

Cindy Gross




NORTHEAST QUADRANT SPECIFIC PLAN

ENVIRONMENTAL IMPACT REPORT

FINAL
MARCH 1995

SCH# 92113073

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NE Quadrant Specific Plan

Draft EIR

Aug 94

Table of Contents

TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION	1-1
2.0 SUMMARY OF KEY ISSUES	2-1
3.0 COMMENTS AND RESPONSES	3-1

Introduction

1.0 INTRODUCTION

This document contains comments received during the public review period on the Draft Environmental Impact Report (DEIR) for the proposed Northeast Quadrant Specific Plan in the City of Dixon. Written responses are provided for each of the comments received. The Specific Plan proposes development of the 643-acre Northeast Quadrant Employment Center. Mixed land uses include highway commercial, community commercial, professional-administrative offices, light industrial, and open space.

In its efforts to solicit input, the City of Dixon distributed a Notice of Preparation, the Notice of Completion, and Public Notice of Availability of the DEIR. The DEIR was distributed to various public agencies, responsible agencies, and interested individuals. The DEIR was made available for public review and comment for a 45-day period. The document was publicly circulated on October 3, 1994, with the review period ending on November 21, 1994. Copies of the DEIR were also available for public review at the Dixon Public Library and the Dixon City Hall. The Dixon City Planning Commission held a public hearing on October 18, 1994 to solicit public comment on the DEIR.

Response to Comments is grouped by comment letter. Subject matter may overlap between comment letters, requiring the reader to occasionally refer to more than one comment letter and response in order to review all information on the subject matter. Cross-references are provided when this overlap occurs.

This document also includes a Summary of Key Issues. This summary of the issues raised in the comment letters is provided for the convenience of the reader.

The Response to Comments and Summary of Key Issues, together with the DEIR (incorporated by reference), will constitute the Final Environmental Impact Report for the City of Dixon Northeast Quadrant Specific Plan project. A final Mitigation Monitoring Program will be prepared after the FEIR is certified.

COMMENTS RECEIVED ON THE DRAFT EIR

A total of 12 comment letters were received on the Northeast Quadrant Specific Plan Draft EIR. These include the following:

1. Solano Irrigation District (11-21-94 and 12-15-94)
2. Dixon Solano Municipal Water District (12-14-94)
3. LAFCo (11-16-94)
4. Department of Fish and Game (11-3-94)
5. Hackard & Holt, Attorneys at Law (10-18-94)
6. Hackard & Holt, Attorneys at Law (11-14-94)
7. Hackard & Holt, Attorneys at Law (11-17-94)
8. State of California- Resources Agency (11-3-94)
9. Solano County Transportation Department (11-14-94)
10. State Department of Transportation (11-9-94)
11. Robert L. Gill (10-21-94)
12. Donald Gorman - FTP Enterprises (10-17-94)

All comments made at the public meeting before the City of Dixon Planning Commission are incorporated in the above cited letters.

Summary of Key Issues

2.0 SUMMARY OF KEY ISSUES

The following is a summary of the key issues addressed in each of the comment letters received on the Draft Northeast Quadrant EIR.

Comment letter #1 from the Solano Irrigation District (SID) recommends that the FEIR address what will be done with the existing SID agricultural irrigation facilities within the project area. SID notes that there are three parcels in the plan area that are not within the SID boundary. Also, SID recommends that the capacity of the two Dixon-Solano Municipal Water Service storage tanks be added to the discussion of treated water capacity for the project area.

Comment letter #2 from the Dixon Solano Municipal Water District (DSMWD) recommends that the FEIR address the topics of existing and planned District facilities, and water availability in greater detail. The DSMWD also recommends reference to the forthcoming North Central Solano County Groundwater Resources Report, which is to determine the magnitude of the necessary system expansion to accommodate the Northeast Quadrant Specific Plan and other planned annexations in the City of Dixon.

Comment letter #3 from LAFCo addresses groundwater extraction. LAFCo indicates a number of issues raised in previous studies that the FEIR should also address, including the cumulative impacts of increased extraction.

Comment letter #4 from the California Department of Fish and Game (DFG) discusses surface drainage and the methods for handling stormwater. Specific language is recommended to ensure no-net-loss of wetland habitat value and acreage, while surveys for Swainson's hawk and tiger salamander are questioned as mitigation measures. DFG also discusses Public Resources Code requirements regarding a Monitoring Program, notification of DFG, and impact fees.

Comment letters #5, #6, and #7 from Hackard & Holt, Attorneys at Law, all deal with the same issues. Hackard & Holt present legal opinion that the California Department of Fish and Game (DFG) does not have the authority to require local lead agencies to implement mitigation measures solely for habitat modification, specifically in reference to that of the Swainson's hawk. Hackard & Holt state that cities and counties are exempt from consultation with DFG. Also discussed is the economic feasibility of proposed mitigation measures.

Comment letter #8 from the State of California - Resources Agency, suggests that additional information be provided to assess the economic impact of the loss of agricultural land. Other recommendations regarding oil and gas issues were also noted, including abandoned wells.

Comment letter #9 from the Solano County Transportation Department requests that further studies be performed as part of the FEIR to determine average daily traffic at present plus project conditions. Also, it is recommended that an inventory be prepared of existing conditions of Solano County roads affected by the project. The Department requests that a master drainage plan be prepared as part of the EIR, addressing what it will involve, who will be responsible for construction, maintenance, and funding.

Comment letter #10 from the State Department of Transportation states that the proposed mitigation measures will require at least one new freeway lane in each direction, and that the volumes and level of service (LOS) need to be identified in the EIR. The Department requests

that the FEIR include more details on cumulative impacts on Interstate 80 and the "fair share" contribution of each developer to mitigate cumulative impacts, including widening I-80. This Department also asks for more information about the Pedrick Road Interchange, North First Street Interchange, local circulation, cost estimates, and general highway related mitigation requirements.

Comment letter #11 from Robert L. Gill requests that the off-site alternative location be identified and assessed in greater detail for the Alternatives Analysis. He also requests that the EIR address project drainage, including Pond B and the North First Street Assessment District. Mr. Gill recommends changes to the drainage system map on page 4-33.

Comment letter #12 from Donald Gorman of FTP Enterprises identifies a specific project which is an alternative to the one proposed in the NQSP EIR.

Comments and Responses

3.0 COMMENTS AND RESPONSES

This section contains the comments and responses to the comments received by the City of Dixon on the Draft EIR. Comment numbers refer to the reference numbers placed at the side of each pertinent comment in the original comment letter. Changes in the text of the draft EIR to be incorporated into the final EIR are shown in **bold and underlined type**. Text to be eliminated in the draft EIR in the final EIR is shown in ~~strike thru~~.

