Draft Environmental Impact Report for the

BELLEVUE RANCH

Master Development Plan
September 1993

SCH No. 92102055

Prepared for
The City of Merced

Prepared by

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DRAFT
ENVIRONMENTAL IMPACT REPORT

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BELLEVUE RANCH
MASTER DEVELOPMENT PLAN

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1.0 INTRODUCTION

1.1 Purpose

This Environmental Impact Report (EIR) has been prepared in conformance with the California Environmental Quality Act (CEQA) to evaluate the effects of the 1,365 acre Bellevue Ranch development project (Project). The Project consists of the Master Development Plan (General Plan Amendment), Planned Development (PD) application (prezone), annexation to the City, and subsequent implementation actions. The Bellevue Ranch is proposed as a mixed use project which provides for the development of up to 6,894 residential dwelling units, recreational amenities and supporting commercial uses consistent with the approved Merced Villages Concept Plan and Merced Village Design Guidelines adopted in concept by the City in October, 1991. The Design Guidelines were approved by the City with the intent to be exercised with discretion in order to allow for continued flexibility throughout the development process. As such, the proposed project creates pedestrian opportunities and provides various transit-oriented options through a neo-traditional planning approach.

The City of Merced is the lead agency responsible for preparation of the environmental document in compliance with CEQA, and will have the decision-making responsibility for the project. The EIR addresses the environmental considerations identified during the initial consultation, Notice of Preparation, public scoping meeting and associated environmental review process.

1.2 Scope of the EIR and CEQA Requirements

The intent of this EIR is: (1) to identify the potentially significant effects (beneficial/ adverse) of the proposed project on the environment and to indicate the manner in which those significant effects can be mitigated or avoided; (2) to identify any unavoidable adverse impacts that cannot be mitigated; and (3) to identify and qualitatively evaluate alternatives to the project. The City must consider the information in the EIR and respond to each significant effect identified in the EIR. As provided in the CEQA Guidelines, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In fulfilling this duty, the public agency has an obligation to balance a variety of economic, environmental, social, and other public objectives (Section 15021 of the CEQA Guidelines).

An EIR is an informational document, the purpose of which is to inform public agency decision-makers and the general public of the significant environmental effects of a proposed project. Additionally, an EIR identifies possible means to minimize or avoid the significant effects and describes reasonable alternatives to the project. The public agency is required to consider the information in the EIR, in addition to other relevant information, in making its decision on the project (Section 15121 of the CEQA Guidelines).

Sections 15122 through 15132 of the CEQA Guidelines describe the content requirement for Draft and Final EIR's. An EIR includes: 1) a description of the environmental setting; 2) identification and an analysis of environmental impacts; 3) mitigation measures; 4) alternatives;

5) short-term versus long-term productivity; 6) significant irreversible environmental changes; 7) growth-inducing impacts; and 8) cumulative impacts.

This EIR is also intended to outline the actions necessary to implement the Bellevue Ranch Master Development Plan. As such, the report will be used to evaluate the following:

- Master Development Plan (including General Plan Amendment, Prezoning, and PD application);
- Tentative/Final Subdivision Maps;
- Related Agency Permits (such as Department of Fish and Game 1603 and Corps of Engineers 404 Permits).
- Annexation pursuant to the Cortese/Knox Act and Merced County LAFCo.

This document has been prepared consistent with the State CEQA Guidelines and the California Government Code. In this regard, this EIR shall serve as the environmental documentation for all actions undertaken pursuant to and in conformity with the Bellevue Ranch Master Development Plan so long as the project thresholds of significance used in the preparation of this document are not exceeded.

The lead agency (the City) determined that this EIR would be a Project EIR pursuant to Section 15161 of CEQA and City Ordinance No. 1081 (City CEQA Guidelines) adopted May 16, 1973. Under this definition, this document is to examine specific environmental impacts resulting from the Bellevue Ranch project.

1.3 Environmental Review Process

The City of Merced reviewed the Bellevue Ranch project proposal in 1991 and determined the project to be subject to CEQA. An Initial Study was prepared, and on October 8, 1992 the City of Merced circulated a Notice of Preparation (NOP) to responsible agencies and affected City departments for input regarding the issues to be addressed in the preparation of an EIR. Nine (9) agencies responded to the NOP and commented on the project. A copy of the NOP and the responses thereto are included in Appendix A of this document.

Subsequent to the City's release of the NOP, a public scoping session was held. The public scoping meeting was held on October 22, 1992 to present the project and solicit input from both the community and affected agencies in accordance with Section 15083 of the State CEQA Guidelines. A summary of this public scoping meeting is included in Appendix A of this document.

The primary concerns identified during the NOP process and public scoping session which warranted further study included:

- potential increases in traffic and changes to the area's circulation patterns;

- potential to decrease the amount of land devoted to agricultural production in the Merced region;
- potential to encroach on or reduce sensitive wildlife habitat and plant and animal species;
- potential to degrade local and regional air quality;
- potential impacts to and the adequate provision of public services and facilities (specifically water, wastewater and schools);
- potential impacts from an increase in solid waste generation; and
- cumulative growth in the project area.

This Draft EIR will be circulated for a 45-day period for review and comment by the public and other interested parties, agencies, and organizations. A public hearing will be held during this review period to allow members of the public to provide comments. Notice of the time and location of the hearing will be published prior to the hearing. Comments or questions regarding the EIR may also be submitted in writing and should be addressed to:

Mr. Phil Block, Planning Director
City of Merced
Planning Department
678 West 18th Street
Merced, California 95340

Following the public review period, a Final EIR (FEIR) will be prepared. The FEIR will respond to written comments received during the public review period and to oral comments made at the public hearing. The FEIR will be available for public review prior to its consideration by the City of Merced Planning Department and City Council. These decision-making bodies will review and consider the FEIR prior to their decision to approve, revise or reject the proposed project.

Upon review and consideration of the FEIR, the City may act upon the project. A decision to approve the project would be accompanied by written findings for each significant adverse environmental effect identified in the EIR. The City must adopt a monitoring or reporting program, pursuant to Assembly Bill 3180 (AB 3180) as described below, for mitigation measures that are incorporated into the project to reduce or avoid significant effects on the environment. This monitoring or reporting program will be designed to ensure that these measures are carried out during project implementation.

1.4 Environmental Issues

As noted previously the City determined, through the environmental review process and related public/agency comments, that the preparation of an EIR was necessary in light of potentially significant environmental impacts that could result from the proposed Bellevue Ranch project. Based on this input, this EIR focuses on the following topics:

- Land Use
- Agricultural Land Conversion
- Aesthetics
- Parks, Recreation and Open Space
- Landform, Topography, and Soils
- Cultural Resources
- Hydrology and Water Quality
- Biotic Resources
- Public Facilities and Services
- Traffic and Circulation
- Air Quality
- Noise
- Population, Housing, and Employment
- Human Health

1.5 Mitigation Monitoring

CEQA requires that when a public agency makes findings based on an EIR, the public agency must adopt a reporting or monitoring plan for those measures which it has adopted or made conditions of the project approval in order to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6, AB 3180, 1988). The reporting or monitoring plan must be designed to ensure compliance during project implementation, and to provide disclosure to the public to ensure that conditions will be monitored and enforced (Public Resources Code Section 21081.6). The Draft Mitigation Monitoring Program (MMP) will be submitted to the City during the EIR review period. Following certification of the EIR, the MMP will be finalized consistent with the City Council's final action on the project.

1.6 Organization of Document

The following describes the overall organization of the EIR with brief descriptions of the purpose and content of each chapter.

Chapter 1 - Introduction

Chapter 1 provides an introduction and overview describing the intended use of the EIR and the review and certification process.

Chapter 2 - Executive Summary

This Chapter summarizes environmental impacts that would result from implementation of the proposed project and proposed mitigation measures, evaluated in Chapter 6 of the EIR, and indicates the level of significance of impacts after mitigation.

Chapter 3 - Project Description

Chapter 3 provides a detailed description of the proposed project, including its location, history, major objectives, and physical and technical characteristics.

Chapter 4 - Environmental Setting, Impacts, and Mitigation Measures

This Chapter is divided into fourteen subsections and contains a project-specific analysis of environmental issue areas. The subsection for each environmental issue contains an introduction and description of the setting of the project site, identifies project-related impacts, and recommends appropriate mitigation measures.

Chapter 5 - Alternatives to the Project

The alternatives to the proposed project and their associated environmental effects are described and evaluated in Chapter 5.

Chapters 6 - 11 - CEQA Considerations

These chapters contain discussions of various topical issues mandated by CEQA including: significant environmental effects that cannot be avoided if the proposal is implemented; growth inducing impacts; relationship between local short-term use of man's environment and the maintenance and enhancement of long term productivity; irreversible environmental changes and irretrievable commitment of resources; cumulative impacts; and effects found not-to-be-significant.

Chapter 12 - Preparers of this Report

Chapter 12 lists all authors that assisted in the preparation of the report by name, title, and affiliation.

Chapter 13 - References

Supporting and reference data used in the preparation of the EIR and is itemized in this Chapter. Lists of all government agencies, organizations, and other individuals consulted in preparing the Draft EIR are also provided in this Chapter.

Chapter 14 - Appendices

Chapter 14 includes the following:

Appendix A - Notice of Preparation and Responses, Public Scoping Meeting Summary
Appendix B - Technical Reports (Provided under separate cover)

2.0 EXECUTIVE SUMMARY

2.1 Project Under Review

This EIR evaluates the environmental impacts associated with the 1,365 acre Bellevue Ranch Master Development Plan. The project involves the development of approximately 7,000 dwelling units, 89 acres of commercial land use, and all associated schools, parks, circulation, open space and office use. A more detailed description of the project is included in Section 3.0 of this report.

2.2 Summary of Impacts

This summary provides an overview of the analysis contained in Chapter 4.0, Environmental Setting, Impacts and Mitigation Measures. This summary also includes discussions of: A) effects found not to be significant; B) potential areas of controversy; C) significant impacts; D) mitigation measures to avoid or reduce identified significant impacts; E) unavoidable significant impacts; and F) alternatives to the project.

A) Effects Found Not To Be Significant

Based upon the environmental review process conducted prior to the preparation of the Administrative Draft EIR, responses to the Notice of Preparation, and public input from the public scoping meeting, the City of Merced determined that environmental issues pertaining to natural resources did not require in depth analysis pursuant to CEQA. Therefore, this EIR does not contain a specific Natural Resources section primarily because the site contains no stands of timber, mining deposits, or other "natural resources."

B) Potential Areas Of Controversy

The major areas of controversy identified through the environmental review process include traffic generation/circulation improvements, air quality emissions, increases in traffic noise, agricultural land conversion, the ability to provide adequate public services and utilities, and cumulative development impacts in relation to other projects in the area. These concerns have been identified and are addressed in this document.

C) Significant Impacts That Can Be Reduced To Acceptable Levels

Under CEQA, a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project. These can include land, water, minerals, flora, fauna, ambient noise, and features of historic or aesthetic significance. Implementation of the proposed Bellevue Ranch Master Development Plan will result in significant impacts. Some of

these impacts will be reduced to a less-than-significant level through mitigation measures outline in this document and summarized in the following "Summary of Environmental Impacts" table.

D) Mitigation Measures To Avoid Or Reduce Identified Significant Impacts

This EIR discusses mitigation measures that could be implemented by the project applicant under the monitoring of the City of Merced. These include design requirements, management practices, and specific points of coordination between the project applicant and the City. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring Program, pursuant to AB 3180, to ensure implementation through to project build-out.

E) Unavoidable Significant Impacts

Unavoidable significant impacts associated with the proposed project include a decrease in air quality and conversion of agricultural lands. An increase in urban uses, automobiles, and associated air pollution generators will result in an incremental degradation of regional air quality. This is a cumulative and unavoidable impact if the project is to be implemented. As noted previously, the conversion of prime and important farmlands is a significant impact that cannot be mitigated or avoided. The City and County anticipate the area north of the existing City boundary to convert to urban uses in lieu of other areas to the east and west that have higher concentrations of prime and important farmlands.

F) Alternatives To The Project

The alternatives to the proposed project that are analyzed in this EIR include:

1. NO PROJECT ALTERNATIVE

This alternative addresses environmental impacts assuming that there is no annexation effort for the project area and no revisions made to the current County Zoning Ordinance or other City or County plans over the same time frame as the preferred alternative (to the year 2010). Land use for the project site would be regulated by the County General Plan and Zoning Ordinance. This alternative consists of one to twenty acre rural residential parcels with a few small pockets of existing commercial and industrial development.

2. TRADITIONAL SUBDIVISION ALTERNATIVE

This alternative represents a land use plan based upon traditional residential subdivision development. The plan consists of a high proportion of low-density residential land

uses, modelled after actual projects that have been submitted to the City or the County for preliminary review. Because the project area is within the City's Specific Urban Development Plan, this alternative assumes annexation by the City.

2.3 Summary Table

Information in the following table, "Summary of Environmental Impacts", has been organized to correspond with the environmental issues discussed in Chapter 4. The summary table is arranged in three columns: 1) impacts; 2) mitigation measures; and 3) level of significance after mitigation. The mitigated level of significance is illustrated in the third column.

Summary of Environmental Impacts

4.1 Land Use, Plans, and Policies

Impacts	Mitigation Measures	Level of Significance After Mitigation
Adjacent Land Use:		
1. Future development for the areas north, east, and west are expected to be accomplished through the guidance of the Merced Villages Conceptual Planning, to form a pedestrian-oriented Villages program for development. In this regard, the proposed project will have the **beneficial** impact of enabling the City to realize the Villages Concept for anticipated development.	1. No mitigation is required.	1. Beneficial.
2. With respect to adjacent lands to the south, the project will have a **less-than-significant** impact on existing lands given that these uses will be buffered by the alignment of Cottonwood Creek and the landscape program Master Plan.	MM 4.1.3 Prior to approval of a tentative map for areas adjacent to existing development in the City of Merced, the project applicant shall submit to the Planning Department for review and approval landscape and typical building placement plans (as specified in the City's CUP submittal requirements) to ensure adequate buffering and transition between land uses.	2. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
General Plan Consistency:		
1. The proposed project, which includes an amendment to the General Plan, will have a **beneficial** impact to the City by proactively planning for development within the Specific Urban Development Plan.	1. No mitigation is required.	1. Beneficial.
2. By implementing and furthering the goals and policies of the General Plan, the proposed project will have a **beneficial** impact.	2. No mitigation is required.	2. Beneficial.
3. The alignment of R Street, as currently proposed by the Master Development Plan, is inconsistent with the City's Circulation Element. This constitutes a **significant** impact.	MM 4.1.1 Prior to approval of the GPA and prezone, the applicant shall redesign the land plan for that portion of R Street right-of-way which is inconsistent with the General Plan Circulation Element. The design change shall show an alignment where the western project boundary form the roadway centerline. The applicant shall amend the land use plan for the area proposed as Standard Single Family at the southern most corner of the project area. The land use plan shall show this area as Park, consistent with the General Plan.	3. Less-than-significant.
4. The proposed fifteen acres of Standard Single Family located between Yosemite Avenue, Fahrens Creek, and existing residential uses is designated as a Park within the General Plan. The inconsistency of the project with the General Plan designation represents a **significant** impact.	4. See above mitigation measure (MM 4.1.1).	4. Less-than-significant.
Merced County Streams Group Project:		
1. The proposed project will provide for a 290 foot right-of-way to accommodate both the designated and future alignment of the flood control improvements to Fahrens Creek. This provision will ensure that the COE facilities will be implemented to provide adequate flood protection. This is considered to be a **beneficial** impact.	1. No mitigation is required.	1. Beneficial.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Merced County LAFCO:		
1. Most of the impacts associated with the LAFCO annexation and approval process are **beneficial** or **less-than-significant**. The only impact listed as **significant**, public services and infrastructure, is discussed in another section of this report.	MM 4.1.4 Prior to conducting annexation proceedings, the applicant will demonstrate to the City that all LAFCO guidelines are met by the project to ensure that the procedural requirements are satisfied.	1. Beneficial or less-than-significant
Merced Villages Concept Plan/Design Guidelines Consistency:		
1. The proposed project is conceptually consistent with the intentions of the Merced 2030 Plan and the Village Concepts. Therefore, the proposed project would have a **beneficial** impact.	1. No mitigation is required.	1. Beneficial.
2. The distribution of land uses in the project, however, is in some cases inconsistent with the land use allocations provided in the 8,000 acre Merced Village Concept Plan. Deviation from these patterns constitute a **significant** impact.	MM 4.1.2 The Bellevue Ranch project and other future projects within the SUDP will continue to be reviewed and monitored to ensure that the City-wide goal of density distribution and land use mix is achieved pursuant to the general goals of the Villages Concept Plan and the Merced General Plan.	2. Less-than-significant.

4.2 AGRICULTURAL LAND USE

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Local Impacts:		
1. The project will involve conversion of existing agricultural uses at the project site to various urban uses. This conversion is a **significant** and **unavoidable** impact. However, these lands are designated by both the County and City as an area for future urban expansion (SUDP) and therefore, conversion of these lands are anticipated.	1. No mitigation is available.	1. Significant and unavoidable.
2. The proposed project is in conformance with the City General Plan in terms of directing growth away from agriculturally significant lands concentrated primarily east and west of the City and promoting growth north and south of the City. Therefore, there are **no significant** impacts associated with conflicts with the local general plans, community plans or zoning.	2. No mitigation is required.	2. No significance.
3. The encroachment of residential development to existing farming operation boundaries will result in **significant** impacts. However, since the majority of adjacent lands are within the SUDP and the Merced Villages Concept Plan area, their continued viability is temporary.	MM 4.2.1 The project applicant, in cooperation with adjacent land owners, shall provide interim buffers between future urbanized areas and existing agricultural uses that use pesticides, herbicides, or create dust and/or odors. Width and location of buffers shall be determined prior to approval of tentative maps, and shall be maintained until the project applicant has demonstrated that adjacent agriculture uses have ceased.	3. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Regional Impacts:		
1. The project will result in conversion of Farmland of Local Importance, Prime Farmland and Farmland of Statewide Importance available in Merced County. With respect to the regional availability of Farmland of Local Importance, Prime Farmland, and Farmland of Statewide Importance, this project will result in a **less-than-significant** impact to agriculture.	1. No mitigation is required.	1. Less-than-significant.
2. Cumulatively, the loss of agricultural lands for other uses in the City and County is a regionally **significant** and **unavoidable** impact.	2. No mitigation is available.	2. Significant and unavoidable.

4.3 AESTHETICS

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<u>View Impairment:</u> 1. While the introduction of urban uses to the project site will encroach upon the views from adjoining properties across the site, none of these views are of significant or unique scenic value. Therefore, the project is expected to have a **less-than significant** impact on scenic views and vistas.	1. No mitigation is required.	1. Less-than-significant.
<u>Creation of Objectional Views:</u> 1. Adherence to the Merced Villages Design Guidelines will ensure that no aesthetically offensive views will be created from adjoining roadways or properties. This impact will be **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.
<u>Alteration/Destruction of Visual Features:</u> 1. The project site is relatively flat, with existing vegetative cover consisting primarily of grasses and row crops. Several creeks and man-made irrigation ditches traverse the site, but they are not highly prominent visual features. Implementation of the proposed project would have a **less-than-significant** impact to the alteration and destruction of these existing visual features.	1. No mitigation is required.	1. Less-than-significant.
2. The only prominent visual features are three strands of mature eucalyptus trees near the center of the site. Stands of such trees, are identified by the City's Parks and Open Space Master Plan and General Plan as significant open space features. Therefore, removal of such trees to implement the project is considered a **significant** impact.	MM 4.3.4 Prior to approval of the Master Development Plan, the project shall demonstrate that the mature stands of existing eucalyptus trees found on site have been designed into the land use of the Master Development Plan.	2. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Production of Light and Glare: 1. The proposed project would introduce new sources of light and glare to the project site. Given the currently undeveloped nature of the site, this represents a **significant** impact.	MM 4.3.3 Prior to approval of conditional use permits, the project applicant shall provide detailed lighting, signage, and fencing plans consistent with the City's Planned Development Ordinance and the Merced Villages Design Guidelines. Covenants, Conditions, and restrictions shall also regulate exterior lighting.	1. Less-than-significant.
Consistency With Adopted Plans: 1. The Bellevue Ranch project is consistent will the Merced Villages Concept Plan, Design Guidelines, and both the City and County General Plans. The Master Plan has illustrated general consistency with these documents in terms of design and aesthetic appeal, and thus has a **less-than-significant** impact in terms of document consistency.	MM 4.3.1 Prior to approval of related Conditional Use permits, the project applicant will retain a qualified landscape architect and/or other professionals as detailed in the City's Planned Development Ordinance to prepare detailed landscaping plans. MM 4.3.2 In conjunction with the approval of related Conditional Use Permits, the project applicant shall provide preliminary building plans, elevations, and architectural treatment for City review. See above mitigation measure (MM 4.3.3). MM 4.3.5 Prior to approval of each Conditional Use Permit, the project applicant will demonstrate to the City Planning Department consistency of overall design features with the general principles of the Merced Village Design Guidelines.	1. Less-than-significant.

4.4 PARKS, RECREATION, AND OPEN SPACE

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Parks, Recreation, And Open Space:		
1. According to the Merced Villages Design Guidelines, General Plan, and the Parks and Open Space Master Plan, the Bellevue Ranch development does not include enough neighborhood and community parks. This characteristic of the project represents a **significant** impact.	MM 4.4.1 Prior to project annexation, prezoning approval, and Master Development Plan Adoption, the applicant shall provide additional neighborhood and community park lands, as required by the Merced Villages Design Guidelines, Merced Municipal Code, and Parks and Open Space Master Plan.	1. Less-than-significant.
2. As the land use plan is currently drafted, there are no provisions for Village Parks, or similar amenities which are crucial to the implementation of the villages concept. This is a **significant** impact.	MM 4.4.2 Prior to approval of the prezone application and Master Development Plan Adoption, the applicant shall demonstrate, by design, the provision of general village park locations within the village core areas. Village park acreage shall generally follow the adopted Merced Village Design Guidelines. In addition, park improvements shall be consistent with the Merced Municipal Code and the Parks and Open Space Master Plan. Precise village park locations and sizes shall be identified prior to approval of Master Development Plan and prezone.	2. Less-than-significant.
3. The development of the proposed project will reduce the total amount of agricultural land in the area, which is considered an important open space resource by the City. Loss of agricultural land in terms of open space is considered a **less-than-significant** impact.	3. No mitigation is required.	3. Less-than-significant.

4.5 LANDFORM, TOPOGRAPHY, AND SOILS

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Alquist-Priolo Zone: 1. The project site is not within an Alquist-Priolo Special Study zone. Therefore, there is **no significant** impact.	1. No mitigation is required.	1. No significance.
Ground Rupture: 1. No known faults traverse the site. Therefore, there is **no significant** impact..	1. No mitigation is required.	1. No significance.
Ground-shaking: 1. The project site may experience moderate severity of ground-shaking during a large seismic event. This is considered to be a **significant** impact.	MM 4.5.4 Prior to approval of building permits, the project applicant shall demonstrate to the City that the project features have been designed to UBC and applicable local codes.	1. Less-than-significant.
Liquefaction: 1. Due to the lack of shallow groundwater and the fine grained texture of the site soils, liquefaction is improbable. This is considered to be a **less-than-significant** impact.	1. No mitigation is required.	1. Less-than-significant.
Seismic Compaction: 1. Although the site may be exposed to ground-shaking, the site soils are not loose nor granular. Therefore, this impact is considered to be **less-than-significant**.	1. No mitigation is required	1. Less-than-significant.
Landslides or Unstable Slopes: 1. The project site and adjacent land is relatively level with no unstable slopes. This is considered to be a **less-than-significant** impact.	1. No mitigation is required.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Flooding Due to Dam Failure: 1. The site may be inundated if the Lake Yosemite dam were to fail. The California Division of Safety of Dams inspects the dam regularly and has judged the dam to be safe. This is considered to be a **less-than-significant** impact.	1. No mitigation is required.	1. Less-than-significant.
Mineral Resources: 1. No significant mineral resources are known to exist within the site boundaries. Therefore, development of the site will not result in a loss of known mineral resources. This is considered to be a **less-than-significant** impact.	1. No mitigation is required.	1. Less-than-significant.
Expansive Soils: 1. A portion of the site is underlain by soils with a moderate to high expansion potential. Development could be impacted because of the possibility for structural distress induced by sub-grade swelling and shrinkage. Due to these concerns, this is considered a **significant** impact.	MM 4.5.1 Prior to the approval of building permits, the City shall require a detailed geotechnical report to be prepared by a California registered geotechnical engineer for each project. MM 4.5.2 The City shall require the recommendations contained in the geotechnical report be incorporated into the design prior to approval of building permits. MM 4.5.3 During construction, the geotechnical engineer shall provide inspection to ensure that recommendations and plans are properly implemented.	1. Less-than-significant.

4.6 CULTURAL RESOURCES

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Archeological Resources: 1. According to Basin Research Associates, the prepares of the Cultural Resource Study, prehistoric cultural resources are not expected in the project area. Therefore, there is **no significant** impact.	1. No mitigation is required.	1. No significance.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Architectural Resources:		
1. The proposed project would result in the demolition of the Bellevue Ranch complex. It is the opinion of Basin Research Associates that the ranch is of historical and potential architectural interest and may also yield archaeological material associated with specific buildings or activities. The demolition of the complex is considered a **significant** impact.	MM 4.6.1 State of California Historic Resource Inventory Form(s) and an Archeological Site Record Form (State of California DRP 422 A Form) of the Bellevue Ranch complex shall be completed by a qualified architectural historian prior to the issuance of any grading, demolition, or building permits for the project. MM 4.6.2 Archaeological monitoring of any demolition and subsurface construction in the vicinity of the Bellevue Ranch building shall be conducted by a qualified archaeological monitor and funded by the project applicant. The archaeological monitor shall have the authority to modify the intensity of the monitoring effort. MM 4.6.3 If any significant cultural materials are exposed during demolition, excavation, grading or other construction activities in the vicinity of the Bellevue Ranch buildings or anywhere else on the project site, operations shall be ceased within ten feet of the find, the City shall be notified, and a qualified archaeologist contacted for further recommendations. MM 4.6.4 A Historic American Building Survey report of all standing Bellevue Ranch structures shall be prepared by a qualified architectural historian prior to the issuance of any grading, demolition, or building permits for the project that may impact existing structures.	1. Less-than-significant.
2. The proposed project would result in the loss of an example of a ranch complex containing architectural dating from the 1870's to 1940. The project's contribution to the cumulative loss of examples of early twentieth century ranch complexes constitutes a **significant cumulative** impact.	2. See above mitigation measures (MM 4.6.1; MM 4.6.2; MM 4.6.3; MM 4.6.4).	2. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Cultural Resources: 1. The proposed project would have an impact on the segment of the abandoned Yosemite Valley Railroad bed which is situated along the far northwestern edge of the project area. This is considered a **significant** impact.	MM 4.6.5 An Archeological Site Record Form for the segment of the Yosemite Valley Railroad Grade shall be completed by a qualified architectural historian prior to the issuance of any grading, demolition, or building permits for the project that may impact the Yosemite Valley Railroad Bed.	1. Less-than-Significant.

4.7 HYDROLOGY AND WATER QUALITY

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Flooding: 1. The implementation of the proposed storm water drainage plan will decrease the potential for substantial flooding to occur, but 100 year flood protection for the southwestern portion of the site will not be provided by reconfiguration of the channel unless the Main Canal check structure is built. Since the structure is not yet completed, the potential for people and property to be exposed to flooding within the southwestern portion of the project is considered to be a **significant** impact.	MM 4.7.1 Prior to approval of the final tract map for development within the Bellevue Ranch project area, the City will review the development proposal to ensure adequate provisions for flood control facilities consistent with the Bellevue Ranch master drainage plan and City of Merced engineering standards. MM 4.7.2 Prior to approval of the tentative map, the applicant shall obtain COE and City of Merced endorsement of the proposed creek channel designs. Prior to the issuance of building permits in FEMA designated floodplains, the project applicant sahll obtain any necessary FEMA endorsements of the revised floodplain boundaries. MM 4.7.3 Development will not be permitted within the southwestern portion of the project site unless building pad elevations are constructed above the 100-year flood elevation.	1. Less-than-Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Water Quality:		
1. Increased siltation and sedimentation could result from erosion and storm runoff during the construction phases of the project. This is considered to be a **significant** impact.	MM 4.7.4 A comprehensive plan to prevent erosion, siltation, and contamination of storm water during construction will be required for any development proposal within the Bellevue Ranch project area prior to approval of the improvement plans. MM 4.7.5 Grading operations should be targeted for the dry months of the year as directed by the City. MM 4.7.6 If construction occurs during storm events, sediment traps, barriers, covers or other methods approved by the City shall be used to reduce erosion. MM 4.7.7 Cut and fill slopes shall not be steeper than recommended by the project geotechnical engineer and approved by the City. MM 4.7.8 Temporary mulching, seeding, or other suitable erosion stabilization measures approved by the City shall be used to protect exposed areas during construction activities. MM 4.7.9 Excavated materials shall not be deposited or stored where the material could be wasted away by storm-water runoff. MM 4.7.10 Final slope grades shall be revegetated as soon as practical after completion of grading.	1. Less-than-significant.
2. Due to the urban land use proposed by the project, there will be a corresponding increase in roadway contaminants. This is considered a **significant** impact as degradation of the surface water quality of the watershed may occur.	MM 4.7.11 Final grades shall be graded so that runoff of surface water is minimized. MM 4.7.12 Streets and parking lots shall be cleaned at least twice during the dry season and at least once during the rainy season, or other practices shall be used to limit the accumulation of "first flush" contaminants.	2. Less-than-significant.

