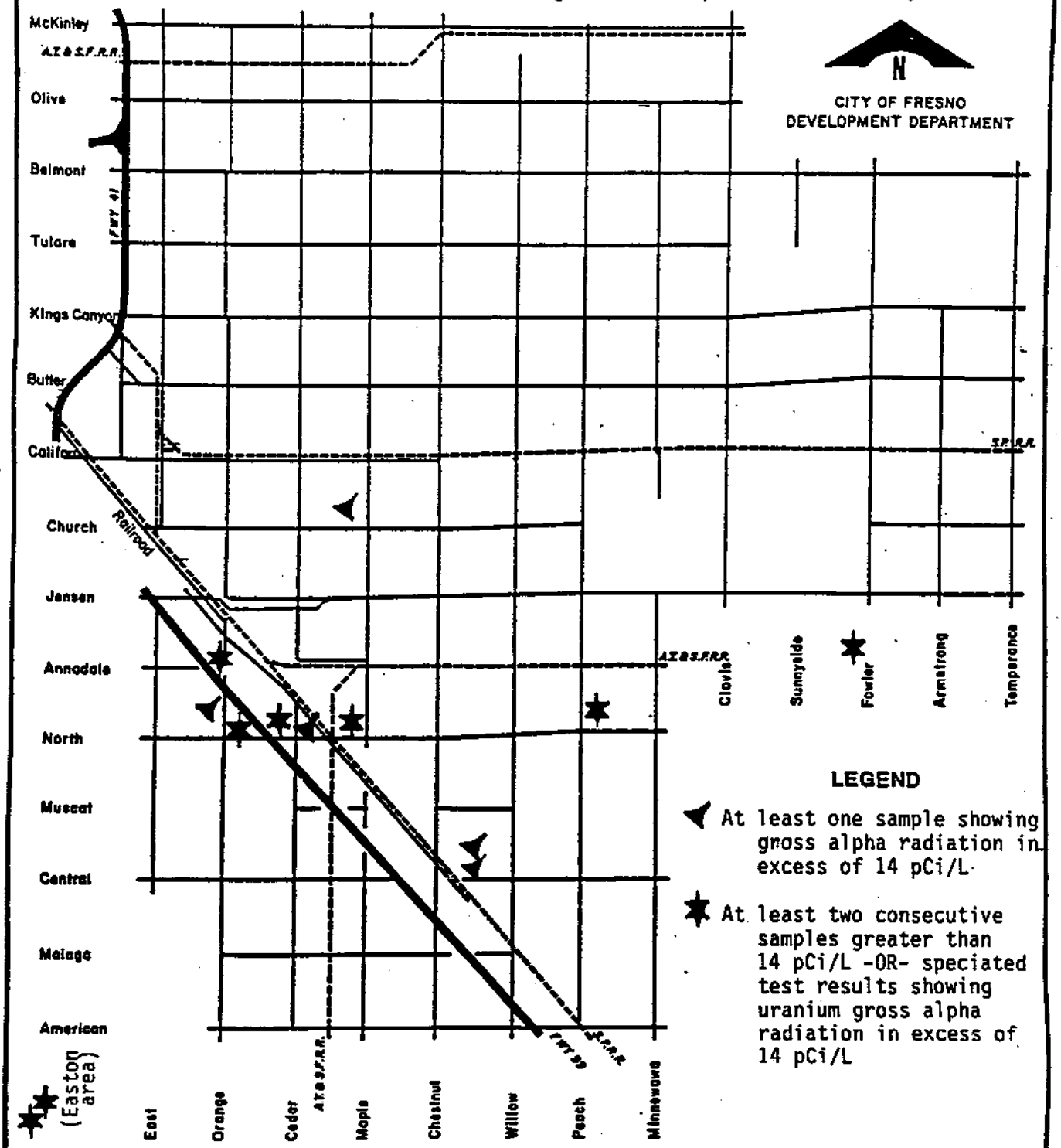
A more problematic (but non-radioactive) inorganic contaminant in the Roosevelt area is nitrate, a compound generally introduced into groundwater by excessive crop fertilization or by land disposal of animal waste, sewage, and food processing byproducts. Excessive levels of nitrate in drinking water can bind to fetal hemoglobin, causing anoxia in infants ("blue baby" syndrome).

Nitrate is a difficult and expensive contaminant to remove from drinking water. The only workable bulk process for drinking water involves reverse osmosis, and treatment cost is over $7.00 per 1,000 gallons for this process. The cost is generally infeasible for municipal water supplies, so nitrate-contaminated wells are often sealed or abandoned.

Figure EIR-10

ROOSEVELT COMMUNITY PLAN UPDATE

Locations of Water Wells With High Gross Alpha Radioactivity



NOTE: Four consecutive quarters of gross alpha test results above 14 picocuries/L are normally required to determine whether a public water supply has excess gross alpha radiation. However, complete test cycle results were not available in Fresno County Environmental Health public non-community water system files as of April 19, 1991 for all such systems in the Roosevelt area.

As of March 1, 1991, five City wells were closed due to nitrate contamination, one of them in the Roosevelt area. Two Bakman Water Company wells were also off-line due to consistently high nitrate. Figure EIR-11 shows the location of City and other public water system wells which exceed permissible nitrate levels. This Figure also depicts public wells whose nitrate content is at least 80% of the MCL.

A review of records for southeast Fresno water systems shows that, after public sewer service was extended into an area and septic tanks/leach fields were abandoned, nitrate levels in local well water declined. Many wells which had tested above or near the MCL for nitrate actually improved to acceptable quality during the ten to fifteen years following abandonment of nearby septic systems.

The E.J. Gallo Winery east of Clovis Avenue between Olive and Belmont Avenues is being investigated as a potential cause of nitrates in groundwater. (Years of land application of wine crush residue may have introduced these nitrates). Systematic testing to fully evaluate this situation is only in the initial stages.

Despite the age of many well sites and water delivery lines in the Roosevelt Community, bacterial (coliform) contamination has not been a problem. There has never been a waterborne infectious illness outbreak associated with the municipal system.

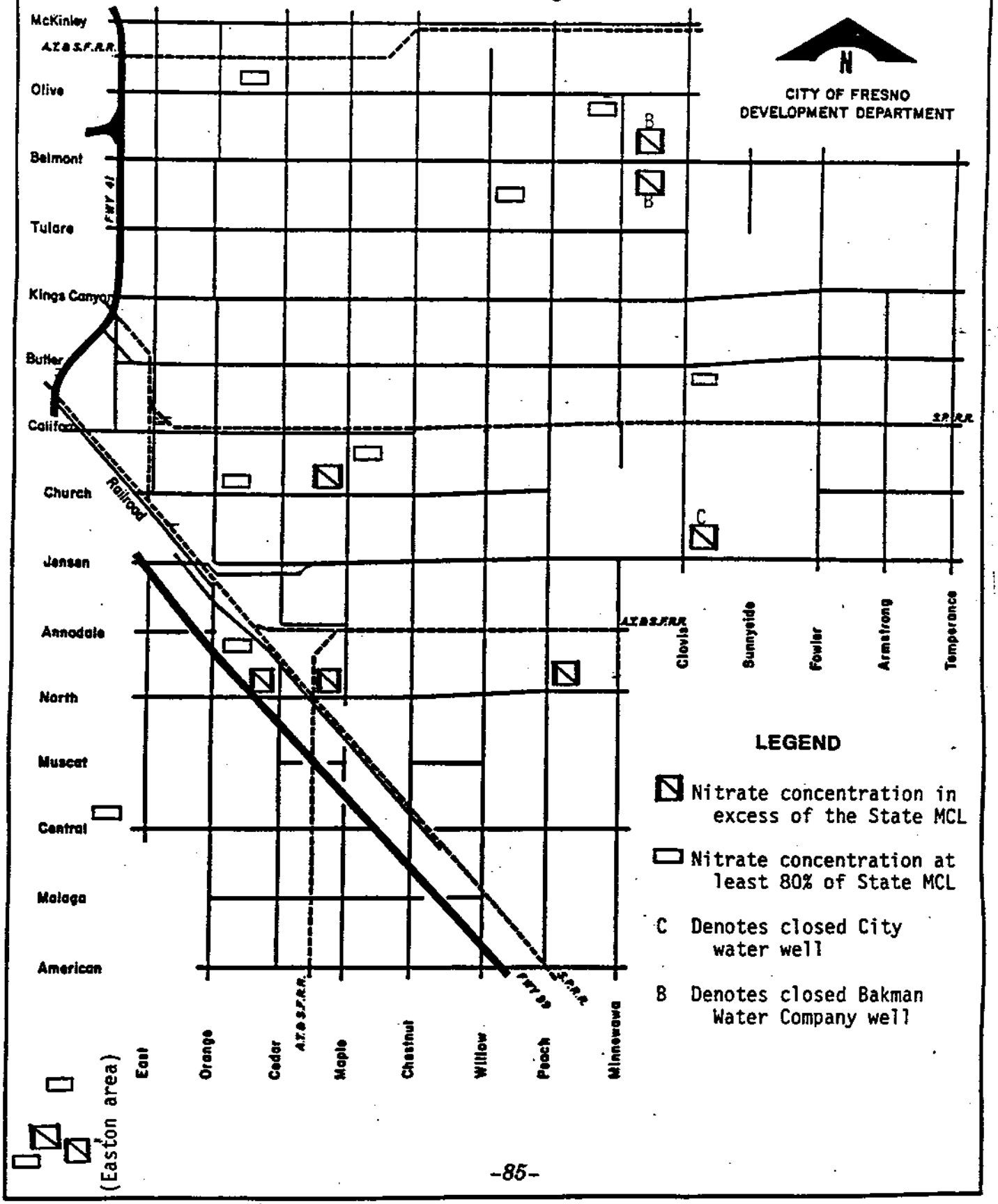
Total hardness and specific electrical conductivity (SEC) are problems in some wells in southwestern portions of the plan area. This hardness appears to come from natural mineral deposits. The major impacts of hardness and high SEC are economic: more rapid "scale" deposits which eventually clog water lines and appliances, such as hot water heaters. Water can be "softened" by filters using ion exchange resins (replacing calcium with sodium), and by carbon filtration in which positively charged mineral ions are absorbed to charcoal filter media.

However, the City's overall water hardness may be increased due to recent EPA regulations which will require boosting the pH of City water to avoid leaching lead and copper out of household water pipes. Presently, City water has a virtually neutral pH of 7.5. Boosting this to the EPA's target level of 8.0 will probably require some measures that could increase water hardness (although the EPA Lead Rule requires all systems serving over 50,000 people to "optimize" corrosion control measures). Due to a demonstrable lack of lead contamination risk and the untoward side effects of raising pH in the system, the City will seek a waiver from this EPA requirement.

Figure EIR-11

ROOSEVELT COMMUNITY PLAN UPDATE

Locations of Wells With High Nitrate Content



Roosevelt area groundwater is at particular risk from six major hazardous material sites: the Purity Oil site, near Golden State Boulevard and Maple Avenue; Thompson-Hayward Agriculture and Nutrition (THAN), near McKinley and Temperance; Fresno Air Terminal (FAT), near McKinley and Clovis Avenues; the Orange Avenue Landfill at Orange and North Avenues; the Safety-Kleen Corporation property in the 3000 block of South Golden State Boulevard, and the FMC Corporation, near Golden State Boulevard and Church Avenues. Three of these sites (Purity Oil, THAN, and FMC) have been extensively investigated and remediation is proposed or imminent.

Numerous "lesser" hazardous/toxic sites and problematic underground storage tanks have also been identified in the Roosevelt area. Appendix A lists known hazardous material sites which are potential detriments to groundwater quality.

Despite regulations on hazardous material storage, handling, and disposal, it is probable that groundwater contamination will get worse in Fresno before it gets better. The soil vadose zone (below plant roots and above the aquifer) still holds and transmits contaminants that were originally released several years ago. Discovery and remediation of contamination sources takes years, allowing problems to spread even farther. High groundwater pumping rates quickly accelerate contaminant plume movement.

Discharges of wastewater (septic tank fluids and treated sewage) upgradient from the Roosevelt community may add moisture to the groundwater, but can bring a heavy load of contamination as well (nitrates, salts, organic chemicals, and heavy metals). Residential and commercial/industrial uses generating this effluent are also likely to draw from the upgradient aquifer, and so would be responsible for a net loss of groundwater due to evaporation and loss of ground surface permeability (from soil compaction and impervious surfacing), leading to diminished recharge.

Water Quality Regulatory Impacts

The U.S. Environmental Protection Agency (EPA) and the California Department of Health Services (DHS) regulate drinking water quality. The EPA sets national drinking water standards; this agency was empowered to promulgate such standards by the U.S. Congress, which passed the Safe Drinking Water Act (SDWA) in 1974.

The federal drinking water program was designed to be delegated to state agencies. In California, the Department of Health Services, Office of Drinking Water has been given primacy to set and enforce drinking water standards. In no case, however, are state standards to be less stringent than those set at the federal level; California standards are frequently more stringent.

DHS retains direct supervision over large community water systems (serving 200 or more service connections), while delegating inspection and monitoring of small community and non-community public water systems to local (County) Environmental Health Services (EHS).

There are "primary" and "secondary" Safe Drinking Water Act standards, the former reflecting major public health needs, and the latter based on aesthetics and impacts on materials and machinery. For instance, the MCLs for arsenic, lead, nitrate, pesticides, and coliform bacteria would be examples of primary water quality standards. Odor, taste, and color are examples of secondary standards.

Although passed in 1974, and amended most recently in 1986, significant impacts of the SDWA are still in process. Many SDWA regulations are not yet implemented and others are being reviewed and revised. Public and legislative attention to this important topic has resulted in increasingly stringent water quality regulation and related legistation.

The drinking water industry is going through unparalleled change across the nation, dramatically impacting water treatment techniques, water resource management practices, public perception, and the cost of water. Many conventional operation and management practices and use of historic water sources will be permanently affected.

The EPA estimates that the complying with the SDWA alone will result in rate increases equal to between $.25 and $7.00 per 1,000 gallons, depending on the water system. The following contrasts various 1990 rates (per 1,000 gallons):

City of Fresno	$.32
California Average	$.61
National Average	$1.40

Due to the existing water system configuration, cost, and infrastructure, the Public Works Department has predicted that fiscal impacts to Fresno will be significant. Whereas a new treatment requirement may be relatively easy to implement at a single major surface water treatment facility, the same type of treatment equipment required at each of 240 individual wells throughout Fresno will be very expensive. Many of the current and proposed regulations requiring treatment at the well site cannot practicably be implemented at most of Fresno's existing wells, due to space and security limitations.

The following list recaps only the more significant water quality regulations recently impemented or in promulgation by EPA:

- **Lead and Copper Rule-** Recently adopted by EPA, this new rule may require corrosion control treatment at

each of Fresno's 240 wells. At the least, the EPA Lead Rule would require removal and replacement of any lead piping discovered through random household water checks or maintenance/installation activities.

- **Coliform Rule**- Recently adopted by DHS, establishes a more stringent protocol for microbial monitoring and compliance. May result in installation of chlorination facilities at all wells. Sampling and lab technique mistakes will count more heavily. The City will incur major additional costs for expanded sampling, resampling, and public notification requirements.

- **Radionuclides**- This new rule sets limits for a number of man-made and naturally occurring radioactive constituents. A new rule for radon in drinking water is being promulgated. As drafted, the "radon rule" may require treatment at Fresno well sites.

- **Surface Water Treatment Rule**- Recently adopted by DHS, this new rule changes many treatment practices at surface water facilities. Anticipated to affect any future surface water facility costs.

- **Mandatory Disinfection**- This proposed rule (under consideration and promoted by EPA) would require disinfection (typically chlorination) of all drinking water supplies--including groundwater.

The EPA has been charged with implementing Maximum Contaminant Levels for 25 new constituents every three years and continuously evaluating existing MCLs. It is anticipated that impacts to Fresno's water system will contine to increase over the next decade.

California Assembly Bill 21 (1989, Sher and Jones) has introduced new terminology and goals for California water systems: the "RPHL," an amount of a water impurity that poses a theoretical health risk of one additonal potential case of cancer per million population. For several chemical compounds, AB 21 limits are far more stringent than the limits set or proposed by EPA. Water systems with 10,000 or more service connections are subject to the provisions of AB 21.

Implementing regulations have not yet been codified for AB 21, but draft regulations have been circulated. RPHLs for some Fresno water constituents are proposed to be one-tenth to one-thousandth the current MCLs for those constituents. In some cases, laboratory equipment and methodology to detect these infinitessimal levels of chemicals have not yet been developed or approved.

AB 21 mandates that large public water system operators develop "treatment objectives" for water supplies which exceed RPHLs. System operators are required to use the best available technology to attempt to meet RPHLs. For the Fresno area, this will have a substanital impact on water rates. AB 21 further sets forth a schedule of permit fees which water systems must remit to the State Department of Health for overseeing AB 21 programs. DHS oversight fees assessed against the City of Fresno could approach $30,000 per year.

2. Water Consumption, Water Well Production and Delivery System

Using City water consumption data, present and future water supply demands can be estimated for the Roosevelt Community.

Present Water Requirements

Average daily per capita water consumption (for all uses) in the City of Fresno is presently about 300 gallons. Drinking water, landscape irrigation, firefighting, system losses (leaks), flushing of sewer and water mains, and industrial process water account for this 300 gallon per day figure.

If only residential consumption were considered, Fresno's daily per capita consumption would be some 205 gallons. About 72% of the city's water is consumed by residences. At present, all commercial, industrial and large multi-family properties served by City water have water meters, and most single-family residences do not.

Historically, Fresno's per capita water consumption has ranked among the highest in the state and nation, ranging as high as 350 gallons per day (1960). Under the severe restrictions imposed during the 1976-78 drought, average overall per capita use was reduced to 250 gallons per day, but has since rebounded (despite the recent four-year drought). City of Fresno water rates (especially its flat rate for unmetered residential customers) are presently among the lowest in the nation.

Overall City water well production/consumption has increased steadily and swiftly, of course paralleling Fresno's rise in population. In 1924, City records show that seven billion gallons of groundwater were extracted and used, equivalent to 21,700 acre-feet. (One acre-foot of water has 325,830 gallons).

Total 1990 water well production and water consumption for large community water systems in the City of Fresno was 40 billion gallons (122,763 acre-feet of water). Some 38.7 billion gallons (118,811 acre-feet) were produced by City

of Fresno municipal water wells (240 total wells, some 180 on-line). The Bakman Water Company, a privately owned large community water system in the City, produced an additional 1.3 billion gallons (about 4,000 acre-feet) from its wells. The Malaga County Water District, south of Fresno's sphere of influence, estimates that its wells extracted some 1,000 acre-feet (about 33 million gallons).

Aside from the groundwater extracted and used by large community water systems, there are numerous private and non-community public water wells which serve households, businesses, industrial sites, and agricultural uses in the City of Fresno and in the surrounding area. The Roosevelt Community Plan Area has many of these wells in its southern and eastern reaches.

Total groundwater extraction by non-municipal wells is not measured and cannot be precisely determined, given the absence of production records for these water systems. The total quantity extracted is probably large; for instance, wells at the Gallo winery reportedly pump over 1,700 gallons per minute, 24 hours a day during wine crush. Another upgradient winery (near McCall and California Avenues) reports using over 75,000 gallons per day during its peak season and is requesting an expansion that could result in 145,000 gallons of water used daily.

Using City-wide average consumption figures, and given the Roosevelt area's 1990 population of 105,200, total daily municipal water consumption for this community was at least 31.6 million gallons, about 96 acre-feet per day. The Roosevelt area's total 1990 consumption for the year 1990 was at least 11.5 billion gallons: 35,295 acre-feet of water, about 30% of the entire community water well production and water consumption for large community water systems in the City of Fresno.

An elevated per capita consumption rate has been observed in the Roosevelt community. Daily water use in some portions of the plan area has approached 400 gallons per person. In one residential neighborhood (a former County Waterworks District), records show a consumption rate of some 2,000 gallons per person per day. This extreme use rate may reflect landscaping and orchard watering on the estate-sized lots in this particular neighborhood.

Because the Roosevelt community has a great deal of industrial (including food processing) activity, overall water consumption would be expected to be higher. Other factors may include landscaping, livestock, large gardens/small farms, and accidental system losses from water leaks.

The municipal water wells located inside the Roosevelt community plan area produced roughly nine billion gallons of water in 1990 (including production from Bakman Water Company wells). This is equivalent to 27,600 acre-feet and accounted for some 22% of the entire City's 1990 municipal water well production.

Roosevelt area well production does not currently meet the water demands of the area. Due to the numerous well closures within the plan area and higher water use within the plan area, the Roosevelt community is importing much of its water from City wells inter-tied outside the plan boundaries. Unfortunately, degraded ground water conditions and well closures virtually surround the Roosevelt area, further complicating efforts to provide an adequate potable water supply.

City water mains are under 14 inches in diameter and were never designed to move water more than about a mile from each water well. The water production deficit within the Roosevelt community, therefore, potentiates an inadequate supply during periods of peak demand. This would be experienced as low water pressure, mainly a problem for maintaining an adequate flow of firefighting water.

Future Water Requirements

Implementation of uniform residential water metering is expected to reduce household consumption by 20% to 40%. This has been the experience of other metropolitan areas which have installed meters, as documented by a recent study conducted by the U.S. Department of Housing and Urban Developement. This is also the range of disparity between City of Clovis (largely metered) and City of Fresno (unmetered) per capita residential water consumption.

With universal water metering, conservation measure effectiveness will be easier to monitor and water wastage will be traceable to responsible parties. Water customers will be made individually financially responsible for their water use. Residents will be able to monitor their water use and gauge their success at conserving. Cryptic water losses (e.g., leaking buried pipes, cracked swimming pools) can be found when meters are installed.

The Public Works Department expects water meter retrofit installations to be complete by 1994. Potential difficulties may sporadically arise, such as hard-to-locate house water service lines, obstructed public utility easements, and deteriorated or unacceptable house water service lines which must be replaced.

Residential water metering is expected to reduce the 205 gallon per day average residential use; however, it is likely that residences will still consume some 70% of the municipal water supply, due to concomitant future industrial development standards for water conservation and water recycling.

Assuming that the Roosevelt community's population growth continues at an annual 4.5 percent, and assuming that water meters are fully installed and reduce consumption in this community plan area by 20%, 1995 Roosevelt water consumption can be projected at 11.1 billion gallons, and year 2001 consumption at 15.2 billion gallons: 34,096 and 46,730 acre-feet, respectively.

Alternatively, if universal water metering were not done, these 1995 and 2001 Roosevelt consumption figures would be 14.3 billion gallons (43,840 acre-feet) and 19 billion gallons (58,310 acre-feet).

A third alternative for residential water metering would be installation of meters only in new residences, without retrofit of existing residences. Utility rate structure and differential water bill impacts on these two classes of residences cannot be estimated at this time. Assuming that the annual population growth rate continues, that residential water use habits do not change for the Roosevelt Area's unmetered existing population, and that the post-1992 new residents of the community have a 20% lower water consumption rate, total 1995 water use would be 13.9 billion gallons (42,660 acre-feet) and year 2001 water use would be 17.7 billion gallons (54,323 acre-feet).

Table EIR-14, following, shows ten years of projected Roosevelt Area water needs under the land use designations in the 1991 Roosevelt Update. The table compares the above-mentioned three residential metering options.

At full build-out, the 1991 Update's population capacity of 222,369 would require 23.8 billion gallons (72,951 acre-feet) of water per year if there were not universal residential water meters. With universal metering, 19 billion gallons (58,361 acre-feet) would be required every year.

Under the "no project" alternative (the existing 1978 Roosevelt Community Plan/1984 General Plan), the eventual Roosevelt build-out population of 259,894 would annually use 27.8 billion gallons (85,320 acre-feet) per year without universal water metering, and 22.2 billion gallons (68,210 acre-feet) if all residences had water meters. Since the annual population growth rate is expected to be higher if there were higher residential densities, these severe water demand impacts would occur on an accelerated timetable.

Table EIR-14: PROJECTED* MUNICIPAL WATER NEEDS FOR THE 1991 ROOSEVELT COMMUNITY PLAN UPDATE, COMPARING THREE OPTIONS FOR RESIDENTIAL WATER METERING

		ANNUAL ROOSEVELT COMMUNITY WATER REQUIREMENT (In Billions of Gallons)		
YEAR	POPULATION	With No Residential Water Meters	With All Residences On Water Meters (Post-1994)	With Only Post-1992 New Residences On Meters
1992	114,881	12.3	N/A	N/A
1993	120,051	12.8	N/A	12.7
1994	125,453	13.4	N/A	13.2
1995	131,098	14.0	11.2	13.7
1996	136,997	14.6	11.7	14.2
1997	143,162	15.3	12.2	14.7
1998	149,604	16.0	12.8	15.2
1999	156,336	16.7	13.4	15.8
2000	163,371	17.5	14.0	16.4
2001	170,723	18.2	14.6	17.1

*Assumptions: 4.5% annual population growth rate; unmetered residential per capita consumption is 205 gal per day; metered residential consumption is reduced to 164 gal per person per day; residential consumption is 70% of total City water use; population growth increments after 1992 will be housed in new residences; stable household sizes throughout the decade.

In either scenario, it will be difficult to supply adequate water to support continued Roosevelt area growth while maintaining groundwater reserves. Obviously, the situation will be more difficult without metering and conservation monitoring.

Water Supply and Delivery Infrastructure

Drilling a new water well and installing the pump, pressure tank, and discharge line presently takes the City at least twelve months from determination of project need to completion of construction. It costs over $240,000 for each well, and acquisition of a 12,000 square foot well site costs an additional $10,000 to $50,000.

Rehabilitating an existing well to seal off shallow contaminated groundwater takes the City nine to twelve months (from determination of project need to completion). Depending on the rehabilitation measures used, cost is presently $30,000 to $60,000 per well.

Well rehabilitation has so far been successful and cost-effective in several wells in the Roosevelt community. However, the experience of other eastern Fresno County cities near agricultural land is that, eventually, DBCP finds its way into the deeper aquifer and contaminates both rehabilitated wells and new, deep wells. Furthermore, bypassing the shallow aquifer means that DBCP-contaminated water will not be extracted and may spread under other parts of the City.

Based on regulatory trends and migration of contaminants in the Roosevelt community, it is presumed that many wells will need to be deepened/drilled below 400 feet, and even then will eventually require some form of water treatment in order to supply acceptable drinking water. If well water remains as a source of supply for the City of Fresno, this could result in a further depletion of the aquifer, without mitigation measures designed to recharge a quantity of water comparable to the volume withdrawn.

The City Water Division has acknowledged that, eventually, all wells could require some form of wellhead water treatment in order to comply with the various federal and state safe drinking water standards.

Wells in the Roosevelt community are already being approved for wellhead treatment installations. A well site of at least 12,000 square feet is needed to accommodate this process, and at least fourteen months are required to complete the job. Cost of each wellhead treatment installation used to remove organic contaminants ranges from $500,000.00 to $1,200,000.00 The amortized installation cost and ongoing operational expense of wellhead treatment can provide high-quality water at a (1990) price of about $.60 per 1,000 gallons. (This estimate does not include the costs of complying with all other new and proposed drinking water regulations.)

Typical wellhead treatment for DBCP and EDB is to utilize large tanks full of granular activated carbon ("GAC") to filter well water and remove organic contaminants. During the initial equilibration process, some minerals may be adsorbed by the carbon, including naturally-occurring radionuclides.

Potential growth of bacteria in the GAC filter bed necessitates that the water be disinfected before entering the City distribution system. This is commonly accomplished by adding liquid hypochlorite to achieve a chlorine residual of at least 0.2 parts per million (ppm). This chlorine residual helps to disinfect the entire distribution system. Hazardous trihalomethane (THM) byproducts are not expected from this chlorination, since organic THM precursors are typically low in groundwater and are being further removed by GAC filtration.

The GAC filtration material has a one to four year useful life, after which adsorption capacity of the carbon is used up and contaminant removal efficiency drops off; or, the filtration bed may become physically clogged due to an accumulation of

biologic and particulate matter. At this point, there are three options for restoring filter efficiency:

(1) Backflushing with clean water, retaining the filter backwash in a settling tank, refiltering the backwash supernatant and disposing of the settled carbon and filterable matter (up to 100 lbs. solids per backflush cycle). This is a maintenance operation most useful for minimizing physical clogging of the filter bed.

(2) Removal and regeneration (reconditioning) of the GAC material, replacing fresh GAC in the filter vessels. The used GAC is pumped out of filter vessels into a transport tanker and trucked to a regenerator. At the reconditioning plant, with chemical/physical treatment, adsorbed contaminants are driven off the carbon particles and are destroyed; the carbon is again ready to remove impurities. About a third of the companies which supply GAC systems take back and recondition used carbon filter material.

(3) Removal and disposal (usually, incineration) of the GAC material; replacing fresh GAC in the filter vessels. This is the least desirable option, because it destroys an expensive recyclable resource (GAC) and may take up valuable capacity in a hazardous waste disposal facility.

Alternative treatment modes to remove radon gas and some types of organic contamination from groundwater include "air stripping" and oxidation systems which use ozone and/or ultraviolet light to degrade contaminants. Air stripping aerosolizes well water, enabling radon gas and most volatile organic compounds to evaporate from small water droplets. The resulting contaminant-laden vapor may need to be filtered to prevent atmospheric discharge and resulting air pollution.

Ozone and ultraviolet light water treatment systems are new technologies that have not yet been completely test-proven for disinfection and volatile organic removal from large volumes of municipal water at high flow rates. The Public Works Department is conducting pilot tests on two "advanced oxidation" systems, and plans to evaluate another in a more limited role as a pretreatment adjunct for GAC filtration.

As City production wells are deactivated for contamination problems or maintenance, neighborhood areas may periodically suffer delivery capacity deficits (pressure drops) that may cause the municipal supply to fail to meet peak demand requirements of at least 2.18 gpm per person.

This is not primarily due to a city-wide lack of production capacity, but to a lack of water transportation capacity: the City's small water mains cannot efficiently move large volumes of water across distances of over a mile. Current Public Works Department policy requires new transimission grid mains to be at least 14" in diameter, but several older lines of smaller diameter remain.

In summary, continued population growth and development in the Roosevelt Community Plan Area, against a background of increasingly stringent water quality regulations, may cause the following significant impacts:

- groundwater overdraft
- accelerated groundwater contamination and migration of contaminants
- reduced water supply service levels and increased water costs

3. Surface Water Supplies and Utilization

Availability and Quality of Surface Water

The City of Fresno presently has entitlements and contracts for some 145,000 acre-feet of surface water in an average rainfall year.

Some 60,000 acre-feet of that is Class I (priority) Federal Bureau of Reclamation water impounded behind Friant Dam on the San Joaquin River. This water is available twelve months per year. This Bureau contract was entered with the City of Fresno after Friant Dam was built, and has increased incrementally 2,000 acre-feet per year (up to the maximum 60,000 acre-feet to be reached in 1995.) During years of low precipitation/low Sierra snowpack, this entitlement can be substantially (and unilaterally) reduced by the Bureau.

The balance of the City's surface water consists of entitlements and contracts from the Fresno Irrigation District (FID) which draws its water from the Kings River, San Joaquin River (Class II "as available" Bureau water), Fancher Creek, Dog Creek, Red Bank Creek, Dry Creek, and storm flows from the Fresno Metropolitan Flood Control District. Figure EIR-12 depicts the FID canal and ditch rights-of-way that traverse the Roosevelt Community.

The City of Fresno acquires rights to FID surface water when annexed properties in this agricultural irrigation district are developed for urban uses. For each Fresno Irrigation District acre annexed and urbanized, the City acquires entitlement to about two and a half (2 1/2)

acre-feet in an average precipitation year. (Fresno County similarly acquires FID water when it allows unincorporated area land to be converted from agriculture to another use.) The City of Fresno has annexed and urbanized over 34,000 acres in the Fresno Irrigation District. In a year with at least average precipitation, this FID entitlement would presently be 85,000 acre-feet.

The City also has acquired additional FID water entitlement to Kings River water when it has pumped reclaimed (percolated) treated wastewater from the City's treatment plant into FID canals. This water trading agreement between FID and the City will be up for re-negotiation and possible renewal in 1994.

The City must pay for delivery like any other FID customer; an entitlement is only a right to purchase. As with Bureau water, low precipitation years reduce availability of FID water. Each year, the Kings River Watermaster determines actual deliveries.

While Class I (priority) Bureau water deliveries tend to be reliable, Class II (as available) deliveries could only be counted on to supply an average of 50% of the total Class II entitlement. In extended periods of extremely low precipitation, even Class I deliveries have been projected to be as low as 10% of the entitlement.

The surface water supplies available to the City of Fresno have traditionally consisted of high quality water. The Sierra watershed supplying this water is generally free of toxic mineral deposits and urban wastewater discharges. Consequently, the runoff has been low in organic and inorganic chemical contaminants.

Increasing development and industrialization of the foothill areas would result in degradation of surface water quality from the inevitable effects of urban-type runoff and human wastewater discharges.

Turbidity of surface water is dependent upon erodibility of the watershed and settling time allowed in water retention basins (lakes). As development increases in the foothill and mountain areas of Fresno and Tulare counties, turbidity and siltation are expected to increase.

Current Uses of Surface Water: Recharge

At present, the City is using only about a third of its total surface water entitlement in a directed recharge program that annually delivers about 20,000 acre-feet to "Leaky Acres" (the City's main groundwater recharge field northwest of the Fresno Air Terminal) and over 25,000 acre-feet to irrigation ditches and flood control ponding/percolation basins throughout the City. Recharge

volumes have increased steadily, despite the recent drought, as new facilities for recharge have been completed.

Fresno's precipitation tends to fall in episodic events, and is directed to Fresno Metropolitan Flood Control District (FMFCD) basins to prevent and alleviate flooding (see EIR "Flood Control and Drainage" Chapter). Much of this water is, therefore, retained in the metropolitan area, where it can percolate into the aquifer. Most of the recharge water is absorbed into the soil and is distributed in the vadose zone (between root zone and aquifer) and aquifer.

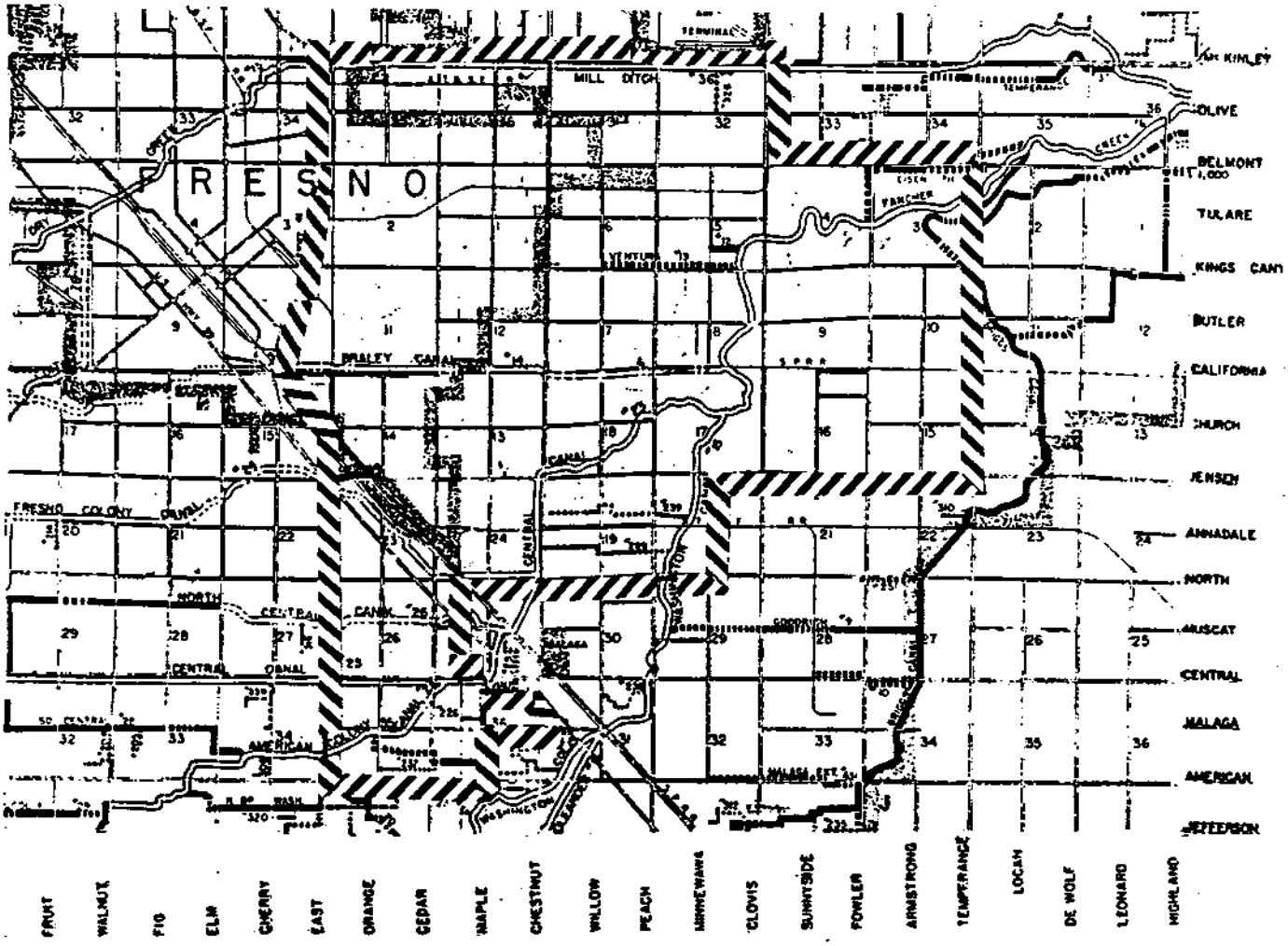
The City of Fresno Public Works Department, in conjunction with FID and the FMFCD, operates an assisted recharge program to replenish groundwater. These agencies designate which basins are suitable for recharge. Basin proximity to a creek, canal, or irrigation pipeline is important to enable delivery of recharge water. Permeable soil and subsurface strata are needed for effective percolation. Basin soil is tested for lead and, in industrial areas, for organic contaminants. FMFCD periodically maintains cleanliness and permeability by scraping basin bottoms. Many basins are kept fenced and locked to prevent unauthorized access and accidental drownings.

It is estimated that, in the Fresno area, some 50 inches of surface water may be lost per year due to evaporation. Losses are highest in the warmer seasons (spring through fall). Because the irrigation season is shorter than the overall warm season, usually delivering surface water only March through September, evaporative losses from recharge basins would be slightly less than the maximum typical yearlong losses, probably on the order of 36 inches per year from a filled basin.

The exact volume of assisted recharge water lost due to evaporation depends on the surface area of the filled ponding basins. For example, the "Leaky Acres" percolation field is some 200 acres in size; thus, if 36 inches (3 feet) is lost on 200 acres of surface area, that amounts to 600 acre-feet lost (or, about three percent of the 18,373 acre-feet of recharge water delivered to "Leaky Acres" in 1990). Given that the average ponding/percolation basin is ten acres in size, and two acres of that is "freeboard" (slope above filled waterline), typical evaporative losses from 8 acres of pond water surface would be around 24 acre-feet per recharge basin.

Due to widespread known and potential groundwater contamination in and around southeast Fresno, directed recharge activities will have to be carefully designed in order to avoid creating gradients which cause

Figure EIR-12



FRESNO IRRIGATION DISTRICT

LEGEND

BOUNDARY OF DISTRICT - ALSO INDICATES EXCLUDED AREAS.

CLASS "A"

CANALS PURCHASED FROM & OPERATED BY THE FRESNO CANAL & LAND CORPORATION.

ADDITIONAL CANALS OWNED & OPERATED BY THE DISTRICT

DEEDED

CANALS DEEDED TO THE DISTRICT.

CLASS "B"

PRIVATE CANALS

PORTIONS OF VARIOUS CANALS THAT ARE PIPED

CITY OF FRESNO ROOSEVELT COMMUNITY PLAN AREA

contamination plumes to spread faster, and to avoid turning unremediated point sources of contamination into plumes. Although recharge activities have a localized soil/aquifer purging effect, they can spread contamination over a wider area by displacing contaminated water (while diluting the concentration of that contaminant).

The Roosevelt area groundwater supply benefits by its location southeast of "Leaky Acres" and adjacent to irrigated crop land. Several creeks and irrigation canals traverse the community; leakage from the sides and bottoms of these ditches is known to help recharge. Fresno Irrigation District canal maintenance projects require several months of time and cannot be conducted during periods of heavy stormwater runoff.

Twenty-two flood control/stromwater ponding basins have been excavated in the Roosevelt plan area; ten more are planned. (See EIR "Flood Control and Drainage" chapter). Five of these Fresno Metropolitan Flood Control District (FMFCD) basins are presently being used for directed groundwater recharge, using part of the City's surface water entitlement. During irrigation season, water is delivered to these basins at a 1990 cost of $1.25 per acre foot for FMFCD basin maintenance fees; this does not include funds for FID taxes, used to defray FID costs. This water is allowed to percolate into the upper aquifer. Table EIR-15 below details 1990 recharge efforts in the Roosevelt area.

1990 water deliveries were unusually low due to a severe four year drought and a shortened FID water delivery season. (Only 74% of the Bureau's Class I entitlement could be distributed in 1990.) After subtracting for an estimated 96 acre-feet (31 million gallons) of evaporation, it appears that the 1990 recharge basin program in the Roosevelt area replaced four percent of the groundwater extracted from wells in the Roosevelt area.

However, with "Leaky Acres" just to the north, with the sizable subsurface flow from eastern portions of Fresno County, and with water infiltration from creek beds and canals that traverse the Roosevelt area, the total groundwater recharge situation is better. City-wide, it is estimated by the Public Works Department that some 40% of total Fresno water consumption was replaced by assisted recharge activities in 1990. With current facilities, 60,000 to 70,000 acre-feet of annual assisted recharge is now possible in the Fresno metropolitan area during normal precipitation seasons.

Table EIR-15: 1990 DIRECTED GROUNDWATER RECHARGE ACTIVITIES IN FRESNO METROPOLITAN FLOOD CONTROL DISTRICT (FMFCD) BASINS WITHIN THE ROOSEVELT COMMUNITY

FMFCD Zone Designation	Recharge Basin Location	Acre-feet Recharged in 1990
A	South of California Ave between Maple & Chestnut Aves.	0
Y	Northeast of Willow & Kings Canyon Aves.	131
BO	North side of Fancher Creek between Clovis & Fowler Aves.	183
GG	Southwest of California & Maple Aves.	0
II-2	Northeast of Church & Orange Aves.	221
JJ	Southeast of McKinley & Millbrook Aves.	732
	TOTAL	1,267
	(413 million gallons)	

In the Roosevelt Community Plan Area the Fresno Metropolitan Flood Control District plans to expand assisted recharge activity soon to Basins II-1 (southeast of Ventura and Freeway 41), AZ (northwest of Golden State Boulevard and Chestnut Avenue in Malaga), and BJ (between Highway 99 and Golden State Boulevard, north of Central Avenue).

The City of Fresno indirectly participates in a more diffuse recharge effort that operates around the perimeter of the metropolitan area. Unused City irrigation entitlement and contract water are distributed by the Fresno Irrigation District to farmers. This water infiltrates the ground from creek beds and other water delivery canals and by agricultural irrigation. The Fresno Irrigation District estimates that 30% of agricultural irrigation water currently percolates below the root zone and helps to recharge groundwater. The City of Fresno and FID have an agreement that the City's unused FID water shall not be sold or traded out of the Fresno-Clovis Metropolitan Area.

Irrigation of most Fresno area crops requires 2-1/2 to 3-1/2 acre-feet of water, per acre, per year. Bureau Class II and senior Kings River Water Association entitlement deliveries would only provide this much water in a "normal" year, and only provides it during the irrigation season. On an average, farmers can only count on receiving about half of their surface water entitlement in any given year. Therefore, farmers also depend on groundwater extraction to produce crops.

As the cost of drilling high-production wells and operating irrigation pumps continues to rise, increasingly efficient irrigation methods are being employed. These methods are beneficial, in that they are designed to conserve water, applying only as much as the crops require. Unfortunately, this means that less water will penetrate deeper than the root zone. Future agriculture will do less flood irrigating, reducing diffuse groundwater recharge.

Potential Surface Water Treatment for Municipal Use

Because surface water is open to the air, has contact with the soil, and can be accessed by animals, microbial populations in surface waters are relatively high. Alum floculation to remove turbidity and chlorine disinfection are most often used to treat surface water so that it can be used as potable water (Turbidity must first be reduced in order for disinfection to work properly and for potential trihalomethane formation to be reduced).

The cities of Fresno and Clovis have jointly studied construction of a plant to clarify and disinfect surface water, so that this water could be used to supply municipal needs. The 1990 Fresno/Clovis Surface Water Feasibility Study concluded that the preferred site for such a facility would be near Willow and Copper Avenues. Such a facility could supply 60 million gallons per day (mgd), annually using over 67,000 acre-feet of water. Municipal water production of a 60 mgd plant would theoretically be about 20 billion gallons per year (half of the City of Fresno's 1990 water requirement).

The Surface Water Feasibility Study concluded that several issues would need to be resolved before such a plant should be approved. A comprehensive water resources study was commissioned; this is expected to be complete by late 1992. City water rights on the Kings River system should be clarified, and an exchange program worked out so that more Friant Dam water could be obtained. A new diversion facility would have to be constructed on the Friant-Kern Canal, and an improvement program would have to be instituted for the cities' municipal water distribution systems.

After these issues were settled, the Feasibility Study concluded that it would take at least three years to design and obtain all necessary permits for constructing

the surface water plant. Building the plant, the Friant-Kern Canal diversion pipeline, and necessary municipal distribution lines would require at least another two years.

Capital costs (1990 dollars) were estimated at $120 million and annual operating costs at $3.9 million. Such a plant could deliver water at a 1990 cost of $.85 per 1,000 gallons. This cost would be substantially lower than the current national average water cost of $1.40 per 1000 gallons. However, the cost estimate was made without regard for future fiscal impacts from new EPA and State water quality regulations.

Use of the entire Bureau contract water supply for treated municipal water would require that new supplies for assisted recharge water be acquired, or be taken from the City's FID entitlement and contract water. Some FID water comes from the San Joaquin River. (Class II Bureau water); the remainder of FID's supply comes from the Kings River. Kings River FID water could be conveyed to northeastern parts of the City by means of the Enterprise Canal, and could be distributed like Bureau water. This would, of course, reduce the availability of "excess" City surface water which has traditionally been left with FID to distribute to agricultural water users.

A 60 mgd water treatment plant running at full capacity could only supply about half of the City of Fresno's 1990 needs; and, any future plant may also supply some treated water to the City of Clovis. Even with universal water metering and conservation measures, population growth and concomitant increased water demand in both cities would cause the plant's proportionate share of total municipal water supply to further decline, unless more surface water could be acquired and water treatment plant capacity could be expanded or duplicated.

Surface Water Impacts from Roosevelt Area Development

In addition to the 60,000 acre-foot annual Bureau water contract for the entire City of Fresno, surface water rights are acquired by the City when urban development occurs in irrigation districts.

In the Roosevelt area, per acre annexed and urbanized, an FID entitlement to a potential two and a half (2-1/2) annual acre-feet (or 814,575 gallons) of FID water is acquired for each FID acre annexed and developed. FID's recent 10-year average delivery has been 2.25 acre-feet per acre per year. Since a full entitlement volume cannot always be delivered (only half of precipitation years are at least "normal"), actual volume of water acquired for possible treatment and distribution may only average 1-1/4 acre-feet over the long term.

Schmidt and Associates has estimated City-wide annual consumptive water use at 2-1/2 acre-feet per acre. However, many planned land uses could create water demands in excess of that, particularly with the higher household sizes that the 1990 Census revealed in the Roosevelt Community.

For instance, 90% build-out of medium-low density single-family residential housing (averaging 4.5 houses per acre) in the Roosevelt Community would place 12.9 people per acre. With present 205 gpd residential consumption, each acre of medium-density housing would require 965,240 gallons of water per year. This volume of water is more than would be acquired from that acre's FID entitlement in a normal precipitation year.

With a 20% consumption reduction (as would be expected from universal water metering), this same acre of medium-low density residential development would require 772,194 gallons per year, just under that acre's average FID entitlement.

Higher density residential uses (90% build-out of medium, medium-high, and high planned densities) creates a per-acre water demand that is greater than the volume of water acquired from that acre's irrigation district entitlement.

Lower-density residential development, commercial development, and many light industrial uses require less water per acre than medium-low residential. Heavy industrial development and residential growth at "medium" and higher planned densities would require per-acre water volumes clearly in excess of amounts supplied by acquisition of that acre's FID rights.

Unless additional surface water rights are purchased or otherwise acquired on a large scale by the City of Fresno, complete conversion to a surface water supply is not possible. Use of City wells to tap Fresno's Sole Source Aquifer supply will forseeably always be a major part of City waterworks, and use of surface water will always be conjunctive with use of groundwater.

With expanded assisted recharge facilities, surplus surface water could be "banked" during high precipitation seasons for later withdrawal. While desirable, additional surface water would not be necessary to accomplish this. Even with a 60 mgd surface water treatment plant in operation, an average precipitation season would provide another 80,000 acre-feet of surface water for the assisted recharge program.

Overall, Fresno has an exceptional surface water supply and an exceptional groundwater reservoir in the Sole Source Aquifer. With some infrastructure enhancements, Fresno's combined surface/groundwater systems will make a stronger and more elastic water supply, capable of withstanding protracted drought better than most California cities.

4. Mitigation Measures

(1) The Development Department and Public Works Department shall implement the 1991 Roosevelt Community Plan Update, including policies on water service (Policy nos. 4-3.1 through 4-3.9) and water quality and quantity protection (Policy nos. 5-1.1 through 5-1.11).

(2) Building permits shall not be issued by the Development Department until an adequate water supply has been fully developed to serve those units (wells and/or surface supply will be constructed, on-line, and providing water of acceptable quality).

(3) The Public Works Department Water Division shall prepare an annual "water budget" and capital improvement program which projects water consumption demand, water delivery capability, and water well improvement commitments.

(4) All practical water conservation measures shall be required by the Development Department and Public Works Department, including installation of water meters on all existing and new water services; establishment of industrial/commercial water conservation standards; establishment of practicable low-volume plumbing fixture standards for new construction; and establishment of water-efficient landscape (xeriscape) requirements.

(5) In order to maintain effective water quality control program enforcement in areas which may influence Fresno's Sole Source Aquifer, the Development Department and Public Works Department shall work with, and provide information to, agencies which have authority over potential sources of contamination and potential causes of groundwater overdraft.

(6) In order to preserve aquifer and surface water quality, development shall not be allowed in areas influencing the groundwater of the metropolitan area, when this development relies on wastewater treatment or disposal systems known to discharge any inadequately treated wastewater (i.e., containing high concentrations of salts, nitrates, nitrites, heavy metals, and/or organic compounds deemed to be drinking water contaminants).

(7) The Public Works Department, in cooperation with the FID and the FMFCD, shall implement and maintain a groundwater recharge program to ensure long-term groundwater balance and promote water quality improvement objectives. Groundwater recharge programs shall be developed, funded and maintained to mitigate the impacts of residential, industrial, and groundwater extraction.

(8) The City Public Works Department shall study the concept of a groundwater replenishment district to fund the portion of recharge activities necessary to recharge water extracted by private and public well operators who are not currently recharging groundwater.

(9) In any development adjacent to FID canals, the Development Department shall ensure that patent canal rights-of-way shall be preserved, FID ability to convey stormwater shall be preserved, and the ability of FID to deliver irrigation water on schedule shall be preserved. Development proposals and applications shall continue to be routed to FID and FMFCD for their review. Per Fresno Municipal Code Section 12-306-O, irrigation canals shall be piped (when adjacent property is developed) to maintain public safety and water quality.

(10) The Public Works Department, FMFCD, and FID shall cooperate to increase recharge within the Roosevelt community as indicated by the Metropolitan Water Resource Management Plan and approved FID/City recharge projects.

(11) Proposed FMFCD stormwater and recharge basins shall be subjected to a Level I hazardous materials assessment to determine proximity to known and suspected areas of soil and groundwater contamination. Protection and remediation measures shall be instituted before these basins are used for recharge or before area-wide storm drainage is directed and allowed to percolate into these basins.

(12) The City Manager's Office, the Development Department, the Public Works Department and the City Attorney's Office shall cooperate on efforts to evaluate, abate and/or mitigate contamination as expeditiously as possible, with the goal of assuring that water delivered to customers complies with federal and state drinking water standards.

(13) The Public Works Department shall continue efforts to avoid and remove groundwater contaminants that affect the Roosevelt area water supply, by: water well rehabilitation; adjusting pumping rates to match specific yield of water-bearing zones; drilling wells outside of degraded water areas; equipping new/rehabilitated wells with deeper seals; and by instituting wellhead treatment to remove contaminants from drinking water and from the aquifer.

(14) The Public Works Department shall develop a timetable and funding mechanism for amortizing and replacing water transmission grid mains, to provide for upgrading capacity, to prevent leakage from deteriorated pipe, and to maintain water quality.

(15) Before a well is developed, the Public Works Department shall subject the potential well site to at least a Level I hazardous substance assessment.

(16) Backwash water, used GAC slurry, and other solid waste or liquid effluent created by wellhead treatment shall be properly handled and/or disposed of according to its waste hazard classification. If the carbon material is reconditioned, the public Works Department shall ensure that the GAC recycling facility has proper handling and disposal procedures, in order to limit the City's "cradle to grave" responsibility for potentially hazardous materials. Documentation of proper "chain of custody" of used GAC shall be a condition of any carbon change-out contracts. If the GAC is to be regenerated or incinerated, the Public Works Department shall ensure that the regeneration facility is fully permitted for the designated procedure and that a certificate of regeneration or destruction is obtained for each GAC load.

(17) In consultation with Department of Health Services' Office of Drinking Water, the Public Works Department shall develop contingency plans for effective public (customer) notification in the event of an exceedance of drinking water standards, when a well must be left in service in order to maintain adequate pressure and fire flow.

(18) City water service shall not be extended to areas planned for new development (residential subdivisions, commercial, or industrial) outside the incorporated city limits, with the following exceptions:

EXCEPTIONS:

(a) City water connection is required under Section 14-115 of the Fresno Municipal Code; or

(b) The existence of extraordinary circumstances, in which case City water service must be approved by both City and County legislative bodies. Existing commitments for water service outside the city limits shall continue to be honored.

D. AIR QUALITY

1. Air Quality Status and Air Pollution Control Regulations

The Roosevelt Community shares the larger air quality problems experienced by the San Joaquin Valley Air Basin, Fresno County, and the Fresno-Clovis Metropolitan Area (FCMA). In published rankings of U.S. cities' air pollution, Fresno has been rated as having the third-worst air quality problem in the nation, ranking just behind Los Angeles and Bakersfield. Much larger cities, such as New York, Chicago, and Houston were rated as having less air pollution than Fresno.

Air pollution is estimated to cost Fresno County residents hundreds of millions of dollars annually, from health care costs, lost tourism, timber and crop damage, and materials degradation.

Local, State, and Federal regulations are attempting to improve Fresno's air pollution. Federal and State governments have set standards for air quality. These standards specify permissible levels of certain pollutants.

Primary air pollution standards have been set at levels intended to preserve the health of the "sensitive population:" persons with heart or lung disease, children, and people over age 65. The demographics of the Roosevelt Community show that southeast Fresno's proportion of "sensitive population" is higher than national, state, and even County-wide and City-wide averages.

Not only does the State of California regulate more pollutants, it sets tighter standards, based on the State Department of Health Services' health of pollution impacts on California's population.

Compliance with these standards is determined by equipment which samples and tests air to monitor pollution. Data from these monitors are statistically analyzed and sent to the State Air Resources Board for examination and approval. Verification of year-end results takes several months, so the most recent monitoring data available for this EIR are from 1989. Fresno County has several EPA-accepted air quality monitoring stations. The two monitors closest to the Roosevelt Community are near Maple and Jensen Avenues, and at First and Shields Avenues.

Based on monitoring data, it has been demonstrated that Fresno County attained State and Federal Ambient Air Quality Standards for sulfur dioxide, lead, and nitrogen oxides (NOx)--although nitrogen oxide emissions must be reduced, because NOx is a leading contributor to ozone pollution. State air quality standards for sulfates and hydrogen sulfide

Figure EIR-13

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [5,6]	Secondary [5,6]	Method [4,7]
Ozone	1 Hour	0.09 ppm (180 ug/m3)	Ultraviolet Photometry	0.12 ppm (235 ug/m3)	Same as Primary Std.	Ethylene Chemiluminescence
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m3)	Non-dispersive Infrared Spectroscopy (NDIR)	9.0 ppm (10 mg/m3)	Same as Primary Stds.	Non-dispersive Infrared Spectroscopy (NDIR)
	1 Hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
Nitrogen Dioxide	Annual Average	-	Gas Phase Chemilumi-nescence	0.053 ppm (100 ug/m3)	Same as Primary Std.	Gas Phase Chemilumi-nescence
	1 Hour	0.25 ppm (470 ug/m3)		-		
Sulfur Dioxide	Annual Average	-	Ultraviolet Fluorescence	80 ug/m3 (0.03 ppm)	-	Pararosoaniline
	24 Hour	0.05 ppm [4] (131 ug/m3)		365 ug/m3 (0.14 ppm)	-	
	3 Hour	-		-	1300 ug/m3 (0.5 ppm)	
	1 Hour	0.25 ppm (655 ug/m3)		-	-	
Suspended Particulate Matter (PM_{10})	Annual Geometric Mean	30 ug/m3	Size Selective Inlet High Volume Sampler and Gravimetric Analysis	-	-	-
	24 Hour	50 ug/m3		150 ug/m3	Same as Primary Stds.	Inertial Seperation and Gravimetric Analysis
	Annual Arithmetic Mean	-	-	50 ug/m3		
Sulfates	24 Hour	25 ug/m3	Turbidimetric Barium Sulfate	-	-	-
Lead	30 Day Average	1.5 ug/m3	Atomic Absorption	-	-	Atomic Absorption
	Calendar Quarter	-		1.5 ug/m3	Same as Primary Std.	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 ug/m3)	Cadmium Hydr-oxide STRactan	-	-	-
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm (26 ug/m3)	Tedlar Bag Collection, Gas Chromatography	-	-	-
Visibility Reducing Particles	1 Observation	In sufficient amount to reduce the prevailing visibility[8] to less than 10 miles when the relative humidity is less than 70%		-	-	-
Applicable Only in the Lake Tahoe Air Basin						
Carbon Monoxide	8 Hour	6 ppm (7 mg/m3)	NDIR	-	-	-
Visibility Reducing Particles	1 Observation	In sufficient amount to reduce the prevailing visibility[8] to less than 30 miles when the relative humidity is less than 70%.		-	-	-

(Footnotes on reverse side)

Figure EIR-13 (continued)

NOTES:

1. California standards for ozone, carbon monoxide, sulfur dioxide (1 hour), nitrogen dioxide and particulate matter - PM_{10}, are values that are not to be exceeded. The sulfates, lead, hydrogen sulfide, vinyl chloride, and visibility reducing particles standards are not to be equaled or exceeded.

2. National standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based upon a reference temperature of 25° C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the Environmental Protection Agency.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by the EPA.

7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8. At locations where the state standards for ozone and/or suspended particulate matter are violated. National standards apply elsewhere.

9. Prevailing visibility is defined as the greatest visibility which is attained or surpassed around at least half of the horizon circle, but not necessarily in continuous sectors.

have been attained (there are no comparable Federal standards for these air pollutants). Vinyl chloride, a manufacturing-related air pollutant which also has a state but not a Federal standard, is not presently monitored in Fresno County.

The Fresno-Clovis Metropolitan Area has chronically failed to attain health-based State and Federal clean air standards for carbon monoxide (CO). Fresno and the other San Joaquin Valley Air Basin counties have been in chronic non-attainment for ozone (oxidants) and particulate matter. Each of these non-attainment pollutants is discussed in more detail below.

Carbon Monoxide (CO)

During 1989-1990 Fresno County exceeded the State/Federal 8-hour carbon monoxide (CO) standard seventeen times. There was one exceedance of the State 1-hour standard in 1989-1990, and no exceedances of the higher Federal 1-hour standard. In 1990, the monitoring station which reported seventeen CO exceedances was moved to a different location, because local conditions had changed (freeway construction), and this station no longer met siting criteria. In 1990-91, Fresno County had one 8-hour CO exceedance, and no violations of the 1-hour standard.

Carbon monoxide is emitted by incomplete combustion processes, such as motor vehicles without smog controls, improperly tuned vehicles with smog controls, uncertified wood heaters, inefficient natural gas burners, and uncontrolled fires such as wildfires and house fires. Carbon monoxide levels (emissions) are higher in Fresno in the winter, because air is "bottled up" by inversion layers, vehicle engines operate less efficiently in cold weather, and because the majority of residences have woodburning appliances in use during the winter.

Carbon monoxide affects human health by binding to hemoglobin and impairing oxygen transport in the body. Severe air pollution episodes have been known to increase mortality (death rate) and morbidity (illness rate), primarily attacking people with underlying heart disease and/or respiratory diseases. Chronic low-level CO pollution is also cited as a contributing factor in the development of heart problems and some circulatory diseases.

Particulate Matter

1989 air quality monitoring data for fine particulate matter (PM-10) shows that the State 24-hour standard was violated on 39 days and the Federal standard was exceeded on 7 days. For 1989, Fresno's annual geometric mean

PM-10 level (88.6 micrograms per cubic meter) exceeded the State attainment standard, and Fresno's annual arithmetic mean of 102.8 micrograms per meter exceeded the federal standard.

In 1990, the State 24-hour PM-10 standard was violated on 41 days; the Federal 24-hour PM-10 standard was violated 10 days. State and Federal annual standards were violated at all monitoring stations in Fresno County. The highest one-day concentration in Fresno was 288 micrograms per cubic meter.

PM-10 exceedances in Fresno occur primarily in the late summer, autumn, and during midwinter inversions. This reflects the pattern of PM-10 emissions. In the summer, more dust is raised from unpaved roads and parking areas. Secondary particulates ("smog") can be formed in the atmosphere by summertime photochemical reactions that condense gases and vapors into solid particles. During the fall, agricultural harvest and plow-down/tillage activities raise a lot of dust, and higher wind speeds loft these particles into the air. Wintertime urban PM-10 has been attributed mainly to the accumulation of woodsmoke and other particulate emissions caught in stagnating inversion air masses.

PM-10 is made up of very small particles, ten or less microns in diameter. These particles are of health concern because they can enter the microscopic sacs (alveoli) in lung tissue, where they accumulate and cause damage. Some PM-10 particles are composed of inherently allergenic or toxic substances (e.g., asbestos fibers, pollen, or chemical fumes/vapors); others are fairly inert (e.g., silica) but cause lung damage by mechanical irritation. Elevated PM-10 levels are contributory to a wide variety of medical conditions, ranging from irreversible emphysema to increased absenteeism due to more severe symptoms of common colds.

Ozone (Oxidants)

Ozone is reported to be Fresno's "worst" air quality problem. In 1989, State standards for ozone were exceeded on 109 days, and Federal ozone standards were exceeded on 24 days. In 1990, State standards for ozone were exceeded 80 days, and Federal ozone standards were exceeded 14 days. The highest value recorded in 1990 was 0.15 parts per million, the same as 1989's maximum. These exceedances occurred from spring through fall, indicative of the nature of ozone formation.

The prevailing warm, sunny climate of Fresno adds to its ozone burden, because sunlight converts precursor gases and atmospheric oxygen into particulates and ozone.

Ozone itself is not emitted directly, except for incidental releases from electrical equipment and lightning. In the lower atmosphere, ozone is formed by a photochemical (sunlight-driven) reaction, where UV light supplies the energy needed to form more reactive ozone out of precursors. The main ozone precursor substances are oxides of nitrogen (NO_x), which are formed when normally-inert atmospheric nitrogen (N_2) is subjected to high-temperature combustion, as in gasoline engines and natural gas burners. Another major precursor is hydrocarbon gas, emitted by incomplete fuel combustion, biological digestion (wastewater treatment, ruminants), solvent evaporation, and emissions from various chemical refining and synthesizing processes.

Ozone in the lower atmosphere is of health concern because it is a reactive, oxidizing gas that can damage exposed tissue. Membranes of the eyes and respiratory passages are most affected. Severe ozone episodes can increase morbidity and mortality. Chronic, lower-level ozone exposure is blamed as a cause or contributing factor in chronic respiratory illnesses.

The underlying reason for Fresno's poor air quality is a unique combination of geography, climate, and pollutant emissions. The low-lying San Joaquin Valley is hemmed in by high mountain ranges on three sides, blocking most cleansing air flows. The Valley air mass is further prevented from circulating by air layer inversions, where an upper air layer warms and expands, capping a cooler, lower air mass within the Valley. These inversion conditions can continue for days, causing the entrapped (stagnant) air mass to become more and more contaminated by discharged air pollutants. Because of its unique geography and climate, the EPA considers the San Joaquin Valley to have potentially the worst air quality in North America, given sufficient air pollution emissions.

Rapid urban and exurban growth in the region have led to ever-increasing levels of emissions that complete the pollution equation. Vehicle-dependant land development patterns in Fresno County have led to high mobile source emissions. A lack of synchronized traffic signals and limited street capacities have led to congestion and have increased source emissions from excessive vehicle idling times. Air quality planners estimate that as much as 65% of the Central Valley's air pollution is due to vehicular sources.

Other types of pollution emissions, such as stationary sources ("point" sources, typically industrial facilities) and area-wide sources (usually non-mobile, disseminated air pollution from domestic and agricultural activities) also contribute significantly.

As required by the Federal Clean Air Act and its later amendments, a series of Fresno County Clean Air Plans were prepared from the late 1960's through the 1980's. A County Air Pollution Control District (APCD) was created to monitor and enforce the clean air plans. Traditional activity focus of the APCD has been permitting and pollution control equipment for stationary sources (industries).

The State of California Air Resources Board, meanwhile, has been tightening emission controls on vehicles sold in California. In 1984, Fresno County mandated a biennial "smog check" for registering on-road vehicles, to ensure functional emission control systems. This program is credited with slowing the rate of air pollution increases, despite the County's massive growth throughout the 1980's. However, air quality did not improve enough to demonstrate attainment of standards for CO, PM-10, and ozone.

In early 1990, the EPA imposed first-level sanctions on the Fresno Metropolitan Area, a construction ban on any new stationary source which would annually emit 100 or more tons of volatile organic compounds (hydrocarbon gases, which are ozone precursors). Existing stationary sources were prohibited from expanding or being modified if the result would be 40 or more annual tons of additional volatile organic compounds emitted into the atmosphere.

In 1988, the State Legislature passed the California Clean Air Act of 1988. It mandated sweeping reforms in air pollution control: requiring different jurisdictions to work together regionally, requiring deadlines and incremental emission inventory reductions so that regions will attain clean air standards, and regulating a wider range of pollution sources (such as consumer products, off-road vehicles, ships, locomotives, and so forth).

One of the problems with the State Clean Air Act's inventory reduction approach is that incremental reductions in the inventory may not translate to proportionately improved results at air quality monitoring stations.

The emissions inventory is developed and modified by often-arguable air quality planning assumptions, while attainment and non-attainment are demonstrated by virtually inarguable sampling methods. The planning assumptions that go into inventory development are not all backed by pertinent field sampling using air testing equipment. Also, different weather conditions acting on the same emissions inventory will produce different levels of air pollution. Pollution not only depends on emissions; it is vastly influenced by temperature, precipitation, sunlight, wind, inversions, and so forth. However, the general underlying premise behind mandating reductions in emissions inventories is that there should be a concomitant reduction in air pollution.

While the California Clean Act stopped short of directly regulating land use, it does require that programs be developed to evaluate and control "indirect sources," the vehicular pollution that ensues when land development occurs. (State legislation was introduced to delete indirect source review from the purvey of regional air pollution control districts.)

In order to fulfill the obligations of the California Clean Air Act and to comply with the expressed wishes of the State Legislature, the eight San Joaquin Valley Air Basin counties (Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare) consolidated their air pollution control efforts and formed the San Joaquin Valley Unified Air Pollution Control District (SJV Unified APCD).

The eight-county air basin agency is working to comply with Federal clean air mandates, compiling a set of State Implementation Plan (S.I.P.) Rules, applied to various types of stationary sources. To fulfill Federal requirements, a PM-10 Control Plan is being refined and implemented.

Although the 1987 emissions inventory (used as the Clean Air Act planning baseline) has not yet been finalized, work is underway on a State-mandated comprehensive 1991 Clean Air Attainment Plan that will be applied in all eight SJV counties. The 1991 Attainment Plan is being drawn to control carbon monoxide and ozone, by reducing the sources (inventory) of CO and ozone precursor emissions. Stationary sources (both large and small/area-wide) and mobile sources will come under more stringent regulation in order to decrease emission inventories.

The SJV Unified APCD is also developing an Indirect Source Review (ISR) Rule to be used for mitigating the vehicular air pollution that is added when land is developed. The State Air Resources Board estimates that, at best, 30% to 40% of new pollution that occurs concomitant with development can be mitigated by strict application of ISR rules.

Late in 1990, Congress revised and re-authorized the Federal Clean Air Act (Public Law 101-549, Clean Air Act Amendments of 1990), introducing concepts of market-based pollution control (buying, banking, and trading offsets), and setting new deadlines for areas to demonstrate attainment. Fresno's previous decade of non-attainment and the EPA sanctions imposed in early 1990 were "wiped clean" by these new Federal Clean Air Act Amendments. (The 1988 California Clean Air Act mandates were untouched by Federal legislation.)

The 1990 Federal Clean Air Act Amendments contain provisions for sanctions which could be imposed for failing to attain Federal clean air standards. New major sources would have to offset non-attainment emissions by a factor of two (i.e., a factory would have to find ways to eliminate twice as much

pollution as it would generate, before being issued a permit to operate). Secondly, Federal transportation funds could be withheld if sufficient progress is not made in mass transit and air quality programs. If the State Air Resources Board fails to correct air quality deficiencies within two years of EPA's finding of a deficiency, a "FIP" (Federal Implementation Plan) will be imposed, removing air quality planning from local and State control.