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ATTORNEYS

STEPHEN J. CARBONARO
TREASURER



November 21, 1994

James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, California 95620

**NORTHEAST QUADRANT SPECIFIC PLAN /
DRAFT ENVIRONMENTAL IMPACT REPORT**

Dear Jim:

Staff of the Solano Irrigation District have reviewed the Specific Plan/Draft Environmental Impact Report (DEIR) for the Northeast Quadrant development. This is proposed by several landowners and includes properties located north of Vaughn Road, south of Highway 80, east of Highway 113 and west of Pedrick Road, Dixon. The proposed development consists of 643± acres of agricultural land northeast of Dixon. The subject property is located within the Solano Irrigation District boundary and, therefore, is subject to the assessments and charges of the District. The following are comments on the Specific Plan and DEIR and requirements of the District for the development of this property:

1. Neither the Draft EIR nor the Specific Plan address what will be done with the existing District agricultural facilities within the project area. Per the District's letter of December 3, 1992, requirement #1 states:

"1. *There are agricultural irrigation facilities within this project area that will require removal and/or replacement per the District's Standard Specification Details, latest revisions, and will be at the developer's expense.*"

We feel that the Draft EIR and Specific Plan are inadequate in addressing the District's concerns regarding the relocation and reconstruction of existing agricultural irrigation facilities. The facilities must be relocated so that agricultural irrigation water can continue to be served to agricultural lands to the east and southeast of the project area. The Draft EIR and/or Specific Plan should state:

The District's Vaughn Lateral currently lies within a twenty foot-wide SID easement. The Vaughn Lateral crosses from the north side of Highway 80 onto the northwest corner of APN 111-040-01 (Mistler). The pipe proceeds south, along the east sides of 111-030-01 (Dixon Main Center Annexation Cammorota), 111-080-03 (Dixon Main Center Annexation Cammorota) and 111-080-15 (Vaughn I Annexation). At this point, the Vaughn Pipeline proceeds east along the south side of 111-080-06 (Non Participating Ownership) at which point the Vaughn Lateral crosses to the south side of Vaughn Road. The Vaughn Lateral 8 heads west from the southeast corner of and along the south side of 111-080-03 and crosses Highway 113 to serve 108-100-09. The Vaughn Lateral A heads east from a point just south of the Lateral 8 headworks, serving agricultural irrigation water to 111-080-06 and -07.

1.1

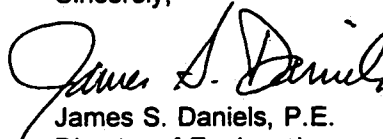
The Vaughn Lateral, Lateral 4 and Lateral 8 consist of different types of pipe. Upon crossing Highway 80, the pipeline is a 42-inch MCP (Monolithic Concrete Pipe) with a 36-inch RPMP (Reinforced Plastic Mortar Pipe) liner, changes to a 36-inch RPMP Direct Burial pipe, to a 36-inch MCP with a 30-inch RPMP liner, to a 36-inch MCP at Vaughn Road. Lateral 4 starts as a 6-inch steel and terminates with a 15-inch PCP (Precast Concrete Pipe). Lateral 8 starts as a 30-inch MCP and terminates with an 18-inch PCP.

The District requires a developer to relocate any existing pipeline to a location within a city street per District Standard Specification Details. The relocated pipelines will be RGRCP (Rubber Gasketed Reinforced Concrete Pipe, Class III) per ASTM C-361 and C-76. Any relocation will have to be reviewed and approved by the Solano Irrigation District. The District's irrigation season is from March through October (weather permitting). **NO RELOCATION OF DISTRICT FACILITIES WILL BE ALLOWED DURING THIS TIME.**

2. It should also be noted that there are three parcels in the proposed development area that are not located within the District's boundary--APN 111-010-04 (Napa Development / Flying J), 111-050-01 (Flying J) and 111-040-03 (Non Participating Ownership). These parcels would have to be annexed to the District in order to receive domestic water service from the Dixon-Solano Municipal Water Service (DSWMS).

Thank you for the opportunity to review and comment on the Draft EIR. If you have any questions, please contact Frank Weber of my staff.

Sincerely,


James S. Daniels, P.E.
Director of Engineering

JSD:FW:jl

cc: Ron Tribbett
cc: Bob Isaac
Suzanne Butterfield
Darrell Rosenkild
Jay Jones
Frank Weber

DIRECTORS

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MEITH, SOARES & SEXTON
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STEPHEN J. CARBONARO
TREASURER

TRANSMITTAL LETTER

TO: James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, CA 95620

DATE: December 15, 1994
SUBJECT: REVISED LETTER FOR
NE QUADRANT SPECIFIC PLAN/
DRAFT EIR

DESCRIPTION OF ENCLOSED:


Original of revised subject letter

MESSAGE:

Our letter of November 21, 1994 has been revised in the paragraph under "Specific Plan" on Page 3, as follows: The DSMWS currently has two water storage tanks with the combined capacity of 244,000 gallons.

If you have any questions, please give me a call.

SOLANO IRRIGATION DISTRICT

By: James S. Daniels, P.E. 
Director of Engineering

jl
c:\wpdocs\Vormsj\dixon2.TL

1.3

LETTER 1: SOLANO IRRIGATION DISTRICT (11-21-94 and supplemented by 12-15-94)

Comment 1.1: Existing Agricultural Irrigation Facilities

Neither the draft EIR nor the Specific Plan address what will be done with the existing District agricultural irrigation facilities within the project area.

Response to Comment 1.1

The following text will be added to Section 4.9 Public Services and Utilities, page 4-110 of the draft EIR and Figure 4.9.1 will be amended to delineate the appropriate boundary.

SOLANO IRRIGATION DISTRICT (SID)

Part of the specific plan area is located within the Solano Irrigation District (SID) boundary and, therefore, is subject to the assessment and charges of the District.