4.8 BIOTIC RESOURCES

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Vegetation: 1. The site is predominately in agricultural production, irrigated pasture, or non-native grassland. Impacts to vegetation resources are **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.
Wildlife: 1. Implementation of the project would result in the displacement of the immediate resident wildlife species observed on site. Conversion of the site would result in a **less-than-significant** impact to wildlife, given the existing agricultural impacts and the abundance of similar habitats in the region.	1. No mitigation is required.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<u>Wetlands and Waters of the United States:</u>		
1. The current site plan for Bellevue Ranch indicates that both Fahrens and Cottonwood Creeks will be realigned. Any levee or channel improvements or other project impacts to these creeks constitutes a **significant** impact.	MM 4.8.2 Prior to issuance of grading permits in wetland areas, the project applicant shall secure a permit to fill wetlands consistent with Section 404 of the Clean Water Act. The mitigation plan for impacts to isolated wetlands shall have the intent of providing for a consolidated mitigation area. Due to the COE levee and channel improvement plan, the project applicant has two options regarding modifications to Fahrens and Cottonwood Creeks, postpone modification until the COE begins the Merced-area project or proceed with modifications to creek channels consistent with the Merced County streams project.	1. Less-than-significant
2. The current project plan indicates that all isolated wetlands will be filled. Any fill of vernal pools and seasonal wetlands represents a **significant** impact.	MM 4.8.1 Prior to issuance of grading permits, the project applicant shall produce a wetlands delineation consistent with the 1987 Corp of Engineers (COE) Wetlands Delineation Manual (as amended occaisionally by the COE) and obtain verification of the wetlands delineation by the COE. The applicant shall consult with the City Planning Department and demonstrate compliance with the COE requirements.	2. Less-than-significant.
3. Loss of artificial wetlands and irrigation canals are considered **less-than-significant** impacts.	See above mitigation measure (4.8.2). 3. No mitigation is required.	3. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Special-Status Plant Species:		
1. Although the vernal pools on-site do not appear to contain San Joaquin Orcutt Grass, the possible consequences of destroying this resource represents a **potentially significant** impact.	MM 4.8.3 Prior to the issuance of grading permits, the project applicant shall retain a qualified biologist to conduct late spring surveys of vernal pools for San Joaquin Orcutt grass and Dwarf Downingia. If these species are confirmed on the project site, mitigation measures consistent with the most current listing status of the species shall be prepared and submitted to the City for inclusion in the Mitigation Monitoring Program for the project.	1. Less-than-significant.
2. It is unlikely that other special-status plants occur on site. Therefore, potential impacts to other special status plant species are judged to be **less-than-significant.**	See above mitigation measure (MM 4.8.3).	2. Less-than-significant.
Special-Status Animal Species:		
1. Two species of shrimp are known to occur on the Bellevue Ranch site. Since these two species have been proposed for listing, loss of their habitat is considered a **significant** impact.	MM 4.8.4 Once a decision regarding listing is reached and prior to the issuance of grading permits, the project applicant shall comply with the appropriate mitigation measure. If the fairy and tadpole shrimp are listed as threatened or endangered, the project sponsor shall initiate a Section 7 consultation with the USFWS as part of compliance with Section 404 of the Clean Water Act. Comparatively, if the shrimps are not listed, a wetlands mitigation plan shall be submitted as part of compliance with Section 404 of the Clean Water Act.	1. Less-than-significant
2. Due to agricultural impacts to the project site and the abundance of similar habitat locally, the project would have a **less-than-significant** impact to other animal species.	See above mitigation measure (MM 4.8.4)	2. Less-than-significant.
General Plan Goals and Policies:		
1. The proposed project is inconsistent with City General Plan Goals and Policies to protect existing natural resources in and around the City. Variations from the General Plan goals and policies represent a **significant** impact.	1. See above mitigation measures (MM 4.8.1; MM 4.8.2; MM 4.8.3; MM 4.8.4).	1. Less-than-significant.

4.9 PUBLIC FACILITIES AND SERVICES

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Water Facilities:		
1. Based on the sufficient long-term water resources existing to serve the proposed project, **no significant** impacts related to the availability of water services are anticipated.	1. No mitigation is required	1. No significance.
2. With respect to the implementation and phasing of improvements, the project will require the extension of water facilities and services. Although the City anticipates extending facilities to the site, the provision of new water facilities constitutes a **significant** impact given that no master plan for water improvements has been approved for the area.	MM 4.9.1 Prior to the approval of a tentative map, the project applicant shall submit to the City of Merced Public Works Department detailed water supply and delivery plans for review and approval. MM 4.9.2 The following two water conservation measures shall be implemented as required by state law - all buildings shall include low-flow fixtures and insulation of hot water lines in water recirculation systems. MM 4.9.3 Prior to the approval of a tentative map, the project applicant will submit to the City Planning Department for review and approval general landscaping plans (as specified by the City's CUP submittal requirements). MM 4.9.4 The project applicant, as approved by the City Public Works Department and Fire Department, will demonstrate that the water system proposed for the project is designed to meet the projected water capacity and fire flow requirements as well as all City specifications, prior to the approval of the first final map.	2. Less-than-significant.
Sewage Facilities:		
1. The proposed project will have a **significant** impact on the City's wastewater delivery and treatment capacities.	MM 4.9.5 Prior to the approval of a tentative map, the project applicant will submit to the City Public Works Department detailed wastewater service plans for review and approval.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Electrical and Natural Gas: 1. Existing electrical and natural gas facilities are inadequate to serve the land uses proposed within the Bellevue Ranch Master Plan. This constitutes a **significant** impact.	MM 4.9.6 Prior to the approval of a tentative map, the project applicant will demonstrate to the City that they have coordinated with Pacific Gas and Electric regarding the location and phasing of natural gas and electrical facilities to serve the area. MM 4.9.7 Prior to the issuance of building permits, the project applicant shall demonstrate to the City that their architect(s) have consulted with Pacific Gas and Electric regarding the incorporation of energy conservation techniques into building and landscape design.	1. Less-than-significant.
Telecommunication Facilities: 1. The extension of telecommunication services will be required to serve the project site. This is considered to be a **significant** impact.	MM 4.9.8 Prior to the approval of a tentative map, the project applicant will demonstrate to the City that they have coordinated with Pacific Bell regarding the extension, location, and phasing of telecommunication facilities to serve the project.	1. Less-than-significant.
Police Services: 1. Based upon an increased project population of approximately 22,371, there will be an increased demand for up to 17 additional sworn officers. There will also be a need for additional equipment. This constitutes a **significant** impact.	MM 4.9.9 The project applicant shall pay all Cost Revenue Impact System fees, or other applicable program fees as defined by the City, which are intended to cover all Police Department costs. MM 4.9.10 Developers associated with Bellevue Ranch shall meet with the Merced Police Department prior to issuance of building permits. Specific security mitigation, as agreed between the Department and the developer, shall be incorporated into the construction plans.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Fire Services: 1. Based on the projected increase in emergency service calls, the increased distance between new development and existing fire stations, and projected increases in the number of fire inspections, there will be a **significant** impact to fire protection services. 2. A future fire station outside the project site is anticipated to serve portions of the Bellevue Ranch project. City staff as indicated that this station is speculative and not guaranteed. In this regard, the project does not provide for adequate fire facilities for future residents south of Bellevue Road. This is considered a **significant** impact	MM 4.9.12 Payment of Cost Revenue Impact System fees or other applicable fees as determined by the City of Merced. MM 4.9.13 Construction of exterior and interior water lines, fire hydrants, and provision of sufficient water pressure shall be determined by the Merced Fire Department. MM 4.9.14 Prior to submittal of individual subdivision maps within the project, each applicant shall meet with representatives from the Merced Fire Department to outline necessary fire prevention requirements. MM 4.9.11 Prior to approval of the Bellevue Ranch Master Development Plan, the applicant shall provide a second fire station site within the project to serve future residents south of Bellevue Road. The provision of this station will remain as a Master Plan requirement unless and until the possibility of a station site at a location adjacent to the project site is planned and confirmed by the City.	1. Less-than-significant. 2. Less-than-significant.
School Facilities: 1. Based on the District standards, the proposed project will generate the need for between two and three schools. This represents a **significant** impact.	MM 4.9.15 The developer of each subdivision within the Bellevue Ranch shall pay the maximum impact fee to the respective districts as permitted by State Law. MM 4.9.16 The Bellevue Ranch project shall reserve necessary school sites for aquisition by the Merced School District.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2000 Scenario: 1. In the year 2000, the Bellevue Ranch project will cause a significant impact to West Olive/M street and Cardell/G street intersections.	MM 4.10.1 Extend R Street to approximately 1/2 mile north of Cardella Road. Construct a 2 lane divided arterial between present terminus and Cardella Road. Construct a 2 lane divided arterial north of Cardella Road. Build R Street with ultimate curb to curb width of 84 feet to allow widening inside without reconstructing curb, gutter, sidewalks, etc. MM 4.10.2 Extend Cardella Road from G Street to present terminus east of Kansas Street. Construct a 4 lane divided arterial (ultimate curb to curb width of 84 feet) between G and R Streets and a 2 lane divided arterial west of R Street. Build 2 lane section with an ultimate curb to curb width of 84 feet. MM 4.10.3 Extend Yosemite Avenue to SR 59 (planned improvement). Construct a 4 lane divided arterial from present terminus to R Street and as a 2 lane divided street from R Street to SR 59. If possible, build 4 lane and 2 lane sections with an ultimate curb to curb width of 98 feet in anticipation of widening to 6 lanes. Maintain expressway level access restrictions on the extension. MM 4.10.4 Extend M Street from present terminus to Cardella Road. Construct a 2 lane divided arterial (maintaining existing tree-lined median). MM 4.11.5 Widen SR 59 to a 4 lane divided expressway from West Olive Avenue to Yosemite Avenue. Maintain expressway level access restrictions.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2000 Scenario (Continued):	MM 4.10.6 Build new intersections of Cardella/R, Cardella/M, and western side of Cardella/G with the lane configurations shown in Figure 4.10-9. MM 4.10.7 Build the new intersections of Yosemite/R and Yosemite/SR 59, with the lane configurations for Yosemite/R shown in the figure. Install a traffic signal at Yosemite/R and a stop sign at the westbound approach to SR 59. MM 4.10.8 Yosemite/G- mitigate service level with a change in signal phasing to include protected left turns on the Yosemite Avenue approaches. Maintain existing lane configurations. MM 4.10.9 West Olive/SR 59- concurrent with widening SR 59 construct a free right turn lane southbound SR 59 to westbound Santa Fe Drive. Add a right turn lane to the northbound SR 59 approach at West Olive Avenue. West Olive/SR 59 cannot easily be mitigated to LOS D or better because of right-of-way constraints. To mitigate to LOS D the following improvements in addition to those described above would be needed: dual left turn lanes southbound on SR 59, dual left turn lanes eastbound on West Olive, exclusive right turn lane westbound on West Olive, two through lanes on SR 59 north and south of West Olive, three through lanes eastbound on Santa Fe Drive.	

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2000 Scenario (Continued):	MM 4.10.10 West Olive/G- apply improvements recommended in the 1992 Smith's Food and Drug Store traffic impact study. These improvements are dual left turn lanes on all approaches and exclusive right turn lanes on the northbound and southbound G Street, and eastbound Olive Avenue approaches. These improvements, however, do not improve the service level to LOS D or better. MM 4.10.11 West Olive/R and West Olive/M- no mitigations are recommended for these intersections because of right-of-way constraints. Dual left turns on all approaches of both intersections would result in a LOS F at West Olive/R and a LOS D/E at West Olive/M. Additional through lanes on R and M Streets are needed to fully mitigate these intersections. Rather than incur high right-of-way costs to improve these intersections, it is recommended that funds be used for additional capacity to divert traffic away from West Olive Avenue. If redevelopment projects occur adjacent to these intersections, the City should evaluate potential improvements as part of the project.	

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2005 Scenario: 1. In the year 2005, the proposed project will create a **significant** impact to nine intersections. The intersection are: West Olive/SR 59, West Olive/R street, West Olive/M street, West Olive/G street, Yosemite/M street, Yosemite/G street, Cardella/SR 59, Cardella/R street, and Cardella/G.	MM 4.10.12 Extend R Street from north of Cardella Road to Bellevue Road. Maintain this section of R Street as a 2 lane divided arterial with ultimate curb-to curb width of 84 feet. MM 4.10.13 Widen Bellevue Road to its ultimate curb to curb width (84 feet) from G Street to R Street. MM 4.10.14 Widen Yosemite Avenue to a 4 lane divided arterial from R Street to SR 59. MM 4.10.15 Widen Cardella Road to a 4 lane divided arterial from R Street to SR 59. MM 4.10.16 Widen G Street to a 4 lane divided arterial from Yosemite Avenue to Bellevue Road. MM 4.10.17 Widen SR 59 to a 4 lane divided arterial from Yosemite Avenue to Bellevue Road. Maintain expressway level access restrictions. MM 4.10.18 Widen M Street to 4 lanes from present terminus to Cardella Road.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2005 Scenario (Continued):	MM 4.10.19 Build new intersections of Bellevue/R and Bellevue/M with the lane configurations shown in the Figure. Install traffic signals at both intersections. MM 4.10.20 Bellevue/G- improve with the addition of a left turn pocket and a shared through-right lane on the northbound and eastbound approaches. Signalize the intersection. MM 4.10.21 Cardella/R- improve with an additional through lane in each directions of Cardella Road concurrent with widening road east of R Street. Signalize the intersection. MM 4.10.22 Cardella/G- improve concurrent with the G Street widening and development east of G Street. Add additional through lanes on G Street and in both directions of Cardella Road. Add an exclusive right turn lane on the eastbound Cardella approach. Signalize the intersection. MM 4.10.23 Cardella/SR 59- improve concurrent with the Cardella Road widening and development west of SR 59. Add additional through lanes on the SR 59 approaches and construct a free right turn lane northbound with a lane addition on eastbound Cardella. Signalize the intersection. MM 4.10.24 Yosemite/R- improve concurrent with the widening of the west approach of Yosemite. Add through lanes to the approaches of Yosemite and R Street.	

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2005 Scenario (Continued):	MM 4.10.25 Yosemite/M- convert the existing westbound and eastbound shared through-left turn lanes to exclusive through lanes. Add an exclusive right turn lane eastbound, and an exclusive through lane westbound. Provide dual left turn lanes northbound. Modify signal phasing to provide protected left turns on all approaches. MM 4.10.26 Yosemite/G- improve concurrent with the G Street widening (G Street lane configurations remain the same). Stripe an additional through lane in each direction of Yosemite Avenue. MM 4.10.27 West Olive/SR 59- no improvements beyond those described for the year 2000 are recommended.	

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2010 Scenario: 1. Traffic from Bellevue Ranch in 2010 will **significantly** impact the intersections of Yosemite/M street, Cardella/R street, and Bellevue/R street because it will change the service level from an acceptable to unacceptable level in either the morning or afternoon peak hour.	MM 4.10.28 Widen SR 59 to a 6 lane divided expressway from Yosemite Avenue to approximately 1/2 mile north of Cardella Road. MM 4.10.29 Widen G Street to 6 lane divided arterial from Yosemite Avenue to approximately 1/2 mile north of Cardella Road. MM 4.10.30 Extend R Street from Bellevue Road to Old Lake Road. Widen R Street to a 4 lane divided arterial from 1/2 mile north of Yosemite Avenue to 1/2 mile north of Bellevue Road. Construct R Street as a 2 lane divided arterial from 1/2 mile north of Bellevue Road to Old Lake Road with ultimate curb to curb width of 84 feet. MM 4.10.31 Extend Old Lake Road from G Street to SR 59 (possibly) incorporating existing Nevada Street. Construct Old Lake Road as a 4 lane divided arterial between G and R Streets, and as a 2 lane undivided road between R Street and SR 59. MM 4.10.32 Extend R Street from Bellevue Road to Old Lake Road as a 4 lane divided arterial, with ultimate curb to curb width of 84 feet. MM 4.10.33 Widen G Street to a 4 lane divided arterial from Bellevue Road to Old Lake Road. MM 4.10.34 Widen Yosemite Avenue to a 6 lane divided expressway from San Jose Avenue to SR 59. Extend Yosemite Avenue as a 6 lane expressway ("Yosemite Bypass") from SR 59, intersecting Santa Fe Drive, and continuing south potentially along the Cooper Avenue alignment to connect with SR 99. Construct a new interchange with SR 99 and eliminate the existing 16th Street interchange.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2010 Scenario (continued):	MM 4.10.35 Cardella/SR 59- add a through lane in each direction of SR 59 concurrent to widening the state route to 6 lanes. Add dual left turns on the westbound Cardella approach. Maintain the free right turn northbound with a lane addition eastbound on Cardella Road. MM 4.10.36 Yosemite/R- improve concurrent with Yosemite Avenue widening. Provide two through lanes on the westbound approach of Yosemite Avenue. Construct a free right turn lane southbound on R Street with a lane addition westbound on Yosemite Avenue. The third through lane eastbound on Yosemite Avenue will drop at or before San Jose Avenue. MM 4.10.37 Yosemite/M- improve with the addition of a second left turn lane on the westbound approach of Yosemite Avenue. MM 4.10.38 Yosemite/G- improve concurrent with the G Street widening. Flare northbound approach to provide three through lanes. Third southbound through lane on G Street is dropped as an exclusive left or right turn lane.	
2. Traffic from Bellevue Ranch will **significantly** impact all of the other study intersections except Cardella/M street, Bellevue/M street, and Cardella/SR 59 because it will contribute more than five percent to intersections already operating at unacceptable levels of service.	2. Same as above mitigation measures (MM 4.10.28 through MM 4.10.38).	2. Less-than-significant.

4.11 AIR QUALITY

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Construction-Related: 1. Construction activities such as clearing, excavation, grading operations, construction vehicle traffic, and wind blowing over exposed earth would generated particulate matter. The construction-related impacts of the proposed project are considered to be **significant.**	MM 4.11.1 To ensure that construction mitigation is utilized, final approval shall not be granted to any development until the developer or contractor submits a satisfactory construction mitigation plan.	1. Less-than-significant.
Auto-Related: 1. The project would generate new traffic and result in construction of new roadways. No violation of either the 1-hour or 8-hour standards are predicted. The project impacts on local air quality are considered to be **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Regional Air Quality: 1. The growth accommodate by the proposed project and other development in the area would result in substantial new regional emissions. These new emissions could cause a deterioration in regional air quality and delay eventual attainment of the air quality standards for ozone and PM-10 in the San Joaquin Valley air basin. Project impacts on regional air quality are considered to be **significant and unavoidable.**	MM 4.11.2 As a condition of project approval, the project applicant shall coordinate with the City to implement a Transportation Demand Program. MM 4.11.3 Employers within the Master Plan area shall coordinate with the City to implement a strong Transportation Demand Management program for all employment generating use. MM 4.11.4 Project design shall be reviewed by the City Planning Department prior to tentative map approvals to encourage tele-communing. MM 4.11.5 Project design shall be reviewed by the City Planning Department prior to approval of the Master Development Plan to encourage the provision of park-and-ride amenities within the project. MM 4.11.6 Prior to issuance of certificates of occupancy, individual homes will require the installation of low NOx space and water heaters, the provision of electric lawn mowers and blowers with the sale of residential units, and include in residential units an electrical outlet and natural gas line to the backyard. MM 4.11.7 In conjunction with the processing of tentative maps, the applicant shall restrict the number of fireplaces in each residence, and require residential use of EPA- certified wood stoves or fireplace inserts. MM 4.11.8 In conjunction with the processing of tentative maps, building orientation should be designed to reduce heating and cooling requirements.	1. Significant and Unavoidable.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Year 2010 With Project Traffic Noise Levels Affecting Proposed Bellevue Ranch Land Use: 1. For the segments of R, M, and G Street, Bellevue Road and Cardella Road located within the Bellevue Ranch project, the year 2010 DNLs at distance of fifty feet from the roadway centerlines would range from seventy to seventy-six dB. Therefore, all new residential dwellings, schools, and parks located along these roadway segments would be exposed to a "normally unacceptable" to "clearly unacceptable" noise environment according to the City's noise compatibility guidelines. The outdoor use areas of the new residences along these roadway segments would also be exposed to a DNL which is up to six dB higher than the maximum DNL recommended by the City's Noise Element. This is considered a **significant** impact.	MM 4.12.1 For the year 2010 with the project scenario noise environment, 6 to 12 foot sound walls, earth berms, or other acoustical shielding would need to be constructed to meet the City's recommended outdoor noise goal of DNL 65 db. A detailed noise study should be preformed along impacted roadway segments to corroborate the actual noise environment and the required acoustical shielding. MM 4.12.2 Most future residence within Bellevue Ranch that are located within 125 feet of Bellevue Road, Cardella Road, and M street would require sound-rated windows consistent with the 45 db interior noise level standard. New residences within 175 feet of R and G streets will require sound rated windows and new residences located within 50 feet of R and G streets will also require sound-rated exterior wall assemblies to meet the 45 db standard.	1. Less-than-significant.
Year 2010 With Project Traffic Noise Levels Affecting Existing Off-Site Land Uses: 1. The existing residences located along Bellevue Road, east of G street, would be exposed to a DNL of sixty-seven dB which is considered "conditionally acceptable" for residential land uses. The existing residences located along the other roadway segments, would be exposed to DNLs that are considered "normally unacceptable" to "clearly unacceptable." Additionally, the year 2010 increase in noise above the existing (year 1992) resultant DNLs exceed sixty-five dB and the increase in noise levels exceed three dB. These increases result in a **significant** impact.	1. See above mitigation measure (MM 4.12.1). MM 4.12.3 Trucks used for the development of Bellevue Ranch will be required to use the City's designated truck routes. MM 4.12.4 All construction activity shall be conducted in accordance with City of Merced Standards for times of operations.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Castle AFB Reuse Affecting Bellevue Ranch: 1. The future noise exposure from any reasonable reuse of Castle AFB would dramatically reduce existing noise contour size. Future operation of Castle AFB, in terms of the established criteria, will result in noise impact to future residents which are **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Merced 2030: 1. The proposed project is conceptually consistent with the intentions of the Merced 2030 plan and the villages concept. The proposed project would thus have a **beneficial** impact.	1. No mitigation is required.	1. Beneficial.
Population: 1. The proposed project would result in the construction of between 4,181 and 6,894 new dwelling units. This would accommodate between 12,335 and 21,371 new residents in the Planning Area between 1990 and 2010. This would be a **beneficial** impact of the proposed project.	1. No mitigation is required.	1. Beneficial.
Employment: 1. The proposed project would result in the development of approximately seventeen percent of the area north of the city scheduled for development, while providing somewhere between seven to twelve percent of anticipated job growth. While the anticipated number of jobs appear deficient, it should be acknowledged that this portion of the 8,000 acre Villages Concept will focus upon residential uses. The future base land use plan provides for a concentration of commercial, office, and light industrial uses along Highway 59, which will offset concentrations of residential uses in other portions of the Plan area. Impacts associated with employment generation rates for the Project are therefore **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Housing:		
1. The project would accommodate between sixteen to twenty-eight percent of the population increase anticipated to occur in the Planning area between 1990 and 2010. This would be a **beneficial** impact of the proposed project.	1. No mitigation is required.	1. Beneficial.
2. The proposed project description does not include any affordable housing targets. This is considered a **significant** impact.	MM 4.13.1 The project applicant shall insure that the project contributes proportionally to the City's affordable housing goals and demonstrate compliance with this requirement prior to approval of tentative maps.	2. Less-than-significant.
Jobs/Housing Balance:		
1. The job/housing ratio for the proposed project would be approximately 0.40, indicating an extremely housing rich area. While the ratio for this project appears directed toward housing, the Village Concept provides for light industrial and office uses within other portions of the Plan area. In addition, the employment opportunities from the potential reuse of Castle Air Base and the potential University of California campus at Lake Yosemite would result in the project's impact to be **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.
General Plan Goals And Policies:		
1. The proposed project is conceptually consistent with the Village Concept and thus with the General Plan. The impact is therefore **less-than-significant.**	1. No mitigation is required.	1. Less-than-significant.

4.14 HUMAN HEALTH

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Adjacent Use:		
1. With the exception of the County Landfill, no recorded source of soil of groundwater contamination has been reported which would impact residents of the proposed project. Therefore **no significant** impact is anticipated to result from the introduction of residential and commercial uses on the proposed site.	1. No mitigation is required.	1. No significance.
2. Landfill activities will not pose a threat to the proposed project, therefore there will be **no significant** impact.	2. No mitigation is required.	2. No significance.
On-Site Concerns:		
1. There is **no significant** impact associated with the introduction of residential and commercial uses in proximity to buried cattle.	1. No mitigation is required.	1. No significance.
2. Even though these burial trenches are not a human health concern, these bone-filled trenches may not be geotechnically suitable for construction. Thus, construction of structures on burial trenches may result in a **significant** impact.	MM 4.14.1 Exploration trenches or other adequate excavation methods shall be conducted prior to the issuance of any project building permits to identify the location of the boned-filled burial trenches. Following delineation of the burial trenches, they shall be excavated, back-filled, and compacted to appropriate construction standards as recommended by a qualified geotechnical engineer.	2. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Hazardous Materials:		
1. Based on the identified chemicals that have been used at the site, there is a **significant** impact associated with the possible exposure of project inhabitants to contaminants.	MM 4.14.3 A Phase II site reconnaissance and sampling investigation of those portions of the project site where areas of potential environmental contamination have been identified shall be conducted and submitted for City review prior to final map recordation. Should the report(s) identify the need for substantial changes in the project, if it reveals significant new information about potential project impacts, if any required remediation will result in additional project impacts, or if impacts are identified which will remain significant after mitigation, the EIR for the proposed project shall be recirculated or a supplemental or subsequent EIR shall be prepared.	1. Less-than-significant.
2. Based on the significant amount of open dumping and soil staining observed throughout the ranch headquarters complex, there is a **significant** impact of exposure of project occupants to contaminants.	MM 4.14.2 Abandoned automobiles, ranch equipment, tires, and other miscellaneous farm refuse shall be removed to an appropriate disposal facility prior to issuance of project grading permits for these affected areas.	2. Less-than-significant.
3. Due to the improper handling practices of waste oil products observed in the vicinity of the ranch complex, there is a **significant** impact of exposure of project occupants to contaminants.	MM 4.14.4 Soil samples shall be collected during the demolition of the vehicle maintenance building from beneath the floor slab and the concrete-lined work pit to assess if subsurface soils have been impacted. Should the results required the need for substantial changes in the project, if it reveals significant new information about potential project impacts, if remediation will result in additional project impacts, or if impacts which will remain significant after mitigation are identified, the EIR for the proposed project shall be recirculated or a subsequent or supplemental EIR shall be prepared.	3. Less-than-significant.
4. Short term exposure of workers to asbestos and lead paint during demolition and transport would result in a **Significant** impacts.	MM 4.14.5 Appropriate precautions and personal protection equipment shall be utilized during demolition.	4. Less-than-significant.