Other legislative actions have recently attempted to deal with air pollution. Traffic congestion control programs were approved in 1986 (Fresno County Ballot Measure C, 1/2 cent sales tax increment) and 1990 (California Ballot Proposition 111, Traffic Congestion Relief and Spending Limit Act of 1990). Although primarily designed to improve traffic flow, these programs have air quality benefits by reducing idling and vehicle operation hours associated with congestion (See the EIR Traffic Section).

In 1990, the City of Fresno embarked on its own Air Quality Policy Program, attempting to address air pollution from land development and from City operations. Areas of focus were City vehicles (buses and passenger car fleet), transportation management plans for development projects which would accommodate 50 or more employees, control of emissions from residential woodburning, better air quality impact analysis for development projects, and more detailed mitigation measures for development projects. Appendix C outlines the City of Fresno Clean Air Policy Program.

2. <u>Future Air Pollution Emissions--Impacts of the Roosevelt Community Plan Update</u>

Urban growth and development in this plan area will potentially cause additional emissions of air pollutants and pollutant precursors. These emissions may come from new industrial facilities (if they are not required to offset at least 100% of all their emissions); from households (heating fuel combustion, maintenance activities, cooking); from construction and demolition activities; and largely from increased vehicular traffic.

Measures designed to increase all types of energy efficiency, to reduce traffic volume, to minimize vehicular trip lengths, to conserve and recycle materials, and to modify consumer products that contribute to air pollution, all act to mitigate the air quality impacts of increased population. Air pollution regulations imposed on industries and other human activities also slow the rate of air quality degradation.

Since the California Clean Air Act of 1988 requires that all air basins make incremental progress toward attaining health-based air quality standards, a wide range of far-reaching clean air measures will be employed in the future.

The Roosevelt Community could benefit from new rules requiring 100% offset of pollutants from new development, because those seeking to clean up existing pollution (so that they can acquire credit in an offset "bank") usually retrofit older industrial facilities with better pollution control equipment.

Other offset opportunities in the Roosevelt community include older homes which were not built to Tile 24 energy efficiency standards; older, high-pollution wood heaters (wood stoves and inserts); traffic light systems which need to be synchronized; a mass transit system which needs bus bays, a transit center, and new vehicles; and three State highways without regional park-and ride lots.

At present, it is not possible to project or calculate the future net quantity of area-wide and stationary source emissions that would be created by build-out of the Roosevelt community.

However, the California Air Resources Board has developed Air Quality Analysis Tools ("AQAT") which can estimate future vehicular pollution linked with development of particular land uses. This set of software contains programs which calculate emissions in various settings.

The "URBEMIS" computer program takes into account land use/project type, acreage/dwelling units, density/building square footage, trip generation rates (from the Institute of Traffic Engineers, or "I.T.E.," manual), average speed on roadways, average trip length of various types of trips, fleet mix, climate, and the year for which the analysis is being made. The results (total "indirect source" emissions) can expressed in pounds per day or tons per year.

The 1978 Roosevelt Plan and the 1991 Roosevelt Update were compared using the "URBEMIS" computer program from AQAT-3 (The term "URBEMIS" is a consolidation of "urban emissions." URBEMIS calculates vehicular emissions generated and particular land uses are developed.

Pursuant to the City's Clean Air Policy Program, URBEMIS can be used to assess individual and cumulative air quality impacts for future land use alternatives and development projects.

Shortcomings of using the URBEMIS program to analyze potential Roosevelt Community Plan Update impacts include:

1. The URBEMIS program only looks at mobile (vehicular) emissions. It does not estimate potential stationary (industrial "smokestack") sources; nor does it estimate "area-wide" emissions from household activities, agriculture, construction activities, wildfires, natural phenomena, or pollution from highway traffic passing through an area.

2. URBEMIS does not have "default values" (built-in data) for all land uses. In the AQAT-3 version, recreational and school land uses were not included.

3. Some of the built-in URBEMIS assumptions (default values) may be based on outdated studies or assumptions that are not fully correct for the Roosevelt community (e.g., the emission levels, ages and types of vehicles in the standard fleet mix).

4. Some of the parameters entered into URBEMIS calculations by the user may not be correct (e.g., it is difficult to estimate an average traffic speed applicable to the entire Roosevelt community for all times of the day).

5. URBEMIS default values are "blind" to built-in offsetting features and special pollution control measures, such as convenient mass transit for a development, or an urban residential development's proximity to employment, commercial centers, and services.

Even with these possible deficiencies, the URBEMIS computer program is still the best tool available for quantifying air quality impacts of land use decisions. Inasmuch as some 75% of the Valley's air pollution comes from mobile sources, URBEMIS data can be extrapolated to roughly estimate total emissions for urban areas. URBEMIS is most useful for comparing two alternative land use scenarios, with all other factors the same except land use options.

Table EIR-16, following, gives URBEMIS mobile source emissions estimated for build-out of the Roosevelt Community under the 1991 Update and the "no project" (1978 Plan) alternative.

As Table EIR-16 shows, the 1991 Roosevelt Update accomplishes its goals of increasing and diversifying commercial opportunities, and converting heavy industrial area to a light-industrial designation without major significant adverse effects on air quality.

URBEMIS does indicate that mobile source emissions of particulate matter would potentially be increased some 26% by adoption of the 1991 Roosevelt Update (as opposed to adoption of the 1978 Roosevelt Plan).

For most major pollutants, however, URBEMIS shows only very slight increases in emissions, despite the large amount of increase in office and other commercial space. The slight potential increases shown by the computer model would not actually occur, since increasing local office and commercial space to proximally serve southeast Fresno would lead to fewer and shorter vehicle trips for the people who live in

TABLE EIR- 16 : "URBEMIS"-MODELED INDIRECT AIR POLLUTION EMISSIONS GENERATED BY BUILD-OUT* OF THE 1978/84 ROOSEVELT PLAN VERSUS BUILD-OUT OF THE 1991 ROOSEVELT PLAN UPDATE

LAND USE DESIGNATION	DWELLING UNITS OR ACRES	TONS PER YEAR OF MAJOR AIR POLLUTANTS				
		OZONE PRECURSORS				
		TOG	NOx	CO	PM-10	SOx
1978/84 ROOSEVELT PLAN TOTAL	See below	1,658.6	2,791.8	17,553.9	961.1	299.4
Single-Family Housing	53,882 d.u.	792.5	1,332.0	8,459.6	122.6	143.9
Multi-Family Housing	28,890 d.u.	229.6	385.7	2.449.3	35.5	41.7
Commercial Office	62 acres	18.3	30.9	190.4	72.5	3.3
General (Strip) Commercial	40 acres	15.0	26.5	150.2	25.2	2.8
Neighborhood Commercial Center	107 acres	161.9	289.0	1,596.6	86.5	30.7
Community Shopping Center	117 acres	88.7	158.2	874.3	47.4	16.8
Regional Shopping Center	85 acres	50.3	89.8	496.3	26.9	9.6
General Light Industrial	1,011 acres	53.3	88.1	566.7	219.6	9.3
Heavy Industrial (Manufacturing)	4,474 acres	249.0	391.6	2,770.5	324.9	41.3
1991 ROOSEVELT UPDATE TOTALS	See below	1,664.7	2,820.3	17,483.2	1,215.6	302.0
Single-Family Housing	47,522 d.u.	698.9	1,174.8	7,461.0	108.2	126.9
Multi-Family Housing	23,247 d.u.	184.8	310.3	1,970.9	28.6	33.5
Commercial Office	195 acres	57.5	97.1	599.0	228.2	10.3
General (Strip) Commercial	63 acres	23.7	41.7	236.6	39.6	4.4
Neighborhood Commercial Center	160 acres	242.1	432.1	2,387.4	129.3	46.0
Community Shopping Center	616 acres	178.8	319.2	1,763.5	95.5	33.9
Regional Shopping Center	0 acres	0.0	0.0	0.0	0.0	0.0
General Light Industrial	1,497 acres	78.9	130.5	839.2	325.2	13.8
Heavy Industrial (Manufacturing)	3,594 acres	200.0	314.6	2,225.6	261.0	33.2

*Standard URBEMIS default values, with the following input values and changes: Analysis year = 2010; Temperature averages 75 degrees F; Trip speed averages 35 mph; Heavy Industrial = Manufacturing trip generation rate per acre; Regional, Community, and Neighborhood Commercial centers are open 362 days per year; General (Strip) Commercial is open 300 days per year; Commercial Offices and General Light Industrial uses operate 250 days per year; and Heavy Industrial (Mfr.) operates 320 days per year.

the Roosevelt Community. Moreover, the locations of areas intensified in the 1991 Update are compatible with mass transit route enhancement and efficient freeway traffic corridors.

Finally, the 1991 Roosevelt Update acknowledges the role of indirect and area-wide sources, invoking policies, mitigations, and support for local air pollution regulations to deal with these major causes of air pollution. In contrast, the 1978 Roosevelt Plan concluded that EPA, State, and County regulations would take care of air pollution, and no further mitigation would be necessary at the community plan level.

3. Mitigation Measures

Measures and strategies necessary to attain air quality standards must be region-wide in scope in order to effectively address the broad range of regional air pollution sources. To this end, the eight counties comprising the San Joaquin Valley Air Basin have been mandated to jointly draft a California Clean Air Act Attainment Plan for non-attainment pollutants. Several aspects of this Attainment Plan will require municipal implementation. Therefore, primary mitigation measures for the 1991 Roosevelt Update would be:

(1) The City of Fresno shall analyze, and implement as necessary, Clean Air Act Attainmnent Plans and other proposed Valley-wide air pollution agency rules and policies to ensure that local and regioanl air quality improvement can be achieved.

(2) The Development Department, Public Works Department, and Fresno Area Express shall support beneficial regional clean air plans, policies, and rules by drafting appropriate ordinances and instituting administrative practices required to implement Valley-wide air quality measures.

Additional pollution control measures are applicable through the land use planning process. The California Clean Air Act of 1988 specifically excluded land use controls from the purvey of air pollution control districts. However, it is obvious that land use planning and land use controls are, potentially, the cheapest, easiest, and most effective means of air quality maintenance. Land use controls for air quality would simply mean that growth and development be accommodated in the least injurious and most beneficial manner possible.

Nothing in the 1988 California Clean Air Act prevents local governments from exercising their authority to achieve clean air by requiring air quality to be a primary consideration in the planning process. To this end, the City of Fresno developed an Air Quality Element for its 1984 General Plan.

Although it appears that automobile travel will remain the predominant local mode of transportation, several strategies were established by the 1984 Fresno General Plan in an effort to reduce congestion and vehicle miles traveled. The following policies/implementation strategies of the 1984 Fresno General Plan Air Quality Element are appropriate mitigation measures to be incorporated in the 1991 Roosevelt Community Plan Update EIR:

(3) The City of Fresno shall continue to uphold 1984 Fresno General Plan Policies and related land use regulations:

(a) Urban Referral Policy - Residential, commercial and industrial development shall be accommodated within incorporated cities; to reduce vehicle miles traveled and provide for mass transit.

(b) Contiguous Urban Expansion - To reduce vehicle miles traveled.

(c) Urban Infill - To reduce vehicle miles traveled.

(d) Mixed Land Use - Utilizes Local Planning and Procedures Ordinance to achieve well-integrated, compatible mixed residential, commercial and office uses; to reduce vehicle miles traveled.

(e) Density Transfer - Utilizes Local Planning and Procedures Ordinance to reallocate dwelling unit densities in selected areas; to reduce vehicle miles traveled.

(f) Intensity Corridors and Nodes - Evaluate the feasibility of "transportation corridors" that would enhance investment in areas bordering the City's freeways. This would support the City policy of concentrating development along major streets which can accommodate traffic, mass transit, and other alternative transportation modes.

(g) Traffic Flow - Ongoing improvement of traffic signals to reduce vehicle emissions from excessive vehicle idling (optimized signal timing, interconnected signals, traffic actuated signals, computer based controls, channel intersections, additional turn lanes.)

(h) Transit - On-site (at major shopping centers, other locations) bus parking and loading lanes with passenger and driver facilities to reduce vehicle miles traveled, engine idling and improved traffic flow.

(i) Bicycle Alternative - Bicycle lanes, bikeway design and planning with attendant safety and convenience facilities to reduce vehicle miles traveled.

(j) Develop and incorporate air quality maintenance considerations in the preparation of community and specific plans and in the review of land use and development proposals.

Pursuant to guidance in the 1984 General Plan, the City of Fresno developed an Air Quality Policy Program which addressed potential emissions from City activities; development-related mobile source emissions; and area-wide household emissions from woodburning. As a mitigation measure for the 1991 Roosevelt Update:

(4) To address potential additional fine particulate matter pollution which could be generated by the 1991 Roosevelt Update, the following specific improvements, requirements, and design standards shall be applied in the community plan area to prevent and reduce entrained dust:

(a) No new unpaved alleys, roadways, driveways, vehicle parking, loading, vehicle sales, or vehicle storage areas shall be permitted in any zone district. No new "temporary" unpaved parking areas shall be permitted, and no existing "temporary" unpaved parking area permits shall be extended under Fresno Municipal Code Section 12-306-I.7.

EXCEPTIONS:

(i) Temporary, on-site construction equipment storage lots may be permitted during construction periods, provided that they satisfy City and air district requirements for siting and dust control.

(ii) Unpaved agricultural roads may be permitted, provided that they satisfy air district requirements for dust control.

(b) Utilizing pro-active code enforcement, existing illegal and nonconforming unpaved driveways, parking areas, and loading areas shall be amortized and removed (or properly improved). Existing unpaved road gutters shall be upgraded to provide paved curb and gutter areas for roadside parking (1991 Roosevelt Update Policy nos. 1-14.1, 1-14.2, 3-1.5, 3-1.9, and 3-1.11).

(5) The City of Fresno shall continue to implement its Air Qualtiy Policy Program [See EIR Appendix C].

(6) The City of Fresno shall implement the air quality improvement policies in the 1991 Roosevelt Community Plan Update (Policy nos. 5-2.1 through 5-2.10).

(7) The Development Department, Fresno Area Express, and the Public Works Department shall implement 1991 Roosevelt Community Update policies for land use, transportation, and energy conservation (Policy nos. 1-1.1 through 1-1.6; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-8.1 through 1-8.3 and 1-8.5 through 1-8.7; 1-9.1 through 1-9.4; 1-10.1 through 1-10.4; 1-12.1 and 1-12.2; 1-16.1 through 1-16.6; 1-20.3; 1-21.2 through 1-21.6; 2-1.1 through 2-1.9; 2-2.1 through 2-2.9; 2-4.1 through 2-4.7; 2-5.1 through 2-5.6; 2-6.1 through 2-6.7; and 5-5.1 through 5-5.4).

E. HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGICAL SITES

1. City Preservation Policy and Existing Historic Resources

The City of Fresno has implemented its Historic Structures and Districts Plan and the Historic Preservation Element of its General Plan by means of the Fresno Municipal Code (Section 13-400 et seq., "Preservation of Historic Structures"). These Municipal Code provisions may also be applied to archaeological sites.

The Municipal Code sets forth eligibility review criteria for property to be listed in the Local Official Register of Historic Resources, and formal procedures by which properties and neighborhoods can be entered on this Local Register. Residential, commercial, public, vacant, and industrial properties are eligible. Entire neighborhoods may qualify as historic districts.

The Historic Preservation Commission meets regularly to review applications for the Local Official Register of Historic Resources and to consider historic property owners' requests for permits to do construction work on historic properties.

Emphasis is placed on the property's unique or period-representative architectural features and the relevance of the property to local history. There is no age

requirement in the Municipal Code; however, structures generally must be at least fifty years old before getting serious consideration by the City's Historic Preservation Commission.

Owner cooperation is essential for historic preservation properties. Generally, a Local Register application is only processed when initiated by an owner, although it may be initiated by the City Council, the City Planning Commission, the Development Department, and the Historic Preservation Commission.

Restrictive preservation guidelines in the Fresno Municipal Code are designed to maintain architectural integrity, foster authentic restoration, allow compatible uses, and promote good maintenance of Local Register properties. However, the Code does permit demolition of formally recognized historic properties, after a 180-day "waiting period" during which alternatives to demolition can be explored. (This waiting period is waivable by the Historic Preservation Commission in emergency or hardship situations.)

In 1979, a comprehensive Historic Resource survey was done in the City of Fresno. Preliminary screening revealed over 2000 properties which were potentially eligible for inclusion on the Local Register. Detailed assessments were done on some 180 of these, eventually resulting in the addition of over 100 structures to the Local Register. Other structures have been added since that time, but only on an incremental basis. Budget constraints have so far precluded an updated City-wide survey.

The Roosevelt Community contains properties whose historic significance has been formally recognized for their eligibility to appear on the Local Official Register of Historic Resources. Figure EIR-14 and Table EIR-17 give the locations of these properties. In addition, an application is being prepared for designating an area surrounding Huntington Boulevard as an historic district (between First and Cedar Avenues). Some of the sites in Figure EIR-14 were recommended for inclusion on the Local Register, but were "denied" for reasons other than historic significance.

Figure EIR-14 also shows those Local Register sites which are potentially eligible for the National Register, but for which no application has been processed. The William Saroyan Residence (3204 East El Monte Way), does have an application pending with the National Register.

The old Sun Maid Raisin Growers Cooperative (2901 East Hamilton Avenue) was demolished in 1986, and a new warehouse has been erected on the site (see also EIR Appendix A).

Figure EIR-14

ROOSEVELT COMMUNITY PLAN UPDATE

HISTORIC LOCATIONS

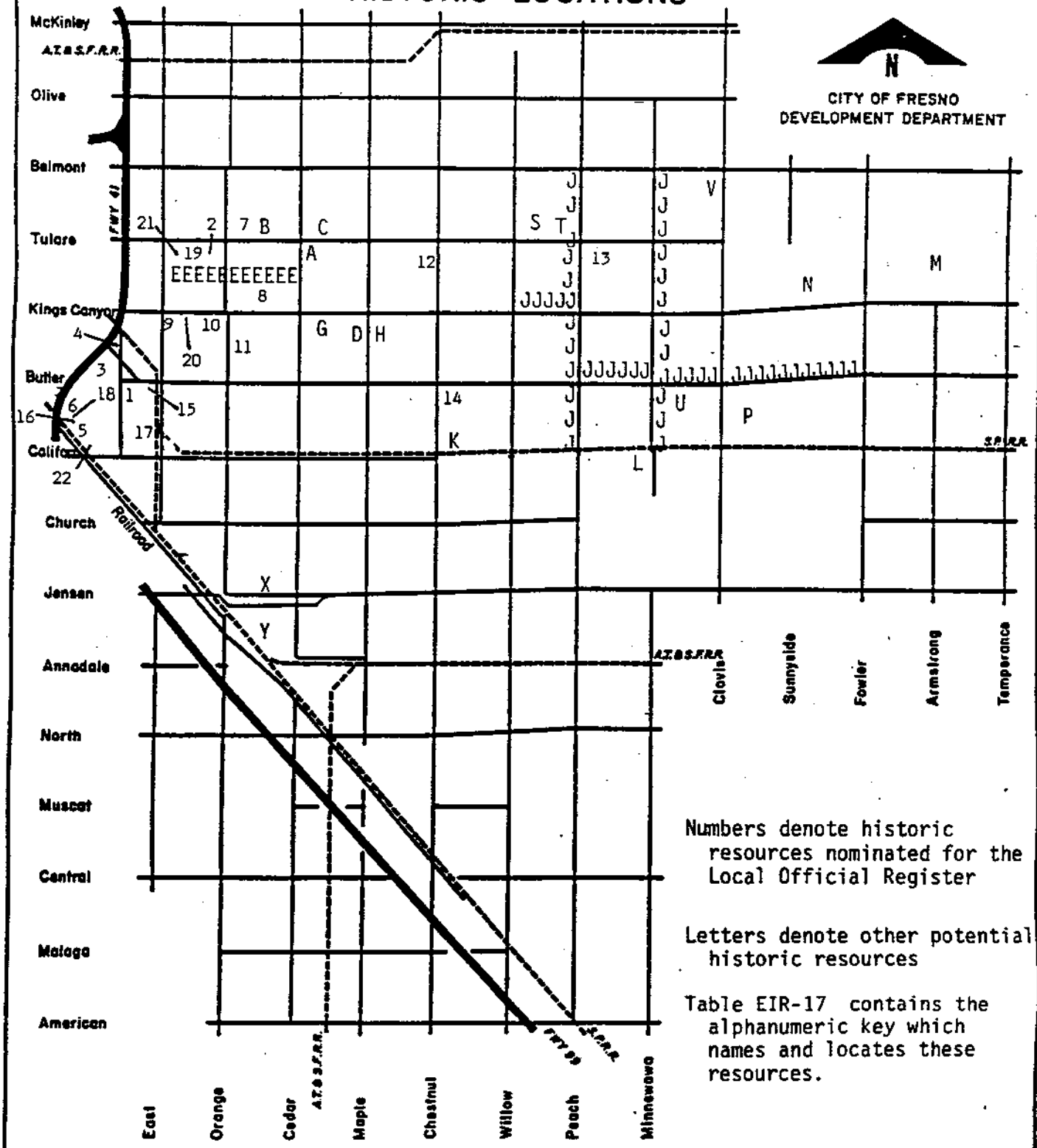


TABLE EIR-17: ROOSEVELT COMMUNITY HISTORIC RESOURCES

(Numbers correspond to the locations depicted on Figure EIR-14)

Local Official Register of Historic Resources

1	100 "M" Street	Fresno Brewing Company
2	35555 E. Huntington Blvd.	A. G. Wishon Residence
3	344 "N" Street	Mink Residence
4	2534 San Benito Street	Central Packaging Supply Co.
5	1820 Monterey Street	Fresno Planing Mill
6	301 Van Ness	Bekins Van & Storage
7	3811 E. Illinois Ave.	Johnson Home
8	3753 E. Balch Ave.	Mundorff Home
9	3121 E. El Monte Ave.	Weems Home
10	743 S. Fourth St.	Hughes Home
11	1003 S. Orange Ave.	Robinson Home
12	320 S. Chestnut Ave.	Shuttera Home
13	373 S. Peach*	John Buless Home*
14	4824 E. Butler*	Wiley giffen Home*
15	3000 E. Butler	California Products Company
16	104 Fulton Avenue	San Joaquin Grocers
17	100½ "M" Street	Old Barn (Mingle Transportation)
18	1916 S. Cherry Ave.	Holt Lumber Company
19	3615 E. Kerckhoff Ave.	Clovis Cole Residence
20	3204 E. El Monte Avenue	Saroyan Home
21	3263 E. Huntington Blvd.	Howard Home
22	Railroad & Van Ness Avenues	Van Ness City Entry Gate

Other Historic Resources Not On the Local Register

A	Roosevelt High School
B	Dwelle Residence and Law Office
C	Roosevelt Commercial District (Winton Building)
D	Fresno County Fairgrounds
E	Huntington Boulevard--homes and landscaping
F	Kerckhoff Building
G	miscellaneous subdivision monuments
H	miscellaneous City Water Well Pump Stations
J	miscellaneous street landscapes (Peach, Butler, Kings Canyon, Minnewawa, and so forth)
K	Senior Citizens Village (1960)--first in the state
L	Ewell Peden Homestead
M	Fancher Creek Nursery (Golden Dawn Ranch, Roeding Estate)
N	John Garabedian Ranch (horticultural experiments)
P	Sunnyside Country Club
S	San Francisco Floral (nursery and residence)
T	Taylor Homestead
U	Fenston Residence
X	Calwa--Santa Fe Railroad worker housing
Y	Santa Fe Railroad freight yard

(* denotes properties nominated for the Local Official Register, but not approved)

Consultation with the California Archaeological Inventory. (Southern San Joaquin Valley Information Center) revealed that there are no recorded archaeological sites in the Roosevelt Community Plan Area; however, very little systematic archaeological work has been done in southeast Fresno. A four-block area was surveyed in 1989 for the Lemoore Oil pipeline, and in 1990 a cursory surface assessment was made on the right-of-way for the Highway 180 project. Neither survey found archaeological evidence.

Agricultural activity and development may have disrupted the top several feet of Roosevelt Area strata, but significant artifacts may survive this disruption. Since water courses were activity foci for earlier cultures, the vicinities of creek beds might harbor sites.

2. Potential Impacts of the 1991 Roosevelt Update

The Plan Update provides for increased code enforcement and property maintenance. This should help to preserve both registered and un-registered historic structures and their surrounding neighborhoods. When maintenance activities or demolitions of substandard buildings are done, however, there is the potential for effacing or losing historic properties. Redevelopment areas, road construction, and new development on vacant land all pose the risk of damaging, obliterating, or demolishing historic and archaeologic resources.

According to CEQA, if the area of a proposed development is found to contain unique paleontological or archaeological resources, and if it can be demonstrated that the project will cause damage to these resources, the City may require reasonable efforts to be made to permit any or all of the resources to be preserved in place or left in an undistrubed state. Examples of such treatment may include any of the following:

- Planning construction to avoid archaeological sites.
- Deeding archaeological sites into permanent conservation easements.
- Capping or covering archaeological sites with a layer of soil before building on the sites.
- Full investigation of a site, possibly including removal and/or relocation of historic, archaeological, or paleontological material or structures, before allowing construction to proceed.

3. Mitigation Measures

(1) The Development Department shall survey redevelopment areas for possible historic property which would be adversely affected by the redevelopment proposal. Detailed assessments shall be done on Local/National Register candidate properties, and recommendations forwarded to the Historic Preservation Commission and to Redevelopment planning staff.

(2) Notices and Orders issued for violations of the Housing Code, Dangerous Building Ordinance, and Exterior Building Maintenance Ordinance, as related to structures 50 years of age and older, shall be made available to the Historic Preservation Commission for their recommendations on surveying, assessing, and preserving potential historic resources.

(3) Before the issuance of any formal demolition order by the City, properties over 50 years old shall be assessed for historic value, and potential Local Register listing resolved.

(4) In any public works project, work shall stop immediately if archaeological and/or fossil material is encountered on the project site.

If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations shall be made to the City as to any further site investigation or site avoidance/preservation.

If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontologist determines the material to be significant, it shall be preserved.

(5) The following paragraphs shall be added as a condition to subdivision and special permit entitlements issued in the Roosevelt Community Plan Area:

> "If archaeological and/or animal fossil material is encountered during project surveying, grading, excavating, or construction, work shall stop immediately.
>
> "If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations shall be made to the City as to any further site investigation or site avoidance/preservation.
>
> "If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontologist determines the material to be significant, it shall be preserved."

F. ENERGY

1. Energy Consumption

Energy is used to conduct almost every aspect of urban life. Transportation is estimated to be the largest energy consumptive activity in the metropolitan area, using 35.5 percent of the area's demand. Residential uses follow with 34.2 percent, and commercial activities account for 21.1 percent of the area's energy usage. These proportions are subject to change, as new energy efficiency and air pollution regulations are adopted and implemented in the future. General climatic trends and costs of various fuels also play a role.

In 1978, it was estimated that the Fresno Metropolitan Area obtained approximately 47.4 percent of its energy from petroleum; 33.5 percent from natural gas; and 15.5 percent from hydroelectrical sources.

2. Impacts of the Roosevelt Community Plan

Development of the Roosevelt community will commit energy resources to the construction and maintenance of new buildings and infrastructure (public facilities), as well as sustaining the subsequent urban activities they are intended to accommodate.

The URBEMIS air quality assessment computer program estimates vehicular fuel consumption and shows the projected volume of vehicle fuel that would be consumed by the built-out Roosevelt community as over 63 million gallons per year (year 2010). Of course, this is speculative; it is unknown what proportion of vehicles in use by that year will be powered by internal combustion engines and what type of fuel they would use.

To the extent that the concept, goals, and policies of the 1991 Update advocate an efficient relationship of land uses, energy consumed by transportation and public facilities, as well as future residential energy consumption rates, may be reduced (in comparison with the no-project alternative). In addition, the City of Fresno has implemented state energy conservation building codes and solar access protection measures and has adopted enhanced landscaping standards for parking areas and streets in order to promote passive energy conservation.

The Energy Element of the 1984 Fresno General Plan addresses four areas of energy conservation which include municipal operations, new development standards, land use, transportation, and retrofit (insulation, cogeneration). These have been implemented and augmented by increasingly stringent Title 24 energy efficiency standards for buildings; EPA and California Air Resources Board requirements for vehicle fuel efficiency/emissions; and by City of Fresno standards for wood heaters.

3. Mitigation Measure

Implement the objectives and policies of the Fresno General Plan Energy Conservation Element; California Title 24 Energy Efficiency Standards; Fresno Municipal Code sections relating to landscaping, shaded parking, and wood heaters; and 1991 Roosevelt Update policies 5-5.1 through 5-5.4.

G. PLANTS AND WILDLIFE

1. Natural History of the Roosevelt Community

The natural condition of most of the planning area was that of a semiarid grassland traversed by intermittent creeks and streams. The southern portion of the Roosevelt community (and the Malaga County Water District Sphere of Influence) contained areas of high water table that seasonally exhibited wetland characteristics.

The events that caused the greatest impact on the Roosevelt area's original flora and fauna began in the mid-1800s, before environmental assessments were done on proposed human activities. These events were railroad construction, subsequent development of a depot town site (urbanization), and increasing agriculturalization of the Valley floor with groundwater pumping, drainage improvements, and diversion/channelization of creeks and streams.

Urban development and agriculture have displaced most of the native flora with introduced species. Almost the entire planning area was used for agricultural production at some time. The possible exception to this is the Fancher Creek area, which still contains some native vegetation. As native vegetation communities and wetlands were obliterated, populations of most native animal species went into severe decline or were extirpated due to loss of food, harborage, and available water.

Those native species which remain are "cosmopolitan," able to tolerate quasi-urban environments and able to survive with exotics (introduced non-native plants, insects, birds, and mammals). The present animal population of the community includes native and introduced species that have adapted to the man-made environment. A partial list of the contemporary wildlife species identified in the area follows:

MAMMALS:

Raccoon (*Procyon lotor*)

Jackrabbit (*Lepus californicus*)

Beechi ground squirrel (*Cilellus beecheyi*)

Gray fox (*Urocyon cinercoargenteus*)

Striped skunk (*Mephitis mephitis*)

Common opossum (*Didelphis marsupialis*)

Botta pocket gopher (*Thamomys bottae*)

Field mouse

Little brown bat (*Myotis lucifugus*)

Freetail bat (*Tadarida brasiliensis*)

BIRDS (* Denotes transitory birds, no known nest sites in the Roosevelt community)

Red-tailed hawk (Buteo jamaicensis)

Sparrow hawk (Falco sparverius)

Barn owl (Tyto alba

Killdeer (Charadrius vociferous)

Red-winged blackbird (Agelaius phoeniceus)

Mourning dove (Zenaidura macroura)

Migratory songbirds (Passeriformes)

Migratory waterfowl

Common (greater) egret (Casmerodias albus)

Great blue heron (Ardea herodias)

REPTILES:

Common king snake (Lampropeltis getulus)

Garter snake (Hamnophis species)

Gopher snake (Pituophis catenifer)

Western fence lizard (Sceloporus undulatus)

Species which formerly were, and still may be, associated with the Roosevelt area include:

Western spadefoot toad

San Joaquin pocket mouse (considered extant some six miles east of the Roosevelt area)

San Joaquin kit fox (federally-listed endangered species)

Kangaroo rats (Heerman's kangaroo rat, possibly the Fresno kangaroo rat)

The significance of native plant and animal species is due, in part, to their geographical limitations and the rate of disappearance of their habitats. Wildlife and native plants contain unique genetic resources. The existence of unique native plant and animal species has a substantial aesthetic, natural, and educational value to Californians and insures that the remaining native environment contains a rich and diverse population of flora and fauna. The protection of these communities is, therefore, important to a better understanding of our world.

The value of flora and fauna, particularly those species considered to be native, unique or sensitive, has been recognized by objectives and policies in the 1984 Fresno General Plan designed to protect the habitat of these species. These objectives advocate the preservation of open space areas to protect and enhance scenic and recreational vegetative and wildlife resources. Fourteen policies are identified to implement these objectives, including the use of open space, easements, and appropriate zoning to promote preservation of habitat and avoid projects that may adversely affect endangered wildlife and vegetation.

Existing federal and state regulations provide for the inventory of designated endangered, threatened, and rare flora and fauna. Levels of protection, however, are not consistent. The Federal Endangered Species Preservation Act of 1966 makes it a federal offense to remove certain threatened or endangered wildlife. State law, on the other hand, seeks to protect these species by encouragement and cooperation of the property owner rather than by established penalties. The California Department of Fish and Game may permit the "taking" of a natural resource in exchange for provision of land and/or the creation of replacement habitat nearby.

2. Wildlife and Plant Community Impacts of the Roosevelt Plan

Through the implementation of objectives (regarding endangered or unique plant and animal species) in the 1984 Fresno General Plan, and the designation of open space land for regional park and drainage/recharge basin uses, the 1991 Roosevelt Update is not expected to have a significant effect on the area's flora and fauna.

The Roosevelt Community Plan provides for the continued process of urbanization which may result in the displacement of some of the existing vegetation and wildlife. However, the man-made environment resulting from the plan may also contain a substantial amount of vegetation and wildlife.

Lower density areas of residential development within the Roosevelt community tend to encourage the extensive planting and landscaping of ornamental vegetation which offers some habitat for many species of wildlife suited to man's environment. Enhanced overall landscaping requirements (and xeriscape emphasis) in the 1991 Roosevelt Update provide opportunities to propagate native plants and create suitable habitats for cosmopolitan species of wildlife. Due to intensive cultivation and pest control practices, actively farmed land in the Roosevelt community hosts a limited diversity of wildlife.

However, when agricultural land is taken out of active use, and particularly when piles of uprooted trees and vines are left on the property, a significant habitat resource is made available. Rare species, such as the San Joaquin pocket mouse and the San Joaquin kit fox, may be part of the wildlife community which utilizes fallow land. Subsequent urban development or returning the land to agricultural use may displace or destroy wildlife.

Continued urban development under the 1991 Update or the no-project alternative will, in general, decrease open space agricultural and rural areas and increase noise, light and glare, vehicular traffic, and other human activities which may further reduce wildlife populations within the community.

3. Mitigation Measures

While no significant plant and wildlife impacts have been identified in this analysis, the following measures are included to address area concerns:

(1) The Development Department shall implement open space, landscaping, and conservation policies/implementation measures of the 1991 Roosevelt Community Plan Update to provide and improve habitat and to preserve natural resources of the area.

(2) The Development Department shall implement 1984 General Plan policies for conserving land important to the continued existence of plant and wildlife species.

(3) For drainage basins in agricultural or industrial areas, and for those basins where geometry or other factors preclude developed recreational uses, FMFCD and the City of Fresno shall consider development of habitat areas for native plants and wildlife, in consultation with the State Department of Fish and Game.

(4) In 100-year flood plain areas along water courses, the City of Fresno shall consider development of conjunctive habitat and trail/recreational uses.

(5) If the California Department of Fish and Game requires habitat replacement as a condition of, or mitigation for, any project in the Roosevelt Community Plan area, such replacement or mitigative habitat shall be located within the Fresno-Clovis Metropolitan Area or on a water course directly contiguous to the FCMA.

H. TRANSPORTATION: TRAFFIC CIRCULATION AND MASS TRANSIT

1. Existing Transportation Systems and Traffic Controls

The City of Fresno's present circulation system consists of a network of local streets and city major streets (collectors, arterials, and expressways) augmented by a partially constructed state freeway system.

The physical characteristics and functions of each of these street types are described below, using Florida Department of Transportation general capacity figures for urbanized areas over 50,000 population and Group C arterials. These Florida Department of Transportation standards have been accepted by the Council of Fresno County Governments and by Cal-Trans for use in congestion management planning. (However, acceptable capacity and level of service figures are subject to further modification through consultation with Cal-Trans, Council of Fresno County Governments, and local jurisdictions' traffic engineers.)

- **Freeways:** These are divided highways having no direct access and no intersections at grade. All access is achieved by on- and off-ramps at designated interchanges. Freeways serve metropolitan and regional travel needs. They may carry average traffic volumes of 56,900 to 85,300 average daily vehicle trips per day (ADTs) at optimum service level for four- and six-lane configurations. Eight-lane freeways may accommodate average traffic volumes of 113,700 vehicles per day at acceptable ("D") service level.

- **Expressways:** These are four- or six-lane, divided roadways with access limited to signalized, at-grade, half-mile major street intersections (no direct access to abutting properties). They accommodate longer trips at higher speeds through the metropolitan area. They may carry average volumes of 31,700 to 47,900 ADTs at acceptable ("D") service level for four- and six-lane configurations.

- **Super-Arterials:** These are four- to six-lane, divided roadways with full median breaks allowed only at quarter-mile points. Access to abutting properties is limited. The main purpose of super-arterials is to carry traffic in and out of the community. Like expressways, super-arterials can carry 31,700 to 47,900 ADTs at acceptable ("D") service level.

- **Arterial Streets:** These are four- or six-lane, divided roadways which are signalized at half-mile intersections with major streets, and at quarter-mile local street intersections when necessary. Direct access may be reduced by limiting driveways or using frontage roads, but these limits are not as restrictive as on expressways. Arterials are the main circulation component of the community and serve large areas or intensive urban activities. They normally carry a range of 31,700 to 47,900 ADTs at acceptable ("D") service level.

- **Collector Streets:** These are four-lane, undivided streets accommodating internal traffic movement within an area, often distributing traffic to activity centers such as parks and schools. Access to abutting property is generally permitted with the exception of single family residences. Collector streets may carry 24,300 ADTs day at acceptable ("D") service level.

- **Local Streets:** These are non-major streets which primarily provide direct access to parcels directly abutting them. They generally have two travel lanes and can carry traffic volumes of up to 11,600 ADTs at acceptable ("D") level of service. However, volumes of 1,000 or more daily trips are often considered a nuisance. Residential street systems should be designed to discourage through-traffic.

The majority of the City's major street system has been developed in a grid pattern of alternating collector and arterial streets spaced at half-mile intervals, with peripheral expressways and internal freeway diagonals. Generally, this system has provided an acceptable level of service by offering alternative major street routes for trip destinations, thereby limiting the potential for congestion.

Within the Roosevelt Area, the normal continuous grid system is discontinuous in some fringe areas. In many cases, a rural thoroughfare exists, with the planned circulation element only partially constructed at its designated street classification. In some cases, barriers (such as creeks or canals) are not bridged.

The traffic carrying performance of a street or intersection may be categorized by a level of service rating from "A" (unrestricted flow) to "F" (severely restricted flow). The general assumption for assigning level of service ratings is that 10% of a street's (or intersection's) 24-hour total ADTs will occur during rush hour, leading to possible congestion.

This assumption has not always been borne out in the Fresno Metropolitan Area: actual 24-hour traffic counts have generated numerical data that would calculate to "Level E" or lower service, but the streets with this many Average Daily Trips function at better than "E" level. As with other numerical analysis tools, potential level of service (LOS) calculations are not accurately predictive and must be corroborated by repeated field observations (traffic counts, intersection studies, and delay studies).

The Fresno City Public Works Department has indicated that levels of service ranging from "A" through "D" are acceptable, while levels of "E" and "F" are not. Vehicle to capacity (V/C) ratios were formerly used as a "screening tool" to estimate potential levels of service. More subjective criteria are now the standard for evaluating level of service.

Abbreviated descriptions of service levels (according to the Cal-Trans and Council of Fresno County Governments-accepted LOS criteria, as developed by the Florida Department of Transportation), follow:

Service Level A	Fluid traffic flow with maximum speeds as allowed by speed limits. Average minimum traffic speeds should range from 25 to 35 mph (on arterials). Stopped delays should average 5 seconds or less.
Service Level B	Stable traffic flow with slight restrictions on speed and maneuverability. Minimum average traffic speeds range from 19 to 28 mph (on arterials). Stopped delays should average 15 seconds or less.
Service Level C	Stable traffic flow with most drivers restricted in speed and maneuverability. Minimum average traffic speeds range from 13 to 22 mph (on arterials). Stopped delays should average 25 seconds or less.
Service Level D	Approaching unstable flow with reduced speeds, limited maneuverability, and a loss of convenience which can be tolerated during periods of congestion. Minimum average traffic speeds range from 9 to 17 mph (on arterials). Stopped delays should average 40 seconds or less.
Service Level E	Constricted traffic flow occurs for longer periods of time and with greater severity than Level "D"; considered undesirable. Minimum average traffic speeds range from 7 to 13 mph (on arterials). Stopped delays should average 60 seconds or less.
Service Level F	Forced flow with low speeds and traffic stoppages occurring; during peak use, minimal traffic flow, with "gridlock" in extreme conditions. Average traffic speeds are less than 7 to 13 mph (on arterials). Stopped delays will average over 60 seconds.

Under these more subjective level of service criteria, traffic signalization could give the appearance of congestion by halting or slowing traffic, when, in fact, there is no congestion. The City of Fresno is actively pursuing synchronization of traffic signals on major streets. However, it must be recognized that left turn signals (which reduce lane congestion and improve traffic safety) and protection of pedestrian crosswalks function somewhat at odds with a synchronization program.

The 1984 Fresno General Plan identified the need to construct "extraordinary" street capacity and circulation system improvements, including completion of Freeways 41, 168, and 180, in order to accommodate planned development and potential population in both incorporated and unincorporated areas of Fresno County.

A Fresno County voter initiative (Ballot Measure C) was passed in 1986, authorizing a half-cent additional sales tax to fund transportation improvements. The primary emphasis of this program is completion of the urban freeway system; for instance, providing funding to complete Freeways 180 and 168 in the Roosevelt Community. The total, county-wide revenue for the twenty-year life of Measure C was projected to approach $900 million. To date, over $25 million has been collected annually. However, projected revenues may not be sufficient to complete the entire work program outlined for Measure C. Priorities, funding, and construction timelines for the Measure C Program are reviewed every two years.

The Fresno County Transportation Authority administers the collection and allocation of these funds. A quarter of all funds collected are set aside for local transportation needs, distributed to incorporated cities and to the county according to a formula based on population and road mileage. Funds are also directed to regional mass transit (Fresno Area Express received over $1.5 million in 1990).

In analyzing potential State freeway construction projects, Cal-Trans uses Year 2010 traffic projections to model traffic flow. Year 2010 data provides fewer average daily trips than full-build projections. (This EIR provides full-build projections.)

Portions of the Roosevelt area major street grid will be interrupted by the completion of Freeways 180 and 168. Completion of the urban freeway system will have the additional impact of directing heavier traffic to interchange streets, some of which have not yet been constructed to their rated capacity.

The benefit of Freeway 180 completion is that it is expected to ease traffic congestion on major east-west arterials, such as Ventura/Kings Canyon and Tulare Avenues. These streets have been impacted by population growth and by the large number of public facilities and commercial sites that front on these streets.

In 1990, the State Legislature redirected Cal-Trans' role: The California Department of Transportation is now involved primarily in inter-regional transportation planning and construction, deferring local highway ("commuter") planning and construction funding to regional agencies such as Councils of Governments. Cal-Trans has also retained and strengthened its role in providing regulatory oversight for local planning and transportation construction programs.

In 1990, Ballot Proposition 111 was approved by California voters: The Traffic Congestion Relief and Spending Limit Act of 1990. This law increased gasoline taxes and provided funding for a grant program to help pay for measures to reduce traffic congestion.

As an urbanized area with over 50,000 population, Fresno County is required to develop, implement, and annually update a Congestion Management Program (CMP) in order to qualify to receive funds generated by Proposition 111. In Fresno County, the responsible congestion management planning agency is the Council of Fresno County Governments. In the initial phase of the CMP, the only Roosevelt community roadways designated for inclusion in congestion management planning are Highway 99 and Freeways 41 and 180. Additional roadways can be added in subsequent years.

Assembly Bills 471 and 1791 (approved in 1990) mandated that "through" trips (trips not originating and ending inside the same county) and trips from "low-income housing" (income level undefined in the legislation) shall be excluded from traffic counts for the purpose of the CMP.

Each congestion management planning agency is charged with establishing a minimum level of service for peak traffic hours on roadways designated in the CMP. If a roadway already operates at Service Level F, it can remain so designated. Otherwise, Service Level E is the lowest designation a roadway may receive--even if the roadway is presently operating at CMP Service Level A or B, and the "E" designation would, therefore, allow significant congestion and deterioration of service.

An integral part of the CMP is the inclusion of a Transit Standards Element, to establish specific standards for mass transit systems in urbanized areas.

Fresno Area Express (FAX) operates bus service seven days per week to supply most of the metropolitan area's mass transit needs. Figure EIR-15, on the following page, shows FAX bus lines. Most routes serving the Roosevelt Community have had high and increasing ridership. Table EIR-18 (following) shows a tabulation of 1990 ridership on FAX's southeast Fresno route.

Figure EIR-15

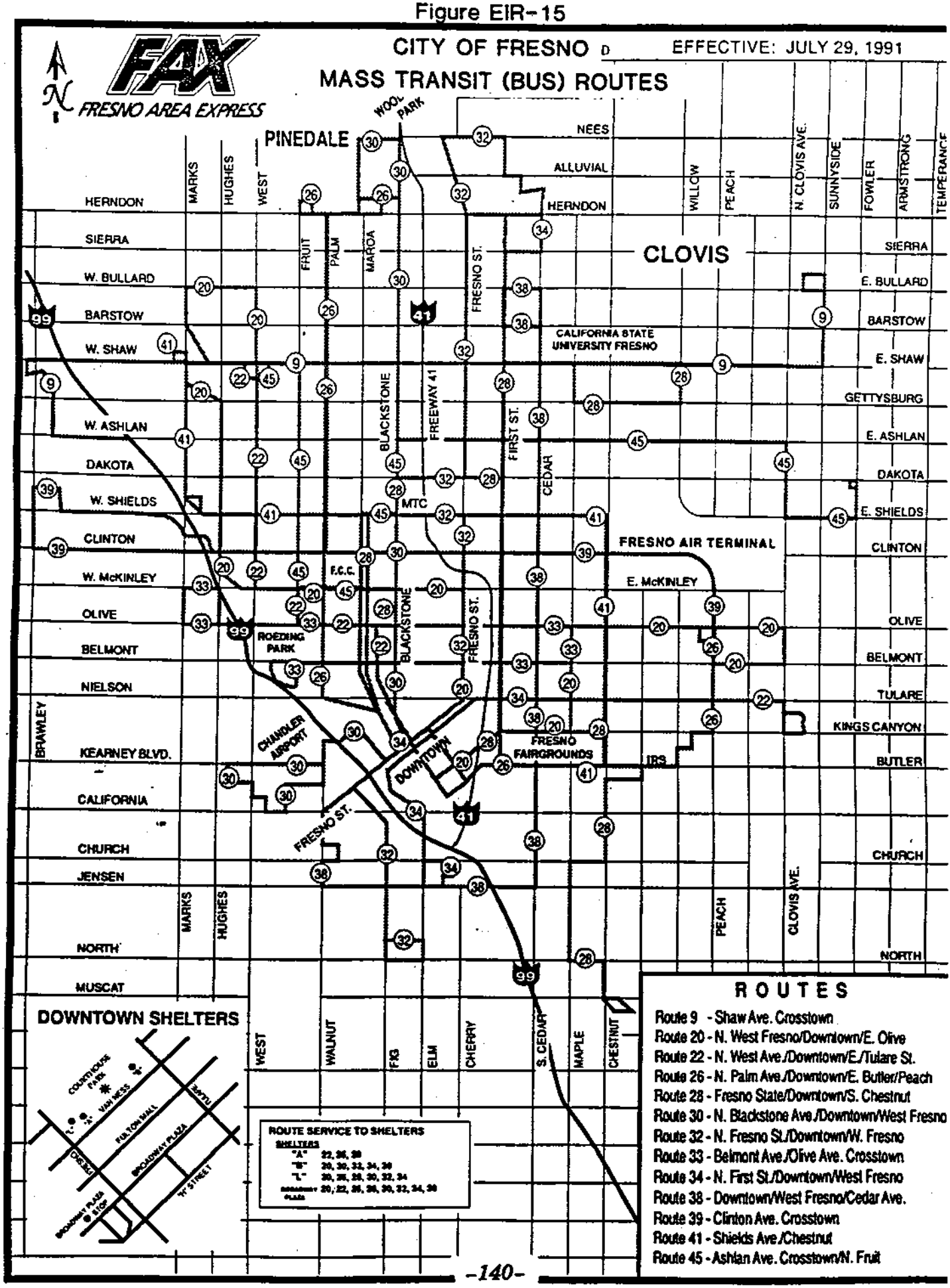


Table EIR-18: **1990 MASS TRANSIT UTILIZATION IN THE ROOSEVELT COMMUNITY PLAN AREA**

FAX Route No.	Total Ridership	Average Weekday Ridership
22	496,881	4,655
26	597,406	2,303
28	1,038,303	3,547
32	627,764	2,053
33	470,961	1,740
34	678,713	2,053
38	1,017,118	3,314
41	389,608*	1,610*

*Route modified in 1991 to increase potential ridership.

FAX has embarked on a phased Service Improvement Program to increase efficiency and enhance ridership. Phase I focused on improving on-time performance and addressing the route overcrowding that affected over 45% of system operations. Phase II implements route and schedule changes to further improve performance. Phase III will involve reconfiguring routes through regional FAX Transit Centers, and Phase IV will involve making changes in stops, vehicles, and route frequencies to attract and better serve workers who presently use automobiles to commute.

At the same time, FAX is assessing its future needs with regard to land development and clean air requirements. FAX is the designated City department which reviews the Transportation Management Plans required under Fresno Municipal Code Section 12-306-N-44 (See Appendix C). Every entitlement is reviewed by FAX for its particular transit infrastructure and service needs.

2. Impacts of the Roosevelt Community Plan

As a general rule, traffic volume in California increases at three times the rate of population increase. In a rapidly-growing community, transportation system planning and improvement is critical to preserve quality of life and function of the community.

The 1991 Plan Update is designed to strategically locate major urba corridor areas balanced with a more functional distribution of residential densities within the community. The major street syste responds to existing land use and circulation commitments, physical barriers, anticipated regional population growth and planned region transportation routes.

The City's typical alternating collector street and arterial street grid pattern is extended throughout the community, and important local streets are extended and designated where necessary to serve increased development capacity. Table EIR-19 below details the proposed classification of the Roosevelt area's major streets, as shown in the 1991 update.

Table EIR-19: 1991 ROOSEVELT UPDATE MAJOR STREET SYSTEM

Freeways (State routes)	Expressways
Freeway 99	Jensen Avenue
Freeway 41	Temperance Avenue
Freeway 180*	
Freeway 168**	

Super-Arterial

South Golden State Boulevard (south of Central Avenue)

Arterials

McKinley Avenue
Belmont Avenue
Ventura/Kings Canyon Boulevard
North Avenue
Central Avenue
American Avenue
First Avenue (north of Ventura)
Cedar Avenue (continuing south of Jensen)
Chestnut Avenue (north of Freeway 99)
Peach Avenue
Clovis Avenue (north of Freeway 99)
Fowler Avenue (continuing south of Jensen)
South Golden State Boulevard (from Freeway 41 south to Central Avenue)

[Continued]

* Construction from Freeway 41 to Chestnut Avenue planned for 1991-1996; construction from Chestnut Avenue to Clovis Avenue planned from 2001 to 2007 (according to 1991 Measure C expenditure program).

** Construction from Freeway 180 (new) to Shaw Avenue planned for 1992-2000 (according to 1991 Measure C expenditure program).

Table EIR-19: [Continued]

Collectors

East Avenue
Orange Avenue
Maple Avenue (north of North Avenue)
Chestnut Avenue (south of Freeway 99)
Willow Avenue (north of North Avenue)
Minnewawa Avenue (between Belmont Avenue and Kings Canyon Boulevard, between Church and Jensen Avenues, and continuing south of Jensen)
Sunnyside Avenue (between Jensen and California Avenues, and continuing south of Jensen)
Olive Avenue
Tulare Avenue (west of Armstrong Avenue)
Lane Avenue (between Chestnut and Peach Avenues)
Butler Avenue (east of Armstrong Avenue and west of Peach Avenue, and continuing east of Temperance)
California Avenue (west of Cedar Avenue, and between Clovis & Fowler Avenues)
Church Avenue (continuing east of Temperance)
Hazelwood Boulevard
"P" Street
"O" Street
"M" Street
Van Ness Avenue
Broadway
Pullman Avenue (from Orange Avenue to the Jensen Bypass)

Regional and intercommunity roadways outline the framework for the Roosevelt area circulation system and allow external traffic to continue around and across the community. This framework consists of four freeways (State Routes 41, 99, 168, and 180) of which the first two are completed urban freeways, and the latter two are planned for partial completion through the Roosevelt Community by the end of the decade; two expressways (Jensen Avenue and Temperance Avenue); and a super-arterial (South Golden State Boulevard).

The 1991 Roosevelt Update essentially provides for the continuation of the current grid-pattern collector street system with several modifications necessitated by community conditions. Compared with the 1978/84 Roosevelt Plan, the 1991 Update Circulation Element makes most of its changes at the "collector" level (exceptions to this are the alignment adjustments and designated interchanges shown for the new urban freeways):

- McKenzie Avenue is no longer shown as a collector road between First and Cedar Avenues.

- Huntington Boulevard is no longer shown as a collector road, though it does keep its scenic route designation.

• Minnewawa Avenue south of Kings Canyon and north of the Church Avenue Alignment is no longer designated a "collector;" like Huntington, it has kept its "scenic" designation. However, a "collector" designation has newly been applied to other portions of Minnewawa: from Kings Canyon to Belmont; from the Church Avenue alignment to Jensen. The scenic portion of Minnewawa has also been extended north 1/2 mile, from Tulare to Belmont Avenues.

• The eastern end of the Tulare Avenue (collector) alignment has been modified so that its connection to the Armstrong Avenue collector is a diagonal.

• The Armstrong Avenue collector designation has been extended south from Kings Canyon to Jensen Avenue.

• A collector has been added in the area bounded by California, Fowler, Jensen, and Clovis Avenues.

• The Florence Avenue collector shown on the 1978/84 Plan between Peach and Minnewawa Avenues has been deleted.

• The 1991 Update shows the Church Avenue collector completed and extended continuously from the western plan boundary (SPRR tracks) to the eastern plan boundary (Temperance Avenue).

• Chestnut Avenue south of Highway 99 has been downgraded from an arterial to a collector.

• Willow Avenue from Jensen Avenue to North Avenue, and Orange Avenue from Central Avenue to American Avenue have been upgraded from unclassified to collector status.

Figures EIR-17 and EIR-18 show areas where precise collector street alignment will be subsequently determined when entitlement maps are processed. These collector segments are:

• California Avenue between Clovis and Fowler Avenues. The intersections of California with Fowler and Butler Avenues will not be at the ordinary half-mile points but instead will be located far enough away from railroad crossings so that these intersections are not impacted by railroad operations.

• Butler Avenue between Armstrong and Temperance Avenues. The locations of Butler's intersections with Armstrong and Temperance will be determined when entitlement maps are processed. Armstrong north and south of Butler may also be realigned.

Other circulation element designations and alignments have remained the same in the 1991 Roosevelt Update. An unresolved issue from the 1978/84 Plan is continued: how to develop land that lies at the intersection of two expressways (for example, Jensen and Temperance), when there may not be alternate access available to other major streets, and

no direct access is permitted to an expressway. This transportation issue has been referred to the Council of Fresno County Governments for review and recommendation. Any policies or guidelines developed by the Council of Governments will be, upon adoption, applicable to land in the Roosevelt area.

Potential 24-hour ADT traffic volumes on Roosevelt area major streets have been projected using the MINUTP traffic model, a computer program operated by the Council of Fresno County Governments. The MINUTP model assumes construction of all planned urban freeways within the Roosevelt area, although recent information indicates that the Fresno County Transportation Authority may defer construction of the Freeway 180 section east of Chestnut Avenue until after the ten-year life of the 1991 Update.

Three full build-out alternatives were modeled: the no-project (1978/84 Roosevelt Community Plan); the 1991 Roosevelt Update with a community shopping center at Kings Canyon and Clovis Avenues and a high school at Kings Canyon and Peach Avenues; and the 1991 Update with a regional shopping center at Kings Canyon/Clovis Avenues and commercial, office, and residential uses at Kings Canyon and Peach. Figures EIR-16 through EIR-18 depict potential traffic volumes for the three plan alternatives and indicate the street segments that potentially will experience congestion and traffic delays at full development of the plan.

Traffic model printouts are best used as a general indicator or "early warning" of potential congestion. As with the URBEMIS computerized air quality model, MINUTP is subject to vagaries of built-in assumptions and incomplete data. (MINUTP has not yet been updated with all the necessary demographic information from the 1990 Census; this data has not been fully released yet by the U.S. Department of Commerce.)

For instance, MINUTP often performs erratically in freeway corridors. In Figures EIR-16 through EIR-18, it can be seen that MINUTP inexplicably shifts a high traffic burden to the urban freeway, would severely worsen traffic congestion on the urban freeways when, in reality, local streets would and could accommodate much of the traffic in those corridors. Traffic model printouts need to be reviewed and adjusted (or "smoothed out") by considering driver behavior and other factors which are not built into the MINUTP software.

As was mentioned previously, projected future traffic volumes are based on population growth and development projections (full build-out scenario). Similar to other "maximum" or "worst case" planning estimations, it is possible that street traffic volumes will not reach estimated levels. One reason for this is that land does not always develop to its maximum density or highest possible intensity of use. Another reason

is driver behavior: when people experience severe congestion and delays, they seek alternate, less crowded routes and try to time their trips to avoid peak congestion periods.

Traffic studies and actual vehicle counts are, therefore, required to test traffic model assumptions. Traffic counts monitor trends to determine the need for, and timing of, street system improvements.

Using Federal funds, the Council of Fresno County Governments manages City and County traffic counting programs, by supplying counters and computer assistance to compile data. Traffic count information sent to the Council of Governments by Cal-Trans and local jurisdictions is used to prepare a detailed annual traffic monitoring report for Fresno County. It is this data which best demonstrates need for roadway improvement projects.

However, by the time this data shows high street utilization and delays, congestion is already occurring and will continue until necessary street improvement is completed. In fact, congestion will worsen during the construction phase of a street improvement project.

A third reason that traffic model predictions of congestion may not be entirely fulfilled is that air pollution and traffic congestion management regulations will focus heavily on reducing individuals' use of automobiles for routine intra-city travel. MINUTP software is presently "blind" to mass transit utilization and congestion control measures. The complete program still assumes that everyone will make a certain number of vehicle trips per day on certain roadways.

Figure EIR-19 (on the following page) presents the State of Florida's traffic capacity matrix for major streets. This matrix has been accepted by Cal-Trans and the Council of Fresno County Governments for use in preparing Fresno County's Proposition 111 Congestion Management Plan. This matrix represents a refinement of previous traffic capacity determinants, and has been used to re-evaluate the 1991 Roosevelt Community Plan for major street segments which could potentially have service level deficiencies at full build-out.

For the no-project alternative (present land use designations in the plan area, as set forth in 1978 and modified in 1984), Table EIR-20 on page *151* details which segments of the major street system would fail to attain the stated goal of "D" or better level of service.

Figure EIR-19

GENERALIZED DAILY LEVEL OF SERVICE MAXIMUM VOLUMES FOR FLORIDA'S URBAN/URBANIZED (5,000+) AREAS

(valid for use from January 1989 through December 1990)

TWO-WAY ARTERIALS

Group A (0.0 to 0.75 signalized intersections per mile)

Lanes/ Divided	Level of Service A	B	C	D	E
2 Undiv.	13,700	15,000	15,600	16,500	17,400
4 Div.	29,800	31,900	33,000	34,900	36,700
6 Div.	45,400	48,100	49,700	52,400	55,200

Group B (0.76 to 1.5 signalized intersections per mile)

Lanes/ Divided	Level of Service A	B	C	D	E
2 Undiv.	9,000	13,700	14,500	15,300	16,100
4 Div.	20,000	29,700	31,000	32,500	34,000
6 Div.	30,600	45,100	46,700	48,900	51,200

Group C (1.6 to 2.5 signalized intersections per mile)

Lanes/ Divided	Level of Service A*	B	C	D	E
2 Undiv.	—	10,200	13,500	14,800	15,700
4 Div.	—	22,800	29,500	31,700	33,400
6 Div.	—	35,100	45,000	47,900	50,300

CLASS I

Group D (2.6 to 3.5 signalized intersections per mile)

Lanes/ Divided	Level of Service A*	B*	C	D	E
2 Undiv.	—	—	9,200	13,700	15,400
4 Div.	—	—	20,100	30,200	33,200
6 Div.	—	—	30,700	46,300	50,200

Group E (3.6 to 4.5 signalized intersections per mile)

Lanes/ Divided	Level of Service A*	B*	C*	D	E
2 Undiv.	—	—	—	12,300	14,600
4 Div.	—	—	—	26,300	32,100
6 Div.	—	—	—	39,500	48,800

Group F (more than 4.5 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A*	B*	C*	D	E
2 Undiv.	—	—	—	10,300	14,600
4 Div.	—	—	—	22,800	32,100
6 Div.	—	—	—	34,900	49,000

CLASS II

Group G (more than 4.5 signalized intersections per mile and within primary city central business district of urbanized area over 500,000)

Lanes/ Divided	Level of Service A*	B*	C*	D	E
2 Undiv.	—	—	—	13,100	15,400
4 Div.	—	—	—	29,300	33,700
6 Div.	—	—	—	45,200	51,200

CLASS III

DIVIDED/UNDIVIDED ADJUSTMENTS

(after corresponding two-way arterial volume indicated percent)

Lanes	Median	Left Turn Bays	Adjustment Factor
2	Divided	Yes	+ 5%
2	Undivided	No	- 15%
Multi	Undivided	Yes	- 5%
Multi	Undivided	No	- 20%

FREEWAYS

Group 1 (within urbanized area over 500,000 and leading to or within 5 miles of primary city central business district)

Lanes	Level of Service A	B	C	D	E
4	27,800	42,800	61,100	73,800	79,300
6	41,700	64,300	91,600	110,700	119,000
8	55,500	85,700	122,200	147,600	158,700
10	69,400	107,100	152,700	184,500	198,400

Group 2 (within urbanized area over 50,000 and not in Group 1)

Lanes	Level of Service A	B	C	D	E
4	21,400	33,000	47,100	56,900	61,100
6	32,100	49,500	70,600	85,300	91,700
8	42,800	66,000	94,200	113,700	122,300
10	53,500	82,500	117,700	142,200	152,900

Group 3 (within non-urbanized areas)

Lanes	Level of Service A	B	C	D	E
4	17,100	26,300	37,600	45,400	48,800
6	25,600	39,500	56,300	68,000	73,200
8	34,100	52,700	75,100	90,700	97,500

ONE-WAY ARTERIALS

Group D (less than 3.6 signalized intersections per mile)

Lanes	Level of Service A*	B	C	D	E
2	—	9,600	14,800	16,900	18,000
3	—	14,900	22,700	25,600	27,200
4	—	19,900	30,800	34,300	36,300

Group E (3.6 to 4.5 signalized intersections per mile)

Lanes	Level of Service A*	B*	C	D	E
2	—	—	13,300	16,200	17,600
3	—	—	20,300	24,800	26,600
4	—	—	27,100	33,300	35,600

CLASS I

Group F (more than 4.5 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)

Lanes	Level of Service A*	B*	C	D	E
2	—	—	10,900	15,600	17,700
3	—	—	16,600	23,900	26,800
4	—	—	22,400	32,400	35,900

CLASS II

Group G (more than 4.5 signalized intersections per mile and within primary city central business district of urbanized area over 500,000)

Lanes	Level of Service A*	B*	C	D	E
2	—	—	13,300	17,200	18,300
3	—	—	20,400	26,200	27,700
4	—	—	27,600	35,200	37,100

CLASS III

TWO-WAY COLLECTORS AND LOCAL STREETS

(signalized intersection analysis)

Lanes	Level of Service A*	B*	C	D	E
2	—	—	7,700	11,600	12,900
4	—	—	16,200	24,300	26,400
6	—	—	24,800	37,200	40,100

* The table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are average daily traffic maximum volumes (based on peak hour volumes) for levels of service and are based on the 1985 Highway Capacity Manual and Florida traffic data. Roadways with more than the number of lanes shown should be treated on a case by case basis. The table's input value assumptions and level of service criteria appear on the back.

* Cannot be achieved.

Source: Florida Department of Transportation, 1988.

Table EIR-20: STREET SEGMENTS WHERE FULL-BUILD OF 1978/84 ROOSEVELT PLAN LAND USE DESIGNATIONS WOULD POTENTIATE "E" OR LOWER LEVELS OF SERVICE[1] (AS AMENDED FOR FINAL EIR, OCTOBER 29, 1991)

Major Street	Classification	Affected Segment(s) of Street	On Affected Segment[2] Lowest LOS	Highest ADTs
Freeway 99	Freeway[3]	Jensen to American	F	143,534
Freeway 41	Freeway[3]	downtown to McKinley	F	137,079
Freeway 180	Freeway[3]	Freeway 41 to Chestnut	F	132,861
Freeway 168	Freeway[3]	McKinley to Freeway 180	F	104,781
Jensen	Expressway[3]	Golden State to Cedar	E	50,167
McKinley	Arterial[4]	Freeway 41 to First	F	38,501
Ventura/Kings Cyn	Arterial[4]	Freeway 41 to Minnewawa	F	40,115
Cedar	Arterial[4]	Freeway 180 to Ventura/Kings Canyon	F	38,821
Chestnut	Arterial[4]	Olive to Belmont	F	46,034
Peach	Arterial[4]	Freeway 180 to Butler	F	37,715
Willow	Collector[4]	Tulare Ave. to Kings Canyon	F	28,025

FOOTNOTES:

1. Average Daily Trips (ADTs) a determined by MINUTP traffic model run in July 1991; Potential LOS (Level of Service) indicated by Florida Department of Transportation table.
2. Stated for the most impacted sub-section defined in the overall affected segment of roadway (See Figure EIR-16).
3. Six-lane configuration evaluated. Clovis Avenue and Jensen are not yet fully improved to 6 lanes, although ultimately planned for it.
4. Four-lane configuration evaluated. The following above-listed roadways are designed for, but not yet fully improved to, four lanes: Belmont, Ventura/Kings Canyon, Chestnut, Peach, Olive, and Willow.

The high traffic volume projections associated with the 1984 General Plan concept appear to be the result of the following factors:

1. Predominance of higher planned densities (medium and medium-high density residential--averaging over 10 dwelling units per acre).

2. Regional commercial land use designations.

In order to reduce projected traffic volume increases and related congestion, the 1991 Roosevelt Update proposes several land use and circulation strategies. These are summarized as follows:

1. Reduced residential densities throughout a majority of the plan area with higher density residential neighborhoods and more intensive non-residential uses focused around those major transportation corridors which can accommodate more traffic.

2. Designation of intensity (activity) corridors on major streets, intended to contain sufficient development activity and density of high-traffic land uses to support enhanced mass transit service.

3. Reducing commercial development intensity outside of designated intensity corridors.

4. Integration of the major street system with regional transportation routes and surrounding grid street pattern.

Traffic projections indicate that full development of the 1991 Update with reduced densities would generate lower traffic volumes and less congestion than the 1984 General Plan densities. Table EIR-21 shows that, under land use designations in the 1991 Udate, fewer roadways and lesser segments of roadways fall below "D" level of service in the MINUTP traffic projections. Those segments which are projected to fall below the level of service goal have lower projected average daily trips than those shown for the no-project alternative.

MINUTP does indicate that, based upon build-out traffic volume estimates, segments of the Roosevelt Community circulation system will remain vulnerable to traffic congestion and declining levels of service as the extent and intensity of urban development increase.

Although future traffic volumes would be reduced in sensitive areas by the 1991 Plan Update, several segments of the circulation system (particularly regional routes) are projected to experience congestion and function at or below the minimum acceptable level of service.

Table EIR-21: STREET SEGMENTS WHERE FULL-BUILD OF 1991 ROOSEVELT UPDATE LAND USE DESIGNATIONS WOULD POTENTIATE "E" OR LOWER LEVELS OF SERVICE[1] (AS AMENDED FOR FINAL EIR, OCTOBER 29, 1991)

Major Street	Classification	Affected Segment(s) of Street	On Affected Segment[2] Lowest LOS	Highest ADTs
Freeway 99	Freeway[3]	Jensen to American	F	143,434
Freeway 41	Freeway[3]	downtown to McKinley	F	132,441
Freeway 180	Freeway[3]	Freeway 41 to Chestnut	F	122,045
Freeway 168	Freeway[3]	McKinley to Freeway 180	E	92,214
Jensen	Expressway[3]	Golden State to Cedar	E	48,449
McKinley	Arterial[4]	Freeway 41 to First	F	38,552
Ventura/Kings Cyn	Arterial[4]	Freeway 41 to First	F[6]	36,356
		Orange to Peach/Minnewawa[5]	F/F[6]	40,634/40,792[5,6]
Chestnut	Arterial[4]	Olive to Belmont	F[6]	45,025
		Kings Canyon to Butler	F[6]	36,436
Peach	Arterial[4]	Freeway 180 to Belmont	F	34,385
		Tulare Ave. to Bulter	F	35,815
Willow	Collector[4]	Tulare Ave. to Kings Canyon	F	28,302

FOOTNOTES:

1. Average Daily Trips (ADTs) a determined by MINUTP traffic model run in July 1991; Potential LOS (Level of Service) indicated by Florida Department of Transportation table.
2. Stated for the most impacted sub-segment defined in the overall affected segment of roadway (See Figure EIR-17).
3. Six-lane configuration evaluated. Clovis Avenue and Jensen are not yet fully improved to 6 lanes, although ultimately planned for it.
4. Four-lane configuration evaluated. The following above-listed roadways are designed for, but not yet fully improved to, four lanes: Belmont, Kings Canyon, Chestnut, Peach, Olive, and Willow.
5. The two 1991 Update Alternatives for High School Sites show a significant difference on Kings Canyon between Peach and Minnewawa.
6. If curb parking were abolished and/or the roadway were widened, a six-lane configuration could be feasible for these major streets. Six-lane configurations would give different levels of service: for Ventura/Kings Canyon: D; for Chestnut: D.