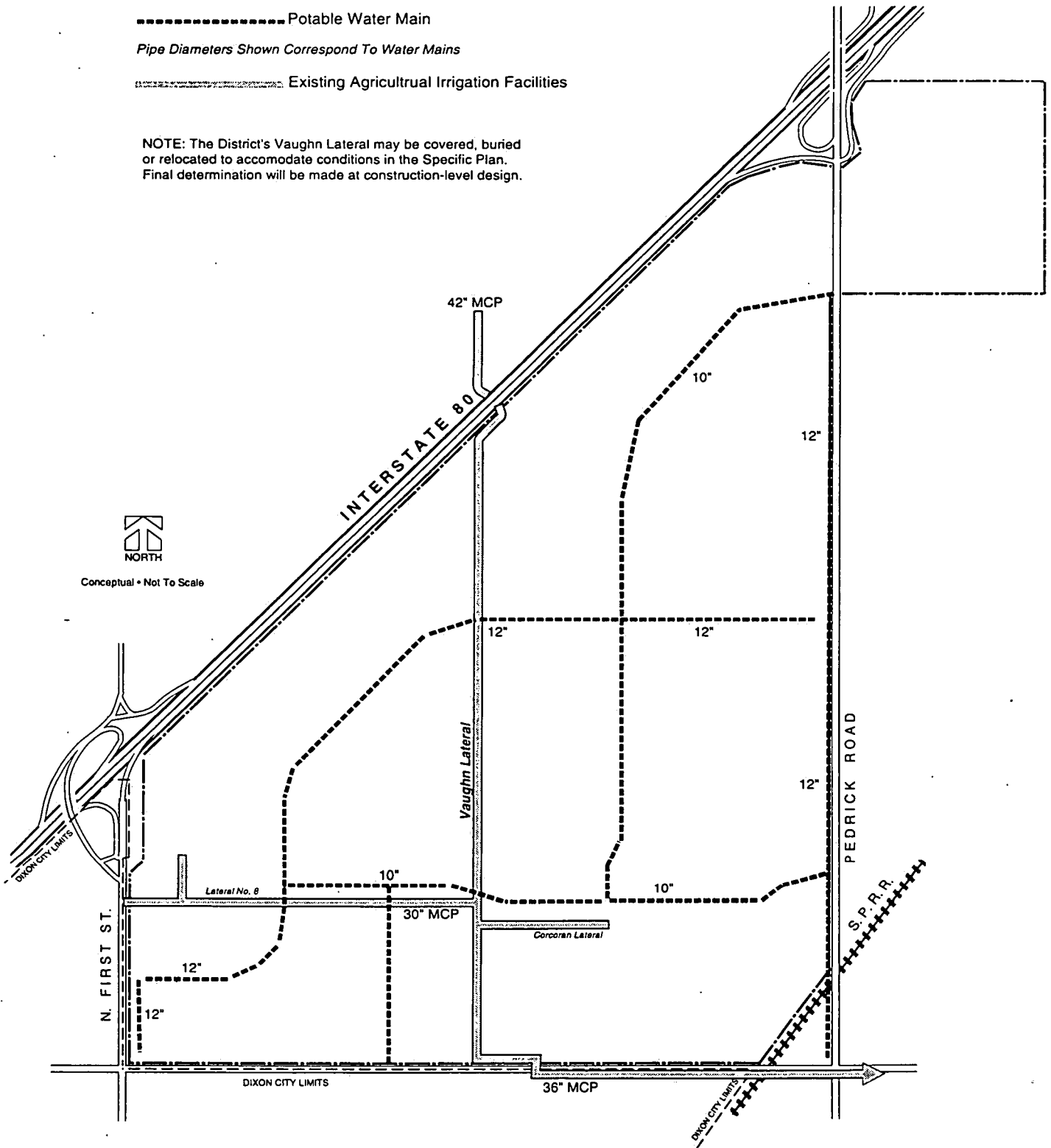
The District's Vaughn Lateral currently lies within a twenty-foot-wide SID easement. The Vaughn lateral crosses from the north side of Highway 80 into the northwest corner of APN 111-040-01 (Mistler). The pipe proceeds south, along the east sides of 111-030-01 (Dixon Main Center Annexation Cammarota), 111-080-03 (Dixon Main Center Annexation Cammarota) and 111-080-15 (Vaughn I Annexation). At this point, the Vaughn Pipeline proceeds east along the south side of 111-080-06 (Non Participating Ownership) at which point the Vaughn Lateral crosses the south side of Vaughn Road. The Vaughn lateral heads west from the southeast corner of and along the south side of 111-080-03 and crosses Highway 113 to serve 108-100-09. The Vaughn Lateral A heads east from a point just south of the Lateral 8 headworks, serving agricultural irrigation water to 111-080-06-and -07 (see Figure 4.9.2).

The Vaughn Lateral, Lateral 4 and Lateral 8 consist of different types of pipe. Upon crossing Interstate 80, the pipeline is a 42-inch MCP (Monolithic Concrete Pipe) with a 36-inch RPMP (reinforced Plastic Mortar Pipe) liner, changes to a 36-inch RPMP Direct Burial pipe, to a 36-inch MCP with a 30-inch RPMP liner, to a 36-inch MCP at Vaughn Road. Lateral 4 starts as a 6-inch steel and terminates with a 15-inch PCP (Precast Concrete Pipe). Lateral 8 starts as a 30-inch MCP and terminates with an 18-inch PCP.

The District requires a developer to relocate any existing pipeline to a location within a city street per District Standard Specification Details. The relocated pipelines will be RGRCP (Rubber Gasketed Reinforced Concrete Pipe, Class III) per ASTM C-361 and C-76. Any relocation will have to be reviewed and approved by the Solano Irrigation District. The District's irrigation season is from March through October (weather permitting). No relocation of district facilities will be allowed at this time.

----- Potable Water Main
 Pipe Diameters Shown Correspond To Water Mains
 ----- Existing Agricultural Irrigation Facilities

NOTE: The District's Vaughn Lateral may be covered, buried or relocated to accommodate conditions in the Specific Plan. Final determination will be made at construction-level design.



**FIGURE 4.9.2
 PROPOSED WATER SYSTEM**

Comment 1.2 (SID (11-21-94)): Properties Not in the District

It should be noted that there are three parcels in the plan area not in the SID boundary.

Response to Comment 1.2

The text will be revised on page 4-110 of the DEIR to read:

There are three parcels in the proposed Specific Plan area that are not located within the boundaries of the Solano Irrigation District. This includes APN 111-010-04 (Napa Development/Flying J), 111-050-01 (Flying J) and 111-040-03 (Non Participation Ownership). These parcels would have to be annexed to the district in order to receive domestic water service from the DSMWS.

Figure 4.9.1 will be amended to illustrate the current district boundary.

Section 4.9.1.3 will be amended as follows:

Impact PS-1: Approximately half of the NQSP land area is currently not within the North First Street Assessment District or the Dixon Solano Municipal Water Service and does not have access to a municipal water system.

Significance: Significant

Mitigation Measure PS-A: ~~Prior to approval of the NQSP, the entire project area shall join the NFSAD to ensure water supply services.~~ **Prior to development of any property in the NQSP the affected parcels would have to be annexed to the district in order to receive domestic water service from the DSMWS.**

Residual Significance: Less than significant.

Comment 1.3: Treated Water Storage Capacity

The DSMWS currently has two storage tanks with the combined capacity of 244,000 gallons:

Response to Comment 1.3

Comment noted. The text of the final EIR will be revised accordingly as shown in the response to comment 2.2.