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Hazardous Materials (Continued):		
5. Long-term health effects from on-site disposal of septic system sludge would most likely be negligible due to the long period of time since this disposal method has been conducted at the site. Therefore, **no significant** impact is anticipated.	5. No mitigation is required.	5. No significance.
6. Based on the results of the California State Wide Radon Gas Survey, **no significant** impact is anticipated.	6. No mitigation is required.	6. No significance.
7. Site reconnaissance revealed no soil staining associated with the observed electrical transformers. But, there is a **potential significant** impact of exposure to contaminants associated with the proposed project if PCPs are present in the transformers.	7. See above mitigation measure (MM 4.14.3).	7. Less-than-significance.
8. A seventy-five foot wide easement for a 230 kV transmission line crosses diagonally through the Bellevue Ranch Site from the northwest corner, south to the southeast corner at Black Rascal Creek. The proposed project will result in placement of homes, parks, and open space corridors in immediate proximity to overhead transmission lines which emit electric and magnetic fields. For the purpose of this analysis, this will result in a **potentially significant** impact.	8. No mitigation available.	8. Potentially significant.
9. A seventy-five foot wide easement for a 115 kV transmission line crosses through the study area to the southwest along Cottonwood Creek. The proposed project will result in placement of homes, parks, and open space corridors in immediate proximity to overhead transmission lines which emit electric and magnetic fields, this will result in a **potential significant** impact.	9. No mitigation available.	9. Potentially significant.

3.0 PROJECT DESCRIPTION AND OBJECTIVES

3.1 Regional Setting

The City of Merced is located near the geographic center of the County of Merced which is located in California's Central Valley along the western slope of the Sierra Nevada mountain range. The County of Merced is bounded on the north by Tuolumne and Stanislaus Counties, on the east by Mariposa County, on the south by Fresno and Madera Counties, and on the west by Santa Clara and San Benito Counties. The City is generally bounded on the west by State Highway 59 and the El Capitan Canal, and to the east by McKee Road (Figure 3.1-1). The northerly City limits include Fahrens Park and Merced College, while the southerly City limits are generally bounded by the Merced Municipal Airport, the Merced County Fairgrounds, and State Highway 99. The City of Merced consists of 10,560 acres, or 16.5 square miles and has a population of 59,800 people.

The City of Merced is approximately four miles long from north to south and four miles in width from east to west. The northern portion of the City is characterized by gently rolling terrain, while the southern portion is relatively flat. The northern, western, and eastern portions of the City contain a number of creeks and canals including North Bear Creek (Merced Lateral), Black Rascal Creek, Fahrens Creek, and Cottonwood Creek. Lake Yosemite County Park is located approximately three miles north and east of the City. Castle Air Force Base is located approximately four miles north of the City.

3.2 Project Setting

The Bellevue Ranch Master Development Plan project, proposed by D.R. Stephens/Bellevue Associates (the project applicant), consists of the development of 1,365.5 acres north of the City of Merced (Figure 3.2-1). The property is bounded by Merced Community College and low density single family residential neighborhoods to the south, and very low density housing and agricultural production land to the north, east and west. Merced "G", "M", and "R" Streets provide the main north/south access to downtown. "G" Street provides primary access to the east side of the project, and State Route 59 and "R" Street would provide access to the west end portion of the property. Old Lake Road, Bellevue Road and Cardella Road which serve the property are east/west arterials.

3.3 Project and Site History

The City of Merced, located 67 miles south of Stockton, was incorporated in 1889. The new town was laid out along the main Southern Pacific Railroad right-of-way through the San Joaquin Valley. At that time, the City was the terminus for Yosemite tourists and consisted of little more than a few hotels and banks. A partnership of Henry Miller and Charles Lux produced a land holding which consisted of more than 920,000 acres in Fresno, Madera and Merced Counties. Over 247,000 acres of Miller/Lux land were located in Merced County, adjacent to the Bellevue Ranch property.

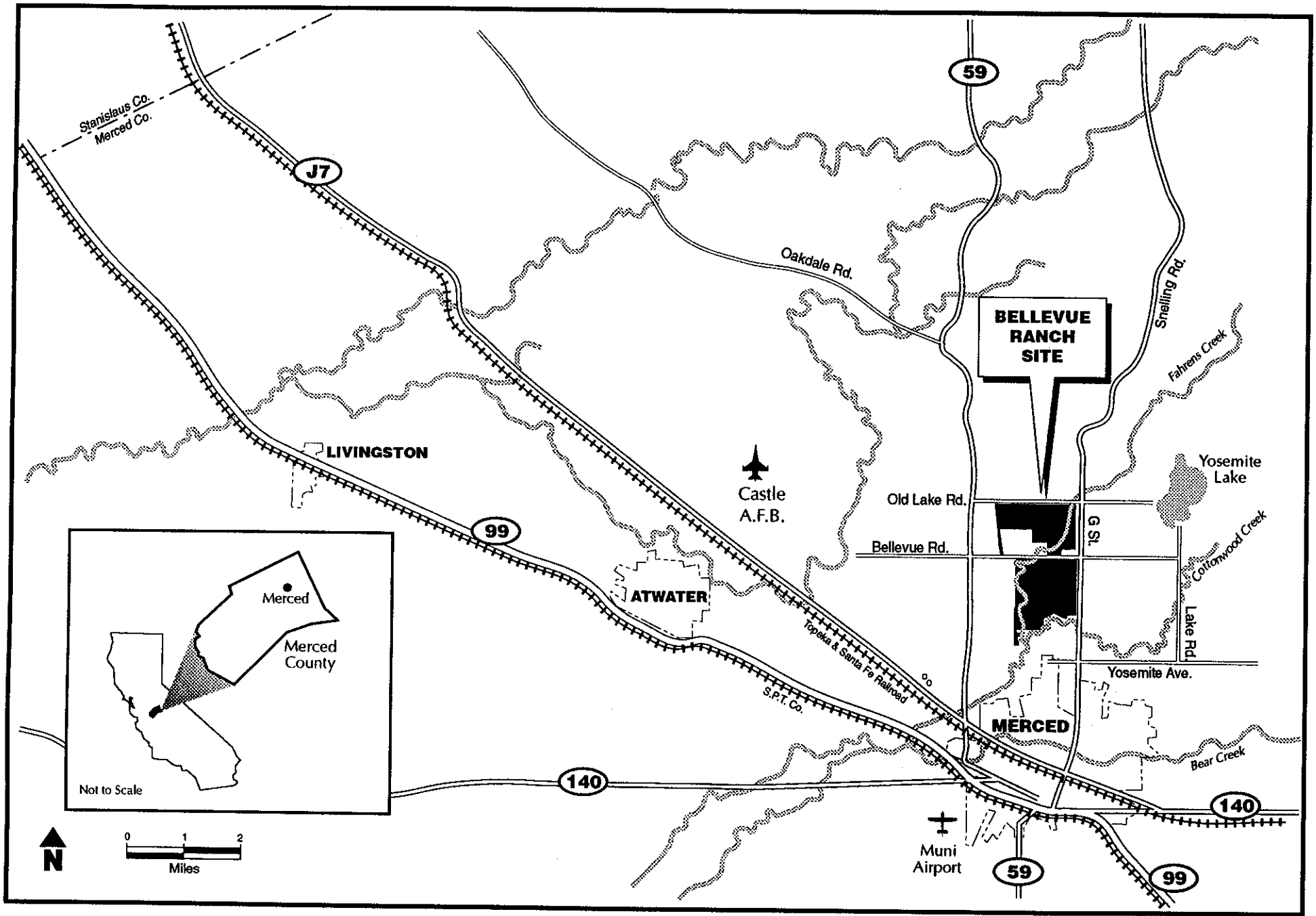

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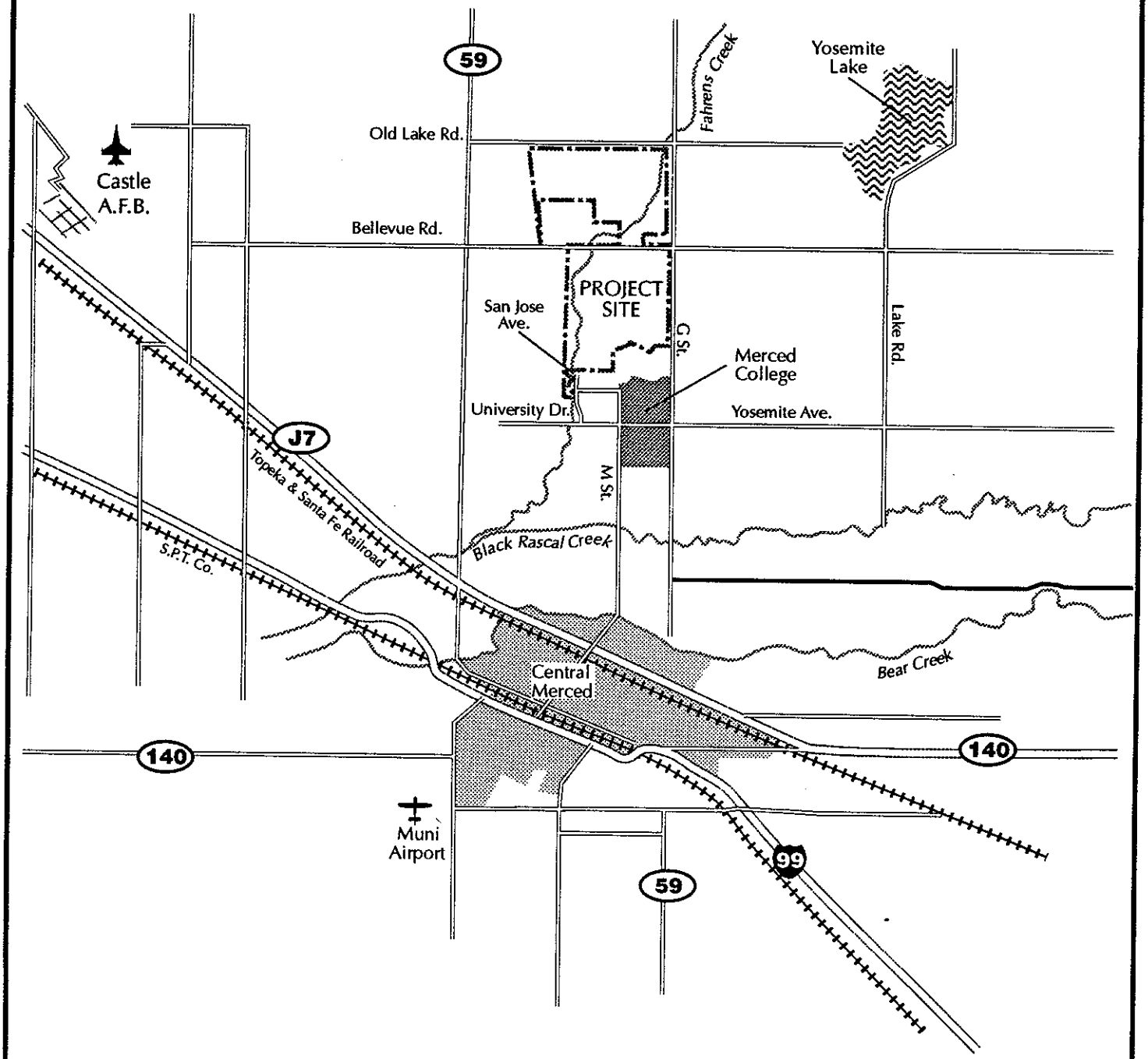
Figure 3.1-1
Regional Location Map



Source: Willdan Associates

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Figure 3.2-1
Project Vicinity Map

In 1911, the Bellevue Ranch was the center of operations for the Crocker-Huffman Land and Water Company, which utilized the site as a ranch headquarters for cattle grazing, grain production, and meat packing operations. The ranch remained in the Crocker family and continued to be utilized as agricultural land until the 1960's. In 1970, a group of investors from Castle Air Force Base purchased the ranch. Through the 1970's, the land was continually leased and was primarily kept in agricultural production. The crops grown at Bellevue Ranch included cotton, alfalfa and sugar beets.

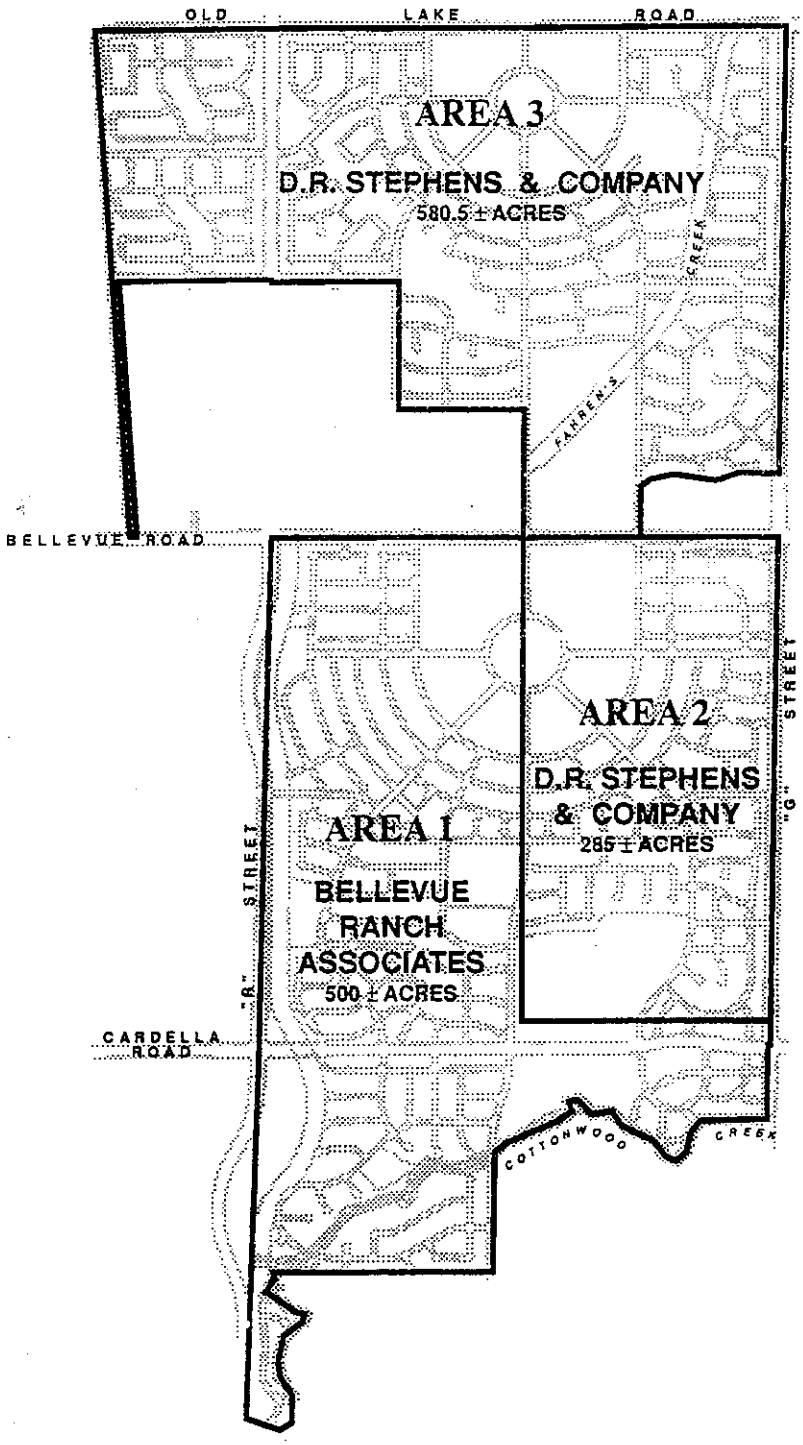
In 1980, Don Gragnani obtained ownership of the ranch for the purpose of farming and grazing cattle. Cattle were reintroduced to the ranch site by Gragnani in 1985. Bellevue Associates purchased the ranch from Don Gragnani in 1989 and retained it as crop producing land, under lease to a farm management company. The Bellevue Ranch site is currently under joint ownership. D.R. Stephens and Company is the owner of approximately 865 acres, while Bellevue Ranch Associates owns the remaining 500 acres (Figure 3.3-1).

The area north of the incorporated limits of the City of Merced is identified by the Merced 2030 Plan as the next logical area for urban expansion. The "*Merced 2030: How Should We Grow?*" report identified five alternative scenarios relative to future City expansion in a process that included input from the City Council, Planning Commission and staff, interested public agencies and concerned citizens. The alternative that was adopted by the City was Scenario IV, which identified an 8,000 acre area north of the City for urban expansion based on the Village Concept of urban design, as prepared by Calthorpe Associates (Figure 3.3-2). After the Scenario IV alternative and Village Concept were adopted by the City, the Planning Department commissioned Calthorpe Associates to prepare a document which would provide a template for future development.

The resultant documentation for implementation of the Villages Concept is a refinement of the "*Merced 2030: How Should We Grow?*" report and includes an Opportunities and Constraints Analysis, a Preferred Alternative Report, and Design Guidelines, and collectively is referred to as the Merced Villages Concept Plan. The Design Guidelines include a land use plan that illustrates a development pattern for the entire 8,000 acre Merced Villages area.

The 1,365 acre Bellevue Ranch Master Development Plan is the first project being proposed to implement the Merced Villages Concept Plan and Design Guidelines. The Merced Villages Design Guidelines and the subsequent Bellevue Ranch Conceptual Land Use Plan intend to provide for compact and efficient development patterns and a diversity of housing types while distributing public facilities throughout the project. Using the Villages Concept, the Master Plan intends to provide for the integration of housing (at various densities), retail commercial uses, public facilities, and office uses in compact neighborhood settings. Retail uses, transit and public facilities are concentrated at the Village Centers, to create a sense of community by providing activity and pedestrian oriented amenities in each core area.

BELLEVUE RANCH



Source: The Spink Corporation

Not to Scale

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Figure 3.3-1
Property Ownership

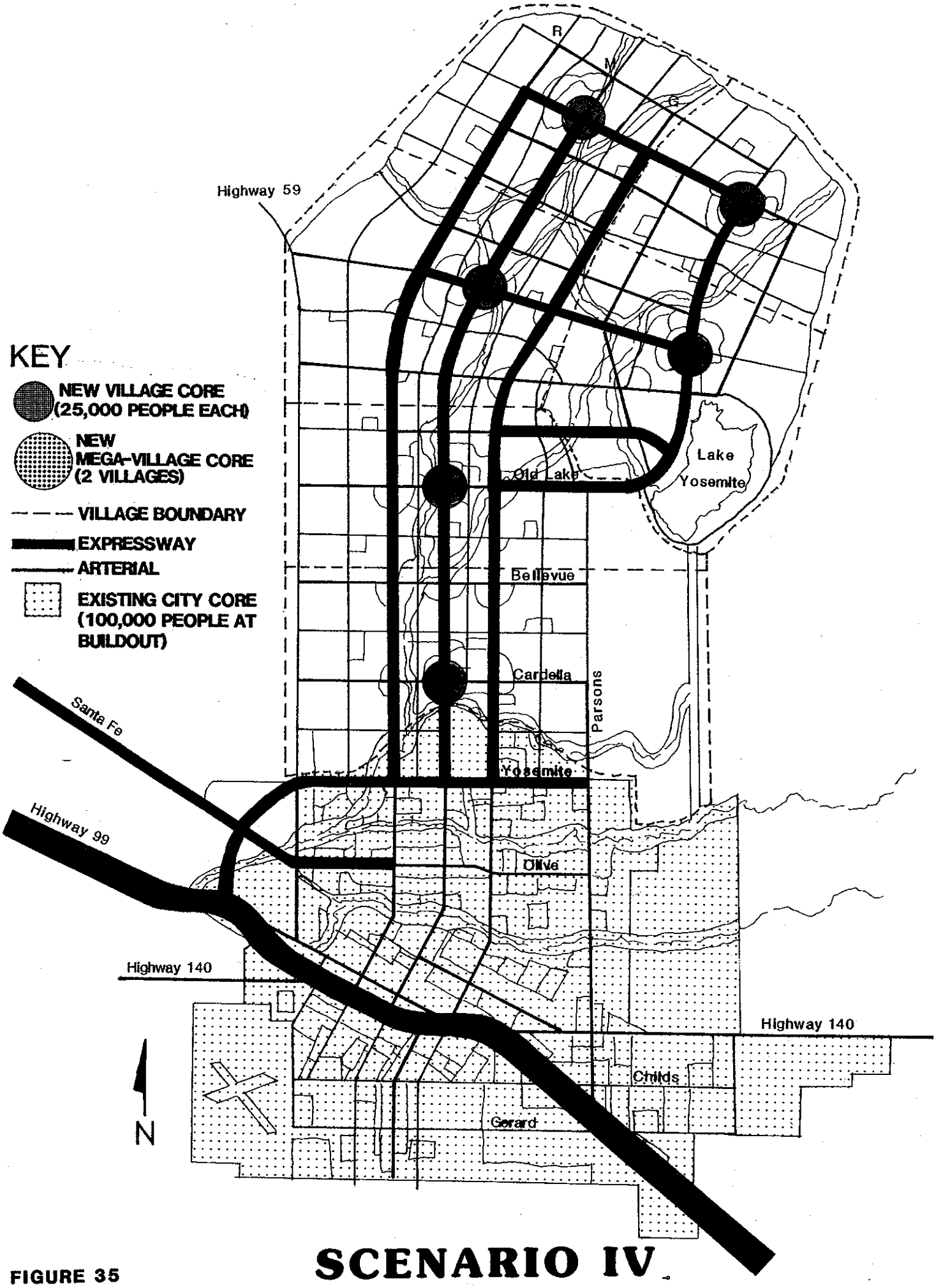


FIGURE 35

SCENARIO IV

On August 12, 1992, the project applicant submitted an application to the City of Merced for annexation of the 1,365.5 acre Bellevue Ranch. Subsequently, on August 12, 1992, the applicant submitted applications for a General Plan Amendment and for prezoning of the area encompassed by the Bellevue Ranch Master Development Plan.

3.4 Project Objectives

The Merced Village Concept Plan calls for growth to occur in "villages" which are self-sufficient, pedestrian-oriented, mixed-use communities that provide the opportunity for people to live, work, go to school, shop and gather all within the village. The purpose of the proposed project is to allow for the development of the 1,365 acre site in accordance with the "villages concept" of urban design. This design concept promotes the integration of residential, commercial, office, open space and public facility uses within the framework of a transit-oriented circulation system. The design of the project incorporates a variety of environmentally-oriented amenities while encouraging a balanced land use pattern that includes jobs close to housing. The combination of these elements is expected to create an overall sense of community that is consistent with the growth patterns envisioned by the Merced 2030 Growth Plan and the Merced Villages Concept Plan. The project applicant has indicated the following objectives for the Bellevue Ranch project which are consistent with the Merced Villages Design Guidelines adopted by the City.

- Create pedestrian-oriented environments to encourage pedestrian travel and to reduce reliance on the automobile.
- Link land use with proposed transit routes of expanded bus service as well as potential light rail system.
- Reduce reliance on the automobile by providing alternative travel modes and by minimizing the number of vehicle-miles traveled for common trips.
- Foster compact and efficient development patterns.
- Complement existing retail and employment areas in the City with appropriate land use and transit patterns.
- Provide a diversity of housing types.
- Distribute public facilities throughout the study area to serve all residents.
- Create a sense of community by providing retail and public facilities at the center of compact villages.

3.5 Project Characteristics

The Bellevue Ranch project consists of a village-oriented residential community featuring a range of 5,971 to 6,894 dwelling units, recreational uses and supporting commercial uses (Figure 3.5-1) as described below. The village concept incorporated into the design of the Bellevue Ranch is intended to provide mixed use development that is accessible to various transit options and is pedestrian oriented. The proposed design and configuration of the project is also intended to be sensitive to area topography and the local environment.

A combination of high density residential and commercial areas will form two "Village Centers" within the project area, with decreasing densities of residential product types radiating from the cores. The Village Centers will surround the two proposed transit stops and will provide for a variety of commercial and residential uses. One intent of the Village Center is to decrease automobile reliance by providing services and public spaces that are convenient and accessible to nearby residents and transit users. The actual Village Center will consist of a combined park site, or "town square" and transit facility, and will provide a formal focus for each village.

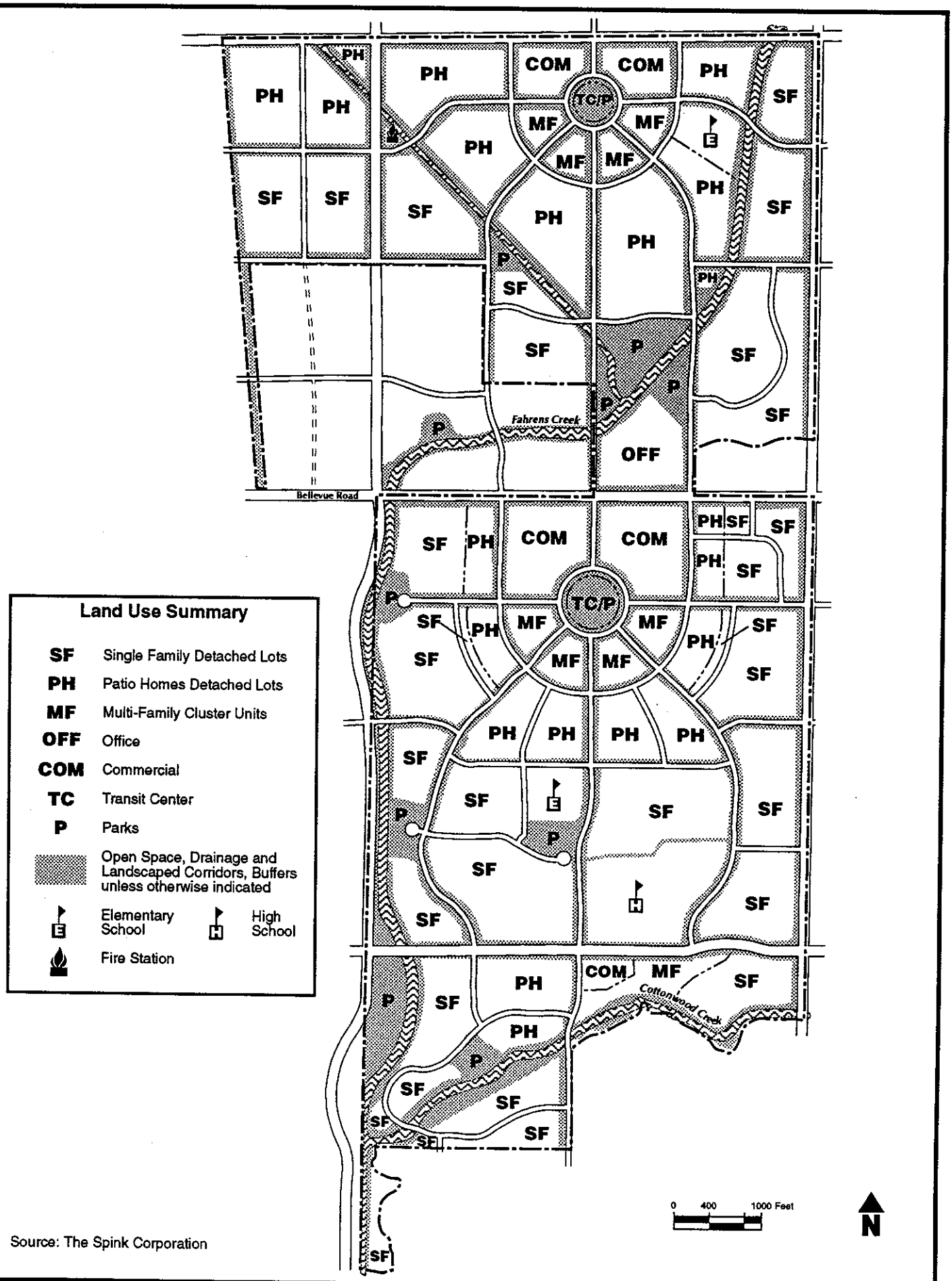
The location of parks and open space areas is intended to provide a range of recreational opportunities throughout the project area. Recreational uses will consist of neighborhood parks dispersed throughout the project area and community parks that generally follow the Fahrens and Cottonwood Creek channel alignments. In addition, open space corridors may be provided along major utility easements that traverse the project area.

Residential Land Use

The residential areas are comprised of three density categories which are described in detail below and summarized in Table 3.5-1.

1) **Single-Family Detached Standard Homes** (SF) will account for 2,384-2981 units on approximately 596 acres. Though the SF will utilize development standards typical for low density single-family residential construction, permitted uses within the SF will conform to single-family use limitations found elsewhere in the City of Merced. SF areas will account for approximately 44% of the total project area and 59% of the residentially designated land area.