Deferral of completion of urban Freeway 180 (from Chestnut Avenue to Clovis Avenue) until after the year 2001 potentiates a major congestion problem, as vehicles would be required to enter and exit Freeway 180 at Chestnut Avenue and take parallel regional routes east of the freeway terminus. These parallel routes (Kings Canyon, Belmont, Tulare, Olive and Jensen) are not developed to handle a large number of trips and are projected to have level of service deficiencies even with the freeway constructed.

While freeways may reduce the burdens of parallel major streets, they may heavily impact interchange streets and they may have growth-inducing effects which, overall, can increase traffic. The MINUTP model shows extraordinary traffic volumes at interchange nodes. This may only be an artifact of the computer model, but it is indicative of potential serious congestion on those street segments.

Regional routes such as Clovis Avenue, Kings Canyon, Jensen, Golden State, Freeway 99, Freeway 180, and Freeway 41 are particularly vulnerable to traffic volume increases generated by urban-type growth in rural Fresno County. Decreasing levels of service and increased noise, glare and air pollution caused by urban development occurring outside of the planning area may not be able to be mitigated within the Roosevelt Community Plan Area.

Within the City of Fresno sphere of influence, planned city street circulation changes, such as widening of Jensen Avenue, Golden State Boulevard, Olive Avenue, Belmont Avenue, Kings Canyon Avenue, Willow Avenue, and Peach Avenue should accommodate more traffic and lead to less potential for congestion.

Opportunities to expand traffic carrying capacities of several major streets within the developed portions of the planning area and adjacent communities may be limited by existing property improvements. Expansion of streets to accommodate traffic would necessitate the acquisition of additional street right-of-way, could necessitate removal of on-street parking spaces, and could expose adjacent land uses to increased traffic nuisances.

An updated official plan line is being prepared for Peach Avenue between Kings Canyon Road and McKinley Avenue to identify the street right-of-way width necessary to accommodate a four-lane divided arterial street. Of particular concern is the need to reduce adverse impacts upon adjacent properties and street trees (including a historic collonade of palms). Consideration of the Peach Avenue plan line will necessitate extensive public review and comment. Policies of the Plan Update provide for application of scenic boulevard standards to reduce street improvement impacts.

If overall traffic congestion in the metropolitan area proves too annoying and cannot be avoided by drivers, and if alternative transportation provides safe, convenient, and inexpensive travel modes, individual commute trips will be reduced and alternative transportation will be more heavily utilized. The City of Fresno has already implemented transportation control measures designed to reduce traffic congestion by arranging flexible work hours, increasing ride sharing, and improving use of mass transit (Fresno Municipal Code Sections 12-306-I-2.1 and 12-306-N.44; see Appendix C of this EIR).

If FAX ridership only increases proportionately with population, the end of the decade would see a fifty percent increase. If ridership increases faster than population--and this is a stated goal of FAX and air pollution control policies--mass transit ridership will expand much more rapidly. The mass transit system will require capital improvements in the form of bus pull-out areas, bus shelters, at least one "transit center" in southeast Fresno, and will require additional staffing and vehicles. Enhanced frequency of service and on-time performance will be needed to meet the needs of the workforce and employers.

3. Mitigation Measures

(1) The Development Department, Public Works Department, and Fresno Area Express shall implement the plan concept (land use design) and policies of the 1991 Roosevelt Community Plan Update to establish balanced land uses with supportive circulation and transportation facilities, in order to reduce vehicle trips and traffic congestion.

(2) The Development Department and Public Works Department shall implement the policies, development standards, and mitigation measures of the 1991 Roosevelt Community Plan Update and its EIR, to minimize exposure to noise and glare from traffic.

(3) The City of Fresno shall continue to implement the City Air Quality Policy Program and its related Municipal Code provisions to minimize air pollution from traffic (see EIR Appendix C).

(4) The City of Fresno shall continue to evaluate proposed congestion management measures and mobile source air pollution control proposals, and shall continue to pursue and implement measures which can beneficially reduce traffic and vehicle-related pollution (including synchronized traffic signalization and mass transit system improvements).

(5) As part of its next General Plan Update, the City of Fresno shall evaluate and institute funding and financing mechanisms for needed major street and urban freeway augmentations, and for development of specific plans for freeway interchange areas, to better coordinate transportation and land use planning in these sensitive areas.

(6) The City of Fresno shall advocate for timely changes and additions in future Measure C expenditure programs, to fund freeway improvements that are demonstrably necessary to accommodate existing and planned population growth and development, such as:

(a) Completion of urban Freeway 180 to the Clovis or Fowler Avenue alignment before the end of this decade.

(b) Expansion of Freeway 99 to eight lanes from the Freeway 41 interchange to Jensen Avenue.

(c) Expansion of planned Freeway 180 to eight lanes between Freeway 41 and the Freeway 168 interchanges.

(7) The City of Fresno shall strongly advocate that Cal-Trans mitigate impacts of its freeway improvement projects, including use of such measures as noise and glare reduction, air quality protection, and capacity enhancements for City streets affected by interchange traffic.

(8) All applications for development entitlements within 660 feet of a planned or existing freeway interchange shall be routed to Cal-Trans and the Council of Fresno County Governments for their review and comment.

(9) Any proposed encroachments/driveways within 300 feet of a planned or existing freeway interchange shall require a design exception, granted only after consultation with Cal-Trans.

(10) A specific Findings procedure shall be employed to evaluate each development entitlement application (See EIR Appendix F) to ensure that acceptable levels of service are maintained.

(11) The Public Works Department shall monitor the need for, and shall initiate as required, the following improvements in City street segments with potentially deficient service levels:

(a) Ventura/Kings Canyon Avenue to six lanes between the downtown area and Minnewawa Avenue.

(b) Ventura/Kings Canyon Avenue to four lanes between Fowler and Temperance Avenues.

(c) Butler Avenue to four lanes between Hazelwood Boulevard and Peach Avenue.

(d) Church Avenue to four lanes between the Southern Pacific Railroad tracks and Fowler Avenue.

(e) Jensen Avenue to six lanes between Freeway 99 and Fowler Avenue.

(f) Chestnut Avenue to six lanes between McKinley and North Avenues. (This may affect planned bike lanes.)

(g) Willow Avenue to four lanes between Olive and Lane Avenues, and between Butler and North Avenues.

(h) Peach Avenue to four lanes between McKinley and Jensen Avenues.

(i) Clovis Avenue to six lanes between McKinley and Jensen Avenues. (This may affect planned bike lanes.)

(j) Fowler Avenue to four lanes between Belmont and Jensen Avenues.

(12) In consultation with Cal-Trans and the Council of Fresno County Governments, the Public Works Department shall develop guidelines for traffic studies and shall continue to review all entitlements for traffic impacts.

(13) The Development Department and Public Works Department shall maintain subdivision design standards which require one subdivision (street system) access point to a major street or local collector for each 100 dwelling units.

(14) The Development Department and Public Works Department shall evaluate and implement development access policies suggested by the Council of Fresno County Governments for land at the corners of intersecting major streets where direct access is not permitted (e.g., the intersection of Jensen and Temperance expressways), and for land served by existing nonconforming driveways on Jensen and Temperance Avenues.

I. SEWER SERVICE

1. Existing Sewerage System and Wastewater Treatment

The City of Fresno Roosevelt Community Plan area is in the service area for the Fresno Regional Wastewater Treatment Facility, located south of Jensen Avenue and west of Cornelia Avenue. This plant serves the Fresno-Clovis Metropolitan Area. (Malaga County Water District maintains its own treatment plant.) Due to the Regional Wastewater Treatment Facility's location relative to the rest of the City of Fresno (far southwest and downgradient), there is little potential for plant effluent to adversely affect Roosevelt area groundwater.

Virtually all the incorporated land in the Roosevelt community is connected to a major sewer trunk line for conveying municipal wastewater to the regional treatment plant. Previously unsewered residential developments, such as Calwa, experienced improved groundwater quality after they annexed to the City of Fresno and were able to abandon on-site household septic systems.

Within the Roosevelt community there are three designated main sewer trunk service areas: the Orange trunk sewer service area; the Chestnut trunk sewer service area; and the Fowler trunk sewer service area. (Construction on the Fowler trunk line began in 1991.) Natural slope of Fresno's terrain generally allows gravity flow of these trunk sewers to the treatment facility.* These sewer trunk service areas extend outside the Roosevelt community as far north as the City of Clovis (see Figure EIR-20 for Roosevelt area sewer lines).

Trunk sewer lines serving the Roosevelt community are several miles in length. This long distance to the plant leads to sewage transit times of up to eight hours. Microbial digestion may begin in the sewer trunk lines and may create anaerobicity and hydrogen sulfide in these lines. This situation is under study, with a recommendation forthcoming regarding in-line sewage stabilization. Ferric (iron) chloride is one chemical stabilizer commonly used to halt premature sewage digestion.

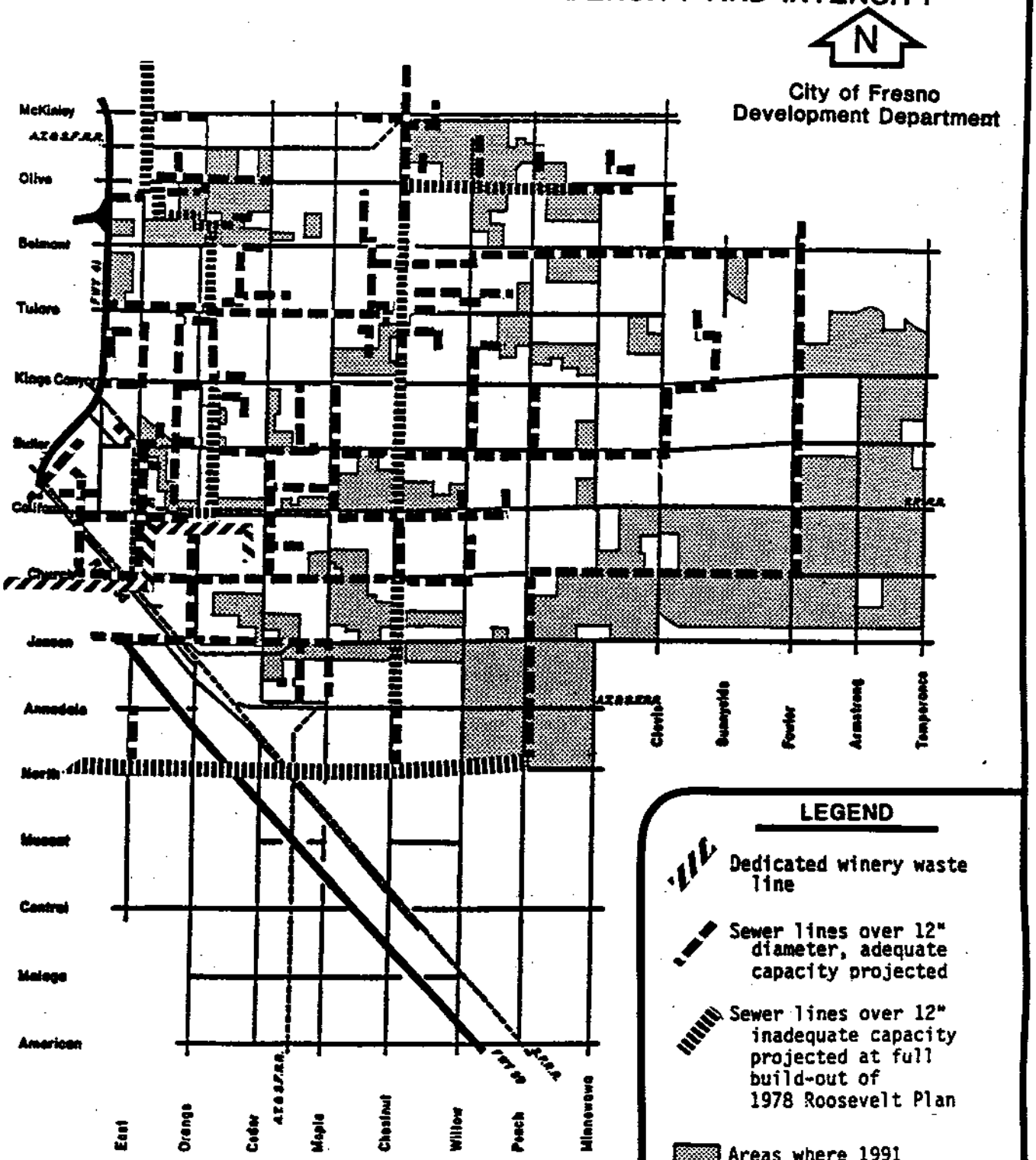
No City sewer service areas exist or are presently contemplated for land within the Malaga County Water District's Sphere of Influence or for land east of the City of Fresno's present Sphere of Influence. There are relief sewer lines planned to be located at the Church Avenue and North Avenue alignments, but no expansion or creation of

* Only one Roosevelt area lift station/force main is in use, a temporary installment east of Fowler Avenue that is designed to move sewage to the Chestnut Avenue sewer trunk line. When the Fowler sewer trunk line is completed, sewage from this subdivision will gravity-flow to the new trunk line and the lift station/force main will be retired from active service.

Figure EIR-20

ROOSEVELT COMMUNITY PLAN UPDATE

POTENTIALLY IMPACTED SEWER MAINS AND RESPONSIVE REDUCTIONS IN PLAN DENSITY AND INTENSITY



service area is presently proposed in conjunction with relief sewer construction. (Topography would require lift stations to serve anything over one-eighth mile south of the North Avenue alignment.)

Capacity of sewer trunks (and interconnecting sewer laterals) is determined by a combination of pipe diameters, pipe slope, parallel interconnections, and mechanical assist devices (such as lift stations and force mains). These limitations determine the volume of wastewater that can be conveyed per hour or per day through a given section of the City sewer network.

There are two important issues to consider in capacity determinations: total daily flows through a section of pipe; and flow rate at peak flow times (generally occurring in two-hour time periods twice a day from 6 a.m. to 8 a.m. and from 5 p.m. to 7 p.m.).

A section of sewer line may have adequate capacity to handle total daily flow, but may surge or "surcharge" during peak flow periods. Sewer lines allowed to surcharge during peak flow periods risk possible infiltration/exfiltration and reduce pipe life expectancy. Short durations of minor to moderate surcharge in pipe segments during peak flow cycles are not considered to be a significant adverse effect. Episodes of extremely high surcharging potentiate damage to sewer lines and public health problems from backed-up, broken or leaking pipes.

Interties in the Roosevelt community provide some redundancy and capabilities for bypass and flow equalization. However, these alternate sewage flow routes also have volume constraints.

Daily, some 53 million gallons, an average 115 gallons per capita of raw sewage, are generated in the Fresno-Clovis metropolitan area (data based on 1990 wastewater treatment plant influent volume). Storm events can introduce runoff at manholes and from emergency dewatering of ponding basins. Peak total influent flow has been recorded at over 90 million gallons at the Regional Wastewater Facility during one 24-hour period.

In 1986, the City-wide average increase in sewage generation was three percent per year (paralleling the City-wide rate of population increase for the 1980-1990 decade). At that time, it was projected that a sewage volume increase rate of five to ten percent per year would cause the 48-inch Chestnut sewer trunk line to exceed capacity in nine to 17 years. (City of Fresno EIR No. 10090 for Canterbury Station, 1986, Section II.C of that Draft EIR).

Multiplying the 115 gpd per capita figure by the 1990 Roosevelt community population (105,200), the Roosevelt area's daily municipal sewage generation for 1990 can be estimated at some 12.1 million gallons per day (mgd). This volume is two-fifths as large as the estimated Roosevelt area water demand, illustrating that some 60 percent of the City's water well production does not contribute to sewage flows.

The Public Works Department assumes that some 85 percent of the volume of raw sewage generated in the metropolitan area comes from residential and commercial activities; the remaining 15 percent is generated by industrial uses. In the Roosevelt community, there is the potential for an elevated per capita sewage generation figure as well as the potential for industrial wastewater to exceed 15 percent of total wastewater generated because this community plan area has such an extensive existing and potential industrial base.

Chestnut sewer trunk line capacity remains a concern for the ten-year period envisioned under the 1991 Roosevelt Community Plan Update because population growth in the Chestnut sewer trunk service area has been increasing at almost five percent per year. The Chestnut trunk line has experienced an increase in peak flow rates and in hydrogen sulfide content.

The municipal sewage treatment portion of the Regional Wastewater Treatment Facility consists of two linked plants, presently rated for an average total municipal influent capacity of 60 mgd. Under typical operating conditions, top treatment efficiency is achieved when flows do not exceed 55 mgd. Average municipal influent at the plant currently approaches this functional 55 mgd capacity. Higher average flow rates make it difficult for plant staff to conduct equipment maintenance without impairing treatment capability.

The Regional Facility is so large that it is resistant to bulking and shock-loading of biologically active material. However, its hydraulic capacity can be affected by peak influent events. For short periods, the plant could physically accommodate very high volumes (134 mgd); but there would be a severe loss of treatment efficiency and a possible substantial reduction in effluent quality at that flow level.

Because increasing flows are expected (with average influent anticipated to exceed rated capacity after 1993), a phased treat- ment plant augmentation project is underway. Redundancy features will be added, making maintenance easier to perform. The first phase of this treatment plant expansion will result in a plant influent capacity rating of 70 mgd; ultimately, expanded capacity will be 98 mgd. City of Fresno EIR No. 10111 is in preparation for this project. Construction is expected to begin by spring of 1992.

Raw sewage consists primarily of water, which carries a small proportion of settleable and dissolved solids. The City-wide effect of water meters and mandatory conservation on treatment capacity should be significant: a reduction of up to 10 percent of the per capita influent. This provides additional opportunities for maintenance and eases the impact of residential and industrial development. Treatment efficiency (effluent quality) can be improved.

The wastewater treatment process is designed to remove pathogenic organisms, reduce microbial and algal nutrients,

and separate raw sewage into clarified discharge water and dried, digested solids. Treatment is a combination of mechanical, chemical, and microbial processes. The Regional Facility is capable of secondary treatment; that is, it is designed to remove most contaminants except nitrate and phosphorous (which, nonetheless, are ordinarily reduced through the treatment process).

A separate winery waste disposal system is operated by the Regional Wastewater Treatment Facility. There is a dedicated winery waste discharge line that passes through the Roosevelt community (see Figure EIR-20). Winery/distilling waste is collected in this line and constitutes a separate stream of wastewater, not mixed with municipal sewage or counted as influent to the Regional Facility plant. This acidic waste slurry (stillage) is spread in shallow layers (to allow its water to evaporate and percolate) on a portion of the treatment facility site. In 1990, almost 38 million gallons of winery waste were handled by these disposal beds. The California Regional Water Quality Control Board is requiring this winery waste treatment system to begin monitoring for possible groundwater quality impacts..

In order to protect water quality, Federal Environmental Protection Agency regulations were established for wastewater treatment plants. Enforcement of the EPA mandates is delegated in California to Regional Water Quality Control Boards. The Central Valley Regional Water Quality Control Board issues waste discharge permits, containing waste discharge requirements (contaminant limits for effluent) and testing/reporting requirements.

Table EIR-22 below shows typical Regional Wastewater Facility test results. "Biochemical oxygen demand" (B.O.D.) is a test that measures the nutrient level of wastewater, showing how much oxygen would be needed to treat wastewater and remove these nutrients. A reduc- tion of B.O.D. is required so that wastewater is not a substrate for microbial or algal growth, which would rob oxygen from waters receiving the wastewater and would be responsible for odors. Conductivity is a measure of ions in water; high ion content makes water more conductive, leading to corrosion (900 micromhos/ centimeter is the conductivity limit for drinking water).

The Regional Facility's final effluent periodically does not meet 30-day average discharge requirements set by the Water Quality Control Board. These deficiencies are attributable to the need for continuing adjustment of recently installed plant equipment (a fine-bubble aeration system). Oxygen injection is also being evaluated for this aeration system. Aeration calibrations are expected to be complete by 1992, correcting deficiencies. The proposed wastewater treatment plant expansion and environmental upgrading modifications are also designed to increase treatment efficiency and bring the plant into continuous compliance as the City grows.

Table EIR-22: WASTEWATER TREATMENT TEST RESULTS FOR FRESNO REGIONAL WASTEWATER PLANT (1990 YEARLY AVERAGE)

	Influent (Raw Sewage Coming In)	Final Effluent (Discharged from Plant)	State Discharge Requirements (Effluent Limits)
B.O.D.	223	36	40
Suspended Solids (milligrams/liter)	231	37	40
Settleable Solids (milligrams/liter)	8.8	3.1	0.2
Conductivity (micromhos/centimeter)	740	722	approx. 850
Chloride (milligrams/liter)	68	72	175
pH	7.20	7.10	No Limit Set
Nitrate (milligrams/liter)	---	0.5* (below limit of quantification)	No Limit Set
Nitrite (milligrams/liter)	---	0.6*	No Limit Set
Ammoniacal Nitrogen (milligrams/liter)	---	16.0*	No Limit Set

* January 1991 data; these test results are not required for the State Discharge Permit testing, so are not averaged for the year.

Some of Fresno's industrial facilities have proven problematic for the wastewater plant. Environmental Protection Agency regulations require the City of Fresno to enforce pretreatment standards on these industrial sites. Most large-volume industrial dischargers are required to pretreat their wastewater to reduce the treatment burden at the main plant and to help prevent damage to sewer mains. The City's pretreatment enforcement program and local limits were not considered stringent enough to protect the Regional Facility. The Water Quality Control Board issued a Cease and Desist Order for this programmatic deficiency in 1990. Per the Order, pretreatment inspection program

deficiencies must be corrected by January 31, 1992. A phased deficiency correction program is currently underway.

In 1990, over 19 billion gallons (58,700 acre feet) of effluent water was discharged from the Regional Facility; 13 percent of that effluent water was used directly for agricultural irrigation on Regional Facility property and adjacent ranches (2.5 billion gallons or 7,837 acre feet).

The rest of the effluent (over 16 billion gallons) was discharged to on-site infiltration ponds, where further purifying biological activity (denitrification) occurs before the water penetrates into the soil. (Because the facility's secondary treatment effluent is not being discharged directly to a body of surface water, elevated B.O.D. and solids would not affect riparian habitat.) Soil percolation further neutralizes and purifies some effluent constituents.

Due to the high volume of soil infiltration from percolation ponds, the Facility has created a groundwater "mound" under its site. The Regional Water Quality Control Board has mandated that the Facility plant mitigate this groundwater "mounding." Facility site groundwater is being pumped out of reclamation wells and discharged to the surface for irrigation onto nearby ranches and into the Fresno Irrigation District system (Dry Creek and Houghton Canals). Chapter A.3 of this EIR discusses the water exchange agreement between the Regional Treatment Facility and the Fresno Irrigation District. Other options are under study for off-site reuse of treated wastewater.

The other major discharge from the Regional Facility is sludge, which is made of refractive concentrated solids and microbial biomass from digesters. Sludge is presently dewatered until it is about 1.5 percent solids (by weight); it then must evaporate in drying beds until it goes from a thick liquid to solid form. The proposed treatment plant expansion includes new dewatering equipment which will produce sludge with some 20 percent solids, vastly shortening the required drying time. In 1990, over 11,315 tons of dried sludge were generated (averaging 31 tons per day).

Sludge disposal has been problematic for the facility. Dried sludge of nontoxic composition could be landfilled, but this would waste valuable landfill disposal capacity. Sludge is a recoverable resource, potentially valuable for fertilizer or composting if it can be designated as nontoxic.

Assessment of sludge quality is a two-fold process. First, sludge is tested for a list of organic and inorganic constituents to ensure that it is nonhazardous. The level of these constituents also determine which reuse/disposal options are available and the applicable sludge loading rates. Second, the sludge is tested for various beneficial nutrients such as nitrogen, phosphorus, and potassium in order to develop the proper loading rates for the various reuse/disposal options.

The first part of this toxicity assessment has been done for Regional Facility sludge. In tests with an acidic leaching solution, Fresno's sludge was above limits for the heavy metals lead and cadmium; all other tests were within limits. In tests with a neutral solution (water), all elements tested in the acceptable, nonhazardous range. Since Fresno's proposed disposal options involve nonacidic environments, the City has applied to the State Department of Health Services (DHS) for a "nonhazardous" sludge classification.

Pending a ruling by the DHS, some 72,000 cubic yards of dried sludge has been stockpiled at the wastewater treatment facility and a contingency hazardous waste management plan has been prepared. If DHS issues the expected "nonhazardous" designation, the sludge will be used for landfill closure foundation material, soil amendment for the vegetative layer in landfill closure, as a soil amendment for a nonfood chain crop, in dedicated land disposal, or for composting operations.

2. Impacts of the Roosevelt Community Plan

As mentioned previously, each metropolitan area resident produces an average 115 gallons per day of raw sewage, making the Roosevelt community aggregately responsible for producing over 4.4 billion gallons of wastewater (1990 figure). After treatment at the Regional Treatment Facility, this raw sewage is rendered into about one-eighth pound of dried sludge and 110 gallons of liquid effluent per person per day. The Roosevelt community, therefore, aggregately produced 2,400 tons of dried sludge and 4.2 billion gallons of treatment plant effluent in 1990. (This does not include winery waste.)

Assuming the 1991 Update's maximum of 4.5 percent annual population growth, Table EIR-23, following details dried sludge, raw sewage, and liquid effluent production for the life of the 1991 Roosevelt Community Plan Update. An unmetered water supply and a metered water supply option (with a 10 percent drop in raw sewage liquid volume) are compared.

Completion and use of the Fowler trunk line will enable urban growth in the southeastern portions of the Roosevelt area by conveying sewage to the secondary-level treatment plant (thus preventing wastewater-related degradation of the aquifer upgradient of the metropolitan area).

Table EIR-23 (following) implies that all Roosevelt Community Plan neighborhoods are connected to the Metropolitan Area Treatment Plant. This is not actually the case. Until the Fowler trunk line is built, some existing neighborhoods (e.g. Sunnyside) and much undeveloped and rural residential property will retain on-site disposal facilities. After completion of the Fowler trunk line, it will be possible for existing development in the Fowler Trunk Service Area to connect to the Regional Wastewater Disposal Facility. The EIR for the Fowler Trunk Sewer (City of Fresno EIR No. 10105) and the financing

Table EIR-23: PROJECTED FUTURE RAW SEWAGE AND TREATMENT FACILITY EFFLUENT GENERATION BY THE ROOSEVELT COMMUNITY: WITH AND WITHOUT ALL RESIDENCES ON WATER METERS

		WITHOUT WATER METERS		WITH WATER METERS	
Year	Dried Sludge (tons/year)	Raw Sewage (million gal. per year)	Effluent (million gal. per year)	Raw Sewage (million gal. per year)	Effluent (million gal. per year)
1992	2,705	4,822	4,609	Not All Installed Yet	
1993	2,826	5,039	4,817	Not All Installed Yet	
1994	2,953	5,266	5,034	4,716	4,508
1995	3,086	5,503	5,260	4,929	4,712
1996	3,225	5,750	5,497	5,150	4,923
1997	3,370	6,009	5,745	5,382	5,145
1998	3,522	6,280	6,003	5,624	5,377
1999	3,681	6,562	6,273	5,877	5,618
2000	3,846	6,857	6,555	6,142	5,872
2001	4,019	7,166	6,851	6,418	6,136

Assumptions: Population growth in the area is a steady 4.5 percent; residential sewage remains at 85 percent of total wastewater generated; per capita sewage generation is 115 gallons without water meters and 103 gallons with meters (the 85 percent fraction of the 115 gallons is reduced by 10 percent); dried sludge weight is not reduced by water metering; effluent volume is 95.6 percent of influent volume.

plan for this trunk sewer were both predicated upon hookup of new and existing development. Jurisdiction over mandatory sewer connection procedures in unincorporated areas is currently being settled.

Some industries in the community plan area have on-site wastewater disposal fields. Unless required to connect to the Metropolitan Area Plant, this practice is likely to continue.

Malaga County Water District population and industries are not included in Table EIR-23, as Malaga is served by its own wastewater treatment plant. Some industrial facilities in the Malaga area have on-site wastewater disposal fields.

Nonetheless, Table EIR-23 shows that the Roosevelt community alone could push the Metropolitan Area Treatment Facility over its functional capacity before the end of the decade. If the planned Regional Wastewater treatment plant expansion cannot be accomplished in a timely manner, it might not be possible for the Public Works Department to make the required sewer findings for development to proceed.

Main sewer trunk lines serving the Roosevelt community do not have dedicated or reserved capacities for each of the community plan areas they cross. Detailed sewer flow modeling and telemetric monitoring of these lines has not been done. The existence of numerous interconnecting laterals prevents isolation (and separate analysis) of each trunk line.

However, using land use based sewage generation figures for large areas, some cumulative estimates of sewer capacity have been done. Under the existing 1978 Roosevelt Community Plan, several segments of sewer trunk lines were projected to have inadequate capacity at full build-out. Figure EIR-20 depicts the major sewer line network for the area, showing those portions which would be inadequate to serve built-out areas under this "no project" alternative to the 1991 Roosevelt Community Plan Update.

The 1991 Roosevelt Update reduces planned residential density designations in several portions of southeast Fresno; Figure EIR-20 has shaded areas where the 1991 Update allows fewer dwelling units per acre than did the 1978 Community Plan. On over 2,200 acres, the 1991 Update has reduced the eventual number of single-family dwelling units by three units per acre, concomitantly reducing daily sewage generation by about 900 gallons per acre.

The 1991 Roosevelt Plan calls for the City Public Works Department to make a written finding of adequate sewer capacity before a development project can be approved.

Due to capacity limitations with the present wastewater treatment plant configuration (due to process deficiencies that currently violate plant discharge requirements) and due to the present lack of detailed sewer line modeling and telemetric monitoring in the Roosevelt community, substantive

findings of adequate sewer capacity may be difficult to justify until wastewater system deficiencies are remedied. Any inability of the system to fulfill the findings would lead to serious problems--from surging sewer lines that leak or break, to permit sanctions, fines, or other penalties for discharging unacceptable treatment plant effluent.

3. Mitigation Measures

(1) The Development Department and Public Works Department shall implement 1991 Roosevelt Update policies for evaluating and improving sewer service (Policy Nos. 4-1.1 through 4-1.5 and 4-2.1 through 4-2.5).

(2) The Public Works Department shall continue to expand its preventive maintenance schedule for sewer line cleaning and obstruction (root) removal.

(3) A policy for sewer line amortization and replacement funding shall be developed by the Public Works Department to prevent infrastructure deterioration and sewer pipe failures in the Roosevelt community.

(4) Redevelopment plans shall include provisions for upgrading and/or replacing inadequate sewer lines, as well as an amortization timetable and funding mechanisms for eventual replacement of any new lines installed.

(5) Development proposals south of the North Avenue alignment shall include plans for improvements required to convey wastewater to a secondary or tertiary treatment plant. On-site wastewater disposal systems shall not be permitted, with the following exceptions:

EXCEPTIONS:

(a) Industrial pretreatment plants will be permitted when they are under permit to discharge to the Fresno-Clovis Regional Wastewater Treatment Facility.

(b) On a case-by-case basis, when the Public Works Department finds that no permanent connection to the Regional Facility is feasible, and when the wastewater contains no industrial processing wastes, on-site and/or package treatment systems--which discharge adequately treated wastewater (with acceptable levels of nitrates, nitrites, salts microbes, and organic constiuents)--may be considered and approved if acceptable to the City Water Division, State and County Health Departments, Regional Water Quality Control Board, and the EPA.

(6) The Public Works Department and Development Department shall implement sewer fees, as necessary, for new development to finance proportionate shares of needed sewer line and sewer treatment plant enhancements.

(7) The Public Works Department and Development Department shall implement water conservation strategies, as identified by the EIR Water Section.

(8) Industrial facility development and expansion proposals shall be environmentally assessed by the Public Works Department (Wastewater Management Division) to determine whether a wastewater pretreatment system shall be required. If one is required, detailed plans and operating parameters for this pretreatment system shall be approved by Public Works before the entitlement can be granted. When pretreatment is initially required for a project, or is later required when wastewater discharges fail to meet quality criteria, continued maintenance of a valid Fresno Regional Wastewater Treatment Facility Discharge Permit shall be a condition of the entitlement.

(9) City sewer service shall not be extended to areas planned for new development (i.e., residential subdivisions, commercial or industrial facilities) outside the incorporated city limits of Fresno and Clovis; except under extraordinary circumstances, in which case such service must be approved by both City and County legislative bodies. All existing commitments for sewer service outside the City limits shall continue to be honored, so long as industrial facilities abide by their discharge requirements.

J. SOLID WASTE MANAGEMENT

1. Solid Waste Generation, Disposal, and Waste Stream Reduction Regulations

Almost 535,000 tons of solid waste were generated in the City of Fresno in 1990, accounting for well over half of the entire solid waste stream of Fresno County. As of April 1990, the Census estimated City of Fresno population at 354,200; making each City resident responsible for a theoretical average of 1.5 tons of solid waste per year.

The City of Fresno Public Works Department has determined that residential waste comprises some 40 percent of trash hauled by the City. Another 10 percent of the City's waste stream is "self-hauled" and is comprised mostly of residential-type wastes. City waste studies (1989-1991) have shown that each household discards an average of 65 pounds of garbage per week. In the Roosevelt Community Plan Area, that translates to a total of 1,195 tons of residential waste per week, 62,143 tons

per year. This figure does not include dried sewage sludge, "special wastes," or construction debris from the Roosevelt Community. Forty-four City of Fresno residential trash collection truck routes presently serve the Roosevelt area with twice-weekly service. Recently annexed Calwa areas have their waste hauled by a private contractor.

On manual collection routes with "can service" (sanitation workers pick up cans and load trucks), an average of 450 to 500 homes can be served per route. On "automated" routes, where trucks have equipment to lift and dump specialized containers, an average of 900 homes can be served per route. The City is changing to an automated container system to reduce labor costs and injury risks for employees. With this new equipment (and enhanced household recycling), it may be possible to run residential collection routes once a week, saving fuel and improving air quality. Present alley collections by the City will be relocated to front curbs of single-family residences.

Commercial waste comprises some 18 percent of the tonnage hauled by the City of Fresno. Commercial waste is picked up on separate routes that utilize front- or rear-loading trucks which tip dumpsters into the truck bodies. Six City of Fresno commercial routes presently serve the Roosevelt Community, and the aggregate tonnage of these routes is 335 tons per week (17,420 tons per year). Private contractors also collect some commercial waste in the plan area.

The City-wide density average of uncompacted commercial waste is 100 to 110 pounds per cubic yard. Roosevelt Community commercial waste has been determined to have a higher average density. The Solid Waste Division perceives this is due to more wet waste (such as food waste), which is heavier.

City-wide, industrial waste is estimated to account for 26 percent of Fresno's solid waste. Industrial waste and construction debris are generally handled by private contractors, who leave large "drop boxes" (roll-off bins) at industrial and construction sites. Because a variety of private contractors serve southeast Fresno, tonnage data has not been tracked for the Roosevelt area. Roosevelt's large industrial sector probably generates a high proportion of the City's overall industrial waste.

Other solid waste is generated by public facilities: schools, parks, government offices, detention facilities, and medical institutions. Litter control programs and the City's Community Sanitation program collect and dispose of solid waste. Some of this waste stream is problematic due to bulk (defunct furniture, dead animals, tires), but much of it is otherwise similar incomposition to residential garbage. Southeast Fresno is heavily impacted by illegal dumping activities. Alleys, vacant lots, agricultural property, commercial trash bin enclosures, and dead-end streets suffer most from illegal dumping.

Recent studies have characterized Fresno's overall waste stream. The following table shows the general composition of local solid waste:

TABLE EIR-24: COMPOSITION OF FRESNO'S SOLID WASTE STREAM

WASTE COMPONENT	PERCENT OF WASTE (By Weight)
Paper - total	21
(newsprint:	5)
Plastics	5
Glass	3
Metals	3
Organic materials - total	48
(yard waste:	13)
(food waste:	12)
(wood waste:	10)
Inert Solids	12
"Other"	5

Data Source: Fresno County Integrated Waste Management Plan workshop, Source Reduction and Recycling Element Fact Sheet

Projections of future waste generation are not simple extensions of the historic steady per-capita figure of 1.5 annual tons per resident. California Assembly Bill (AB) 939 mandates that by January 1995, 25 percent of the City's waste stream shall be diverted to other uses besides landfill (i.e., recycled, composted, or prevented); by January 1, 2000, this mandatory diversion increases to 50 percent.

If the City fails to meet these waste diversion mandates, and if a State public hearing finds that non-substantive efforts have been made and compliance deficiencies continue, the State can levy a $10,000 per day fine upon the City.

In order to fulfill its obligations under AB 939, the City of Fresno is proceeding to adopt compliance plans: a Source Reduction and Recycling Element and a Household Hazardous Waste Element are scheduled for adoption and implementation in Spring of 1992.

The Roosevelt Community Plan area contains several community recycling centers used by private residents and industries. The wide swath of industrial-zoned land in this community makes these centers accessible and provides locations for future industries to receive, ship, and re-use salvaged material.

Currently, an estimated 8 percent of Fresno's solid waste stream is recycled. The Draft Fresno County Integrated Waste Management Plan estimates that 30 percent to 64.3 percent of the County's total solid waste stream could be diverted by salvage, recycling, composting, or source reduction (i.e., waste prevention).

The least expensive methods for compliance are source reduction, composting, and "source separation," where persons and businesses segregate their own recyclables into recycling bins for separate pick-up and routing. The City of Fresno operates a curbside recycling program for commercial and residential properties (to be phased in from 1991 to 1993).

The most expensive methods for AB 939 compliance involve special sorting operations, where an entire municipal waste stream is salvaged for recyclable material.

It is anticipated that, to meet the year 2000 mandate of AB 939, a combination of all these methods will be required. Due to the "air toxics" provisions of the 1990 Federal Clean Air Act Amendments, and due to the major air quality problems in the San Joaquin Valley, incineration of municipal waste is not presently feasible.

Solid waste generation figures are tabulated by weight (tons), but disposal capacity in landfills is measured in cubic yards of available volume. Average fill rates for solid waste disposal sites are used to project how long they can continue to be used, termed the "life" of the landfill. Packed waste from collection trucks is dumped ("tipped") at sanitary landfills, covered with at least six inches of soil, and compacted to a density of 1,200 pounds per cubic yard on the working face of the landfill.

The City of Fresno's own landfill reached capacity and was closed in 1988. Presently, the City contracts to send waste to two privately-owned landfills in the unincorporated area: The BFI Chateau Fresno landfill (Chateau Fresno and Muscat Avenues, a 26-mile round trip from the closest border of the Roosevelt Plan area) and the BFI Chestnut Avenue landfill (Chestnut and Manning Avenues, a 12-mile round trip from the southern edge of the Roosevelt Community). These facilities are projected to run out of capacity by 1993 or 1994. The City of Fresno has contracted with Fresno County to begin using the County's American Avenue Landfill (southwest of Kerman) in 1993.

The American Avenue 160-acre site has 11,757,732 cubic yards of capacity, which can hold over 7 million tons of compacted waste. The 160-acre site has a useful life of over 20 years (with an option for the landfill to then expand onto 250 adjoining acres). Fresno County's General Plan designates

this site as the regional solid waste repository for Fresno County. The American Avenue facility has been developed by the County, and each cell of the landfill has a liner to prevent escape of leachate, as well as built-in groundwater quality monitoring devices. The first cell has already reached capacity, and the second cell (1.27 million cubic yards) should be opened in early 1992. Fresno County anticipates opening two more cells by 1995, then a cell every three years for 20 years.

Due to the 44-mile round trip to the American Avenue Landfill, the City of Fresno will not reasonably be able to utilize the County's landfill until a more efficient solid waste transportation system is created, because trucks used on waste collection routes have a high per-mile operation cost.

As a member of the Fresno Metropolitan Area Solid Waste Authority, the City of Fresno has been designated lead agency to develop a joint powers solid waste transfer, recycling, and composting facility to serve the greater Fresno-Clovis Metropolitan Area (including Malaga). The Metropolitan Area Solid Waste Transfer Facility will be designed to receive at least 1,700 tons per day. When completed, this facility will receive solid waste from the Fresno-Clovis Metropolitan Area, will retrieve recyclables, and will package non-salvageable waste for the long trip to the Fresno County American Avenue Landfill. Smaller (route) trucks will deliver their garbage loads to this facility, from which material destined for landfill can be hauled by more economical, fuel-efficient tractor-trailers. A preferred location (in the Roosevelt Community Plan area near North and Maple Avenues) and alternate sites have been selected. Bond issuance is necessary to fund construction of this facility. Groundbreaking is tentatively scheduled for late 1992.

2. Impact of the 1991 Roosevelt Community Plan Update

As contrasted with the 1978 Roosevelt Community Plan, the 1991 Update reduces planned residential dwelling units. "Full" (90 percent) build-out of the 1978 Update would have annually generated over 137,500 tons of residential refuse, while "full" (90 percent) build-out under the 1991 Update will generate some 115,000 tons per year of residential refuse.

This residential refuse would be a waste stream increasingly subject to recycling, so the proportion going to landfill would decrease throughout the decade. Most of the total waste would still be picked up and transported by a municipal waste hauler; only the more remunerative recyclables would possibly be self-hauled by residents.

In comparision with the 1978 Roosevelt Plan, the 1991 Update designates more land for institutional, open space, commercial, and industrial uses. Per acre, each of these uses will generate fewer annual tons of refuse than would residential uses.

Park visitors are not likely to carefully separate their paper, glass, and plastic discards. Park waste, therefore, is more likely to require expensive post-discard sorting at a waste transfer station.

The 1978 Plan Update generally indicated that "code enforcement" measures should be applied, and did not focus on details of community sanitation enforcement. In contrast, the 1991 Update specifically provides funding, goals, and direction for the City's Neighborhood Presevation and Community Sanitation Division to increase removal of debris, abandoned vehicles, and illegal dump sites. The 1991 Update's policies on rubbish pickup for multi-family units should help to prevent illegal dumping of discarded items.

Recycling provisions in the 1991 Update will require that more project site area be devoted to on-site waste storage, and that more detailed design measures will be needed for these waste/recycling storage areas. If recyclables with food and beverage residues are not picked up frequently, insects and rodents may become a problem from recycling storage areas.

3. <u>Mitigation Measures</u>

(1) The Public Works Department and Development Department shall implement 1991 Roosevelt Update policies for maintaining adequate solid waste disposal service (Policy Nos. 4-8.1 through 4-8.6).

(2) The Public Works Department and Development Department shall implement the City-wide Source Reduction and Recycling Element and other plans and policies necessary to comply with AB 939.

(3) The Development Department shall require that designs for multi-family residential projects include functional recycling container space.

(4) The Public Works Department shall extend community clean-up rubbish pickup service to multi-family residences, and shall consider increasing the frequency of this service to four times per year.

(5) The Public Works Department shall institute a system for collecting recyclables, yard waste, and other compostable organic material.

(6) The Development Department shall require that designs for recreational, institutional, commercial and industrial projects shall include adequate secure space to segregate and store recyclable material.

(7) The Parks and Recreation Department shall institute policies on food and beverage containers (and recycling) at parks and other community recreation facilities.

(8) The Development Department shall add a condition to all development entitlements requiring that any asphalt and concrete removed during construction or demolition activity shall be recycled.

K. SCHOOLS

1. Educational Facilities in the Roosevelt Community

The Roosevelt Community Plan Area contains several child (day) care centers, preschools, elementary schools (public and private), secondary schools (public and private), and four post-secondary educational facilities. Appendix D of this Environmental Impact Report lists the names and street addresses of school facilities and child care centers in the plan area.

Public K-12 schools are evaluated in this EIR as essential public facilities. The Roosevelt Community Plan Area is served by four different unified (K-12) school districts: Fresno (FUSD), Clovis (CUSD), Sanger (SUSD), and Fowler. In addition, some of the southwestern portion of the Roosevelt area is in the Orange Center Elementary District and the Washington Union High School District. Figure EIR-21, following, shows the boundaries of these school districts, and Table EIR-25 (on pages 177 and 178) lists the existing schools within each district.

Due to the cultural and economic diversity of the Roosevelt Community, there are specialized local educational needs for enhanced language capabilities; outreach programs; dropout prevention; and remedial, independent, and adult instruction. Student health, nutrition, and counseling programs are also needed to serve southeast Fresno.

Local school operating budgets have recently been affected by statewide and local economic conditions, with loss of some programs, personnel reductions, and shortages of facilities and some educational materials and supplies.

Figure EIR-21

ROOSEVELT COMMUNITY PLAN UPDATE
SCHOOL LOCATIONS

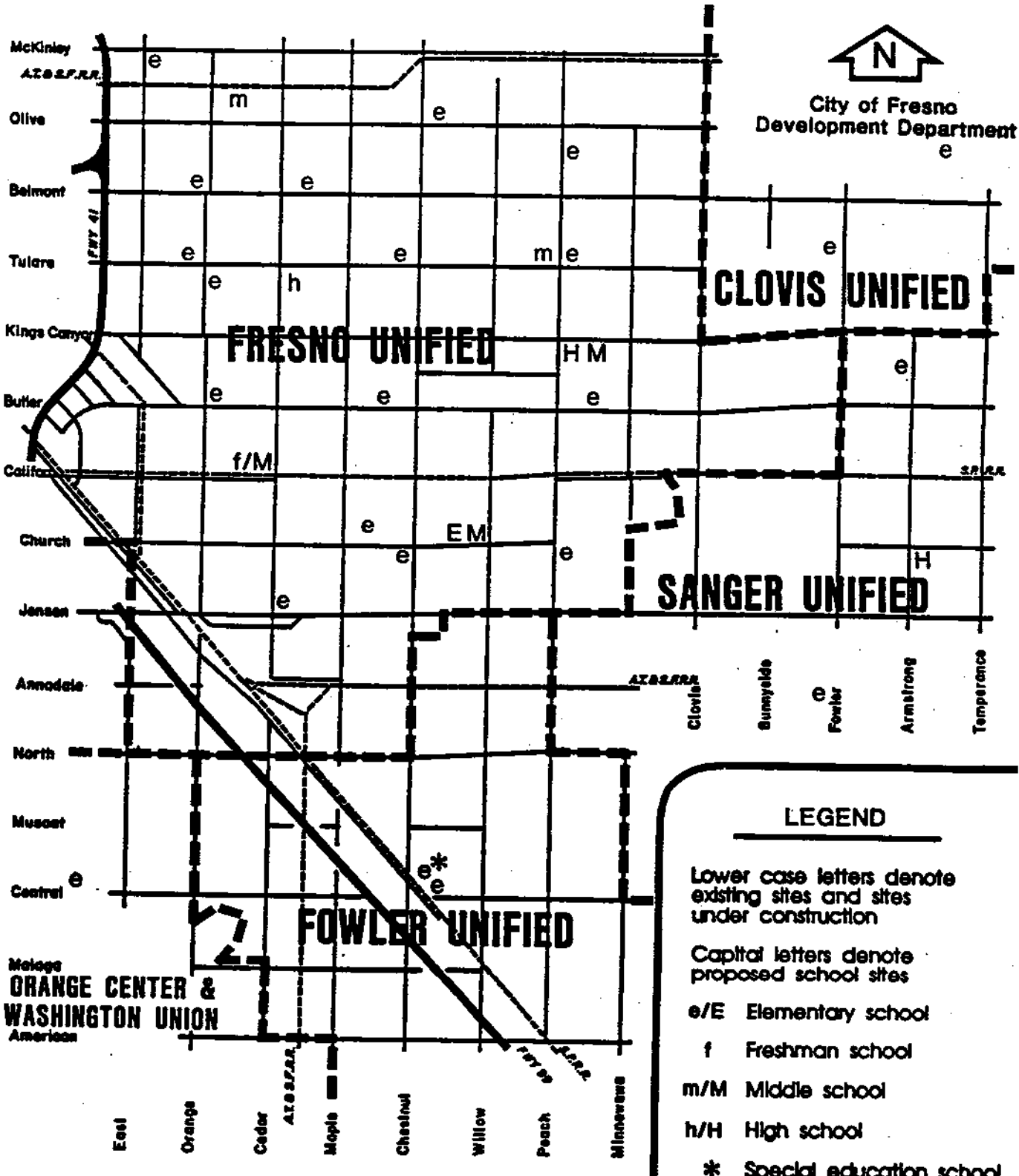


TABLE EIR-25: CAPACITIES AND ENROLLMENTS OF ROOSEVELT AREA SCHOOLS

School	Present Capacity	Maximum Potential Capacity With Portable Space And Year-Round Schedule	1991 Enrollment
FRESNO UNIFIED			
Anthony Elementary[1]	1,085[1]	Not Available	-----
Ayer Elementary	923	1,270	912
Aynesworth Elementary	1,038	1,230	1,031
Balderas Elementary[1]	1,085[1]	Not Available	-----
Burroughs Elementary	1,370	1,370	1,341
Calwa Elementray	994	1,120	864
Easterby Elementary	973	1,140	976
Ewing Elementary	700	940	1,127
Heaton Elementary	836	836	809
Hidalgo Elementary[1]	1,085[1]	Not Available	854[2]
Jackson Elementary	335	447	413
Jefferson Elementary	1,104	1,104	1,140
Konkel Special Education	Not Avail.	Not Available	25
Lane Elementary	1,360	1,360	1,407
Leavenworth Elementary[1]	1,085[1]	Not Available	-----
Lowell Elementary	804	804	761
Mayfair Elementary	1,100	1,128	1,097
Muir Elementary	970	970	959
Norseman Elementary	838	838	983
Rowell Elementary	1,272	1,300	1,268
Storey Elementary[1]	1,155[1]	Not Available	-----
Turner Elementary	700	940	765
Webster Elementary	703	703	765
Winchell Elementary	1,170	1,170	1,231
Kings Canyon Middle School	1,069	1,069	1.016
Yosemite Middle School	1,134	1,134	1,008
Sequoia Freshman School[3]	1,073	1,073	669
Roosevelt High School	2,581	2,581	2,528

[Continued]

TABLE EIR-25 [Continued]

School	Present Capacity	Maximum Potential Capacity With Portable Space And Year-Round Schedule	1991 Enrollment
CLOVIS UNIFIED			
Fancher Creek Elementary	759	1,000	750
Temperance-Kutner Elem.	656	930	650
SANGER UNIFIED			
John Wash Elementary	290	800 to 1,000	190
Lone Star Elementary	376	800	320
FOWLER UNIFIED			
Malaga Elementary	420	600	310
ORANGE CENTER ELEMENTARY			
Orange Center Elementary	527	900	320

FOOTNOTES

1. Elementary school to be constructed in 1991-1993; "present" capacity is the capacity which will be constructed.

2. This is Hidalgo Elementary School's enrollment at its temporary location. Hidalgo is constructed of portable modules and will be reconstructed on a permanent site in 1991-1992.

3. Sequoia Freshman School will be converted to a middle school.

All of the elementary school districts in the Roosevelt Community Plan Area have been subject to rapidly increasing enrollments and school overcrowding. Table EIR-25 lists the current and potential student capacities accommodated at each school site. Table EIR-25 also indicates the potential use of capacity-enhancing measures such as school attendance area boundary adjustments, added "portable" (modular) classroom space, new school site acquisition and construction, and year-round school operation (as opposed to the traditional September through June school year).

FUSD, with the third largest district-wide student enrollment in California, is particularly impacted in southeast Fresno. FUSD covers territory in the Roosevelt community that has been almost fully developed with medium to medium-high density residential uses. Nearly 2,000 Roosevelt area students must be accommodated at (transported to) schools outside the Roosevelt Community Plan Area boundary.

FUSD enrollment in Southeast Fresno is growing so fast that, even with completion of new elementary schools in 1991 and 1992, FUSD still expects to have to transport over 1,000 elementary students outside the plan area. Figure EIR-22 depicts FUSD's current elementary school attendance areas, those schools which are affected by adoption of a year-round schedule, and approved elementary school construction projects.

Permanent school space is expensive to construct, largely because of the extensive seismic and other safety standards for this type of public facility construction. Present cost averages $125 per square foot. General tax revenues and square footage fees imposed on new development are insufficient to fund new school construction. The California Department of Education recently calculated average statewide construction costs, per student, for new schools:

- For each high school student who must be accommodated: $11,500.
- For each intermediate (middle) school student who must be accommodated: $10,000.
- For each elementary school student who must be accommodated: $8,300.

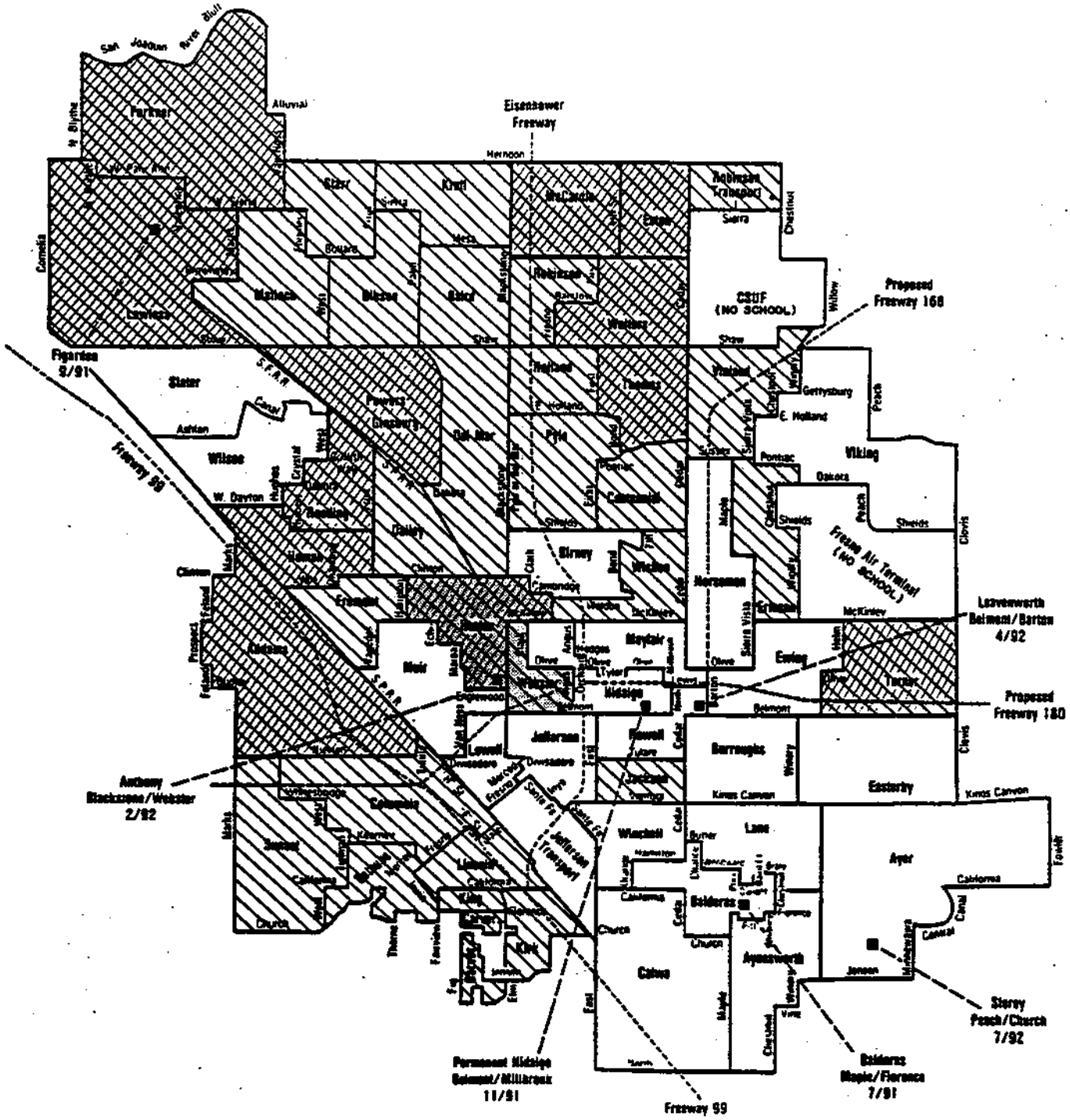
Due to lower local land costs, the above Statewide figures are higher than the average Fresno per capita cost for school construction.

School districts in the Roosevelt Community have experienced school capacity deficiencies severe enough to document their need to collect impact fees to help meet new school construction demands. California Government Code (GC) Sections 53080, 65001, and 65995 authorize impacted school districts to levy fees on development projects to offset or mitigate the educational service demands engendered by development projects.

Figure EIR-22

FRESNO UNIFIED SCHOOL DISTRICT

1991 - 1992 ELEMENTARY YEAR-ROUND SUMMARY



\\\\\\ - SINGLE TRACK 90/30 AND / OR TRADITIONAL

▭ - 90/30 YEAR-ROUND SCHEDULE

////////// - SCHOOLS LIKELY TO IMPLEMENT A MULTI-TRACK YEAR-ROUND SCHEDULE IN THE NEAR FUTURE

FUSD, CUSD, and SUSD presently collect GC Section 65995's maximum fees for residential ($1.58 per square foot) and industrial/commercial ($0.26 per square foot) projects. Orange Center collects $1.50/s.f. for residential projects and $0.25/s.f. for non-residential projects. Fowler Unified does not levy fees on industrial or commercial construction, but charges the statutory maximum per square foot of residential development ($1.58).

Fees collected under GC Section 65995 must be used to alleviate overcrowding. However, development fees alone are not adequate to construct schools. A 2,000 square foot home would generate just over $3,100 in impact fees. This is not adequate to fund construction of classroom space for even one child which the new house may bring into a school district.

FUSD, CUSD and SUSD have contemplated or attempted ballot initiatives (bond isuues) for school construction funding. These efforts have not recently met with success, but escalating school overcrowding may prompt the electorate to support future school bond issues.

Each proposed new school must fit conceptual and locational goals to provide a cost-effective, functional, and safe educational facility. Student needs, community requirements, district fiscal constraints all must be served. Table EIR-26 summarizes local districts' guidelines for new school sites:

Table EIR-26: SCHOOL SITE STANDARDS

	Optimum Capacity	Target Attendance Radius	Optimum Site Size
Elementary	500 to 1,000	1 mile	15 acres
Intermediate/Middle	800 to 1,450	2 miles	40 acres
High School	1,800 to 2,500	2 miles	60 acres

These characteristics require substantially undeveloped land that is economically feasible to acquire. In addition, the State of California and school districts also have developed guidelines for choosing new school sites. Siting criteria were developed to maximize school location utility and student safety. FUSD criteria for new sites are reproduced in Appendix D.

In addition to considering surrounding land uses when evaluating a potential school site, the street circulation system must be able to effectively disperse traffic and reduce congestion immediately surrounding the site. It is preferable that a school be located on at least a collector street, to provide adequate traffic carrying capacity. In addition, serious consideration should be given to locations that maximize the opportunity for students to walk or bicycle to

school and minimize the use of private vehicles. Coordination between the City and the school district should be sought in the review and approval of property development plans, and the design of street patterns in order to provide adequate access to neighborhood schools and avoid excessive congestion.

2. Impacts of the Roosevelt Community Plan

FUSD and CUSD have developed district-wide Master Plans to provide for timely siting and construction of new school facilities. Both districts recently completed student generation studies to estimate the number of students which will enter the school system for each dwelling unit constructed.

The effects of recent high birth rates and family immigration rate trends are being felt in Roosevelt area schools, where overcrowding is severe in elementary and middle schools. Although student yield factors (the average numbers of students generated per household) are generally calculated city-wide, some special studies have been done in Southeast Fresno. The following Table compares results from these recent surveys:

Table EIR-27: 1990 STUDENT YIELD FACTORS, GRADE LEVELS K-12

	YIELD FACTORS (AVERAGE # OF STUDENTS PER DWELLING UNIT)		
Category of Housing Unit	Clovis Unified District-Wide	Fresno Unified District-Wide	Fresno Unified Southeast Fresno
New (post-1987) Single Family	0.774	0.447	0.386[1]
All Single Family	0.884	0.537	0.946[2]
New Multiple-Family	0.148	0.341	—
All Multiple-Family	0.371	0.819	1.600[3]

[1]44 homes in survey
[2]200 homes in survey
[3]Three apartment complexes in survey

Information courtesy of Michael Paoli and Associates, Clovis Unified School District, and Fresno Unified School District.

The above table depicts the "immediate" or current impact of residential construction on schools.

Fresno Unified School District sponsored a 1990 survey to project future school needs in the longer term. The yield of preschool-aged children per household is summarized in Table EIR-28. This Table shows the number of children which would be expected to enter public school in one to five years.

Table EIR-28: FRESNO UNIFIED SCHOOL DISTRICT 1990 PRESCHOOLER YIELD FACTORS (BIRTH TO AGES 4 AND 5)

	FUSD PRESCHOOLER YIELD FACTORS (AVERAGE # OF PRESCHOOLERS PER HOUSEHOLD)	
Category of Housing Unit	District-Wide	Southeast Fresno
New (post-1987) Single-Family	0.383	0.341[1]
All Single Family	0.209	0.284[2]
New Multiple Family	0.275	None Surveyed
All Multiple Family	0.492	0.971[3]

[1]44 homes in survey
[2]200 homes in survey
[3]Three apartment complexes in survey

Information courtesy of Michael Paoli and Associates and the Fresno Unified School District

If southeast Fresno multi-family unit student generation figures for K-12 and preschool-aged children are added together, the result is 2.571 children per apartment--when the Census results only showed 3.07 people per apartment. This discrepancy occurs because the student generation study could not achieve as broad a sampling base as the Census. The student generation figures presented here could be used to evaluate "maximum" school impacts from multi-family development.

Implementation of the 1991 Roosevelt Update as proposed would provide for a potential total of 47,522 single-family residences and 23,247 multi-family units. Some 28,700 new single-family units and 9,800 new multi-family units could ultimately be constructed under the 1991 Update's proposed land uses. This new construction will primarily affect the Sanger, Clovis, and Fresno Unified Districts.

Based on student generation figures developed in 1990 for Fresno and Clovis Unified Districts, full build-out of this new construction could ultimately mean 12,500 to 42,800 additional K-12 students in the Roosevelt Plan Area. Coupled with present overcrowding, the need for new and expanded school sites is obvious.

Because birth rates have historically fluctuated, and school districts can only require or obtain funding for school space when need is demonstrated by student capacity studies, 1991 designation of all potential school space which could possibly be needed at full Roosevelt build-out would be premature. Therefore, it is acknowledged that school districts will seek future school sites through subsequent plan amendments.

The ability to provide adequate school facilities is influenced by the reliability of land use plans and their arrangement of urban uses. Schools represent substantial public investments which can be optimized by establishing efficient school service areas. Land use planning predicts the distribution and density of population upon which the location of school facilities are based. Because schools occupy a substantial amount of land and have specific characteristics, they should be intergrated in a compatible manner with surrounding uses and public service facilities.

The no-project alternative (the present 1978/84 Roosevelt Community Plan) would provide for some 53,882 single-family and 28,890 multiple-family units at full build-out. This would be an increase of 35,000 new single-family and 19,000 new multiple-family units, possibly adding 16,322 to 63,510 more K-12 students to the City's Roosevelt Community Plan Area.

The no-project alternative does not provide any designations for new school sites (except those already acquired or being negotiated for proximal school construction). The no-project alternative's lack of designated school sites is not responsive to that plan's need for schools. Without any advance school site designations, land in developing portions of the plan area would not be as easily preserved or set aside for school uses, forcing school districts into more expensive proceedings for choosing and acquiring suitable sites for needed school construction.

The 1991 Roosevelt Update has responded to the need for schools by designating new school sites (see Figure EIR-21). These new sites, combined with maximum utilization of existing sites, could accommodate a total of 39,000 K-12 students. This fulfills the City's goal--and obligation--of providing adequate public services for existing and planned development. However, substantial overcrowding of the existing school facilities would continue in the interim periods between formal determination of school needs, acquisition of funding, and completion of school construction.

Under the 1991 Update, the **Orange Center Elementary School District, Washington Union High School District,** and **Fowler Unified School District** encompass primarily industrial areas of the City of Fresno Roosevelt Community Plan Area.

Industrial (and commercial) development has a more diffuse impact on student generation, typically not studied or

estimated in a community plan with the same precision as are student generation figures from residential development. New school facility sites are not designated in the Roosevelt Update for these school districts.

Although Table EIR-25 shows that **Sanger Unified School District's** two current elementary sites in the plan area have significant expansion capacity, it is likely that at least one new elementary school, a high school, and possibly a middle school, will be needed to serve development in the Roosevelt Community. SUSD covers much of the urban reserve area that will experience rapid development when the Fowler sewer trunk line is completed.

The Sanger Unified School District has not yet compiled a far-reaching Master Plan; rather, SUSD estimates the potential student generation of prjects when detailed entitlement applications are drawn.

In the absence of a long-range Master Plan, SUSD did not designate a preferred elementary school (or alternate elementary sites) for inclusion in the land use map for the 1991 Roosevelt Update. If, eventually, a site is designated by SUSD, and if that site is within the City of Fresno's sphere of influence, a subsequent amendment will be needed in the Roosevelt Community Plan.

Fresno Unified School District has been particularly impacted by population growth in the Roosevelt Community. As Table EIR-25 shows, some of FUSD's schools are operating above their expanded, year-round capacity.

School sites are difficult to acquire and expand in developed areas. The 1991 Update will reduce escalating growth pressures by reducing residential density designations in already-urbanized areas of FUSD. In addition, the 1991 Update has identified some future school sites by designating land for this public facility use.

In the future, more FUSD school sites may be required in urban and fringe portions of the Roosevelt community. When such sites are chosen by FUSD, subsequent modifications will be needed in the Community Plan.

Alternate FUSD High School and Middle School Sites

In view of current overcrowding, the transportation costs for exporting students out of southeast Fresno, and the future need for additional secondary school classroom space to accommodate the area's current elementary school student population, the Fresno Unified School District has determined that a new high school and new middle school sites are required for the Roosevelt area.

The Fresno Unified district has conducted a preliminary site comparison for alternate middle and high school locations. Originally, seven different site configurations in Southeast Fresno were evaluated. FUSD's overriding considerations caused elimination of all but two sites. These two sites have been included as alternatives for consideration in the 1991 Roosevelt Update EIR: the preferred site, called "Site No. 1" herein, at the southeast corner of Kings Canyon and Peach Avenues; and "Site No. 2," at the northwest corner of Church and Willow Avenues.

Following is a description of both sites and a brief summary of environmental impacts for each:

Site No. 1 consists of 90.5 acres at the southeast corner of Peach and Kings Canyon Avenues. Its boundaries are Kings Canyon, Peach, the Lowe Avenue alignment, and Minnewawa Avenue. Figure EIR-23 shows the 50-acre high school proposed area and some 40.5 acres as an "expansion option" for a middle school.

This site has been incorporated (annexed) into the City of Fresno. It is not in the Urban Growth Management area and is, therefore, not subject to UGM fees.

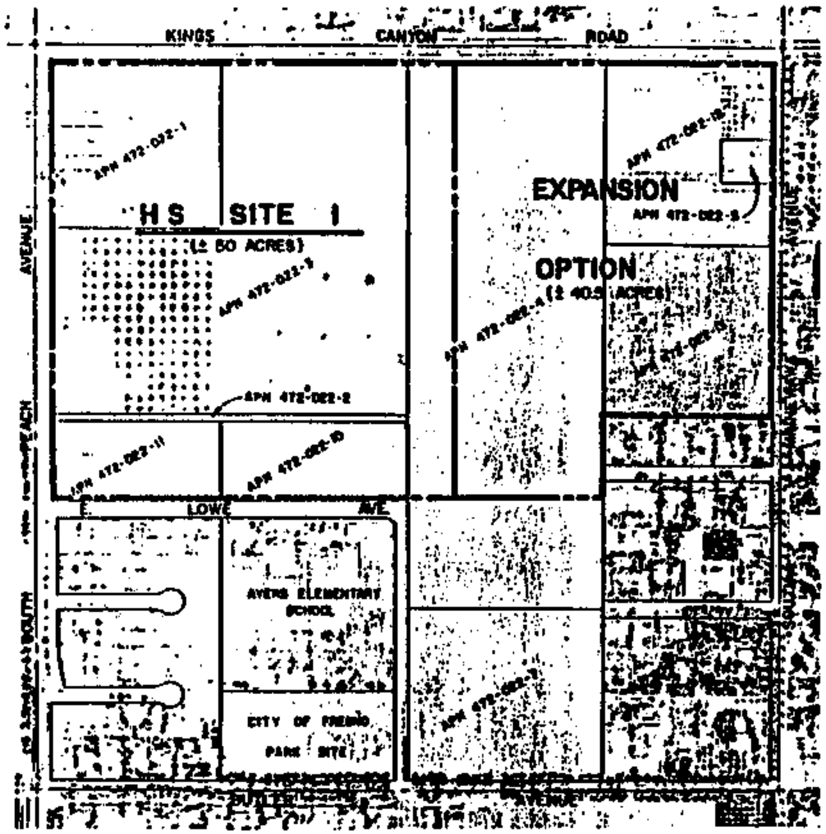
The entire 90.5 acre site has been used to grow and process crops. However, all trees and vines have been removed from the high school site portion, which formerly had agricultural structures adjacent to Peach Avenue. A small commercial structure is located along Kings Canyon Road. On the eastern or "expansion option" portion of the 90.5-acre site, there are two residences, a fruit stand, and some producing cropland.

Site No. 1's underlying current (1978/84 Roosevelt Plan) land use designations are Regional Commercial, Office Commercial, Medium-Density Residential, and Medium-Low Density Residential (see Figure EIR-23).