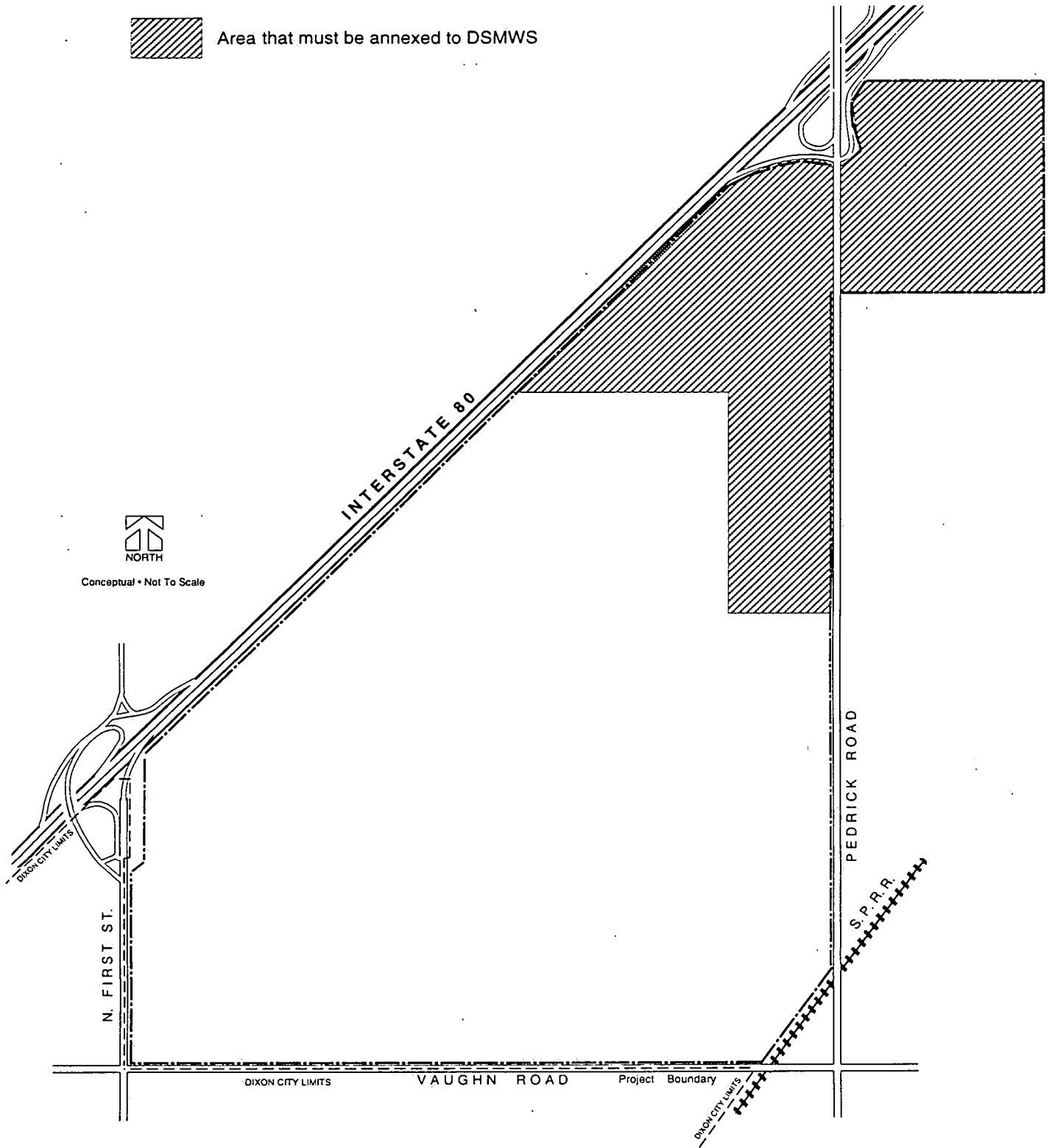


FIGURE 4.9.1
WATER SERVICE BOUNDARIES



December 14, 1994

James Louie, Planning Director
 Community Development Department
 City of Dixon
 600 East A Street
 Dixon, California 95620

**NORTHEAST QUADRANT SPECIFIC PLAN /
 DRAFT ENVIRONMENTAL IMPACT REPORT**

Dear Jim:

Staff of the Dixon-Solano Municipal Water Service (DSMWS) have reviewed the Specific Plan/Draft Environmental Impact Report (DEIR) for the Northeast Quadrant development, proposed by several landowners, which properties are located north of Vaughn Road, south of Highway 80, east of Highway 113 and west of Pedrick Road, Dixon. The proposed development consists of 643± acres of agricultural land, northeast of Dixon. Upon annexation to the City of Dixon, the subject property will be located within the Dixon-Solano Municipal Water Service area, which will serve domestic water to this development. The following are comments on the Specific Plan and DEIR and requirements of the DSMWS for the development of this property:

DRAFT ENVIRONMENTAL IMPACT REPORT:

Section 4 -- Environmental Analysis:

4.9.1 Water:

Page 4-110:

1. 4.9.1.1 Environmental Setting: Should read:
DIXON-SOLANO MUNICIPAL WATER SERVICE:

The Dixon-Solano Municipal Water Service (DSMWS) is a Joint Exercise of Powers Agreement between the City of Dixon and the Solano Irrigation District, dated July 2, 1984. The DSMWS currently serves the Dixon Industrial Park, the Watson Ranch, Pheasant Run, Regency and Connemara Subdivisions and the West "A" Street Assessment District. Water in the DSMWS ...

... Storage capacity will be 1.0 million gallons by mid 1995. It is the policy of the DSMWS ...

2.1

2. 4.9.1.3 Environmental Impacts and Mitigation Measures: Should read:

The DSMWS currently has two water storage tanks with the combined capacity of 244,000 gallons. A new 800,000 gallon water storage tank is presently being constructed to replace the 44,000 gallon tank and should be completed by late Spring 1995. When completed, the storage capacity will be 1.0 million gallons. Present expansion plans include the construction of a third water storage tank with a capacity of 600,000 gallons, bringing the total storage capacity to 1.6 million gallons. Upon completion of the facilities currently proposed in the DSMWS Master Plan of the Water Supply and Delivery System (1993 Water Master Plan) overall pumping capacity of the system will be 9,590 gallons per minute (gpm), or 13.8 million gallons per day (mgd). (The figure of 13,000 gpm capacity was presented in the April, 1990 report titled Proposed Water Supply and Delivery System, a.k.a. the 1990 Water Master Plan. The 1993 Water Master Plan revised the service area to conform with the then-current Dixon General Plan Area, and the water demand and planned facilities were reduced accordingly.) Capacity for the Northeast Quadrant Specific Plan Area (NQSPA) is not included in the above pumping capacity, nor is there a sufficient facility (well) or storage capacity.