2) **Single-Family Detached Patio Homes** (PH) will account for 1,790-2,116 units on approximately 325 acres. Though the PH will utilize development standards typical for medium to high density single-family residential construction, permitted uses within the PH will conform to single-family use limitations found elsewhere in the City of Merced. PH areas will



Source: The Spink Corporation

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Figure 3.5-1
Conceptual Land Use Plan

account for approximately 24% of the total project area and 32% of the residentially designated land area.

3) **Multi-Family** (MF) will account for 1,797 units on approximately 82 acres. Though the MF will utilize development standards typical for high density multi-family residential construction, permitted uses within the MF will conform to multi-family use limitations found elsewhere in the City of Merced. MF areas will account for approximately 6% of the total project area and 9% of the residentially designated land area.

The sum of these three categories equates to 1,003 acres, or 74% of the gross project area.

Commercial Land Use

The commercial land uses described in detail below are also summarized in Table 3.4-1.

1) **Commercial** uses comprise approximately 89 acres of land within the project. These areas are generally located in the Village Centers, adjacent to residential uses and transit facilities. Permitted commercial uses will conform with the general commercial uses found elsewhere in the City of Merced. Commercially designated land accounts for approximately 6% of the total land area for the Bellevue Ranch project.

2) **Office** designated land represents approximately 23 acres of the total land area for the Bellevue Ranch. Land designated for office usage is only located in Phase Three of the project (discussed in Section 3.6), south of Fahrens Creek at the intersection of Bellevue Road and M Street. The permitted uses will conform with the general office uses found elsewhere in the City of Merced. Land designated for office usage comprises approximately 2% of the total land area for the Bellevue Ranch project.

Open Space, Parks and Transit Stations

The open space recreation and parks component of the project consists of parkland, open space corridors, transit stations and other developed common areas designated to serve both the residents of the project and the surrounding area as summarized in Table 3.4-1. These areas include:

- Combined Parks and Transit Stations (14.7 acres)
- Park Areas (51.3 acres)
- Open Space/Creeks/Easements/Corridors (122.2 acres)

The sum of all open space and recreation areas equates to 188.2 acres, or approximately 14% of the gross project area. This acreage includes sidewalks and meandering pedestrian pathways as well as the above noted uses.

Land Uses for Public Facilities

Proposed public facility land uses will include:

- two elementary school sites (19.9 total acres)
- one high school site (40.0 acres)
- one fire station (1.6 acres)

The sum of the school sites and fire station sites is 61.5 acres, or approximately 4% of the total land area of the Bellevue Ranch project.

TABLE 3.5-1
PROJECT SUMMARY

LAND USE	ACRES	% TOTAL	DWELLING UNITS
Single Family Detached Standard Homes	598.4	44%	2,384-2,981
Single Family Detached Patio Homes	325.6	24%	1,790-2,116
Multi-Family	81.7	6%	1,797
Commercial	89.1	6%	
Office	23.1	2%	
Schools	59.9	4%	
Park and Transit Station	14.7	1%	
Park	49.2	4%	
Open Space / Creeks / Easements / Corridors	122.2	9%	
Fire Station	1.6	*	
Total	1,365.5	100%	5,971-6,894

3.6 Phasing

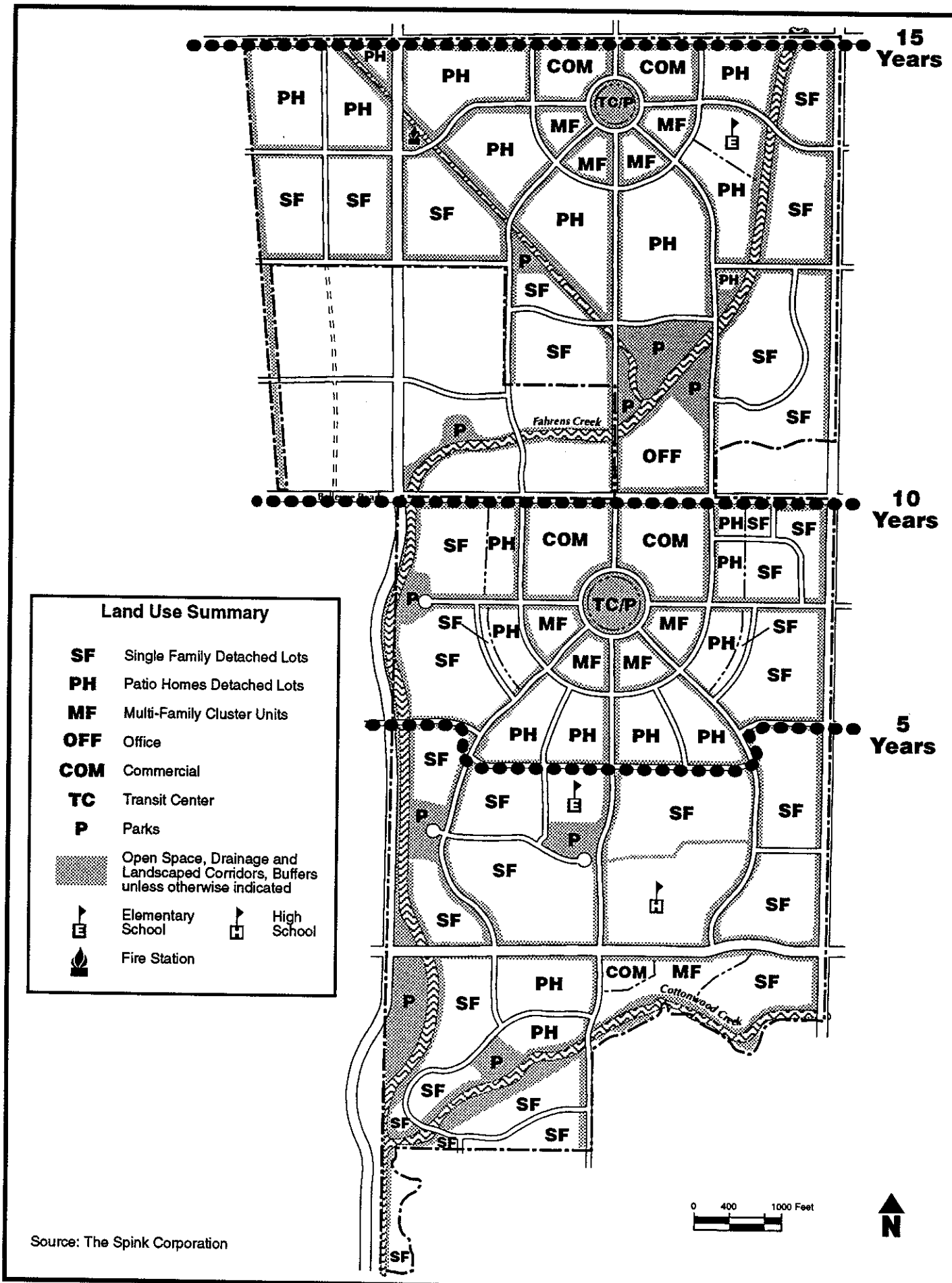
The project applicant has indicated that Bellevue Ranch is to be developed in three phases over a period of 15 years (Figure 3.6-1).

Phase I

The first five year phase of Bellevue Ranch will consist mainly of single-family detached homes. Considerable open space and parks will also be included in the first phase of the project. An elementary and high school will also be a part of phase one, in addition to a small amount of land designated for commercial and multi-family uses.

Phase II

The second five year period will include the first Village Center, which will be surrounded by land designated for commercial and multi-family use. Patio homes and single family detached homes will also be major components of the second phase of the project.



Source: The Spink Corporation

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Figure 3.6-1
Development Phasing Plan

Phase III

The final five year phase of Bellevue Ranch will result in project build-out. This final phase will include the second Village Center, in addition to substantial amounts of open space and parkland. A second elementary school will be located in the final phase, as will a fire station. All types of residential development will be present in the build-out phase of the project, including patio homes, single-family detached homes and multi-family units. Further, considerable amounts of land designated for commercial and office use are included in the final phase of the Bellevue Ranch project.

3.7 Related Project Actions

The Bellevue Ranch is the is currently within the County and is identified by both the county General Plan and the City General Plan as a Specific Urban Development Plan (SUDP) Area. Therefore, the City and the County agree that the project site is a logical choice for urban expansion. The site is currently zoned by the County as a combination of "A-1" (General Agriculture, 20 acre minimum lot size) and A-R (Agricultural-Residential, one-acre minimum lot size).

The applicant requests approval of a Planned Development (PD) application to provide for a comprehensive arrangement of land uses that are intended to respond to the environmental, physical, economic and social concerns of the site and surrounding area. Upon approval, the Plan will become a part of the City's General Plan, adopted as a General Plan Amendment. As noted in the Merced 2030 Growth Plan, the approval of the Bellevue Ranch Master Development Plan will require annexation into the City of Merced. In this regard, the EIR and Master Development Plan for Bellevue Ranch will facilitate the following primary discretionary actions:

1. A General Plan Amendment to provide consistency between the new land use (i.e., the PD) and the continuing administration of the City of Merced General Plan as reflected in the change from agricultural land to urbanization.

2. Prezoning to allow for the PD to serve as the zoning for the project to include all development standards, and to provide for development flexibility pursuant to State Law and City Ordinances.

3. Annexation to include Bellevue Ranch within the corporate boundaries of the City of Merced, making the City the lead agency relative to land use decisions affecting the site.

After annexation, the following City actions will be required to implement the project:

1. Enactment of an ordinance to adopt the PD zoning in compliance with the land use designations of the Master Plan.

2. Conditional Use Permits.

3. Approval of tentative subdivision maps.

4. Approval of bonding agreements or special districts, approval and recordation of deed restrictions (CC&R's), approval of grading plans and permits, and public improvement plans.

5. Approval of final subdivision maps.

6. Related affected agency permits (i.e., Corps of Engineers 404 permit, California Department of Fish and Game 1603 permit, Caltrans Encroachment permit)

4.0 ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

4.1 LAND USE

1. Environmental Issues

This section evaluates land use impacts resulting from the implementation of the Project. The analysis focuses on potential conflicts between the Project and existing plans and policies, as well as on potential conflicts with surrounding land uses.

2. Existing Setting

Bellevue Ranch is located in the Merced Village area, which is the "Northern City" alternative of the Merced 2030 Growth Plan. The Merced Village area is north of the incorporated limits of the City of Merced. As shown in the Merced Villages Conceptual Land Use Plan (Figure 3.3-2), the Merced Village area extends approximately 2,000 feet north of Old Lake Road. The Merced Village area is bounded on the south by Yosemite Avenue, the northerly City limits, and Black Rascal and Cottonwood Creeks. The east side of the Village area is bounded by Lake Road and the west side is bounded by Snelling Highway (State Route 59). The Merced Village concept plan comprises approximately 8,000 acres, the majority of which is presently agricultural and rural residential in nature with the exception of some clusters of higher density single family residential dwelling units.

The Bellevue Ranch project itself consists of 1,365 acres of land generally bounded by Old Lake Road to the north, the Merced College expansion area and Cottonwood Creek to the south, "G" Street to the east, and "R" Street to the west. The site is vacant except for the former Crocker-Huffman ranch complex in the south-central portion of the project site. The site has historically been used for agricultural purposes including crop production and cattle grazing. In recent years crops have included cotton (most recent crop harvested in December, 1992), alfalfa and sugar beets. Agricultural land uses are discussed in greater detail in Section 4.2.

The existing Bellevue Ranch complex occupies approximately 40 acres in the south-central portion of the project area. Of the 39 structures which currently form the complex, six are residential structures currently in use. The balance of the structures include various farm and utility buildings such as barns, milk sheds, chicken coops, and a variety of farm implements and vehicle storage sheds.

The Bellevue Ranch site is generally flat, with limited topographic relief on site consisting of a small hill that the ranch complex is located upon, and the area west of Fahrens Creek that exhibits gently rolling terrain. In addition, several canals and two significant creeks (Fahrens and Cottonwood) traverse the project site. Access to the site is afforded via "M", "R", and "G" Streets to the south, and Cardella, Bellevue and Old Lake Roads from the east and west.

Existing Land Use in the Surrounding Area

The proposed project is located adjacent to land uses which include low and medium density residential, and agricultural producing ranch lands. A summary of the surrounding land uses is shown on Figure 4.1-1, and includes the following:

NORTH: To the north of the project site is vacant land that is currently undeveloped or is in agricultural production. The north edge of the project site marks the northern SUDP boundary. Land north of the project site is currently zoned by Merced County as agricultural and rural residential.

SOUTH: The southern boundary of the project site is bordered by an existing medium density single-family subdivision and by the future expansion area of the Merced College campus. This area is designated as "Low Density Residential", "Low Medium Density Residential", and "Park" by the City's General Plan.

EAST: The eastern boundary of the project site is bordered by a mixture of rural residences and agricultural land. This area is designated SUDP, as noted above, and is anticipated for future urban development.

WEST: The western boundary of the project site is also bordered by a mixture of rural residential and agricultural uses. This area is designated as SUDP, and is anticipated for future urban development.

Relevant Planning Programs

The following describes the existing regulatory framework governing the Bellevue Ranch site. This includes a discussion of the November 1987 City of Merced General Plan, the Merced 2030 Growth Plan, the Merced Villages Concept Plan and Design Guidelines, the December 1990 Merced County General Plan and the U.S. Army Corps of Engineers - Merced County Streams Design Memorandum No. 11 as noted below.

1. City of Merced General Plan

The City of Merced General Plan identifies the project area as an "urban expansion area", within the SUDP which limits the physical limits of urban development. The urban expansion policies written into the General Plan provide direction consistent with new City growth and the 2030 plan. As discussed above, the objective of the urban expansion area is to direct anticipated new urban growth away from what are considered to be prime agricultural and other constrained areas.

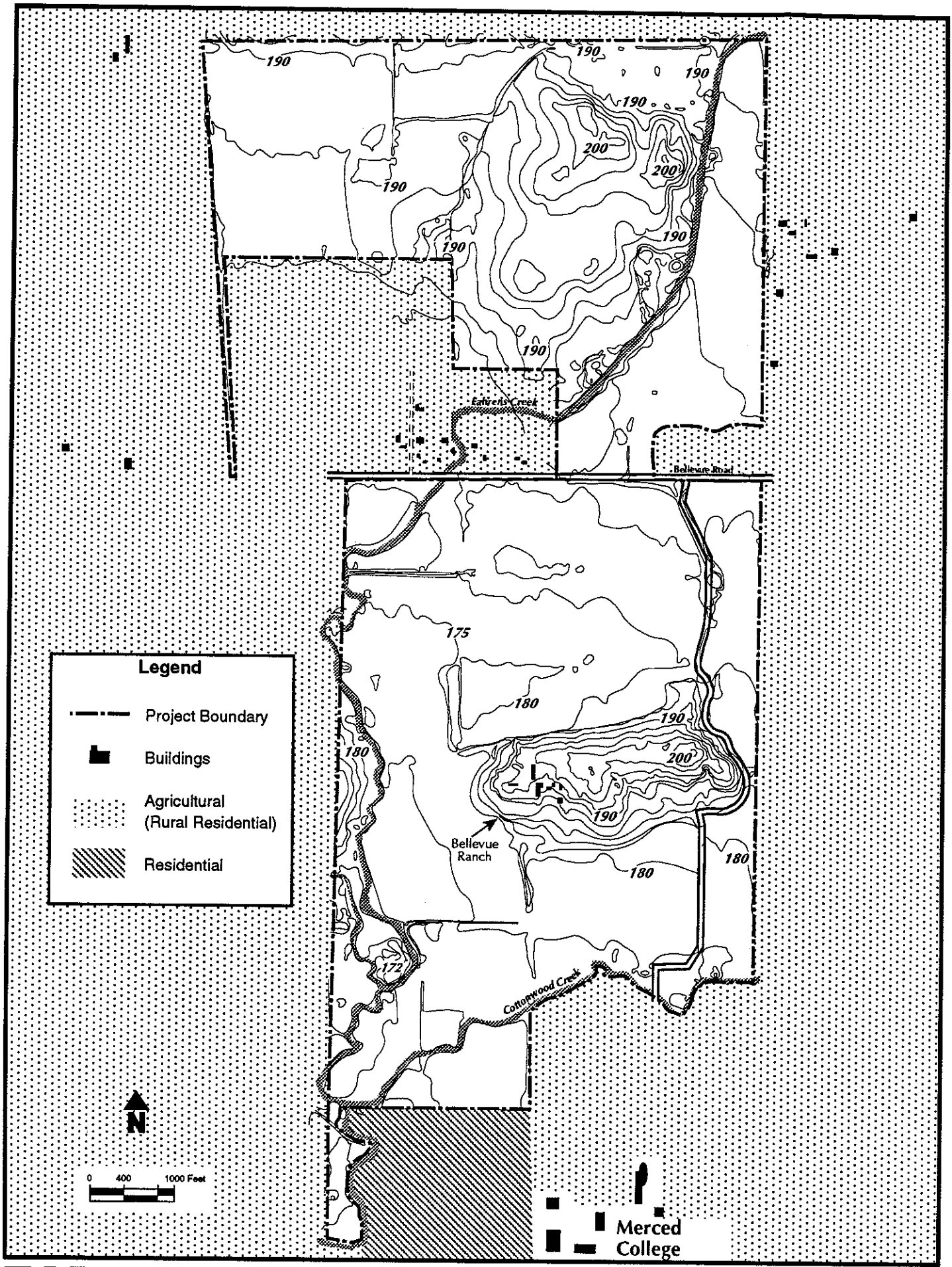

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Figure 4.1-1
Surrounding Land Use

General Plan Goals and Policies

The City of Merced General Plan contains a series of goals and policies relevant to the Land Use section of this EIR:

City Goals for Urban Growth

- *Improve and conserve existing urban development and, at the same time, encourage and promote quality growth in expanding areas of the City and the local economy.*

- *Protect and promote viable, pleasant, and safe residential and commercial neighborhoods.*

- *Guide urban growth to obtain an urban form as compact as possible by encouraging the orderly expansion of urban utilities and facilities, and preserving designated agricultural lands from urbanization.*

- *Promote physical development in the City which achieves a high level of efficiency and places a high priority on enhancement of the existing urban area, in-fill development and energy conservation.*

Urban Expansion Policies

- *The City should strive to achieve as compact an urban form as possible while designating areas for new urban development which reflect the physical characteristics and environmental constraints of the planning area.*

- *To preserve agriculturally significant areas, the City must try to accommodate urban development pressures on non-prime soils.*

- *The City should try to achieve a highly efficient form of urban expansion. The City should control the timing, density and location of new land uses.*

Residential Policies

- *Through the General Plan map, residential areas are delineated by natural and/or man-made features, community facilities, recreation areas, schools, public transportation facilities, and shopping. Ethnic and economic boundaries are discouraged.*

- *Protect and mitigate where practical residential areas from excessive noise, odors, dirt, glare, and other unattractive influences resulting from heavy traffic, incompatible uses of adjacent properties, or aircraft flight patterns.*

- *Provide and encourage attractive park and recreation facilities, designed and located in such a way as to promote neighborhood interest and appreciation. Where possible, these facilities should be combined with schools or other similar open spaces.*

- *Continue to require new housing developments to provide underground utilities, streets, parks, and related improvements suitable to the density of the project.*

- *Encourage a diversity of building types, ownership types, design and site plans throughout the city on designated sites.*

- *Continue to pursue quality (but not necessarily expensive) residential development, including review of architecture, landscaping, public improvements, common open space and maintenance.*

- *Continue to encourage the use of various design and site planning measures which improve the security of residential buildings and sites.*

- *Continue where practical to designate new housing development in areas not impacted by high level of jet aircraft noise from Castle Air Force Base and the Merced Municipal Airport.*

Commercial Policies

- *The City should continue to show a commitment to the economic growth of the City through provision for all categories of commercial development on the City.*

- *Neighborhood commercial centers should be provided for in proportion to residential expansion in the City. Such facilities should be adequately spaced throughout the City to ensure that they retain their function of providing personal goods and services to the immediate neighborhood, and do not become "strip commercial" areas or community centers because of being located too closely together.*

- *In implementing the General Plan, proceed with preparation and adoption of specific plans (corridor plans) for the improvement of strip commercial*

and gateway areas to the City and county fringes. Such plans should outline methods of enhancement to include land use, signs, architecture, landscaping, street trees, public improvements, billboards, blight, screening of storage areas, and other related design guidelines.

- *In order to encourage the development of economic environment in the City and to enhance Merced's position as the retail center of the region, attempt to improve the local permit approval process to ensure equity and efficiency for all land use applications. Special emphasis should be placed on continued efforts to promote cooperation with the County and standardization of development standards between the City and County.*

Transportation and Circulation

The Transportation and Circulation Element illustrates the future extension of major roadways through the SUDP boundary. This primarily relates to the extension of G, M, and R Streets north of Yosemite Avenue, expansion of State Route 59, and the expansion of Cardella Road and Bellevue Road. All of the above noted roadways are shown in the General Plan as straight "grid" alignments from the existing City boundary through the SUDP area.

The following goals and policies, in addition to the alignments noted above, relate to land use in the SUDP.

- *Land use proposals shall continue to be approved subject to meeting the requirements necessary to implement the circulation plan.*

The relationship between the General Plan and proposed circulation needs are discussed in Section 4.10 of this report.

2. Merced 2030 "How Should We Grow" Report

Subsequent to the 1987 General Plan, the City of Merced has been involved in a careful planning effort to decide how best to channel the anticipated growth of the City through the year 2030. The impetus for the planning effort is the fact that the City of Merced is currently anticipated to grow from its current size of 57,000 to a population of 250,000 by the year 2030. City boundaries are also anticipated to expand to encompass an area up to five times the City's present size. The "Merced 2030" planning effort has involved looking at the constraints on, and forces driving growth, deciding where best to channel growth, and deciding on the land use pattern which should be encouraged. It has resulted in the selection of a preferred Growth Scenario and growth concepts.

The preferred growth scenario involves channeling growth to the north. Growth in other areas was rejected due to the presence of growth constraints. Growth to the east and west was felt to be undesirable due to the presence of prime agricultural lands. Growth to the south is restricted due to flood potential, a high water table, and productive agricultural areas. Growth to the northwest was limited due to unacceptable noise levels and safety hazards associated Castle Air Force Base's flight path, specifically the possibility of planes crashing and property damage due to vibrations. Similarly, growth in the southwest corner of the City is restricted due to the presence of the Municipal Airport and safety hazards associated with the flight path, as well as the desire not to jeopardize both the developing area and the presence of the airport. Growth to the northeast is restricted due to the need to avoid undue impacts on Lake Yosemite. The City has developed strong policies directing growth away from these sensitive areas. The boundaries of the City and County Specific Urban Development Plans (SUDP) reflect these growth constraints.

Once the location for anticipated growth was established, the City addressed the question of the spacial form that the growth should take. Three City pattern options were investigated: the sprawling city model, the central city with concentric growth model, and the multi-center village concept model. The sprawling cities model characterizes the land use pattern which has developed in a number of jurisdictions. "Urban Sprawl" according to the Merced 2030 study is defined as land uses which have ceased to be centrally located. This form of development was rejected due to inherent inefficiencies in providing services to residents, the need to retrofit Merced as it exists today to support this type of growth, and the tendency of this land use pattern to foster excessive auto usage and severe traffic congestion.

The second model investigated by the City was the central city with concentric growth model. This pattern of land use is characterized by ringed growth built upon the existing infrastructure, with major new commercial growth augmenting the existing business and commercial centers, rather than the creation of new centers. Typically, the new outlying growth would be primarily residential with neighborhood support services only. These outlying areas would be bedroom communities to existing business and commercial areas, with most people traveling into the City Center for work and recreation. Residential growth would occur in Merced on land to the east, west, and north of the present City limits under this model. This land use pattern was rejected because it would result in the small-town character of the downtown being lost, would generate a great deal of cross-town traffic, and would result in the need for costly retrofiting of the presently built-up areas of Merced.

The third model investigated by the City was the Village Concept. This approach involves the creation of a series of connected, relatively self-contained "satellite communities" or villages, with Downtown Merced remaining a focal point. This model was the one selected because it was felt that it would enable the downtown's economic viability to be maintained, while at the same time reducing the need for cross-town traffic. The specific design guidelines for the preferred village approach are spelled out in a document entitled "Merced Village Concept Planning." This document includes a discussion of the economic and demographic

setting, land use and planning policies, circulation planning, environmental factors, and retail demand analysis for the villages.

The preferred growth scenario involves application of the village concept to an 8,000 acre area extending north approximately a quarter section above Old Lake Road and bounded roughly by Yosemite Avenue to the south, Highway 59 to the west, and Lake Road to the east. The planning area in question represents an extension of the SUDP boundaries. The preferred alternative is intended to include: compact, mixed-use villages; a circulation system that protects neighborhoods and provides opportunities for expansion; an M Street transitway; core commercial centers at transit stops; sensitive habitat protection; an open space network with trails; large rural residential areas; transit service to the potential University of California campus adjacent to Lake Yosemite, if constructed; parks and schools tied to bike paths; one community center; three neighborhood centers; and five convenience centers.

3. Merced Villages Concept Planning

In 1991, the City completed three studies referred to as the Merced Villages Concept Planning which include: 1) The Opportunities and Constraints Analysis and Villages Programming Recommendations (February 1991), 2) The Preferred Alternative Report (June 1991), and 3) The Design Guidelines Report (October 1991). The intent of these studies was to "test" the principles established by the 2030 Plan for the 8,000 acre area north of the City, and refine the preferred growth scenario for the actual implementation of a Villages Concept of development program.

In February 1992, the Merced City Council approved in concept the Villages Conceptual Land Use Plan, Circulation Plan and Design Guidelines. Given that the Bellevue Ranch is the first project to implement the Villages Concept Planning program, the relevant sections of the three studies are summarized below.

Opportunities, Constraints and Village Programming

This study established the baseline data for refining the Merced 2030 Plan. In this regard, the study evaluated current/projected market factors, traffic projections, land use conditions and environmental considerations for the 8,000 acre area. Through the factors evaluated, the study identified a series of issues which would effect the development of a Villages land use program, and resulted in the following principles for growth:

- Maximize the use of existing urbanized areas through the use of "infill" development strategies.

- Foster compact suburban expansion in new development areas.

- Link land use with transit.
- Minimize traffic congestion and encourage pedestrian and transit travel for some daily trips.
- Maintain good air quality.
- Provide a diversity of housing types.
- Design the Growth Area efficiently.

Preferred Alternative Report

The Preferred Alternative Report was an outgrowth of the principles noted above, and resulted in the development of two alternative land use plans featuring a neo-traditional Villages approach to urban development. While the alternatives varied the location of individual Village locations, school and park sites, and the quantity of community and neighborhood retail, the main difference was between the use of one centrally focused "town center" or several dispersed commercial opportunities.

Both of the Alternatives were reviewed and refined through City Council, Planning Commission and staff toward the development of a preferred Alternative which is presented in the report. The preferred Alternative provides for a mix of residential uses, a series of community and convenience commercial centers, a community commercial center, open space/parks, schools and various transit options (the centerpiece of the neo-traditional approach). Over the 8,000 acres, the plan is anticipated to accommodate a population of 72,660 and provide for the protection of sensitive habitat features, maintenance of rural residential features, a network of trail and open space, and transit service extension for the proposed University of California campus site at Lake Yosemite.

Design Guidelines

The Design Guidelines were prepared to ensure that through the subdivision process for individual projects, the guiding principles of the neo-traditional Villages approach were implemented. As noted document, the Guidelines "seek to ensure quality, transit- and pedestrian-oriented development by providing a framework to guide the character, extent and arrangement of future development in the (8,000 acre) planning area. Included in the Guidelines are specific criteria for placement and size of Villages, streetscapes, pedestrian/bicycle facilities, transit facilities, parking, building character, and density, siting and design standards for all land uses.

The Merced Villages Design Guidelines adopted in concept by the City include goals which are relevant to the Land Use section of the EIR.

- *Create pedestrian oriented environments to encourage pedestrian travel and to reduce reliance on the automobile.*
- *Foster compact and efficient development patterns.*
- *Complement existing retail and employment areas in the City with appropriate land use and transit patterns.*
- *Create a sense of community by providing retail and public facilities at the center of compact villages.*

4. Merced County General Plan

The City SUDP boundaries discussed above are one element to an overall Specific Urban Development Plan prepared by the County. Other SUDP boundaries have been designated for the Atwater and Franklin areas. Pursuant to County guidelines, SUDP areas are intended for urban expansion. This is especially applicable where the SUDP boundary is located adjacent to an incorporated City, as is the case with the Merced Village area.

With respect to goals and policies, the County General Plan incorporates the goals and policies of the City of Merced General Plan as the logical extension of urban development. In this regard, through the SUDP designation, the County has indicated that the City of Merced will grow to the north consistent with the Merced 2030 Plan and the Villages Concept Plan.