If no high school were developed at Site No. 1, policies of the 1991 Update would require that the underlying planned regional shopping center property be developed in accord with community center standards. (Two of the requested Plan Modifications analyzed in Chapter U of this EIR would retain a regional commercial land use designation and residential development for this property.)

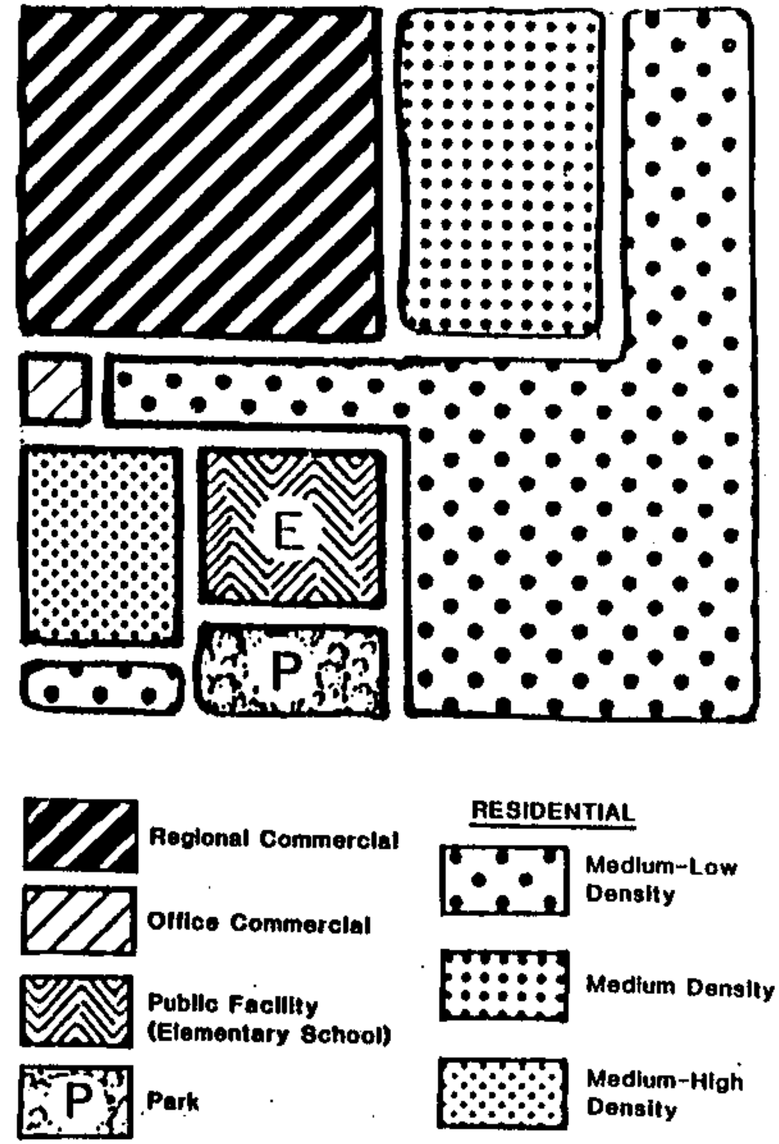
Utilization of Site No. 1 for regional commercial uses would provide for increased traffic volumes on already-impacted portions of Kings Canyon and Peach Avenues (see Figures EIR-17 and EIR-18 in Chapter H of this EIR).

Figure EIR-23



Proposed High School and Middle School Site at Kings Canyon and Peach Avenues (Site No. 1)

Current ("No Project") Land Use Designations



If no high school were developed on the 50-acre portion of this site, the "expansion area" of 40.5 acres would still be required for a middle school to accommodate the huge elementary enrollment of FUSD. If this 40.5-acre "expansion area" were not utilized for a middle school, its underlying land use designation would remain in medium and medium-low residential densities, potentially allowing construction of some 250 single-family residences. The school district would also have to find a replacement middle school site (in addition to the Church-Willow proposed site for a new middle school).

Surrounding this site are residential uses (medium-high through medium-low densities), public facilities, and existing and proposed commercial uses (across Kings Canyon and Peach Avenues). Site No. 1 is bordered by scenic street designations--collonades of large palm and olive trees with historic value--on Peach and Minnewawa Avenues.

There are no large (70 or more kV) electrical transmission lines and no electrical distribution substations within a mile of Site No. 1.

There are no listed hazardous material sites on this land, although it is subject to a Level II assessment due to reported asbestos materials used in construction of the agricultural buildings, and due to former on-site agricultural chemical storage and use (see chapter P of this EIR for a discussion of hazardous material assessments). There are no listed hazardous material sites adjacent to this site, and no known handlers of extremely hazardous materials within 1,000 feet of the site.

There are no rail lines within 1/2 mile of the site. There are no open canals in the area (the Fresno Irrigation District's Ventura branch canal has already been piped).

The site is in Fresno Metropolitan Flood Control District drainage area (district) "PP." The basin for this drainage area has been acquired, fenced, and partially excavated.

The site is served by the Chestnut Avenue sewer trunk line. Public water supply is available. The closed city well in the vicinity (Pump Station 82, southwest of the site) was put on standby status due to ethylene dibromide contamination. This well is presently being rehabilitated (redrilled and sealed) to avoid contaminated strata.

As shown in Figures EIR-17 and EIR-18 the siting of school facilities at this location would affect projected traffic volumes on Peach and Kings Canyon Avenues. Compared with the present underlying land use designation, the MINUTP traffic model shows that a 90.5 acre school campus at Site No. 1 would provide for lower daily traffic volumes on Peach Avenue, in some sections improving projected levels of service above "F." Traffic on Kings Canyon would be

affected as well, decreasing the number of vehicle trips west of Willow and east of Peach, but increasing traffic by some 1500 daily trips between Willow and Peach.

Because Site No. 1 is well within the boundaries of FUSD, it would be more accessible to its student population. As Figure EIR-15 shows, the site is presently served by the City's mass transit system, providing further opportunity to reduce the number and length of school-related vehicle trips. School district transportation costs are expected to be significantly lower for this centrally located site.

The 60 dB Ldn projected noise contour in the 1984 General Plan Noise Element falls approximately 600 feet south of and parallel to the Kings Canyon right-of-way, and another 60 dB Ldn noise contour parallels Peach Avenue 400 feet east of the Peach right-of-way. (No noise contour was developed for Minnewawa Avenue in the 1984 Noise Element.)

Insofar as this school location and its stadium may become a significant evening noise and glare source, the size and orientation of Site No.1, in relation to nearby existing and proposed commercial uses, provides opportunities to direct noise and glare away from sensitive uses if the entire 90.5-acre site is used for school construction.

Site No. 2, the northwest corner of Willow and Church Avenues, is an alternative high school and middle school site that is designated in the 1991 Update for a middle school and elementary school site. Putting a high school at Site No. 2 would require designating another alternate or "replacement" FUSD elementary school site (see Figure EIR-24).

Neither Site No. 2 nor the elementary school "replacement area" are incorporated into the City of Fresno. They are within the designated Urban Growth Management Area. Site No. 2 has been in agricultural use and lies entirely in prime (Class I) agricultural land. The elementary school "replacement area" is also prime farmland and has crops and structures located on it.

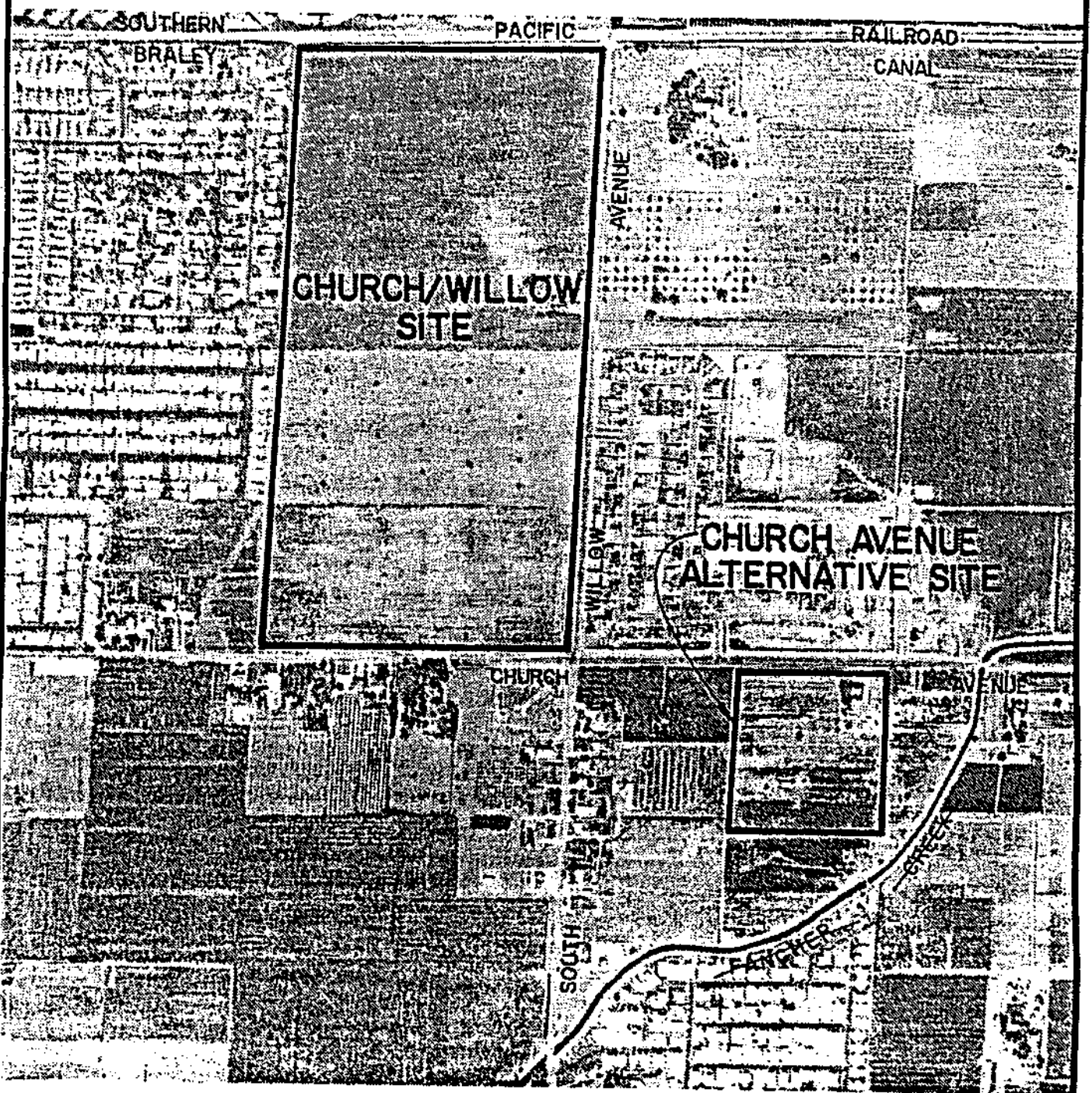
The current land use designation (1978/84 Roosevelt Plan) for Site No. 2 and the alternative elementary school site is medium density residential.

In the 1991 Roosevelt Update, 60 acres of Site No. 2 is designated for public facility use, set aside for contiguous middle and elementary schools. North of this is 20 acres of medium density residential. The 1991 Update retained the medium density designation for the alternate elementary site across Willow Avenue.

Using Site No. 2 for high school and middle school contiguous campuses would require that 20 more acres of medium density residential land be added to the bloc of

Figure EIR-24

ROOSEVELT COMMUNITY PLAN UPDATE



Alternative High School and Middle School site at Church and Willow Avenues.

(showing proposed relocation site for elementary school)

land already set aside northwest of Church and Willow; and that 10 to 15 acres of medium density residential would be utilized across Willow to provide elementary school space. These land use changes would remove 150 to 260 potential single-family dwellings from this potential growth area.

Fresno Pacific College is north of Site No. 2. West and southeast of Site No. 2 are residential uses (mobile home parks, single-family residences); otherwise, this location has agricultural and related uses bordering it. There are subdivision maps being processed for agricultural land east and south/southeast of Site No. 2.

Major (70 kV) electrical trasmission lines bisect and border this site (see Figure EIR-29 in Chapter T of this EIR). State guidelines for school sites mandate that educational facilities stay specified distances away from major electrical transmission lines.

There are no listed hazardous material sites on Site No. 2 or the Church Avenue elementary school alternative sites. As with Site No. 1, past agricultural use would make this location subject to at least a Level I assessment.

Site No. 2 is bounded on its northern edge by a branch of the Southern Pacific Railroad. SPRR estimates that it averages one freight train per day on this branch. However, Southern Pacific is in the process of divesting itself of branch lines, and use patterns may change when the new owner of this branch line takes over operations in 1992.

Figure EIR-24 shows "Fancher Creek" as traversing the area southwest of Site No. 2. This is actually the 100 year-old Central Canal, a large irrigation canal which is part of Fresno Irrigation District (FID), and which branches off from Fancher Creek. The canal is almost 1/2 mile from Site No. 2, but is considerably closer--though not contiguous--to the proposed alternative elementary site.

Because neither school site actually crosses or borders the canal, and the canal is considered too large to feasibly pipe, FID would not require that the canal be piped. On the other hand, proximity of an elementary school could prompt FID to request and/or require several measures to protect the pre-existing right-of-way for this major irrigation improvement: execution of a right-of-way agreement by FUSD in favor of FID; prohibition of encroachments on this right-of-way; and safety fencing along both sides of the canal (this list is not intended to be inclusive).

Site No. 2 is within Fresno Metropolitan Flood Control drainage district "BF." The ponding basin site for "BF"

has been acquired, but has not been fenced or excavated. There are no drainage pipelines installed for basin "BF."

Like Site No. 1, Site No. 2 is served by the Chestnut Avenue sewer trunk, as is the alternative elementary site. Public (City of Fresno) water service is available in this area, but service capacity may be strained and costly to expand. Within one-half mile of Site No. 2 are two City wells closed due to DBCP contamination and a City well closed due to ethylene dibromide. Existing pump stations 100 (at Church and Peach), 61 (Butler and Chestnut); and new Pump Stations 164 (Willow and Heaton) and 153 (Butler and Villa) will provide water for this site. Proposed residential development in the area may also be required to provide for other well installations.

The MINUTP traffic model (Figures EIR-17 and EIR-18) project adequate capacity on Church Avenue and on Willow Avenue south of Church. However, Willow Avenue north of Church is impacted. Both Church and Willow are only designated as collector streets, and neither is intended or designed to carry high levels of through traffic. Willow Avenue dead-ends at Lane Avenue; Church Avenue is not yet constructed between Peach and Clovis, and between Sunnyside and Fowler Avenue. Both streets could require expensive widening projects if the schools cause significant increases in traffic and congestion.

Site No. 2 is peripherally located within FUSD, being only some 1/2 mile within Fresno Unified's southern boundary. Since high schools and middle schools comprise the top two tiers of school capacity "pyramids," it is important that high schools and middle schools be as centrally located as possible to minimize student transportation cost.

Site No. 2 is not on any FAX bus lines; the nearest mass transit routes are a mile away and not likely to be extended if school sites are the only intense urban uses in the area.

Thus, Site No. 2 has potentially more deleterious and unmitigable impacts on air quality from a higher number of vehicle trips as well as from longer trip length.

In the 1984 Noise Element, no noise contours were developed for Church or Willow Avenues, due to the primarily agricultural and residential nature of the area in 1984 and the undeveloped condition of these two streets. Likewise, the inconsequential utilization level of the SPRR (California Avenue) branch line did not justify development of noise contours for that railroad track.

Traffic increases from residential and school development could increase noise levels on both streets. As mentioned previously, rail traffic could increase on the nearby SPRR California branch line, creating further noise impacts.

If Site No. 2 were to include a stadium, it would be difficult to prevent noise and glare from affecting existing and proposed residential uses west, south, and east of the site.

3. Mitigation Measures:

(1) The Development Department shall implement policies of the 1991 Roosevelt Update to reduce residential dwelling unit densities and to mitigate high levels of potential student generation.

(2) In order to provide capital improvement funding, the City of Fresno and impacted school districts shall consider the use of Mello-Roos districts and other assessment districts and financing mechanisms for school construction.

(3) The City of Fresno shall assist and support school districts' efforts to plan for and locate additional school sites as they are needed.

(4) The City of Fresno shall advocate for the application of historic, scenic, and neighborhood preservation policies of the 1991 Roosevelt Update when school sites are developed.

(5) The City of Fresno shall continue to assure collection of school construction fees for residential and non-residential projects.

(6) When school district analysis of a proposed residential development project indicates that there will be school capacity deficiencies, the following advisements shall be provided to all prospective purchasers of property within the proposed project:

> "The schools serving this property may not have adequate capacity for students from the area. Students could be bused to other schools within the District; or school attendance areas may be adjusted within the District, requiring students to attend another school. Students might attend new facilities when and if such facilities are constructed. Students could, therefore, change elementary, middle, and/or high schools during their years of enrollment in the District. Students could also have to attend elementary, middle, and/or high school on year-round, extended-day, and/or double-session schedules."

L. PUBLIC LIBRARY

1. Current Library Service and Planned Library Expansion

The Roosevelt Community Plan Area is served by five Fresno County Free Library branches: the Central (Main) library, Sunnyside, Cedar-Clinton, Mosqueda, and Ivy. Except for the Mosqueda branch, each of these facilities presently has a service area which extends outside Roosevelt Community Plan boundaries.

In its fifteen-year (1990-2005) Capital Facilities Assessment, Fresno County Library, the library proposed realigning and consolidating Library Service Areas by the year 2005 (see Figure EIR-25). According to the County's March, 1990 plans, the Roosevelt Community would primarily lie within Public Library Service Areas 8, 9, and 10. These areas include land outside the urban (incorporated) boundary, and outside the City's adopted sphere of influence.

After the Capital Facilities Assessment was published in March of 1990, residents of Library Service Areas 8 and 9 expressed concerns that resulted in a proposed boundary modification (See Figure EIR-26). This revision has been approved by area residents, but has not yet been formalized by the Fresno County Board of Supervisors. If approved, the Roosevelt Community would then lie within Library Service Areas 1, 9, and 10.

Presently, library space in the Metropolitan area totals 175,885 square feet. Facilities now serving the Roosevelt area total 95,650 square feet, including the 82,000 square-foot Central library, which houses support and administrative resources for all libraries in Fresno County.

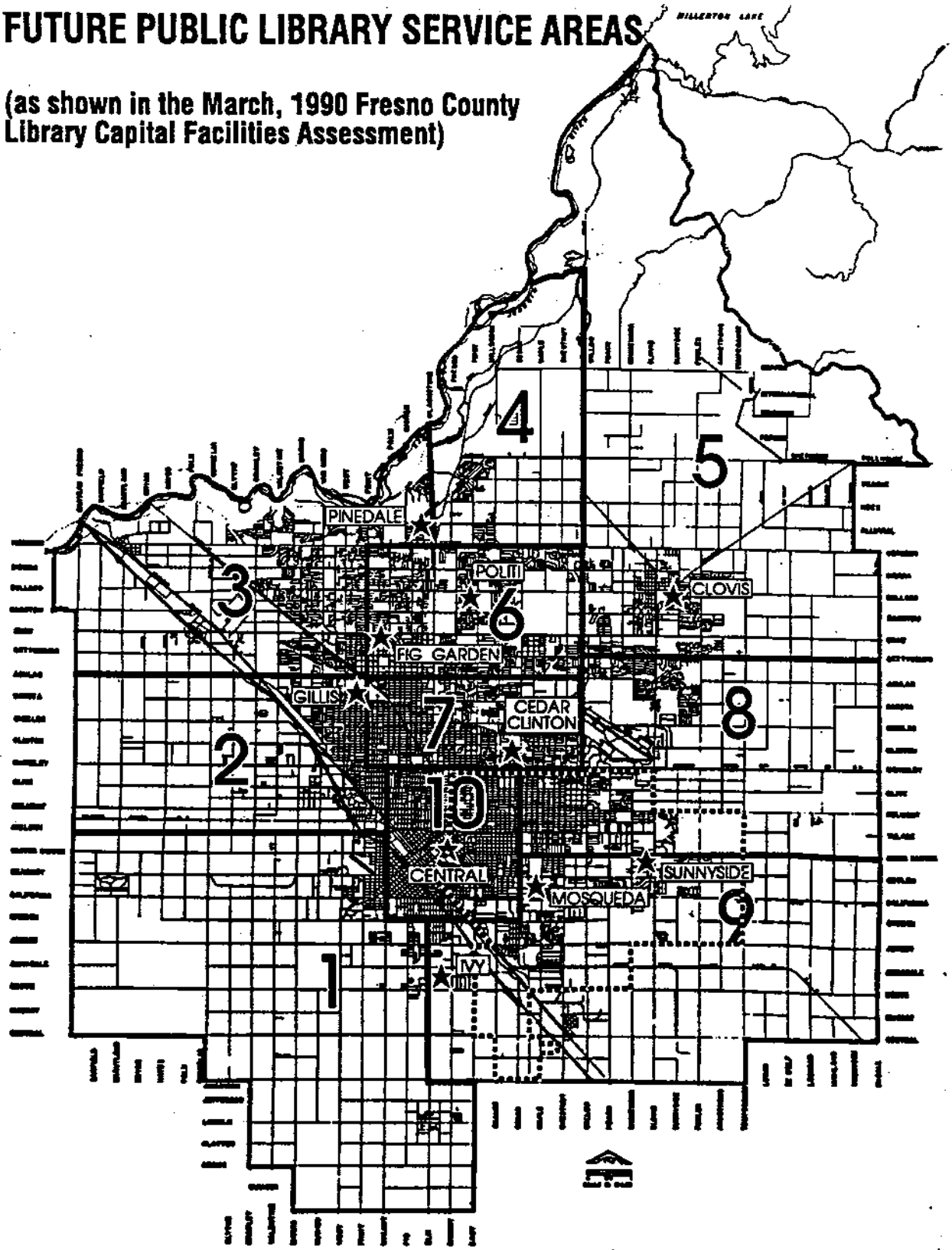
According to the standard 0.321 square foot per capita urban library space requirement, the Metropolitan Area is presently more than 200,000 square feet deficient for library space. By the year 2005, Fresno County has estimated that the Metropolitan Area will require over half a million square feet of library space. (This estimate was developed before 1990 Census Data was compiled.) The Capital Facilities Assessment is being used by the County Library as a planning document to guide facility construction and expansion.

In the Metropolitan area, the intent is to provide larger facilities, spaced farther apart, to maximize service efficiency and cost-effectiveness. Three phases of library improvement have been charted. In Phase I (1990 through 1998), the Roosevelt Community project is construction of a new facility in Library Service Area 8. In Phase II (1998 through 2005), the Central library in Service Area 10 is slated for expansion, and a new library is to be constructed in Service Area 9 to relocate the existing Sunnyside and Mosqueda branches.

Figure EIR-25

FUTURE PUBLIC LIBRARY SERVICE AREAS

(as shown in the March, 1990 Fresno County Library Capital Facilities Assessment)



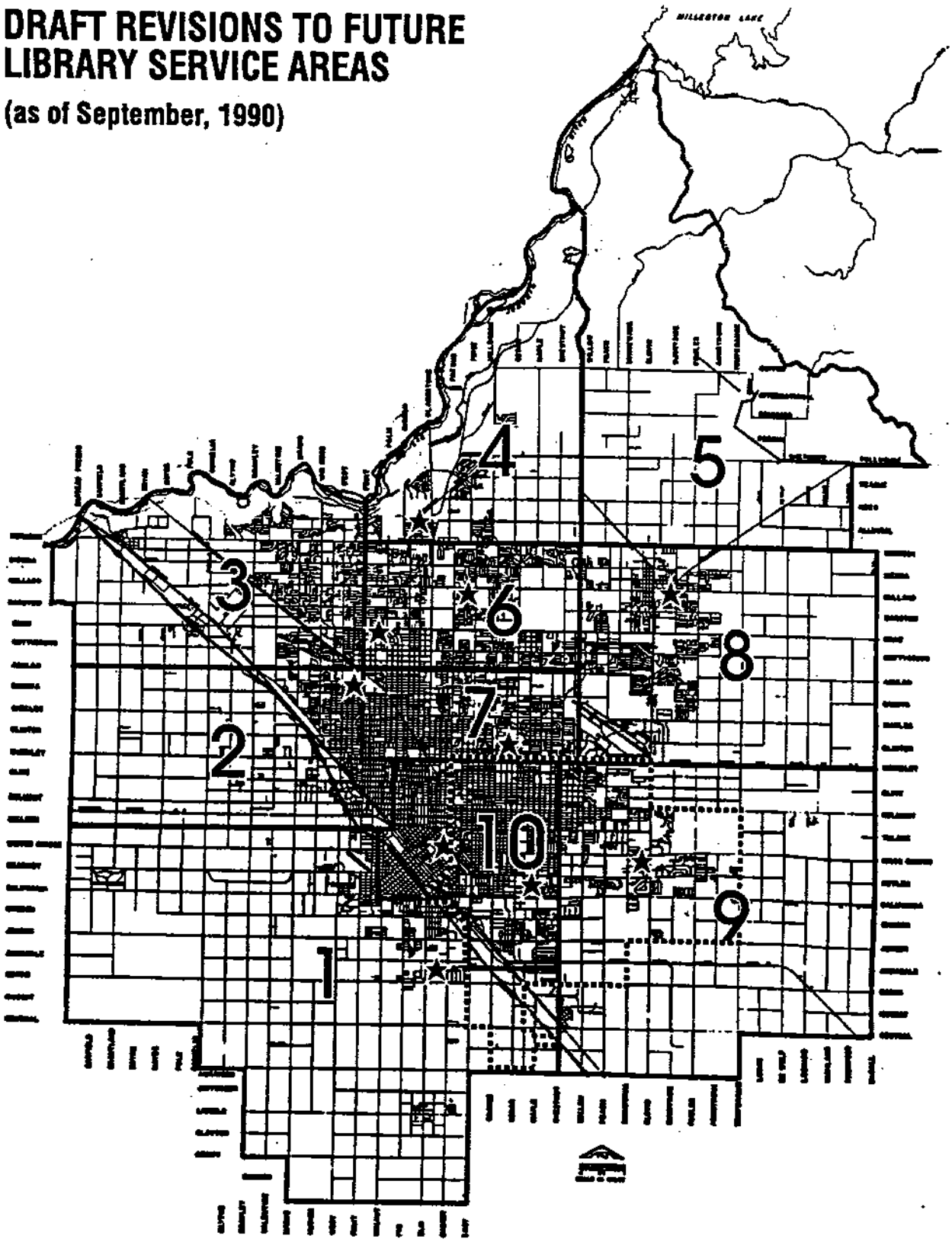
★ Existing Locations

····· City of Fresno, Roosevelt Community Plan Area boundary

Figure EIR-26

DRAFT REVISIONS TO FUTURE LIBRARY SERVICE AREAS

(as of September, 1990)



★ Existing Locations

····· City of Fresno, Roosevelt Community Plan Area boundary

No action is proposed in Service Area 1 during the fifteen-year planning period covered by the Capital Facilities Assessment.

The Fresno County Library has studied user mobility and site requirements and constraints. The Capital Facilities Assessment contains guidelines for choosing and developing library sites; these guidelines are reproduced in Appendix E of this EIR. New branch facilities were estimated to each require 18,828 square feet (by 2005). In light of revised population projections, these proposed library sizes may need modification.

Funding to purchase sites, construct libraries, acquire library materials, and operate libraries is the major limiting factor in augmenting the public library system. Library revenue losses in the 1991-1992 Fresno County budget process prompted library staff to recommend a review of the library service delivery plan. If the review proposes a reduction in the number of library branches, the Capital Facilities Assessment would have to be modified.

Fresno County does not make General Fund revenue or Library District* Fund monies available for construction projects. However, from time to time, special donations to the Fresno County Library have been directed toward construction projects. The Capital Facilities Assessment stated that 65% of the library system's Phase I capital cost would be derived from Ballot Proposition 85 grants (California Library Construction and Renovation Bond Act of 1988). Phase II detailed cost and revenue projections were not compiled in the Capital Facilities Assessment.

In October of 1990, the library staff informed the Board of Supervisors that Proposition 85 funding would not be pursued for any metropolitan area projects. Alternative funding will therefore be necessary to carry out library capital improvements in the Roosevelt Community Plan Area. Various possibilities for this funding are listed in Appendix E of this EIR and are being discussed with residents of all Library Service Areas with Phase I construction project proposals. Other funding sources as yet unknown (e.g., future bond acts) may present themselves.

Phase I construction of a new, 18,828 square foot facility is projected to cost $2.89 million. The Capital Facilities Assessment listed land/equipment credits, voluntary/private contributions, and County Service Area assessments as sources of financing. However, the County Service Area could not be

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* All portions of Fresno County, except the cities of Coalinga and Huron, are included in this Library District. Authorized by Assembly Bill 8, the district is allocated some 1.6% of all ordinary (general) property tax revenues in the County (except Coalinga and Huron). It is not mandated that this 1.6% of tax revenue be returned in equal amount to communities which generate it; these funds are allocated to library uses throughout Fresno County.

applied to land within a City sphere of influence. Alternative funding options will be required to fairly spread the burden between incorporated and unincorporated, new and existing development.

The Capital Facilities Assessment projected that library utilization would increase 30% when a new branch is constructed. Additional staffing, utilities, and materials for operation of Phase I expansions would amount to $148,000 for all the Phase I projects.

In the Capital Facilities Assessment, it was noted that Phase II relocation of some existing libraries, including the Sunnyside branch (Library Service Area 9), would provide lease expense savings that could be directed toward operational expense. These lease savings are not projected to be sufficient to cover the increased library utilization cost for implementation of Phases I and II.

Operational funds are currently deficient for existing library branches, and full implementation of the library capital facilities plan could create a further deficit. The Capital Facilities Assessment proposes that, if future development does not fully fund operations with Library District property tax revenue, or, if the State does not increase its Public Library Fund distributions to the statutory level, down-sized or incrementally constructed modular libraries could help the Fresno County Public Library System stay within its operational budget as new facilities are added.

2. Impacts of the Roosevelt Community Plan

By reducing planned residential densities in many areas and by increasing the acreage and number of foci for commercial development, the 1991 Roosevelt Update would enhance the opportunities for the Fresno County Library System to achieve its service targets.

Preservation of existing neighborhoods and strong development standards for new projects will maintain and enhance tax base to help fund the Library District.

The Fresno Municipal Code (Zoning Ordinance) permits libraries, (as "government facilities") by a "Type B" conditional use permit in all zone districts.

3. Mitigation Measure

The City of Fresno shall cooperate with the Fresno County Library in evaluating funding mechanisms needed to construct the new library facilities planned to serve the Roosevelt Community.

M. FIRE PROTECTION AND PARAMEDIC SERVICES

1. Status of Fire Protection and Paramedic Services

The City of Fresno has earned a "Class 2" fire insurance rating by virtue of its codes, climate, fire department staffing and training, and its firefighting water supply. The "Class 2" designation results in significantly lower fire insurance premiums for City homeowners and businesses.

Fire protection and paramedic services are jointly provided to the Roosevelt Community Plan Area by the Fresno City Fire Department and by Mid-Valley Fire Protection District (MVFPD). Figure EIR-27 shows that three City of Fresno fire stations (Nos. 1, 4, and 8) and two Mid-Valley Fire Protection District stations (Nos. 7 and 8) are presently operating in the Roosevelt Plan area. City Fire Station 10 (located at the Fresno Air Terminal) serves the northeast corner of the Roosevelt Area. City Fire Station 7 (located just west of the Roosevelt area on Jensen Avenue) serves some of the southwestern portion of the Roosevelt community and some of the Malaga area.

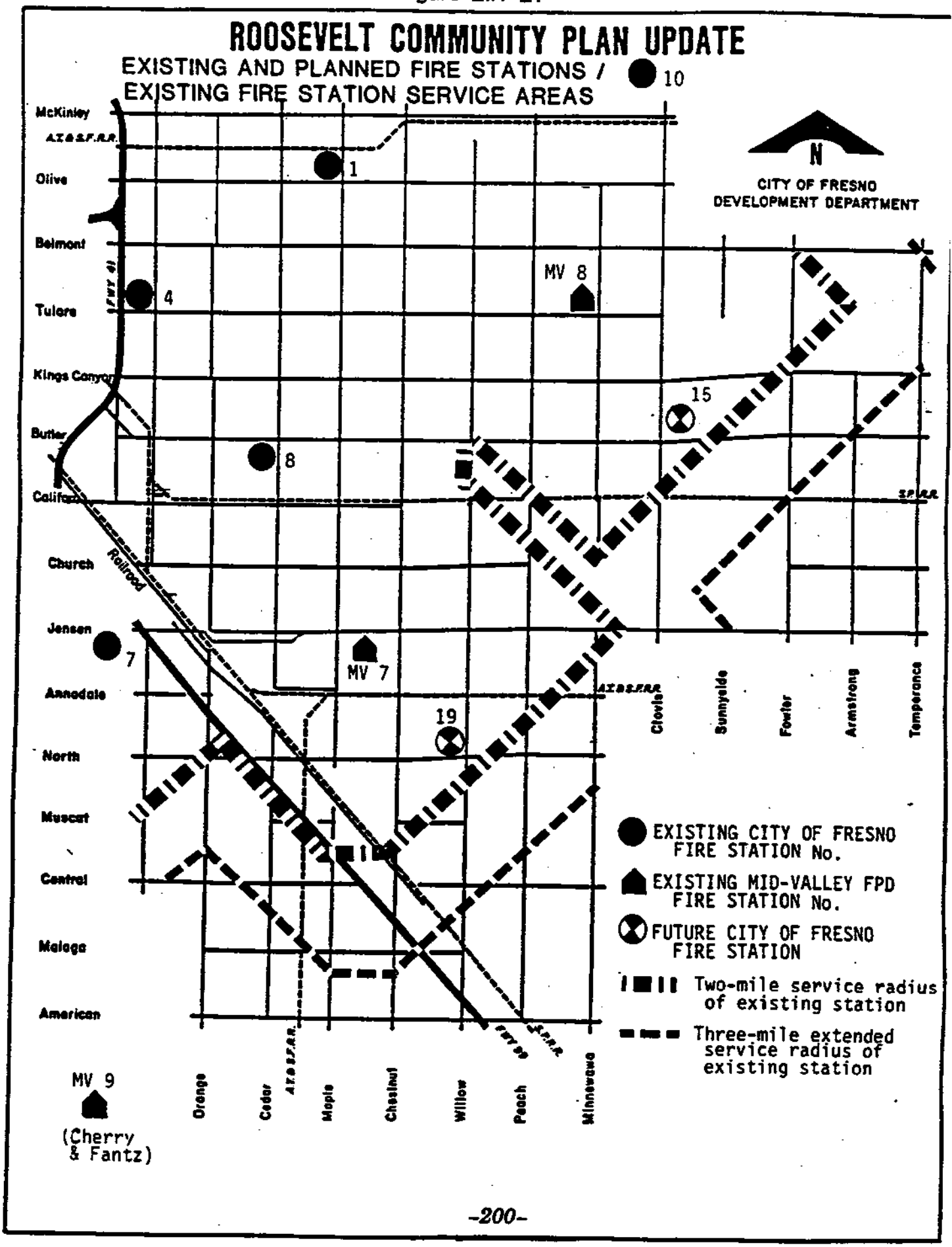
To provide a high level of service and to avoid boundary and jurisdictional confusion, these two agencies have entered agreements for the transition of services, automatic aid and mutual aid in the Roosevelt area. Either MVFPD or the City Fire Department will respond to an emergency, whether in an incorporated area or not, through existing response agreements. The City Fire Department and Mid-Valley FPD each perform their own arson investigations and do their own fire prevention inspections in businesses, institutions, and lodging facilities within their respective jurisdictions.

Mid-Valley Fire Protection District urban stations still operating in the Fresno Metropolitan Area are remnants from the time when subdivisions were created in the unincorporated areas outside Fresno city limits. These stations still serve "county islands" and fringe area developments which have not been annexed to the City of Fresno. Mid-Valley FPD also serves most of the Malaga County Water District Sphere of Influence.

"911" emergency dispatching is functional in the entire Fresno-Clovis Metropolitan Area. In 1990, there were 28,810 total calls responded to by the City Fire Department. Of these, 20,885 were emergency medical aid calls. Other response activities included fire suppression, hazardous material spill scene management, extrication of accident victims, fire and arson investigations, search and rescue, and hydrant checks.

Mid-Valley Station 9, located at Cherry and Fantz Avenues in the Easton area, is outside Fresno's sphere of influence. Therefore, it is not part of the automatic aid agreement (but is part of the mutual aid agreement). It has no assigned City of Fresno service area.

Figure EIR-27



City Fire Stations 4 and 8 have paramedic units, and MVFPD Station 8 has a paramedic unit. Fire department paramedic units render emergency advanced life support (ALS) in the plan area; however, all City fire stations respond to EMS calls by sending a company as a basic life support (BLS) unit. Other care, and all transport of victims to hospitals, is handled by Fresno County's designated emergency medical service provider.

The City of Fresno's Urban Growth Management (UGM) process provides for rapid firefighting response by systemmatically locating new fire stations so that each has a service area encompassed by a two-mile driving radius ("running distance") around each station. For commercial and industrial property, the maximum running distance for a station's primary service area is 1.5 miles.

The UGM process allows temporary extension of existing stations' primary service boundaries to three miles of running distance for construction of new residential developments. When urban development is proposed outside the three-mile running distance of existing stations, the City of Fresno can, through the UGM process, accept residential development proposals by requiring that dwelling units be equipped with automatic fire suppression systems (e.g., fire sprinkler systems) meeting National Firefighting Protection Standards.

Alternatively, residential project developers may elect to finance a new fire station that will include their project(s) within its primary (two-mile) service area. Some of the UGM fees assessed for these new developments are used to build fire stations that will then include the developments within a two-mile running distance.

The UGM ordinance requires construction of a new fire station where the nonresidential running distance would be exceeded. (General City policy would require sprinklers on all new nonresidential construction of 5,000 square feet or more, regardless of distance from a fire station. Exceeding the designated running distance requires full sprinkler protection on all occupiable structures, regardless of intended use or footage). Figure EIR-27 shows which portions of the Roosevelt Community Plan area are outside the extended (three-mile running distance) service areas of current existing fire stations.

As Figure EIR-27 shows, two future City fire station sites in the Roosevelt Area have been designated (Nos. 15 and 19). A service area boundary has already been approved for future City Fire Station 15. Land for this station has been acquired.

After City Fire Station 15 is constructed, "corners" (80 acres or less) of the Roosevelt Community Plan Area (at Temperance and Belmont, and at Temperance and Jensen) will be outside its service area (exact acreage depends on street configurations). Residential development in these areas outside the running

distance from Station 15 would require automatic fire sprinklers for all structures.

According to the terms of Mid-Valley FPD's fire protection transition agreement with the City of Fresno, Mid-Valley Station 8 will be closed when City Station 15 opens, and its fire protection responsibilities will be transferred to the City station. If paramedic service is transferred to City Station 15, it is probable that an engine will be staffed with paramedics (rather than a dedicated paramedic unit vehicle being supplied).

A fire service area is currently being determined for proposed City Station 19. Much of Station 19's service area will extend into the Malaga County Water District sphere of influence. (However, if Fresno County does not participate in the Urban Growth Management process, UGM funds to construct Station 19 would only come from new development in the City of Fresno sphere of influence.)

Even after City Station 19 is constructed at the North and Willow Avenue location, approximately 340 acres of planned industrial land at the southwest corner of the City's Roosevelt Community Plan Area would lie outside its extended service area boundary. The City's UGM ordinance would require that a new fire station be constructed to serve any industrial development in this area.

Although UGM analysis continues to show new development as having a balanced cost/revenue budget impact, many City-wide service levels have been reduced in recent years. Some separate paramedic vehicles (critical care units) have been deleted and paramedic service shifted to fire engines. Fees have been instituted to cover some fire prevention services (review of development applications, building plan checks, reinspection fees for uncorrected items noted on routine fire prevention inspections); other fees for basic fire prevention inspection services are currently under study. Mello-Roos and special fee arrangements have been written into some fire station capital agreements in northern Fresno.

2. Impacts of the Roosevelt Community Plan

As development and population growth continue in southeast Fresno, there will be increasing demand for fire suppression, fire investigation, fire prevention, and paramedic services. Increasing traffic congestion, limited water supplies, and budgetary constraints could reduce the levels of fire department services in the Roosevelt community.

The UGM process assures the provision of capital facilities and equipment to adequately serve the planning area as urban development occurs. However, continued funding of operational expenses is not as certain, given increases in personnel and

equipment costs. A budgetary imbalance has occurred over the past several years as discretionary (general fund) revenues have not increased as rapidly as costs.

Insufficient revenues could necessitate a reduction in the level of fire services and emergency medical care being provided by the fire department. Previous service level reductions which have been considered include reduced staffing, less intensive fire prevention programs, further reduction or elimination of paramedic service, and a possible service charge for emergency response.

The 1991 Roosevelt Update proposes residential density reductions (from the "no project" 1978/84 Plan alternative), including an area of approximately two square miles of the adopted service area for future City Fire Station 15. This eases the response burden for City Station 15 (and the interim response burden for Mid-Valley Stations 7 and 8).

Evaluation of the two alternate high school sites shows that the preferred site (Kings Canyon and Peach Avenues) is within one mile of paramedic-equipped Mid-Valley Station 8, and within 1.5 miles of future City Fire Station 15. The second alternative high school site (Willow and Church Avenues) is within 1.5 miles of Mid-Valley Station 7 (no paramedic unit).

3. <u>Mitigation Measures</u>

(1) The City of Fresno shall implement existing policies and standards as well as 1991 Roosevelt Update policies/ implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities, and management of water resources.

(2) The Development Department shall continue to support, and shall uphold UGM requirements for funding needed to implement, the findings of the 1975 Fire Station Location Program Study.

(3) The City of Fresno shall consider using Mello-Roos or other types of assessment districts to maintain staffing and service levels for City Fire Stations.

(4) The Fire Department shall continue to revise and update fire station location scenarios, as appropriate, in response to changing land uses and population.

N. FLOOD CONTROL AND DRAINAGE

1. Roosevelt Area Flood Potential and Existing Flood Control Measures

Although Fresno only normally receives approximately ten inches of rain per year, the rain storms can be concentrated in episodic, severe storm events between September and May. Neither cropland nor typical compacted, paved urban soils can absorb all this moisture as it falls. The flat topography and lack of strong drainage characteristics of the Central Valley predisposes most cities to widespread shallow flooding.

The City of Fresno's street system, with curbing and gutters to channel lot and street runoff, is an integral part of this drainage system. In older and unincorporated portions of the Roosevelt community, streets were not designed or built to help with drainage. Southeast Fresno has also been at risk from overflowing creeks and irrigation canals (Fancher Creek, Mill Ditch, Redbank Creek) which convey runoff through the Roosevelt community from the Sierra foothills and the eastern side of the San Joaquin Valley.

The Federal Emergency Management Agency (FEMA) develops maps of communities depicting where flooding is likely to occur from 100-year and 500-year storm events (storms of peak intensities that are statistically likely to occur in every 100 and 500 years, respectively). For land lying in the 100-year flood plain, the theoretical (statistical) risk that structures would be destroyed or damaged by flooding is one percent each year. Maps issued by FEMA govern whether special flood insurance will be required for a development and whether federal grant funds may be disbursed to construct buildings or infrastructure in an area.

The FEMA maps are periodically revised to reflect changes in flood risk from construction of flood control projects. At one time, most of the Fresno-Clovis Metropolitan Area was subject to some flooding during minor storms, and serious floods routinely occurred along creeks and in river channels. Construction of irrigation water impoundment dams, flood control dams, and localized ponding basins has significantly reduced Fresno's overall flood risk.

The U.S. Army Corps of Engineers has recently participated in the design of new flood control impoundments on Fancher, Dry, and Redbank Creeks. (The Corps uses a 200-year storm event for its flood control design values.)

The present 100-year flood plain areas in the Roosevelt community lie along the present or former drainage courses for creeks, or in areas which were once seasonal marshes.
Due to new flood control impoundment areas on Fancher Creek, Dry Creek, and Redbank Creek, local FEMA maps are undergoing major revision. Until revised maps are formally developed and approved by FEMA, existing maps remain the governing documents for flood plain designation.

None of the City's Roosevelt Community Plan area lies in the projected inundation areas for failure of Friant Dam on the San Joaquin River or Pine Flat Dam on the Kings River. Some of Pine Flat Dam's inundation area passes along the southeastern edge of the Malaga County Water District's Sphere of Influence.

The Roosevelt community lies entirely within the Fresno Metropolitan Flood Control District (FMFCD). However, much of the Roosevelt community was already developed when the FMFCD was formed in 1956. The Fresno-Clovis Metropolitan Area has been divided into flood control service areas (see Figure EIR-28). Each service area has an alphabetic designation, and each is or will be served by a ponding basin operated by FMFCD.

The FMFCD funds its flood control activities in two ways: impact fees for new entitlements, and special assessment for areas already (largely) developed. The 1991 FMFCD fees in the Roosevelt community range from $1,280 to $10,130 per acre, depending on which local drainage area the project will be located within and which land use (zone district) designation that land has.

Shading in Figure EIR-28 shows the portions of the Roosevelt community where permanent storm drainage improvement has been installed as a result of the formation of assessment districts. These assessments are needed in already developed areas; in combination with FMFCD general revenue funds, they provide financing to finish basin construction and to construct storm drain lines and drain inlets linking the street drainage system (curb and gutter) with flood control basins. Development projects that are proposed inside the boundaries of assessment districts are not required to pay the drainage impact fees for new entitlements because overall drainage improvement costs have been taken care of by improvement district cost amortization.

A variety of considerations enter into drainage basin locations. Primarily, they should be located in naturally and historically low areas in order to receive gravity flow of runoff from their service area. Proximity to an irrigation canal or pipeline is important so that excess drainage can be disposed of (pumped) to adjacent drainage areas or into the canals (which are not being used for irrigation water in the winter rainy season). Irrigation canal proximity or availability of connecting pipeline is also important for those basins designated to receive groundwater recharge allocations. (See Section III.C.3. of this EIR). Combined drainage/recharge basins require suitable underlying strata which allow rapid percolation. Even with all these constraints, designated basin locations may be adjusted somewhat to suit land availability and development plans.

The objective of FMFCD is to provide an integrated drainage network which can dispose of runoff by retaining the runoff for groundwater recharge, or by moving water from basin to basin or

to canals. Whenever feasible, FMFCD supports conjunctive recreational uses and/or wildlife uses. Carozza Park (Olive and Winery Avenues) is the only Roosevelt community basin which has been improved for recreational use.

The 1991 Roosevelt Community Plan proposes that several ponding basins be improved as parks. However, stormwater-filled basins, deep basin geometry, and basins which are used for recharge can limit the availability of a site or cause the site to be entirely unsuitable for a park. All basins are fenced to control access. Table EIR-29 lists current improvement status of each Roosevelt area basin.

Because runoff water may eventually reach riparian areas and Fresno's sole source aquifer, FMFCD participated in the Environmental Protection Agency's National Urban Runoff Program (NURP) study. This study revealed that Fresno's urban runoff consists of fairly high-quality water, and routine basin maintenance (removing silt deposits to keep basin floors permeable) will preserve groundwater quality. Flood control basin soils are routinely tested for heavy metals and hazardous chemicals, with increased testing in industrial areas.

The Environmental Protection Agency (EPA) has promulgated regulations requiring metropolitan areas to implement a non-point source pollution program via the National Pollution Discharge Elimination System (NPDES). The legislation will require FMFCD to obtain a system-wide permit relative to management of nonpoint source pollutants in stormwater runoff. Industrial properties and construction sites of more than five acres will also require an NPDES permit.

In the Roosevelt community, most basin sites have already been acquired by the FMFCD, and several have been excavated. Table EIR-29 gives the present status of flood control service area basins in southeast Fresno. Storm drain (pipe) systems are not completed to many basins, so the planned drainage service level is not yet available in these areas.

Older areas in the Roosevelt community were developed without a drainage system; therefore, drainage assessments, redevelopment or grant funds are needed to fund the planned drainage infrastructure. The FMFCD has estimated that completion of major drainage facilities in these older areas cannot begin sooner than 1995, unless special assessment or other funding is made available for these projects. The improvements required involve not only storm drain pipes, but street work: grading, curb, and gutter structures to make older, substandard streets into integral parts of the urban flood control system.

Pursuant to the 1969 Flood Control Ordinance, all local subdivisions and development proposals must include flood prevention and runoff control provisions. Development project

TABLE EIR-29: STATUS OF FLOOD CONTROL FACILITIES IN THE ROOSEVELT COMMUNITY PLAN AREA*

FMFCD AREA	BASIN SITE ACQUIRED	EXCAVATION BEGUN	BASIN FENCED	PIPELINE SYSTEM COMPLETED**	RECHARGE
II 4A	x	x	x		
II 4B	x	x	x		
II 1	x	x	x		Soon
II 2	x	x	x		x
II 3	x	x	x		
A	x	x	x	x	x
W	x	x	x		
X	x	x	x		
Y	x	x	x		x
Z	x	x	x	x	
G***	x		x	x	
AW 1	x				
AW 2	x	x	x		
AX					
AY	x				
AZ	x	x	x		Soon
BD	x				
BE	x	x	x		
BF	x				
BG					
BH	x				
BJ	x	x	x		Soon
BK	x	x	x		
BL					
BM	x	x			
BO	x	x	x		x
CE					
CF					
CS	x				
CU					
CV	x	x	x		
GG	x	x	x		x
HH	x	x	x		
PP	x	x	x		

* As of June 1991
** In the Draft EIR, this column was captioned "Storm Sewers Developed"
***Carozza Park

review in both the City and County of Fresno includes determination of flood control needs. The FMFCD reviews project applications to determine the drainage fees and to determine construction requirements relating to the FMFCD Storm Drainage and Flood Control Master Plan. The flood control district may make an exaction for a drainage facility easement. City of Fresno subdivision projects are required to include lot grading and street drainage improvements.

If public drainage facilities are not yet available, interim on-site retention of stormwater is required. When these on-site basins are filled, their overflow is usually directed to the nearest improved street, whose curb and gutter drainage system should convey the excess water. On-site basins are typically in use for less than five years. After a project is connected to FMFCD's area basin, any on-site facility is filled, compacted, and its land released for development.

2. Impacts of the Roosevelt Community Plan Update

The 1991 Roosevelt Update enhances requirements for landscaped areas. This should improve soil absorption characteristics and reduce runoff.

The 1991 Update designates several neighborhoods in need of redevelopment and/or infrastructure upgrading. Implementation of these goals creates an opportunity for street drainage structures to be installed and FMFCD major drainage improvements to be built.

The 1991 Update reduces planned residential densities in several areas. This will lead to less impervious surface (roofs, paving) per acre in those areas. Because reduced planned density will allow fewer dwelling units per acre, the per unit cost of drainage fees will be higher. According to the 1991 FMFCD fee schedule, changing designated land use in the Roosevelt area from medium-high to medium density will require an average of $241 more drainage fees per dwelling unit. Changing land use designations from medium to medium-low would require an average additional $391 per dwelling unit for drainage fees. In the overall cost of a dwelling unit, these figures represent much less than one percent.

When feasible, the 1991 Update calls for FMFCD basins to be developed as passive recreational sites. In the City of Fresno, FMFCD would contract with the City for using suitable basins as City parks. Either the cost for recreational improvements needs to be included in area drainage improvement assessments; or alternate funding is needed from donations, grants or City/County Park Departments. Since safety of local residents and groundwater recharge needs take precedence over recreational needs, it is uncertain how many FMFCD basins will ultimately be deemed suitable for parks.

3. Mitigation Measures

(1) The City of Fresno and the FMFCD shall jointly implement 1991 Roosevelt Update policies relating to storm drainage (Policy nos. 3-1.11 and 4-4.1 through 4-4.4).

(2) Whenever feasible, temporary on-site drainage basins shall be located so that they may be easily dewatered to an adjacent irrigation facility.

(3) The Development Department shall include provisions for area-wide drainage facilities in redevelopment plans.

(4) The Public Works Department shall continue to consider drainage needs when outlining street, curb, and gutter improvement districts.

(5) The Development Department shall continue code enforcement activities which prevent vehicles from traversing and parking on unpaved areas, to prevent undue compaction and to prevent loss of landscape plants and erosion of silt into the drainage system.

(6) Pursuant to EPA regulations, the Development Department shall incorporate NPDES industrial stormwater discharge permit requirements by reference into its conditions for industrial projects and all construction sites of five or more acres. The NPDES permit requirements shall be included in special permits, grading permit review, and building permit plan check review.

(7) The Development Department and Parks and Recreation Department shall consult with FMFCD and the Public Works Department's Water Division on their drainage and groundwater recharge needs before designating any basin site for conjunctive recreational uses.

(8) The FMFCD shall perform a Level I Hazardous Waste assessment before acquiring new basin sites or commencing use of new basin sites in order to avoid exacerbating the effects of contamination in an area when basins are placed into service for drainage and recharge activities.

O. LAW ENFORCEMENT

1. Existing Police Services and Law Enforcement Issues in the Roosevelt Community

The law enforcement agency which has primary responsibility for most of the Roosevelt community is the Fresno Police Department. The FPD is organized into special investigation/support units and five community-based policing sectors. There are a total of 432 sworn City police officers and 54 community service officers (CSO's) assigned to the City's five police sectors. The number of officers deployed to each sector and shift depends on the workload demand.

FPD Field Services include uniformed patrol, crime enforcement, traffic enforcement, and accident prevention. Operations Support provides investigation of criminal cases, juvenile crime and gang prevention and enforcement, and vice/narcotics control and enforcement. Crime prevention assistance includes residence and business security inspections, formation of neighborhood and business watch groups, and public presentations.

The Fresno County Sheriff's Department serves unincorporated areas not yet annexed to the City within the Roosevelt Community Plan Area. City Police and County Sheriff's Departments cannot "overlap" their activity areas to the extent that the City Fire Department and Mid-Valley FPD are virtually interchangeable within the City of Fresno sphere of influence. The irregular and changing boundary between City and County cause confusion and lapses in emergency and non-emergency can police situations.

Adjunct law enforcement services are provided by the Fresno County Sheriff's Department (operates Fresno County detention facilities, provides coordination in some crime investigations and Special Weapons and Tactical Operations); the Fresno County Coroner's Office; Fresno County Probation Office; Juvenile Hall/ C.K. Wakefield School; State Department of Corrections/Parole; California Highway Patrol; California Youth Authority, Federal Bureau of Investigation; the (federal) Drug Enforcement Agency; the federal Bureau of Alcohol, Tobacco, and Firearms; the U.S. Marshall's office; and the judicial system, with courts in Fresno ranging from Municipal Court to the U.S. District Court (Eastern District of California).

The area encompassed by the Roosevelt Community Plan is within the FPD's Southeast area sector. "Southeast" is staffed with 54 uniformed officers, and 5 community service officers (Community Service Officers are non-sworn personnel who do not carry firearms and who perform routine, non-emergency service calls, such as preparation of crime reports, evidence collection, and crime prevention). Three overlapping ten-hour

shifts operate from the Southeast Area dressing station, providing 24 hours of coverage every day.

In 1990, the Southeast Sector handled more service calls than any of the other four City police sectors in Fresno. This is somewhat to be expected, given that the Roosevelt community has approximately a quarter of Fresno's entire population. "Southeast" handled 24 percent of Fresno's robbery and auto theft cases; 25 percent of the City's disturbance calls; 26 percent of the rapes reported to FPD; 27 percent of Fresno's assaults; 30 percent of the City's narcotics investigations; and 19 percent of all the City's 1989 non-negligent murders and homocides.

General socioeconomic conditions and the tremendous influx of recent immigrants has contributed to overcrowded housing and increases in robberies and extortion. Because of cultural and language differences, many incidents involving recent immigrants are never reported.

The Fresno Police Department has identified several areas of major concern in the Roosevelt plan area:

- Gang activity in the area threatens resident safety, increases auto thefts and burglaries, and creates graffiti and vandalism problems. Illegal drug sales are also closely related to many gangs' activities.

- Large apargment complexes create problems of overcrowding, lack of recreational areas, and inadequate parking. Street parking poses security and traffic hazards.

- While there is a Building Security Code for new construction, older residences lack sufficient security, (e.g., one-inch throw dead bolts and windows which cannot be easily removed from tracks). Abandoned, dilapidated houses may become shelters for the homeless, are used by narcotics dealers and users, and become targets for arson, graffiti and vandalism.

- Vacant lots in the area likewise provide a convenient spot for street vendors. This creates traffic, trash and health problems should they be selling food. Abandoned vehicles and discarded tires, etc., seem to accumulate on vacant lots. Narcotics activity is also common.

- In industrial areas, security is often inadequate. Aluminum doors are easily opened and long straight streets (deserted at night) provide drag racing strips.

- In the Roosevelt community there are many alleyways which generate sanitation problems, allow burglars easy access to homes, and encourage the homeless to

rummmage through trash. Alleyways are prime spots for graffiti, arson, abandoned vehicles and discarded tires.

- Railroad spurs through residential areas cause safety problems, as do slow moving trains which obstruct major streets and cause response delays and traffic problems.

- Fresno Fairgrounds and the Sunnyside Swap Meet cause multiple problems. Traffic congestion and parking problems abound, and pedestrians are in danger when crossing those major thoroughfares which border the areas. Vehicle thefts and burglaries in these areas climb during events.

- Currently, the Police Department indicates that there is insufficient manpower to provide the preferred level of services. This is largely a result of the City's significant growth both in area and population, increasing operation and maintenance costs, and insufficient local government revenues.

- City budget shortfalls have led to some police service curtailments in recent years. The number of uniformed personnel has not increased at the rate of population growth. Non-essential law enforcement activities have been reduced; for instance, FPD officers no longer write reports on non-injury vehicle accidents.

2. Impacts of the Roosevelt Community Plan

Increased population in southeast Fresno will create a need for additional police response and crime prevention activity. As the community expands, with development on the metropolitan fringes, the cost of providing police services may increase disproportionately to the population increase, and response distance and time will increase. The Police Department has also noted that traffic congestion generated by excessive urban intensities or inadequate circulation could hamper response times as well as increase the demand for officers to maintain traffic safety.

Growth and traffic congestion could lead to the need for a new policing district in Southeast Fresno, creating the need to pay for new community policing district support facilities. The Police Department has indicated that, in addition to personnel and vehicles, a new dressing station would be necessary if an additional policing sector is required.

Unlike fire service UGM fees, police service fees have not been established to provide for capital improvements, vehicles, equipment, or operational funds necessary to serve expanded urbanization.

If funding is not available or adequate to support current police service levels, there could be reductions in law enforcement and related community based programs and services. Further reductions in the level of services now provided could include: the inability to respond to non-emergency calls; requiring mail-in reports in lieu of personal contact; reduced crime prevention patrol activities; increased use of Community Service Officers; response delays; and, possibly, cross-dispatching from one sector to another, causing officers to frequently be pulled away from their own patrol beat.

3. Mitigation Measures

(1) The Development Department and the Fresno Police Department shall implement 1991 Roosevelt Update policies to enhance crime prevention activities (Policies 1-7.4, 1-7.5, 1-11.4, 1-11.5, 1-11.10, 3-1.9, and 4-6.1 through 4-6.4).

(2) The Development Department shall promptly forward details of approved annexations to the City of Fresno Police Department, the Fresno County Sheriff, and to respective City and County Public Safety Answering Points (dispatch centers).

(3) The Development Department shall consider using UGM fees, Mello-Roos districts, and other special assessments to fund capital costs and operational expenses for providing police services when new development is proposed that will require additional police facilities and services.

(4) The Development Department shall implement 1991 Roosevelt Update policies for neighborhood preservation, traffic congestion prevention, and open space/recreation.

(5) The Development Department shall route all residential subdivision, site plan, and conditional use permit applications to the Fresno Police Department for their review of security design, emergency access, traffic/pedestrian safety, and impact on police service needs.

(6) Police service impacts shall be added to the Development Department Environmental Review checklist for project evaluation purposes.

(7) The Development Department shall require that land use entitlements for "swap meets" and large public gathering or special event facilities be conditioned upon these activities providing their own security force which will provide crowd and traffic control.

(8) The Development Department shall require that multi-family developments containing over 50 dwelling units provide and maintain an on-site police call box.

P. HAZARDOUS MATERIAL MANAGEMENT

1. Hazardous Material Regulations and Status of the Roosevelt Community

In the past two decades, State and Federal Occupational Health and Safety agencies, the Federal Environmental Protection Agency, the California Water Quality Control Board, and California's Department of Health Services have each designated numerous substances and situations as "hazardous" if there are potential toxic, flammable, corrosive, radioactive, or deleterious chemically reactive outcomes of releases or exposures. The designated chemicals and threshold amount limits are constantly being revised on these lists.

The California Office of Hazardous Materials Data Management Section periodically publishes a Chemical Cross-Index (the "List of Lists"), giving names of these designated substances and the agencies which have promulgated regulations for the substances.

Roosevelt Community Locations of Hazardous Waste Sites

The Roosevelt Community Plan Area contains a significant number of properties where chemical manufacturing, use, storage, and disposal facilities predated the development of regulations which would prevent contamination of air, soil, and groundwater. For instance, most new underground storage tanks have double walls, with leak monitors built into the space between the walls. These tanks were not on the market at accessible prices until the 1980's, so underground tanks installed before the 1980's are more predisposed to leakage.

Leaking storage facilities and poorly designed disposal facilities have created several contamination sites in the Roosevelt community. Appendix A lists the location of the confirmed contamination sites in the community (as of 1990), as well as two on the border of the Roosevelt Area. These sites vary widely in severity. Some are minor leaks of gasoline from underground tanks or pipes; others are acres of soil and groundwater contaminated by industrial waste "drying ponds."

Locations of some known contaminated sites have been compiled by the Office of Research and Planning (California Governor's Office). Approximately twice a year, an updated local list is sent to each City and County building Department. Other lists are developed by the EPA (i.e., the National Priority List or "Superfund" list); Water Quality Control Board (facilities receiving Cease and Desist and/or Cleanup and Abatement Orders for improper waste discharges affecting water resources); the California Waste Management Board (solid waste facilities from which hazardous materials have migrated); and Fresno County

Environmental Health (leaking underground storage tanks, and other "hazmat" spills--reported under Proposition 65--which may have left residual contamination).

Responsible agencies may also have cases in process where the site has not yet been formally listed because contamination has not yet been proven, but is under investigation. Finally, there are an unknown number of sites where contamination has not yet been discovered.

To clarify the status of property with regard to its potential for being contaminated by hazardous materials, special investigations are used. Often known as "Level I" and "Level II" [Hazardous Waste] Assessments, these investigations first screen property according to its history of uses, past ownerships, physical appearance, the obvious presence of any buried material, whether the property is listed as a known contaminated site, and what contaminants occur in any water well(s) on the site. If these Level I Assessment activities show potential for contamination to be present, a Level II Assessment may be used to accurately determine what contaminants are present and exactly where they are located.

Hazardous Material Regulations for Property Development and Underground Storage Tanks

Recent state legislation regarding hazardous waste has been aimed at preventing contamination by placing stringent requirements on handling and storage of hazardous materials. Local governments have been required to assess their overall needs with regard to protection from hazardous material releases, and regulations have been drawn to ensure that businesses adequately contain and properly dispose of potentially hazardous materials.

California Government Code Section 65962.5 requires that any application for a development project must include a statement signed by the applicant declaring whether the proposed project is located on any contaminated site (lists of these sites are compiled by the aforementioned agencies). This requirement has been implemented at the City of Fresno Development Department Building Permit Counter, where agencies' compiled lists are made available to permit applicants, and the permit applicants are required to sign a declaration as to whether the project is on a listed property. Chapter 6.95 of the California Health and Safety Code requires that businesses handling more than a threshold amount of hazardous material(s) prepare and file hazardous material "business plans," which are operation and contingency plans to be reviewed and approved by the County Environmental Health (EHS), with a copy forwarded to the responsible fire department. These documents are required to contain procedures for adequately containing and disposing of hazardous materials.

If the business handles or stores a material considered "acutely hazardous," it must also prepare and file a "Risk Management and Prevention Program" (RMPP). RMPPs must give consideration to the proximity of schools, child day care facilities, general acute care hospitals, long-term health care facilities, and residential areas.

Inventories of hazardous materials that are kept on business sites must be made available to County Health staff and to firefighting agencies ("disclosure" requirements). However, these inventories may be designated as not public information ("proprietary" information), in order to protect businesses' privacy and competitive status within their industries.

California Government Code Section 65850.2 mandates that a city or county shall not issue a final certificate of occupancy until the applicant for a nonresidential building permit has filed any required hazardous material business plan (and has also obtained any required air pollution control permit).

The City of Fresno has implemented this requirement by requiring that applicants for nonresidential building permits review, complete, and sign separate documents declaring whether the facility to be constructed would require an air pollution control permit and/or a hazardous material business plan. (The Development Department makes a copy of the Chemical Cross-Index available, so that permit applicants may know whether they will be handling a designated hazardous material.)

Fresno County's Environmental Health Services operates the underground storage tank (UGST) program (California Administrative Code, Title 23, Chapter 3, Subchapter 16). Since 1984, all underground storage tanks, active and inactive, had to be registered with EHS (if the tank(s) ever held anything that is presently considered hazardous). All tanks are required to be continuously monitored for leaks, except farm tanks under 1100 gallons used primarily for agricultural purposes. (Farm tank regulations are pending.) Installation, in-place abandonment, removal, and repair of UGSTs requires prior approval of EHS (as well as any pertinent special permits, plumbing, grading, and building permits from the City).

If soil contamination is found in the ground after a tank is removed, or if monitoring outside an extant tank shows a potential leak, a Proposition 65 advisory is completed and filed with the Health Department, documenting that a toxic substance has been released. EHS then requires, approves, and confirms compliance with stepwise consultant workplans for: 1) determining lateral and vertical extent of contamination; 2) remediating contamination; and 3) disposing of contaminants and/or contaminated material.

If assessment indicates that a hazardous material or a designated water pollutant has reached water resources, the Regional Water Quality Control Board is notified. They administer a similar stepwise program aimed at stopping the spread of water contamination.

Monitoring wells, extraction wells, test borings, impervious caps, and soil venting systems are variously used in site assessment and mitigation processes.

The City of Fresno Fire Department, which formerly regulated underground flammable liquid storage tanks under State Fire Code provisions, has cooperated with EHS by sharing its tank permit database and by referring newly discovered UGSTs to Environmental Health for their action.

General Hazardous Waste Management

Each California County is mandated to prepare a Hazardous Waste Management Plan (HWMP), which is to be adopted by the County and cities within the County. This HWMP is to assess hazardous waste disposal needs and to provide policies for managing the County's hazardous waste stream. The HWMP is required to include policies on siting hazardous waste processing and disposal facilities. These siting policies, by law, would supersede contravening City or County General Plan language.

Fresno County's HWMP is still in draft form and has not been adopted by the Board of Supervisors or the incorporated cities' governing bodies. Nor has its EIR (State Clearinghouse No. 88012516) been certified. When the Hazardous Waste Management Plan is completed, it is probable that there will be some impacts on the Roosevelt community. Draft HWMP policies on siting hazardous waste transfer, recycling, and treatment facilities state that these facilities should be located in industrially-zoned areas, and that these activities should occur close to the sources of hazardous waste generation, in order to minimize the impacts of transporting untreated hazardous waste.

Fresno County EHS, assisted by the City Fire Department (and Mid-Valley Fire Protection District) maintain emergency response capability for reported releases or imminent releases of hazardous material. EHS provides a 24-hour staffing for this unit. Response activities include scene management, risk assessment, containment, and, often, disposal of spilled hazardous material and site cleanup.

The California Waste Management Board has classified solid waste disposal facilities according to the expected hazard of materials sent to these sites. Ordinary municipal refuse may be accepted by a "Level I" solid waste facility.

"Level II" has been used to describe facilities which may accept "designated" wastes, those substances not formally designated as hazardous but considered to be potential groundwater contaminants.

"Level III" is the State category of waste facilities which may accept designated hazardous waste. The nearest Level III (hazardous material) disposal facility which could serve the Roosevelt community is the Kettleman Hills site in Kings County. (Fresno County's Big Blue Hills Level III disposal facility for triple-rinsed pesticide containers will close by the end of 1991.)

Efforts are underway to prevent widespread improper disposal (landfilling) of small quantities of household-generated hazardous waste. As the City's waste stream becomes increasingly segregated (per AB 939 requirements), it will be easier to separate and properly route hazardous materials to a Level III repository, recycling facility, or other processing installation.

Surface Transportation of Hazardous Materials Through the Plan Area

Hazardous material transport traffic occurs at higher levels on freeways, with many such vehicles on Freeway 99 (except highly radioactive material, which is relegated to Interstate 5 in the more rural western part of the San Joaquin Valley). Due to the large industrial sector in the Roosevelt community, trucks carrying a variety of hazardous materials use major and local streets.

The Department of Transportation (DOT) and the Interstate Commerce Commission regulate motor vehicles which transport hazardous materials. These vehicles are required to be clearly labelled with DOT placards showing the nature of the hazardous material being carried.

Rail freight lines also carry hazardous materials in specially constructed tanker cars and in truck bodies on flatbed cars. Hazardous material rail freight is regulated by the California Public Utilities Commission and the Federal Railroad Administration.

In the Roosevelt Plan area, rail freight lines traverse industrial, residential, and rural areas. Most grade crossings (primary sites for derailments and train vs. motor vehicle accidents) at fully developed major streets are signalized in the plan area. However, there are unsignalized crossings at some rural and minor streets.

Firefighters, law enforcement personnel, and Environmental Health/emergency response personnel are trained to identify and deal with accidents involving labelled and unlabelled hazardous material transport vehicles.

2. Impacts of the Roosevelt Community Plan

Both the 1991 Roosevelt Update and the 1978/84 Roosevelt Community Plan (the no project alternative) would increase the area's population (placing more persons at risk) and would open the urban reserve area for development. Development in the former urban reserve area would increase traffic on rural portions of the major street network, creating additional risk of train-vehicle collisions at unsignalized grade crossings.