Table 4.9.11 indicates that the NQSPA water demand is estimated to be 2.3 mgd, which is 1,620 gpm. Assuming this to be correct, an additional deepwell, storage tank, pumping plant and appurtenant facilities must be constructed to increase the water system capacities for this area. Depending on the capacity of the new facilities, other portions of the DSMWS service area may also benefit from it and proportionally share in their cost.

A study is under way to determine the magnitude of the necessary system expansion to accommodate the Northeast Quadrant Specific Plan Area as well as other planned annexations to the City of Dixon. Before DSMWS can issue a Will-Serve Letter, the NQSPA water demand must be verified, the hydraulic model of the water system updated, and the necessary capacity of new facilities established.

3. Section 4.9.1.4 Cumulative Impacts

Solano County LAFCO has instructed the City in comments on another DEIR to "fully [discuss] the potential impacts from increased groundwater extractions" (letter from Harry Englebright, Principal Planner, LAFCO, to James Louie, Director, Dixon Community Development Department, dated August 19, 1994). In the same letter, forty questions about the groundwater were asked. The NQSP DEIR neither addresses this topic nor answers the questions raised by LAFCO. This is not surprising, for it is a broad topic. To identify that groundwater is available to meet water needs of proposed development, a report is being prepared to address this issue. The City of Dixon and two other agencies that draw groundwater in the area are collaborating in the preparation of the "North Central Solano County Groundwater Resources Report" to be used in project and plan EIRs. The NQSP DEIR should address this topic, and reference to the forthcoming Groundwater Resources Report is recommended.

SPECIFIC PLAN:

Section 6 – Public Facilities and Services Element:

Page 6-1:

1. 6.1 Water: Should read:

The City of Dixon is currently served by the Dixon-Solano Municipal Water Service, (DSMWS) and the California Water Service Company. The DSMWS is operated through a Joint Exercise of Powers Agreement between the City of Dixon and the Solano Irrigation District. The DSMWS is intended ...

The DSMWS currently has two water storage tanks with the combined capacity of 244,000 gallons. A new 800,000 gallon water storage tank is presently being constructed and should be completed by late Spring 1995. When completed, the storage capacity will be 1.0 million gallons. Present expansion plans include the construction of a third water storage tank with a capacity of 600,000 gallons, bringing the total storage capacity to 1.6 million gallons. Upon completion, overall pumping capacity ...

It should also be noted that there are three parcels in the proposed development area that are not located within the boundary of the Solano Irrigation District, being APN 111-010-04 (Napa Development/Flying J), 111-050-01 (Flying J) and 111-040-03 (Non Participating Ownership). These parcels would have to be annexed to the District in order to receive domestic water service from the Dixon-Solano Municipal Water Service (DSMWS).

Thank you for the opportunity to review and comment on the Draft EIR. If you have any questions, please contact Jim Daniels or Frank Weber.

Sincerely,



Suzanne Butterfield
Assistant Manager, S.I.D.
On Behalf of DSMWS

cc: Ron Tribbett

2.4

2.5

LETTER 2: DIXON SOLANO MUNICIPAL WATER DISTRICT (12-14-94)

Comment 2.1: Description of Existing and Proposed District Facilities

Section 4.9.1 (Environmental Analysis), page 4-110 of the DEIR should be revised as recommended.

Response to Comment 2.1

The text on page 4-110 of the DEIR is revised as follows:

4.9.1.1 ENVIRONMENTAL SETTING

Dixon-Solano Municipal Water Service:

The Dixon-Solano Municipal Water Service (DSMWS) is a Joint Exercise of Powers Agreement between the City of Dixon and the Solano Irrigation District, dated July 2, 1984. The DSMWS currently serves the Dixon Industrial Park, the Watson Ranch, Pheasant Run, Regency and Connemara Subdivisions and the West "A" Street Assessment District. The Dixon-Solano Municipal Water Service (DSMWS) was established in 1987 under a joint powers agreement between the City of Dixon and the Solano County Irrigation District. The DSMWS currently serves the Dixon Industrial Park, the Watson Ranch Subdivision, the Pheasant Run Subdivision, portions of the West "A" Street Assessment District and the Regency and Connemara Subdivisions. Water in the DSMWS system is extracted from naturally occurring aquifers. Three wells pump this water from hundreds of feet below the ground surface into the overall distribution system. The total capacity of these wells is 3,990 gpm at a pressure range of 57 to 61 pounds per square inch (psi). Total water delivered in 1992 was 575-acre-feet. The peak water demand for July 1994 was 1,387,677 gpd. The average daily demand for water in 1993 was 730,353 gpd. Storage capacity will be over one 1.0 million gallons within the next year. by mid 1995. It is the policy of the DSMWS to serve all new developing areas within the city limits of Dixon. There are presently no water limitations to accommodate planned development within the current boundary of the City of Dixon.

Comment 2.2: Increase Domestic Water Demand and Storage Requirements

Page 4-112 section 4.9.1.3 Environmental Impact and Mitigation Measures of the DEIR should be revised as recommended.

Response to Comment 2.2

The text on page 4-112 of the DEIR is revised as follows:

4.9.1.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES:

Impact PS-2:

Implementation of the NQSP would generate a substantial need for domestic water and increase current municipal water storage requirements.

The DSMWS currently has two water storage tanks with the combined capacity of 244,000 gallons. A new 800,000 gallon water storage tank is presently being constructed to replace the 44,000 gallon tank and should be completed by late Spring 1995. When completed, the storage capacity will be 1.0 million gallons. Present expansion plans include the construction of a third water storage tank with capacity of 600,000 gallons, bringing the total storage capacity to 1.6 million gallons. Upon completion of the facilities currently proposed in the DSMWS Master Plan of the Water Supply and Delivery System (1993 Water Master Plan) overall pumping capacity of the system will be 9,590 gallons per minute (gpm), or 13.8 million gallons per day (mgd). (The figure of 13,000 gpm capacity was presented in the April, 1990 report titled Proposed Water Supply and Delivery System, a.k.a the 1990 Water Master Plan. The 1993 Water Master Plan revised the service area to conform with the then-current Dixon General Plan Area, and the water demand and planned facilities were reduced accordingly). Capacity for the Northeast Quadrant Specific Plan area (NQSP) is not included in the above pumping capacity, nor is there a sufficient facility (well) or storage capacity.

The demand for water availability has been estimated to be approximately 2,331,435 gpd or 2.3 mgd as shown on Table 4.9.1. Table 4.9.1 indicates that the NQSP water demand is estimated to be 2.3 mgd, which is 1,620 gpm. This is three times greater than the 1993 average daily demand for the entire District in 1993 and a 168 percent increase over the peak water demand in July, 1994. It should be noted that usage rates on Table 4.9.1 include the use of water for maintaining proposed ornamental landscaping within each land use category.

An additional deep well, storage tank, pumping plant and appurtenant facilities must be constructed to increase the water system capacity for this area. Depending on the capacity of the new facilities, other portions of the DSMWS service area may also benefit from it and proportionally share in their cost.