5. Merced County Streams Project

The U.S. Army Corp of Engineers (COE) published in September 1983 the Merced County Streams Levee and Channel Improvements-Design Memorandum No. 11 for flood control improvements within various streams within the Merced area. This included Cottonwood Creek, Lower Fahrens Creek and Black Rascal Creek, which are located within the City limits and within a portion of the SUDP north of the City.

The focus of this program is the extension of improvements to Fahrens Creek which meanders through the project. In this regard, the COE has designed regional serving flood control improvements for Fahrens Creek to just north of Cardella Road at a right-of-way of 290 feet. While no COE or City design criteria has been established for the remaining alignment, the City anticipates that the 290 foot right-of-way for the Creek will be continued through the SUDP.

A detailed hydrologic analysis of the Stream Project and its relationship to the proposed Bellevue Ranch project is included in Section 4.7 Surface Hydrology and Water Quality of this report.

6. Current Zoning

The present zoning on the project site is a combination of Merced County designations. The southern portion of the project site is zoned "Agricultural-Residential" (A-R) and provides for one acre minimum lot sizes. The A-R zone is intended for residential uses and does not permit any commercial, industrial, or agricultural/farm related uses. The northern portion of the project site is zoned "General-Agricultural" (A-1) and requires lot sizes with a minimum of 20 acres. The A-1 zone is intended to provide for variety of heavy farm and agriculture related activities and uses. The A-1 zone permits uses such as trucking facilities, processing plants, dairies, batch plants, and crematoriums.

7. Discretionary Actions

The City of Merced will be required to consider specific discretionary actions to process the proposed application. Upon annexation of the project site, these actions will be required in order to adopt the Master Plan and provide the proponents with the legal mechanism necessary to proceed with development of the Project. A summary of the key discretionary actions are as follows:

General Plan Amendment

The City has been petitioned to approve a resolution to amend the Land Use Map of the General Plan to show the project site as the "Bellevue Ranch Master Development Plan". This action would change the designation of the subject property from Urban Expansion Area to Planned Development. The text of the General Plan would also need to be amended to identify the existence of the Master Plan and the fact that it is a separate document that is a part of the General Plan. The Roads section of the Public Facilities and Services Element of the City's General Plan shall be concurrently amended to reflect the extension of "G", "M", and "R" street.

Planned Development Prezoning

The Bellevue Ranch application contains a request for prezoning the site to "Planned Development" (PD) which would enable the implementation of the land use designations of the Bellevue Ranch Master Plan upon the project site's annexation into the incorporated City limits. The PD zone has been requested by the applicant to expand the City of Merced Zoning Code to include a zoning district which would accommodate the levels of flexibility necessary for the proposed project. Once the PD zone is adopted and the Site Utilization Plan (Development Plan) is approved, the land

use designations contained in the Bellevue Ranch Master Plan document will become the zoning designations and development standards for the entire project area. The PD zone will allow flexibility in terms of densities while ensuring compliance with the overall density requirements established by the General Plan.

The PD zone defines the maximum parameters for development densities, but allows flexibility to adjust densities of individual phases of the project pursuant to the Master Plan, in order to meet future market demands. In addition, it provides consistency with the site's General Plan land use designation of Urban Expansion Area and the requirements set forth in the Merced Villages Design Guidelines.

Merced County Local Agency Formation Commission (LAFCo)

As defined by the Cortese-Knox Local Government Reorganization Act of 1985 (section 56000 et seq of the California Government Code), the purpose of LAFCo is the discouragement of urban sprawl and encouragement of the orderly formation and development of local governmental agencies based upon local conditions and circumstances.

LAFCo's statutory authority includes responsibility for deciding on the annexation of unincorporated land to local agencies. In reviewing a proposal for annexation, LAFCo must consider a number of factors which include but are not limited to the following:

- Population, population density, land area and land use; per capita assessed valuation; topography, natural boundaries, drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas during the next ten years.

- Need for organized community services, present cost and adequacy of government services and controls, probable future needs, probable effect of the annexation and of alternative courses of action on the cost and adequacy of services and controls in the area and vicinity.

- The effect of the proposed annexation and of alternative actions on adjacent areas, on mutual social and economic interests, and on the local government structure of the county.

- Conformity of the proposed annexation and its effect with LAFCo policies on providing planned, orderly, and efficient patterns of urban development and with state policies and priorities in conversion of open space lands to other uses.

- The effect of the proposal on maintaining the physical and economic integrity of lands in an agricultural preserve in open space uses.

- Clarity of the boundaries of the territory, the nonconformance of the proposed boundary lines of assessment or ownership, the creation of islands or corridors of unincorporated territory and other similar matters affecting the proposed boundaries.

- Consistency with appropriate city or county general and specific plans.

- The sphere of influence of any agency which may be applicable to the proposal being reviewed.

- The comments of any affected agency.

Tentative Map/Final Subdivision Maps

Tentative maps will need to be submitted to the City for individual development projects within the PD zone. The tentative map process enables the project applicant to define the location of the parcels to be subdivided and ultimately made available for development. When all the conditions imposed on a tentative map are complete, the City will need to approve the final subdivision maps for recordation.

3. Project Impacts

Standards of Significance

Project related impacts may be considered significant if implementation of the proposed Bellevue Ranch Master Plan will result in one or more of the following:

- Compatibility with adjacent land uses, which may cause the potential for a substantial adverse change in the types or intensity of existing land use patterns.

- Consistency with the City of Merced General Plan.

- Consistency with the Merced County Streams Group Project Plan.

- Compliance with the Local Agency Formation Commission (LAFCO) relative to annexation and prezoning proceedings.

- Land use consistency with the Merced Villages Concept Plan, Merced Villages Design Guidelines, and the preferred growth scenario (Scenario IV) under the City of Merced 2030 growth report.

Specific Impacts

Compatibility with Adjacent Land Uses

As noted previously, the majority of lands adjacent to the Bellevue Ranch project are within the SUDP and Merced Villages Conceptual Planning area which is anticipated by both the City and County as accommodating future development area. Future development for the areas north, east and west are expected to be accomplished through the guidance of the Merced Villages Conceptual Planning, to form a pedestrian-oriented Villages program for development. In this regard, the proposed project will have the **beneficial impact** of enabling the City to realize the Villages Concept for anticipated development.

With respect to adjacent lands to the south, the project will have a **less-than-significant impact** on existing residential and park/open space uses and the City of Merced College campus given that these uses will be buffered by the alignment of Cottonwood Creek, and through edge and transition treatments contained in the landscape program Master Plan.

General Plan Consistency

As noted previously, the proposed project includes an amendment to the City of Merced general Plan to allow for the development of a mix of residential densities and housing types, commercial uses, park and open space features, and school and fire facilities within the SUDP designation adjacent to the City limits. In this regard, the General Plan amendment will have a **beneficial impact** to the City by facilitating development within the SUDP which is anticipated for future growth.

With respect to General Plan consistency, the applicant has indicated that the proposed project is designed to respond to the goals and policies of the General Plan by:

1. Providing safe and adequate housing for all citizens and providing each with an opportunity for choice between alternative living environments.

2. Creating a safe, efficient, coordinated and balanced system of transportation facilities capable of serving the needs of all citizens.

3. Provide all residents with opportunities for a wide range of cultural, social, educational, health and commercial activities and facilities.

4. Guide urban growth to obtain an urban form as compact as possible by encouraging the orderly expansion of urban utilities.

Based upon the above, the proposed project will have a **beneficial** impact by implementing and furthering the goals and policies of the General Plan.
The alignment of R Street, as currently proposed by the Master Development Plan, is inconsistent with the City's Circulation Element. The proposed southern segment of R Street, south of Cardella Road, deviates from its alignment and infringes adjacent property outside the project area. This "bulge" in the roadway constitutes a **significant** land use impact.

With regard to the proposed 15 acres of Standard Single Family bounded by Yosemite Avenue, Fahrens Creek and existing residential uses, this area is designated as Park (PK) on the City's General Plan. The proposed use is inconsistent with the General Plan designation, and is a **significant** impact.

Merced County Streams Group Project

The proposed project will provide for a 290 foot right-of-way (ROW) to accommodate both the designed and future alignment of the flood control improvements to Fahrens Creek. In this regard, the provision of this ROW will ensure that the COE facilities will be implemented to provide adequate flood control protection, and is considered to be a **beneficial** impact of the proposed project.

Merced County LAFCO

As discussed previously, the project proposes annexation into the City of Merced and will require LAFCo review and approval. LAFCo's action will include adjustments of the City's corporate boundaries. The changes and impacts associated with annexation approval are noted below:

1. The project proposes a General Plan amendment and prezone to PD to establish the appropriate land use designations for the Master Development Plan. As noted previously, these actions are anticipated by the City through the Merced 2030 Plan and conceptual approval of the Merced Villages Conceptual Planning effort, and by both the City and County through the current SUDP designation which anticipates future development for the project site. In this regard, the GPA and prezone are considered to be a **beneficial** impact.

2. Supply and demand for public services and infrastructure will have a **significant** impact on existing service providers and facilities. These impacts are discussed in more detail in the Public Services and Facilities and Traffic sections of this report.

3. The proposed project will have a **beneficial** impact on the social and economic interests of adjacent areas. This is discussed in the Population and Housing section of this report.

4. The project site is located adjacent to existing development in the City of Merced, and the City boundaries. In this regard, the project has **no significant** impact with respect to providing for the planned and orderly pattern of growth without creating islands or corridors of unincorporated territory.

5. Development of the proposed project will not remove any lands from an agricultural preserve.

6. The project is located within both the City and County SUDP for which annexation is proposed.

Merced Villages Concept Plan/Design Guidelines Consistency

Table 4.1-1 below compares the uses proposed in the Merced Villages Design Guidelines Conceptual Plan with the uses in the proposed project. The proposed project is conceptually consistent with the intentions of the Merced 2030 plan and the villages concept. The proposed project would thus have a **beneficial impact** on City's implementation of its desired land use pattern, as explained in the Merced Village Concept.

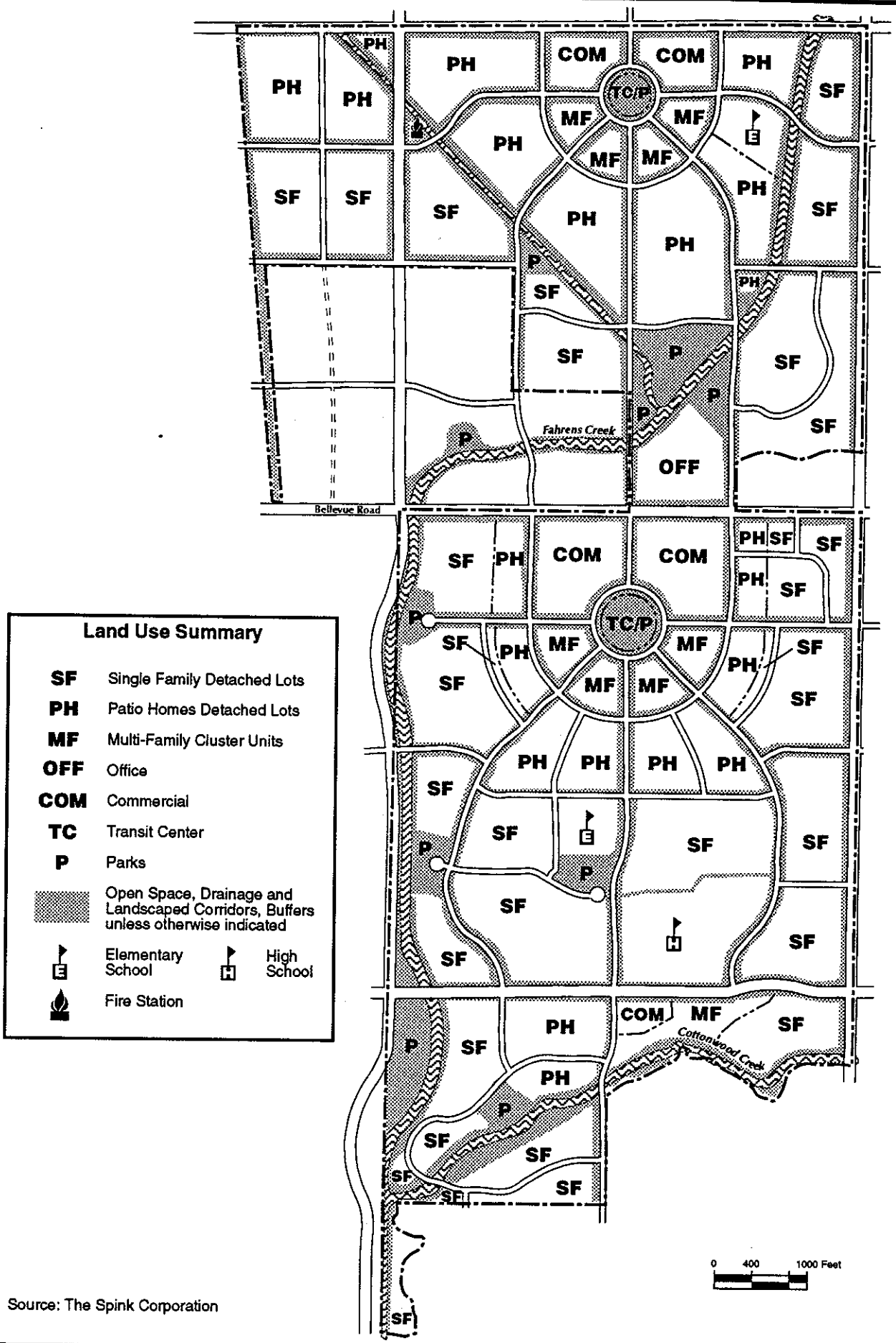
The distribution of project land uses, however, is in some cases inconsistent with the land use allocations provided in the 8,000 acre Merced Villages Concept Plan. Commercial uses in particular are out of proportion with the overall Concept Plan as currently proposed. According to City staff, this imbalance is the result of public comment during the adoption process. Public concerns expressed a desire to see additional commercial acreage planned into the proposed project. While the Project comprises 17% of the total Concept Plan acreage, the Project supplies 99% of all proposed commercial acreage (see Table 4.1-1). In order to successfully implement the general goals of the village concept, the type, quantity, and location of project land uses must generally follow the patterns of the Villages Concept Plan. Deviation from these patterns constitute a **significant impact.**

TABLE 4.1-1
COMPARISON OF PROPOSED USES WITH THE CONCEPTUAL PLANS FEATURES

LAND USES	CONCEPTUAL PLAN (Fig.3.3-2)	PROPOSED PROJECT (Figure 4.1-2)	PROJECT SHARE OF CONCEPTUAL PLAN
Core Commercial	70 acres	89.1 acres /1/	99 % /1/
Travel Commercial	20 acres		
Office	40 acres	24.7 acres /2/	54.89 % /2/
Office-Commercial	5 acres		
Light Industrial	110 acres		00.00 %
Village Residential	580 acres - 5,800 units	81.7 acres - 1,797 units	14.09 % acres - 30.98% units
Secondary Residential	3,500 acres - 17,050 units	925.6 acres - 4,174 to 5,097 units /3/	26.45% acres - 24.48 % to 29.89 % units
Rural Residential	2,200 acres - 2,200 units		0.00 % units
Open Space/Parks	700 acres	188.2 acres /4/	26.89 % acres /4/
Schools	240 acres /6/	59.9 acres /5/	24.96 % acres - 20% schools /5/
Arterial/Transitway	400 acres		
Total Acres	8,000 acres	1,365.5	17.07 % acres
Total Population	73,900 residents /7/	17,614 to 20,337 residents /7/	23.83 % to 27.52 %

Source: Project Description and the Merced Villages Design Guidelines, p 6, October 1991

/1/ Total Commercial
/2/ Total Office. Includes 1.6 acres for a fire station.
/3/ Includes Single Family Detached Standard and Patio Homes
/4/ Includes park and transit station, parks, open space, creeks, easements and corridors
/5/ Includes Elementary and High Schools.
/6/ Includes 10 Elementary Schools, 3 Middle Schools, and 2 High Schools
/7/ Based on 2.95 residents per dwelling unit contained in the Conceptual Plan. The City of Merced Draft Housing Element, p. 14, indicates the average household size was 3.0 in 1990 and forecasts an average household size of 3.1 in 1997.



Source: The Spink Corporation

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Figure 4.1-2
Conceptual Land Use Plan

4. Mitigation Measures

The following mitigation measures will reduce project land use impacts to a less-than-significant level.

MM 4.1.1 Prior to approval of the GPA and prezone, the applicant shall redesign the land plan for that portion of R Street right-of-way which is inconsistent with the General Plan Circulation Element. The design change shall show an alignment where the western project boundary forms the roadway centerline.

The applicant shall also amend the land use plan for the area proposed as Standard Single Family at the southern most corner of the project area. The land use plan shall show this area as Park, consistent with the General Plan.

MM 4.1.2 Bellevue Ranch and other future projects within the SUDP will continue to be reviewed and monitored to ensure that the City-wide goal of density distribution and land use mix is achieved pursuant to the general goals of the Villages Concept Plan and the City's General Plan.

MM 4.1.3 Prior to approval of a tentative map for areas adjacent to existing development in the City of Merced, the project applicant shall submit to the Planning Department for review and approval general landscape and typical building placement plans (as specified in the City's CUP submittal requirements) to ensure adequate buffering and transition between land uses. To ensure project compatibility, this plan will consist of landscaped berms, building setback requirements, and other specific requirements as outlined in the City's Planned Development ordinance and Conditional Use Permit process.

MM 4.1.4 Prior to conducting annexation proceedings, the applicant will demonstrate to the City that all LAFCo guidelines are met by the project to ensure that the procedural requirements of Government Code Section 56000 and County LAFCo requirements are satisfied.

4.2 AGRICULTURAL LAND CONVERSION

1. Environmental Issues

The following evaluates the conversion of agricultural lands to urban uses as proposed by the Bellevue Ranch project. The following sections describe the existing site characteristics and setting, the environmental impacts due to the proposed land conversion, and mitigation measures.

2. Existing Setting

General Site Characteristics

Merced County encompasses approximately 1,031 square miles which includes the incorporated cities of Atwater, Merced, and Los Banos. The current Merced County General Plan was adopted on December 4, 1990 and addresses the unincorporated area that encompasses the project site and surrounding property. The current revision of the City of Merced General Plan was adopted in November, 1987 and covers the incorporated city of Merced located immediately south of the proposed project site.

The Merced County General Plan designates the project area and surrounding lands as part of a Specific Urban Development Plan Area (SUDP). Agricultural land use at the project site and adjacent property is shown on Figure 4.2-1. Figure 4.2-1 is based on a 1987 California State Department of Water Resources Land Use Survey.

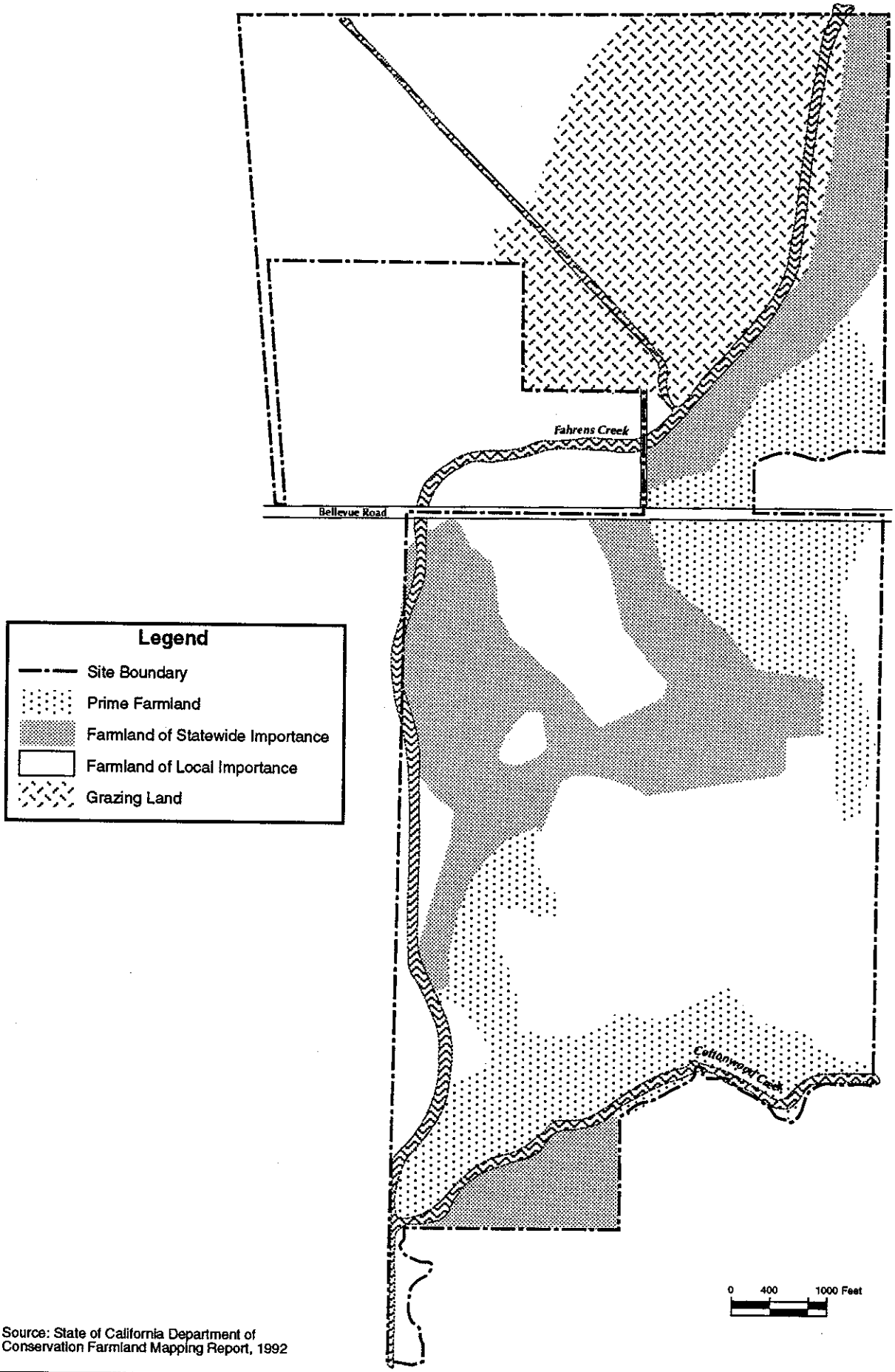
Soil Characteristics

Soils at the project site and surrounding lands consist primarily of those developed from alluvium that was derived partly from granite and metamorphosed sedimentary rocks of the western slope foothills of the Sierra Nevada Mountains. The soils are generally fine textured with low permeability and poor drainage.

The soils at the project site and adjacent areas, and their general suitability for agriculture, are summarized in Table 4.2-1. The areal extent of these soils at the project site is shown on Figure 4.2-2.

Land Classification/Capability

The USDA Soil Conservation Service (SCS) land classification system organizes soils into eight major capability classes designated by Roman numerals I through VIII. Suitability Class I and II soils include those that have few limitations, are generally suited to the range of climatically adaptable crops and have the least risk of damage resulting from sustained agricultural



Source: State of California Department of Conservation Farmland Mapping Report, 1992

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Figure 4.2-1
State Farmland Designation

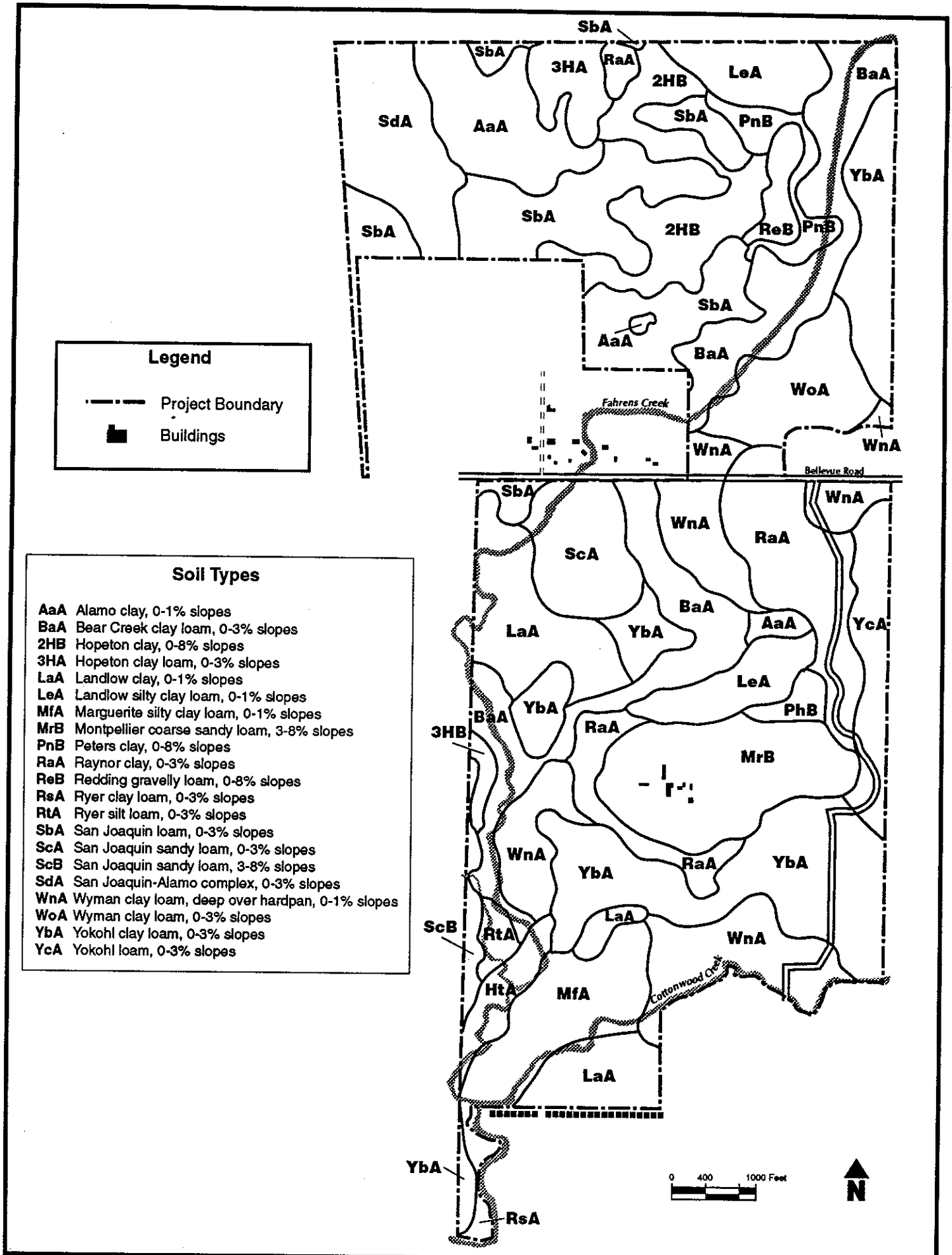

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Figure 4.2-2
Project Site Soil Types

Table 4.2-1
PROJECT SOILS AND CROP SUITABILITY

Soil Series	Map Designation	Project Acreage	Storie Index		Capability Group	Soil Features Affecting Crops	Suitable Crops
			Rating	Grade			
Alamo	AaA	63 (4.6%)	12	5	III-W5	Limited by excess water, slow permeability	Row crops, rice, grain, irrigated pasture
Bean Creek	BaA	159 (11.6%)	45	3	III-W2	Limited by excess water	Row crops, rice, grain, irrigated pasture
Hopeton	2HB, 3HA	96 (7.0%)	25,48	4, 3	III-s5, IVs-3	Limited by low moisture holding capacity	Dry farmed grain, range, row crops, irrigated pasture (shallow-rooted)
Landlow	LaA, LeA	145 (10.6%)	29, 43	4, 3	III-w5, IIIw-2	Limited by excess water	Row crops, rice, grain, irrigated pasture
Manguerite	MfA	65 (4.8%)	85	1	I-1	No limitations	All common irrigated row and grain crops, grapes, deciduous fruit and nut crops, pasture plants
Montpellier	MrB	83 (6.1%)	48	3	IVe-3	Highly erodible	Dry farmed grain, irrigated pasture, range
Peters	PnB	27 (2.0%)	19	5	IVe-5	Highly erodible	Dry farmed grain, irrigated pasture, range
Raynor	RaA	94 (6.9%)	33	4	IIIs-5	Limited by low-moisture holding capacity	Dry farmed grain, range, row crops, irrigated pasture
Redding	ReB	13 (1.0%)	11	5	IVe-3	Highly erodible	Dry farmed grain, irrigated pasture, range
Ryer	RtA	8 (0.6%)	85	1	IIs-7	Moderate moisture-holding capacity	Irrigated row crops, grain and pasture plants

Soil Series	Map Designation	Project Acreage	Storie Index		Capability Group	Soil Features Affecting Crops	Suitable Crops
			Rating	Grade			
San Joaquin	SbA, ScA, ScB, SdA	261 (19.1%)	25, 24, 22, 20	4, 4, 4, 4	IVs-3, IVs-3, IVe-3, IVs-3	Shallow, low moisture-holding capacity, alkaline	Dry farmed and shallow rooted irrigated crops, range
Wyman	WnA, WbA	137 (10.0%)	59, 81	3, 1	IIs-3, I-1	Few limitations	Irrigated row crops, grain, grapes, deciduous fruit and nut crops, pasture plants
Yokohl	YbA, YcA	214 (15.7%)	29, 32	4, 4	IVs-3, IVs-3	Shallow, low-moisture holding capacity, alkaline	Dry farmed and shallow rooted irrigated crops, range

production. Soils included in Suitability Classes I and II are generally considered prime agricultural lands. These lands are considered well suited to sustained agricultural production because they do not require special management practices and yield the highest returns from agricultural crops suited to the prevailing climatic conditions. The other soil classifications in the SCS system have progressively greater natural limitations. Class III land is suitable for cultivated crops but requires additional attention to offset or overcome inherent soil limitations. Class IV soils are considered suitable for limited cultivation. The lands in Classes V, VI, and VII are best adapted to pasture, range, woodland, or wildlife habitat. Class VIII soils and land forms have severe limitations that preclude their use for agricultural crop production.