Many agricultural uses in the former urban reserve area have utilized underground storage tanks for fuel. There may also be repositories of agrichemicals in old buildings, or illegal disposal sites used for agrichemical and industrial chemicals. Under either plan alternative, these situations will require prompt corrective action as they are discovered.

Establishment of new industrial, commercial, and residential uses will require that hazardous materials be adequately contained and safely disposed of. Again, these impacts would be similar under both plan alternatives. Because the Roosevelt Update reduces planned residential densities and industrial use intensities, it is going to have an impact less than that of the "no project" alternative.

3. Mitigation Measures

(1) The City of Fresno Development Department Public (Permit) Counter shall continue to implement California Government Code Sections 65850.2 and 65962.5, to provide for adequate assessment and mitigation measures on listed hazardous material sites, and to prevent future hazardous material releases.

(2) The City of Fresno shall continue to support special household hazardous waste collection activities, to reduce the amount of hazardous material being improperly discarded.

(3) The City of Fresno shall, as may be appropriate, require Level I and further Assessments before annexing property, before acquiring property, and before approving the development of property in the Roosevelt Community Plan Area.

(4) The City of Fresno shall continue to prevent, assess, and seek remediation of any hazardous material contamination on property owned by the City.

(5) The Development Department shall condition all commercial and industrial special permits upon proper use, containment, safeguarding, and disposal/discharge of hazardous materials.

(6) The Development Department and the City Attorney's office shall work with the appropriate regulatory agencies and/or shall exercise their police power and land use regulation authority to amortize and to abate nonconforming and illegal land uses which threaten public health, safety, and general welfare by illegal or unacceptable use, containment, safeguarding, or disposal/discharge of hazardous materials.

(7) The Development Department and the Public Works Department shall continue to ensure that funding is provided for required signalizing of railroad grade crossings as land is developed for urban uses.

Q. NOISE

1. Measurement, Effects, and Planning Implications

Noise can be defined as a physical phenomenon: "air vibration in frequencies audible to the human ear;" or as a subjective reaction (emotional and physiologic) to this physical phenomenon: "unwanted sound." Magnitude, pitch, timing, or connotation of these air vibrations can be annoying, disturbing, or inhibitory to sleep or activity patterns.

Noise is measured according to scientific (physical) parameters, but its effects are usually evaluated according to subjective reactions. The normal range of human hearing (the audible range) encompasses air vibration freguencies of 20 to 20,000 wave cycles per second. Although physiologic effects are postulated to occur from subsonic and supersonic noise/vibration, those situations are not generally analyzed except with regard to specific projects which may be sources of these vibrations.

High levels of noise have documented, deleterious effects on the human auditory system, cardiovascular system, nervous system, and emotional well-being. A noisy environment perceptably increases stress, decreases the overall quality of life, and depresses real estate values.

Noise measurements are obtained by instrumentation which determines the magnitude of sound pressure and registers a particular decibel (dB) level. The decibel scale is logarithmic, so single-digit increases in dB levels represent tenfold increases in sound pressure.

Ambient ("background") noise should be measured in a manner that avoids undue influence from any particular single ("point") noise source (though the aggregation of all point sources comprises ambient noise). Ambient noise is quantified in units which express the composite results of sound monitoring conducted over a period of time.

Table EIR-30 details approximate decibel levels of various sounds and auditory effects.

Table EIR-30: DECIBEL (dB) LEVELS CORRESPONDING TO VARIOUS NOISE SOURCES AND EFFECTS

DECIBEL LEVEL	NOISE SOURCE AND/OR EFFECT
10 dB	Threshold of sound detection by normal human ear (against a "silent" background, as in a noise-proof room)
20 dB	Whispering
30 dB	Quiet conversation
50 dB	Average conversation
60 dB	A noisy home, an average factory
70 dB	Loudest shouting
70 dB--80+ dB	Chronic exposure to noise at these decibel levels can lead to damaged hearing
80 dB	Police whistle, noisy party
90 dB	Unmuffled truck, noisy factory
95 dB	Noise becomes painful
110 dB	Rivet gun, highly amplified music at a "rock" concert
120 dB	Artillery fire, nearby thunderclap. Instant and irreversible hearing loss may occur at this noise level.

There are three composite noise descriptors in common use today: Ldn, CNEL, and Leq. Leq, CNEL and Ldn descriptions are similar enough to be virtually interchangeable.

The Ldn is an average of day and night decibel sound levels, based upon an average hourly sound level over a 24-hour day with a +10 dB weighting applied to nighttime (2200 hours to 0700 hours) sound levels. Ldn is used in the Noise Element of the City of Fresno General Plan to quantify ambient noise conditions and to define maximum appropriate noise exposure levels.

The CNEL scale was developed for California Airport Noise Regulations planning purposes.

Cal-Trans uses Leq, or "equivalent noise level," which generally describes daytime noise, to evaluate the impact of freeways and highways.

Since noise intensity decreases rapidly with distance (according to the "inverse square law" of physics), it is important to determine the location where measurements should be taken to assess a point source of noise.

When considering noise in the planning process, it is recognized that different land uses have varying degrees of sensitivity to noise, and the time and type of noise can alter the impact of noise on land uses. The most sensitive land uses include residential dwellings, schools, health care facilities, and churches. Moderately sensitive land uses include motels, offices, and commercial uses. Agriculture, parking facilities, warehouses, and industrial uses are considered to be land uses that are largely insensitive to noise.

Significant noise sources are considered to be airports, railways, major streets, industrial operations, and many types of public facilites/public assembly locations.

The City of Fresno General Plan includes a Noise Element. This Noise Element responded to State Planning Law (Government Code Section 65302g) and State standards (Title 24) by providing: 1) noise measurements and projections for the City of Fresno; 2) noise criteria and mitigation measures; and, 3) noise-sensitive land use compatibility planning. The Noise Element is periodically updated with the General Plan.

The Noise Element defines noise-impacted areas as all outdoor sensitive uses subjected to Ldn/CNEL noise levels exceeding 60 dB, and all indoor sensitive uses subjected to Ldn/CNEL noise levels exceeding 45 dB. New noise-sensitive uses are not permitted within noise-impacted areas unless mitigative measures are implemented to reduce noise exposure to levels which do not exceed 60 dB Ldn for exterior activity areas and 45 dB Ldn for interior living areas.

The Fresno Air Terminal (FAT) Environs Area Specific Plan delineates CNEL contours for land around the airport. Runway orientation at FAT is along a northwest to soureast axis, impacting the Roosevelt Community Plan Area south and east of FAT. Appendix B contains the CNEL contour map and noise policies for this specific plan area.

The City of Fresno Noise Ordinance is designed to control public and private nuisance aspects of noise. Encompassing Sections 8-301 through 8-311 of the Fresno Municipal Code, it defines permissible noise levels and sets forth procedures for measuring particular point-source noises which may create a nuisance by exceeding ambient noise levels by 5 or more dB.

The ambient noise table from Municpal Code Section 8-302(b) is reproduced below:

Table EIR-31: FRESNO MUNICIPAL CODE SECTION 8-302(b) AMBIENT NOISE TABLE

ZONE DISTRICTS	TIME SPAN	PREMISSIBLE SOUND LEVEL
Residential	10 pm to 7 am	50 dB
Residential	7 pm to 10 pm	55 dB
Residential	7 pm to 7 pm	60 dB
Commercial	10 pm to 7 am	60 dB
Commercial	7 am to 10 pm	65 dB
Industrial	anytime	70 dB

The Noise Ordinance also contains permitting procedures for public address systems, and exceptions for temporary sound exceedances due to emergencies and due to permitted construction work that is carried out between 7 a.m. and 10 p.m.

2. Roosevelt Community Plan Area Impacts

Present and future noise sources within the Roosevelt community are airport, roadway, railway, commercial/industrial, and public facility activities, outlined below:

- **Airport:** Appendix B details the effects of the Fresno Air Terminal.

- **Roadways:** includes areas proximal to Freeways 41, 99, 180, realigned Freeway 168, Clovis Avenue, and the Jensen Avenue expressways, and other transportation corridors which may experience vehicular traffic of levels and types which generate high sound levels. Roadway noise levels are a function of vehicle size, ambient speeds, engine types, and traffic volume (and timing). Freeway 41, for instance, has generated sound levels neasured at 70 dB fifty feet from the right-of-way. The 60 dB Leq noise contours for at-grade portions of the new Freeway 180 are projected to extend 500 feet from center line. Elevated and sub-surface segments of the Freeway will have a narrower 60 dB Leq contour.

  As growth and traffic volume increases occur, noise intensities will rise. The noise level contour analysis in the General Plan takes this into account and makes noise contour projections. The existing Noise Element projection for arterial streets (such as Cedar Avenue) shows a 60 dB noise contour that extends approximately 180 feet out from the edge of the right-of-way.

Field studies have substantiated the predictive accuracy of projected noise contours. A recent example is presented in City of Fresno Environmental Assessment No. 90-70, done for the widening of an arterial road in northeast Fresno. This major street accommodates 10,000 to 21,000 vehicle trips per day (on various segments of the arterial). Peak traffic is estimated to be 10% of the daily totals. The 60 dB Ldn contour down each side of the street ranges from 158 to 221 feet from the street's center line. Mitigations proposed for the street widening include very high walls, retrofitting older homes with insulation, and providing homes with air conditioners or coolers, so that doors and windows can be kept closed to exclude noise.

- **Railways:** Major rail installations pass through the western portion of the Roosevelt area, and rail lines/spurs traverse the community's industrial area, extending east along the California Avenue alignment and north along Clovis and Maple Avenues. Locomotive noise, whistles, coupling/uncoupling, wheel-track noise, and crossing signals all generate sufficient noise to affect sensitive receptors.

  The Noise Element projected major rail line 60 dB Ldn contours to extend 800 to 1050 feet from track center for the Malaga to Ventura portion of the Southern Pacific Railroad (SPRR); and 150 to 200 feet from track center for the Calwa to Palm portion of the Atchison, Topeka & Santa Fe (AT &SF Railroad.

  The AT & SF Calwa railroad classification yard's rail switching and train maintenance also contributes to noise contours developed for the Calwa area along Golden State Boulevard.

  Smaller "spur" rail lines, such as the SPRR branch along California Avenue, were not included in 1984 Noise Element noise contour projections.

- **Construction:** Temporary situations will occur during public and private development, when heavy equipment, trucks, and power tools will generate high levels of daytime noise.

- **Commercial/Industrial locations:** related vehicular traffic, loading/unloading, factory machinery, loudspeakers, and ventilation equipment can generate significant noise. This is a particular problem at the interfaces between residential and non-residential zone district. The Roosevelt Community's expanses of commercial- and industrial-designated areas, and its extensive strip commercial/intensity corridors lead to a multiplicity of existing and potential interfaces between commercial/industrial uses and sensitive receptors.

- **Public Facilities**: related vehicular traffic (including emergency vehicles), loading/unloading, mechanical equipment (such as amusement rides), loudspeakers and music amplification, crowd noise, and unusual special event noises such as fireworks, "tractor pulls," and "mud drags" all generate significant noise which can impact sensitive uses in the general vicinity.

  Two problematic public facilites are located in the heart of the Roosevelt Community: Valley Medical Center (Cedar & Kings Canyon) and the Fresno Fairgrounds (south side of Kings Canyon between Chance and Maple Avenues).

  Valley Medical Center continually generates disturbing noise levels at all times of the day and evening from ambulances and med-evac helicopters. Paradoxically, Valley Medical Center is a sensitive noise receptor as well.

  The Fresno Fairgrounds episodically generates high levels of noise from its special events: The Big Fresno Fair, and grandstand use for livestock shows, concerts, "mud drags" and "tractor pulls." Some of these events, and proposed vehicle races, have caused noise complaints and public controversy.

  In 1986, noise measurements were taken in the residential neighborhood east of Maple Avenue during a tractor pull event at the Fairgrounds. Ambient (non-event) noise levels in this neighborhood ranged from 50.4 to 54.6 dB. During the evening tractor pull, average noise levels of 77.1 to 82.6 dB were recorded, with peaks as high as 87.9 dB. Tractor pulls are conducted on the race track infield. Potential vehicle races on the track itself (which borders Maple Avenue) would cause even higher nuisance levels of noise for adjacent areas.

<u>No-Project Alternative</u> - The 1978/84 Roosevelt Community Plan provided for much higher overall residential densities, which would lead to higher traffic volumes and more roadway noise. Neither the 1978 Roosevelt Community Plan, nor its Environmental Impact Report identified noise evaluation measures, noise control measures, or other noise mitigations. Therefore, if the 1991 Roosevelt Community Plan Update were not adopted, only the existing Fresno Air Terminal Area Environs Specific Plan, the General Plan Noise Element, and the Municipal Code Noise Ordinance would be in place to mitigate the increased noise burden caused by land use designations of the 1978/84 Roosevelt Community Plan.

3. Mitigation Measures.

As previously mentioned, distance between a noise source and a noise receptor is an effective mitigation measure. Construction practices and materials may be utilized to block, redirect, or absorb noise when it is not possible to achieve distance. Engineered acoustics can make it possible for some sensitive uses to peacefully co-exist with proximal noise sources. (Noise control construction techniques also add insulation value to buildings.) Effective acoustic installations can often be retrofitted.

Aside from these general practices, the following specific mitigation measures are proposed for the 1991 Roosevelt Community Plan Update:

(1) The Public Works and Development Departments shall implement noise control measures proposed in the 1991 Roosevelt Community Plan Update (Policy nos. 5-3.1 through 5-3.5).

(2) The Public Works and Development Departments shall implement circulation policies of the 1991 Roosevelt Community Plan Update, to reduce exposure to traffic-generated noise.

(3) The Development Department shall continue to implement noise policies of the Fresno Air Terminal Airport & Environs Specific Plan (see Appendix B).

(4) The City of Fresno and the Twenty-first District Agricultural Association (Fresno Fair) Board shall evaluate potential noise sources for events proposed at the Fresno Fairgrounds and pursue relocation of nuisance-level noisy activities to a less-sensitive location (1991 Update Policy nos. 1-21.3 and 3-1.8).

(5) The City of Fresno shall require appropriate noise mitigation structures and landscaping for urban freeways 168 and 180 as each segment is built.

(6) For commercial, industrial, and public facility special permit applications, the Development Department's environmental assessment shall include noise generated by on-site truck traffic. Potential noise impacts upon the industrial area and upon nearby sensitive receptors shall be evaluated. Operational controls (eg, limited hours of specified activities), on-site acoustic measures, and off-site acoustic measures shall be employed to prevent nuisance noise episodes and to keep within limits set forth in Fresno Municipal Code Section 8-302.

(7) The Development Department shall require that all fences and walls constructed for residential uses which back or side onto major streets without a frontage road meet the standards of Fresno Municipal Code Section 12-306-N-19.

R. AIRPORT SAFETY

1. Background

The Fresno Air Terminal (FAT) is a regional airport located immediately to the north of the Roosevelt Community Plan Area. FAT is heavily used for commercial passenger flights, air freight, military training (the California Air National Guard 144th Fighter Interceptor Wing is based there), general aviation, helicopters, and firefighting (the Fresno Air Attack base is jointly operated by the US Forest Service and the California Department of Forestry and Firefighting).

Each take-off and each landing is an "aircraft operation". In 1990, over 210,000 aircraft operations were accommodated by FAT. The 1990 total combines civilian and military operations.

FAT operates a 24-hour, radar-equipped control tower. FAT also provides ILS (Instrument Landing System), primarily used in lower-visibility conditions (although available at any time upon pilot request). Fresno Air Terminal is not yet large enough to require a Terminal Control Area; however, it has an Airport Radar Surface Area (ARSA). The ARSA is that region approximated by a ten-mile radius around FAT and includes air space up to an altitude of 4,400 feet. Within the ARSA, all aircraft are required to be in contact with FAT Air Traffic Control.

The FAT runway is oriented according to prevailing wind direction, northwest to southeast. Aircraft generally take off and approach into the wind. At least three-quarters of the time, they approach FAT from the southeast, crossing a portion of the Roosevelt Community Plan Area.

The City of Fresno and Fresno County's Airport Land Use Commission have jointly adopted a Fresno Air Terminal Environs Area Specific Plan, pursuant to California Public Utilities Code and California Government Code requirements. This Specific Plan delineates noise, safety, and avigation space requirements for the Fresno Air Terminal. Appendix B of this EIR reproduces the relevant material from this Specific Plan.

Portions of the Roosevelt Community Plan Area are within Airport Safety Zones I, II, III, and IV as well as the "horizontal surface" governed by Federal Aviation Regulations, Part 77, Subpart C. Permissible land uses, structure heights, and even landscaping are affected by provisions of the FAT Specific Plan within designated constraint zones.

2. Impacts of the Roosevelt Community Plan

The 1991 Roosevelt Update does not propose changes in designated land uses in Airport Safety Zones; land use designations would remain the same as in the 1978/84 Roosevelt Community Plan Update. Changes are proposed for land uses in the "horizontal surface," but these changes in designated land use have only been made to reflect existing developed uses. As the FAT Environs Specific Plan overrides other development standards for structure heights, these changes would not be able to affect avigation.

3. Mitigation Measure

The Development Department shall continue to implement safety and avigation protection provisions in the Fresno Air Terminal Environs Specific Plan (see EIR Appendix B).

S. SEISMIC SAFETY

1. Geologic Conditions and Seismic Safety

The Fresno Metropolitan Area is located east of and near the midpoint of the San Joaquin Valley, which is the south half, or sub-basin, of the California's Central Valley geomorphic province. The Metropolitan Area was classified as seismic zone V-1 by the Five-County Seismic Safety Element (Envicom, 1974), and is characterized by a relatively thick section of sedimentary rock overlaying a granitic base.

Fresno's potential exposure to primary earthquake-caused hazards, including ground shaking and rupture, is considered low. Risk of secondary hazards, such as landslides, subsidence, and liquefaction, is minimal to moderate.

The recognized fault located closest to the Roosevelt community is the Clovis fault, which is designated as inactive. The next-nearest faults are the Anticline Ridge, or "Coalinga", fault (over 45 miles to the southwest); the San Andreas fault system (70 miles to the west); and the Owens Valley fault system (80 miles to the east). No incidents of subsidence, fissures, liquefaction, or major structural damage are known to have occurred in Fresno from any of the large earthquakes which have occurred on these faults, probably due to the attenuating effect of distance.

The Roosevelt community is located on thick layers of alluvial deposits washed down from the Sierra Nevada mountain range to the east. These alluvial deposits appear to have a dampening effect on the earthquakes which have originated outside the Central San Joaquin Valley.

Because the Roosevelt community hosts a regional trauma center (with a burn ward), the Fresno Fairgrounds, the 185th Army National Guard Armory, several skilled nursing facilities, CK Wakefield School/Juvenile Hall, and numerous schools, it is possible that these large facilities will be used to stage a major emergency response and it is also possible that people from other areas could be relocated to, and temporarily housed in, southeast Fresno in the event of a major seismic event elsewhere in California.

2. Impacts of the Roosevelt Community Plan

The major impacts of both the 1991 Roosevelt Update and the 1978 Roosevelt Plan (the no-project alternative) are that the community's population and the number of structures in the Roosevelt area will increase. Provisions must be made for these additional people and structures in the disaster planning process.

3. Mitigation Measure

The City of Fresno and the Fresno County Office of Emergency Services shall update its emergency/disaster plans to accommodate the expanded population and inventory of structures in the Roosevelt community.

T. ELECTROMAGNETIC AND RADIOFREQUENCY RADIATION

1. Current Risk Management Knowledge

Electromagnetic and radiofrequency radiation are grouped under the general classification of "non-ionizing radiation," not to be confused with the ionizing radiation that is emitted by radioactive substances.

Electromagnetic and radiofrequency emanations are characterized as "waves." When pictured on an oscilloscope, they are visualized as an undulating line with characteristic "frequency," or regular number of cycles (wave undulations). The more cycles (undulations) there are per second, the shorter each cycle is: higher frequencies mean shorter wavelengths. One "hertz" equals one cycle per second. A megahertz is one million cycles per second; and a gigahertz is one billion cycles per second.

Radiowave frequencies range from 3,000 cycles per second to 300 billion cycles per second (300 gigahertz). Microwave radiation comprises part of the radiofrequency "band," and it ranges from 100,000 to 300 billion cycles per second.

Electricity in this country's utility lines consists of alternating current--"AC"--which has a wave frequency of 60 cycles per second. As electric current moves through a conductor or fluctuates (alternates), it creates or induces magnetic field potential. The stronger the electrical current, the greater the magnetic field it induces. The ordinary unit of measurement for magnetic field strength is milliGauss (mG).

Acute, close exposure to a high level of short-wave electromagnetic radiation can result in a burn type of injury, as high energy levels impart a lot of kinetic energy to tissue. Microwave ovens, for instance, use high-frequency radio waves to cook food inside their shielded cooking chambers.

Cal-OSHA has regulations which govern workplace exposures to radiofrequency (RF) forms of non-ionizing radiation. According to Cal-OSHA, radiofrequencies range from 3 megahertz to 300 gigahertz, with microwave frequencies taking up the 100 megahertz to 300 gigahertz part of the frequency "band."

RF exposures can be measured as energy impinging on a surface (such as skin) and can be expressed as milliwatts per square centimeter (mW/cm^2). RF electric field strength can be expressed as volts per meter (v/m), or its induced magnetic field strength as amperes per meter (a/m). (Cal-OSHA regulations use a/m as units for magnetic field strength, rather than mG.)

Cal-OSHA regulations attempt to limit workplace exposures of continuous or repetitively pulsed RF to 10 mw/cm^2; field strengths of this RF to 200 v/m and 0.5 a/m. For radio frequencies which are interrupted or modulated (e.g., FM radio), RF energy should not exceed one milliwatt-hour per square centimeter (adding the element of time to the units is the way to account for RF which is not steady, but which varies over time.) In workplaces which exceed these limits, special signage is required to be posted to inform employees of required protective actions.

Negative health impacts have been alleged to result from long-term exposure to low levels of electromagnetic and radiofrequency radiation. Electromagnetic energy from power transmission lines, appliances, and electrical substations involves vastly lower frequencies than radio waves.

Some studies have been done, and more are being done, on household exposures (microwave oven leakage, electromagnetic fields from appliances and electric blankets), workplace exposures (video display terminals, high-voltage electrical equipment, power tools, broadcast facilities, radar installations), and general environmental exposures (living, working, or attending school near power transmission lines, electrical substations, and TV/radio towers).

In cases where electromagnetic energy has been associated with a documented "cancer cluster," few and tentative general conclusions have been drawn. "Elevated levels" of radiowave

and electromagnetic radiation exposure have been epidemiologically associated with rates of leukemia, lymphoma, nervous tissue, and connective tissue cancers that are higher than the background cancer rates for the general public.

However, the "elevated levels" and the types of exposure have varied widely between published studies. Even more confounding, most situations with "elevated levels" of general environmental exposures have not yet resulted in any detectable health impacts, when controlled and prospective studies have been done (although this line of research is ongoing).

Very recently, it has been suggested that there are electric current phenomena which occur in or travel through the ground near high-voltage electrical equipment, and that these may be the actual cause of statistically-indicated health impacts. California construction standards (electrical codes) have the effect of preventing and eliminating this type of occurrence.

The California Department of Education, when writing its 1989 School Site Selection and Approval Guide, consulted with the Electric Power Research Institute, utility companies, and the State of Department of Health Services before determining school site constraints on electromagnetic radiation.

Since high-tension electric lines are constructed in discrete kilovolt (kV, 1000-volt) "denominations" (70 kV, 110-115 kV, 220-230 kV, and so on), the Department of Education chose to assume uniform electromagnetic field strength for each "denomination," and settled on distances that were estimated to provide safety. The following policies were published in the 1989 Guide, regarding permitted proximity of new school sites to high-power transmission line rights-of-way:

> School sites must be at least...
>
> > One hundred feet from the edge of 100-115 kV power line rights-of-way;
> >
> > One hundred-fifty feet from edge of 220-230 kV power line rights-of-way; and
> >
> > Two hundred-fifty feet from the edge of 345 kV power line rights-of-way.

Several states have adopted more generally applicable regulations to try to shield land uses from electromagnetic radiation by limiting the extent of energy fields generated by electric transmission equipment. The California Department of Health Services compiled a list of these states' limits for electric and magnetic field intensities along transmission equipment rights-of-way. These limits range from 8 to 10 kilovolts/meter (kV/m) field strength within rights-of-way. Some States' limits are expressed in milliGauss, and range from 150 mG to 250 mG at the edge of power line rights-of-way.

2. Potential Exposures in the Roosevelt Community

At this time, only general background information can be given on some possible radiofrequency and electromagnetic radiation exposures and on City regulations for siting sources of these exposures. These facilities and land uses are listed because they are potential sources of low-level, non-ionizing radiation exposures. The following listing does not imply that certain facilities are known to be sources of harmful electromagnetic or radiofrequency energy.

The plan area is traversed by 115 kV and 70 kV overhead power transmission lines, as well as the usual neighborhood distribution grid of 12 kV lines. Figure EIR-29 details the locations of the large transmission lines.

In the City's Roosevelt Community Plan Area, 8.5 miles of 115 kV line presently traverses undeveloped or agricultural property, and five miles of 115 kV line traverses land that has been developed for urban residential, commercial, and industrial uses.

Some 7.5 miles of 70 kV line traverses undeveloped or agricultural property, and 8.5 miles of 70 kV line passes through property already developed for urban uses.

The Fresno Municipal Code (Section 12-409 of the Zoning Ordinance) allows the Director of the Development Department to review and make recommendations as to the route, placement, height, and the effect on land use of proposed utility towers that will be used for power transmission lines. The Director may, in the public interest, recommend modifications for proposed utility rights-of-way, in order to protect public health, safety, and welfare.

Fresno Municipal Code Section 12-409 clearly states that this Code Section is not to be construed as contravening other aspects of the authority of the Public Utilities Commission when determining construction, installation, operation, and maintenance of utility improvements. Director's determinations made under Municipal Code Section 12-409 may be appealed to the Planning Commission, and any resulting Planning Commission decision may be appealed to the Fresno City Council.

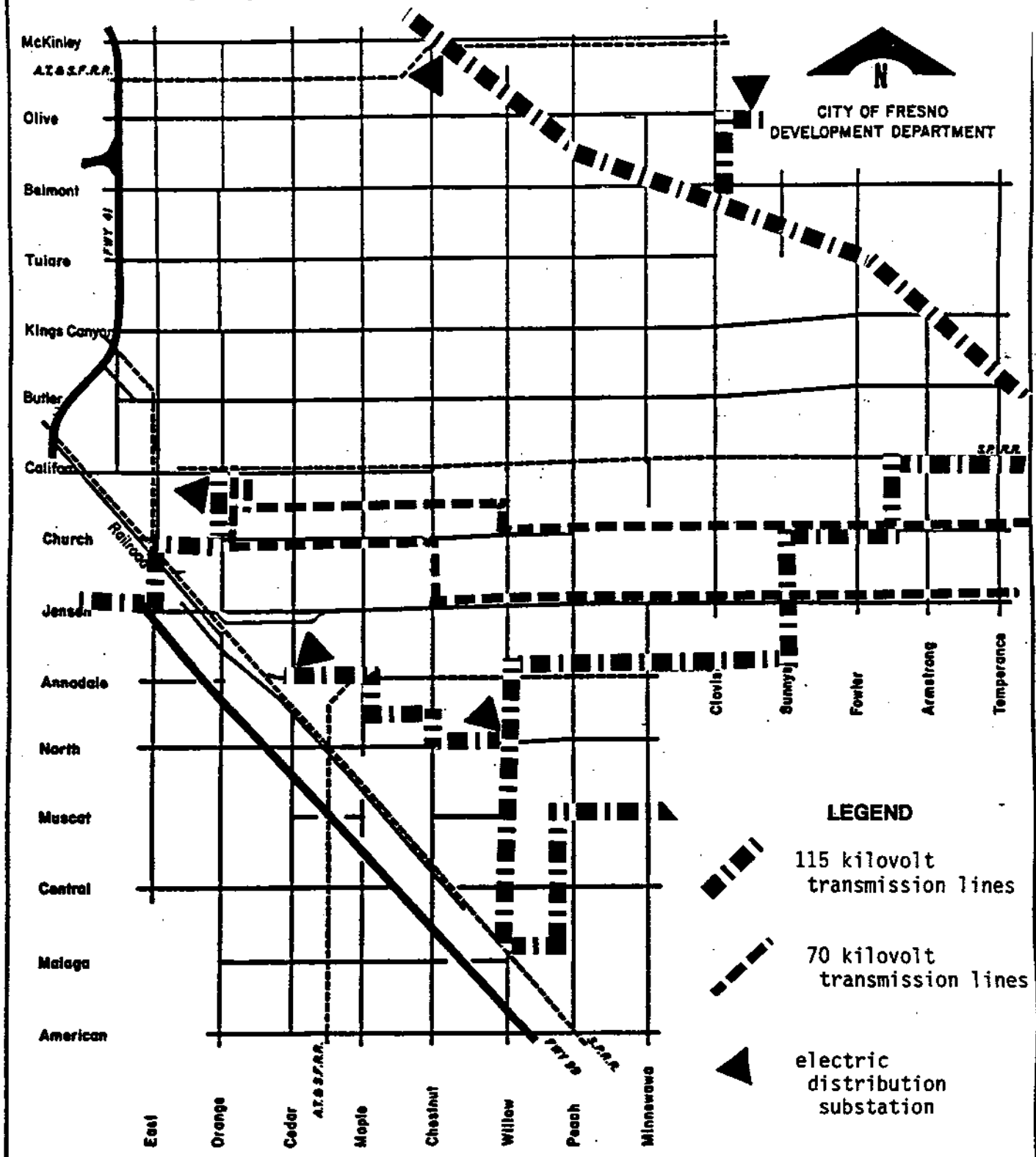
Inasmuch as most rights-of-way for large power lines have already been determined in the Roosevelt plan area, this review procedure would have limited application (until or unless application is made to alter rights-of-way or voltage capacities of existing lines).

There are presently five electric substations in the plan area (see Figure EIR-29). Electric substations, or distribution substations, are large "step-down" transformers that redistribute higher voltages to the 12 kV line network. As large subdivisions are developed and as industrial facilities are built, new substations will be required.

Figure EIR-29

ROOSEVELT COMMUNITY PLAN UPDATE

MAJOR ELECTRICAL TRANSMISSION LINES AND DISTRIBUTION SUBSTATIONS



In the following City of Fresno zone districts, electrical distribution substations are allowed "by right" (site plan review required): C-5, C-M, and industrial zone districts. Electrical distribution substations are allowed only by conditional use permit (CUP) in all other City of Fresno zone districts except O, RP, C-6, and M-1-P, where the zoning ordinance does not list these utility installations as permitted uses at all.

The Zoning Code requires CUPs for all radio and TV antennae and commercial transmitters, and restricts the zone districts where these facilities may be located: the C-5, C-6, CC (Civic Center) and all industrial zone districts. Although microwave relay stations are a type of radio broadcasting facility, the Zoning Ordinance lists them as a separate classified use. Microwave relay stations may be constructed in numerous zone districts. They are permitted by CUP in O, AE, R-A, C-P, C-1, C-2, C-3, C-6, C-R, C-M, and M-1 zone districts; and by right (site plan review required) in M-2 and M-3 zone districts.

Radiofrequency transmitting facility locations have not been mapped in the Roosevelt Community.

The City of Fresno Development Department performs environmental assessments on all site plan and conditional use permit applications. These environmental assessments, and the granting of special permits (CUPs and site plans) are appealable to the City Planning Commission and, in turn, to City Council.

Section 15145 of the California Environmental Quality Act Guidelines states that, if a lead agency finds that a particular impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact.

At the present time, it is not known what the threshold is for experiencing health impacts; or whether there are, in fact, quantifiable health impacts from long-term, low-level electromagnetic and radiofrequency radiation exposure, nor whether other cofactor(s) is/are necessary to cause health effects. It has not even been determined which form(s) of electromagnetic energy cause these impacts (e.g., direct versus alternating current), nor what physiological processes are affected, nor how negative impacts may be prevented by distance or shielding.

Until responsible agencies (i.e., the EPA, the Public Utilities Commission, California Department of Health Services, National Institutes of Safety and Occupational Health, National Institute for Cancer, and the Consumer Product Safety Commission) can agree to set exposure limits and guidelines for protecting humans from various types of chronic electromagnetic and microwave exposures, more stringent City of Fresno land use

policies cannot be developed which would competently and completely address the entire range of issues. While a policy of "prudent avoidance" is said to be best, the current field of knowledge does not indicate just what things are to be avoided, or by what margin(s).

This chapter has, therefore, only been included to provide general information, to assist in the evaluation of new school sites, and to give locational and procedural data which may be of use if subsequent relevant guidelines are developed by responsible agencies.

U. IMPACTS OF PLAN MODIFICATIONS

Modifications are alternative land use designations which were requested in the course of preparing the 1991 Roosevelt Plan Update.

These requested Modifications would generally provide for more intensive urban development than the land uses designated in the 1991 plan update. These proposed land use changes and their expected impacts (relative to the estimated potential impacts of the 1991 Update) are identified by the following matrix, Table EIR-32. A capsule analysis of each requested plan Modification follows.

In general, the requested plan Modifications would lead to increased traffic volumes, with concomitant increases in street congestion, air pollution, and noise levels. Most Modifications would place heavier demands upon public facilities and public safety services, either by increasing potential population (and population density), or by reducing the amount of land set aside for essential public services.

Modifications which substitute non-residential uses for residential uses may reduce the need for some resources and services, but also tend to reduce housing supply and increase traffic.

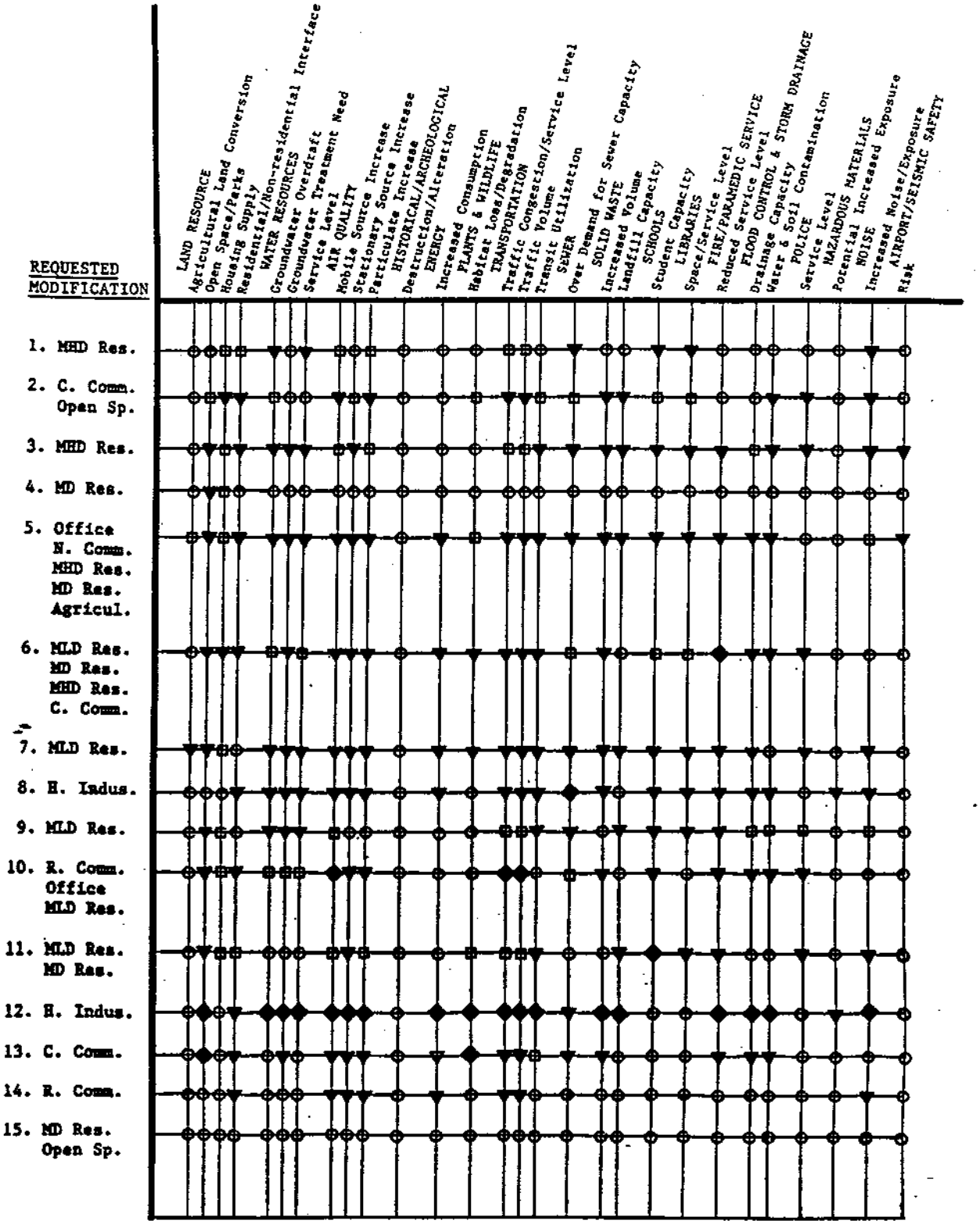
Modifications which increase potential residential densities increase housing stock, but intensify most service demands in an area where essential services may already be overtaxed.

Cumulatively, if all proposed Modifications were adopted, the potential impacts of the 1991 Roosevelt Update would be significantly altered. Table EIR-33 presents a comparison of those impacts which can easily be reduced to numerical terms.

Only three plan Modifications (in a single vicinity) would be expected to affect historic resources, so this category was omitted from capsule summaries. Scenic and historic collonades of large palm and olive trees on Kings Canyon, Minnewawa, and Peach Avenues could be affected by requested Modification Nos. 2, 10, and 11.

Table EIR - 32

COMPARISON OF IMPACTS ASSOCIATED WITH PLAN MODIFICATIONS



☐ Improved Condition ▼ More Adverse Condition

○ No Discernable Difference ◆ Considerably More Adverse Condition

TABLE EIR-33: **COMPARISON OF POTENTIAL CUMULATIVE IMPACTS FROM COMPLETE BUILD-OUT* OF ROOSEVELT COMMUNITY PLAN AREA UNDER THE 1991 UPDATE vs. UPDATE WITH MODIFICATIONS****

	1991 ROOSEVELT UPDATE	1991 ROOSEVELT UPDATE WITH ALL MODIFICATIONS
Acreage of Agricultural Land	230	210
Acreage of Open Space/Recreational Land (Parks)	440	280
Acreage for School Facilities	487	394
Acreage for Office Commercial Uses	195	169
Acreage for Neighborhood Commercial Uses	160	167
Acreage for Community Commercial Uses	236	233
Acreage for Regional Commercial Uses	0	89
Acreage for Light Industrial Uses	1,497	1,488
Acreage for Heavy Industrial Uses	3,594	3,763
Acreage for Residential Uses	10,833	10,929
Low-Density Residential Acreage	1,057	1,057
Medium-Low Density Residential Acreage	3,015	2,802
Medium-Density Residential	5,089	5,322
Medium-High Density Residential	1,722	1,748
Total Dwelling Unit Capacity (except group qtrs.)	70,769	71,215
Multi-Family Units (% d.u. capacity)	23,247 (32.8%)	23,592 (33.1%)
Single-Family Units (% d.u. capacity)	47,522 (67.2%)	47,623 (66.9%)
Population Capacity	222,370	223,747
Housed in Multi-Family Units (% pop.)	71,300 (32.1%)	72,358 (32.3%)
Housed in Single-Family Units (% pop.)	151,070 (67.9%)	151,389 (67.7%)
Public Water Supply Required Annually		
With Single-Family Dwellings Unmetered	23.8 billion gallons (72,951 acre-feet)	23.9 billion gallons (73,403 acre-feet)
With All Single-Family Dwellings Metered	19.0 billion gallons (58,361 acre-feet)	19.1 billion gallons (58,723 acre-feet)

[Continued]

TABLE EIR-33: **COMPARISON OF POTENTIAL CUMULATIVE IMPACTS FROM COMPLETE BUILD-OUT* OF ROOSEVELT COMMUNITY PLAN AREA UNDER THE 1991 UPDATE vs. UPDATE WITH MODIFICATIONS** [Cont'd]**

	1991 ROOSEVELT UPDATE	1991 ROOSEVELT UPDATE WITH ALL MODIFICATIONS
Annual Vehicular Air Pollution Emissions		
Total Organic Gases	1,644.7 tons	1,725.2 tons
Nitrogen Oxides	2,820.3 tons	2,931.7 tons
Carbon Monoxide	17,483.2 tons	18,060.3 tons
Fine Particulate matter (PM-10)	1,215.6 tons	1,441.7 tons
Sulfur Oxides	302.0 tons	313.9 tons
Annual Vehicular Fuel Consumed	63,890,432 gallons	66,404,822 gallons
Student Generation (total potential students)		
Kindergarten through 12th Grade (K-12)	26,270 to 82,151	26,426 to 82,798
Preschool-aged Children	16,236 to 40,785	16,441 to 41,150
Tons of Solid Waste Generated Annually	333,555	335,621
Millions of Gallons Per Day of Wastewater Generated	25.57 mgd	25.73 mgd
Tons of Sewage Sludge Generated Daily	13.9	14.0

* Full build-out is projected to occur at Year 2010, if current rate of population growth holds steady, and if the City's sphere of influence is not enlarged in the plan area.

**Does not include secondary impacts from having to relocate high school/middle school and regional park site within the plan area.

The Modifications may require additional street and circulation improvements; mass transit system improvements; sewer and water service expansion; additional school, park, library, fire protection, law enforcement, and other services; and special site design measures.

In addition to 1991 Roosevelt Update policies and other generally applicable mitigations proposed throughout this EIR, some specific mitigations are proposed for each Modification. These should be applied as conditions of approval on all changes of land use classifications and all entitlements used to actualize these Modifications.

Implementation of mitigation measures necessary to reduce the impacts of these Modifications may require higher expenditures of financial resources and increased use of governmental authority and police powers.

When preparing capsule summaries of Roosevelt Plan Update Modification impacts, standard assumptions were used to generate numerical data. These are the same assumptions used in preceding chapters of this EIR, with some augmentations. The following list of assumptions is referenced by bracketed footnotes in the capsule summaries:

1. At an average of 3.07 persons per multi-family dwellings, Population Capacity = Housing Capacity x 3.07.

2. At an average of 3.18 persons per single-family dwelling, Population Capacity = Housing Capacity x 3.18.

3. At an average of 15 multi-family residences per medium-high density acre, with 90% of acreage used for residences, Housing Capacity for medium-high residential density = 15 x 0.9 x medium-high density acreage. (The maximum number of multi-family residences per medium-high density acre is 18.15. This figure was substituted into the above formula to obtain "maximum" figures. The maximum number of multi-family units is further limited by 1991 Roosevelt Plan Update Policy No. 1-6.10, which requires usable on-site open space by capping multi-family units on various size categories of parcels.)

4. At an average of 7.5 single-family residences per medium density acre, with 90% of acreage used for residences, Housing Capacity for medium residential density = 7.5 x 0.9 x medium density acreage. (The maximum number of residences per medium density acre is 10.37. This figure was substituted into the above formula to obtain "maximum" figures.)

5. At an average of 4.5 single-family residences per medium-low density acre, with 90% of acreage used for residences, Housing Capacity for medium-low residential density = 4.5 x 0.9 x medium-low density acreage. (The maximum number of residences per medium-low density acre is 4.98. The figure was substituted into the above formula to obtain "maximum" figures.)

6. Single-family residential water consumption expressed as range of options: volume of metered consumption (lower), through unmetered (higher) volume. Average metered daily per capita consumption = 164 gallons. Average unmetered daily per capita consumption = 205 gallons.

7. Multi-family residential water consumption = metered daily per capita volume of 164 gallons.

8. Park and agricultural uses are estimated to require 3 acre-feet of water per acre per year. One acre-foot of water equals 325,830 gallons.

9. Maximum commercial/light industrial daily water consumption is estimated at 2,000 gallons per acre. There is a wide potential variability, depending on the exact nature of the commercial or light industrial use.

10. Maximum heavy industrial daily water consumption is estimated at 11,000 gallons per acre. There is a potentially wide variability, depending on the exact nature of the heavy industrial use.

11. Residential sewage generation is expressed as million gallons per day (mgd). This is calculated by: Population Capacity x 115 gallons per day average per capita sewage generation.

12. Commercial/light industrial sewage generation is expressed as million gallons per day (mgd). Maximum sewage generation is estimated by: 1,750 gallons per day per acre x commercial/light industrial acreage.

13. Heavy industrial sewage generation is expressed as million gallons per day (mgd). Maximum sewage generation is estimated by: 10,120 gallons per day per acre x heavy industrial acreage.

14. The range of student generation figures is estimated by: Housing Capacity (single and/or multi-family units) x Fresno Unified School District lowest and highest student generation figures for that type of dwelling unit.

15. The California Air Resources Board's URBEMIS computer model was used for these estimates. Default values and units are the same as described in Chapter D of this EIR.

[THE FOLLOWING MODIFICATION WAS APPROVED, BUT WITH 4.07 ACRES OF MEDIUM-LOW DENSITY RESIDENTIAL USE]

Requested Plan Modification No. 1 would create 3.07 acres of medium-high density residential at the northeast corner of Maple and Church Avenues.

The 1991 Roosevelt Plan Update designated this property for neighborhood commercial use. In the 1978/84 Roosevelt Plan (no-project alternative), this property was designated for neighborhood commercial.

This property is outside of the Urban Growth Management Area (in the "Calwa Island" of non-UGM area). The property is within the incorporated City of Fresno.

a. **Population Capacity:** Adds 126 occupants of multi-family units [1].

b. **Housing Capacity:** Adds 41 multi-family dwelling units (maximum added would be 44 multi-family units), and creates an interface between multi-family and medium-low density residential [3].

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Increases demand.

e. **Commercial/Industrial Land:** Decreases neighborhood commercial shopping land by 3.07 acres. The next nearest designated commercial site would be approximately one mile away. Removes interface between neighborhood commercial and medium-low density residential. Creates interface between neighborhood commercial and medium-high density residential.

f. **Water Resources/Service:** Increases consumption. Would require some 5.79 million gallons per year, (vs. neighborhood commercial water requirement of 2.2 million gallons per year) [7,9]. Located within 1/2 mile of wells which exceed State Safe Drinking Water standards for DBCP, EDB, nitrate, and possibly gross alpha radiation (one sample, one well).

g. **Air Quality:** May increase stationary source pollution from household appliances, if combustion heating units are used.

   The URBEMIS computer model was used to compare vehicular pollution related to the Modification and the 1991 Update's land use designation for this parcel. This Modification would decrease mobile source pollution, annually generating 12.1 fewer tons of ozone precursors (-4.3 tons TOG, -7.8 tons NOX); 10.6 fewer tons of carbon monoxide, and 2.4 fewer tons of particulate matter [15].

   However, removal of a neighborhood commercial site from this location will tend to increase air pollution from longer vehicle trips by neighborhood residents who may have to drive farther to a store.

h. **Energy:** Increases consumption.

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Church and Maple Avenues are projected to have sufficient traffic capacity at this location. This property is on a bus route.

URBEMIS has built-in trip generation data (from the Intstitute of Traffic Engineers Manual). URBEMIS indicates that this Modification would reduce daily vehicle trips by about 3,500 [15].

k. **Sewer:** Increases sewage. Would generate 0.011 mgd (vs. 0.0053 mgd for neighborhood commercial) [11,12].

This site is in the service area of the Chestnut Avenue sewer trunk, and is proximal to a section of the Chestnut trunk which would experience capacity shortfalls from build-out of the 1978/84 Roosevelt Plan.

l. **Solid Waste:** Increases volume which must be transported. Requires increased landfill capacity.

m. **Schools:** Increases demand. Would generate 14 to 65 K-12 students and 11 to 40 preschool-aged children [14]. Within attendance area of Calwa School (operates year-round), which had a 1991 spring enrollment 130 below its present rated capacity and 256 below its maximum potential capacity.

n. **Library:** Increases demand.

o. **Fire and Paramedic:** Increases service demand.

p. **Flood Control and Drainage:** Decreases runoff. This site is in the Fresno Metropolitan Flood Control District (FMFCD) drainage district GG. No flood control assessment district has been formed at this site. Basin GG has been improved (acquired, excavated, fenced) and is used for groundwater recharge. However, proposed storm drainage pipeline to this site is not yet constructed.

q. **Police:** Potential change in impacts cannot be estimated.

r. **Hazardous Materials:** Decreases potential exposures, inasmuch as commercial sites may have inventories of products which include designated hazardous materials.

s. **Noise:** Potential change in impacts cannot be estimated. No noise contours in 1984 Noise Element for this location.

t. **Airport and Seismic Safety:** No difference in impacts.

[THE FOLLOWING MODIFICATION WAS APPROVED WITH 15.5 ACRES OF COMMUNITY COMMERCIAL, 9.7 ACRES OF OFFICE COMMERCIAL, AND 3.8 ACRES OF OPEN SPACE]

Requested Plan Modification No. 2 would create 25.2 acres of community commercial and 3.8 acres of open space (park), northeast of the Kings Canyon/Willow intersections.

The 1991 Roosevelt Plan Update designated this property for office (19.3) acres) and medium-density residential (9.7 acres) uses. Under the no-project alternative (the 1978/84 Roosevelt Plan), this site was designated for office commercial, medium-high density residential, and ponding basin.

This site is not in the UGM Area. It is within the incorporated City limits.

a. **Population Capacity:** Removes 207 occupants of single-family dwelling units.

b. **Housing Capacity:** Removes 65 single-family dwelling units (maximum removed would be 90 single-family dwelling units) [4].

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Adds 3.8 acres adjoining Fresno Metropolitan Flood Control District basin. (However, in conjunction with Requested Plan Modification No. 13 by the same applicant, net park space is decreased by 4.2 acres within one mile radius of Kings Canyon and Willow Avenues.)

   According to the 1989 Master Plan for Parks and Recreation, 3.8 acres is too small to qualify (or efficiently administer) as a neighborhood park. If conjoined with and operated with the adjacent ponding basin, the minimum size standard for a neighborhood park would be satisfied.

e. **Commercial/Industrial Land:** Decreases office commercial by 19.3 acres and removes interfaces of office/medium-density residential, office/medium-high density residential, and office/park or ponding basin.

   Increases community commercial by 25.2 acres and creates interfaces of commercial/medium and medium-high density residential, commercial/park or ponding basin.

f. **Water Resources/Service:** Possibly increases demand. Reduces residential demand by 12.4 to 15.5 million gallons per year [6]. Creates park irrigation demand of some one million gallons per year [8]. Creates commercial demand of up to 18.4 million gallons per year [9]. This location is within 1/2 mile of a well undergoing rehabilitation due to EDB contamination.

Modification No. 2 (continued)

g. **Air Quality:** Decreases stationary source pollution.

The URBEMIS computer model shows that this Modification would increase vehicular pollution, annually generating 35 more tons of ozone precursors (+12.3 tons TOG, +22.7 tons NOX); and 118 more tons of carbon monoxide; however, Modification No. 2 reduce mobile source particulates by 12 tons [15].

h. **Energy:** Increases Consumption. URBEMIS shows 511,779 more gallons of vehicle fuel used annually [15].

i. **Plants and Wildlife:** Increases habitat (though, if combined with Requested Plan Modification No. 13, decreases net habitat within one mile of Kings Canyon and Willow intersection.)

j. **Transportation:** On a designated intensity corridor. This property is served by a bus route.

Kings Canyon Avenue is projected to function below an "E" level of service at build-out of the plan area. Even if Kings Canyon were widened to six lanes, it would potentially operate below "E" level of service at plan area build-out.

Willow Avenue north of Kings Canyon is also projected to operate below an "E" level of service at build-out of the Roosevelt Community.

URBEMIS software has standard trip generation values built into the program. URBEMIS shows that this project would increase vehicle trips by almost 9,000 per day [15].

Traffic impacts of the Modification would be increased because commercial traffic is less amenable to trip reduction measures that can be more easily applied to office developments.

k. **Sewer:** Decreases sewage. Would generate 0.04 mgd (vs. 0.06 mgd for 1991 Update's residential and office commercial designations) [11,12].

This site is in the service area of the Chestnut Avenue sewer trunk and would remove sewer line service demand from a portion of the Chestnut trunk line which would experience capacity shortfalls from intense development patterns in the 1978/84 Roosevelt Plan.

l. **Solid Waste:** Potential change in impacts cannot be estimated.

m. **Schools:** Decreases demand, reducing student generation by 25 to 29 K-12 students and 18 to 22 preschool-aged children [14]. This project is in the Easterby School attendance area. Easterby operates year-round and now has an enrollment greater than its rated capacity. If expanded to the maximum by adding portable classrooms, Easterby could only accommodate 164 more students.

n. **Library:** Decreases service demand.

o. **Fire and Paramedic:** Increases service demand.

Modification No. 2 (continued)

p. **Flood Control/Drainage:** Increases runoff.

This site is in FMFCD drainage area "Y," where the basin has been acquired, fenced, excavated, and put into use for groundwater recharge. Several drainage pipelines have been improved in the vicinity of this site. The runoff generated by this modification can be accommodated because of its proximity to Basin "Y". There is an opportunity for the 3.8 acres of open space to be integrated into part of Basin "Y" for use as a park site.

q. **Police:** Increases service demand.

r. **Harardous Materials:** Increases potential exposures, inasmuch as commercial sites may have retail inventories which include designated hazardous materials.

s. **Noise:** Increases exposures by increasing traffic on East Kings Canyon and by locating community commercial acreage adjacent to residential uses.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 2:

(1) The Development Department shall require a specific traffic study for any site plan and development entitlements at this site, to assess the need for: deceleration/acceleration lanes on Kings Canyon Avenue; a synchronized 1/4 mile interval signal on Kings Canyon; and required improvements on Willow and Peach Avenues.

(2) The Development Department and Parks Department shall require design standards for the site's park/shopping center and park/residential interfaces to promote public safety and reduce park maintenance requirements.

[THE FOLLOWING MODIFICATION WAS APPROVED, SUBJECT TO THE APPLICANT'S DESIGN CONCEPT]

Requested Plan Modification No. 3 would create 4.6 acres of medium-high density residential on the west side of Clovis Avenue between Belmont and Tulare Avenues.

The 1991 Roosevelt Plan Update designated this property for office commercial uses. Under the no-project alternative (the 1978/84) Roosevelt Plan), this property was designated for office commercial and medium-high density residential.

This site is not in the UGM Area, and is within the incorporated City limits.

a. **Population Capacity:** Adds 190 occupants of multi-family units [1].

b. **Housing Capacity:** Adds 62 multi-family dwelling units (maximum added would be 74 multi-family units) [3].

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Increases demand.

e. **Commercial/Industrial Land:** Decreases office commercial by 4.6 acres. Removes potential interfaces between office/medium-high and office/medium-low density residential uses.

f. **Water Resources/Service:** Increases consumption. Would require some 11.3 million gallons of water per year (vs. office commercial water requirement of 3.46 million gallons per year) [7,9]. This location is within 1/2 mile of wells closed due to DBCP and due to nitrate contamination.

g. **Air Quality:** Increases stationary source pollution from household appliances.

   The URBEMIS computer model shows that vehicle-related air pollution would be decreased. Per year, this Modification will generate 2.4 tons less ozone precursors (-0.9 ton less TOG; -1.5 ton less NOX); 8.8 tons less carbon monoxide, and 5.3 tons less particulate matter [15].

h. **Energy:** URBEMIS shows 32,450 fewer gallons of vehicle fuel consumed per year for this Modification [15].

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Located on an intensity corridor. This location is within 1/4 mile of two FAX bus routes.

   Vehicle trip generation figures from the URBEMIS computer model show about 1,100 fewer daily trips from this Modification [15].

   Clovis Avenue near this site is projected to operate below an "E" level of service at build-out. Even if Clovis Avenue were widened to six lanes, it would potentially operate below an "E" level of service at build-out of the plan area.

Modification No. 3 (continued)

k. **Sewer:** Increases sewage. This Modification would generate 0.02 mgd (vs. 0.008 mgd for office commercial) [11, 12].

This site is in the service area of the Chestnut Avenue trunk sewer. The Chestnut Avenue trunk was projected to have inadequate capacity at build-out of the more intense 1978/84 Roosevelt Plan land uses.

l. **Solid Waste:** Increases volume which must be transported. Requires increased landfill capacity because diverse residential refuse is much less amenable to pre-sorting and recycling compared to office waste.

m. **Schools:** Increases demand. Generates 21 to 99 K-12 students and 17 to 60 preschool-aged children [14]. Within attendance area of Easterby Elementary, which operates year-round and now has an enrollment greater than its rated capacity. If expanded by adding portable classrooms, Easterby could only accommodate 164 more students.

n. **Library:** Increases service demand.

o. **Fire and Paramedic:** Increases service demand.

p. **Flood Control/Drainage:** Decreases runoff

Modification No. 3 is in FMFCD drainage area "Y," which has a basin (acquired, excavated, fenced) and which is in use for groundwater recharge. None of the proposed drainage pipelines have been constructed to this site.

The Master Drainage Plan facilities to serve this site are not designed for this modification's proposed land use. A future parallel storm drain in Minnewawa Avenue, or on-site peak reducing facilities may have to be constructed in order to accomodate the higher intensity land use if this modification were approved.

q. **Police:** Increases service demand.

r. **Hazardous Materials:** No difference in impacts.

s. **Noise:** Increased exposure. The 1984 Noise Element locates the 60 dB Ldn street noise contour some 600 feet west of Clovis Avenue. While dwellings may be constructed so as to attenuate interior noise below 45 dB, outdoor "usable open space" for multi-family units would be subject to high noise levels.

t. **Airport and Seismic Safety:** No difference in impacts, although this property is located within the Federal Aviation Regulations Part 77 Horizontal Surface, which limits structure and landscape plant heights.

[THE FOLLOWING MODIFICATION WAS APPROVED.]

Requested Plan Modification No. 4 would create 0.56 acres of medium-density residential on the west side of Clovis Avenue between Kings Canyon and Butler Avenues.

The 1991 Roosevelt Plan Update designates this property for low-density residential use, which is the same land use pattern shown in the 1978/84 Roosevelt Plan.

This property is not in the designated UGM Area. It has not been annexed to the City of Fresno.

a. **Population Capacity:** Adds 9 persons (single-family unit occupants) [2].

b. **Housing Capacity:** Adds three single-family dwelling units (maximum) [4].

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Increases demand (insignificant).

e. **Commercial/Industrial Land:** No significant difference in interface of residential/commercial.

f. **Water Resources/Service:** Increases consumption by 0.54 to 0.68 million gallons per year [6]. Project is within 1/2 mile of two public wells closed due to DBCP and one well with 80 percent of the MCL for nitrate.

g. **Air Quality:** Increases stationary source pollution.

   The URBEMIS computer model shows that adding just three single-family residences increases ozone precursors from the homes' associated traffic by 0.1 ton per year (NOX); and boosts carbon monoxide from vehicular travel by 0.5 ton per [15].

h. **Energy:** Increases consumption (insignificant). URBEMIS projects that annual vehicular fuel consumption will rise by almost 1,700 gallons due to this Modification [15].

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Located on an intensity corridor subject to high traffic volume and potentially substandard level of service. URBEMIS projects 30 additional daily vehicle trips from this Modification [15]. Arterial status of Clovis Avenue requires special driveway design standards for safe direct access.

k. **Sewer:** Increases sewage by 0.001 mgd (insignificant) [11].

l. **Solid Waste:** Increases volume to be transported and landfill capacity (insignificant).

Modification No. 4 (continued)

m. **Schools:** Increases demand. Generates 1 or 2 additional K-12 students and preschool-aged children (insignificant). Located in attendance area of FUSD's Ayer Elementary School (operates year-round), which now has an enrollment level as high as its rated capacity. Ayer is capable of accommodating 350 more students by adding portable classrooms. Proposed construction of Storey Elementary School in this area may provide additional capacity.

n. **Library:** Increases demand (insignificant).

o. **Fire and Paramedic:** Increases service demand (insignificant).

p. **Flood Control/Drainage:** Increases runoff (insignificant amount).

Modification No. 4 is located in FMFCD drainage district BK, where most drainage improvements are in place, exept for a proposed drainage pipeline along Montecito Avenue.

q. **Police:** Increases service demand (insignificant).

r. **Hazardous Materials:** No difference in impacts.

s. **Noise:** Increases exposure. The 1984 Noise Element locates 60 dB Ldn street noise contour some 600 feet west of Clovis Avenue. While dwellings may be constructed so as to attenuate interior noise below 45 db, outdoor areas on this parcel would be subject to high noise levels. The small size of the parcel gives little design flexibility to attenuate noise. If driveway access is permitted to Clovis Avenue, a solid wall noise barrier would not be useful for blocking Clovis Avenue's noise.

t. **Airport and Seismic Safety:** No difference in impacts.

Note: This single-parcel modification, adding only three dwelling units, has negligible resource and service impacts when considered alone. However, if it creates a precedent which would lead the way for extensive low-density to medium-density residential land use conversions, this project would be considered to have growth-inducing impacts. Cumulatively, the effect of such plan designation conversions would be large, as each conversion gives roughly a 300 percent increase in resource consumption and service demands.

Mitigation Measure for Modification No. 4:

The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.

[THE FOLLOWING MODIFICATION WAS APPROVED WITH 5.5 ACRES OF OFFICE COMMERCIAL, 9.9 ACRES OF NEIGHBORHOOD COMMERCIAL, 11.1 ACRES OF MEDIUM-LOW DENSITY RESIDENTIAL, AND A CURVED ALIGNMENT FOR MINNEWAWA AVENUE.]

Requested Plan Modification No. 5, as proposed, would create 9.9 acres of neighborhood commercial, 3 acres of medium-high density residential, 8.1 acres of medium-density residential, and 5.5 acres of office commercial on the west side of Clovis Avenue south of the California Avenue alignment; and would also continue the proposed Minnewawa Avenue collector, between Jensen and Church Avenue, along the half-mile alignment rather than curving to the east of the Washington Colony Canal (as depicted by the Plan Update).

The 1991 Roosevelt Update designates on this site 9.9 acres of office, 13.2 acres of medium-low density residential, and 3.4 acres of medium-density residential. The 1978/84 Roosevelt Plan designated the entire site for medium-density residential.

This property is not in the designated UGM Area and is within the incorporated City limits.

a. **Population Capacity:** Adds 49 persons, net. Adds 119 multi-family residents, and reduces single-family housing occupants by 70 [1,2].

b. **Housing Capacity:** Adds 39 multi-family dwelling units (maximum) on acreage designated for medium-high density. Creates an interface between single-family and multi-family.

   Note: The applicant's map submitted for this modification shows intent to seek "RP" zoning on 5.5 acres (of office commercial); the RP zone district would allow up to 26 more multi-family dwelling units. The applicant's map also shows 8.1 acres of "condominiums," which are herein designated as medium-density residential, but which could be constructed as medium-high density dwelling units; this could create a further 117 multi-family dwelling units.

   If average development densities are used, Modification No. 5 reduces single-family housing supply by 22 units [4.5]. However, the range of single-family units under the modification (36 to 75) largely overlaps the range of single-family units which could be constructed under the 1991 Update (41 to 91).

c. **Agricultural Land:** Creates interface between ranch (tree fruit, vines) and commercial.

d. **Open Space for Parks:** Increases demand.

e. **Commercial/Industrial Land:** Decreases office commercial by 13.8 acres and reduces interface between office and residential uses. Increases neighborhood commercial by 9.9 acres and creates interface between retail commercial/multi-family and retail commercial/agriculture.

Modification No. 5 (continued)

f. **Water Resources/Service:** Increases demand. This Modification would require 1.71 to 2.75 million gallons more domestic water per year [6,7,9]. Site is within 1/2 mile of City wells closed due to DBCP and nitrate.

This site is traversed by a large irrigation canal, possibly too large to run through pipe(s). While this presents an opportunity to construct trails, it also creates safety concerns.

g. **Air Quality:** Potential change in stationary source impacts cannot be estimated.

Mobile (vehicle) source air pollution would be increased. URBEMIS predicts that, if this Modification is approved, 38.1 more tons of ozone precursors will be emitted each year (+13.6 tons TOG; + 24.5 tons NOX); 134 more tons of carbon monoxide will be generated annually, and 2.7 additional tons of particulate matter will be emitted [15].

h. **Energy:** URBEMIS projects that this Modification will increase vehicular fuel consumption by about half a million gallons of fuel per year [15].

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Not on a designated intensity corridor. This site is neither on, nor within a mile of, bus lines.

Clovis Avenue, on the east edge of Modification No. 5, is projected to have a deficient level of service when the Roosevelt Community builds out, and may require widening to six lanes.

California and Minnewawa Avenues, on the north and west sides of the Modification, are proposed to be designated as major streets. Church Avenue (south edge of the site) is not projected to have deficient levels of service.

URBEMIS trip generation data indicates that this Modification will increase traffic by some 10,813 vehicle trips per day [15].

k. **Sewer:** Increases demand. Would require 0.005 mgd more sewage disposal and treatment capacity [11,12]. This site is in the service area for the Fowler Trunk sewer line, not yet constructed. One-quarter to one-half mile of sewer line lateral would have to be constructed to reach the Fowler trunk.

l. **Solid Waste:** Increases volume which must be transported. Requires increased landfill capacity. Residential and retail commercial refuse is increased; these waste streams are less amenable to recycling.

Modification No. 5 (continued)

m. **Schools:** Increases demand. Would generate 34 to 113 K-12 students and 24 to 82 preschoolers (1991 Roosevelt Update ranges would be: K-12, 29 to 72; preschoolers, 16 to 26) [14]. Site is within the present attendance area of Ayer School, presently operating year-round at its rated capacity: Ayer could add 350 to its capacity with maximum utilization of portable classrooms. Storey Elementary School is proposed to be constructed in this area in 1992.

n. **Library:** Increases demand.

o. **Fire and Paramedic:** Increases demand.

p. **Flood Control/Drainage:** Increases runoff. Modification No. 5 is in FMFCD drainage districts "BD" (west of the irrigation canal) and "BG" (east of the canal). No drainage improvements exist in either district.

q. **Police:** Increases service demand.

r. **Hazardous Materials:** Increases potential exposures, inasmuch as commercial sites may have retail inventories of consumer goods which include designated hazardous materials.

s. **Noise:** Decreases exposure of residential uses to Clovis Avenue traffic noise (so long as RP-zoned office commercial is not developed as multi-family residential). Increases multi-family exposure to loading/unloading and other noise associated with retail commercial uses.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 5:

(1) The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

(2) The Development Department shall require a traffic study for any site plan or development entitlements at this site, to assess the need for deceleration/acceleration lanes on Clovis Avenues.

[THE FOLLOWING MODIFICATION WAS APPROVED WITH: 30 ACRES OF COMMUNITY COMMERCIAL—WITH 15 ACRES CONVERTIBLE TO AN OFFICE PARK; 35 ACRES OF MEDIUM-DENSITY RESIDENTIAL; AND 92 ACRES OF MEDIUM-LOW DENSITY RESIDENTIAL.]

Requested Plan Modification No. 6 would create 77 acres of medium-low, 35 acres of medium, and 15 acres of medium-high density residential; and 30 acres of community commercial on approximately one quarter-section (157 acres) of land bound by Jensen, Sunnyside, Church, and Fowler Avenues.

The 1991 Update designates 118 acres for medium-low, and 39 acres for medium density residential. The 1991 Update does not designate community commercial or other large-scale intense urban uses in this vicinity. Modification No. 6 would be over 2-1/2 miles (by road) from the nearest plan-designated intensity corridor.

The No-Project Alternative (1978/84 Roosevelt Plan) designated this land for medium-density residential, with a ponding basin on Fowler Avenue and a landscaped buffer on Jensen.

This property is in the Urban Growth Management Area. It is entirely incorporated within Fresno's city limits and is located at the southeast edge of the City of Fresno's current sphere of influence.

a. **Population Capacity:** Adds 10 persons, net. Adds 623 multi-family residents and removes 613 single-family residents [1,2].

b. **Housing Capacity:** Adds 203 multi-family dwelling units (maximum added would be 242 multi-family units) [3]. Creates interfaces between multi-family/single-family. Removes 193 single-family dwelling units (the build-out range of this Modification would be 309 to 672 single-family units; 1991 Update range is 407 to 893 single-family units) [4,5].

c. **Agricultural Land:** No difference in impacts. This site has some prime agricultural land, but no agricultural land conservation contracts are extant.

d. **Open Space for Parks:** Increases demand.

e. **Commercial/Industrial Land:** Increases community commercial land by 30 acres. Creates interfaces between retail commercial/multi-family and retail commercial/single family residential.

f. **Water Resources/Service:** Potentially increases demand by 35 to 45 million gallons per year [6,7,9]. This location is within 1/2 mile of wells which exceed MCLs for DBCP and nitrate, and possibly for gross alpha radiation.

Modification No. 6 (continued)

g. **Air Quality:** No discernible difference in stationary source pollution.

URBEMIS estimates annual mobile source emissions would increase from this Modification: 60 more tons of ozone precursors (+21.5 tons TOG; + 38.5 tons NOX); 211.1 tons more of carbon monoxide; and 11.9 more tons of particulate matter [15].

Providing a large expanse of Community Commercial in this location would not serve to reduce air pollution from shorter trip lengths, because Modification No. 6 is being proposed at the urban fringe, where it could lengthen vehicle trips by drawing people from more urbanized portions of the community.

h. **Energy:** URBEMIS projects that the Modification will increase annual vehicle fuel consumption by 865,679 gallons [15].

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Not on a designated intensity corridor: this contravenes 1991 Update policies which require that new community commercial centers be located on an activity corridor. This site is not on any bus line and is two miles from the nearest bus route.