The development of the plan area will occur over a period of years and thus full implementation of the water delivery system is not required to serve the initial phases of development.

A study, "The North Central Solano County Groundwater Resources Report", is underway to determine the magnitude of the necessary system expansion to accommodate the Northeast Quadrant Specific Plan area as well as other planned annexations to the City of Dixon. Before DSMWS can issue a Will-Serve Letter, the NQSP water demand must be verified, the hydraulic model of the water system updated, and the necessary capacity of new facilities estimated.

**TABLE 4.9.1
ESTIMATED WATER DEMAND**

Land Use	Acres	Rate (gpd)*	Water Demand (gpd)
Commercial	194.1	5,760	1,118,000
Professional Offices	105.4	2,880	303,552
Light Industrial	214.4	2,880	617,472
Drainage Easements and Open Space Irrigation	<u>129.1</u> 643.0 acres	<u>2,265</u>	<u>292,411</u> 2,331,435 gpd (2.3 mgd)

* Based on projections contained in the Northeast Quadrant Specific Plan

Present expansion plans of the DSMWS water service area include two new storage tanks which would increase capacity to 1.4 million gallons. Upon completion, overall pumping capacity of the system is expected to be 13,000 gallons per minute (gpm) or 18.7 million gallons per day (mgd) which will be reached at projected buildout date of 2005.

Significance: Significant

Mitigation Measures PS-B: Prior to the issuance of a building permit, the project proponent shall obtain evidence that a water supply is available to meet the minimum demand of the proposed project and submit this evidence (will serve letter) to the City of Dixon.

Residual Significance: Less than significant

Comment 2.3: Groundwater Extraction

Solano County LAFCo has instructed the City in comments on another DEIR to "fully discuss the potential impacts from increased extraction" (letter from Harry Englebright, Principal Planner, LAFCo, to James Louie, Director, Dixon Community Development Department, dated August 19, 1994). The NQSP DEIR neither addressed this topic nor answered the questions raised by LAFCo.

Response to Comment 2.3

The NQSP Draft EIR is identified as being a program document, which will rely on future construction-level analysis to provide greater detail when specific development is proposed. The City of Dixon and two other agencies that draw groundwater in the area are collaborating in the preparation of the "North Central Solano County Groundwater Resources Report" to be used in such project and plan EIRs in the future. This report will be used in assessing the next, more detailed level of environmental analysis.

4.9.1.4 CUMULATIVE IMPACTS

Impact PS-3: Implementation of cumulative development in the area would generate the need for additional water supply, conveyance, treatment and storage facilities and services.

Significance: Less than significant Significant

Cumulative development would generate the need for approximately 5 mgd of water. This impact is considered to be significant, however, the City of Dixon is currently anticipating growth (as identified in the general plan) and public services and utility districts are planning to serve this future growth. ~~It is unlikely that cumulative water needs would exceed the service capacity of local water purveyors if the development of each cumulative project is contingent upon providing evidence for or acquiring an adequate water supply.~~

The cumulative impact of increasing groundwater draft is unknown but several issues have been raised by public agencies. The City of Dixon, in concert with the City of Vacaville and Solano Irrigation District, have undertaken a comprehensive study to address the issues associated with the cumulative increase in groundwater draft. The study, cited above as the "North Central Solano County Groundwater Resources Report" is not available as of the preparation of this report, but is anticipated to be completed prior to any application for development within the NOSP.

Mitigation Measures PS-B(1) Prior to the issuance of a PUD for any project that will exceed ten percent (10%) of the total land area in the NOSP the "North Central Solano County Groundwater Resources Report" shall be completed to indicate whether a water supply is available to meet the minimum demand of the proposed project and submit this evidence (will serve letter) to the City of Dixon.

Residual Significance: Less than significant

Comment 2.4: DSMWS Water Storage

Page 6-1 of the Specific Plan should be revised as recommended.

Response to Comment 2.4

The text in Section 6-1 of the Specific Plan is revised to read:

6.1 WATER

The City of Dixon is currently served by the Dixon-Solano Municipal Water Service, ~~(D-SMWS)~~ (DSMWS) and the California Water Service Company. The DSMWS has been established under a joint powers agreement between the City of Dixon and the Solano County Irrigation District. is operated through a Joint Exercise of Powers

Agreement between the City of Dixon and the Solano Irrigation District. The DSMWS is intended

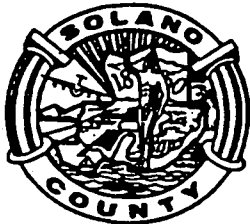
Current water storage capacity of the DSMWS is 242,000 gallons. Present expansion plans include two new storage tanks which would increase capacity to 1.4 million gallons. The DSMWS currently has two water storage tanks with the combined capacity of 244,000 gallons. A new 800,000 gallon water storage tank is presently being constructed to replace the 44,000 gallon tank and should be completed by late Spring 1995. When completed, the storage capacity will be 1.0 million gallons. Present expansion plans include the construction of a third water storage tank with a capacity of 600,000 gallons, bringing the total storage capacity to 1.6 million gallons. Upon completion, overall pumping capacity....

Comment 2.5 (DSMWS (12-14-94)): Properties Not in the District

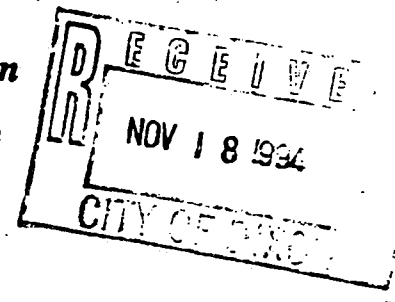
It should be noted that there are three parcels in the plan area not in the SID boundary.

Response to Comment 2.5

See Response to Comment 1.2.



Local Agency Formation Commission
 601 Texas Street
 Fairfield, California • 94533
 (707) 421-6765



John E. Taylor, Executive Officer
 (707) 421-6160

November 16, 1994

James Louie, Director
 Community Development Department
 600 East A Street
 Dixon, CA 95620

RE: Northeast Quadrant Specific Plan Draft Environmental
 Impact Report

Dear Jim:

Thank you for the opportunity to review the Northeast Quadrant Specific Plan Draft Environmental Impact Report (EIR). LAFCO, as a responsible agency, will be utilizing this document in considering the annexation of the project area to the City of Dixon. We would like to offer the following comments with regards to this project.

GROUNDWATER SUPPLY

LAFCO in reviewing the annexation of this project area must make findings relative to the provision of public services including water service. LAFCO must analyze the feasibility of servicing the area proposed for annexation without causing undue service deficiencies or negative impacts including negative impacts on other jurisdictions. Since the City does not have a Comprehensive Annexation Plan and Urban Services Delivery Plan, LAFCO must review the City's ability to provide services on a case by case basis.