Soil limitations, which affect potential use, also impact economic returns because of higher production costs required to address additional management considerations, decreased crop yield resulting from limiting soil characteristics, or limitation of cropping alternatives. The soils at the project site consist largely of SCS Capability Class III lands (approximately 40.7% or 557 acres). The project site encompasses approximately 15.4% or 210 acres of land classified as Capability Class I and II. The remainder of the site (approximately 43.9% or 598 acres) is classified as Capability Class IV. Based on the SCS Soil Survey of Merced County (1991) there are some 146,348 acres of Capability Class I and II lands in the county. The project Capability Class I and II lands comprise about 0.14 percent of that area.

In 1980, the California Department of Conservation began a program to supplement the SCS information and in 1982 began a farmland mapping and monitoring program. This program was developed to inventory important farm and grazing lands in California by preparing a series of important farmland series maps. The preparation of these important farmland maps was based on the published SCS soil survey reports. The goal of this program is to provide data for decision makers to facilitate planning for present and future use of California's agricultural land resource. The Department of Conservation monitors conversion of California's agricultural land to and from agricultural use and reports such conversion to the legislature, local government and the public. The most recent report was published in December 1992 (1988 to 1990 Farmland Conversion Report).

This program identified five categories of farmland: prime farmlands, farmlands of statewide importance, unique farmlands, farmlands of local importance, and grazing lands. Land use category and conversion acreage for Merced County as reported in the September 1992 Farmland Conversion Report are shown in Tables 4.2-2 through 4.2-4. The project site and surrounding area does include some prime farmlands, farmlands of statewide importance, farmlands of local importance and grazing lands. These categories are summarized as follows:

Table 4.2-2
MERCED COUNTY
1988-1990 LAND USE CONVERSION TABLES

DEPARTMENT OF CONSERVATION
Office of Land Conservation

Farmland Mapping and Monitoring Program

County Summary and Change by Land Use Category

Land Use Category	Total Acreage Inventoried		1988-90 Acreage Changes			
	1988	1990	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed
Prime Farmland	163,151	162,516	921	286	1,207	-635
Farmland of Statewide Importance	124,113	123,114	1,162	163	1,325	-999
Unique Farmland	81,983	81,786	659	462	1,121	-197
Farmland of Local Importance	45,078	45,005	1,297	1,224	2,521	-73
IMPORTANT FARMLAND SUBTOTAL	414,325	412,421	4,039	2,135	6,174	-1,904
Grazing Land	213,946	212,431	1,750	235	1,985	-1,515
AGRICULTURAL LAND SUBTOTAL	628,271	624,852	5,789	2,370	8,159	-3,419
Urban Built-Up Land	20,683	21,374	0	511	511	511
Other Land	16,572	19,456	239	3,123	3,362	2,884
Water Area	624	648	29	53	82	24
TOTAL AREA INVENTORIED	666,330	666,330	6,057	6,057	12,114	0

Table 4.2-3
Lands Committed to Nonagricultural Use

Land Use Category	Total Acreage 1990
Prime Farmland	468
Farmland of Statewide Importance	10
Unique Farmland	0
Farmland of Local Importance	90
IMPORTANT FARMLAND SUBTOTAL	568
Grazing Land	0
AGRICULTURAL LAND SUBTOTAL	568
Urban Built-Up Land	0
Other Land	47
Water Area	0
TOTAL ACREAGE REPORTED	615

Prime Farmland - These lands have the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops treated and managed, including water management, according to current farming methods. They must have been used for the production of irrigated crops within the last three years and do not include publicly owned lands for which there is an adopted policy preventing agriculture use. Prime farmland encompasses approximately 16 percent of the proposed project site or approximately 230 acres. Prime farmland is located in two general areas. The first is bisected by the eastern half of Bellevue Road and extends north and south adjacent to G Street. The second area is irregularly shaped and is adjacent to the southern site boundary.

The 1992 Farmland Conversion Report inventories a total of 162,516 acres of Merced County as Prime Farmland as of 1990. The 230 acres within the project site encompasses 0.14% of that total area.

Farmlands of Statewide Importance - These lands consist of those other than prime farmland which have a good combination of physical and chemical characteristics for the production of crops. They must have been used for the production of irrigated crops within the last three years and do not include publicly owned lands for which there is an adopted policy preventing agricultural use. Farmlands of Statewide Importance are located generally adjacent and along both sides of Fahrens Creek and

Table 4.2-4
Land Use Conversions From 1988 to 1990

Land Use Category	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance	Subtotal of Important Farmland	Grazing Land	Total Agricultural Land	Urban Built-Up Land	Other Land	Water Area	Total Converted To Another Use
Prime Farmland	0	15	5	27	47	0	47	79	795	0	921
Farmland of Statewide Importance	13	0	1	5	19	21	40	78	1,044	0	1,162
Unique Farmland	10	17	0	230	257	7	264	65	330	0	659
Farmland of Local Importance	125	97	303	0	525	194	719	67	511	0	1,297
Important Farmland Subtotal	148	129	309	262	848	222	1,070	289	2,680	0	4,039
Grazing Land	138	18	149	928	1,233	0	1,233	50	414	53	1,750
Agricultural Land Subtotal	286	147	458	1,190	2,081	222	2,303	339	3,094	53	5,789
Urban Built-Up Land	0	0	0	0	0	0	0	0	0	0	0
Other Land	0	16	4	34	54	13	67	172	0	0	239
Water Area	0	0	0	0	0	0	0	0	29	0	29
Total Acreage Converted	286	163	462	1,224	2,135	235	2,370	511	3,123	53	6,057

in the center portion of the project site. Farmland of Statewide Importance encompasses approximately 24 percent of the site or approximately 327 acres. The 1992 Farmland Conversion Report inventories a total of 123,114 acres of Merced County as Farmland of Statewide Importance in 1990. The 327 acres within the project site comprises 0.27% of that total area.

Farmland of Local Importance - These lands are classified as either currently producing crops, or have the capability of production. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland. These lands may be important to the local economy due to its productivity and does not included publicly owned lands for which there is an adopted policy preventing agricultural use. Farmland of Local Importance encompass approximately 40 percent of the project site or approximately 543 acres. These lands are located primarily in the northwest corner of the site and surrounding the existing ranch facility. Small isolated pockets of this category are located near the western property boundary.

The 1992 Farmland Conversion Report inventories a total of 45,005 acres of Merced County as Farmland of Local Importance in 1990. The 543 acres contained within the project site encompasses 1.21% of that total area.

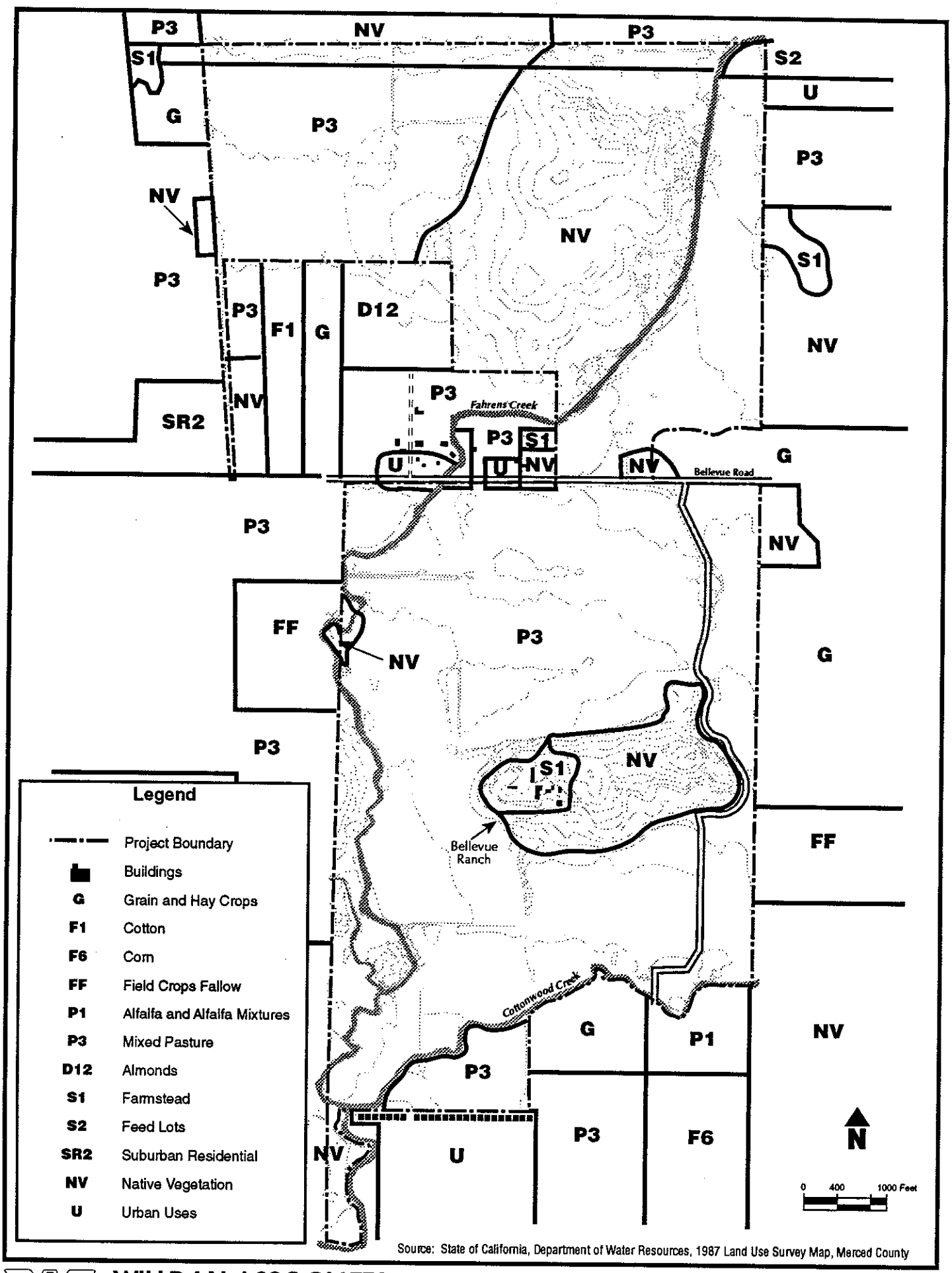
Grazing Land - This category includes lands on which existing vegetation whether grown naturally or through management, is suitable for grazing or browsing for livestock. Grazing land encompasses approximately 20 percent of the project site or approximately 265 acres and is located generally in the northeast corner of the project area.

The 1992 Farmland Conversion Report inventories a total of 212,431 acres of Merced County as Grazing Land in 1990. The grazing land within the project site encompasses 0.12% of that total area.

Crop Production

Agriculture use at the project site currently includes cotton, grazing and pasture land. Approximately 580 acres are currently used for the production of cotton. This area is located primarily within the southern half of the property. The northern half of the property is divided by native vegetation grazing land and irrigated pasture land. The southern half of the property has historically been used for the production of cotton and oats. The surrounding land historically has been used for mixed pasture, grain, and field crops. See Figure 4.2-3.

The combination of fine textured soil, low moisture-holding capacity, and alkalinity generally render the project site and surrounding area unsuited for the production of more intensively farmed and higher value tree/vine and truck crops. The historic cropping pattern confirms the limited suitability of project soils for higher value crops. The yield potential of crops



Source: State of California, Department of Water Resources, 1987 Land Use Survey Map, Merced County

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Figure 4.2-3
Historical Agricultural Land Uses

grown in the project area is also constrained because of limiting soil characteristics. The combination of cropping pattern restrictions, higher production costs, and reduced yields limits the economic return from these lands.

General Plan Goals and Policies

The City of Merced General Plan contains provisions to reduce the overall significance of cropland conversion and facilitate mitigation of potential cumulative impacts. The City of Merced has adopted several objectives and policies to protect agricultural and other natural resources within the City while providing for the orderly conversion to urban uses as described below.

- *The City should strive to achieve as compact an urban form as possible while designating areas for new urban development which reflect the physical characteristics and environmental constraints of the planning area.*

  a. *Areas with agriculturally suitable soils are not appropriate for urban expansion except where such soils lie within an established urban expansion boundary or urban buffer zone of rural residential development.*

- *To preserve agriculturally significant areas, the City must try to accommodate urban development pressures on non-prime soils by use of the following methods:*

  a. *Encourage development on in-fill sites, zoning ordinance amendments, subdivision ordinance amendments, or other methods of encouraging in -fill developments.*

  b. *Direct future development away from prime agricultural soils.*

  c. *Require that all new development occur only within established urban expansion boundaries after annexation.*

  d. *Create clearly defined buffer zones, in cooperation with the County, between the City's urban area and the agriculturally significant areas within which unincorporated rural residential development will be allowed.*

  e. *Continue to limit the expansion of city services to only those areas within an established expansion boundary. In no case should city services be extended into or be extended beyond rural residential buffer zones to serve new urban development outside of an established urban expansion boundary.*

  f. *Continue to establish a clear set of procedures for coordinating new development with the County and continue to require mutual agreement for*

all amendments to urban expansion boundaries (Specific Urban Development Plan) and rural residential centers.

- *Agriculture is a primary land use because of its significant effect on conserving natural resources, its effects on maintaining open space, and its economic benefits to the community.*

- *Preserve significant agricultural soils and relieve the pressures of converting prime agricultural areas to urban uses by directing growth away from these areas and promoting development opportunities on in-fill sites.*

  a. *Direct growth north and south and restrict growth east and west to preserve prime agricultural land.*

3. Project Impacts

Standard of Significance

Impacts are considered significant if one or more of the following conditions would result from the implementation of the proposed project.

- Changes in the type or intensity of land uses which are not compatible with existing land uses on or adjacent to the project site.

- Loss of substantial acreage of prime agricultural land and/or other farmlands designated as Important Farmlands by the State Important Farmlands Inventory (IFI).

- Conflict with local general plans, community plans, or zoning.

Specific Impacts

The economic contribution of agricultural crop production at the project site and from adjacent lands to the local and state economy is acknowledged. Approximately 16 percent of the project site is characterized as Prime Farmland. Additionally, approximately 24 and 40 percent of the project site is characterized as Farmland of Statewide Importance and Farmland of Local Importance, respectively. In this regard the local and regional impacts are summarized as follows:

Local Impacts

- The project will involve conversion of existing agricultural uses at the project site to various urban uses. This conversion is a **significant and unavoidable impact** and could indirectly impact adjacent agricultural lands of similar quality. The conversion will encompass approximately 230 acres of Prime Farmland; approximately 327 acres of Farmland of Statewide Importance; and approximately 543 acres of Farmland of Local Importance. However, these lands are designated by both the County and City as an area for future urban expansion (SUDP) and therefore, conversion of these lands has been anticipated.

- The project site and surrounding area are presently located in the SUDP by both the City and County General Plans. The proposed project is in conformance with the City General Plan in terms of directing growth away from agriculturally significant lands concentrated primarily east and west of the City and promoting growth north and south of the City. Therefore, there are **no significant impacts** associated with conflicts with the local general plans, community plans or zoning.

- The project will result in land uses which are not compatible with the surrounding farming operations. The encroachment of residential development to existing farming operation boundaries will result in **significant impacts** to both the existing farming operations and the development project. However, since the majority of adjacent lands are within the SUDP and the Merced Villages Concept Plan area, their continued viability is temporary.

Regional Impacts

- The project will result in conversion of approximately 0.14 percent of the total acreage of Prime Farmland, 0.27 percent of the total acreage of Farmland of Statewide Importance, and 1.21 percent of the total acreage of Farmland of Statewide Importance available in Merced County. With respect to the regional availability of Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance, this project will result in a **less-than-significant** impact to agriculture.

- Continued conversion of agricultural lands will begin to reduce the total crop value in the region and will threaten agricultural-related jobs. Prime Farmlands and other important farmlands may ultimately be subject to conversion to other uses. Cumulatively the loss of agricultural lands for other uses in the City and County areas is a regionally **significant and unavoidable impact.**

4. Mitigation Measures

As discussed above, the conversion of prime and important agriculture lands is a significant unavoidable impact that cannot be mitigated. However, the City of Merced urban growth and conservation policies approved through the General Plan, the Merced 2030 Plan and the conceptually approved Merced Villages Concept Plan direct expansion primarily to the north of the City due to the higher concentrations of lands designated as prime and important farmlands to the east and west of the City. Additionally, the project site is within a County and City designated SUDP and therefore, urban development in this area is anticipated.

Implementation of the following mitigation measure will reduce the temporary impacts from the development to adjacent existing agriculture uses to a **less-than-significant** level.

MM 4.2.1 The project applicant, in cooperation with adjacent land owners, shall provide interim buffers between future urbanized areas and existing agriculture uses that use pesticides, herbicides, or create dust and/or odors. The width and location of this buffer shall be determined prior to the approval of tentative maps with input from the County Food and Agriculture Commission and the owner of the adjacent agricultural use. The buffer shall be maintained until the project applicant has demonstrated that adjacent agriculture uses have ceased.

4.3 AESTHETICS

1. Environmental Issues

The following section analyzes aesthetic or visual impacts resulting from the implementation of the Bellevue Ranch project. This analysis examines existing visual resources and the possible impacts thereto, the potential for increased light and glare, and the overall aesthetic quality of the proposed project design.

2. Existing Setting

Character of the Site

The visual character of the Bellevue Ranch site is dominated by grasslands and slight topographic changes. A number of existing ranch buildings are located on a knoll near the center of the project site which rises twenty feet above the surrounding area. This rise provides a modest viewpoint of the surrounding area.

The project area is traversed by creeks and man-made irrigation ditches. Fahrens Creek bisects the property in a northeast-southwest direction north of Bellevue Road and generally runs along the western project portion south of Bellevue Road. Cottonwood Creek flows east to west along the southern portion of the site and the two creeks converge at the southwest corner of the property. This area where the creeks converge can be considered the most visually significant portion of the site due to a larger quantity and greater diversity of plant life.

The natural setting of the site has been modified by agricultural uses and related rural residential ranch structures, access roads, fences, remnants of old ranch structures, and minor alterations to the natural drainage systems. Two Pacific Gas and Electric (PG&E) power line easements cross the site. One easement enters the project site at the northwest corner and extends in a southeasterly direction, exiting the site just south of Bellevue Road. The other easement roughly parallels the southern border of the site, running in a northeast-to-southwest direction.

The project site and surrounding area contain no significant or unusual visual features or exceptional scenic vistas or viewpoints. The area where the creeks converge cannot be considered significant or unique to the region, although it may be the most aesthetically interesting portion of the project site.

Adjacent Development Patterns

The City of Merced, and its associated pattern of urban development, is located south of the Bellevue Ranch. A medium density, single-family residential neighborhood lying along the south side of Cardella Road, east of the project site is the nearest urban land use. The Merced Community College campus agricultural area abuts the southeastern portion of the project site. The college may extend northward to the southern border of the project site when completed.

Property lying to the north, west, and east of the project site is primarily used for farming, cattle ranching and open space, with intermingled enclaves of rural residential development.

Views and Vistas

The site is located on the alluvial plain of the San Joaquin Valley between the Coastal Range to the west and the Sierra Nevada Mountains to the east. Views in the vicinity of the site are primarily upward toward the distant mountain ranges. Vistas to the north and south reveal great expanses of grassy rangeland, occasionally penetrated by stands of tress planted as agricultural wind breaks. The knoll at the center of the property provides a 360 degree view of the surrounding area.

Observation Points

The observation points used in photographing the visual and topographical features of the project site are shown in Figure 4.3-1. Corresponding site photographs follow in Figures 4.3-2 through 4.3-4.

Photograph No. 1 was taken near the intersection of "G" Street and Old lake Road at the northeast corner of the site. The view is looking south-southwest. "G" Street is visible on the left side of the photograph with the relatively flat grasslands of the Bellevue Ranch occupying the balance of the photograph.

Photographs No. 2 and No. 3 were taken looking north and south from Bellevue Road, respectively. Relatively flat grasslands are the dominant natural features in both of these photographs.

Photograph No. 4 was taken where Bellevue Road crosses Fahrens Creek. The view is looking south-southwest. Fahrens Creek is clearly visible at the center of the photograph as it flows southwesterly through open grasslands.

Photograph No.5 was taken approximately 1000 feet east of the existing Bellevue Ranch. The view is looking west. The ranch complex and an access road are visible at the center of the picture. Flat, open land surrounds the ranch headquarters.

Photograph No. 6 was taken on Cardella Road along the eastern boundary of the project site. The view is looking southwest. The open lands in the foreground of the photograph encompass the southeast portion of the project site as well as the Merced College expansion area. The City of Merced and Merced College are visible in the background of the picture.

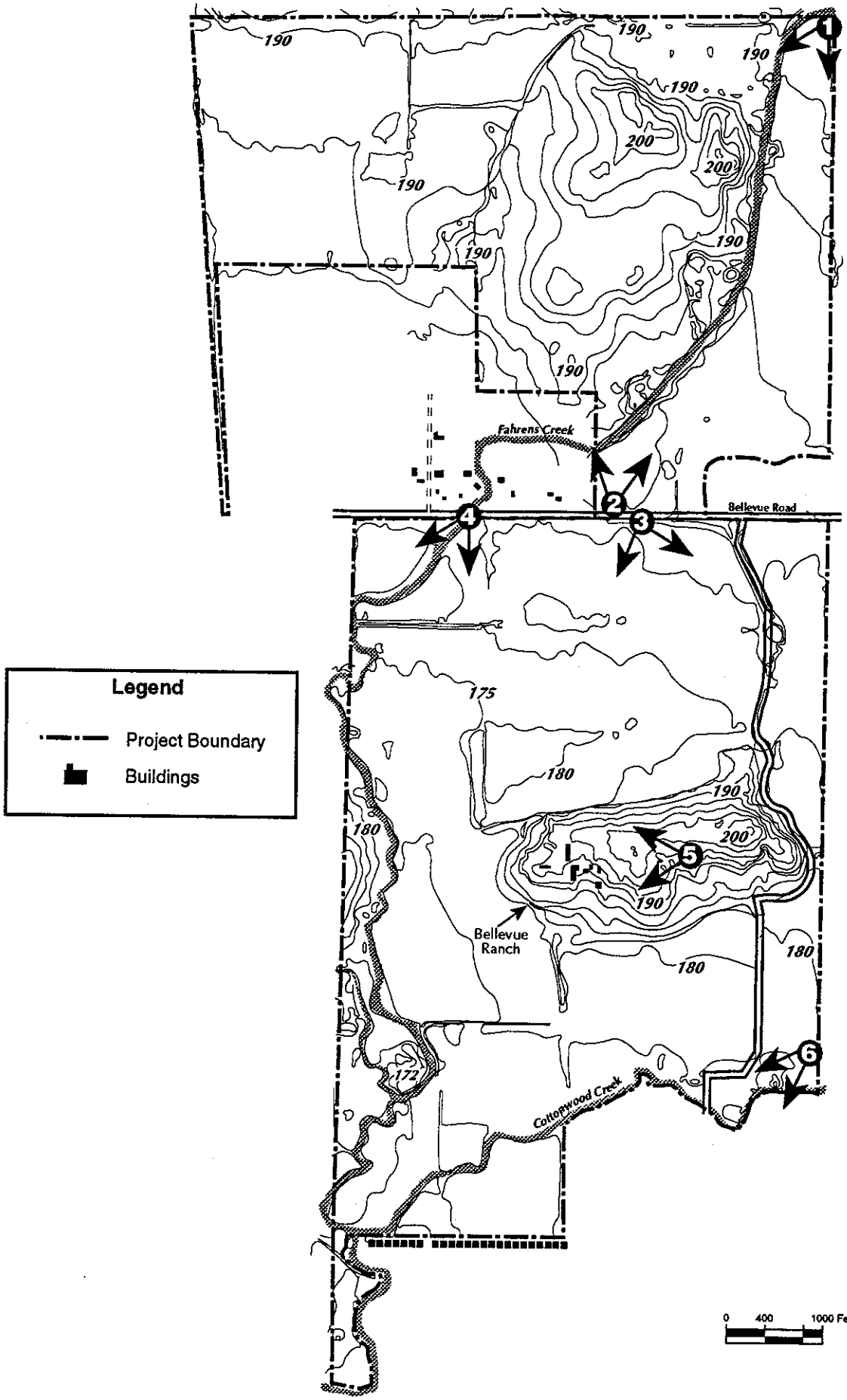

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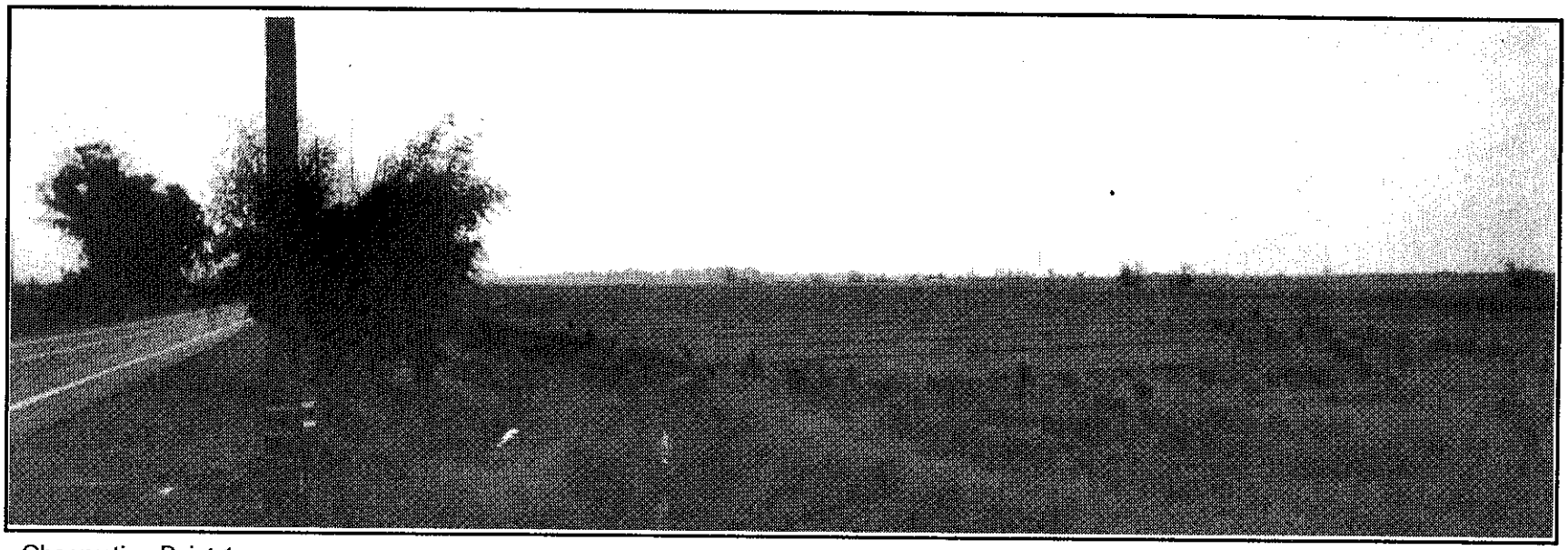
Figure 4.3-1
Observation Points