Jensen and Fowler Avenues have adequate capacity to carry the additional traffic generated by this Modification. However, Church Avenue is not yet constructed to urban standards, and Sunnyside Avenue (as a major street) will terminate north of Church Avenue. These two collectors would not be useful in moving large volumes of traffic, leading to increased impacts on Clovis Avenue, which is projected to have a deficient level of service at build-out of the 1991 Roosevelt Community Plan Update.

URBEMIS' built-in trip generation values project that this Modification would generate 17,646 more daily trips than the 1991 Update's designated land use for this property [15].

k. **Sewer:** Increases sewage. This Modification would generate 0.07 mgd more sewage [11,12]. This project is located in the service area for the Fowler sewer trunk. The Fowler trunk line runs along the north edge of this site.

l. **Solid Waste:** Increased volume (Modification adds ten net households plus 30 acres of commercial). Requires increased landfill capacity.

m. **Schools:** Increases demand. Modification No. 6 would generate 281 to 873 K-12 students and 171 to 407 preschool-aged children. (1991 Update would generate 286 to 701 K-12 students and 155 to 284 preschool-aged children) [14]. This project is located in Sanger Unified School District, Wash School attendance area. Wash School enrollment is presently 100 under its current rated capacity, and 610 to 810 under the school's maximum expanded capacity.

n. **Library:** Increases demand.

Modification No. 6 (continued)

o. **Fire and Paramedic:** Increases service demand. Modification No. 6 is outside the three-mile extended service areas of existing fire stations, and so residential development at this location would require construction of City Fire Station No. 15.

Even then, the site's location (over two miles from Fire Station No. 15) would require that all structures be equipped with automatic fire sprinklers (this UGM requirement supersedes less stringent fire sprinkler regulations). Furthermore, this total sprinkler installation may only be used as an interim measure until a new fire station is built. Approval of this Modification would, therefore, require planning, funding, and construction of an entirely new fire station beyond planned City Fire Station No. 15.

p. **Flood Control/Drainage:** Increases runoff. This modification is in FMFCD drainage district "BH." A ponding basin site has been acquired (not on the quarter-section covered by this Modification). No improvements have been made on the basin or on drainage pipelines in the area.

q. **Police:** Increases service demand.

r. **Hazardous Materials:** Increases potential exposures, inasmuch as commercial sites may have inventories of products which include designated hazardous materials.

s. **Noise:** Increases noise exposure by locating more dwelling units proximal to Jensen Avenue and by increasing traffic on Fowler Avenue. (The 1984 Noise Element did not develop noise contours for these segments of Jensen and Fowler Avenues.)

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 6:

(1) The Development Department shall require a water service study for any commercial development site plan or development entitlement application on this site. This study shall address: cost of water supply infrastructure; cost of developing adequate supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant sprinkler head pressure.

(2) The Development Department shall require a traffic study for any site plan or other entitlements at this site, to provide adequate internal circulation and to assess the need for deceleration/acceleration lanes and signalization on Fowler Avenue.

(3) The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of the site's commercial property at Jensen and Fowler Avenues.

Modification No. 6 (continued)

(4) The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conforming with FMFCD National Urban Runoff Program Study recommendation.

[THE FOLLOWING MODIFICATION WAS DENIED.]

Requested Plan Modification No. 7 would create some 20 acres of medium-low density residential at the southwest corner of Butler and Temperance Avenues.

The 1991 Roosevelt Update designates this property for agriculture/open space. The 1978/84 Roosevelt Plan designated this modification site as land for agriculture/open space.

This site is surrounded on three sides by planned residential uses, and its eastern boundary is formed by Temperance Avenue, a designated expressway with 106 to 110 feet of planned street right-of-way. Temperance Avenue is the eastern boundary of the City's present sphere of influence in the Roosevelt Community Plan Area. A railroad spur line runs along the eastern edge of Temperance Avenue. East of the railroad tracks from this modification site is a fruit processing (raisin drying) facility.

This Modification is in the UGM Area and has been annexed to the City of Fresno (Annexation No. 1164, effective 2/18/86).

a. **Population Capacity:** Adds 257 single-family occupants [2].

b. **Housing Capacity:** Adds 81 single-family residences [5].

c. **Agricultural Land:** Removes some 20 acres of farmland of statewide importance. Removes potential future interface between agricultural/single-family residential uses. Land to the north of this property (across Butler Avenue) is presently developed with low-density residential uses, and other land surrounding this property is presently in agricultural/open space uses.

d. **Open Space for Parks:** Increases demand.

e. **Commercial/Industrial Land:** A raisin processing plant located on the east side of Temperance Avenue could create a difficult interface between industrial and residential uses. The processing plant potentially generates noise (trucks, machinery, shift whistles), traffic impacts (slow-moving, turning, and backing trucks on Temperance), light and glare (plant lights) and odors (from on-site wastewater disposal facility upsets).

f. **Water Resources/Service:** Increases consumption of domestic water which could require purification treatment. Modification No. 7 would require 15.4 to 19.2 million gallons per year of domestic water [6].

   If these residences have water meters, they would consume approximately the same volume of water as an identical acreage of cropland [8]. However, cropland can utilize untreated groundwater and surface water.

   This site is within 1/2 mile of wells exceeding MCLs for DBCP and EDB.

Modification No. 7 (continued)

g. **Air Quality:** Decreases area-wide emissions of particulate matter. Increases ozone precursor and CO stationary source emissions. Increases mobile source pollution. Because URBEMIS does not give default values for agricultural air pollution mobile sources, a numerical comparison of 1991 Update and Modification emissions cannot be attempted.

h. **Energy:** Increases consumption.

i. **Plants and Wildlife:** May reduce habitat, although development of residential landscapes could provide more diverse habitat. This more diverse residential landscaped habitat would be accompanied by heavier human intrusion and more vehicle-related hazards for wildlife and birds.

j. **Transportation:** Not on a designated intensity corridor. No direct access permitted to Temperance Avenue, and no local streets are yet developed to provide access to collectors or arterials. This property abuts Butler Avenue, a developed collector, at its northern boundary.

Built-in trip generation figures in the URBEMIS model estimate an additional 810 average daily trips from this Modification. Butler and Temperance Avenues are projected to have adequate capacity for these vehicle trips.

k. **Sewer:** Increases sewage. Would generate 0.03 mgd [11]. This site is in the service area for the Fowler trunk sewer line, not yet constructed. Approximately one mile of sewer line lateral would have to be constructed to reach the Fowler trunk.

l. **Solid Waste:** Increases volume which must be transported. Requires increased landfill capacity.

m. **Schools:** Increases demand. Generates 31 to 76 K-12 students, and 16 to 31 preschool-aged children [14]. Located in Sanger Unified School District, where the two nearest elementary schools have adequate capacity.

n. **Library:** Increases demand.

o. **Fire and Paramedic:** Increases service demand in an area which is beyond the extended service radius of existing fire stations. Construction of City Fire Station No. 15 would be required, and even then, these residences would be outside the primary service area (two-mile running distance) of City Fire Station No. 15. Therefore, UGM requirements for residential fire protection in the three-mile extended service area would apply.

p. **Flood Control/Drainage:** Increases runoff. Modification No. 7 is in FMFCD drainage district "BM." The ponding basin for this drainage district has been acquired, and excavation of the basin has begun; the basin is not yet fenced. None of district "BM's" proposed drainage pipelines have been constructed.

q. **Police:** Increases service demand.

Modification No. 7 (continued)

r. **Hazardous Materials:** Increases potential exposure, inasmuch as the agricultural processing facility across Temperance Avenue uses. Phostoxin ™ (aluminum phosphide), a toxic fumigant that is stored in dry pellet form in metal canisters. (A hazardous material business plan has been approved by Fresno County Environmental Health.)

During use of this fumigant, the aluminum phosphide pellets are released from their canister into the sealed fumigation chambers, where the pellets sublimate to gaseous form. After the fumigation cycle, the aluminum phosphide is dissipated through direct venting. Use of Phostoxin ™ is under the regulatory oversight of the Fresno County Agricultural Commissioner. The raisin processing facility also posesses a permit to operate (issued by the San Joaquin Valley air quality agency), where this use and discharge of aluminum phosphide is noted.

s. **Noise:** Potential increased exposure from industrial and traffic sources. Industrial noise on the east side of Temperance Avenue is not subject to City noise control ordinances, and so may not be fully mitigable.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measure for Modification No. 7:

The Development Department shall require that any residential development site plan or entitlement application shall include a detailed analysis of potential nuisance impacts relative to the residential development's configuration, and shall incorporate design measures to mitigate dust, noise, odors, and light/glare associated with adjacent agricultural uses (processing and farming).

[THE FOLLOWING MODIFICATION WAS APPROVED, SUBJECT TO CONSIDERATION OF PLAN POLICIES AND THE ROOSEVELT PLAN IMPLEMENTATION COMMITTEE.]

Requested Plan Modification No. 8 would create 9.2 acres of heavy industrial on the south side of Jensen Avenue between Chestnut and Willow. The Modification requests the same land use shown in the 1978/84 Roosevelt Plan (the no-project alternative considered in this EIR). This property already has M-3, Heavy Industrial, zoning.

The 1991 Update designates this property for light industrial uses.

This property is in the UGM Area and is within incorporated City limits.

a. **Population Capacity:** No difference in impacts.

b. **Housing Capacity:** No difference in impacts.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space For Parks:** No difference in impacts.

e. **Commercial/Industrial Land:** Increases heavy industrial, and decreases light industrial, by 9.2 acres. Creates additional interface between light and heavy industrial uses on the Jensen frontage. Creates potential interface (across Jensen Avenue) of residential and heavy industrial uses.

f. **Water Resources/Service:** Potentially increases consumption, depending on the type of heavy industrial use permitted. (Light industrial uses estimated to consume maximum of 6.7 million gallons per year; water-intensive heavy industrial uses could consume almost 40 million gallons per year) [9, 10]. This site is within one-half mile of a public water system well which exceeds the MCL for DBCP.

g. **Air Quality:** Potential change in stationary source pollution cannot be estimated; this would depend on San Joaquin Valley Unified Air Pollution Control District Rules.

   Mobile source pollution comparison is also difficult to estimate. According to URBEMIS, manufacturing uses generate large commute trip volume, much heavier than light industrial uses; but "general" heavy industrial uses are estimated by URBEMIS to generate fewer trips per acre than light industrial uses.

h. **Energy:** Potential change in impacts cannot be estimated.

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** Potential change in impacts cannot be estimated, due to range of traffic possibilities outlined in "Air Quality" subsection above. This property is not on a designated activity corridor, and is approximately one-half mile from the nearest bus line.

Modification No. 8 (continued)

k. **Sewer:** As with water consumption, this Modification potentially causes a major increase in sewage, depending on the type of industry involved. Water-intensive heavy industrial uses could generate 0.1 mgd sewage at this location, whereas the 1991 Update's light industrial uses would generate a maximum of 0.02 mgd [12, 13].

This property would be served by the Chestnut Avenue sewer trunk line, which was projected to have capacity deficiencies from Jensen Avenue south to Annadale, if land were to fuly develop according to uses permitted by the 1978/84 Roosevelt Plan.

l. **Solid Waste:** Potential change in impacts cannot be estimated.

m. **Schools:** No difference in impacts.

n. **Library:** No difference in impacts.

o. **Fire and Paramedic:** Increases service demand.

p. **Flood Control/Drainage:** No difference in impacts. This site is in FMFCD drainage district "HH," where the drainage basin has been acquired, excavated, and fenced. However, drainage pipelines for "HH" remain to be built.

q. **Police:** No difference in impacts.

r. **Hazardous Materials:** Increases potential exposures, inasmuch as heavy industrial uses may have larger volumes of more hazardous materials involved in their activities.

s. **Noise:** Increases potential exposure of adjacent light industrial property, and residences across Jensen, to higher levels of industrial noise.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 8:

(1) Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all heavy industrial special permit applications submitted within the area covered by Modification No. 8.

(2) The Development Department and the Public Works Department shall require that temporary on-site basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendiations.

[THE FOLLOWING MODIFICATION WAS DENIED.]

Requested Plan Modification No. 9 would create 16 acres of medium-low density residential in the vicinity of the southeast corner of Clovis and Kings Canyon.

The 1991 Roosevelt Update designates this property for community commercial use (see also Requested Modification No. 14). The no-project alternative (1978/84 Roosevelt Plan) shows Regional Commercial on this property.

This site is not in the UGM Area. It has been incorporated into the City of Fresno.

a. **Population Capacity:** Adds 203 occupants of single-family housing [2].

b. **Housing Capacity:** Adds 64 single-family dwelling units (maximum added would be 71 single-family residences) [5]. Increases the linear footage of single-family/multi-family interface.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Increases demand and creates additional interface between residential and ponding basin.

e. **Commercial/Industrial Land:** Decreases planned community commercial shopping land by 16 acres.

f. **Water Resources/Service:** Increases demand by approximately 3 million gallons per year [6]. Site is within 1/2 mile of wells closed due to excess DBCP and EDB.

g. **Air Quality:** Increases stationary source pollution. Decreases mobile source (vehicular) pollution by 31.2 tons of ozone precursors per year (-11.2 tons ROG, -20 tons NOX); by 109.6 tons of carbon monoxide per year; and by 6.4 tons of particulate matter per year [15].

h. **Energy:** URBEMIS projects that this Modification will reduce vehicle fuel consumption by 450,663 gallons of fuel per year [15].

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** On a designated intensity corridor. This site is served by FAX bus route No. 22.

   This Modification would reduce traffic on Kings Canyon, which is not projected to be impacted east of Clovis Avenue.

   This Modification could also reduce traffic on Clovis Avenue, possibly improving the built-out Clovis Avenue level of service to "E" (if Clovis Avenue were widened to six lanes on its most impacted segments).

   Trip generation values built into the URBEMIS air pollution model indicate that this Modification would decrease daily vehicle traffic by over 9,200 trips [15].

Modification No. 9 (continued)

k. **Sewer:** Modification No. 9 is served by the Chestnut Avenue trunk sewer, which was projected to have inadequate capacity if 1978/84 Roosevelt Plan land uses built out their full densities.

l. **Solid Waste:** Potential change in impacts cannot be estimated.

m. **Schools:** Increases demand. Generates 24 to 60 K-12 students and 13 to 24 preschool-aged children [14]. Modification No. 9 is located in the FUSD attendance area for Ayer Elementary School, presently operating at year-round rated capacity, but capable of accommodating 350 more students with the maximum addition of portable classrooms. Proposed construction of Storey Elementary School in 1992 in this area may provide additional capacity.

n. **Library:** Increases demand.

o. **Fire and Paramedic:** Potential change in impacts cannot be estimated.

p. **Flood Control and Drainage:** Decreases runoff. This Modification is located in FMFCD drainage district BK. Most improvements are complete in district BK, including some of the proposed drainage pipelines.

q. **Police:** Decreases service demand.

r. **Hazardous Materials:** Decreases potential exposures, inasmuch as commercial sites may have inventories of products which include designated hazardous materials.

s. **Noise:** Decreases noise exposure potential by decreasing traffic on Clovis and Kings Canyon Avenues.

t. **Airport and Seismic Safety:** No difference in impacts.

[THE FOLLOWING MODIFICATION WAS APPROVED, BUT WITH A DUAL DESIGNATION FOR POUBLIC FACILITY/SCHOOL.]

Requested Plan Modification No. 10 would create 40 acres of regional commercial, 2 acres of office commercial, and 8 acres of medium-low density residential at the southeast corner of Peach and Kings Canyon Avenues.

The land uses requested in this Modification are the same as those in the no-project alternative (the 1978/84 Roosevelt Plan).

The 1991 Roosevelt Plan Update shows this 50 acres as part of a 90.5-acre proposed high school and middle school campus with school stadium (see also Requested Plan Modification No. 11).

Approval of Modification No. 10 would have secondary impacts from relocation of a proposed high school campus. Because Fresno Unified School District designated an alternate high school site for analysis, these secondary impacts can be discussed below in some detail.

Modification No. 10 is not in the UGM Area and is within the incorporated City limits.

a. **Population Capacity:** Adds 101 single-family dwelling occupants at the vicinity of Kings Canyon and Peach [2]. However, subsequent displacement of housing by use of alternate high school site would have the secondary impact of a net reduction of 757 single-family dwelling occupants in the overall Roosevelt Plan Area [2].

b. **Housing Capacity:** Adds 32 single-family dwelling units (maximum added would be 35 additional single-family units) [5]. Creates interfaces between single-family/multi-family residential; single-family residential/office commercial; single-family residential/regional commercial.

   Removal of preferred high school site creates the need to locate the high school at an alternate site, displacing 40 acres of medium-density residential: a loss of 270 single-family housing units (maximum loss, 373 single-family units). Therefore, this Modification has a potential secondary impact on housing: a net loss of some 238 single-family dwelling units.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Increases demand in vicinity of Kings Canyon/Peach, but decreases net plan area demand. Removes potential school playfield area from Kings Canyon/Peach vicinity.

e. **Commercial/Industrial Land:** Increases regional shopping center land by 40 acres. Creates interfaces between regional commercial/single-family residential; regional commercial/office commercial; and regional commercial/middle school site.

Modification No. 10 (continued)

f. **Water Resources/Service:** Decreases demand at Kings Canyon/Peach vicinity (water consumption differences cannot be numerically estimated).

Subsequent relocations of school facilities could affect demand in the vicinity of Willow and Church Avenues. Within 1/2 mile of the Church/Willow alternate high school site is a public well that exceeds the MCL for DBCP.

g. **Air Quality:** Increased mobile source pollution, due to regional commercial traffic and due to displacement of the high school from a location served by mass transit and central within its attendance area. (URBEMIS has no default values for school facility indirect source emissions, so a numerical comparison of emissions is not possible here.)

h. **Energy:** Potential change in impacts cannot be estimated with precision. Probably increases energy usage by generating additional vehicle trips for shopping center, and by necessitating longer vehicle trips for students attending the high school which would be displaced to the south edge of FUSD.

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** This Modification is on a designated intensity corridor, directly served by two bus routes. However, retail customers are much less likely than school students to utilize mass transit.

Modification No. 10 is projected to have significant negative impacts on Kings Canyon and Peach Avenues' traffic volumes, adding traffic to street segments which were already projected to operate at or below a "D" level of service (compare Figures EIR-17 and EIR-18 in Chapter H).

k. **Sewer:** Decreases sewage, given net reduction in housing units and low sewage generation of retail commercial uses. Because "standard" sewage generation volumes are not available for schools, a numerical net effet comparison cannot be made.

This Modification site is served by the Chestnut Avenue sewer trunk, which was projected to have capacity deficiencies if its service area were fully built out to 1978/84 Roosevelt Plan land uses.

l. **Solid Waste:** Decreases volume which must be transported, but increases landfill capacity requirement because commercial and residential refuse is less amenable to sorting or recycling.

m. **Schools:** Reduces land designated for school facilities by 50 acres. Necessitates subsequent plan amendment to provide 40+ acres of replacement area for high school/middle school campus and for alternate elementary school site. Increases operating expenses of school district, due to need for more student transportation to more distant alternate high school site. [Continued]

Modification No. 10 (continued)

Increases student generation at Kings Canyon/Peach vicinity: generates 12 to 30 K-12 students and 6 to 12 preschool aged children [14]. This is in the attendance area for Ayer Elementary School, presently operating year-round at capacity. Ayer could concievably add some 350 students by utilizing portable classrooms to the maximum extent. Storey School, proposed to be constructed in 1992, could alleviate elementary student capacity shortages in this area.

Decreased student generation would occur in the Willow/Church area, where alternate school sites would displace single-family residences. This would reduce K-12 student generation by 104 to 255 and preschool-aged child generation by 56 to 103 children [14].

n. **Library:** Decreases net demand in the overall Roosevelt Community.

o. **Fire and Paramedic:** Decreases demand.

p. **Flood Control/Drainage:** Increases runoff in the vicinity of Kings Canyon/Peach and in the vicinity of Church/Willow. This Modification site is in the FMFCD drainage district PP, where the ponding basin has been acquired, fenced, and excavated. However, no drainage pipelines have been constructed to this site. A hydrology study for this property was undertaken when City Rezoning Application No. R-90-13 was submitted for this area. It was determined that upsizing of a proposed 24" storm drain in Peach Avenue to 30" will be necessary to accommodate the land use proposed in this Modification.

The alternate high school site is in FMFCD drainage district BF, where basin site acquisition has been the only flood control improvement to date.

q. **Police:** Increases service demands.

r. **Hazardous Materials:** Increases potential exposures, inasmuch as commercial sites may have inventories of products which include designated hazardous materials.

s. **Noise:** Decreases on-site noise exposure, in that regional commercial uses are less sensitive to the high traffic noise levels projected at Kings Canyon/Peach. However, this Modification potentially increases overall noise levels by providing for increased traffic volumes on Kings Canyon and Peach Avenues.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measure for Modification No. 10:

The Development Department shall require that application for any site plan or development entitlement for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.

[THE FOLLOWING MODIFICATION WAS APPROVED, BUT WITH A DUAL DESIGNATION, ON THE 25 WESTERLY MEDIUM-LOW DENSITY ACRES, FOR PUBLIC FACILITY/SCHOOL.]

Requested Plan Modification No. 11 would locate 25 acres of medium-density and 18 acres of medium-low density on the southwest corner of Kings Canyon and Minnewawa Avenues. The land uses requested in this Modification are the same as those in the no-project alternative (the current 1978/84 Roosevelt Plan).

The 1991 Roosevelt Plan Update shows this 43 acres as part of a 90.5-acre high school and middle school campus with school stadium (see also Requested Plan Modification No. 10).

Approval of Modification No. 11 would require subsequent amendment of the Roosevelt Community Plan to designate another middle school site elsewhere. Because no alternate middle school site was designated by FUSD for analysis, a detailed discussion of secondary impacts cannot be accomplished herein.

Modification No. 11 is not in the UGM Area and is within the incorporated City limits.

a. **Population Capacity:** Adds 763 single-family dwelling occupants at Kings Canyon and Minnewawa [2]. However, designation of a replacement site for this middle school could displace persons from the Roosevelt Community. Since no alternative or replacement site has been indicated by Fresno Unified School District, potential net population impacts cannot be enumerated.

b. **Housing Capacity:** Adds 240 single-family residences Kings Canyon and Minnewawa. (Maximum single-family residences which could be added: 313 [4,5].) Creates interface between single-family residential and school uses.

   If this Modification were approved, Fresno Unified School District would be forced to designate another middle school site (no alternate for this middle school site was identified for consideration in the 1991 Roosevelt Update). When such a site is subsequently identified, a plan amendment will be required. Approval of an alternate middle school site will require displacement of other land uses designated in the Roosevelt Community Plan Area; these displaced uses could include residential.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space For Parks:** Increases demand in the vicinity of Kings Canyon/Minnewawa, but removes potential school playfields.

e. **Commercial/Industrial Land:** No difference in impacts (except creation of a single-family residential/regional commercial interface if both Plan Modifications 10 and 11 are approved).

f. **Water Resources Service:** Probably increases demand. Comparison of potential impacts cannot be numerically estimated, due to lack of data on school water consumption. 240 single-family residences would be expected to consume more water than a middle school on this site.

g. **Air Quality:** Increases stationary source pollution. Probably increases mobile source pollution (cannot be compared more precisely, because the URBEMIS computer model does not include default values for school sites). The MINUTP traffic model shows that significantly more automobile trips are generated by the Modification. Furthermore, occupants of single-family residents are less likely than middle school students to utilize mass transit.

h. **Energy:** Increases consumption.

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** On a designated intensity corridor. Served by two FAX bus routes.

Approval of this Modification is projected to reduce level of service below "E" on Kings Canyon between Peach and Clovis Avenues, necessitating an upgrade of Kings Canyon to six lanes. Even then, the stretch between Peach and Minnewawa is projected to have an "F" level of service.

Similar impacts would occur on Peach Avenue between Belmont and Butler, except that upgrading Peach to six lanes could achieve "E" as the lowest projected service level. Given Peach Avenue's "scenic" designation on this stretch, widening it to six lanes would have secondary impacts.

Minnewawa is classified as a local street between Kings Canyon and California Avenues. Approval of this Modification is projected to cause over 7,300 daily vehicle trips on Minnewawa at full build-out of the plan area. (The 1991 Update's school site designation is projected to create over 6,200 daily trips, according to MINUTP). Upgrading Minnewawa from "local" to "collector" status could require street widening, which would have a signficant impact on its scenic and historic row of palm trees.

k. **Sewer:** Probably increases demand. Potential change in impacts cannot be estimated. 240 residences would generate more sewage than a middle school with enrollment over 1,400.

This site is served by the Chestnut Avenue sewer trunk, which was projected to have inadequate capacity between Kings Canyon Avenue and California Avenue if the Roosevelt Community built out as planned in the 1978/84 Roosevelt Community Plan.

l. **Solid Waste:** Increases volume which must be transported. Requires more landfill capacity, because the household waste stream is less amenable to recycling.

Modification No. 11 (continued)

m. **Schools:** Reduces land designated for school facilities by 40.5 acres. Necessitates selection of alternate middle school site, and subsequent plan amendment to provide replacement area for middle school. Could increase school district operating expenses, if students would have to be transported to a less centralized site within the middle school attendance area.

   Increases student generation at Kings Canyon/Minnewawa vicinity: 85 to 208 K-12 students and 46 to 84 preschool-aged children [14]. This is in the attendance area for Ayer Elementary School, presently operating year-round at capacity. Ayer could conceivably add some 350 students by utilizing portable classrooms to the maximum extent.

   Construction of Storey Elementary School in 1992 may alleviate some of the elementary level capacity problem in the Ayer attendance area.

n. **Library:** Increases demand.

o. **Fire and Paramedic:** Increases service demand.

p. **Flood Control/Drainage:** Increases runoff. Modification No. 11 is in FMFCD drainage district PP, where the ponding basin has been acquired, fenced, and excavated. No drainage pipelines have been constructed to this Modification site.

q. **Police:** Increases service demands.

r. **Hazardous Materials:** No difference in impacts.

s. **Noise:** Increases exposure, in that homes would be located within the broad 60 db Ldn contour parallel to, and south of, Kings Canyon Road; whereas, middle school facilities could be arranged on the 40.5 acres so that noise-sensitive locations would not be within the noise impact area.

t. **Aircraft and Seismic Safety:** No difference in impacts.

Mitigation Measure for Modification No. 11:

The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.

[THE FOLLOWING MODIFICATION WAS APPROVED, BUT FOR LIGHT INDUSTRIAL USES WITH A DUAL DESIGNATION FOR OPEN SPACE/REGIONAL PARK.]

Requested Plan Modification No. 12 would create some 150 acres of heavy industrial on the quarter-section of land bounded by Jensen, Minnewawa, Annadale, and Peach Avenues. Modification No. 12 would establish the same land use designation as exists in the no-project alternative (1978/84 Roosevelt Plan).

The 1991 Roosevelt Plan Update designates this property for a regional park site.

Land covered by Modification No. 12 is in the UGM Area. This site has not been annexed to the City of Fresno.

If this site is not allocated for regional park use, an alternate site would be required. The City of Fresno Parks, Recreation, and Community Services Department has not designated any alternate site, so detailed estimation of secondary impacts is not attempted here. A brief analysis of three other potential park sites is included in Chapter B.2. of this EIR.

a. **Population Capacity:** No difference in impacts, except possible secondary impact of population displacement due to locating an alternate park site.

b. **Housing Capacity:** No difference in impacts, except possible secondary impact of housing displacement due to locating an alternate park site.

c. **Agricultural Land:** No difference in impacts, except possible secondary impact of possible agricultural land conversion due to locating an alternate park site.

d. **Open Space for Parks:** Removes 160 acres designated for park use, and removes the only land designated for a regional park in the Roosevelt community. Removes interfaces of park/light industrial and park/heavy industrial. Modification No. 12 would require that replacement regional park land be selected, and a plan amendment be processed to designate that replacement land for park use.

e. **Commercial/Industrial Land:** Increases industrial land by 147 acres. (Ten acres of this site would still be required for a designated FMFCD drainage/ponding basin.) Creates more interface between heavy industrial and light industrial. Places heavy industrial along Jensen Avenue, directly across from single-family residential uses.

f. **Water Resources/Service:** Increases potential consumption of public (domestic) drinking water. Some heavy industrial uses consume over 11,000 gallons per day, per acre, creating a maximum potential consumption of 590 million gallons per year from 147 acres of water-intensive heavy industrial land [9]. A park of some 160 acres would not require purified water for irrigation (untreated groundwater or untreated surface water would suffice). Potentially, some 156 million gallons of water per year could be required to irrigate a park [8].

[Continued]

Modification No. 12 (continued)

This site contains a designated ponding basin and an irrigation canal, which could be used for groundwater recharge.

The quarter-section encompassed by Requested Modification No. 12 is located within 1/2 mile of two public wells which exceed DBCP, gross alpha radiation, and nitrate MCLs.

g. **Air Quality:** Increases stationary source pollution. Increases mobile source pollution from commute traffic (numerical comparison cannot be made with 1991 Update land use designation, because URBEMIS does not include default values for parks).

h. **Energy:** Increases consumption.

i. **Plants and Wildlife:** Decreases habitat.

j. **Transportation:** Not on a designated intensity corridor. No bus route within 1-1/2 miles. This industrial land is farther away from the freeway system than any other industrial land designated in the Roosevelt Community.

k. **Sewer:** Increased sewage. Heavy industrial uses on all 147 acres could potentially generate over 560 mgd [13]. Even industrial uses which are not water-intensive would generate up to 94 mgd, much more sewage than a park [12]. Pretreatment plants, and City inspection and monitoring activities, could be required.

This quarter-section of land is in the Fowler trunk sewer service area.

l. **Solid Waste:** Vastly increases potential volume to be transported. Increases landfill capacity required, although bulk recycling of industrial refuse components is possible.

m. **Schools:** No difference in student capacity impacts.

n. **Library:** No difference in impacts.

o. **Fire and Paramedic:** Increases service demand. About one-eighth of this site is outside the two-mile service radius of the existing fire station. Moreover, the maximum fire "running distance" for industrial property is 1.5 miles. Industrial development on this site would require construction of City Fire Station No. 19, and even then would require automatic fire sprinklers in every nonresidential building in the eastern half of the site. This sprinkler requirement can only be used as an interim measure. Industrial development on the eastern half of this site would require planning, funding, and construction of a new City fire station in addition to Station 19.

Modification No. 12 (continued)

p. **Flood Control/Drainage:** Increases runoff. Changes nature of runoff to that which carries greater risk of contamination. Would require application of National Pollution Discharge Elimination System (NPDES) permitting by City and Regional Water Quality Control Board. This quarter-Section of land is in FMFCD drainage districts "BD" and "BG". Neither drainage district has any improvements (basins are not yet acquired, etc.). The residential design of these drainage basins would need to be changed if this modification were approved.

q. **Police:** Potential change in impacts cannot be estimated. Police calls from the City's two regional parks were compared with police calls from two quarter-section industrial areas in southeast Fresno. This comparison revealed that a regional park adjacent to a new residential area (which would be the case if Modification No. 12 were not approved) generated fewer police calls and fewer police reports than a comparably sized industrial area.

r. **Hazardous Materials:** Increases potential exposures from heavy industrial material inventories and processes. Any hazardous waste and substance sites at this location would have to be resolved before either park or industrial use were instituted.

s. **Noise:** Increases potential exposures to industrial noise. The City's 1984 Noise Element projected 60 dB Ldn noise contour parallel to and 600 feet south of Jensen Avenue. Industrial uses are listed as "insensitive" to noise in the City's 1984 Noise Element. Parks are not evaluated for noise sensitivity in the 1984 Noise Element, but could experience outdoor activity and communication interference from high noise levels.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 12:

(1) The Development Department shall require a water service study for any nonresidential site plan or development entitlement at this site. This study shall address: cost of water supply infrastructure; cost of developing adequate water supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant/sprinkler head pressure.

(2) The Development Department and Public Works Department shall require that any nonresidential development on the eastern half of this property shall be conditioned upon dedication and improvement of the Minnewawa Avenue right-of-way to at least the City's local industrial street standard.

(3) Prior to, or concurrent with, the approval of any nonresidential site plan or development entitlement, project applicants shall develop and secure City of Fresno approval of a local street circulation design for this entire 157-acre site.

Modification No. 12 (continued)

(4) The Development Department and the Parks, Recreation, and Community Services Department shall select alternate regional park land to serve the Roosevelt Community.

(5) The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.

(6) Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all nonresidential special permit applications submitted within the area covered by Modification No. 12.

(7) The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of nonresidential uses at locations which exceed the permissible running distance.

[THE FOLLOWING MODIFICATION WAS APPROVED, BUT WITH A DUAL DESIGNATION FOR OPEN SPACE/NEIGHBORHOOD PARK.]

Requested Plan Modification No. 13 would create seven acres of community commercial at the northwest corner of Willow and Lane Avenues. This is similar to the land uses in the "no-project" alternative: office and community commercial.

The 1991 Roosevelt Plan Update (and the City's 1989 Master Plan for Parks and Recreation) designated this site for a neighborhood park (see also Modification No. 2).

This location is not in the UGM Area and is within the incorporated City limits.

a. **Population Capacity:** No difference in impacts.

b. **Housing Capacity:** No difference in impacts.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Removes seven acres of park space and removes a designated neighborhood park site. Even considered in concert with Requested Plan Modification No. 2, net loss of park space would be 3.2 acres, and the additional park land in Modification No. 2 would not alone meet the minimum city size standard set for neighborhood parks.

e. **Commercial/Industrial Land:** Increases community shopping center land by seven acres and removes a park/community commercial interface.

f. **Water Resources/Service:** Decreases consumption.

g. **Air Quality:** Increases stationary source pollution. Increases mobile source pollution. (URBEMIS does not provide default values for park land indirect source emissions, so a numerical comparison is not possible.)

h. **Energy:** Increases consumption.

i. **Plants and Wildlife:** Decreases habitat.

j. **Transportation:** Within a designated intensity corridor. This site is within one-quarter mile of two bus routes.

   The site fronts on Willow Avenue, which is projected (at build-out of the 1991 Update) to have adequate capacity south of Kings Canyon but inadequate capacity north of Kings Canyon. Kings Canyon itself is projected to have levels of service below "E" on either side of the project. By adding commercial acreage, Modification No. 13 would make these situations worse.

k. **Sewer:** Increases sewage, but exact determination of comparative sewage generation cannot be made, due to lack of data on volume of sewage generated daily by public parks.

Modification No. 13 (continued)

l. **Solid Waste:** Potential change in impacts cannot be estimated.

m. **Schools:** No difference in impacts.

n. **Library:** No difference in impacts.

o. **Fire and Paramedic:** Increases service demand.

p. **Flood Control and Drainage:** Increases runoff. Modification No. 13 is located in FMFCD drainage district "A," which is part of an existing drainage assessment district. Drainage area "A" is fully improved (basin acquired, excavated, fenced; drainage pipelines installed).

q. **Police:** Potential change in impacts cannot be estimated.

r. **Hazardous Materials:** Increases potential exposures, inasmuch as commercial sites may have inventories of products which include designated hazardous materials.

s. **Noise:** No difference in impacts. The 1984 Noise Element depicts the 60 dB Ldn noise contour for Lane Avenue as almost contiguous with its right-of-way.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measure for Modification No 13:

The Development Department and the Parks, Recreation, and Community Services Department shall select an alternate neighborhood park site for this Master Parks Plan Service Area.

[THE FOLLOWING MODIFICATION WAS APPROVED.]

Requested Plan Modification No. 14 would designate 49 acres at the southeast corner of Kings Canyon and Clovis Avenue as Regional Commercial (this would include the 16 acres covered by Requested Modification No. 9). The land use requested in this Modification is the same as that shown in the no-project alternative (the 1978/84 Roosevelt Plan).

The 1991 Roosevelt Plan Update designates this site for community commercial.

This site is not in the UGM Area. It is within the incorporated City limits.

a. **Population Capacity:** No difference in impacts.

b. **Housing Capacity:** No difference in impacts.

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** No difference in impacts.

e. **Commercial/Industrial Land:** Decreases community commercial by 49 acres and creates 49 acres of regional commercial.

   Inasmuch as this land is already zoned C-3, this plan modification request is intended to prevent the 1991 Roosevelt Update from applying more stringent community commercial shopping center standards to proposals at this partially-developed site.

f. **Water Resources/Service:** No difference in impacts.

g. **Air Quality:** Although URBEMIS distinguishes between emissions associated with regional and community shopping centers, Policy No. 1-8.5 of the 1991 Roosevelt Plan Update would allow identical commercial uses in both designations. Therefore, service area and traffic volume would be expected to be identical: no difference in impacts.

h. **Energy:** No difference in impacts.

i. **Plants and Wildlife:** No difference in impacts.

j. **Transportation:** This center anchors the eastern end of the designated Kings Canyon commercial intensity corridor. As was mentioned above under "Air Quality," vehicle trips are expected to be the same.

   Without a unified internal circulation pattern, this site's access points could create problems on the major streets abutting the site.

k. **Sewer:** No difference in impacts.

l. **Solid Waste:** No difference in impacts.

m. **Schools:** No difference in impacts.

Modification No. 14 (continued)

n. **Library:** No difference in impacts.

o. **Fire and Paramedic:** No difference in impacts.

p. **Flood Control and Drainage:** No difference in impacts.

q. **Police:** No difference in impacts.

r. **Hazardous Materials:** No difference in impacts.

s. **Noise:** No difference in impacts.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measure for Modification No. 14:

The Development Department shall require that any applications for site plans or development entitlements for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.

[THE REQUEST FOR THE FOLLOWING MODIFICATION WAS WITHDRAWN BY THE APPLICANT.]

Requested Plan Modification No. 15 would create 241 acres of medium density residential and 16 acres of ponding basin/open space. The applicant for this modification has stated that the project's overall density will be 4.3 units per acre and the project will contain 1020 dwelling units (maximum). This modification covers an extensive irregularly-shaped area, from California Avenue between Fowler and Clovis Avenues south to Jensen west of Sunnyside Avenue.

The 1991 Roosevelt Update designates this site for 220 acres of medium-low density residential, 25 acres of medium density residential, and ponding basin/park (16 acres, currently owned by FMFCD). The underlying zoning of the ponding basin is R-2, a multi-family zone district which was approved before the effective date of the City's Local Planning and Procedures Ordinance. If the ponding basin site were not used, and it it were sold by the Fresno Metropolitan Flood Control District, it could be developed for multi-family uses. Modification No. 15 originally proposed relocating the ponding basin, but this Modification request has since been amended, and Modification No. 15's design concept shows the ponding basin remaining in its present location and its present designated use for drainage/open space.

The 1978/84 Roosevelt Plan (the no-project alternative) designated the land covered by Modification No. 15 for medium-density residential. This land comprises roughly half of the Canterbury Station proposal, a residential development which was not actualized (and which was evaluated in City of Fresno Environmental Impact Report No. 10090).

This property is in the Urban Growth Management Area. It is within the incorporated Fresno City limits.

a. **Population Capacity:** Removes 124 occupants of single-family residences [2].

b. **Housing Capacity:** With the 4.3 unit per acre constraint (averaged over 241 acres), this Modification would reduce the potential number of single-family residences by 39 (maximum difference: Modification at 4.3 units/acre would allow 199 fewer single-family homes than 1991 Update) [4,5].

   There is a small potential single family/multiple family interface, because R-2 zoning exists on a narrow strip of land between the south edge of the ponding basin and Church Avenue's right-of-way. This R-2 zoned land is not part of Modification No. 15 (it is in different ownership).

c. **Agricultural Land:** No difference in impacts.

d. **Open Space for Parks:** Decreases demand.

e. **Commercial/Industrial Land:** If requesting a relocation of the park/ponding basin, the Modification would increase the interface between single-family residential on this site and commercial land west of this site.

Modification No. 15 (continued)

f. **Water Resources/Service:** Decreases consumption by 7.4 to 9.3 million gallons per year [6]. This site is proximal to five public water wells which exceed the MCL for DBCP; one well which exceeds the MCL for nitrate; and one which appears to exceed the gross alpha radiation MCL. Relocation of the ponding basin may affect its suitability for use in the groundwater recharge program, if the Modification's proposed basin location is on or closer to contaminated soil.

g. **Air Quality:** Decreases stationary source pollution. Decreases mobile source pollution: per year, 1.6 fewer tons of ozone precursors (-0.6 ton TOG; -1.0 ton NOX); 6.1 fewer tons of carbon monoxide; and 0.1 less ton of particulate matter [15].

h. **Energy:** Decreases consumption. URBEMIS projects that the Modification would provide for a 22,000 gallon decrease in vehicular fuel consumption [15].

i. **Plants and Wildlife:** Increases habitat by designating more park space.

j. **Transportation:** Not in an activity corridor. This site is over one mile from the nearest bus route.

The site takes some access from Clovis Avenue, which is projected at (build-out of the 1991 Update) to be at Service Level "F" in its four-lane configuration south of California Avenue. If Clovis Avenue were upgraded to six lanes, its service level on this segment would be "E." Jensen Avenue between Clovis and Sunnyside Avenues is also projected to be severely impacted (see Figure EIR-17 in Chapter H of this EIR). Adequate traffic capacity exists on Sunnyside, California, Fowler, and Church Avenues, but these are tributary to other major streets for which the MINUTP traffic model shows possible congestion problems.

URBEMIS traffic generation projections indicate that this Modification would decrease traffic by 390 daily vehicle trips [15].

k. **Sewer:** Decreases sewage by 0.01 mgd [11]. This site is in the Fowler trunk sewer line's service area. The Fowler trunk line is not yet constructed. Lateral sewer lines are likewise not yet installed for the Fowler trunk.

l. **Solid Waste:** Decreases volume which must be transported. Decreases utilization of landfill capacity.

m. **Schools:** Decreases demand. Using Fresno Unified School District's student generation figures, the modification would generate 15 to 36 fewer K-12 students and 8 to 13 fewer preschool-aged children [14].

This Modification site is in the Sanger Unified School District and is close to Lone Star Elementary School. Lone Star School presently has room to enroll 50 more students. If Lone Star were to add portable classrooms and go to a year-round schedule, 580 more students could accommodated. Sanger Unified School District staff has estimated that this modification would generate 129 K-8 students and 52 high school students. Adequate school capacity is projected by SUSD.

Modification No. 15 (continued)

n. **Library:** Decreases demand.

o. **Fire and Paramedic:** Decreases demand. Some 40 acres of this site is outside the extended (three-mile running distance) service area for Mid-Valley Fire Station 8. To adequately serve that 40 acres, City Fire Station No. 15 would have to be constructed and staffed.

p. **Flood Control and Drainage:** Increases runoff. Modification No. 15 is located in FMFCD's drainage district "BH." The flood control basin site for BH has been acquired (and is located just north of the California alignment, close to Clovis Avenue). However, no other improvements have been made in "BH"--basin not excavated or fenced, nor drainage pipelines installed.

q. **Police:** Decreases service demand.

r. **Hazardous Materials:** No difference in impacts.

s. **Noise:** Decreases noise exposure, inasmuch as fewer homes will generate less traffic noise.

t. **Airport and Seismic Safety:** No difference in impacts.

Mitigation Measures for Modification No. 15:

(1) The limit of 1020 single-family dwelling units for this site shall be designated on the official plan map of the 1991 Roosevelt Update.

(2) Any subsequent proposal to relocate the ponding basin, or to use the ponding basin site for other than drainage and open space uses, shall require a plan amendment application. As part of this plan amendment application, the Development Department and Public Works Department shall require a water quality, drainage, and recharge feasibility study, to ensure that relocation of the ponding basin does not have adverse effects on drainage for FMFCD drainage district BH, on recharge activities, or on groundwater quality. The impacts and feasibility of R-2 zoning (multi-family) development on theerstwhile ponding basin parcel shall also be re-evaluated, and appropriate zoning and density controls applied as found to be appropriate.

APPENDIX A

ROOSEVELT COMMUNITY HAZARDOUS WASTE AND SUBSTANCES SITES LIST

The following list was abstracted from the November, 1990 list prepared by the California State Office of Research and Planning, and the US Environmental Protection Agency's National Priority List. Data regarding the specific nature of hazardous waste and substance problem(s) at each site was obtained by abstracting files of the Fresno County Environmental Health services and by contacting other managing agencies. Most of the following listed facilities are in assessment and remediation phases of their hazardous material releases. The managing agency or agencies involved in reporting each site are listed by these abbreviations:

EHS	Fresno County Environmental Health Services PO Box 11867, Fresno, California 93775 (209) 445-3357
RWQB	Regional Water Quality Control Board Central Valley Region, Fresno Office 3614 East Ashlan, Fresno, California 93726 (209) 445-5116
WRCB	Water Resources Control Board Information Officer 2014 "T" Street, Sacramento, California 95814 (916) 739-4267
CWMB	California Integrated Waste Management Board 1020 Ninth Street Suite 300, Sacramento, CA 95814 (800) 553-2962
DHS	Cal-EPA Department of Toxics [formerly part of the California State Department of Health Services] Site Mitigation Unit: 714/744 "P" Street, Sacramento, CA 94234-7320 (916) 324-3773 Region 1 Fresno Ofc: 1515 Tollhouse Road Clovis, CA 93611 (209) 297-3901
EPA	U.S. Environmental Protection Agency, Region IX 75 Hawthorne Street, San Francisco, CA 94105 (415) 744-1578

Location (Street Address) Site/Company Name	Listed By: Managing Agency/Agencies	Problem
5045 E. Anderson Wofford's Flying Services	WRCB/EHS	Aviation fuel spill
2131 E. Annadale Midnight Express Trucking	WRCB	Tank Leak
3110 E. Belmont 7-11	WRCB/EHS	Tank Leak
4556 E. Belmont (used car lot)	WRCB	Tank Leak
5191 E. Belmont Harold's Automotive	WRCB/EHS	Tank Leak
3603 E. Butler Tino's Shell Service	WRCB/EHS	Tank Leak
2701 S. Byrd Ryder Truck Service	WRCB	Tank Leak
3600 E. California PG&E Service Center	DHS	~~[UNVISITED]~~ PCB contamination of soil
4734 E. Carmen Pacific Bell	WRCB/EHS	Tank Leak
1605 S. Cedar Unocal service station	WRCB/EHS	Tank Leak
2202 S. Cedar The Christian Brothers	WRCB	Tank Leak
3252 S. Cedar H. M. Largent Company	DHS	[unlisted]
3600 S. Cedar Dunavant-Fambro Warehouse	WRCB/EHS	Tank Leak
3223 E. Church Guild/Cribari Winery	WRCB/EHS	Tank Leak
525 S. Clovis Beacon service station #638	WRCB/EHS	Tank Leak
1888 S. East Old Sun Maid Raisin Plan (now United Grocers Warehouse)	WRCB/EHS	Tank Leak; possible diesel pipeline leak from adjacent railway diesel line
2510 S. East Ametek Valley Foundry	WRCB	Tank Leak
Fresno Air Terminal Clovis & McKinley Avenues	DHS	Tank leak; possible improper solvent disposal and waste burial from 1940's
2379 S. "G" St. Alert-O-Lite	WRCB/EHS	Tank Leak
2089/2090 S. Golden State AT&SF Calwa Rail Yard	WRCB/EHS	Tank Leak
3363 S. Golden State Suburban Propane	WRCB/EHS	Tank Leak
4025 S. Golden State Texaco terminal stations	WRCB	Tank Leak
4582 E. Harvey Fibreboard Box & Millwork	WRCB/EHS	Tank Leak
2865 E. Jensen "Private shop"	WRCB	Tank Leak

(AUGUST 1991)

Location (Street Address) Site/Company Name	Listed By: Managing Agency/Agencies	Problem
3230 E. Jensen Jensen Auto Parts	WRCB	Tank Leak
5408 E. Jensen Demirjian Property	DHS/EHS	Improper disposal (burial) of materials
4740 E. Kings Canyon Jorgensen's Battery Shop	DHS	[unlisted]
5698 E. Kings Canyon USA Petroleum service station	WRCB/EHS	Tank Leak
3220 E. Malaga Coca-Cola	WRCB/EHS	Tank Leak
2702 S. Maple American Warehouse	DHS	Herbicide accumulation in settling pond for pesticide handling warehouse
3265 S. Maple Purity Oil Sales (formerly)	EPA/DHS/WRCB/EHS	Soil and groundwater contamination at waste oil facility
7183 E. McKinley Thompson-Hayward Agricultural & Nurtition Co. ("THAN") (formerly)	EPA/DHS/WRCB/EHS	Soil and groundwater contamination at pesticide handling facility
2099 E. North General Tire Service	WRCB/EHS	Tank Leak
5610 E. Olive E & J Gallo Winery	WRCB/EHS	Tank Leak
1606 E. Orange Harry's Automotive Service	WRCB/EHS	Tank Leak
3280 S. Orange Orange Avenue Landfill	CWMB/WRCB/DHS/EHS	Unlined solid waste facility with groundwater contamination
180 S. Parkway TNT Bestway (formerly)	WRCB/EHS	Tank Leak
3128 S. Parkway Willig Freight Lines	WRCB	Tank Leak
3333 S. Peach P.P.G. Industries	WRCB/EHS	"Tank Leak"--tank removed 7/86; no soil tests required or done at that time
2012 S. Pearl 7-UP Bottling	WRCB/EHS	Tank Leak
4557 E. Pine Allen Residence	WRCB/EHS	Tank Leak
2396 S. Railroad Anderson Clayton	WRCB/EHS	Tank Leak
2796 S. Railroad Cal-Trans	WRCB/EHS	"Tank Leak"--tanks removed 3/88; no soil contamination test results positive
200 Santa Fe A.R. Zacher Co.	WRCB/EHS	Tank Leak
717 S. Seventh F.U.S.D. Maintenance yard	WRCB/EHS	Tank Leak
2501 S. Sunland FMC-Fresno	EPA/DHS/WRCB/EHS	Soil and groundwater contamination at pesticide handling facility (see attached)
3464 E. Ventura Regal service station #611 (Texaco Food Mart)	WRCB/EHS	Tank Leak
3829-3839 E. Ventura Seibert Oil Co.	WRCB/DHS/EHS	Tank Leak
3857 E. Ventura Lamoure's Dry Cleaners	WRCB/EHS	Tank Leak
4161 E. Ventura Chevron service station	WRCB/EHS	Tank Leak
4248 S. Willow Turners Auto Wrecking	WRCB	Tank Leak

(AUGUST 1991)

F M C - FRESNO SUPERFUND SITE

United States Environmental Protection Agency, Region IX, San Francisco

Fresno, CA May 1991

EPA Announces Plan to Clean Up Soil and Groundwater

The U.S. Environmental Protection Agency (EPA) is requesting comments on the proposed clean-up plan for the FMC-Fresno Superfund site. The proposed plan for the site is preliminary, and EPA encourages you to comment on all of the alternatives described in this fact sheet. A Community Meeting will be held on May 28, 1991 to discuss these alternatives. (See the back page for details.)

Groundwater

EPA's plan for clean up of contaminated groundwater at the site is to pump and treat contaminated groundwater using activated carbon (adsorption) and air stripping technologies, and reinject the treated water into the groundwater on site. Institutional controls (legal measures) restricting the installation of water wells would also be required.

Soil

The plan to clean up contaminated soil is to excavate soils contaminated in excess of selected clean-up levels (to a depth of 15 feet) and treat the excavated material using stabilization and soil washing technologies. As the FMC-Fresno plant is currently an operating facility, the cleanup of several areas of contaminated soil within the active portion of the plant may occur in phases to allow operations to continue at the facility. Institutional controls restricting future use of the property would be required, and a cap (protective cover) would be installed over several areas of the site in order to prevent rainwater from causing further migration of soil contaminants to groundwater.

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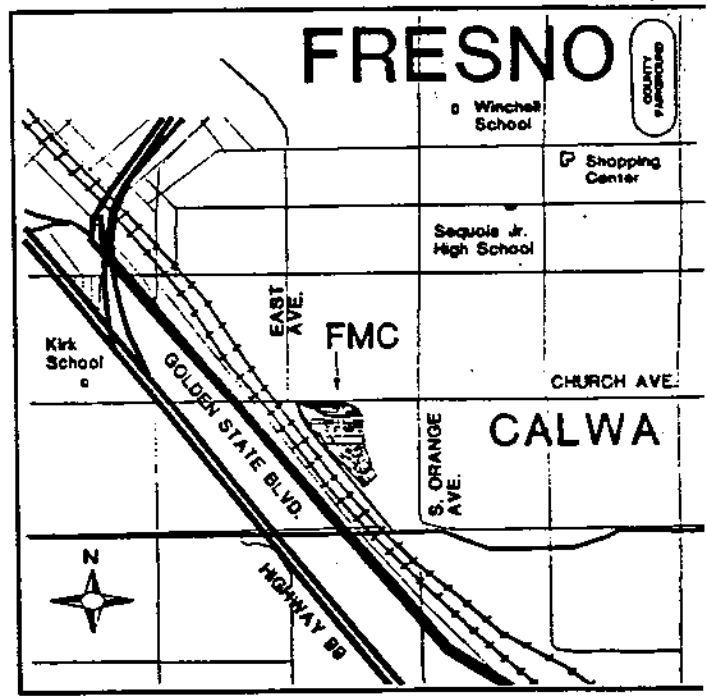


Figure 1: Area map of FMC - Fresno Superfund Site

The California Department of Health Services (DHS) has participated in the selection of the proposed clean-up plan. Detailed explanations regarding the extent of contamination at the site, potential health risks posed to the community by the contaminants, and all alternatives considered for cleaning up the site are contained in the Remedial Investigation, Risk Assessment and Feasibility Study reports. A fact sheet summarizing the Remedial Investigation and Risk Assessment reports was released in November 199(These documents are available for rev'ew, along with other site-related documents, in the library listed on page 9 of this fac sheet.

SITE BACKGROUND

Industrial operations at the FMC-Fresno site (Figu 2) began in 1931, when Sunland Sulfur Company began processing sulfur fc agricultural uses. In 1946, Sunland started formulating fertilizers and dry pes

Public Comment Period - May 8 through June 7, 1991

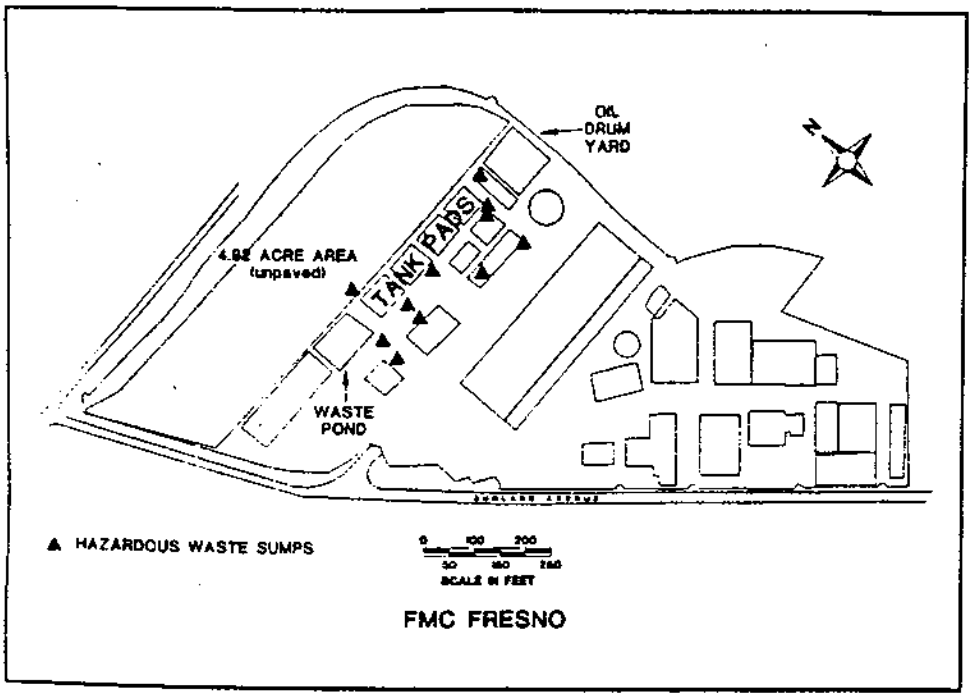


Figure 2: Detailed Site Map

cides in addition to sulfur products. FMC bought the facility in 1959, and added the formulation of liquid pesticides to plant activities. During the 1960s and 1970s, FMC discharged liquid wastes and rinse water to an unpaved, vacant 4.92-acre lot (Figure 2). Also from 1963 to 1974, rinse water from a drum-washing operation was sprayed onto a cement evaporation pad within an oil drum yard. During the early 1970s, FMC used a clay-lined waste pond to collect wastes from plant operations and rainwater run-off.

In 1979, the California Regional Water Quality Control Board (Regional Board) requested that FMC initiate a groundwater monitoring program after a Regional Board inspection revealed potential groundwater contamination at the site. FMC subsequently conducted groundwater and soil sampling in conjunction with the Regional Board and DHS.

In 1984, the site was proposed for inclusion on the National Priorities List (NPL), EPA's list of the nation's most urgent hazardous waste sites. In December 1986, EPA and FMC signed a Consent Order (a legally binding agreement) requiring FMC to perform a Remedial Investigation and Feasibility Study for the site. FMC, at the direction of EPA and DHS, will implement the remedy selected for this site.

SUMMARY OF SITE CONTAMINATION

Groundwater Contamination

Numerous contaminants have been detected in two water- bearing sand zones beneath and downgradient (north-northwest) of the site. These two sand zones are separated by a less permeable zone; however, some contaminants have migrated from the shallow sand zone to the deeper sand zone (Figure 3). The depth to the water table is approximately 72 feet. The majority of usable water in the area is extracted from aquifers (sand zones capable of passing and storing large volumes of water) present beneath this less permeable zone.

Table 1 (on the next page) indicates the concentration of groundwater contaminants detected most frequently beneath the site. Groundwater contaminant concentrations within the shallow sand zone are typically higher than those in the deeper sand zones, although this is not the case for all contaminants. Groundwater contamination has also been detected in monitoring wells downgradient (north- northwest) of the site. Groundwater contamination beneath and downgradient from the site is believed to have originated from wastewater discharges to the oil drum yard, waste pond, 4.92 acre-area, and sumps.

Soil Contamination

Soil contamination is present throughout much of the site, but is most prevalent beneath the following areas: the 4.92 acre-area, waste pond, oil drum yard, hazardous waste sumps, and stained areas (Figure 2). Soil contamination present in these areas is summarized below. See Table 2 for a list of the chemicals that are most abundant in soils and present the greatest risk.

Unpaved 4.92 Acre-Area. The contaminants detected at the highest concentrations in this area include organochlorine pesticides, herbicides, and organophosphorous pesticides. Dioxins and furans were also detected in surface samples from this area and the oil drum yard. Contaminants in this area have been detected at depths exceeding 50 feet, although most contamination is located in the uppermost 20 feet below ground surface.

Waste Pond. The contaminants detected at the highest concentrations beneath the waste pond include organochlorine and organophosphorous pesticides and other organic chemicals such as cyclohexanone. These chemicals have been detected at depths down to 55 feet.

Oil Drum Yard. The contaminants detected at the highest concentrations beneath the oil drum yard include organochlorine and organophosphorous pesticides, ethylene dibromide, xylene, and other solvents including cyclohexanone. Twenty-one organic contaminants have been detected at

Table 1: GROUNDWATER CONTAMINATION AND CLEAN-UP LEVELS (ppb)*

Chemical **	Maximum Concentration	Federal MCL	Federal MCL Goals	State MCL	State Action Level	Health Based Level	Quantification Limit
Organochlorine Pesticides							
BHC-gamma	3.3	0.2	0.2	4		0.0119	0.05
Endosulfan I	2.5					0.431	0.05
Dieldrin	4.5				0.05	0.001	0.10
Organophosphorous Pesticides							
Dimethoate	1100				140	1.72	1.3
Ethyl Parathion	6.7				30	1.12	0.3
Halogenated Aliphatics							
Dibromochloropropane	110	0.2	0	0.2		0.0055	0.15
Chloroform ***	126	100				1.27	5
Carbon Tetrachloride	125	5	0	0.5		0.0595	5
1,2-Dichloropropane	5200	5	0	5		0.114	5
Trichloroethene	207	5		5		0.704	5
1,1-Dichloroethane	6.5			5		431	5
1,1,1-Trichloroethane	3.7	200	200	200		388	5
Bromodichloromethane ***	40	100				0.0595	5
Tetrachloroethene	3.8	5	0	5		0.152	5
Miscellaneous Organics							
Acetone	5100					431	10
Bis(2-ethylhexyl) Phthalate	39			4		1.11	10
Casoron	29					4.3	0.15
Monuron	22						0.015
Pentachlorophenol ****	1200	1	0		30	0.967	50
Toluene	29	1000	1000		100	1290	5
Xylenes	7	10000	10000	1750		8620	5
Dinoseb (DNBP)	31	7				8.62	0.35
4-Chloroaniline	13					0.442	10

* All values in this table are reported in parts per billion (ppb).
** This table only lists those chemicals detected in ground water with occurances greater than 5%. Several other chemicals have been detected an EPA has also set clean-up levels for these chemicals.
*** Federal MCL is set for total trihalomethanes.
**** MCL and MCL Goals for pentachlorophenol are proposed values.
___ Indicates the selected clean-up level.

depths close to the water table (72 feet). The concentrations of these contaminants do not consistently decrease with depth, as they do in the 4.92 acre-area and the waste pond. It is likely that pesticides are found in deeper soil because they dissolved in solvents after being released into the environment.

Hazardous Waste Sumps. Twelve hazardous waste sumps are present within the facility. Organochlorine and organophosphorous pesticides and solvents including cyclohexanone have been detected beneath several of these sumps. Pesticides and solvents have been detected beneath several sumps at depths close to the water table.

ASSESSMENT OF HEALTH RISKS

A risk assessment is used to estimate the potential for chemicals to cause harmful effects on human health and the environment. The risk assessment assumes that no action will be taken to clean the site, and as a result is a very conservative document.

To protect human health, EPA is most concerned with the probability that exposure to specific chemicals may result in cancer and other adverse health effects. A risk level of 1 in 1,000,000 means that one additional person out of one million people exposed to chemicals at the site could develop cancer as a result of their exposure. This risk level is abbreviated as 1×10^{-6} (scientific notation). For chemicals that are no cancer causing (non-carcinogenic) b are still toxic to people, EPA uses a Hazard Index based on laboratory studies to assess this risk.

A Risk Assessment was conducte at the FMC-Fresno site to determine the current and future risks to publ health. The Risk Assessment analyzed several ways that the public could be exposed to contaminants present at the site.

Exposure to Contaminated Groundwater

Currently no drinking water wel are located on site and drinking wa wells in the vicinity of the site have

Table 2: SURFACE AND NEAR SURFACE SOIL CONTAMINATION AND CLEAN-UP LEVELS FOR INDICATOR CHEMICALS AT THE FMC-FRESNO SITE

	Maximum Concentration (parts per million - ppm)				Clean-up Levels (ppm) *	
Chemical	4.92 Acre Area	Waste Pond	Oil Drum Yard	Hazardous Waste Sumps	Carcinogenic ***	Non-Carc.
Aldrin	100	37	5.6	8.7	21.8	2.4
Dieldrin	52	100	35	27	23.2	4.0
Toxaphene	15000	--	230	2200	337	--
DDT **	750	670	153	1510	1092	43.2
Chlordane	8.7	--	--	--	285	4.8
Endosulfan I,II	1100	3000	90	550	--	4.0
Ethylene Dibromide	--	--	0.068	6.7	2.2	--
Heptachlor	1.3	--	--	0.78	82.6	40
Disyston	64	110	47	280	--	3.2
Phorate	47	610	1.1	2000	--	8.0
Dimethoate	--	--	0.08	24	--	16.0

* Clean-up levels were developed based on the assumption that only one indicator chemical is present. If multiple contaminants are present, clean-up levels will be adjusted lower.
** Combined concentration of DDT, DDD and DDE equals DDT value detected in soils.
*** Based on an excess cancer risk of one in ten thousand ($1x10^{-4}$).
**** Based on a non-carcinogenic Hazard Index of 1.
___ Indicates the selected clean-up level.
-- Compound not dectected

not been contaminated by site-related contaminants. However, based on current patterns of groundwater movement, site contaminants could affect public supply wells in the future, if no actions are taken. If this happens, unacceptable levels of carcinogenic and non-carcinogenic risk could result from drinking or contact (e.g. bathing) with groundwater. Under unrestricted access conditions where drinking water wells would exist on site, drinking or contact with groundwater would again result in unacceptable levels of risk.

Exposure to Contaminated Soil

Under restricted access conditions, where no one is permitted to live on site, the only exposure route that results in unacceptable levels of risk is inhaling soil as dust by people near the site. Under unrestricted access conditions, where people would live on site, eating soil and direct skin contact with soil would also contribute to unacceptable levels of carcinogenic and non-carcinogenic risk. Also, in the event that the water table rises significantly, leaching of contaminants from deep soils (present from 50 - 70 feet beneath the land surface) to groundwater would also contribute to unacceptable levels of carcinogenic and non-carcinogenic risk. This risk would occur only if residents were exposed to the resulting contaminated groundwater from use of an on-site drinking water well, and is in addition to that caused by contaminants now detected in on-site groundwater.

SUMMARY OF CLEAN-UP LEVELS

The FMC-Fresno site will be cleaned up to levels that are protective of public health and comply with federal, state, and local standards. As a national goal, EPA has set a protective risk range of one in ten thousand to one in a million ($1X10^{-4}$ - $1X10^{-6}$) excess cancer cases. For non-carcinogenic chemicals, EPA generally considers a Hazard Index in excess of one to be representative of unacceptable risk levels. EPA has used the conclusions from the Risk Assessment to set health-based (protective of human health) clean-up levels for soil and groundwater.

Groundwater Clean-up Levels

EPA has set site-specific clean-up levels for all groundwater contaminants detected beneath the site that are not considered to be "naturally occurring." See Table 1 for a list of the chemicals detected most frequently and their clean-up standards.

Groundwater clean-up levels were selected according to the following decision process:

- When they exist, federal and state Maximum Contaminant Levels (MCLs) have been selected as required groundwater clean-up levels.

- Health-based clean-up levels (levels that are protective of human health, as calculated specifically for this site) were selected as clean-up levels for chemicals for which no MCLs exist. Furthermore, health-based levels rather than MCLs were selected as clean-up levels for toxaphene, ethylene dibromide, heptachlor and lindane (BHC-gamma), since EPA felt the extra level of protection was justified for

these chemicals.

• California Action Levels have been selected as clean-up levels when no health-based levels or federal or State MCLs or MCL Goals exist.

• In several instances, the clean-up levels selected are below the levels that can currently be detected by monitoring equipment. In these cases, the quantification limit (the lowest level at which a chemical can be accurately measured with currently available technology) will be used as a clean-up level. These quantification limits will be reviewed periodically, so that in the future it may be possible to meet the health-based or regulatory levels. Quantification limits have also been selected as clean-up levels when no health-based or regulatory levels exist.

Soil Clean-up Levels

See Table 2 for a list of soil contaminants and their clean-up standards. While over fifty chemicals have been detected in soils at the FMC-Fresno site, EPA has selected 12 of these as indicator chemicals (chemicals that pose the greatest potential public health risk at the site, see Table 2). EPA has selected risk-based clean-up levels for soil based on a one in ten thousand ($1X10^{-4}$) level of carcinogenic risk. This level is with the protective risk rang, and EPA does not believe it is necessary to select the most protective level of o in one million ($1X10^{-6}$) for soil since the preferred remedy includes seve methods of protection (ie. cap, instit tional controls, excavation and treat ment) and an overall one in one million ($1X10^{-6}$) level of protection w be attained for future exposure to sc and groundwater. For non-carcinogenic chemicals, EPA selected a health-based clean-up level based o Hazard Index of One for contaminated soil. For chemicals that are both carcinogenic and non-carcinogenic, EPA selected the stricter of th two levels. Additionally, these soil

Table 3: GROUNDWATER CLEAN-UP ALTERNATIVES EVALUATED

The following groundwater clean-up alternatives, including EPA's preferred alternative, were evaluated in the Feasibility Study:

G1 No Action:	G2 Institutional Controls:	G3 Groundwater Extraction, Onsite Treatment (Carbon Adsorption and Air Stripping), Discharge, and Institutional Controls:	EPA's Preferred Alternative * G4 Groundwater Extraction, Onsite Treatment (Carbon Adsorption and Air Stripping), Reinjection to the Second Sand Zone, and Institutional Controls:	G5 Groundwater Extraction, On-site Treatment (Carbon Adsorption and Air Stripping), Reinjection to the First and Second Sand Zone, and Institutional Controls:
This alternative would leave contaminated groundwater in place. Groundwater monitoring would be performed for a minimum of thirty years. Cost: $4,606,389	This alternative would leave contaminated groundwater in place. Institutional controls would restrict the installation of water wells on site. Groundwater monitoring would be performed at the site for a minimum of thirty years. Cost: $4,606,389	This alternative would extract contaminated groundwater using a network of extraction wells, and pump the water to an on-site treatment unit which would use carbon adsorption (physical treatment by which groundwater contaminants are transferred to activated carbon) and air stripping technologies (physical treatment by which groundwater contaminants are transferred from a liquid to a gas). The water would be treated to non-detectable levels and discharged to a publicly owned treatment works. Institutional controls, and groundwater monitoring as described in Alternative G2 would also be required. Cost: $7,082,028	This alternative is the same as Alternative G3, except treated groundwater would be reinjected on site to the second sand zone to maximize groundwater clean up and to return treated groundwater to the aquifer. Cost: $7,207,027	This alternative is the same as Alternative G3, except treated groundwater would be reinjected on site to both the first and second sand zone to maximize groundwater clean up, promote flushing of subsurface soil contamination, and return treated groundwater to the aquifer. Cost: $7,207,027

:lean-up levels assume there is only ›ne indicator chemical present. The :lean-up levels will be adjusted become more strict) in the event that nultiple indicator chemicals are ›resent.

For soil contamination present at lepths greater than 50 feet, unacceptible levels of risk could occur if an ›n-site well were used as a source of lrinking water and the water table ises significantly. By requiring institutional controls restricting the installation of on-site water wells, extracting and treating groundwater, and ›erforming groundwater monitoring or a minimum of thirty years, EPA elieves that it is not necessary to lean up these deeper soil contamiants.