As you are aware, the issue of increased ground water extraction from the Tehama formation including its potential environmental impacts has been a concern of the City of Vacaville, City of Dixon and Solano Irrigation District (SID) along with the County. At the July 11, 1994 LAFCO hearing, Greg Werner, Director of Community Development and David Tompkins, Assistant Public Works Director testified on behalf of the City of Vacaville regarding environmental impacts of increased groundwater extraction from the Tehama formation for the proposed Steiger Hill Community Services District. Under this proposal it is estimated that between 600 to 900 acre ft. per year will be needed to serve the proposed district and proposed Sphere of Influence area. Bob Isaac, Manager and Tim

O'Laughlin, attorney for SID also testified before LAFCO. It was the testimony of both the City of Vacaville and SID that an Environmental Impact Report was required to address the impacts of increased groundwater extraction.

3.2 | To provide water service to this project the Draft EIR identifies the need for constructing additional wells. The City is also currently reviewing other projects for annexation which will result in additional increased demands for water and additional new wells. To date, based on the City of Dixon's environmental documents reviewed by LAFCO, this increase in groundwater extraction has not been previously analyzed. Based on the City of Vacaville's and SID's testimony before LAFCO, the EIR should fully discuss the potential impacts from increased groundwater extraction. A number of questions and issues have previously been raised by Dixon in the joint letter from Dixon, SID and Vacaville dated March 3, 1993, concerning the potential impacts and details of studies needed at the specific plan level.

ENVIRONMENTAL IMPACTS FROM ADDITIONAL GROUNDWATER EXTRACTION

Greg Werner, Director of Community Development for the City of Vacaville, testified before LAFCO that increased ground water extraction would have cumulative impacts on the Tehama formation water supply. He noted that CEQA has a mandatory finding that the project does not involve short term goals to the disadvantage of long-term environmental goals and that SID, Dixon and Vacaville have major concerns regarding the impacts of additional groundwater extraction on their agencies. He referenced section 15064(h) of the CEQA guidelines and noted that 1) there is a major public controversy regarding groundwater extraction on the part of neighbors and public agencies and 2) there is a disagreement between experts which requires the lead agency to treat the effect as significant. He believed that is very clear and that there was disagreement among experts between information in the English Hills Specific Plan Groundwater Investigation (January 1991) verses information and analysis by the City Consultants and SID and inhouse staff. He felt that was a potential effect on a great number of people served by the Tehama aquifer. He concluded it was very clear to him that an EIR was required to fully discuss and analyze this issue.

David Tompkins, Assistant Public Works Director for the City of Vacaville, in his testimony before LAFCO referenced several previous letters by the Cities of Vacaville and Dixon and SID which he believed supported the need for further environmental analysis of ground water extraction and supply. He noted that the pumping capacity of known pumpers not including private pumping from agriculture and commercial use (i.e. American Home Foods) exceeds the estimated safe yield of the Tehama formation identified in the English Hills EIR.

SID also raised issues which they believe require that environmental analysis of increased groundwater extraction. Bob Isaac noted that there are a number of agencies pumping from the Tehama formation. However, he stated that there has been no conclusive findings dealing with those capacities and how stable they are. He was concerned as to what impacts may occur from additional pumping and would like to see more discussion of this issue and an identification of the impact. He indicated that this was a joint concern of SID and the Cities of Dixon and Vacaville.

Tim O'Laughlin, attorney for SID, raised concerns regarding potential impacts from subsidence and upwelling of saline water. He stated that with regards to Vacaville, SID, and Cal water Service Co., the amount of withdrawal by these three entities on any average basis is not known and the maximum amount is not known and that their combined capacity exceeds the 16,400 acre ft. per year limit identified in the English Hills Specific Plan EIR.

Based on the issues raised from this testimony, both the City of Vacaville and SID concluded that an EIR was required to fully analyze and address these issues and potential impacts on increased groundwater extraction including cumulative impacts. Based on the testimony before LAFCO, the potential environmental impacts of the proposed wells should also be analyzed.

ANALYSIS OF GROUNDWATER IMPACTS

In responding to the Draft English Hills Specific Plan EIR, Ronald Tribbett, Public Works Director of the City of Dixon along with David Tompkins from the City of Vacaville, and Brice Bledsoe, from SID, prepared a joint letter dated March 5, 1993, raising a number of questions which they felt needed to be addressed to fully analyze impacts to groundwater supplies as part of a English Hills Specific Plan EIR. It is the position of the City of Dixon along with Vacaville and SID that these questions need to be answered and quantified as part of a groundwater study at a specific plan level of approval. Many of them would appear to be applicable to this project. They include and we quote:

1. "What formation is the shallow aquifer? The deep aquifer?
 - A. New alluvium;
 - B. Older alluvium;
 - C. Tehama:
 - (1) Upper;
 - (2) Middle;
 - (3) Lower."
2. "How deep and how thick is the Tehama Formation at I-505?"
3. "What is the extent of the Tehama Formation?"

4. "What studies or information are there to support the 'belief' it is hydraulically connected for 300-500 feet below the surface?"
5. "What is the connection between the shallow aquifer and the Putah Formation?"
6. "What is the connection between the shallow aquifer and the Putah Plain?"
7. "What is meant by younger alluvium?"
8. "Are the aquifers within the study area divided? What is the basis for the division?"
9. "What is the zone from 600-1000 feet called?"
10. "Where does this deep aquifer lie in the study area-North, South, East or West? It would be helpful to see it on a chart."
11. "A map showing location of wells, lots and geologic formation is a must for this type of DEIR (Specific Plan EIR)."
12. "Where in the study area does the Tehama Formation become an extensive source of freshwater--all the way west, or all the way east?"
13. "What is the water production ability of the "shallow aquifer of the Tehama formation...?"
14. "What is the rate of extraction within the shallow aquifer?"
15. "Why can't the report quantify extraction from the deep aquifer? Vacaville, Cal Water Service, City of Dixon, Vacaville, UC Davis and City of Davis have records that are public. If extraction is significantly above the 7,4000 acre feet as suspected, then perhaps additional extraction of 4,000 acre feet will severely affect existing users."
16. "Can this area support it's current need for groundwater?"
17. "Can this area support future projected growth?"
18. "If not, what is the shortfall (in acre feet)?"
19. "What is the current utilization of the assumed available yield of 16,640 AF of groundwater?"
20. "How much water is currently extracted from the local basins?"
21. "How may wells are currently located in the project area?"