Observation Point 1

Observation Point 2

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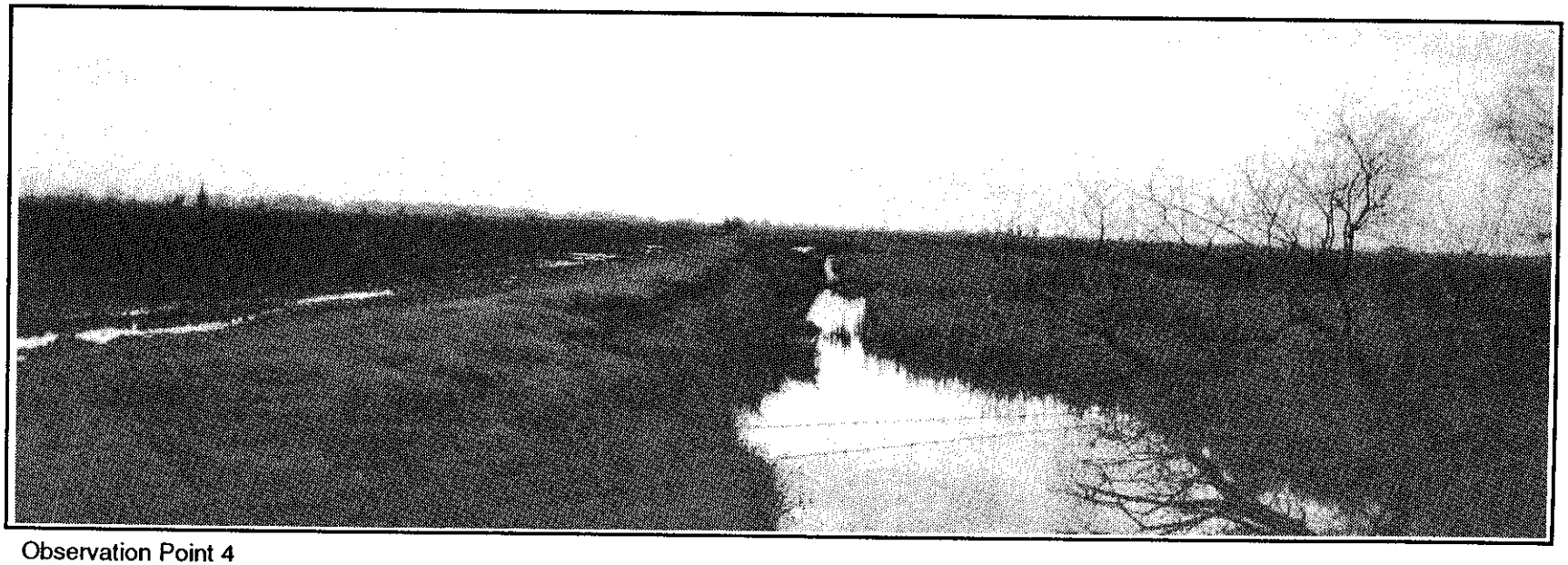
Figure 4.3-2
Visual Features

Observation Point 3



Observation Point 4

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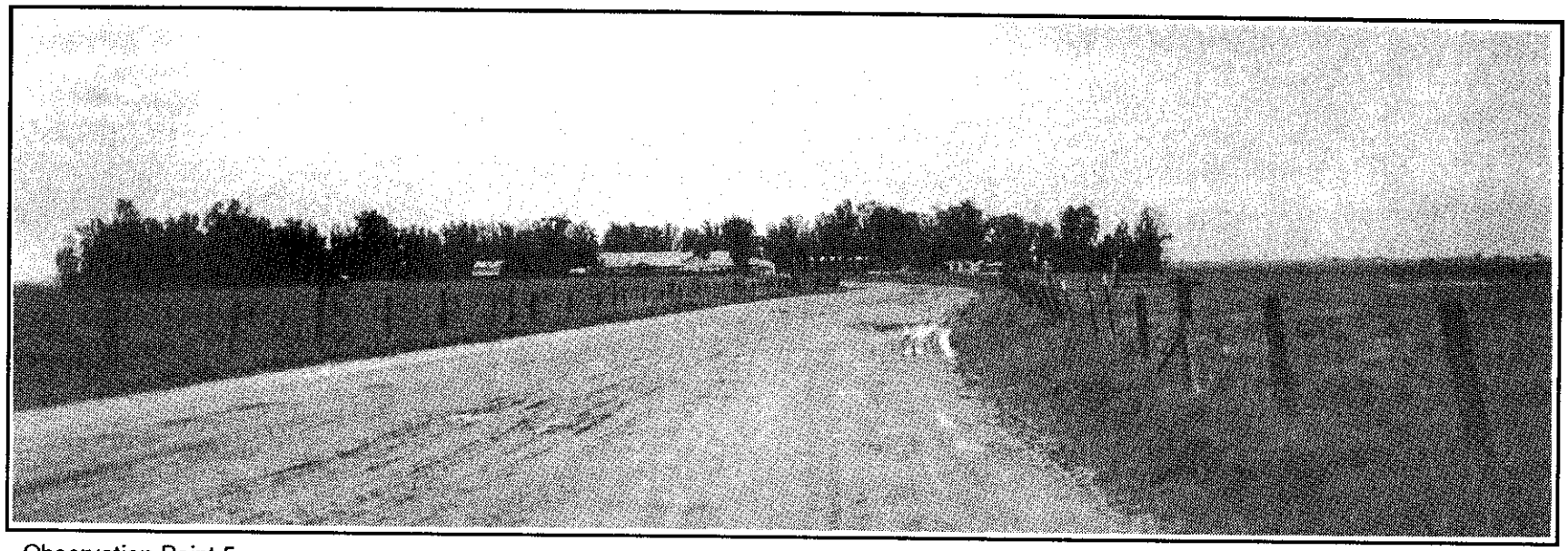
Figure 4.3-3
Visual Features



Observation Point 5

Observation Point 6

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Figure 4.3-4
Visual Features

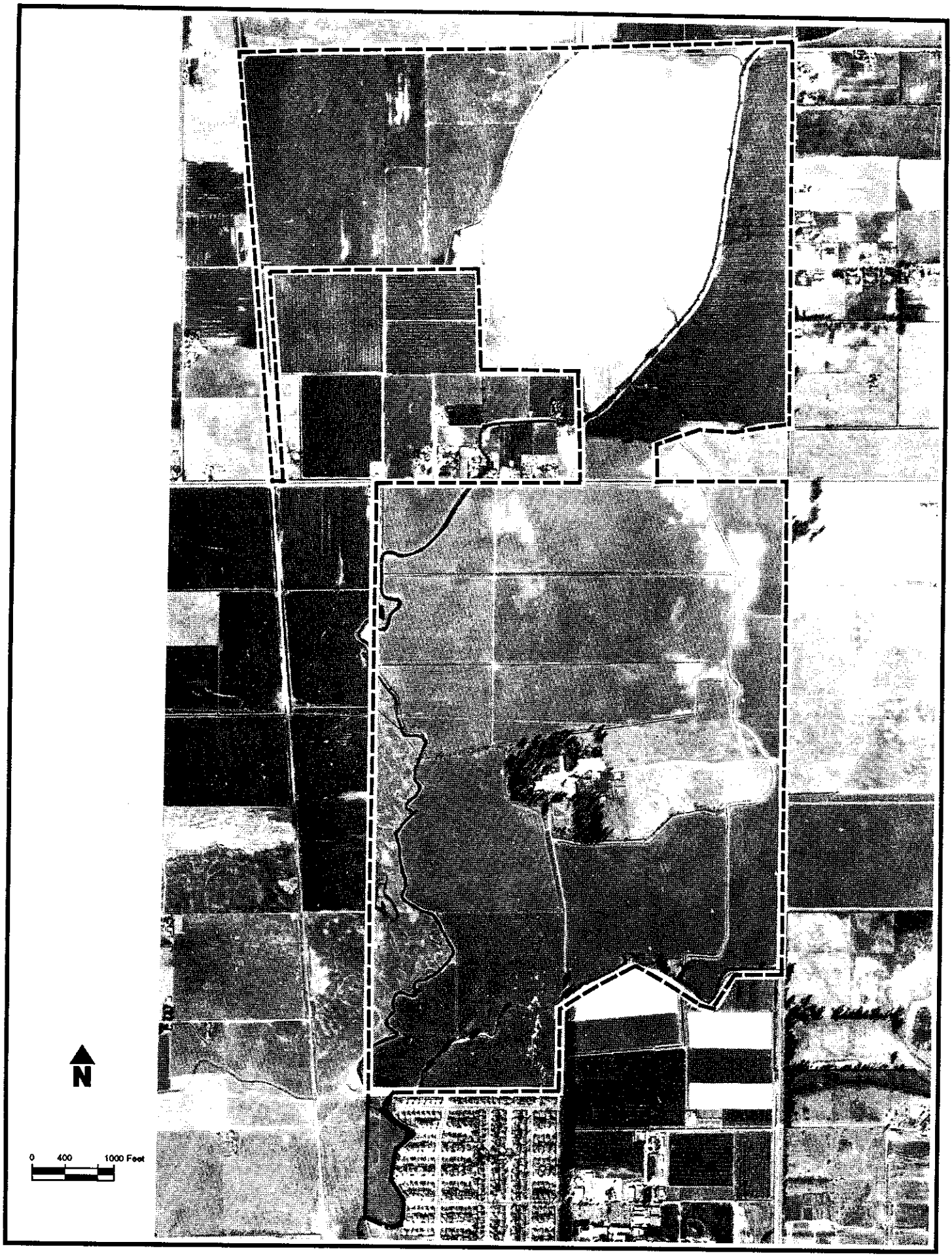

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Figure 4.5-2
Aerial Map

Light and Glare

The night sky as viewed from the project site currently exhibits minimal light intrusion when looking to the north. To the south, however the night sky is illuminated by the glow from lighting on the Merced College campus and in the City of Merced beyond. Aside from the ranch headquarters, there are no existing sources of light on the project site. Likewise, there are no reflective building surfaces or other improvements on the project site that are capable of producing glare.

Regulatory Considerations

Visual Policies

The City of Merced General Plan and Zoning Ordinance are the principal policy documents regulating development in the City of Merced. Although these documents provide broad policy statements regarding the preservation of the community, quality of life, and the natural beauty of the City of Merced, they do not provide specific design review requirements or directives which would be applicable to the proposed project. In this regard, the Merced Villages Design Guidelines are intended to provide the transition from the General Plan and Zoning Ordinance to the Master Plan in terms of physical design guidance. Future tentative maps for the Master Plan area will be evaluated for general consistency with the Merced Villages Design Guidelines. The pertinent goals and policies of the City's General Plan and the key elements of the Merced Villages Design Guidelines are discussed below.

General Plan Goals and Policies

The City of Merced General Plan contains a number of specific goals relative to the preservation and enhancement of the aesthetic character of the City of Merced. The City's stated goals are to:

- *Promote the distinctive character and identity of the City.*
- *Guide urban growth to obtain an urban form as compact as possible by encouraging the orderly expansion of urban utilities and facilities, and preserving designated agricultural lands from urbanization.*
- *Place a strong emphasis on the design and appearance of all development within the community.*

In addition to these overriding goals, the General Plan also contains the following urban design policies. These policies have been established to emphasize and promote the physical characteristics that define the City's image. These policies are also intended to create functional and visual relationships among the community's land uses and open spaces.

- *Continue support of urban expansion boundaries and agricultural land preservation in order to discourage scattered urban development and to strengthen the visual distinction between city and agriculture.*

- *Create a set of development standards for all proposed development along major gateways to the city to include consideration of land uses, signs, landscaping and public improvements.*

- *Existing creeks, waterways, and significant stands of trees should be protected and incorporated into areas of new development as open space.*

- *Encourage the design of buildings that are in scale with adjacent development and harmonize with the character of the areas or neighborhoods. Discourage project designs which create man-made barriers.*

- *Strengthen the positive visual distinctions between areas whose function and location are identifiable but assure that various areas are visually inter-related.*

- *Continue the use of specific development guidelines to control land use and improvement along designated scenic corridors.*

Merced Villages Design Guidelines

The Merced Village Design Guidelines describe those design features that are to be incorporated into new developments in order to fully achieve the objectives of the Merced Villages Concept Plan. The guidelines were approved by the City with the intent to be exercised with discretion. These design features include the following:

- *Street Patterns: The village and surrounding area street system should be clear, formalized, and inter-connected, converging at transit stops, core commercial areas, schools and parks. Cul-de-sac and "dead end streets" should be minimized and connected by pedestrian passages to through streets or greenways.*

- *Street Trees: Shade trees are required along all streets . . . located in planter strips . . . between curbs and sidewalks. Tree species should be selected to create a unified image for the street and provide an effective canopy.*

- *Building Orientation: In general, primary building entrances and active interior areas shall face onto streets and sidewalks to enliven them with activities and make safe, pleasant walking environments.*

- *Intensities and Densities: Building intensities and densities should meet the minimum requirements set forth for village and surrounding areas as required to promote more active centers, to support transit, and to encourage pedestrian-oriented development that fronts onto the street.*

- *Architectural Character: Buildings should create visually pleasing, human-scaled environments that reinforce the identity of the various uses and express the importance of the village centers and civic buildings.*

3. Project Impacts

Standards of Significance

CEQA Guidelines state that an impact will be considered significant if the proposed project causes a substantial adverse change in the visual setting of the site. For purposes of this analysis, an "adverse change" will refer to the destruction or deterioration of the area's natural scenic quality, impediments or substantial change to panoramic view of the region, or the production of disruptive light or glare.

More specifically within the context of this analysis, the impacts associated with the implementation of the Bellevue Ranch Master Development Plan will be considered significant if they result in one or more of the following:

- Substantial impairment or destruction of scenic views or vistas.

- Creation of aesthetically offensive views from surrounding properties.

- Substantial alteration or destruction of significant or unique visual features.

- Production of light and glare which may disrupt activities in adjacent areas.

- Inconsistency with the design goals and policies of the City's General Plan or the objectives of the Merced Villages Concept Plan.

Specific Impacts

View Impairment

As previously indicated, the project site is relatively flat and does not contain any exceptional scenic views or vistas. The views of the distant coastal and Sierra Nevada Mountain Ranges that are available from the project site are available from countless other properties in the

Merced area. While the introduction of urban uses to the project site will encroach upon the view from adjoining properties across the site, none of these view are of significant or unique scenic value. Therefore, the project is expected to have a **less-than-significant impact** on scenic views and vistas.

Creation of Objectionable Views

Views of the project site from surrounding properties will be dramatically altered with the implementation of the project, as existing rangeland and cultivated fields are converted to urban land uses. Although the project will alter the local landscape this does not mean it will do so in a negative fashion. Detailed development plans have not yet been prepared, however those plans will be prepared in accordance with the Merced Villages Design Guidelines. These guidelines promote functional, "human-scale" pedestrian-oriented development that is also visually pleasing. No industrial uses, with their accompanying externalities, are proposed on the site. Adherence to the Merced Villages Design Guidelines will ensure that no aesthetically offensive views will be created from adjoining roadways or properties and therefore this impact will be **less-than-significant.**

Alteration/Destruction of Visual Features

As previously stated, the project site is relatively flat, with a vegetative cover consisting primarily of grasses and row crops. Several creeks and man-made irrigation ditches traverse the site, but they are not highly prominent visual features. The most prominent visual features are the stands of mature eucalyptus trees existing on the knoll near the center of the site and which form a windbreak along the southern boundary of the site, and the area where Fahren's and Cottonwood Creeks converge.

The implementation of the proposed project would necessitate the removal of the site's existing vegetative cover, which may include portions of the three stands of mature eucalyptus trees. After the site is denuded, it would be graded to create roadways, building pads and other site improvements. The grading of the site will affect the alignment and nature of the existing drainage courses on the site, particularly Fahrens Creek, which is planned to be relocated and channelized. Fahrens Creek is planned for improvements by the COE regardless of project implementation, therefore rendering project-specific impacts to the creek areas as **less-than-significant**. However, the stands of mature eucalyptus trees located on site, and stands of such trees in general, are identified by the City's Parks and Open Space Master Plan and General Plan as significant open space features. Removal of such trees to implement the project is therefore considered a **significant impact.**

Production Light and Glare

The proposed project would introduce new sources of light and glare to the project site. Lighting within the project is anticipated to include:

Flood Lighting

Flood lighting would be used for recreational activities, special events and security purposes.

Security Lighting

Security lighting may be installed at various selected locations throughout the project. The use of these fixtures is anticipated to be for emergency use only.

Private Lighting

Proposed residential dwelling units may have exterior lighting to illuminate entry ways, walkways, and landscaped areas. Additionally, common areas and commercial areas will likely be illuminated.

In addition to increased nighttime illumination, the introduction of buildings to the site (especially retail and office structures) could create reflective surfaces capable of generating glare. Given the currently undeveloped nature of the site, the above described increase in light and glare is a **significant impact.**

Consistency With Adopted Plans

The Bellevue Ranch project will introduce urban land uses to a currently undeveloped area which is proposed for urban expansion by both the City and County General Plans. Development will follow the villages concept of urban design, as discussed earlier, and will thus be in conformance with the Merced Villages Concept Plan and Design Guidelines. The Master Plan has illustrated general consistency with these documents in terms of design and aesthetic appeal, and thus has a **less-than-significant** impact in terms of document consistency.

4. Mitigation Measures

Implementation of the following mitigation measures will ensure that potential visual and aesthetic impacts associated with project implementation will be **less-than-significant.** The mitigation proposed is intended to ensure compliance with the Merced Villages Design Guidelines and the City goals and policies regarding urban design, as stipulated in its General Plan.

MM 4.3.1 Prior to approval of related Conditional Use Permits, the project applicant will retain a qualified landscape architect and/or other professionals as detailed in the City's Planned Development Ordinance to prepare detailed landscape plans. Landscape plans must be reviewed and approved by the City Planning Department and shall generally adhere to the landscape concepts contained in the Merced Villages Design Guidelines.

MM 4.3.2 In conjunction with the approval of related Conditional Use Permits, the project applicant shall provide preliminary building plans, elevations, and architectural treatment for City review and approval by the Planning Department. City review will ensure general project consistency with the Merced Villages Design Guidelines.

MM 4.3.3 Prior to approval of conditional use permits, the project applicant shall provide detailed lighting, signage, and fencing plans consistent with the City's Planned Development Ordinance and the Merced Villages Design Guidelines, and in conjunction with the landscape plans noted above. Covenants, Conditions, and restrictions (CC & R's) shall limit the exterior lighting on residential dwelling units to mercury vapor, low pressure sodium, incandescent and fluorescent lamps (150 watt or less). All lighting shall have cut-off lenses that confine light to intended areas of illumination.

MM 4.3.4 Prior to approval of the Master Development Plan, the project applicant shall demonstrate that the mature stands of existing eucalyptus trees found on site have been designed into the land uses of the Master Development Plan. Preservation of these stands of trees is consistent policies contained within the City's General Plan.

MM 4.3.5 Prior to the approval of each Conditional Use Permit, the project applicant will demonstrate to the City Planning Department consistency of overall design features with the general principles of the Merced Villages Design Guidelines.

4.4 PARKS, RECREATION, AND OPEN SPACE

1. Environmental Issues

This section provides an analysis of the existing parks, recreation, and open space opportunities that the City of Merced currently provides, and an impact analysis of facilities proposed by the Bellevue Ranch project.

2. Existing Setting

Parks, open space and recreational facilities within the City of Merced are planned for and guided by two key documents. The City of Merced Parks and Open Space Master Plan (Master Plan), adopted by the City Council in March of 1984, provides inventories, park categories, and proposed new park sites based on growth patterns and needs as identified in 1984.

In 1991 the City Council adopted the Merced Villages Concept and Design Guidelines, which also addresses the provision of parks and open space. The Design Guidelines provide a more current analysis of park needs and design requirements in the context of the Villages Concept, which is the intended framework of the Bellevue Ranch project. Both the Master Plan and the Design Guidelines however, are necessary to adequately evaluate park needs and impacts associated with Bellevue Ranch in terms of City requirements.

Parks, open space, and recreational facilities within the City of Merced are maintained and operated by the City of Merced Community Services District All park improvements and maintenance standards are required to be consistent with the City's Municipal Code.

Existing Parks and Open Space Facilities

Parks

The City's Parks Master Plan indicates that there are 20 park sites within the City of Merced. Total park land area is 153.4 developed acres and 81 undeveloped acres. Using the 1990 Census population of 56,216, the total area translates into approximately 4.2 acres of park land per 1,000 persons. This number is below the City's standard of five acres of park land per 1,000 residents.

The Master Plan currently classifies parks under four categories: Mini, Neighborhood, Community, and Linear. The following discussion briefly describes each category.

> *Mini-Parks:* Mini-parks accommodate casual, spontaneous recreational needs and function more as an extension of the front yards of adjoining residents. Ideally, these spaces should be located so as to relate visually to nearby residences. This helps to establish communication and interaction among neighbors and thus a "mini" neighborhood identity.

Neighborhood Parks: Neighborhood parks serve a larger area than a mini-park and have a wider variety of facilities to serve a more diverse population. They generally accommodate an immediate area of approximately 3,000 to 6,000 people and normally range between 3 to 15 acres in size.

Community Parks: The community park serves the entire city or urban area. It generally serves several neighborhoods and, depending on population density, serves from 15,000 to 20,000 people. A community park is the nucleus of the park system and is usually over 15 acres in size.

Linear Parks: Linear parks connect the various park sites with paths exclusively for pedestrians and bicyclists. These parks weave through residential neighborhoods, connecting larger public uses such as schools and open space.

Existing parks and park categories are listed below in Table 4.4-1. There are currently no designated park lands within the Bellevue Ranch project site, with the exception of the areas adjacent to Fahrens Creek.

TABLE 4.4-1
CITY OF MERCED PARK FACILITIES

Parks	Acres
COMMUNITY PARKS	
Fahrens Park	75.0
Applegate	23.0
Joe Herb Park	27.0
NEIGHBORHOOD PARKS	
Rahilly	14.7
Burbank	4.0
Courthouse Square	7.0
Ada Givens Park	10.0
Stephen Leonard	2.7
McNamara	7.0
Flanagan	3.9
Macias	5.0
MINI-PARKS	
Main Street Square	0.5
Circle Drive	0.3
Macready Park	5.0
South Merced Mini-Parks (10)	5.5
Patent Nollet	0.3
LINEAR PARKS	
Black Rascal Creek	20.0
Bear Creek	8.0
Santa Fe	15.6
TOTAL ACRES	**234.4**

The Villages Concept Design Guidelines are consistent with the Parks Master Plan in requiring 5 acres of park land per 1,000 residents, although the park categories in the Design Guidelines are more specific to the villages concept. The following discussion briefly describes park and open space categories per the Design Guidelines:

Community Parks: Community parks should be a minimum of 18 acres in size and distributed across growth areas. Community parks are major recreation facilities and contain ball fields, play lots, picnic opportunities and other facilities.

Secondary Area Neighborhood Parks: These parks consist of two types of facilities: joint-use facilities where a 5 to 10 acre park is associated with elementary and junior high school, and "Surrounding Area" parks, which are 4 to 6 acres in size and serve areas that would otherwise be more than one-eighth of a mile from a park. This category of park land should be provided at a ratio of 3.5 acres per 1,000 residents who are not within the village core (secondary area population).

Village Parks: Village parks are located within Villages and should be 2 to 4 acres in size. Village park sites should reinforce retail and residential areas by creating "town squares" suitable for informal gatherings, public events and recreation. Village parks should be provided at a ratio of 3.5 acres per 1,000 village residential population.

Greenways: Greenways include a trail or trails for bicycles and pedestrians and provide easy access to parks and schools that abut them. Greenways should be created along creeks, high-voltage power lines, transit ways, and railroad right-of-ways.

Recreation Centers/Activities

The City of Merced Community Services District (CSD) also supports a number of programs that are accessible to area residents. There are currently two "drop-in" recreation centers in the south Merced area. These centers are designed for school age children and include a variety of after school activities.

The CSD also offers a number of "leisure classes" that are affordable and accessible to all residents. These classes include arts and crafts, karate, dance, music, yoga, foreign language, and personal finance workshops. A number of additional programs are designed specifically for children such as some of the karate classes, kindergym (1-4 years old), and gymnastics (4-14 years old).

In addition to the leisure classes, the City offers a variety of opportunities for league sports including basketball, volleyball, and softball. Additional privately organized sports programs include Little League Baseball and Pop Warner Football for children between the ages of seven and 15.

Open Space Features

The City of Merced recognizes a number of features that are considered elements of its open space resources. Specific examples of open space features include the following:

- The agricultural buffer surrounding the City
- Court House Square
- Bear Creek
- Black Rascal Creek

- "M" Street median (Eucalyptus trees)
- Fahrens Creek
- Cottonwood Creek

Figure 4.4-1 provides an illustration of the City's open space elements.

Flood Control Projects

In an effort to preserve the open space value of the various creeks that traverse the City, Merced has instituted a policy within the Parks and Open Space Master Plan relative to the dedication of areas adjacent to the creeks. The City requires creekside dedications equal to 50 feet from the centerline of the creek, or 25 feet from the crown (bank) of the creek, whichever is greater.

When the Master Plan was adopted in 1984, however, it was unknown how the Army Corps of Engineers (COE) flood control projects would affect the natural drainage courses of Fahrens and Cottonwood Creeks. It is now clear that the COE has designs for and intends to channelize Fahrens Creek as far north as the existing ranch complex, and Cottonwood Creek throughout the project area and eastward. As part of the Bellevue Ranch project, the applicant has proposed a continuation of the Fahrens Creek flood control project, based upon refined applicant calculations and channel size requirements. These improvements are necessary to decrease the chance of flooding south of the project area, and are necessary to accommodate the urban development goals envisioned by the City. This issue is discussed in detail in Section 4.7 of this report.

The Applicant's improvement plans incorporate open space amenities along both Fahrens and Cottonwood Creeks. These amenities feature linear rights-of-way which are 28 and 22 feet wide, respectively. A 12-foot wide multi-use trail is proposed within both of these open space features.

General Plan Goals and Policies

The City of Merced General Plan outlines a number of policies regarding the preservation and management of natural resources, including open space. The Government Code Section 65560 provides that the four major functions of open space are to preserve natural resources, manage the production of resources, provide outdoor recreation, and provide public health and safety.