EVALUATION OF CLEAN-UP ALTERNATIVES

EPA initially considered a wide range of clean-up options that could reduce the risk posed by chemicals at the site. Several of these clean-up methods were eliminated during the preliminary screening of the alternatives because they did not effectively address contamination, were not technically practical at the site, or the costs were excessive compared to other alternatives that achieved the same level of protection. The remaining alternatives (listed in Tables 3 and 4) were evaluated using the nine criteria summarized below.

1. **Short-Term Effectiveness:** The period of time needed to complete the remedy, and any adverse effects upon human health and the environment that may be posed during the construction and implementation period, until the clean-up goals are met;

2. **Long-Term Effectiveness and Permanence:** The ability of a remedy to maintain reliable protection of human health and the environment over time, after clean-up goals have been met;

3. **Reduction of Toxicity, Mobility, or Volume:** The ability of a remedy to reduce the toxicity, mobility, and volume of the hazardous components present at the site;

Table 4: SOIL CLEAN-UP

Based on the selected soil clean-up levels and a maximum excavation depth of 15 feet, it was estimated that 25,000 cubic yards of soils

S1 No Action: This alternative would leave contaminated soils in place. Cost: $0	**S2 Institutional Controls:** This alternative would leave contaminated soils in place, but institutional controls would be required, restricting the future residential use of the property. Cost: $90,000	**S3 Institutional Controls, Capping:** This alternative would leave contaminated soils in place, but institutional controls would be required and a combination cap (constructed of soil cement and asphalt) would be installed. The purpose of this cap would be to prevent contact with contaminated soils, and to prevent infiltration of water and continued migration of soil contaminants to groundwater. Cost: $1,500,000	**S4 Excavation, Onsite Disposal, Institutional Controls, and Capping:** This alternative would involve excavation of contaminated soils to the selected clean-up levels and placement in an on-site RCRA landfill. The landfill would likely be constructed in the vicinity of the Waste Pond. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. Cost: $9,800,000	**S5 Excavation, Stabilization, Institutional Controls, and Capping:** This alternative would involve excavation of contaminated soils to the selected clean-up levels and stabilization (formation into a cement-like material) using a fixing agent. Treatability studies, in addition to those already completed, would be performed to ensure the effectiveness of the stabilization process. The stabilized material would either be placed in an on-site, lined disposal unit or would be used in the construction of a cap. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. Cost: $5,800,000

4. Implementability: The technical and administrative feasibility of a remedy, including the availability of materials and services needed to carry out a particular action;

5. Cost: The estimated capital and operation and maintenance costs of each alternative;

6. Overall Protection of Human Health and the Environment: Whether a remedy provides adequate protection and describes how risks posed through each pathway are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls;

7. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs): Whether a remedy will meet all ARARs (federal and state environmental statutes) and/or provides grounds for invoking a waiver;

8. State Acceptance: Whether, based on its review of the information, the state concurs with, opposes, or has no comment on the preferred alternative;

9. Community Acceptance: Whether community concerns are addressed by the remedy, and whether the community has a preference for a remedy. Public comment is an important part of the final decision.

PREFERRED ALTERNATIV FOR GROUNDWATER CLEANUP

EPA is proposing Alternative G4 (Table 3) for clean up of groundwat contamination. This alternative is protective of human health and the environment, provides long-term pr tection, uses treatment, and meets al the legal requirements (ARARS). Al ternatives G1 and G2 are not protec- tive of human health and the enviro ment. EPA feels that it is important return the treated water to the aquif where it can be reused, and as a resu Alternative G3 is not being propose EPA is concerned that reinjection to the first sand zone (Alternative G5) could cause additional migration of soil and groundwate contaminants, and as result this alternative not being proposed.

Alternative G4 is illustrated in Figure 3 Groundwater would be pumped by a network of extractio wells to an on-site treatment facility, which would use carbon adsorption ar air stripping technol gies to treat the contaminated water to non-detectable level A carbon adsorption unit would also be added to the air stripper to control emissions to the atmosphere. Water discharged from the treatment facility, which has been trea to non-detectable levels of contamination, would be reinjected onsite to the second sand zone, i order to maximize groundwater clean- operations and to return treated grou

ALTERNATIVES EVALUATED

will require cleanup. The following soil clean- up alternatives were evaluated in the Feasibility Study:

EPA's Preferred Alternative			
S6 Excavation, Soil Washing, Institutional Controls, and Capping: This alternative would involve excavation of contaminated soils to the selected clean-up levels. A soil washing process would be used to physically separate the more highly contaminated fine soil from the less contaminated coarse soil. The contaminated fines would be stabilized using a fixing agent, while the coarse grained soils would be tested and used as clean fill on site. Treatability studies, in addition to those already completed, would be performed to ensure the effectiveness of the stabilization and soil washing processes. The stabilized material would either be placed in an on-site, lined disposal unit or would be used in the construction of a cap. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. *Cost: $9,800,000*	**S7 Excavation, Solvent Extraction, Institutional Controls, and Capping:** This alternative would involve excavation of contaminated soils to the selected clean-up levels. The soils would then be treated using a solvent extraction technology. The solvent would be recovered by distillation and the contaminants discharged as an oily residue. The soil would be used onsite as backfill, the used solvent would be recycled, while the extracted contaminants would be incinerated offsite at a commercial facility. Treatability studies, in addition to those already completed, would be performed to ensure the effectiveness of the solvent extraction process. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. Cost: $15,700,000	**S8 Excavation, Vitrification, Institutional Controls, and Capping:** This alternative would treat contaminated soils using in- situ (in place) vitrification, which is a thermal treatment process that converts contaminated soils into a chemically unreactive, glass-like product. Vitrification is accomplished by placing electrodes into the soil and applying electric current. Resulting combustion gases would be collected using an off-gas treatment system. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. Cost: $25,700,000	**S9 On-Site Incineration, Institutional Controls, and Capping:** This alternative would involve excavation of contaminated soils to the selected clean-up levels and onsite incineration of the excavated soils. The decontaminated soils (ash) would be used onsite as backfill. Treatability studies, in addition to those already completed, would be performed to ensure the effectiveness of the incineration process. Institutional controls would be required and a cap would be installed over all unpaved or excavated areas of the site. Cost: $27,700,000

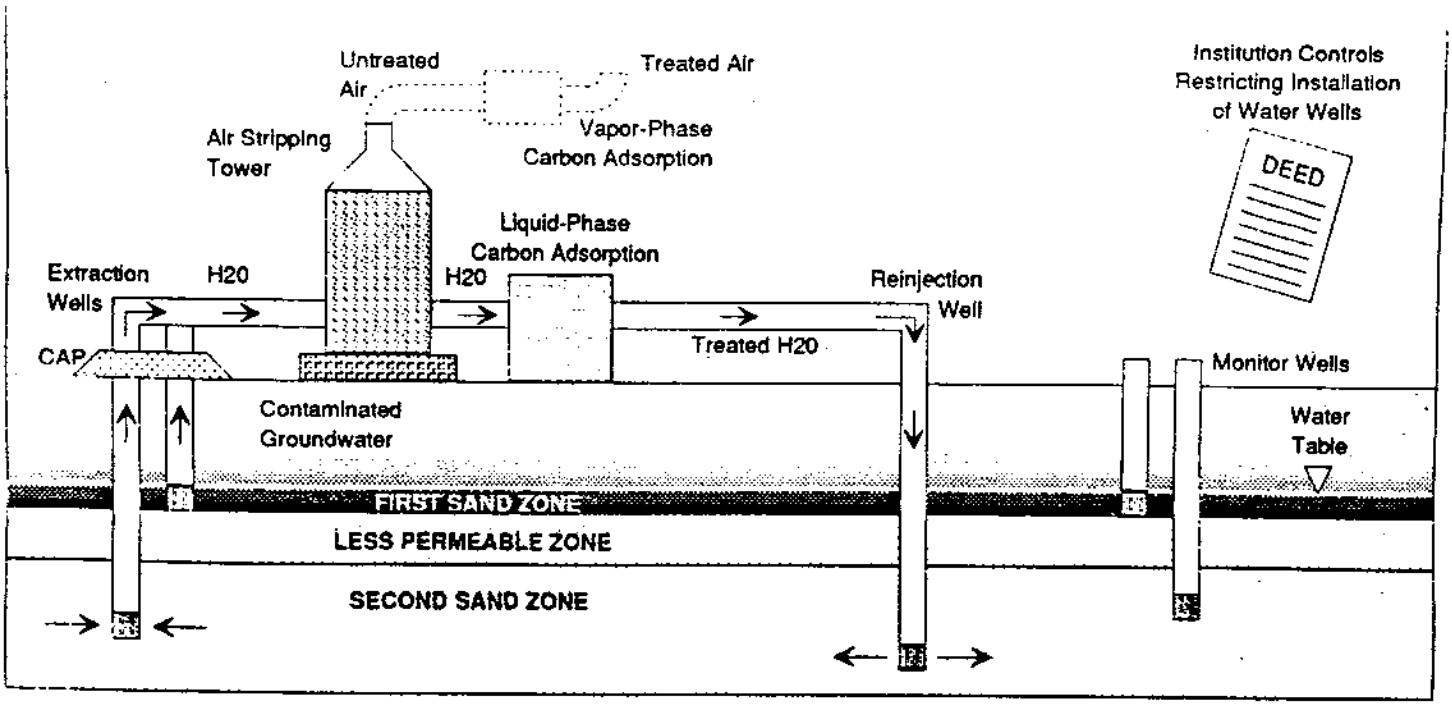


Figure 3: EPA's Preferred Alternative for Groundwater Cleanup

water to the aquifer. Extraction and treatment of groundwater would continue until the clean-up levels have been met.

Institutional controls restricting the installation of water wells on site would be required. Groundwater monitoring would be conducted for a minimum of 30 years. Additional on-site and off-site wells would be installed as necessary to ensure groundwater contaminants are removed.

PREFERRED ALTERNATIVE FOR SOIL CLEAN-UP

EPA is proposing Alternative S6 (Table 4) for clean up of soil contamination. When combined with the selected groundwater remedy, this alternative is protective of human health and the environment, complies with all ARARS, provides long-term protection, reduces the mobility and volume of soil contaminants, is technically practical, and is cost-effective. The preferred alternative provides the best balance of tradeoffs with respect to the nine evaluation criteria.

Alternatives S1 and S2 are not protective of human health and the environment. Alternatives S3 and S4 do not meet Superfund's requirements for remedies that employ treatment as a principal element of the remedy. Furthermore, in the event that institutional controls and the cap become ineffective over time, Alternatives S3 and S4 do not provide long-term protection. Alternative S5 provides a reduction in mobility of soil contaminants, but EPA felt that the combination of stabilization and soil washing would result in more effective treatment of the contaminated soil. Alternative S7 provides permanent removal of soil contaminants; however, solvent extraction was not selected due to concerns regarding the implementation, cost and the amount of solvent residues left by the process. Given the fact that some soil contamination will be left in place, it was determined that in-situ vitrification (S8) and incineration (S9) are not cost-effective.

Alternative S6 is illustrated in Figure 4. Prior to excavating the contaminated soils, additional treatability studies would be conducted in order to determine the most effective stabilization and soil washing processes. In the event that treatability studies indicate that soil washing would not meet the selected clean-up levels or would not effectively reduce the volume of soil requiring stabilization, stabilization alone would be used to treat the contaminated soils. Additional sampling would also be required to determine the extent of dioxin contamination in the soil. Soil contaminated in excess of the selected cleanup would be excavated. Due to cost and engineering considerations, the depth of excavation would not exceed 15 feet below the present land surface. The soil washing process would physically separate the more highly contaminated fine soil from the lesser contaminated coarse soil. The contaminated fines would be stabilized using a fixing agent and would either be placed in an on-site, lined disposal unit or would be used in construction of the cap. The coarse grained soils would be tested to ensure that the clean-up levels have been met, and will be used as on-site fill. The contaminated rinse water would be treated by carbon adsorption or other suitable technologies.

A combination cap consisting of soil, cement and asphalt will be placed over all unpaved or excavated areas of the site. Where required (e.g. the waste pond), the cap design

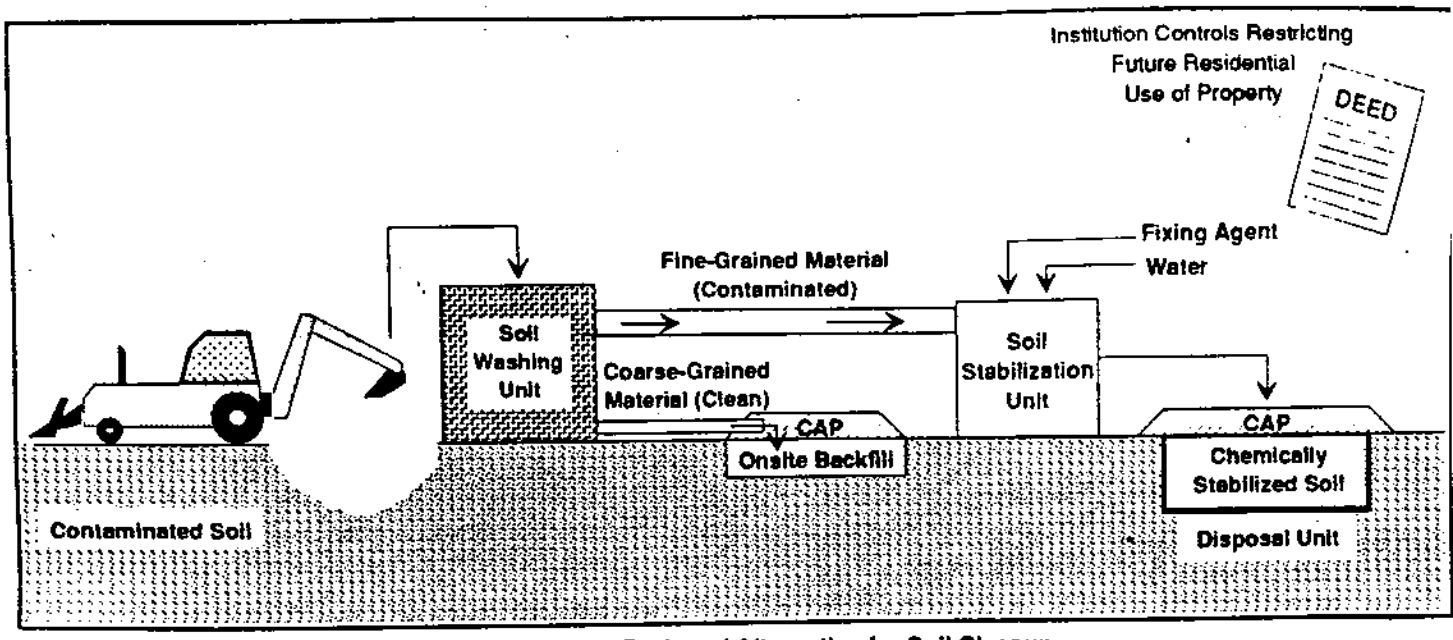


Figure 4: EPA's Preferred Alternative for Soil Cleanup

would meet RCRA requirements. Clean up of the soil contaminants beneath active areas of the facility (e.g. the tank pads and certain hazardous waste sumps), would occur in phases in order to allow continued operation of the facility.

FUTURE ACTIVITIES AT THE FMC-FRESNO SITE

Following the close of the public comment period, EPA will prepare a Record of Decision (ROD), that describes the remedy selected for the site. EPA will consider all comments received during the public comment period and respond in writing. EPA expects to complete the ROD in June 1991. Following the ROD, enforcement activities with the responsible party will be pursued by EPA and DHS and detailed specifications for the selected remedy will be developed. This remedial design stage is expected to be completed by early 1993. A qualified contractor will be selected by FMC to perform the clean-up beginning in 1993.

INFORMATION REPOSITORY

The Administrative Record is a file which includes all documents, including the Remedial Investigation/Feasibility Study upon which EPA bases the decision for a proposed plan at a site. Copies of the Administrative Record are available for public review at:

Fresno County Central Library
2420 Mariposa Street
Fresno, CA 93721
(209) 488-3195

FOR FURTHER INFORMATION

The Superfund program places a high value on community input in addressing hazardous waste cleanups of Superfund sites. Your comments are invited and encouraged. If you have any questions or concerns about the clean-up activities at the FMC-Fresno site, please direct them to the following EPA personnel.

If you have questions or aren't sure whom to call, contact:

Andy Bain
Community Relation Coordinator
U.S. EPA, 75 Hawthorne St. (H-1-1)
San Francisco, CA 94105
(415) 744-2184

or call toll-free 1-800-231-3075

If you have technical questions about activities at the site, contact:

Tom Dunkelman
Remedial Project Manager
U.S. EPA, 75 Hawthorne St. (H-7-1)
San Francisco, CA 94105
(415) 744-2368

EPA's News Media Contact is:

Terry Wilson
Office of Public Affairs
U.S. EPA, 75 Hawthorne St. (E-2)
San Francisco, CA 94105
(415) 744-1578

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY
PETE WILSON, Governor
DEPARTMENT OF HEALTH SERVICES
TOXIC SUBSTANCES CONTROL PROGRAM
REGION 1
10151 CROYDON WAY, SUITE 3
SACRAMENTO, CA 95827-2106
(916) 855-7700

June 7, 1991

Mr. Tom Dunkelman
U.S. EPA Region IX (H-7-2)
Superfund Enforcement Branch
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Dunkelman:

FMC FRESNO SITE, FRESNO COUNTY

The Department of Health Services (Department) has the following comments on the U.S. Environment Protection Agency's (EPA) May 28, 1991 "Public Comment Feasibility Study Report, FMC Fresno Site, Fresno County, California" (FS) and the May 1991 "Proposed Plan". In general, the Department concurs with the selected remedy. The technology chosen for soil clean-up has not been proven for a site of this nature and as such will require appropriate bench/pilot scale testing before full scale implementation.

The discussion of the Applicable or Relevant and Appropriate Requirement (ARAR) was very well presented. One minor modification based on the ARAR's which need to be part of the final Record of Decision (ROD) is the drinking water maximum concentration limit (MCL) for carbon tetrachloride (CT). The State's MCL for CT is 0.5 ug/l (parts per billion; ppb). This is a recognized Applicable State standard which is lower than the federal level of 5.0 ppb. Since this is an ARAR for CT, 0.5 ppb should be used as the clean-up level.

The following discussion is for the record and provides the Department's understanding in general of what will be required after the ROD, if it is based on the current proposed plan.

In regards to EPA's signing of the ROD, the Department will be entering into negotiation with FMC to implement the selected remedy. FMC needs to be aware of the requirement to fully determine the extent of groundwater contamination prior to completion of the Remedial Project Design. Additionally, before full scale implementation, the bench scale and/or pilot scale work will need to be performed as part of a Remedial Design/Remedial Action phase.

The Department will also need to work with local water purveyors and agricultural users to insure the final design will not be adversely affected by regional withdrawls and/or other injection activities.

It is apparent in reviewing the Proposed Plan that not all RCRA activities across the site are adequately addressed. As part of the institutional controls, the entire site needs to be part of deed restriction until such time as the soil contamination across the site and at depth is adequately addressed. RCRA at the time of facility closures will probably be addressing those areas underneath the current warehouses and ongoing operation.

We appreciate EPA's cooperation through the generation of the Proposed Plan. We look forward to reviewing the draft ROD.

If you have any questions regarding the above, please contact me at (916) 855-7722 or Mr. Donn Diebert at (916) 855-7838.

Sincerely,

Anthony J. Landis, P.E.
Chief, Site Mitigation Branch

cc: Mr. Ray Beach
Development Department
2326 Fresno Street
Fresno, CA 93721

Mr. David Trafican
Development Department
2326 Fresno Street
Fresno, CA 93721

Mr. John Mitchell
Development Department
2326 Fresno Street
Fresno, CA 93721

Mr. Frank Nevins
Regional Water Quality
Control Board
Central Valley Region
3614 East Ashland Avenue
Fresno, CA 93726

Mr. Garry Carozza
Fresno County Environmental Health Services
P.O. Box 11867
1221 Fulton Mall
Fresno, CA 93775

APPENDIX B

POLICIES RELATING TO THE FRESNO AIR TERMINAL

The Fresno Air Terminal Environs Specific Plan that was in effect at the time the Roosevelt Community Plan was updated (April, 1992) has since been superseded with the approval of an updated specific plan for the Fresno Air Terminal and its environs.

The Fresno Air Terminal Airport and Environs Plan (FAT-AEP) was approved in September of 1992. Please refer to that specific plan document for a full explanation of policies relating to land use, noise mitigation, and airport safety.

Reproduced in this Appendix are Tables E-1 through E-3 and Figure E-1 from the FAT-AEP.

Table E-1: AIRPORT / LAND USE NOISE COMPATIBILITY CRITERIA

LAND USE CATEGORY	CNEL 60-65	CNEL 65-70	CNEL 70-75
Residential			
*Single-family/Multi-family residential	0	--	--
*Mobile homes	-	--	--
*Transient lodging	0	-	--
Public/Institutional			
*Schools, libraries, hospitals, nursing homes, large residential support facilities, large child day care centers, adult day care facilities	0	-	--
*Churches, auditoriums, concert halls	0	-	--
Transportation, parking, cemeteries	++	+	0
Commercial and Industrial			
Offices, retail commercial	+	0	-
Service commercial, wholesale commercial, warehousing, light industrial	+	0	0
General manufacturing, utilities, extractive industry	++	+	+
Agricultural and Recreational			
Cropland	++	++	+
Livestock breeding	0	0	-
Parks, playgrounds, zoos	+	0	-
Golf courses, public riding stables, water recreation	+	0	0
Outdoor spectator sports	+	0	0
Amphitheaters	-	--	--

[Continued on next page]

LAND USE ACCEPTABILITY	INTERPRETATION / CONDITIONS
++ Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+ Normally Acceptable	Noise is a factor to be considered, in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
0 Conditionally Acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable, on the conditions that outdoor activities are minimal and that construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
- Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or which involve outdoor activities which would be disrupted by noise should generally be avoided.
-- Clearly Unacceptable	Unacceptable noise intrusion upon these activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided, unless strong overriding factors prevail; and the land use should be prohibited if outdoor activities are involved.
* Acoustical Analysis Required	An acoustical analysis is required for these categories of land uses, pursuant to noise policies in the Fresno Air Terminal Airport and Environs Plan.

Table E-2: AIRPORT / LAND USE SAFETY COMPATIBILITY CRITERIA

	APPROACH PROTECTION ZONE (APZ)			
LAND USE CHARACTERISTIC	APZ I	APZ II	APZ III	APZ IV
Residential Uses		(A)	(B)	(C)
Other Uses in Structures		(D,E)	(E)	(E)
Uses Not in Structures	(D,F)	(D)	+	+
Special Characteristics (Distracting Lights or Glare)	-	-	-	-
Sources of Smoke or Electronic Interference	-	-	-	-
Attractor of Birds	-	-	-	-

INTERPRETATION:

+ ACCEPTABLE: The use is acceptable with little or no risks

( ) CONDITIONALLY ACCEPTABLE: Risks exist, but the use is acceptable under conditions cited below:

A Density no greater than 1 dwelling unit per 3 acres

B Density no greater than 2 dwelling units per acre

C Density no greater than 5 dwelling units per acre

D No uses attracting more than 10 persons per acre

E No schools, hospitals, nursing homes, large residential support facilities, large child day care centers, adult day care facilities, churches, auditoriums, concert halls, amphitheaters, or other uses that would concentrate a large number of people

F Characteristic cannot reasonably be avoided or located outside the indicated safety zone

- UNACCEPTABLE: Use is unacceptable due to associated high risks

[Continued on next page]

NOTES:

1. See Official Specific Plan Map for location of Approach Protection Zones.

2. Approach Protection Zone I (Clear Zone) is that area at ground level that begins at the end of each Primary surface and terminates directly below each approach surface slope.

3. Approach Protection Zone II is 2,500 feet wide by 5,000 feet long to the northwest and southeast of the thresholds of the runways.

4. Approach Protection Zone III extends 5,000 feet beyond APZ II.

5. Approach Protection Zone IV extends 4,000 feet beyond APZ III.

Within APZs III and IV, the following shall apply:

- Existing development that conforms to existing zoning regulations in effect prior to February 20, 1987 may be rebuilt in the event it is destroyed by fire or Act of God.

- Development of vacant property or redevelopment of property in accordance with the zoning regulations in effect prior to February 20, 1987 shall not be prohibited on the basis of the restrictions set forth in this Table E-2. This provision shall not apply to conditional use permits for schools, hospitals, nursing homes, large residential support facilities, large child day care centers, adult day care facilities, churches, auditoriums, concert halls, amphitheaters, or other uses that would result in a large concentration of people.

Table E-3: PLANNED LAND USE CONSISTENCY TABLE

Plan Designation	Consistent Zone District	Consistent Density
RESIDENTIAL USES		
Rural	AE-5, AE-20, R-A	0 to 1.21 Units Per Acre
Low	R-1-A, R-1-AH, R-1-E, R-I-EH	0 to 2.18 Units Per Acre
Medium-Low	R-1-B, R-1-C, R-1-B/PUD	2.19 to 4.98 Units Per Acre
Medium	R-I,MH, R-1-C/PUD, R-1/PUD	4.99 to 10.37 Units Per Acre
Medium-High	R-2-A, E-2, T-P, R-P*	10.38 to 18.15 Units Per Acre**
High	R-3-A, R-3, R-4+, C-P*	18-16 to 43.56 Units Per Acre***
COMMERCIAL USES		
Neighborhood	C-11 C-L	
Community	C-2	
Regional	C-3, C-4	
General, Heavy, Strip	C-5, C-6, C-R	
Office	RP-L,. R-P**, C-P**, R-P, Planned Office Development C-P, Planned Office Development	
INDUSTRIAL USES		
Light	C-M, M-1, M-1-P	
Heavy	M-2, M-3	
OTHER USES		
Open Space	0, AE-20	
Agricultural	0, AE-20	

[Continued on next page]

Table E-3, continued

* In the RP or CP zone district, pursuant to a conditional use permit for a planned development, a maximum of 35 percent of the property may be developed with the non-residential uses permitted in these zone districts.

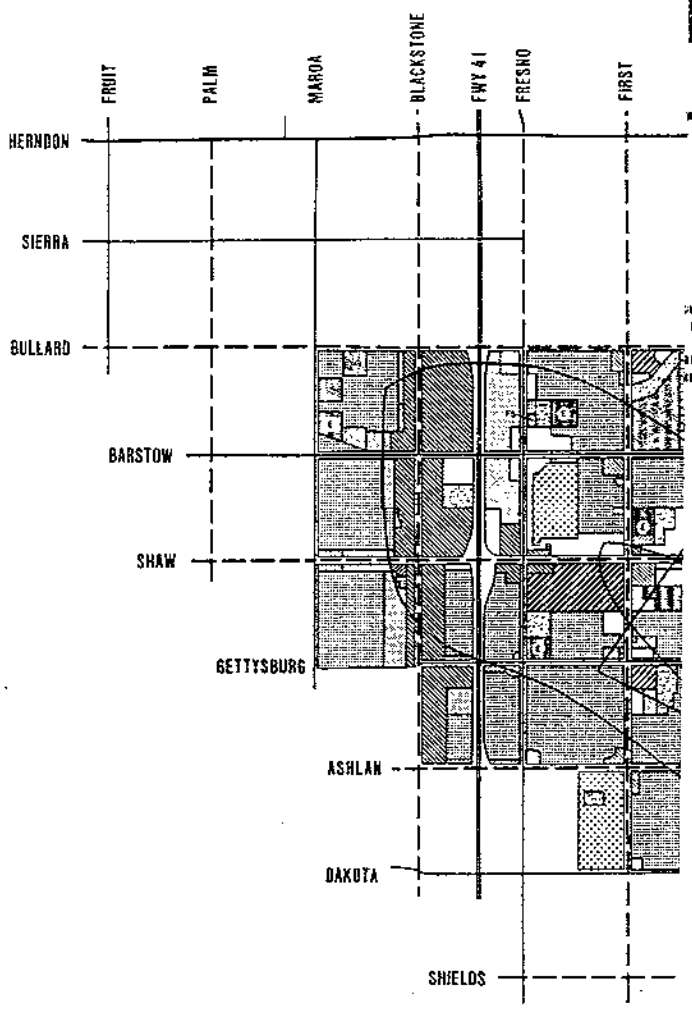
** In the RP or CP zone district, pursuant to a conditional use permit for a planned development, a maximum of 35 percent of the property may be developed with the residential uses permitted in these zone districts.

*** Unit-per-acre density is modified in the Roosevelt Community ,plan Area pursuant to Polity No. 1-6.11 of the 1991 Roosevelt Community Plan Update.

\+ Thirty or more dwelling units per acre in the R-4 zone district only, subject to a conditional use permit.

NOTE: The method and procedure for determining zoning consistency in relation to this plan shall conform to Section 12-403 of the Fresno Municipal Code and any subsequent amendments thereto.

TERMINAL
LAN MAP



II, III, IV

UNDARY" REFERRED TO IN THE CALIFORNIA ADMINISTRATIVE CODE
UNLESS CERTAIN CONDITIONS ARE MET (SEE TEXT)

ESIGNATED AS "NOISE IMPACTED"
ERAL PLAN.

HIGHER CNEL NOISE CONTOUR, OR APZ'S I, II, III
TO THE DESIGNATIONS OF THIS EXTIONS PLAN.

PUBLIC FACILITIES

PUBLIC FACILITIES

E ELEMENTARY SCHOOL

M MIDDLE SCHOOL

F FRESHMAN SCHOOL

H HIGH SCHOOL

U UNIVERSITY

FS FIRE STATION

AIRPORT NOTE: FOR LAND USES WITHIN AIRPORT BOUNDARIES NOT DESIGNATED ON THIS MAP, REFER TO FAT-AEP FIGURE E-5, "AIRPORT LAND USE PLAN".

INDUSTRIAL

LIGHT

OPEN SPACE

AGRICULTURAL

PARK / PONDING BASIN

CR COMMERCIAL RECREATIONAL

CIRCULATION

FREEWAY

EXPRESSWAY

ARTERIAL

COLLECTOR

ADOPTED BY RESOLUTION NO. 8991 OF THE FRESNO CITY PLANNING COMMISSION ON DECEMBER 17, 1986.

ADOPTED BY ORDINANCE NO. 87-14 OF THE FRESNO CITY COUNCIL ON JANUARY 20, 1987.

AMENDMENTS			
FRESNO CITY PLANNING COMMISSION		FRESNO CITY COUNCIL	
DATE	RES. NO.	DATE	ORD. NO.
11/4/87	9279	11/17/87	87-163
11/12/87	9283	12/8/87	87-171
11/12/87	9284	12/8/87	87-171
11/12/87	9285	12/8/87	87-171
11/12/87	9286	12/8/87	87-171
11/12/87	9287	12/8/87	87-171
11/12/87	9288	12/8/87	87-171
11/16/87	9294	12/22/87	87-180
3/2/88	9375	5/10/88	88-69
7/20/88	9479	8/16/88	88-105
9/7/88	9521	10/4/88	88-126
8/3/88	9493	10/11/88	88-129
11/16/88	9563	12/13/88	88-151
4/5/89	9640	4/18/89	89-45
12/20/89	9814	1/23/90	90-9
4/18/90	9870	6/5/90	90-50
6/20/90	9913	7/24/90	90-75
7/23/91	10036	4/23/91	91-39
6/19/91	10155	7/16/91	91-76

ITIONS

AMENDMENT, REFER TO AMENDMENT FILE.

AXIMUM

AXIMUM

XIMUM

AXIMUM

ENT ENTITLEMENTS GRANTED ONLY FOLLOWING
N OF WATER QUALITY ISSUES COORDINATED BY
C WORKS DEPARTMENT.

LATED USES

P ZONE DISTRICT STANDARDS

6/1/92

EP FIGURE E-1

APPENDIX C

EXCERPTS FROM THE 1990 CITY OF FRESNO AIR QUALITY POLICY PROGRAM

This section of the report contains the policy program recommended for consideration and adoption by the City Council. City staff has attempted to develop a program which appropriately responds to the information provided in the [preceding air quality] problem statement and legislation/regulation sections of this report.

As explained in the introduction, the policy program consists of three parts, which are:

1. A City policy program consisting of two segments. One segment has programs to be implemented by City departments; the other segment consists of new regulations to be applied throughout the City. (Although the majority of the department program measures will apply to department operations, some of the department program measures would, in fact, become regulations to be applied City wide (e.g., ordinances imposing new regulations). Since some of the City-wide measures will require Municipal Code amendments, implementation of the measures would be delayed to allow for those amendments.)

2. Recommendations to the Fresno County Board of Supervisors for consideration as part of the Fresno County Air Pollution Control District Clean Air Plan, mandated by the California Clean Air Act.

3. Recommendations to the San Joaquin Valley Air Basin authority.

Staff believes that this proposed policy program strikes a reasonable balance between those measures the City can realistically pursue on its own now, and those measures that should be implemented county-wide or basin-wide. This program does not focus on those measures which are already in place and which are already working to control our air pollution problem. This program emphasizes future work that needs to be done.

It should also be noted that following the policy program is a technical background report prepared by City staff regarding residential woodburning. This report is included because the City program proposes a new fireplace/woodstove policy. This new policy may receive a large amount of public testimony at the workshop hearings. The technical report provides more detailed information on the impacts of fireplaces and woodburning stoves and serves as the basis for recommendations in the policy program.

CITY POLICY PROGRAM/CITY DEPARTMENTS

AIRPORTS DEPARTMENT

- By April 1, 1990, the Airports Department shall encourage aircraft operators to substitute training flights in actual aircraft, wherever possible, with flight training simulators.

- As soon as the new Central Firefighting Training Facility is constructed in northern California, the Airports Department shall eliminate local "hot fire" training at the Fresno Air Terminal.

- Before July 1, 1990, the Airports Department will begin to monitor compliance by tenants with rules, regulations and procedures pertinent to vapor-recovery systems and to other fueling/defueling systems, equipment and operations.

- On July 1, 1990, the Airports Department will require the Airport parking operator to establish procedures which will require the opening and operation of additional exit booths when the number of vehicles waiting to exit the lot exceeds a specified amount of vehicles.

DEVELOPMENT AND HOUSING AND COMMUNITY DEVELOPMENT DEPARTMENTS

- The Development and Housing and Community Development Departments will utilize the State-approved URBEMIS Air Quality Computer Model in the analysis of development entitlements and for the formulation and updating of plans.

- The Development and Housing and Community Development Departments will continue to develop and recommend policies in the General Plan, Community Plans, Specific Plans and Redevelopment Plans that are intended to reduce air quality impacts.

- By October 1, 1990, the Development Department shall present, for City Council adoption, an amendment to the Municipal Code to add bicycle parking facilities to on-site parking requirements. [This was accomplished by Fresno City Ordinance No. 90-74, effective 7/24/90.]

- By October 1, 1990, the Development Department shall present, for City Council adoption, an amendment to the Municipal Code allowing reductions in on-site parking requirements for projects providing space or areas for mass transit (FAX) facilities, including bus bays, terminals, and park and ride facilities. [This was accomplished by Fresno City Ordinance No. 90-74, effective 7/24/90.]

FRESNO AREA EXPRESS/FAX

- Current Services:

  Policy issues focus upon current efforts to improve technical performance, [reduce] emission levels, and [improve] system operations over the next 12-18 months.

  1. Low Sulfur Fuels - Purchase and monitor diesel fuels for current bus fleet.

  2. Engines - Use electronically controlled engines (DDEC) for greater emissions control.

  3. Air Conditioners - Recycle refrigerants (freon) to reduce emissions.

  4. Transmissions - Use electronically controlled (ATEC) transmissions to reduce emissions.

  5. Manchester Transit Center - Construction of this timed transfer station has significantly improved route and system performance here. Convenience, safety, information, and design/environment have improved the image and acceptance of transit services.

  6. On-Time Service Improvement Program - 1990 will achieve improvement requirements to operate current services better. Costs and changes in services always have a direct impact on users,but performance and priority decisions must be made.

- Future Services - Short Range:

  Policy issues focus upon 1- to 5- and 10-year efforts. Some programs are already mandated through Federal or State legislation, others will be determined as a result of Council action during the air quality workshop.

  1. Alternative Fuels - Purchase alternatively fueled buses, powered by compressed natural gas (CNG), methanol, or clean diesel as mandated by state and federal regulations. Cost impact would be significant for both capital and operating expenses.

  2. Regional Transit Centers - Implement other regional transit centers, similar to the Manchester Transit Center, for improved services. Assessment fees on parking spaces could fund the capital requirements for construction.

FRESNO AREA EXPRESS/FAX (continued):

3. Expanded Services:

a. Current system - extend routing network to expand service and coordinate at regional transit centers.

b. Extended hours - add hours of operation to 8 or 9 p.m..

c. Express bus - add specialized services for downtown or supplemental express routes that provide limited but more direct service to major terminal points.

d. Park and ride - establish areas where people can park and ride the bus to work, school, etc., in conjunction with regional transit centers and/or express bus service.

4. Development Standards:

a. Land use development standards - provide sufficient transit facilities and make alternative transportation attractive and convenient. Fees or parking space credits based upon a per square foot criteria could be assessed.

b. Transportation systems management (TSM) - require employers of 50 or more workers to develop transportation management plans designed to mitigate environmental impacts. [This was accomplished by City of Fresno Ordinance No. 90-74, effective 7/24/90.]

5. User Incentives:

a. Bus passes/tokens - encourage area employers to purchase bus passes for their employees.

b. Raise parking fees.

c. Lower bus fares.

- <u>Future Services - Long Range</u>:

Policy issues here focus upon 10- to 20-year (and longer) programs or projects that could change the transportation infrastructure and related economic resources in Fresno.

1. High Speed Rail - Support the development of high speed rail in the San Joaquin Valley.

FRESNO AREA EXPRESS/FAX (continued):

2. Urban Mobility - Focus upon the development and evolution of overall greater urban mobility:

a. Inter-city commuting services.

b. Railroad (track) consolidation.

c. Alternative transportation systems, transitways, High occcupancy vehicle lanes (HOVs), downtown shuttles.

3. Light Rail - Continue feasibility studies, right-of-way protections and conceptual designs.

4. One-half cent Sales Tax - Identify probable need and plan for continuation of the transportation sales tax after 2007.

FIRE DEPARTMENT

- By January 1, 1991, the Fire Department will prepare and present to the City Council a report on procedures to test fire protection systems utilizing chlorinated fluorocarbons without atmospheric discharge.

GENERAL SERVICES DEPARTMENT

- By October 1, 1990, the General Services Department will present to the City Council a feasibility study on the purchase and use of electrostatic filtering systems in City fleet shops.

- By October 1, 1990, the General Services Department will present to the City Council a feasibility study on changing City-owned emergency backup generators to burn natural gas.

- By October 1, 1990, the General Services Department will present to the City Council a feasibility study on the increased purchase and use of Grade (1) diesel, which burns cleaner than Grade (2).

- By October 1, 1990, the General Services Department will present to the City Council a feasibility study for a North Fresno Maintenance Facility to reduce vehicle miles.

- The General Services, Development, and Public Works Departments will cooperate to ensure that as City-owned buildings are expanded or remodeled, they will have automatic/computer-controlled HVAC (heating, ventilation, and air conditioning) and lighting systems installed.

GENERAL SERVICES DEPARTMENT (continued)

- The General Services, Parks and Recreation, Public Works, FAX and Fire Departments shall investigate the use of fluorocarbon-propelled aerosol products and the possible ways to reduce their use, and shall make a joint presentation to the Council by October 1, 1990.

- By July 1, 1990, the General Services Department will have in operation three auto air conditioning recycling and charging stations to reduce freon gases being released into the atmosphere.

PERSONNEL DEPARTMENT

- The Personnel Department shall enter into discussions with City labor groups to consider the following:

  1. Work at home options, staggered work shifts, and other alternative work options

  2. Free or reduced-fee FAX bus passes for City employees (not to exceed 10% of total City workforce).

  3. Reduced City parking lot fees for City employees who rideshare and increased parking fees for City employees who do not rideshare.

  The Personnel Department shall prepare a recommendation regarding these measures to the City Council by July 1, 1991, for consideration as part of the Fiscal Year 1992 City budget.

PUBLIC WORKS DEPARTMENT

- By January 1, 1992, methane gas generated at the landfill will be used to fuel a cogeneration facility.

- By August 1, 1990, the Public Works Department shall begin phased implementation of the solid waste load-to-trip optimization routing model, which will take four to six months to complete.

- The Public Works Department shall continue on-going implementation of bikeways.

- The Public Works Department shall continue pursuing the development of railroad grade separations at intersections with City streets.

- The Public Works Department shall continue to pursue up to $10.5 million in State grants for computer-controlled traffic signal systems.

PUBLIC WORKS DEPARTMENT (continued)

- Pursuant to Assembly Bill 2558, the Public Works Department shall continue to monitor the Wastewater Treatment Plant and submit findings to the Fresno County Air Pollution Control District by July 1, 1992.

- By January 1, 1991, the City Traffic Engineer shall develop and implement a procedure to give City employees who rideshare preference in receiving parking spaces in City employee parking lots.

PARKS, RECREATION, AND COMMUNITY SERVICES DEPARTMENT

- The City shall pursue funding mechanisms to allow the Parks, Recreation, and Community Services Department to attain the following goals (the funding mechanism to pursue these goals is explained in the City-wide section of the program):

  1. A tree planting program which will, within five years after its initiation, increase the number of street trees planted annually in the City by at least 2,000 trees.

  2. The planting of all unplanted traffic islands in the City with trees and shrubs.

  3. Conversion, where appropriate, of turfed traffic islands to trees and shrubs, to reduce the use of turf maintenance equipment operated with gasoline engines.

- By October 1, 1990, the Parks, Recreation, and Community Services department shall present, for City Council adoption, a Municipal Code amendment requiring closer spacing of street trees in developing areas.

- By July 1, 1990, the Parks, Recreation, and Community Services Department will present, for City Council adoption, a revised Street Tree Ordinance and Street Tree Master Plan.

CITY MANAGER

- By July 1, 1990, and as part of the Fiscal Year 1991 budget, the City Manager shall present a program to provide for the convenient location of facsimile ("fax") machines in all City departments.

- By July 1, 1990, the City Manager shall designate a Rideshare Coordinator to pursue increased rideshare within all City departments and to improve ride sharing coordination with Fresno Ridesharing and CALTRANS.

CITY POLICY PROGRAM/CITY-WIDE APPLICATION

- Before July, 1990, ban the use of coal for domestic purposes.[1]

- Before July, 1990, ban the development of coal-fired cogeneration facilities.[1]

- Establish new fees to provide revenue for air quality improvement measures, such as the computerization of the City's traffic signals, transit improvements, and the planting of more trees.

  The City Attorney advises that the most appropriate and legally sound method to establish these fees is through a "nexus study" performed by a City-hired consultant. The study would correlate the air pollution impacts of various activities with a reasonable fee to help offset those impacts. The fees could be applied to new building construction, fireplaces, drive-up window operations, private parking lots, and other activities to generate revenue for air quality improvement measures. The nexus study would be a more comprehensive and equitable approach to establishing fees, as opposed to determining separate fees through separate studies of activities contributing to air pollution. Recent court rulings have justified the use of nexus studies. The courts have also ruled that the future fees could be used to offset the cost of the study, which staff estimates to be approximately $25,000. This money can be allocated as part of the Fiscal Year 1991 budget and subsequently paid back through the fees.

  The fees collected for air quality purposes could be utilized for the following prioritized air quality-oriented programs:

  1. Computer synchronization of the City's traffic signals.

  2. Mass transit (FAX) improvements.

  4. Development and updating of clean air plans.

  3. Planting of trees.

  5. Remedial improvement of identified congested intersections and underdeveloped City streets.

  6. Modification of City design standards to accommodate additional street tree plantings.

- Effective March 1, 1990, specific policies shall apply to all new Conditional Use Permits for drive-up window facilities.[1] The goal of these policies is to minimize the time necessary to service drive-up window customers and, therefore, reduce air pollution.

  A Conditional Use Permit application for a new drive-up window associated with a restaurant shall not be granted unless the following requirements are met:

  1. Either a minimum of two windows, or two stations at one window, shall be provided for the separate handling of money and food.

  2. The City Traffic Engineer is satisfied that sufficient vehicle stacking exists within the drive-up window lane to accommodate demand without interrupting adjacent traffic and/or parking areas.

  3. A pull-out lane, escape lane, or some acceptable alternative is provided adjacent to the drive-up window for the use of customers with large orders and/or when made necessary by delayed services.

  In addition, a Conditional Use Permit application proposing a new drive-up window facility for any type of business shall include an operation statement which clearly identifies physical improvements and operational measures intended to reduce vehicle idling time. The operation statement shall remain on file in the City Development Department.

  After a Conditional Use Permit application for a new drive-up window facility is approved, the Development Department, at its discretion, can ask the owner and/or operator of the drive-up window to provide a report on the results of the operation statement measures to reduce vehicle idling times. The Director of the Development Department may administratively grant modification(s) to an operation statement if the modification(s) will not result in increased air quality degradation.

- Effective July 1, 1990, all trucks carrying dirt, gravel or sand while utilizing public streets shall be covered.

- Effective July 1, 1990, the City of Fresno shall have construction standards requiring cleaner burning wood heating appliances. As of July 1, 1990, building permits shall only be issued for wood stoves and fireplace inserts which meet EPA Phase I emissions standards. As of January 1, 1991, building permits shall only be issued for wood stoves and fireplace inserts which meet EPA Phase II emissions standards.[2] (continued)

(continued) Furthermore, by July 1, 1990, the Development Department staff, in consultation with the fireplace industry, shall have drafted ordinance standards regarding open fireplaces.[3]

- The owner of any fireplace or heating stove which was constructed or installed without required City permit(s) shall be subject to a $2,000 fine, except that the fine will be waived if the illegal fireplace or stove is either removed or replaced with an appliance meeting EPA and City standards.[4]

- The City of Fresno shall sponsor media advertisements asking residents to voluntarily refrain from using fireplaces or heating stoves on "no burn days" specified by the Fresno County Air Pollution Control District. The advertisements shall be placed in City utility bills, in the newspaper, on radio and television, and on signs.[2]

- Effective July 1, 1990, the City of Fresno shall not accept for processing any development entitlement application (for rezoning, subdivision, Conditional Use Permit, or site plan review) for a development which will employ more than 50 people, unless the application is accompanied by a Transportation Systems Management plan containing the following[1] [see also the informational handout at end of this Appendix]:

  1. A description of the manner in which, and how regularly, employees will be informed of ridesharing or carpooling opportunities.

  2. Incentives that would be provided to employees who wish to rideshare or utilize public transportation.

  3. Other measures that will be implemented to reduce air pollution and energy consumption. Examples of measures which may be included are:

     a. Staggered or varied work hours.

     b. Work at home options.

     c. Facilities to improve public transportation.

     d. Telecommunication improvements.

     e. Fleet improvements or modifications.

     f. Other physical improvements.

  NOTE: Any development entitlement for the renovation or expansion of an existing development shall contain an operations plan if the total development will employ more than 50 people.

- Recommend to the Fresno County Board of Supervisors that the Fresno County Council of Governments be designated as the agency responsible for the transportation portion of the Fresno County Clean Air Plan.

- Recommend that Fresno County support and adhere to adopted County urban referral policies pertaining to annexation. These policies state that urban development and the provision of urban services should be the responsibility of cities.

- Support Senate Bill 1770 in the State Legislature (the McCorquodale Bill), which would establish a San Joaquin Valley Air Quality Management District. This District features mandatory participation of all valley counties, uniform application of District-wide standards, and equal representation of cities and counties on the District governing board. Alternatively, if the San Joaquin Valley Air Basin counties amended their joint powers agreement to include the above three features, an amended J.P.A. could be supported by City Council.

FOOTNOTES:

[1] Accomplished by City of Fresno Ordinance No. 90-74, effective July 24, 1990.

[2] Accomplished by City of Fresno Ordinance No. 90-115, effective November 30, 1990.

[3] Accomplished by City of Fresno Resolution No. 90-448, effective October 30, 1990.

[4] Accomplished by City of Fresno Ordinance No. 90-116, effective November 30, 1990.

PROGRAMS RECOMMENDED FOR REVIEW AND CONSIDERATION BY THE FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT

- The Fresno County Air Pollution Control District (APCD) should review, modify as necessary, and consider for adoption all of the policies proposed for City implementation.

- The APCD should continue to review and study the appropriateness of local agricultural burning and "plow down" practices.

- The APCD should review and consider policies and standards to limit or eliminate the development and/or existence of unpaved local roads.

- The APCD should support increases in vehicle registration fees on a county-wide basis as a way of permanently financing ongoing air quality remedial efforts.

- The APCD should review and study the possibility of restricting the sale and use of starter fluid.

- The APCD should review and study the feasibility of restricting the use of small gasoline-powered engines (less than 10 horsepower) and leaf blowers.

- The APCD should consider a retrofit requirement for residential woodburning appliances. This retrofit program would mandate, upon sale of property, that uncertified woodburning appliances be removed or replaced with EPA-certified wood heating appliances.

PROGRAMS RECOMMENDED FOR BASIN-WIDE CONSIDERATION

- Consider Basin-wide adoption of Fresno's Air Quality Policy Program and of the recommendations made to the Fresno County Air Pollution Control District.

- Establish a uniform basin-wide vehicle inspection program.

- Mandate uniform air quality standards and unified enforcement practices within the San Joaquin Valley Air Basin.

- Support research designed to limit the production of particulates by agricultural practices.

CITY OF FRESNO
TRANSPORTATION MANAGEMENT PLAN REQUIREMENT

The City of Fresno recently adopted Ordinance #90-74 addressing air quality in the Fresno Metropolitan Area. The ordinance requires submission of a Transportation Management Plan (TMP) for all new developments, or modifications to existing developments, that affect sites employing over 50 people. Rezonings which affect developed sites having 50 or more employees are also subject to the requirement.

The purpose of the TMP is to reduce the number of vehicle trips to the site, and to reduce the associated vehicle emissions that contribute to the air quality problems. Review of the TMP is conducted by the City's Transportation Director and the Development Department. Once approved the TMP becomes a permanent condition of a development.

The TMP must generally accomplish the following:

- Give description of how and when employees will be informed of ridesharing, carpooling, and public transportation opportunities.
- Show incentives which will be provided to employees who rideshare, carpool, or utilize public transportation.
- Detail other measures which are being employed to reduce vehicle emissions: alternative work schedules; work-at-home options; improved public transportation facilities; fleet improvements; and other physical improvements or programs to improve air quality.

The attached document from the Council of Fresno County Governments summarizes various strategies which an employer/site-developer might need for a required Transportation Management Plan. The document will provide a basic understanding of the types of strategies available.

In evaluating TMPs, the City of Fresno will look for the following specific items:

The following elements of a TMP are minimum requirements, and must be included in <u>all</u> TMPs:

☐ 1. Show physical site features associated with the TMP on exhibits and drawings for the entitlement. Preferred parking areas for carpool participants may be described verbally in the text or may be shown by an attachment to the TMP document.

☐ 2. Carpooling incentives for employees and how the incentives will be implemented.

☐ 3. (On-)site coordinator responsible for implementing and keeping records on the TMP.

☐ 4. Record keeping and annual report submission to the Development Department.

☐ 5. Procedures for orienting and informing employees about the TMP.

☐ 6. Incentives to encourage use of public transit (when the development is within 1/4 mile of a bus route).

☐ 7. Flexible employee work hours, to reduce traffic flow during peak hours.

☐ 8. Provisions requiring leaseholders to comply with the provisions of the TMP.

The following elements may be required under specific circumstances, depending upon the scope/location of the development:

☐ 9. A covenant will be required if the development is within an area included in an adopted public transit plan. The covenant will require that the property owner agrees to participate in an assessment district to fund the transit plan.

☐ 10. Park and Ride Lot or Shuttle Service.

☐ 11. Employee changing rooms to accommodate bicycle commuters and/or walking employees (when a level of 500 employees is to be reached at the site).

☐ 12. Vehicle fleet improvements and alternative fuels.

☐ 13. Bus turnout at or near the site.

☐ 14. Bus shelter.

Office and commercial developments will require on-site amenities and services which may include, but may not be limited to the following:

- Telecommunications
- Automated teller machines/direct deposit for employee paychecks
- Food services
- Day care
- Postal services
- Delivery services to accommodate customers/shoppers
- On-site customer/employee shuttle service

When a project applicant is unsure how many employees will ultimately be at the development site, data from the Institute of Transportation Engineers' Manual will be used to help evaluate whether a TMP will be required (see Attachment A).

Once the TMP is prepared and submitted to the Development Department, the Development Services Division will coordinate with the City of Fresno Director of Transportation and the Fresno Area Express Planning Division. The TMP will be evaluated concurrently with other special permit application materials.

Failure to complete an acceptable TMP when one is required will bar issuance of building permits for a project for which a TMP is required.

Once the TMP is approved, its provisions will become conditions of the special permit entitlement. The approved TMP will become a permanent part of the special permit file for a project.

Failure to implement or failure to continue implementing a Transportation Management Plan will constitute failure to adhere to conditions of a special permit. Violation of conditions could lead to revocation of the special permit.

Where can information and assistance be obtained from the City of Fresno to prepare a Transportation Management Plan (TMP)?

DEPARTMENT	TYPE OF INFORMATION / ASSISTANCE
Fresno Area Express ("FAX") 2223 "G" Street Fresno, CA 93706 (209) 498-4036	■ Fresno Metro Area public transit routes ■ Schedules for public transit ■ Transit passes, rate / fare information
Planning Section City of Fresno Development Department 2326 Fresno Street Fresno, CA 93721 (209) 498-1361	■ Ordinance Requirements ■ City of Fresno Air Quality Improvement Program
City of Fresno Public Works Traffic Engineering Section 2326 Fresno Street Fresno, CA 93721 (209) 498-1436	■ Fresno traffic flow data ■ Engineering options

ATTACHMENT A

TRANSPORTATION MANAGEMENT PLAN REQUIREMENT

GENERAL REFERENCE TABLE

When the number of potential employees for a project is uncertain, these I.T.E. Manual factors will be applied to determine whether a Transportation Management Plan is required.

LAND USE	I.T.E. MANUAL EMPLOYEE FACTORS	TMP THRESHOLD
General Light Industrial	17.40 employees per acre 2.30 employees per 1,000 sf gfa	21,740 sf gfa
General Heavy Industrial	7.60 employees per acre 1.60 employees per 1,000 sf gfa	31,250 sf gfa
Industrial Park	19.00 employees per acre 1.89 employees per 1,000 sf gfa	26,460 sf gfa
Lodging (Hotel, Motel)	0.34 employees per hotel room	147 hotel rooms
Warehousing (except mini-storage)	14.00 employees per acre 1.30 employees per sf gfa	38,465 sf gfa
Banking/Insurance Office Building	0.85 employees per 1,000 gfa	58,825 sf gfa
General Office Building Under 100,000 sf gfa 100,000 - 199,999 sf gfa Over 200,000 sf gfa	 4.80 employees per 1,000 sf gfa 4.40 employees per 1,000 sf gfa 3.50 employees per 1,000 sf gfa	 10,420 sf gfa will be required will be required
Medical Office Building	3.60 employees per 1,000 sf gfa	13,890 sf gfa
Research Center	2.20 employees per 1,000 sf gfa	22,730 sf gfa
Retail Center	1.35 employees per 1,000 sf gla	37,040 sf gla

sf gfa = square feet gross floor area
sf gla = square feet gross leasable area

SOURCE: "TRIP GENERATION (4TH EDITION)" - INSTITUTE OF TRANSPORTATION ENGINEERS, 1987

APPENDIX D

LOCATIONS OF CHILD CARE CENTERS AND SCHOOLS IN THE ROOSEVELT COMMUNITY PLAN AREA

(as of April, 1992)

Child (Day) Care Centers

Ann's Noyesy Nursery	414 N. Maple
Chestnut Avenue Baptist Academy	1461 N. Chestnut
The Children's Place Montessori School	5094 E. Tulare
Jack & Jill's Educational Center	969 S. Willow
Kiddie Kollege	2765 E. Olive
Piaget Discovery School	1080 N. Chestnut
Renaissance Day Care Infant & Pre-School	214 S. Clovis
School Age Child Care	4730 E. Lowe
Small World Pre-School	4884 E. Butler
Wee Care Learning Center	5191 E. Tulare
YMCA Child Care Center at John Wash School	6350 E. Lane
Yosemite Head Start	1109 N. Ninth

K - 12 Schools Presently Located Within and Proximal To the City's Roosevelt Community Plan Area

Ayer Elementary	5272 E. Lowe
Aynesworth Elementary	4765 E. Burns
Balderas Elementary	4625 E. Florence
Burroughs Elementary	166 N. Sierra Vista
C.K. Wakefield School/Juvenile Hall	744 S. Tenth
Calwa Elementary	4303 E. Jensen
Chestnut Avenue Baptist Academy	1461 N. Chestnut
Easterby Elementary	5211 E. Tulare
Ewing Elementary	4873 E. Olive
Fancher Creek Elementary	5948 E. Tulare
Fresno Adventist Academy	5397 E. Olive
Heaton Elementary	1533 N. San Pablo
Jackson Elementary	3733 E. Kerckhoff
Jefferson Elementary	202 N. Mariposa
Kings Canyon Middle School	5117 E. Tulare
Konkel Special Education	3224 E. Central
Lane Elementary	2617 S. Fowler
Lowell Elementary	171 N. Poplar
Malaga Elementary	3910 S. Ward
Mayfair Elementary	3305 E. Home
Muir Elementary	410 E. Dennett
Norseman Elementary	4636 E. Weldon
Orange Center Elementary	3530 S. Cherry

[Continued]

K - 12 Schools (continued)

Roosevelt High School	4250 E. Tulare
Rowell Elementary	3460 E. McKenzie
St. Helens School	4870 E. Belmont
Sequoia Freshman School	4050 E. Hamilton
Temperance-Kutner Elementary	1448 N. Armstrong
Turner Elementary	5218 E. Clay
(John S.) Wash Elementary	6350 E. Lane
Webster Elementary	930 N. Augusta
Winchell Elementary	3722 E. Lowe
Yosemite Middle School	1272 N. Ninth

Post-Secondary Educational and Vocational Training Facilities

Federico College - Sunnyside	5712 E. Kings Canyon
Fresno Pacific College	1717 S. Chestnut
Mennonite Brethren Biblical Seminary	4824 E. Butler
School of Hair Design	1880 Tulare
Sentro Esperanza	4860 E. Kings Canyon
Sheet Metal Industry Joint Apprenticeship	4585 E. Floradora
State Center Community College, Vocational Training Center	2930 E. Annadale

FRESNO UNIFIED SCHOOL DISTRICT
SCHOOL SITE SELECTION CRITERIA

District and State criteria for the evaluation of elementary and middle school sites are as follows:

A. Size and Shape:

1. Elementary school sites should have a minimum net area of 10 acres and middle school sites 25 acres.

2. The site should have an appropriate length-to-width ratio. Generally, the length should not exceed twice the width of the site.

3. The site should be regular in shape (e.g., rectangular or square).

B. Location:

The site should be centrally located to avoid extensive transporting and to minimize student travel distance.

C. Land Use:

1. The site should have a minimum number of parcels and owners.

2. The site should be substantially undeveloped in order to avoid disrupting or displacing existing development.

3. There should be a minimal potential for conflicts between the school and existing and potential future surrounding land uses. Use of adjoining school sites should be avoided, with the only Possible exception being a high school and an elementary school in close proximity

4. There should be no existing development commitments or approvals on the site (e.g., approved building permits, tentative tract maps, site plans).

D. Accessibility:

Elementary school sites should have access to local or collector streets. Middle school sites should have access to collector or arterial streets.

E. Safety:

1. The site should not be proximate to high voltage power transmission lines. Minimum distance limits from transmission line easements have been established by the State Department of Education, School Facilities Planning Division. These vary from 100 feet from the edge of an easement for a 100-110 kv line to 250 feet from the edge of an easement for a 345 kv line.

2. The site should not be in an area that is subject to airport-related safety considerations, including aircraft accident exposure or aircraft noise. The District must refer any proposed site within two miles of an airport to the State for review and approval.

3. The site should not be within one-half mile of railroad tracks. This is a general guideline that is used by the State in order to avoid exposing schools to potential health hazards resulting from accidents involving trains carrying toxic or hazardous materials. The State has granted exceptions to this guideline.

4. There should be no contaminants or toxics in the soil on the site or in the vicinity of the site that could adversely affect a school.

5. Locations should be avoided that are near canals or large irrigation ditches.

F. Environment:

Environmental conditions within the area, including noise, air quality, biological resources, cultural resources and aesthetics should be suitable for a school and not subject to significant constraints to development of a school.

G. Topography, Geology, Soils, and Drainage:

1. Topography, soils, geologic, seismic, drainage and flooding conditions within the area should not present significant constraints to development of a school.

2. Locations should be avoided that require covering or piping canals or large irrigation ditches.

H. Public Services and Utilities:

Public water, sewer, gas and electric systems should be available to serve the site.

Fresno Unified School District and State criteria for the evaluation of high school sites are as follows:

A. Size and Shape:

1. The site should have a minimum net area of 50 acres.

2. The site should have an appropriate length-to-width ratio. Generally, the length should not exceed twice the width of the site.

3. The site should be regular in shape (e.g., rectangular or square).

B. Location:

The site should be centrally located in the southeast area to avoid extensive transporting and to minimize student travel distance.

C. Land Use:

1. The site should have a minimum number of parcels and owners.

2. The site should be substantially undeveloped in order to avoid disrupting displacing existing development.

3. There should be a minimal potential for conflicts between the high school and existing and potential future surrounding land uses. Use of adjoining school sites should be avoided, with the only possible exception being a high school and an elementary school in close proximity.

4. There should be no existing development commitments or approvals on the site (e.g., no approved building permits, tentative tract maps, or site plans).

D. Accessibility:

The site should have access to two existing or planned major streets (collector or arterial streets). Collector and arterial streets normally have at least four traffic lanes and adequate capacity for the volume of traffic generated by a high school.

E. Safety:

1. The site should not be proximate to high voltage power transmission lines. Minimum distance limits from transmission line easements have been established by the State Department of Education, School Facilities Planning Division. These vary from 100 feet from the edge of an easement for a 100-110 kv line to 250 feet from the edge of an easement for a 345 kv line.

2. The site should not be in an area that is subject to airport-related safety considerations, including aircraft accident exposure or aircraft noise. The District must refer any proposed site within two miles of an airport to the State for review and approval.

3. The site should not be within one-half mile of railroad tracks. This is general guideline that is used by the State in order to avoid exposing schools to potential health hazards resulting from accidents involving trains carrying toxic or hazardous materials. The State has granted exceptions to this guideline.

4. There should be no contaminants or toxics in the soil on the site or in the vicinity of the site that could adversely affect a high school.

5. Locations should be avoided that are near canals or large irrigation ditches.

F. Environment:

Environmental conditions within the area, including noise, air quality, biological resources, cultural resources and aesthetics should be suitable for a high school and not subject to significant impacts by a high school.

G. Topography, Geology, Soils, and Drainage:

1. Topographic, soils, geologic, seismic, drainage and flooding conditions within the area should not present significant constraints to development of a high school.

2. Locations should be avoided that require covering or piping canals or large irrigation ditches.

H. Public Services and Utilities:

Public water, sewer, gas and electric systems should be available to serve the site.

APPENDIX E

[BY] FRESNO COUNTY LIBRARY

LIBRARY [SITE] SELECTION GUIDELINES

Site selection is a crucial step in any building project. The choice of the site is one of the most important determinants of the success of a library. A carefully selected site enhances the attractiveness and utility of a finished building. Fresno County uses the following criteria:

PRIMARY

1. A public library should be located where the people are. Proximity to other services used by community members is vital. Examples of such services would be a post office, a bank, a principle grocery store, a video store, or a town center in a rural community.

2. It should be highly visible and on major pedestrian and vehicular traffic routes.

SECONDARY

1. The property must be large enough for the proposed facility. In Fresno it is required that all branch libraries be on a single story.

2. The site should be available for purchase on the open market; the County does not wish to be involved in condemnation proceedings.

3. The site must be large enough to accommodate on-site parking.

4. There should be ample room for future expansion at a later date.

5. The site must be affordable.

6. The site must be either zoned for a library, or future zoning must be possible.

7. Setbacks and other restrictions that would limit the usability of the site must be investigated.

8. Natural features: existing features such as mature trees, ground slope and collection of water must be considered.

9. It is preferable not to select a site that has an existing structure which must be demolished.

10. The site must be reviewed for unseen conditions. For example, is the soil suitable for support of a large structure? Are soil borings needed? Where are underground utility lines located?

11. It is preferable to select a site on which the library can be oriented so as to take advantage of passive solar design.

12. It is preferable to select a site which has already been improved; that is, curbs and gutters, water, sewer.

13. In mountain areas, special fire requirements must be investigated.

14. The existence of rights-of-way which would diminish the size of the property in the future must be studied. An example would be a right-of-way for a freeway.

Other [Library] Financing Alternatives

* LCSA Title II; a fifty percent (50%) match is required. Funds for new buildings, additions, conversions of buildings to library, handicapped access, energy conversation, or use of modern technologies are available. General renovation and repair is not possible.

* One time revenue enhancements, e.g. oil impound funds.

* General Obligation bonds are the least costly method of financing. They are based on the ad valorem property tax and require a two-thirds vote of the electorate.

* Lease-purchase ("build to suit"). The "purchase" part remains an option until exercised, since under the California constitution municipal income cannot be obligated for more than one year at a time without 2/3 voter approval. Voter approval is not needed for lease-purchase financing. The lease can be negotiated at favorable rates because the property is used as a library.

* Developer Fees: Under the Subdivision Map Act, local developers may be required to pay fees for needed municipal capital projects in the areas they are developing. Such costs are passed on to purchasers of the subdivided property. Several public library buildings have been financed through such fees.

* Special Assessment Districts: according to many experts, recent court decisions and statutes make it possible for special library districts to use special assessment financing to construct library facilities in areas still being developed. This is a method that could be used for areas which are anticipated to develop. Voter approval is not needed, but care needs to be exercised so as not to abuse the system.

* Redevelopment: Since a library is not a major revenue producing agency, it could not generate a sufficient increased property and sales tax income in a redevelopment area to offset cost of construction. However, libraries have been included among the public facilities constructed in a neighborhood redevelopment area.

* Formation of a special district using the Mello-Roos Community Facilities Act of 1982. A 2/3 vote is required; the boundaries of the district can be drawn to include or exclude any area. Future restrictions exist which preclude reduction of services in place at the time the district is formed.

Other [Library] Financing Alternatives (continued)

* Retirement Funds. The Library may borrow funds from the Retirement Board under Section 19180 of the Education Code for the purpose of constructing a library. If agreed by all parties, these funds could assist with lease purchase financing.

* Certificates of Participation: Similar to a lease purchase, but for larger projects. A pool of investors create in effect a tax-exempt real estate investment trust.

* Sale-Leaseback is used for multi-million dollar projects. Our library could, for example, sell its Central library and use the proceeds (must be used within 3 years) as a partial payment towards construction of a new larger facility. In the meantime the current facility could be used until a larger facility was ready.

* Integrated Financing District: the statute allows for creation of a special district that is authorized to levy a landowner assessment that is contingent on development of the land; the district can enter into a reimbursement agreement with investors who will in turn build the project, and be repaid from the assessments.

* Community Rehabilitation Districts: The Law of 1985 provides a method to finance the rehabilitation, renovation, repair or restoration of existing public buildings; funding can be any source of revenues, including but not limited to property tax. Senior obligation bonds, which require a simple majority for passage are issued. This method reprioritizes existing revenues, rather than providing a new source of funds.

* Other public/private partnerships: Arrangements where the building constructed on public land includes private businesses which lease from the public agency, thereby generating revenue to help pay for the improvements.

* Sale of air rights or setback easements associated with a library project in built-up downtown areas may provide valuable incentives for private developers. Developers may also build large library projects on public land. The library occupies part of the space and the remainder stays under the developer's control for an agreed number of years and is used for commercial purposes. When the library needs to expand, it reclaims the space.

APPENDIX F

FINDINGS VERIFICATION AND MITIGATION MONITORING PROCEDURES AS REQUIRED BY THE ROOSEVELT COMMUNITY PLAN UPDATE, ITS CERTIFIED ENVIRONMENTAL IMPACT REPORT (SCH. 90-021238), AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The City of Fresno has instituted a findings verification system and mitigation monitoring procedure designed to fulfill the requirements for findings of public service availability and monitoring of environmental impact mitigation measures established by community plan updates and their final environmental impact reports.

The purpose of this verification system is to assure implementation of the policies and mitigation measures adopted by the City Council when applications for development projects (entitlements*) in the plan area are subsequently evaluated.

The findings verification system will implement Roosevelt Community Plan Update policy nos. 1-1.4, 4-1.4, 4-2.5, 4-3.1, and 4-3.3 as they relate to the verification of the availability of adequate water, sewer, and transportation infrastructure service capacities for all new development proposed within the boundaries of the Roosevelt Community Plan Area. Specific findings procedures are outlined in Sub-Appendices F-1, F-2, and F-3 following. Certification of these Findings is required for development project approval, and the Findings shall be made a part of the environmental assessment of development projects.

As an integral part of the mitigation monitoring process, an evaluation shall be prepared for each development application, to analyze each project's impacts on air quality, water quality/quantity, noise, conversion of agricultural land, traffic circulation, energy consumption, flood control, schools, fire and police services, and library facilities. This evaluation shall utilize current data obtained from responsible public agencies and project applicants to determine appropriate specific mitigation measures.

A mitigation monitoring checklist shall also be completed and included as part of the environmental assessment for each development project (see Sub-Appendix F-4 for the master checklist). This mitigation monitoring document must be prepared by the Development Department and considered by the City of Fresno prior to final approval of the development application.