The specific General Plan goals regarding these four areas are provided below:

- *Open Space for Natural Resources Goal: To preserve and manage the natural resources of the planning area for the utilization and benefit of both present and future generations.*

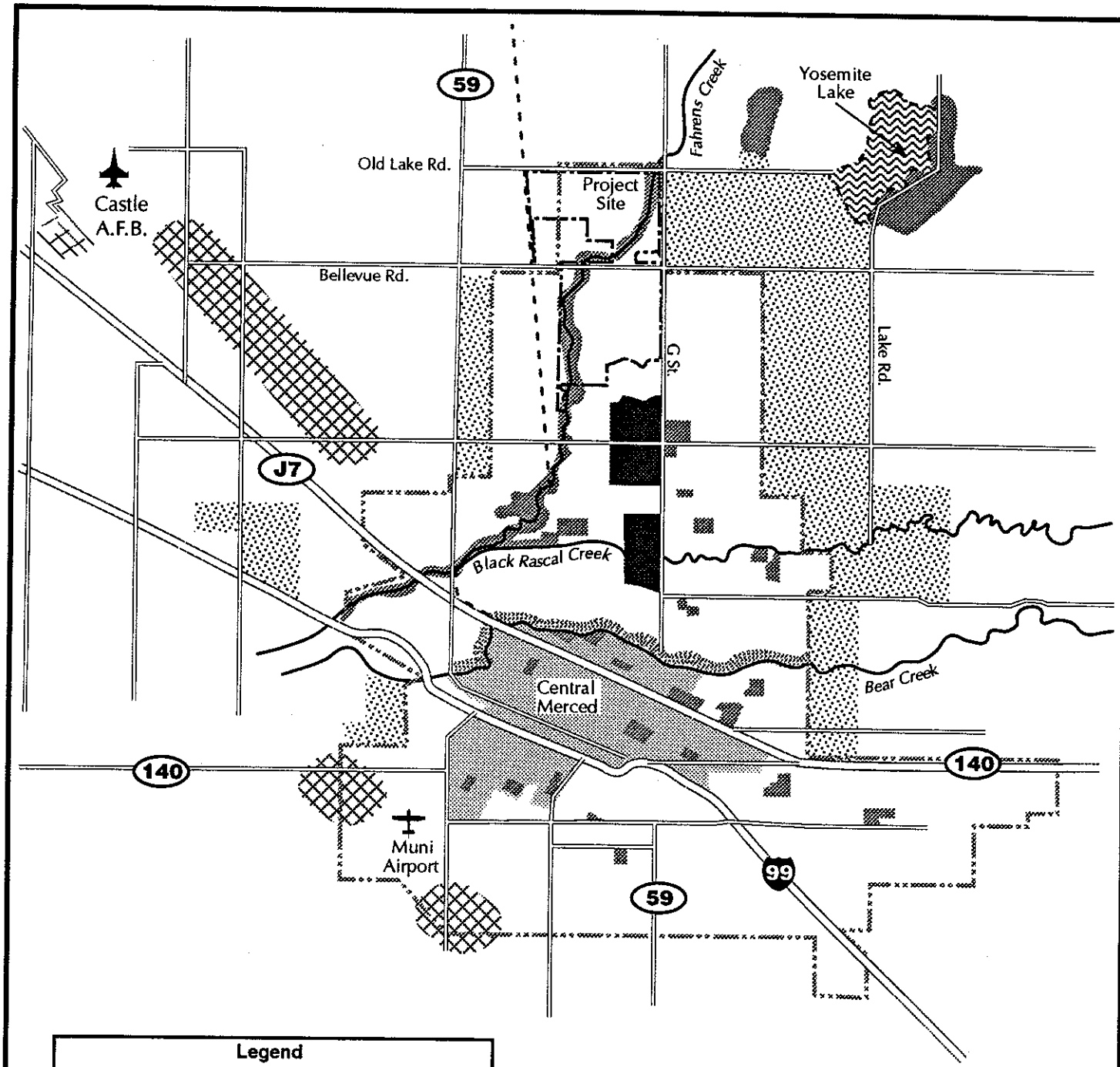

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Figure 4.4-1
Open Space Features

- *Open Space for Resource Management Goal: To recognize that open space serves an important role in the managed production, processing, and distribution of agricultural products for Merced's economy, as well as the County, the State, and the Nation.*

- *Open Space for Outdoor Recreation Goal: To achieve a sense of natural openness as an integral part of urban surroundings and recognize the outdoor recreational value of opens space.*

- *Open Space for Public Health and Safety Goal: To recognize the value of open space for public health and safety because of conditions in an area, protection of water quality, or protection and enhancement of air quality.*

Merced Villages Design Guidelines

The Design Guidelines provide the following general statements regarding parks, open space, and plazas. These guidelines outline the concept of the Merced Villages open space network and are consistent with specific policies of the General Plan:

- *Overall, a total of 5 acres of park land should be provided per 1000 residents in the growth area, of which 1.5 acres should be in community park and 3.5 acres should be in various forms of neighborhood parks, including village parks, village greens, school parks and other neighborhood parks. "Greenway" trails should provide bicycle and pedestrian access throughout the growth area.*

- *The location of parks, plazas and trails should be coordinated to distribute a variety of recreation opportunities throughout the growth area. Parks should be located near greenways wherever possible to provide good access on foot or by bicycle. Greenways should be provided along open space corridors poorly suited for development and should not be counted towards park acreage requirements.*

3. Project Impacts

Standards of Significance

In accordance with the CEQA Guidelines, impacts are considered significant if one or more of the following conditions would result from implementation of the proposed project:

- Constraint of the existing availability of parks, open space or recreational opportunities;

- Requirement of additional staff or equipment in order to maintain acceptable levels of service;

- Requirement of new or expanded parks and open space resources to accommodate future populations;
- Deviation from the parks and open space goals and polices set forth in the City's General Plan;
- Deviation from the intent of the park land criteria set forth in the Villages Concept Design Guidelines.

Specific Impacts

Base upon a maximum population projection for the project of 21,371, the project will create a maximum demand for 106 additional acres of park land and related facilities. This calculation is based upon the City's housing element, which estimates a future average of 3.1 persons per household.

Table 4.4-2 illustrates park type, park acreage recommended by the Merced Villages Design Guidelines, and park acreage supplied by the Project.

TABLE 4.4-2

Park Type	Design Guideline Standard*	Project Park Land Recommended per Design Guideline Standard **	Acreage Provided by Project
Community Park	1.5 ac./1,000 pop.	32 (maximum)	19***
Neighborhood Park (includes village parks, village greens, school parks and other Surrounding Area parks)	3.5 ac./1,000 pop.	75 (maximum)	30
Transit Center/Park	No Standard	No Standard	14.7
Greenways (includes linear open space greenways and tower easement corridor)	No Standard	No Standard	45.3

* These standards combined total 5 ac./1,000 population, which is also the City's General Plan and Parks Master Plan requirement for park acreage.

** Based on a maximum buildout population of 21,371.

*** This acreage assumes that contiguous park acreage along Fahrens Creek north of Bellevue Road will be counted together as community park.

The transit center/park proposed by the project encompasses about 11 acres. According to the City, the Design Guidelines and the City Parks and Open Space Master Plan, the transit center/park does not provide the improvements necessary to qualify for park credit. Similarly, the open space features provided along Fahrens and Cottonwood Creeks meet the requirements for "greenways" under the Design Guidelines but the level of improvement is not adequate to meet the requirements for "linear parkways" under the City Parks and Open Space Master Plan. As provided in the Design Guidelines policy discussed above, greenways are not given park credit. Therefore, the project, as proposed, provides 49 acres of creditable park land. This leaves a shortfall of 58 total park land acres, based upon maximum population scenarios proposed for the project. The shortfall of community park acreage is 13 acres, while the shortfall of neighborhood parks is 45 acres. This is a **significant impact.**

The Project land use plan accounts for most of its park acreage in what the Design Guidelines define as Surrounding Areas, which are those areas outside of defined villages. The Guidelines address a specific need for Village Parks within the village centers which will provide for small "village greens" and town squares. The provision of village parks is crucial to the adopted villages concept because they provide open space enclaves for residents of high density land uses. As the land use plan is currently drafted, there are no provisions for Village Parks or similar amenities which are crucial to the implementation of the villages concept. This is a **significant impact.**

The development of the project will reduce the total amount of agricultural land in the area, which is considered an important open space resource by the City. The City's General Plan and future growth scenarios, however, identify the project as an area for urban expansion. Loss of agricultural land in terms of open space, therefore, is a **less-than-significant impact.** Other impacts associated with conversion of agricultural land, however, are considered in Chapter 4.2.

4. Mitigation Measures

The following mitigation, when implemented, will reduce park and recreation impacts to a less-than-significant level.

MM 4.4.1 Prior to project annexation, prezoning approval, and Master Development Plan Adoption, the applicant shall provide at least 13 additional acres of community park land and at least 45 additional acres of neighborhood parks. The project applicant shall demonstrate that the park improvements are generally consistent with the Villages Design Guidelines, to the City's satisfaction. In addition, park improvements shall be consistent with the Merced Municipal Code and the Parks and Open Space Master Plan.

MM 4.4.2 Prior to approval of the prezone application and Master Development Plan Adoption, the applicant shall demonstrate, by design, the provision of general

village park locations within the village core areas. Village park acreage, distribution, and design within the village core areas shall generally follow the adopted Merced Villages Design Guidelines. In addition, park improvements shall be consistent with the Merced Municipal Code and the Parks and Open Space Master Plan. Precise village park locations and sizes shall be identified prior to approval of Master Development Plan and prezone.

4.5 LANDFORM, TOPOGRAPHY, AND SOILS

1. Environmental Issues

This section describes the geologic conditions and soil characteristics of the project site and addresses the impacts of potential geological and geotechnical hazards on the proposed project resulting from those conditions.

2. Existing Setting

Project Geology

The proposed project site is located in the Sacramento Valley, which is a geosyncline (concave depression) within which sedimentary deposits have accumulated. The deeper sediments are of marine origin and are overlain by alluvial type deposits derived from the Sierra Nevada. The maximum thickness of these sedimentary marine deposits can be 10,000 feet or more, however, the alluvial fan and terrace deposits typically range from 100 to 400 feet in thickness.

Slopes, Elevation and Topographic Features

The site topography varies from elevations of 170' to 200' above sea level and is characterized by relatively flat terrain with some areas comprising gently rolling hills. No evidence of recent or historic landslides were found in a recent geotechnical analysis completed for the site (Herzog 1/93). The potential for slope failure or landslides on the Bellevue Ranch site is extremely low because there are no slopes greater than 10% within the project area. Figure 4.5-1 illustrates the location of the dominant elevation features of the project site.

No significant topographic features such as large or unusual rock formations or rock outcroppings have been observed on site (Figure 4.5-2).

Soils

Table 4.5-1 lists the soil series which have been mapped within the site boundaries of the proposed development by the U.S. Department of Agriculture, Soil Conservation Services (1962). The locations of the various soil series on the site, as shown on the soil survey maps are illustrated on Figure 4.5-3. Recent agricultural practices, such as tilling and the construction of drains and irrigation ditches, may have changed the near surface soil conditions across the site.

The native surface soil types at the site consist generally of clay and silt loam derived by the in-place weathering of the underlying alluvial fan and terrace deposits. The clay soils exhibit a moderate to high potential to expand when exposed to water.

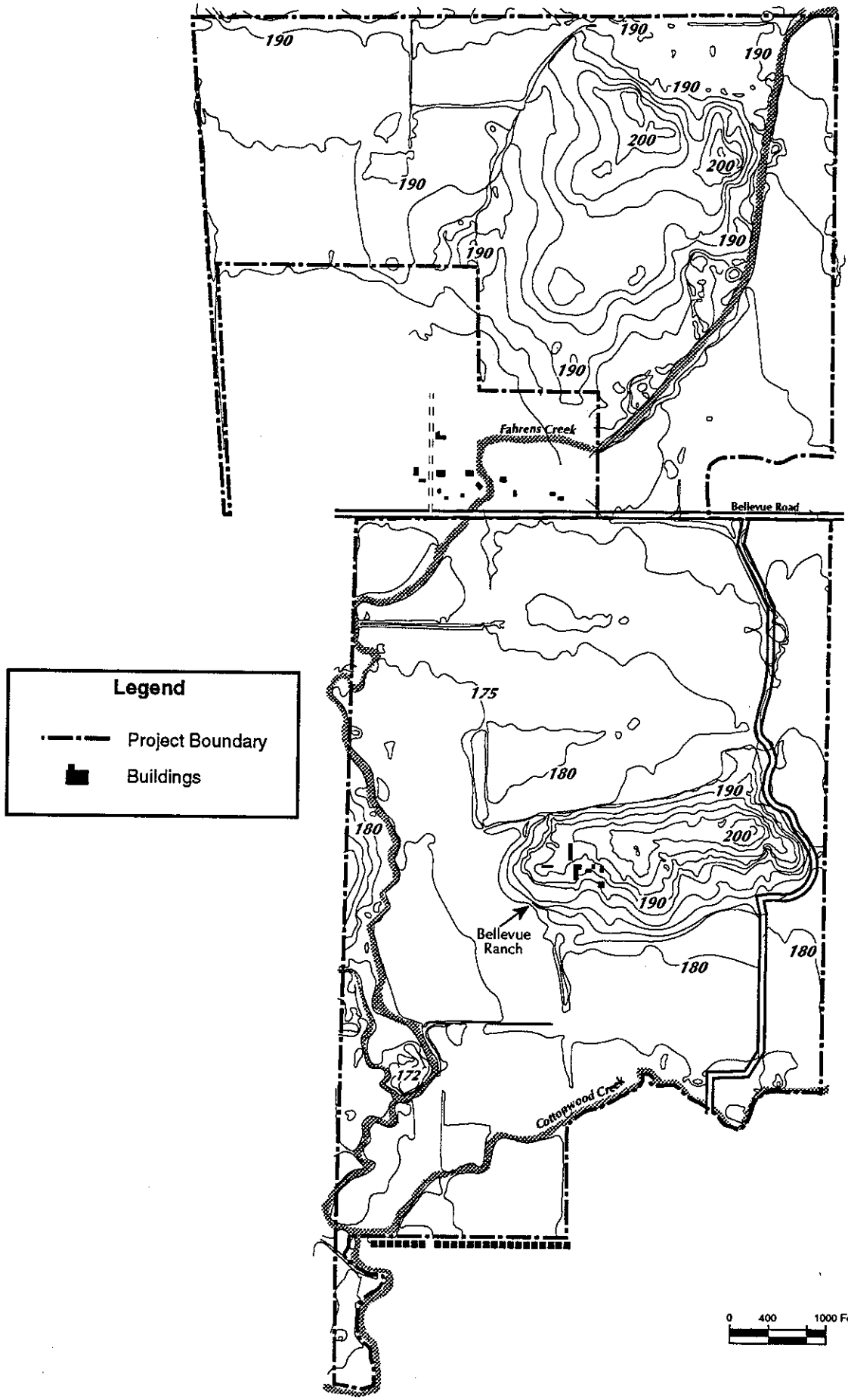

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Figure 4.5-1
Topographical Features

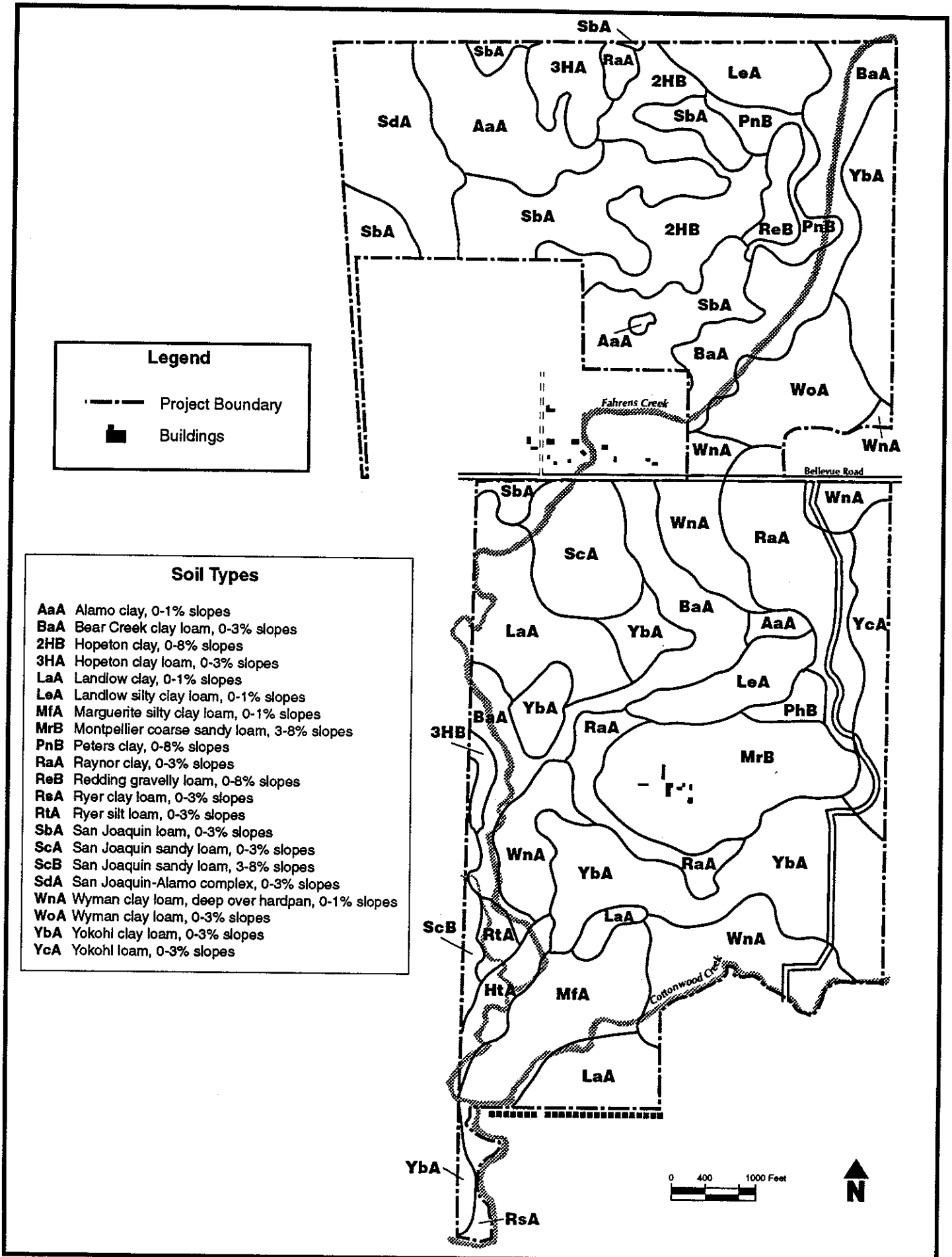

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Figure 4.5-3
Project Site Soil Types

Table 4.5-1
Summary of Engineering Properties of On-Site Surficial Soils

Map Symbol	Soil Series Name	U.S.D.A. Textural Classi-fication	U.C. System Classi-fication	Slope (%)	Permeability	Shrink Swell Potential	Erosion Hazard
AaA	Alamo	Clay	CL	0-1	Slight	Moderate	Slight
BaA	Bear Creek	Clay Loam	CL	0-3	Slight to Moderate	Moderate	Slight
3Ha	Hopeton	Clay Loam	CL/CH	0-3	Slight	High	Slight
2Ha	Hopeton	Clay	CL	0-8	Slight	Moderate	Slight
LeA	Landlow	Silty Clay Loam	CH	0-1	Slight	High	Moderate
MFA	Margarita	Silty Clay Loam	CL/ML	0-1	Moderate	Moderate to High	Slight
MuB	Montepellier	Coarse Sandy Loam	CL	3-8	Moderate	Moderate	Slight
ReB	Redding	Gravelly Loam	GC	0-8	Moderate	Slight	Slight
RtA	Ryer	Silt Loam	CL/ML	0-3	Moderate	Moderate	Moderate
RsA	Ryer	Clay Loam	CH	0-3	Slight	High	Slight
SbA	San Joaquin	Loam	CH	0-3	Slight	High	Slight
WnA	Wyman	Clay Loam	CH	0-1	Slight	High	Slight
YcA	Yokohl	Loam	ML	0-3	Moderate	Slight	Low
LaA	Landlow	Clay	CH	0-1	Low	High	Moderate
WoA	Wyman	Clay Loam	CL	0-3	Low	Moderate	Moderate
YbA	Yokohl	Clay Loam	CH	0-3	Slight	High	Slight

Expansive soil can shrink and/or swell with changes in soil moisture content. Consequently, the ground surface can heave and/or settle due to seasonal fluctuations in precipitation, irrigation practices, or utility pipe leaks. These differential ground movements can cause cracking and distortion of structures supported upon shallow foundations, and of concrete slabs on grade.

Seismic Hazards

Faults

The project site is located in one of the least active seismic regions in California. The project is not within an Alquist-Priolo Special Studies zone and is not crossed by a known active earthquake fault. The nearest known faults are located northeast of the proposed development. The Bear Mountain Fault line is located about 22 miles to the northeast and the Melones Fault zone approximately 26 miles northeast of the site. These two faults are currently considered prequaternary in age, and therefore not considered to be seismically active. Other faults in the region include the Ortigalita fault, located about 38 miles southwest; and the Midland fault, located approximately 82 miles northwest of the site. Because these faults have been active within the past 3 million years, they are considered potentially active.

Active faults (faults that have demonstrated activity within the last 11,000 years) that could affect the Bellevue Ranch site are the San Andreas fault, located approximately 64 miles southwest, the Calaveras fault, about 57 miles southwest, and the Concord Green Valley fault, located approximately 75 miles northwest. These faults and the maximum credible earthquake each could produce are listed in Table 4.5-2.

Table 4.5-2
Faults Potentially Affecting Bellevue Ranch

Fault System	Closest Approximate Distance to Project (Miles)	Maximum Credible Earthquake Magnitude (Richter)
San Andreas	64	8.25
Calaveras	57	7.0
Hayward	59	7.5
Concord-Green Valley	75	6.5
Midland	82	7.0
Ortigalita	38	6.7

The Merced area has historically experienced a relatively low level of seismic activity. While the area has not been the source of earthquakes in recent geologic time, activity in neighboring regions suggest that the project area could be affected by seismic activity in the future.

Liquefaction

Liquefaction is a phenomenon whereby loose, saturated, granular soil deposits loses its strength due to a sudden buildup of excess water pressure resulting from a seismic event. Liquefaction can cause severe damage and loss of strength to foundations supported by liquefiable soil. The primary factors contributing to the liquefaction potential of a soil deposit are 1) magnitude and duration of seismic ground motions; 2) particle gradation and density; 3) degree of saturation.

Review of boring and well logs in the immediate area encountered groundwater at depths of approximately 50 to 60 feet and primarily cohesive stiff soils, with occasional sand lenses. Due to the lack of shallow groundwater and the cohesiveness of the soil the potential for liquefaction at the site is low.

Seismic Compaction

Seismic compaction is caused by soil compaction as a result of earthquake-induced ground shaking. It occurs irregularly (unevenly) and may be caused by old swamps, channel and stream beds or other physical factors, resulting in differential or uneven settlement between adjacent areas. Seismic densification is most likely to occur in areas which are underlain by soft, saturated alluvial soils with low in-place density. The potential for seismic densification at the site is low due to the low level of ground shaking anticipated and lack of loose, granular soil deposits.

Groundshaking

Groundshaking of moderate intensity can be expected to occur at the proposed development during the life span of the project. A 8.25 Richter magnitude earthquake with an epicenter on the San Andreas fault at the point were it passes closest to the site could result in a maximum ground acceleration (the measurement unit of groundshaking) of about 0.2g. The County general plan maps the site as an area that could experience moderate severity of groundshaking that would cause moderate probable damage.

Ground Rupture

Ground rupture refers to fractures, cracks, and fissures produced by ground shaking or seismic densification, and may occur many miles from the epicenter of an earthquake. These effects are associated with an earthquake large enough to produce significant ground motions. The probability of occurrence of ground rupture at the site is very low.

Tsunamis

Tsunamis are earthquake-generated ocean waves that can cause drainage along marine coastline. Tsunamis are not a concern to the project.

Seiches

Seiches are earthquake-induced oscillations within an enclosed or restricted body of water. The site contains no enclosed or restricted bodies of water and therefore no risk of seiches.

Lateral Spreading

Lateral spreading is the horizontal movement or spreading of soil toward an open face such as a stream bank, during a seismic event. The combination of factors necessary to produce lateral spreading (steep banks and weak soils) is very unlikely at this site.

Hazards that could potentially occur at the site due to earthquake activity include ground shaking, liquefaction, and seismically induced landslides and lurching along existing creek or channel banks. The probability of a particular seismic hazard is illustrated in Table 4.5-3.

TABLE 4.5-3
PROBABILITY OF OCCURRENCE OF SEISMIC HAZARD

Hazard	Probability of Occurrence
Ground Displacement Along Active Faults	None
Liquefaction	Low
Seismic Densification	Low
Ground Shaking	Low to Moderate
Ground Rupture	Low
Tsunami	None
Seiches	None
Lateral Spreading	Low

Geologic Hazards

The California Division of Mines and Geology provides a checklist for addressing geologic and seismic considerations in Environmental Impact Reports (CDMG Note 46 Guidelines for Geologic/Seismic Consideration in Environmental Impact Reports, 1982). Much of the above information and the geologic hazard discussions provided below are based upon that checklist.

Land Subsidence

Subsidence is a large-scale areal settlement that can be caused by the extraction of groundwater, gas, oil, or geothermally-created stream. Groundwater subsidence is possible in the area (CDMG, Bulletin 198, p4). Such subsidence would involve the compaction of the valley alluvium at depth. It could cause damage to water wells, canals, sewers and other structures sensitive to settlement.

Loss of Mineral Resources

At the present time, the project area is not being used as a source of any mineral resource, nor does it appear the site has ever provided mineral commodities for any purpose except possibly minor fill material used in conjunction with nearby grading.

Volcanic Hazards

Since no recently active volcanic areas are near the site there is not a significant hazard due to volcanic activity.

Slope Instability

The proposed project is on a relatively level area, with slope inclinations not greater than 10 percent. Landslides and mudflows are not considered a hazard except along banks of drainage channels and streams.

Lake Yosemite is located approximately 1.7 miles northeast of the site. The County General Plan has mapped the Bellevue Ranch project site within the inundation one if the earthen Lake Yosemite dam were to fail. This dam is inspected by the California Division of Safety of Dams regularly and is considered to be safe.

City Goals and Policies

The City of Merced General Plan and Public Safety Element contains no specific goals and policies relative to grading practices, erosion control, or geologic hazards. The pending General Plan Update should be prepared to address these issues, as well as the intent of the

adopted Villages Concept Plan, in order to illustrate linkages and consistency between future projects and the General Plan.

3. Project Impacts

Standards of Significance

In accordance with the CEQA Guidelines, impacts are considered significant if one or more of the following conditions would result from implementation of the proposed project:

- Location of structures within an Alquist-Priolo Special Studies zone, or within a known active fault dome;
- Exposure of people or structures to geologic hazards, including:
    1) ground rupture;
    2) groundshaking
    3) liquefaction;
    4) seismic compaction
    5) landslides or unstable slopes, and
    6) flooding due to failure of dams
- Obstruction of access to and extraction of mineral resources
- Construction of structures on soils with adverse engineering properties.

Specific Impacts

Alquist-Priolo Zone

The project site is not within an Alquist-Priolo Special Studies zone and therefore is not a **significant impact.**

Ground Rupture

No known faults traverse the site and therefore there are **no significant impacts** associated with ground rupture.

Groundshaking

As discussed above the project site may experience moderate severity of groundshaking during a large seismic event. Groundshaking could cause damage to structures and could cause failure

of the stream banks resulting in water quality degradation and loss of support. This is considered to be a **significant impact.**

Liquefaction

Due to the lack of shallow groundwater and the fine grained texture of the site soils, liquefaction is improbable and therefore is considered to be a **less-than-significant impact.**

Seismic Compaction

As discussed above, seismic compaction occurs during a seismic event when loose granular soils are exposed to groundshaking. Although the site may be exposed to groundshaking, the site soils are not loose nor granular and therefore this impact is considered to be **less-than-significant.**

Landslides or Unstable Slopes

The project site and adjacent land is relatively level with no unstable slopes and therefore landsliding within, or onto, the site is not likely. This is considered to be a **less-than-significant** impact.

Flooding Due to Dam Failure

As discussed above, the site may be inundated if the Lake Yosemite dam were to fail. The California Division of the Safety of Dams inspects the dam regularly and has judged the dam to be safe. Therefore, failure of the dam is unlikely and therefore is considered to be a **less-than-significant** impact.

Mineral Resources

No significant mineral resources are known to exist within the site boundaries. Therefore, development of the project will not result in a loss of mineral resources and is considered to be a **less-than-significant** impact.

Expansive Soils

A portion of the site is underlain by soils with a moderate to high expansion potential. Soil and fill with a moderate to high expansion potential may shrink (i.e., settle) when the soil moisture content decreases or swell (i.e., heave) when the soil moisture content increases. The most common cause of changing soil moisture content is seasonal changes in rainfall; however, improper surface drainage facilities or utility pipe leaks may cause shrink and/or swell behavior. Structures founded on expansive soil may be damaged by earth movement resulting from changing soil moisture content.

Project improvements could be impacted in areas of potentially expansive soils, because of the possibility for structural distress induced by subgrade swelling and shrinkage. Due to these concerns, this is considered a **significant impact.**

4. Mitigation Measures

Implementation of the following mitigation measures will reduce the impacts related to geotechnical engineering to a **less-than-significant** level:

MM 4.5.1 Prior to the approval of building permits, the City shall require a detailed geotechnical report be prepared by a California registered geotechnical engineer for each project. These investigations shall recommend at a minimum appropriate foundations, pavement sections, grading and compaction techniques, slope design, and mitigation of expansive soils if present.

MM 4.5.2 The City shall require that recommendations contained in the geotechnical report are incorporated into design prior to approval of building permits.

MM 4.5.3 During construction the geotechnical engineer shall provide inspection to ensure that recommendations and plans are properly implemented.

Implementation of the following mitigation measure will reduce the groundshaking impact to less-than-significant level.

MM 4.5.4 Prior to the approval of building permits, the project applicant shall demonstrate to the City that the project features have been designed to UBC and applicable local codes.