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* "Applications for development entitlements" are defined herein as applications for plan amendments, rezonings, subdivisions (tracts maps and parcel maps), conditional use permits, and site plan reviews. Some Findings requirements may also be applied to certain building permits (see Water Service Finding Procedure).

Upon the submission of any application for a development entitlement, the Public Utilities Department, Public Works Department and Fire Department shall verify (with or without conditions) the availability of adequate water and sewer service and transportation capacity to accommodate the proposed project.

Verification shall be made an integral part of the formal. environmental review process and shall state in positive and specific terms in the environmental findings for each project.

Each verification shall take into account previous development application approvals, previously filed development applications and existing development within the Roosevelt Community; and shall, therefore, be based on a cumulative analysis of each affected service delivery system.

Verification shall take the form of a signature (on a cover form) by the department's Director (or designee), certifying the availability of the above-noted public services, and the verification shall include an attachment with summary data available and any conditions upon which the findings are based.

Verification shall expire in one year unless the development entitlement application is approved.

Otherwise, verification will continue to remain valid unless one of the following occurs:

(1) the application expires;

(2) the development application is amended (unless the amendment clearly requires the same or less sewer, water and traffic capacity);

(3) the development application is withdrawn;

(4) the approved entitlement expires; or

(5) the applicant fails to exercise the right granted by the approved development application within the applicable time limit for exercise of an approved application.

When verification expires, the Development Department will notify the verifying departments.

Any extension granted to a development entitlement shall require re-verification.

The Directors'/Fire Chief's reliance on federal, state and local code standards in determining capacity are not appealable. However, the specific methods required to provide adequate circulation, water and sewer services to meet local, state and federal standards for a development proposal are subject to appeal.

Appeals of these finding must comply with Section 12-401-H of the Fresno Municipal Code, except that:

(1) only the project applicant or the applicant's authorized representative(s) may file the appeal;

(2) the appeal shall be directed to the City Council;

(3) the appeal may be filed within 30 (instead of 15) days of the Directors' Notification of Findings;

(4) the appeal must be accompanied by supporting certification by a qualified registered engineer that capacity for service(s) exists as demonstrated by specific data and analysis (in accordance with generally accepted engineering practices); and

(5) the appeal shall specify the good faith attempts of the applicant to resolve the issues on the appeal.

All appeals must be finally determined prior to the development entitlement application (and its environmental assessment) being deemed complete for further processing.

FINDINGS COVER FORM (EXAMPLE)

VERIFICATION OF AVAILABILITY OF PUBLIC SERVICES
(Supporting documentation attached)

TO: Project Evaluation Section,Development Services Division Development Department

FROM: William T. Hetland
Public Utilities Department

Marvin D. Johnson, Director
Public Works Department

C. T. Armstrong, Fire Chief,
Fire Department

O.C. White, City Traffic
Engineer, Traffic Division
Public Works Department

This verification of public services for the following described project is being provided in accordance with the requirements of Exhibit D of City Council Resolution No. 92-140, which certified the Final Environmental Impact Report for the Roosevelt Community Plan (City of Fresno EIR No. 10113).

Project Number:_____ Location:_____
Description:_____

1. WATER SERVICE

In compliance with the Roosevelt Community Plan Verification and Monitoring Procedure For Water Service, it has been demonstrated and determined that an adequate source of potable water exists that meets state and federal contaminant levels and that a sufficient source of water to meet state fire flow requirements is available and is adequate to meet the needs of the above project.

By _____ Dated_____
Public Utilities Director

By _____ Dated_____
Fire Chief

2. SEWER SERVICE

In compliance with the Roosevelt Community Plan Verification and Monitoring Procedure for Sewer Service, it has been determined that there will be adequate sewer capacity in the _____ Trunk Sewer to serve the above project.

By _____ Dated_____
Public Utilities Director

3. TRAFFIC CIRCULATION

The Traffic Division of the Public Works Department has conducted a separate traffic review and has incorporated all recommended mitigation measures that are economically feasible into the above project such that the project will not diminish street service below an acceptable level.

By _____ Dated_____
Public Works Director

SUB-APPENDIX F-1

FINDINGS PROCEDURE FOR WATER SERVICE

With the submission of any development application, the project applicant shall submit data upon which the water demand of the proposed development can be determined. This data must include the number and type of residential units, and the proposed floor area and type of office, commercial, and/or industrial use(s).

A water availability analysis will be prepared by the Public Utilities Department and must be approved by the Public Works Director and the Fire Chief prior to approval of the development entitlement. This finding requirement will apply to building permits if a water availability analysis has not yet been performed for that site.

The analysis must demonstrate that adequate water, meeting state and federal safe drinking water standards, is available or will be available prior to issuance of any building permit for the development.

The finding that an adequate water supply will exist at occupancy may be conditioned upon the construction of, or securing with an agreement, certain water supply facilities prior to issuance of building permits. The adequacy of the water supply shall be based on the following minimum standards and/or criteria:

1. The supply of potable water shall be permanent and shall satisfy all requirements of Federal and State Safe Drinking Water Acts and Amendments.

2. The supply shall provide adequate fire flows at the most remote public or private fire hydrant in the development, with the following minimums:

   a) Residential uses up to 5,000 square feet per building: 1,500 gallons per minute at 20 psi pressure.

   b) Nonresidential, and residential over 5,000 square feet: 2,500 gallons per minute at 20 psi pressure.

3. The maximum pressure assumed to be available in a transmission grid main (TGM) for purposes of design of on-site water systems shall be 35 psi. The proposed development shall not cause the pressure in any transmission grid main serving that development to fall below 35 psi during peak use.

4. Flow and pressure determination in the transmission grid mains serving the entitlement shall consider all prior development entitlements at the density approved for those entitlements, and shall assume that all services are connected and use the following volumes of water:

   a) Single Family: 2.12 gallons per minute per unit (residence)

   b) Multi-Family: 1.51 gallons per minute per unit

   c) Nonresidential: determined from proposed uses on the property and any new criteria established for determining equivalency with residential water uses.

5. The Public Utilities Department shall use the above criteria, to develop a finding. The Department will assess water supply conditions in the Roosevelt Community Plan area resulting from existing and proposed development. This information shall be made available for use by project applicants and their engineers to determine if an adequate supply of water is available for a proposed development.

   The Public Utilities and Public Works Departments will, if feasible, develop and employ a computerized hydraulic flow model to help predict flow characteristics in the transmission grid main system to give further technical analysis support for the finding process. A Finding Application Charge shall be imposed if approved by the City Council for inclusion in the Master Fee Schedule.

6. An applicant proposing a development may be required, at his cost, to provide flow tests at various locations in the existing TGM system for use by Public Works to determine availability of an adequate water supply.

7. The applicant shall be responsible for evaluating the on-site distribution system, to determine the minimum pressures which will exist within the proposed development, and to document this information in the development entitlement application.

8. The applicant shall be required, prior to final approval of the entitlement, to provide security (in a form acceptable to the City Attorney) for construction of any facilities shown in the water availability analysis to be required for an adequate supply of water. The security will be released and the requirement to construct deleted if the required facilities satisfying the project's needs are constructed by others and placed in service.

9. If the Public Utilities Director determines that groundwater contamination exists less than one mile upstream from a well site providing primary service to a proposed development, and it is determined with reasonable certainty that maximum contaminant levels will be exceeded at the well site, the applicant may be required to install, or to provide for installation of, wellhead treatment.

10. For tract maps and parcel maps, approval of tentative maps will be subject to the determination that an adequate supply of acceptable potable water will be available or will be made available at the time of issuance of building permits for the development. The conditions of approval of tentative maps may include requirements related to provision of an adequate supply of water. In accordance with the provisions of Chapter 4.5 of the Subdivision Map Act, at the time of final approval of the map, other requirements may be imposed or the map may be denied if conditions are determined to exist which would be dangerous to the health or safety of the residents of the development or adjacent areas.

11. The finding that an adequate supply of acceptable potable water will not be available at the time of building permit issuance for the development may be appealed to the City Council in accordance with Section 12-401-H of the Fresno Municipal Code, as modified in this Findings Procedure (see page F-3 of Appendix F of the Roosevelt Community Plan EIR); provided such an appeal is accompanied by a study prepared by a licensed Civil Engineer showing that an adequate supply of water will be available at the time of building permit issuance.

12. The minimum standards and criteria listed above shall be reviewed as needed by the Public Utilities Director, the Public Works Director, and the Fire Chief; and with the approval of the City Council, may be revised to reflect changing conditions.

13. A development entitlement shall be considered to be valid until the Development Department otherwise determines in writing, based on provisions of the Fresno Municipal Code and the Subdivision Map Act, that the entitlement is no longer in effect.

SUB-APPENDIX F-2

FINDINGS PROCEDURE FOR SEWER SERVICE

With the submission of any development entitlement application the project applicant shall submit data upon which the Public Utilities and Public Works Departments can determine the quantity of wastewater flow from the proposed development. This data must include the proposed number and type of residential units, and the proposed floor area; or the type of office, commercial and/or industrial use(s) and the lot area and fixture units.

Public Utilities/Public Works staff shall prepare a sewer availability analysis to determine if there will be adequate sewer capacity in the affected trunk sewer for the proposed development at the time of issuance of an occupancy permit. Prior to approval of the development entitlement, the analysis shall be reviewed and approved by the Public Utilities Director.

The conditions of approval of an entitlement may include certain sewer facilities which will provide adequate sewer capacity or on-site treatment at time of occupancy. The adequacy of capacity shall be based on the following criteria and/or standards:

1. A residential unit equivalent in the Roosevelt Community Plan area is based on the following assumptions:

    a) Each person served in the Roosevelt Community Plan area will generate 115 gallons of sewage per day.

    b) Equivalent residential units shall be determined from current population data and shall be updated as necessary.

    c) Specific densities for residential uses will be obtained from information on the development entitlement application (when this information has been obtained pursuant to evaluating the application); otherwise, residential densities will be those cited in Policy 1-1.1 of the Roosevelt Community Plan.

    d) Commercial and light industrial flows will be calculated at 1,750 gallons per day per acre on parcels ten (10) acres or more to 2,750 gallons per day on parcels two (2) acres or less.

e) Heavy industrial flows will be obtained from information on the development entitlement application (when this information has been included in the application); otherwise, the estimate of 10,120 gallons per day per acre will be used to calculate sewer demand.

f) A peaking factor of 1.6 to 3.0 will be used to determine maximum flows, depending on pipeline diameters.

2. Sewage flows in the Roosevelt area trunk sewers shall be monitored by the City on at least a semi-annual basis to determine the validity of the assumptions regarding a residential unit equivalent and to determine that flows do not exceed the capacity of the trunks.

3. Modification of the residential unit equivalent and commercial/industrial sewage generation criteria may be made by the Public Utilities/Public Works Departments, based on sewage flow monitoring, and such modification shall be subject to approval by the City Council.

4. The Public Utilities/Public Works Departments will develop and maintain an empirical model of trunk sewers and their service, areas. The model will attempt to duplicate all existing development conditions in the service area (excepting sewer capacity reserved for the City of Clovis in the sewer trunks). Using residential unit equivalent criteria and Clovis sewage flows, the model will estimate existing sewage flow in the trunk system. The model will also estimate the remaining residential unit equivalents (available units which may be added to the trunk system) up-flow from selected points (nodes) along the trunk. The model sewage flow will be compared with the actual flow as determined by monitoring.

5. Capacity will be determined to not be available if the sewage generation volume added by the proposed development, in addition to all sewage generation from development previously tentatively approved through development entitlements, exceeds the available capacity at any point in the trunk sewer as indicated by the sewer model.

6. Required pretreatment facilities shall not be subject to reimbursement and the owner shall assume full responsibility for proper operation.

7. The development entitlement application shall include an engineering evaluation and details of any proposal to enhance capacity or to provide on-site wastewater treatment or pretreatment.

8. In the event the Council approves a sewer connection fee for capacity enhancement in trunk sewers and construction of new trunk sewers, and the Public Utilities/Public Works Directors determine that a capacity enhancement facility proposed by a developer is specifically covered by that fee, the developer shall be reimbursed upon completion and acceptance of the facility in an amount equal to the actual cost of the. facility but not to exceed the amount covered by the fee.

9. The available sewer capacity in the Orange, Fowler, and Chestnut Trunks will be determined in a manner similar to the Herndon Trunk and shall consider all existing and approved development in the Fowler and Chestnut service areas. Development in the Roosevelt Community Plan area will have no more "right" to sewer capacity than development in other portions of the Fowler Trunk Service Area and in the Chestnut Trunk Service Area.

10. The finding that adequate sewer capacity is not available in the trunk sewers at the time of occupancy of the development may be appealed to the City Council in accordance with Section 12-401-H of the Fresno Municipal Code, as modified in this Findings Procedure (see page F-3 of Appendix F of the Roosevelt Community Plan EIR); provided such an appeal is accompanied by a study prepared by a licensed civil engineer showing that capacity will be available at the time of occupancy.

11. A development entitlement shall be considered to be valid until the Development Department determines in writing that, based on provisions of the Municipal Code and the Subdivision Map Act, the entitlement is no longer in effect.

SUB-APPENDIX F-3

FINDINGS PROCEDURE FOR TRANSPORTATION

Prior to the submission of any development entitlement application, the project applicant shall submit traffic study data to demonstrate that sufficient transportation capacity is available to accommodate the proposed project at level of service "D" or better.

Prior to approval of the development entitlement, the data shall be reviewed by the City Traffic Engineer and approved by the Public Works Director. The finding that transportation capacity is adequate may be conditioned upon construction of certain street improvements prior to completion of the development, and/or to certain transit enhancements and implementation of a Transportation Management Plan.

The adequacy of capacity shall be based on the following criteria and/or minimum standards:

1. Proposed projects shall, to the extent economically feasible, conform to the circulation policies and implementation measures contained in Policies 2-1.1 through 2-1.9; 2-2.1 through 2-2.9; 2-3.1 through 2-3.12; and 2-4.1 through 2-4.7 of the Roosevelt Community Plan.

2. The conditions of approval for development entitlements shall comply with all provisions of the UGM Policy and the Municipal Code pertaining to the major street system and transportation management.

3. Notwithstanding the provisions of the UGM Street Policy, traffic generated by a proposed development shall not produce a condition where the current capacity of any existing collector and arterial streets which are not completed to planned width (and which provide primary traffic service within two miles of the development) would be exceeded. If the City Traffic Engineer determines that the capacity of these designated major streets, in their present condition, would be exceeded as a result of the proposed development, the development applicant shall be responsible for measures to mitigate the effects of exceeding the capacity of these streets.

4. For all non-residential projects greater than five acres in size, located within one mile of any interchange or intersection projected by the City Traffic Engineer to experience an "E" or "F" level of service, a traffic study shall be completed that identifies mitigation measures designed to mitigate project-related traffic impacts.

   In addition, the following streets which have been identified in the Roosevelt Community Plan EIR as having insufficient traffic capacity in the future, shall be included in the traffic study. The development applicant shall be responsible for implementing mitigating measures approved by the Council through certification of the Roosevelt Community Plan EIR:

   Freeway 99 - Jensen to American

   Freeway 41 - Freeway 99 to McKinley

   Freeway 180 (when built) - Freeway 41 to Peach

   Jensen - Golden State to Maple, and Clovis Avenue to Sunnyside Avenue

   McKinley - Freeway 41 to First

   Kings Canyon - Freeway 41 to Clovis Avenue

   Chestnut - Freeway 180 to Butler, and Church to North Avenue

   Peach - Freeway 180 to Butler

   Clovis - McKinley to Church

   Willow - Kings Canyon to Tulare Avenue, and Butler to Church

5. The finding that adequate traffic capacity will not be available at the time of building permit issuance for the development may be appealed to the City Council in accordance with Section 12-401-H of the Fresno Municipal Code, as modified in this Findings Procedure (see page F-3 of Appendix F of the Roosevelt Community Plan EIR); provided such an appeal is accompanied by a study prepared by a licensed Civil Engineer or Traffic Engineer showing that adequate traffic capacity will be available at the time of building permit issuance.

SUB-APPENDIX F-4

ROOSEVELT COMMUNITY PLAN EIR

MITIGATION MONITORING CHECKLIST

(CITY OF FRESNO EIR NO. 10113, STATE CLEARINGHOUSE No. 90-021238)

This monitoring checklist for the above-noted environmental assessment is being prepared in accordance with the requirements of Exhibits "A" & "B" of City Council Resolution No. 92-140 which certified Final Environmental Impact Report (EIR) No. 10113 for the Roosevelt Community Plan Update.

A. Incorporated into Project
B. City Wide Program in Place
C. Responsible Agency Contacted
D. City Wide Program Being Estab.
E. Not Applicable
F. Mitigated

Growth-Inducing Impacts

Urban Growth Management policies; agricultural land preservation policies; community plan density designations; and plan policies, including the requirements for environmental analysis and specific service capacity findings for water, sewer, and transportation as detailed in Appendix "F" of the Roosevelt Plan Environmental Impact Report (EIR).

A	B	C	D	E	F

Agricultural Land

The Development Department shall continue implementation of urban growth management (UGM) policies, water/sewer Findings, and property development standards which discourage the premature development of land.

A	B	C	D	E	F

Agricultural/urban reserve areas shall only be converted to urban uses in accordance with growth and public facility policies of the 1991 Roosevelt Community Plan Update. Agricultural land conservation policies of the 1991 Plan Update shall be implemented by the Development Department (Policy Nos. 1-20.3 and 1-20.4).

A	B	C	D	E	F

The Development Department shall utilize major streets, where possible, as boundaries between areas designated for urban development and agriculture. When land proposed for urban development directly abuts actively farmed land that is in an agricultural preservation contract, the development project shall include design features which buffer the agricultural/urban interface: densely landscaped strips, designated open space (including, but not limited to: full-width multi-use trails or bikeways, boundary streets, on-site flood control facilities, and/or building setbacks with fencing).

A	B	C	D	E	F

Housing

The Development Department and the Housing Division of the Department of Economic Resources shall implement housing preservation and residential development policies as outlined in the 1991 Roosevelt Community Plan Update (Policy Nos. 1-6.1 through 1-6.11; and 1-7.1 through 1-7.5; 3-1.1 through 3-1.13; 3-2.1 through 3-2.7) and the 1992 Housing Element Update of the City of Fresno General Plan.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Housing (cont'd.)

In conformance with State Planning Law, the Development Department shall review the City's Density Bonus Ordinance. Any proposed Density Bonus Ordinance revisions shall be subject to detailed environmental review that assesses impacts on infrastructure, services, and resources in the Roosevelt Community and on larger planning consideration areas.

A	B	C	D	E	F

Park Land

The Development Department and the Parks, Recreation, and Community Services Department shall jointly update the Master Plan for Parks and Recreation after the preliminary results of the next decennial census have been made available.

A	B	C	D	E	F

The Development Department shall amend and utilize the Fresno Municipal Code (Zoning Ordinance) as necessary to implement the City's Master Multipurpose Trails Manual (October,1990) by classifying multipurpose trail elements as permitted uses in all zone districts that trails may intersect.

A	B	C	D	E	F

The Development Department shall implement 1991 Roosevelt Plan Update policies for usable on-site open space at residential developments and for open space conservation (Policies 1-7.3.a; 1-15.1 through 1-15.11; 1-16.1 through 1-16.6; 1-17.1 through 1-17.5; and 1-18.1 through 1-18.5).

A	B	C	D	E	F

The Development Department shall continue implementation of the UGM process, which requires payment of fees upon development of property in order to provide neighborhood park facilities in a timely manner. The City Parks Division shall commit to developing a neighborhood park within two years of the time that 95 percent of the UGM service area funds are collected for that park.

A	B	C	D	E	F

Commercial/Industrial

Implement 1991 Roosevelt Plan Update policies for "Urban Form and Extent" (Chapter II) as they relate to commercial and industrial development (Policy Nos. 1-1.2 through 1-1.5; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-4.1 through 1-4.4; 1-4.7; and 1-5.1 through 1-5.8).

A	B	C	D	E	F

Implement 1991 Roosevelt Community Plan Update policies for commercial and industrial development (1-8.1 through 1-8.5; 1-8.7; 1-9.1 through 1-9.5; 1-10.1 through 1-10.4; 1-11.1 through 1-11.10; 1-12.1 through 1-12.3; 1-13.1 and 1-13.2; and 1-14.1 through 1-14.5).

A	B	C	D	E	F

Energy

1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and at preventing traffic congestion.

A	B	C	D	E	F

Implement the objectives and policies of the Fresno General Plan Energy Conservation Element; California Title 24 Energy Efficiency Standards; Fresno Municipal Code sections relating to landscaping, shaded parking, and woodburning; and 1991 Roosevelt Update policies 5-5.1 through 5-5.4.

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Water

	A	B	C	D	E	F
Adoption of the 1991 Roosevelt Community Plan Update, including policies on water service (Policy nos. 4-3.1 through 4-3.9) and water quality and quantity protection (Policy nos. 5-1.1 through 5-1.11).						
Building permits shall not be issued by the Development Department until an adequate water supply has been fully developed to serve those units (wells and/or surface supply will be constructed, on-line, and providing water of acceptable quality).						
The Public Works Department, Water Division shall prepare an annual "water budget" and capital improvement program which projects water consumption demand, water delivery capability, and water well improvement commitments.						
All practical water conservation measures shall be required by the Development Department and Public Works Department, including installation of water meters on all existing and new water services; establishment of industrial/commercial water conservation standards; establishment of practicable low-volume plumbing fixture standards for new construction; and establishment of water-efficient landscape (xeriscape) requirements.						
In order to maintain effective water quality control program enforcement in areas which may influence Fresno's Sole Source Aquifer, the Development Department and Public Works Department shall work with, and provide information to, agencies which have authority over potential sources of contamination and potential causes of groundwater overdraft.						
In order to preserve aquifer and surface water quality, development shall not be allowed in areas influencing the groundwater of the metropolitan area, when this development relies on wastewater treatment or disposal systems known to discharge any inadequately treated wastewater (i.e., containing high concentrations of salts, nitrates, nitrites, heavy metals, and/or organic compounds deemed to be drinking water contaminants).						
The Public Works Department, in cooperation with the FID and the FMFCD, shall implement and maintain a groundwater recharge program to ensure long-term groundwater balance and promote water quality improvement objectives. Groundwater recharge programs shall be developed, funded and maintained to mitigate the impacts of residential and industrial groundwater extraction.						
The City Public Works Department shall study the concept of a groundwater replenishment district to fund the portion of recharge activities necessary to recharge water extracted by private and public well operators who are not currently recharging groundwater.						
In any development adjacent to FID canals, the Development Department shall ensure that patent canal rights-of-way shall be preserved, FID ability to convey stormwater shall be preserved, and the ability of FID to deliver irrigation water on schedule shall be preserved. Development proposals and applications shall continue to be routed to FID and FMFCD for their review. Per Fresno Municipal Code Section 12-306-O, irrigation canals shall be piped (when adjacent property is developed) to maintain public safety and water quality.						

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Water (cont'd.)

The Public Works Department, FMFCD, and FID shall cooperate to increase recharge within the Roosevelt community as indicated by the Metropolitan Water Resource Management Plan and approved FID/City recharge projects.

A	B	C	D	E	F

Proposed FMFCD stormwater and recharge basins shall be subjected to a Level I hazardous materials assessment to determine proximity to known and suspected areas of soil and groundwater contamination. Protection and remediation measures shall be instituted before these basins are used for recharge or before area-wide storm drainage is directed to and allowed to percolate into these basins.

A	B	C	D	E	F

The City Manager's Office, the Development Department, the Public Works Department and the City Attorney's Office shall cooperate on efforts to evaluate, abate and mitigate contamination as expeditiously as possible, with the goal of assuring that water delivered to customers complies with federal and state drinking water standards.

A	B	C	D	E	F

The Public Works Department shall continue efforts to avoid and remove groundwater contaminants that affect the Roosevelt area water supply, by: water well rehabilitation; adjusting pumping rates to match specific yield of water-bearing zones; drilling wells outside of degraded water areas; equipping new/rehabilitated wells with deeper seals; and by instituting wellhead treatment to remove contaminants from drinking water and from the aquifer.

A	B	C	D	E	F

The Public Works Department shall develop a timetable and funding mechanism for amortizing and replacing water transmission grid mains, to provide for upgrading capacity, to prevent leakage from deteriorated pipe, and to maintain water quality.

A	B	C	D	E	F

Before a well is developed, the Public Works Department shall subject the potential well site to at least a Level I hazardous substance assessment.

A	B	C	D	E	F

Backwash water, used GAC slurry, and other solid waste or liquid effluent created by wellhead treatment shall be properly handled and/or disposed of according to its waste hazard classification. If the carbon material is reconditioned, the public Works Department shall ensure that the GAC recycling facility has proper handling and disposal procedures, in order to limit the City's "cradle to grave" responsibility for potentially hazardous materials. Documentation of proper "chain of custody" of used GAC shall be a condition of any carbon change-out contracts. If the GAC is to be regenerated or incinerated, the Public Works Department shall ensure that the regeneration facility is fully permitted for the designated procedure and that a certificate of regeneration or destruction is obtained for each GAC load.

A	B	C	D	E	F

In consultation with Department of Health Services' Office of Drinking Water, the Public Works Department shall develop contingency plans for effective public (customer) notification in the event of an exceedance of drinking water standards, when a well must be left in service in order to maintain adequate pressure and fire flow.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Water (cont'd.)

City water service shall not be extended to areas planned for new development (residential subdivisions, commercial, or industrial) outside the incorporated city limits. EXCEPTIONS: (a) City water connections required under Section 14-115 of the Fresno Municipal Code; and (b) the existence of extraordinary circumstances, in which case City water service must be approved by both City and County legislative bodies. Existing commitments for water service outside the city limits shall continue to be honored.

A	B	C	D	E	F

Specific mitigation measures and existing regulations and policies identified in EIR chapters relating to flood control/drainage, sewer service, and hazardous materials would also protect and preserve groundwater and water service capacity.

A	B	C	D	E	F

Air Quality

The City of Fresno shall analyze, and implement as necessary, Clean Air Act Attainmnent Plans and other proposed Valley-wide air pollution agency rules and policies to ensure that local and regional air quality improvement can be achieved.

A	B	C	D	E	F

The Development Department, Public Works Department, and Fresno Area Express shall support beneficial regional clean air plans, policies, and rules by drafting appropriate ordinances and instituting administrative practices required to implement Valley-wide air quality measures.

A	B	C	D	E	F

The City of Fresno shall continue to uphold 1984 Fresno General Plan Policies and related land use regulations:

(a) Urban Referral Policy - Residential, commercial and industrial development shall be accommodated within incorporated cities; to reduce vehicle miles traveled and provide for mass transit.

A	B	C	D	E	F

(b) Contiguous Urban Expansion - To reduce vehicle miles traveled.

(c) Urban Infill - To reduce vehicle miles traveled.

(d) Mixed Land Use - Utilizes Local Planning and Procedures Ordinance to achieve well-integrated, compatible mixed residential, commercial and office uses; to reduce vehicle miles traveled.

(e) Density Transfer - Utilizes Local Planning and Procedures Ordinance to reallocate dwelling unit densities in selected areas; to reduce vehicle miles traveled.

(f) Intensity Corridors and Nodes - Evaluate the feasibility of "transportation corridors" that would enhance investment in areas bordering the City's freeways. This would support the City policy of concentrating development along major streets which can accommodate traffic, mass transit, and other alternative transportation modes.

(g) Traffic Flow - Ongoing improvement of traffic signals to reduce vehicle emissions from excessive vehicle idling (optimized signal timing, interconnected signals, traffic-actuated signals, computer-based controls, channel intersections, additional turn lanes.)

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Air Quality (cont'd.)

	A	B	C	D	E	F
(h) Transit - On-site (at major shopping centers, other locations) bus parking and loading lanes with passenger and driver facilities to reduce vehicle miles traveled, engine idling and improved traffic flow.						
(i) Bicycle Alternative - Bicycle lanes, bikeway design and planning with attendant safety and convenience facilities to reduce vehicle miles traveled.						
(j) Develop and incorporate air quality maintenance considerations in the preparation of community and specific plans and in the review of land use and development proposals.						

	A	B	C	D	E	F
The City of Fresno shall continue to implement its Air Quality Policy Program (See EIR Appendix C).						

	A	B	C	D	E	F
The City of Fresno shall implement the air quality improvement policies in the 1991 Roosevelt Community Plan Update (Policy nos. 5-2.1 through 5-2.10).						

	A	B	C	D	E	F
The Development Department, Fresno Area Express, and the Public Works Department shall implement 1991 Roosevelt Community Update policies for land use, transportation, and energy conservation (Policy nos. 1-1.1 through 1-1.6; 1-2.1 through 1-2.7; 1-3.1 through 1-3.3; 1-8.1 through 1-8.3; 1-8.5 through 1-8.7; 1-9.1 through 1-9.4; 1-10.1 through 1-10.4; 1-12.1 and 1-12.2; 1-16.1 through 1-16.6; 1-20.3; 1-21.2 through 1-21.6; 2-1.1 through 2-1.9; 2-2.1 through 2-2.9; 2-4.1 through 2-4.7; 2-5.1 through 2-5.6; 2-6.1 through 2-6.7; and 5-5.1 through 5-5.4).						

To address potential additional fine particulate matter pollution which could be generated by the 1991 Roosevelt Update, the following specific improvements, requirements, and design standards shall be applied in the community plan area to prevent and reduce entrained dust:

	A	B	C	D	E	F
(a) No new unpaved alleys, roadways, driveways, vehicle parking, loading, vehicle sales, or vehicle storage areas shall be permitted in any zone district. No new "temporary" unpaved parking areas shall be permitted, and no existing "temporary" unpaved parking area permits shall be extended under Fresno Municipal Code Section 12-306-I.7.						

EXCEPTIONS:

(i) Temporary, on-site construction equipment storage lots may be permitted during construction periods, provided that they satisfy City and air district requirements for siting and dust control.

(ii) Unpaved agricultural roads may be permitted, provided that they satisfy air district requirements for dust control.

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Air Quality (cont'd.)

(b) Utilizing pro-active code enforcement, existing illegal and nonconforming unpaved driveways, parking areas, and loading areas shall be amortized and removed (or properly improved). Existing unpaved road gutters shall be upgraded to provide paved curb and gutter areas for roadside parking. (1991 Roosevelt Update Policy nos. 1-14.1, 1-14.2, 3-1.5, 3-1.9, and 3-1.11.)

A	B	C	D	E	F

Historic, Archaeologic, Paleontologic

The Development Department shall survey redevelopment areas for possible historic property which would be adversely affected by the redevelopment proposal. Detailed assessments shall be done on Local/National Register candidate properties, and recommendations forwarded to the Historic Preservation Commission and to Redevelopment planning staff.

A	B	C	D	E	F

Notices and Orders issued for violations of the Housing Code, Dangerous Building Ordinance, and Exterior Building Maintenance Ordinance, as related to structures 50 years of age and older, shall be made available to the Historic Preservation Commission for their recommendations on surveying, assessing, and preserving potential historic resources.

A	B	C	D	E	F

Before the issuance of any formal demolition order by the City, properties over 50 years old shall be assessed for historic value, and potential Local Register listing resolved.

A	B	C	D	E	F

In any public works project, work shall stop immediately if archaeological and/or fossil material is encountered on the project site.

A	B	C	D	E	F

If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations made to the City as to any further site investigation or site avoidance/preservation.

If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontoligist determines the material to be significant, it shall be preserved.

The following paragraphs shall be added as a condition to subdivisions, special permits, and entitlements issued in the Roosevelt Community Plan Area:

A	B	C	D	E	F

"If archaeological and/or animal fossil material is encountered during project surveying, grading, excavating, or construction, work shall stop immediately. [cont'd.]

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Historic, Archaelogic, Paleontologic (cont'd.)

"If there are suspected human remains, the Fresno County Coroner shall be immediately contacted. If the remains or other archaeological materials are possibly Native American in origin, the Native American Heritage Commission (ph. 916-653-4082) shall be immediately contacted, and the California Archaeological Inventory/Southern San Joaquin Valley Information Center (ph. 805-644-2289) shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations made to the City as to any further site investigation or site avoidance/preservation.

If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontoligist determines the material to be significant, it shall be preserved."

Transportation

1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and fostering alternative transportation through provision of bikeways and trails.

A	B	C	D	E	F

The Development Department, Public Works Department, and Fresno Area Express shall implement the plan concept (land use design) and policies of the 1991 Roosevelt Community Plan Update to establish balanced land uses with supportive circulation and transportation facilities, in order to reduce vehicle trips and traffic congestion.

A	B	C	D	E	F

The Development Department and Public Works Department shall implement the policies, development standards, and mitigation measures of the 1991 Roosevelt Community Plan Update and its EIR, to minimize exposure to noise and glare from traffic.

A	B	C	D	E	F

The City of Fresno shall continue to implement the City Air Quality Policy Program and its related Municipal Code provisions to minimize air pollution from traffic (see EIR Appendix C).

A	B	C	D	E	F

The City of Fresno shall continue to evaluate proposed congestion management measures and mobile source air pollution control proposals, and shall continue to pursue and implement measures which can beneficially reduce traffic and vehicle-related pollution (including synchronized traffic signalization and mass transit system improvements).

A	B	C	D	E	F

As part of its next General Plan Update, the City of Fresno shall evaluate and institute funding and financing mechanisms for needed major street and urban freeway augmentations; and development of specific plans for freeway interchange areas, to better coordinaate transportation and land use planning in these sensitive areas.

A	B	C	D	E	F

The City of Fresno shall advocate for timely changes and additions in future Measure C expenditure programs, to fund freeway improvements that are demonstrably necessary to accommodate existing and planned population growth and development, such as:

(a) Completion of urban Freeway 180 to the Clovis or Fowler Avenue alignment before the end of this decade.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Transportation (cont'd.)

	A	B	C	D	E	F
(b) Expansion of Freeway 99 to eight lanes from the Freeway 41 interchange to Jensen Avenue.						
(c) Expansion of planned Freeway 180 to eight lanes between Freeway 41 and the Freeway 168 interchanges.						

	A	B	C	D	E	F
The City of Fresno shall strongly advocate that Cal-Trans mitigate impacts of its freeway improvement projects, including use of such measures as noise and glare reduction, air quality protection, and capacity enhancements for City streets affected by interchange traffic.						
All applications for development entitlements within 660 feet of a planned or existing freeway interchange shall be routed to Cal-Trans and the Council of Fresno County Governments for their review and comment.						
Any proposed encroachments/driveways within 300 feet of a planned or existing freeway interchange shall requre a design exception, granted only after consultatiion with Cal-Trans.						
A specific Findings procedure shall be employed to evaluate each development entitlement application (See EIR Appendix F) to ensure that acceptable levels of service are maintained						

The Public Works Department shall monitor the need for, and shall initiate as required, the following improvements in City street segments with potentially deficient service levels:

	A	B	C	D	E	F
(a) Kings Canyon Avenue to six lanes between the downtown area and Minnewawa Avenue.						
(b) Kings Canyon Avenue to four lanes between Fowler and Temperance Avenues.						
(c) Butler Avenue to four lanes between Hazelwood Boulevard and Peach Avenue.						
(d) Church Avenue to four lanes between the Southern Pacific Railroad tracks and Fowler Avenue.						
(e) Jensen Avenue to six lanes between Freeway 99 and Fowler Avenue.						
(f) Chestnut Avenue to six lanes between McKinley and North Avenues. (This may affect planned bike lanes.)						
(g) Willow Avenue to four lanes between Olive and Lane Avenues, and between Butler and North Avenues.						
(h) Peach Avenue to four lanes between McKinley and Jensen Avenues.						

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Transportation (cont'd.)

(i) Clovis Avenue to six lanes between McKinley and Jensen Avenues. (This may affect planned bike lanes.)

(j) Fowler Avenue to four lanes between Belmont and Jensen Avenues.

In consultation with Cal-Trans and the Council of Fresno County Governments, the Public Works Department shall develop guidelines for traffic studies and shall continue to review all entitlements for traffic impacts.

The Development Department and Public Works Department shall maintain subdivision design standards which require one subdivision (street system) access point to a major street or local collector for each 100 dwelling units.

The Development Department and Public Works Department shall evaluate and implement development access policies suggested by the Council of Fresno County Governments for land at the corners of intersecting major streets where direct access is not permitted (e.g., the intersection of Jensen and Temperance expressways), and for land served by existing nonconforming driveways on Jensen and Temperance Avenues.

Sewer

The Development Department and Public Works Department shall implement 1991 Roosevelt Update policies for evaluating and improving sewer service (Policy Nos. 4-1.1 through 4-1.5 and 4-2.1 through 4-2.5).

The Public Works Department shall continue to expand its preventive maintenance schedule for sewer line cleaning and obstruction (root) removal.

A policy for sewer line amortization and replacement funding shall be developed by the Public Works Department to prevent infrastructure deterioration and sewer pipe failures in the Roosevelt community.

Redevelopment plans shall include provisions for upgrading and/or replacing inadequate sewer lines, as well as an amortization timetable and funding mechanisms for eventual replacement of any new lines installed.

Development proposals south of the North Avenue alignment shall include plans for improvements required to convey wastewater to a secondary or tertiary treatment plant. On-site wastewater disposal systems shall not be permitted with the following exceptions:

(a) Industrial pretreatment plants will be permitted when they are under permit to discharge to the Fresno-Clovis Regional Wastewater Treatment Facility.

(b) On a case-by-case basis, when the Public Works Department finds that no permanent connection to the Regional Facility is feasible, and when the wastewater contains no industrial processing wastes, on-site and/or package treatment systems--which discharge adequately treated wastewater (with acceptable levels of nitrates, nitrites, salts, microbes, and organic constituents)--may be considered and approved if acceptable to the City Water Division, State and County Health Departments, Regional Water Quality Control Board, and the EPA.

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Sewer (cont'd.)

The Public Works Department and Development Department shall implement sewer fees, as necessary, for new development to finance proportionate shares of needed sewer line and sewer treatment plant enhancements.

A	B	C	D	E	F

The Public Works Department and Development Department shall implement water conservation strategies, as identified by the EIR Water Section.

A	B	C	D	E	F

Industrial facility development and expansion proposals shall be environmentally assessed by the Public Works Department (Wastewater Management Division) to determine whether a wastewater pretreatment system shall be required. If one is required, detailed plans and operating parameters for this pretreatment system shall be approved by Public Works before the entitlement can be granted. When pretreatment is initially required for a project, or is later required when wastewater discharges fail to meet quality criteria, continued maintenance of a valid Fresno Regional Wastewater Treatment Facility Discharge Permit shall be a condition of the entitlement.

A	B	C	D	E	F

City sewer service shall not be extended to areas planned for new development (i.e., residential subdivisions, commercial or industrial facilities) outside the incorporated city limits of Fresno and Clovis; except under extraordinary circumstances, in which case such service must be approved by both City and County legislative bodies. All existing commitments for sewer service outside the City limits shall continue to be honored, so long as industrial facilities abide by their discharge requirements.

A	B	C	D	E	F

Solid Waste

The Public Works Department and Development Department shall implement 1991 Roosevelt update policies for maintaining adequate solid waste disposal service (Policy Nos. 4-8.1 through 4-8.6).

A	B	C	D	E	F

The Public Works Department and Development Department shall implement the City-wide Source Reduction and Recycling Element and other plans and policies necessary to comply with Assembly Bill 939.

A	B	C	D	E	F

The Development Department shall require that designs for multi-family residential projects include functional recycling container space.

A	B	C	D	E	F

The Public Works Department shall extend community clean-up rubbish pickup service to multi-family residences, and shall consider increasing the frequency of this service to four times per year.

A	B	C	D	E	F

The Public Works Department shall institute a system for collecting recyclables, yard waste, and other compostable organic material.

A	B	C	D	E	F

The Development Department shall require that designs for recreational, institutional, commercial and industrial projects shall include adequate secure space to segregate and store recyclable material.

A	B	C	D	E	F

The Parks and Recreation Department shall institute policies on food and beverage containers (and recycling) at parks and other community recreation facilities.

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Solid Waste (cont'd.)

The Development Department shall add a condition to all development entitlements requiring that any asphalt and concrete removed during construction or demolition activity shall be recycled.

A	B	C	D	E	F

Schools

The Development Department shall implement policies of the 1991 Roosevelt Update to reduce residential dwelling unit densities and to mitigate high levels of potential student generation.

A	B	C	D	E	F

In order to provide capital improvement funding, the City of Fresno and impacted school districts shall consider the use of Mello-Roos districts and other assessment districts and financing mechanisms for school construction.

A	B	C	D	E	F

The City of Fresno shall assist and support school districts' efforts to plan for and locate additional school sites as they are needed.

A	B	C	D	E	F

The City of Fresno shall advocate for the application of historic, scenic, and neighborhood preservation policies of the 1991 Roosevelt Update when school sites are developed.

A	B	C	D	E	F

The City of Fresno shall continue to assure collection of school construction fees for residential and non-residential projects.

A	B	C	D	E	F

When school district analysis of a proposed residential development project indicates that there will be schoo capacity deficiencies, the following advisements shall be provided to all prospective purchasers of property within the project:

A	B	C	D	E	F

"The schools serving this property may not have adequate capacity of students from the area. Students could be bused to other schools within the District; or school attendance areas may be adjusted within the District, requiring students to attend another school. Students might attend new facilities when and if such facilities are constructed. Students could, therefore, change elementary, middle, and/or high schools during their years of enrollment in the District. Students could also have to attend elementary, middle, and/or high school on year-round, extended-day, and/or double session schedules."

Fire and Paramedic

The City of Fresno shall implement existing policies and standards as well as 1991 Roosevelt Update policies/ implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities, and management of water resources.

A	B	C	D	E	F

The Development Department shall continue to support, and shall uphold UGM requirements for funding needed to implement, the findings of the 1975 Fire Station Location Program Study.

A	B	C	D	E	F

The City of Fresno shall consider using Mello-Roos or other types of assessment districts to maintain staffing and service levels for City Fire Stations.

A	B	C	D	E	F

The Fire Department shall continue to revise and update fire station location scenarios, as appropriate, in response to changing land uses and population.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Law Enforcement

The Development Department and the Fresno Police Department shall implement 1991 Roosevelt Update policies to enhance crime prevention activities (Policies 1-7.4 and 1-7.5; 1-11.4 and 1.11.5; 1-11.10; 3-1.9; and 4-6.1 through 4-6.4).

A	B	C	D	E	F

The Development Department shall promptly forward details of approved annexations to the City of Fresno Police Department, the Fresno County Sheriff, and to respective City and County Public Safety Answering Points (dispatch centers).

A	B	C	D	E	F

The Development Department shall consider using UGM fees, Mello-Roos districts, and other special assessments to fund capital costs and operational expenses for providing police services when new development is proposed that will require additional police facilities and services.

A	B	C	D	E	F

The Development Department shall implement 1991 Roosevelt Update policies for neighborhood preservation, traffic congestion prevention, and open space/recreation.

A	B	C	D	E	F

The Development Department shall route all residential subdivision, site plan, and conditional use permit applications to the Fresno Police Department for their review of security design, emergency access, traffic/pedestrian safety, and impact on police service needs.

A	B	C	D	E	F

Police service impacts shall be added to the Development Department Environmental Review checklist for evaluation purposes.

A	B	C	D	E	F

The Development Department shall require that land use entitlements for "swap meets" and large public gathering or special event facilities be conditioned upon these activities providing their own security force which will provide crowd and traffic control.

A	B	C	D	E	F

The Development Department shall require that multi-family developments containing over 50 dwelling units provide and maintain an on-site police call box.

A	B	C	D	E	F

Library

The City of Fresno shall cooperate with the Fresno County Library in evaluating funding mechanisms needed to construct the new library facilities planned to serve the Roosevelt Community.

A	B	C	D	E	F

Hazardous Materials

1991 Roosevelt Update policies and mitigation measures primarily aimed at protecting air quality and water quality, and designed to ensure proper disposal of solid waste, wastewater, and stormwater.

A	B	C	D	E	F

The City of Fresno Development Department Public (Permit) Counter shall continue to implement California Government Code Sections 65850.2 and 65962.5, to provide for adequate assessment and mitigation measures on listed hazardous material sites, and to prevent future hazardous material releases.

A	B	C	D	E	F

The City of Fresno shall continue to support special household hazardous waste collection activities, to reduce the amount of hazardous material being improperly discarded.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Hazardous Materials (cont'd.)

The City of Fresno shall, as may be appropriate, require Level 1 and further Assessments before annexing property, before acquiring property, and before approving the development of property in the Roosevelt Community Plan Area.

A	B	C	D	E	F

The City of Fresno shall continue to prevent, assess, and seek remediation of any hazardous material contamination on property owned by the City.

A	B	C	D	E	F

The Development Department shall condition all commercial and industrial special permits upon proper use, containment, safeguarding, and disposal/discharge of hazardous materials.

A	B	C	D	E	F

The Development Department and the City Attorney's office shall work with the appropriate regulatory agencies and/or shall exercise their police power and land use regulation authority to amortize and to abate nonconforming and illegal land uses which threaten public health, safety, and general welfare by illegal or unacceptable use, containment, safeguarding, or disposal/discharge of hazardous materials.

A	B	C	D	E	F

The Development Department and the Public Works Department shall continue to ensure that funding is provided for required signalizing of railroad grade crossings as land is developed for urban uses.

A	B	C	D	E	F

Noise

The Development and Public Works Departments shall implement noise control measures proposed in the 1991 Roosevelt Community Plan Update (Policy nos. 5-3.1 through 5-3.5).

A	B	C	D	E	F

The Development and Public Works Departments shall implement circulation policies of the 1991 Roosevelt Community Plan Update, to reduce exposure to traffic-generated noise.

A	B	C	D	E	F

The Development Department shall implement noise policies of the Fresno Air Terminal Airport & Environs Specific Plan (see Appendix B).

A	B	C	D	E	F

The City of Fresno and the Twenty-first District Agricultural Association (Fresno Fair) Board shall evaluate potential noise sources for events proposed at the Fresno Fairgrounds and pursue relocation of nuisance-level noisy activities to a less-sensitive location (1991 Update Policy nos. 1-21.3 and 3-1.8).

A	B	C	D	E	F

The City of Fresno shall require appropriate noise mitigation structures and landscaping for urban freeways 168 and 180 as each segment is built.

A	B	C	D	E	F

For commercial, industrial, and public facility special permit applications, the Development Department's environmental assessment shall include noise generated by on-site truck traffic. Potential noise impacts upon the industrial area and upon nearby sensitive receptors shall be evaluated. Operational controls (e.g., limited hours of specified activities), on-site acoustic measures, and off-site acoustic measures shall be employed to prevent nuisance noise episodes and to keep within limits set forth in Fresno Municipal Code Section 8-302.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Noise (cont'd.)

The Development Department shall require that all fences and walls constructed for residential uses which back or side onto major streets without a frontage road meet the standards of Fresno Municipal Code Section 12-306-N-19.

A	B	C	D	E	F

Plants and Wildlife

The Development Department shall implement open space, landscaping, and conservation policies/implementation measures of the 1991 Roosevelt Community Plan Update to provide and improve habitat and to preserve natural resources of the area.

A	B	C	D	E	F

The Development Department shall implement 1984 General Plan policies for conserving land important to the continued existence of plant and wildlife species.

A	B	C	D	E	F

For drainage basins in agricultural or industrial areas, and for those basins where geometry or other factors preclude developed recreational uses, FMFCD and the City of Fresno shall consider development of habitat areas for native plants and wildlife, in consultation with the State Department of Fish and Game.

A	B	C	D	E	F

In 100-year flood plain areas along water courses, the City of Fresno shall consider development of conjunctive habitat and trail/recreational uses.

A	B	C	D	E	F

If the California Department of Fish and Game requires habitat replacement as a condition of, or mitigation for, any project in the Roosevelt Community Plan area, such replacement or mitigative habitat shall be located within the Fresno-Clovis Metropolitan Area or on a water course directly contiguous to the FCMA.

A	B	C	D	E	F

Flood Control and Drainage

The City of Fresno and the FMFCD shall jointly implement 1991 Roosevelt Update policies relating to storm drainage (Policy Nos. 3-1.11 and 4-4.1 through 4-4.4).

A	B	C	D	E	F

Whenever feasible, temporary on-site drainage basins shall be located so that they may be easily dewatered to an adjacent irrigation facility.

A	B	C	D	E	F

The Development Department shall include provisions for area-wide drainage facilities in redevelopment plans.

A	B	C	D	E	F

The Public Works Department shall continue to consider drainage needs when outlining street, curb, and gutter improvement districts.

A	B	C	D	E	F

The Development Department shall continue code enforcement activities which prevent vehicles from traversing and parking on unpaved areas, to prevent undue compaction and to prevent loss of landscape plants and erosion of silt into the drainage system.

A	B	C	D	E	F

A. Incorporated into Project
B. City-wide Program in Place
C. Responsible Agency Contacted
D. City-wide Program being Est.
E. Not Applicable
F. Mitigated

Flood Control and Drainage (cont'd.)

Pursuant to EPA regulations, the Development Department shall incorporate NPDES stormwater discharge permit requirements by reference into its conditions for industrial projects and all construction sites of five or more acres. The NPDES permit requirements shall be included in special permits, grading permit review, and building permit plan check review.

A	B	C	D	E	F

The Development Department and Parks and Recreation Department shall consult with FMFCD and the Public Works Department's Water Division on their drainage and ground- water recharge needs before designating any basin site for conjunctive recreational uses.

A	B	C	D	E	F

The FMFCD shall perform a Level I Hazardous Waste assessment before acquiring new basin sites or commencing use of new basin sites in order to avoid exacerbating the effects of contamination in an area when basins are placed into service for drainage and recharge activities.

A	B	C	D	E	F

Airport Safety

The Development Department shall continue to implement safety and avigation protection provisions in the Fresno Air Terminal Environs Specific Plan.

A	B	C	D	E	F

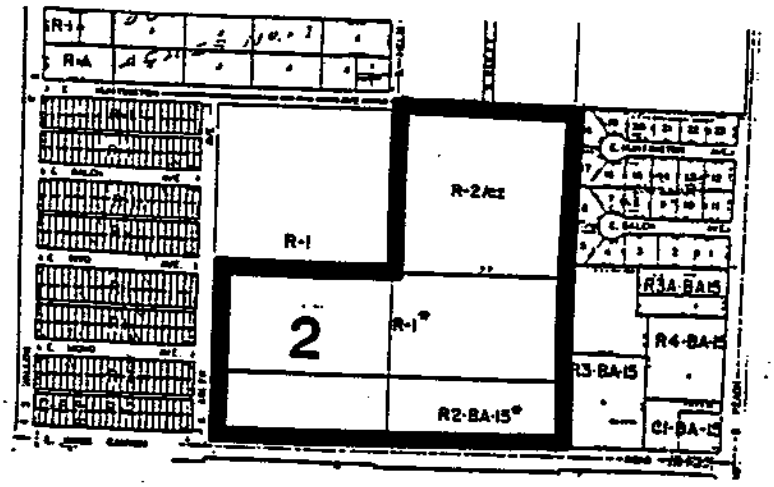
Seismic Safety

The City of Fresno and the Fresno County Office of Emergency Services shall update its emergency/disaster plans to accommodate the expanded population and inventory of structures in the Roosevelt Community.

A	B	C	D	E	F

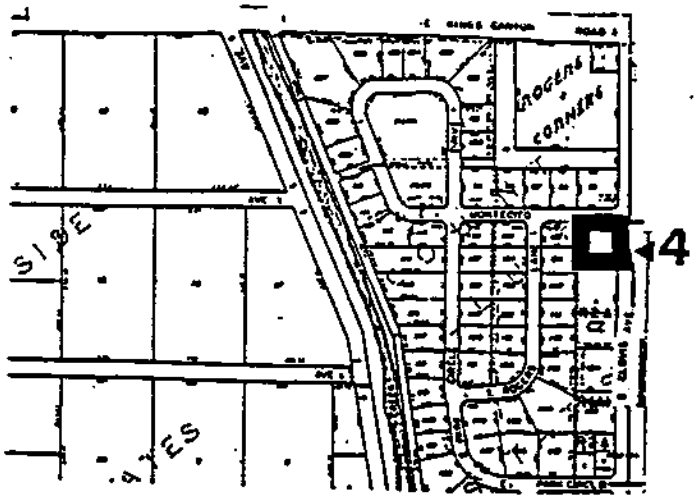
PAR/SB
TECH18/+2434; WPPPLN2/85
3/5/93

Addendum For Land in Requested Plan Modification No. 2



	INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED
• The Development Department shall require a specific traffic study for any site plan and development entitlements at this site, to assess the need for: deceleration/acceleration lanes on Kings Canyon Avenue; a synchronized 1/4 mile interval signal on Kings Canyon; and required improvements on Willow and Peach Avenues.						•
• The Development Department and Parks Department shall require design statndards for the site's park/shopping center and park/residential interfaces to promote public safety and reduce park maintenance requirements.						•

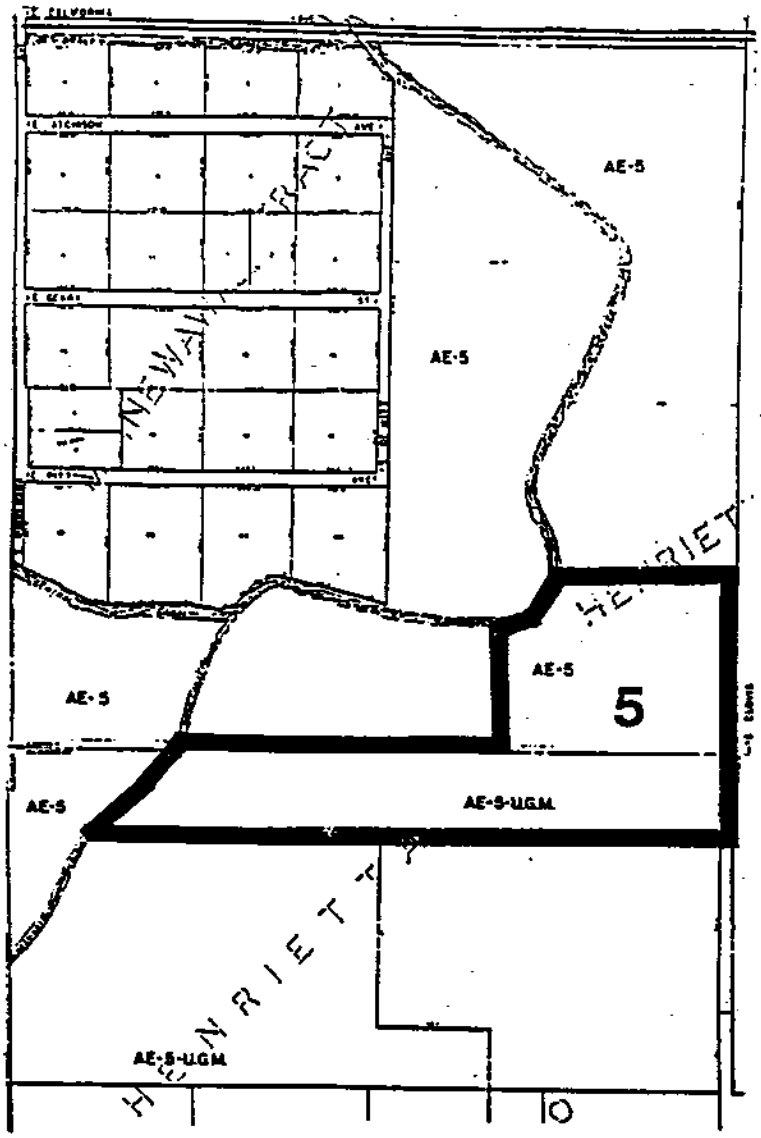
Addendum For Land in Requested Plan Modification No. 4



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED

* The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.

Addendum For Land in Requested Plan Modification No. 5

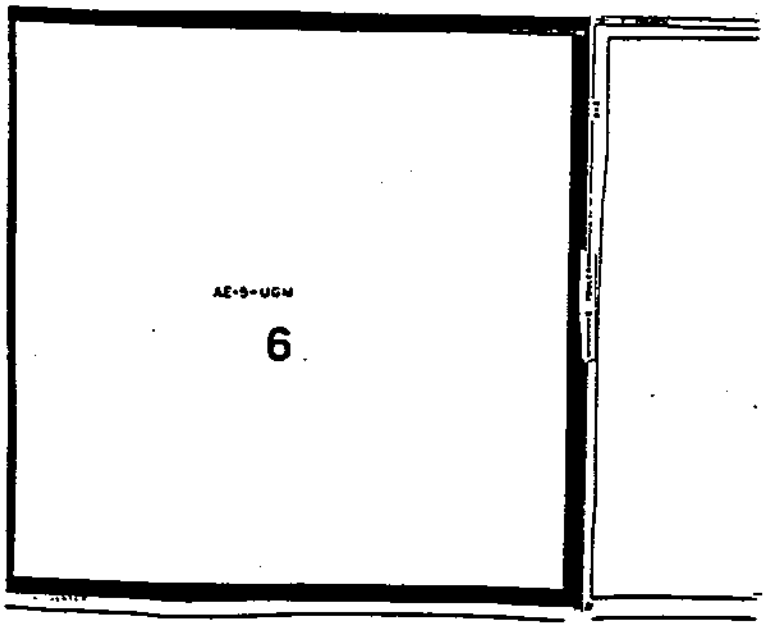


INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED	
						•
						•

- The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Study recommendations.

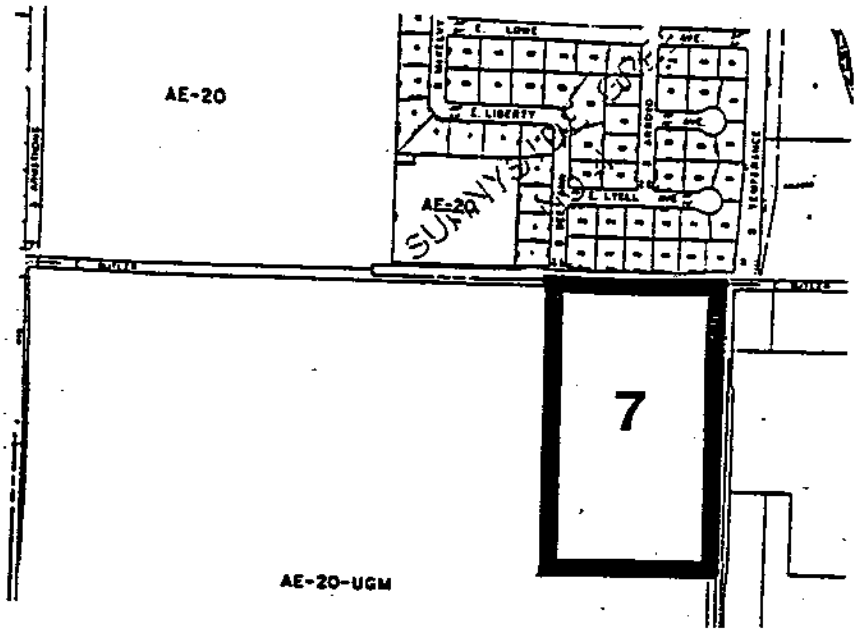
- The Development Department shall require a traffic study for any site plan or development entitlements at this site, to assess the need for deceleration/acceleration lanes on Clovis Avenues.

Addendum For Land in Requested Plan Modification No. 6



	INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED
• The Development Department shall require a water service study for any nonresidential site plan or development entitlement at this site. This study shall address: cost of water supply infrastructure; cost of developing adequate water supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant/sprinkler head pressure.						•
• The Development Department shall require a traffic study for any entitlements at this site, to provide adequate internal circulation and to assess the need for deceleration/acceleration lanes and signalization on Fowler Avenue.						•
• The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of the site's commercial property at Jensen and Fowler Avenues.						•
• The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.						•

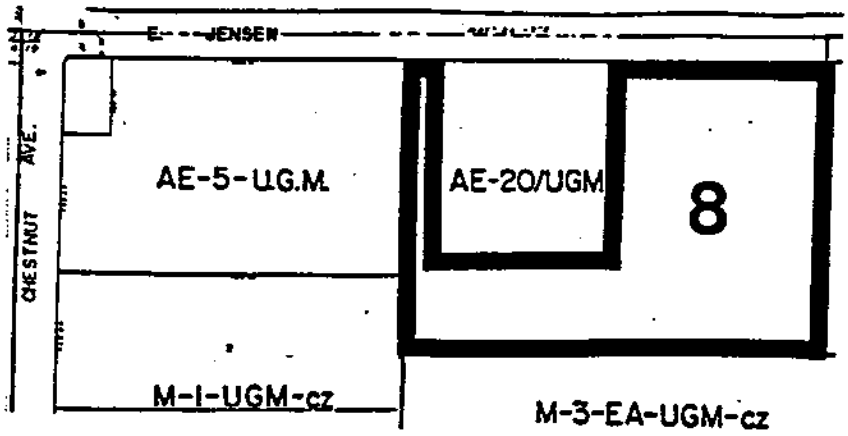
Addendum For Land in Requested Plan Modification No. 7



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED

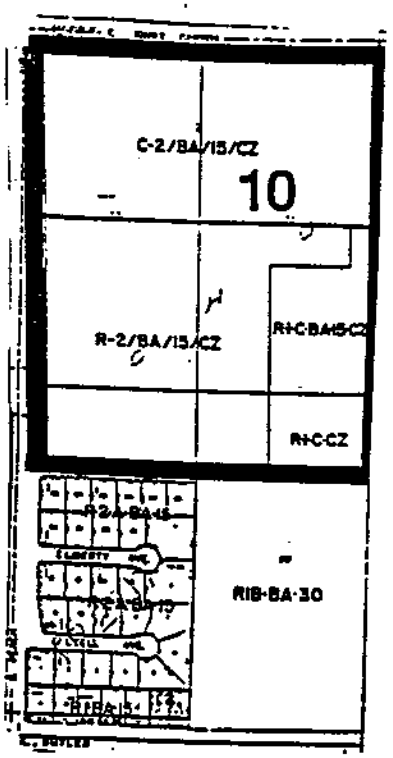
- The Development Department shall require that any residential development site plan or entitlement application shall include a detailed anaysis of potential nuisance impacts and shall incorporate design measures to mitigate dust, noise, odors, and light/glare associated with adjacent agricultural uses (processing and farming).

Addendum For Land in Requested Plan Modification No. 8



	INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED
• Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all heavy industrial special permit applications submitted within the area covered by Modification No. 8.						•
• The Development Department and Public Works Department shall require that temporary on-site drainage basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.						•

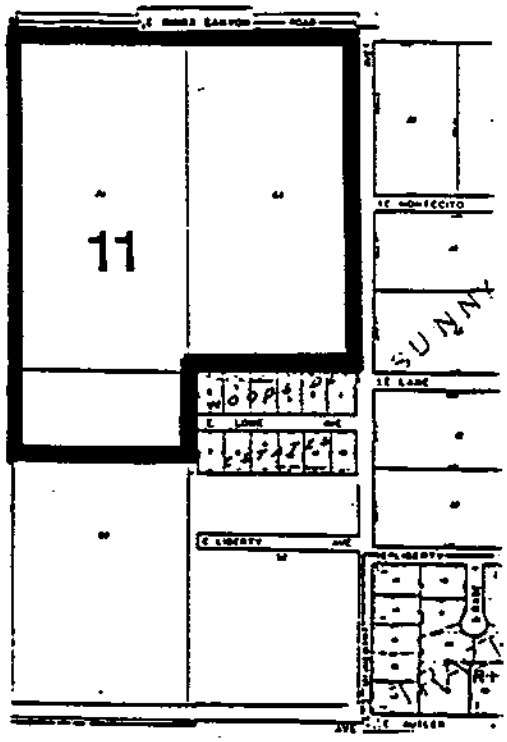
Addendum For Land in Requested Plan Modification No. 10



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED

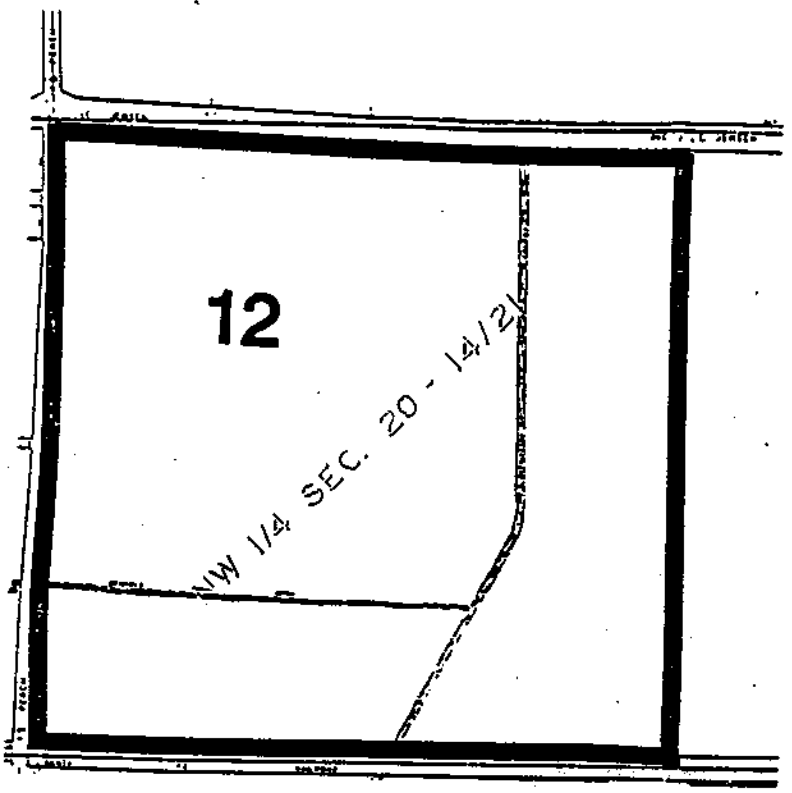
- The Development Department shall require that application for any site plan or development entitlement for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.

Addendum For Land in Requested Plan Modification No. 11



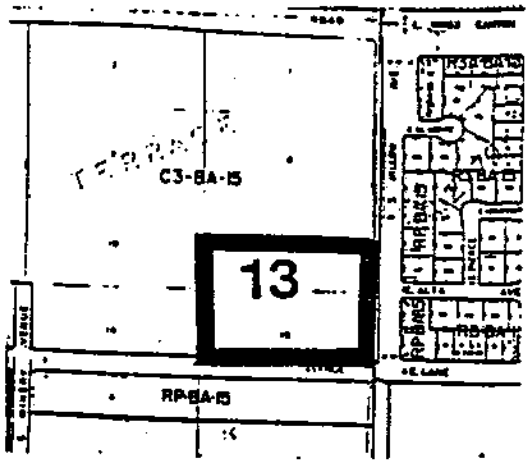
	INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED
• The Development Department shall require a noise study for any residential site plan or development entitlement application for this site. Design standards shall be employed to reduce noise impacts in the site's outdoor (yard) areas below the 60 db Ldn threshold.						•

Addendum For Land in Requested Plan Modification No. 12



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED	
						• The Development Department shall require a water service study for any nonresidential site plan or development entitlement at this site. This study shall address: cost of water supply infrastructure; cost of developing adequate water supplies; cost of treating public water supply; limitations on types of commercial uses compatible with water availability; and provision of adequate fire flow and hydrant/sprinkler head pressure.
						• The Development Department and Public Works Department shall require that any nonresidential development on the eastern half of this property shall be conditioned upon dedication and improvement of the Minnewawa Avenue right-of-way to at least local industrial street standard.
						• Prior to, or concurrent with, the approval of any nonresidential site plan or development entitlement, project applicants shall develop and secure City of Fresno approval of a local street circulation design for this entire 157-acre site.
						• The Development Department and the Parks, Recreation, and Community Services Department shall select alternate regional park land to serve the Roosevelt Community.
						• The Development Department and the Public Works Department shall require that temporary on-site basins are maintained and operated in conformance with FMFCD National Urban Runoff Program Study recommendations.
						• Conditional use permit findings and noticing procedures, as outlined in Chapter 12 of the Fresno Municipal Code, shall be applied to all nonresidential special permit applications submitted within the area covered by Modification No. 12.
						• The Development Department and Fire Department shall require a temporary (or permanent) fire station (with firefighting equipment) for development of the site's commercial property at Jensen and Fowler Avenues.

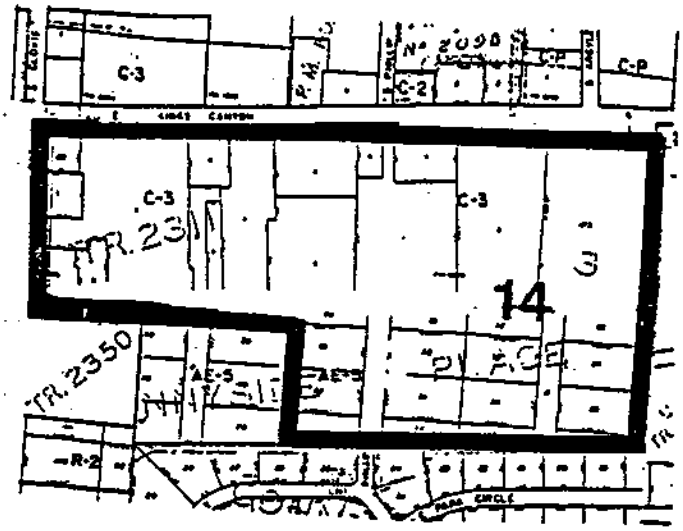
Addendum For Land in Requested Plan Modification No. 13



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED

* The Development and the Parks, Recreation, and Community Services Department shall select an alternate neighborhood park site for this Master Parks Plan Service Area.

Addendum For Land in Requested Plan Modification No. 14



INCORPORATED INTO PROJECT	CITY-WIDE PROGRAM IN PLACE	RESPONSIBLE AGENCY CONTACTED	CITY-WIDE PROGRAM BEING ESTABLISHED	NOT APPLICABLE	MITIGATED

- The Development Department shall require that any applications for site plans or development entitlement for nonresidential uses on any portion of this site shall be accompanied by a traffic study and a master site development study which shall ensure unified internal circulation, compatible thematic building design, and a master transportation management plan.