22. "Please break down the wells in the project area by:
- A. Location;
 - B. Depth;
 - C. Extraction ;
 - D. Use:
 - (1) Domestic;
 - (2) Agricultural;
 - (3) Municipal;
 - (4) Industrial."
23. "Please identify the wells in the undifferentiated sedimentary rock strata."
24. "...how much does Sweeny Creek recharge the local groundwater basins? Please identify 'other creeks'. How much do the 'other creeks' recharge the local groundwater basins?"
24. "Where is the younger alluvium recharged from?"
26. "What is the percentage of recharge by factor?"
27. "Where is the Tehama recharged from?"
28. "What is the percentage of recharge by factor?"
29. "Does the shallow aquifer receive recharge from Putah Creek?"
30. "What is the percentage of recharge for the various factors?"
31. "What analysis has been done of the firm yield of the local groundwater basins?"
32. "Have any test wells been drilled? If no, why not?"
33. "How much groundwater is being pumped?"
34. "What do you mean by 'overdraft'?"
35. "If the elevation of the water table is reduced for one year, is that overdraft?"
36. "What is the correlation between increased development and declining water tables?"
37. "How does the drawdown of the groundwater affect:
- A. Those located in the eastern zone of the study area?
 - B. Those located outside the zone of study?"
38. "Leave aside the question of drawdown, how do the cones of depressions caused by pumping these existing wells affect:

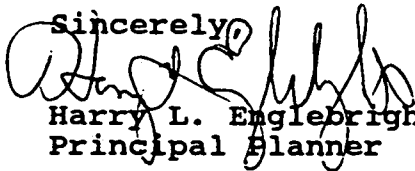
- A. Those located in the eastern zone of the study area;
- B. Those located outside the zone of study?"

39. "With water conservation and keeping the existing general land use designation, could the study areas's water demands be met?"

40. "Where are the proposed wells located?"

Again, thank for the opportunity to comment on the Draft EIR. We look forward to reviewing your groundwater analysis and your response to these comments and questions.

Sincerely,



Harry L. Englebright
Principal Planner

cc John E. Taylor, Executive Officer
County Counsel

HENORTHE.LET
ho#9; November 16, 1994

LETTER 3: LOCAL AGENCY FORMATION COMMISSION (11-16-94)

Comment 3.1: Lack of Comprehensive Infrastructure Plan

Since the City does not have a Comprehensive Annexation Plan and Urban Services Delivery Plan, LAFCo must review the City's ability to provide services on a case by case basis.

Response to Comment 3.1

Comment noted. The General Plan, recently adopted in 1993, serves as the City's Comprehensive Annexation Plan. The General Plan provides guidance for development over the next 15 years. The City is currently working with LAFCo to amend its Sphere of Influence to be consistent with the urban boundaries identified in the General Plan. The city is developing a comprehensive water study to deal with the issues of cumulative groundwater use.

Comment 3.2: Cumulative Impact on Groundwater

To date, based on the City of Dixon's environmental documents reviewed by LAFCo, this increase in groundwater extraction has not been previously analyzed. A number of questions and issues have previously been raised by Dixon in the joint letter from Dixon, SID and Vacaville dated March 5, 1993, concerning the potential impacts and details of studies needed at the specific plan level. The EIR should fully discuss the potential impacts from increased groundwater extraction. The specific points of concern are incorporated in the November 16, 1994 letter from LAFCo included in Appendix L.

Among the issues identified by LAFCo in reference to the comments provided by others in similar projects are:

- increased groundwater extraction would have cumulative impacts on the Tehama formation water supply;
- the pumping capacity of known pumpers not including private pumping from agricultural and commercial use (i.e. American Home Foods) exceeds the estimated safe yield of the Tehama formation identified in the English Hills EIR;
- potential impacts from continued groundwater use include subsidence and upwelling of saline water.

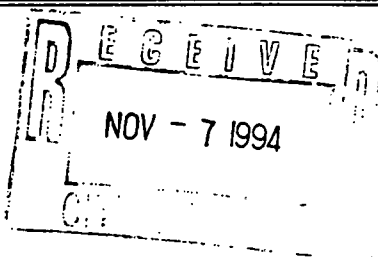
Response to Comment 3.2

See Response to Comment 2.3.

DEPARTMENT OF FISH AND GAME

REGION 2
1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CALIFORNIA 95670

(916) 355-7020



November 3, 1994

Mr. James Louie
Community Development Department
600 East A Street
Dixon, California 95620

Dear Mr. Louie:

The Department of Fish and Game (DFG) has reviewed the Draft Environmental Impact Report (EIR) for the Dixon Northeast Quadrant Specific Plan. This plan proposes to annex and develop to commercial, business-professional, industrial, and ancillary uses approximately 643 acres of land located adjacent to northeastern city limits of the city of Dixon in Solano County. The project is bounded by Pedrick Road on the east, Vaughn Road on the south, North First Street (State Highway 113) on the west, and Interstate 80 on the north. In addition, there is a 60-acre parcel adjacent to the east side of Pedrick Road in the northeast corner of area that is also, part of the project.

Present uses of the land include a livestock auction facility, Christmas tree farm (vacant), a trucking and maintenance operation, industrial fabrication/storage facility, and 11 residential structures along with intensive agriculture, which is the major use on this 643-acre site.

The discussion on surface water hydrology on pages 4-32/4-34, is not specific as to what method or combination of methods will be used to handle stormwater run-off. There is a statement at the end of the second paragraph on page 4-34 which says the project has the "option to retain all on-site drainage". But there is also discussion which alludes to the increase in downstream flows as a result of this project and improvements in downstream channels to accommodate these increased flows. The DFG recommends that projects be designed so they do not increase pre-project peak flows. If this project will result in downstream improvements, then this document must describe the impacts these improvements will have on the fish and wildlife and mitigate these impacts to less than significant.

4.1

Under section 4.5.3 ENVIRONMENTAL IMPACTS AND MITIGATION, starting on page 4-58, the discussion concerning this projects impacts on the 5.3-acre on-site seasonal freshwater marsh is ambiguous. None of the mitigation measures listed on page 4-59 are mitigation, but rather ways that mitigation might be accomplished if this project is to impact this seasonal wetland.

4.2

Mr. James Louie
November 3, 1994
Page Two

It should be noted that the U.S. Army Corps of Engineers' Section 404 of the Clean Water Act is a permitting Act covering all waters of the United States and as such may not protect wetlands considered important to DFG. As a Trustee Agency per CEQA, the DFG should be consulted for all impacts to wetland resources, including those outside the 100 year flood plan. Cumulative impacts from continued loss of wetlands of less than one acre is of concern to the Department. Impacts to wetland resources are given special consideration in the CEQA Guidelines (Sec. 15206 (b.) (5)) such that a project containing wetlands is considered of areawide significance. Cumulative impacts to smaller wetlands should be addressed in the EIR. Mitigation for impacts to riparian, seasonal, and permanent wetland habitat (including riparian vegetation) should be developed for DFG review prior to circulation of the revised EIR. This plan should provide for no-net-loss of wetland habitat value and acreage. The mitigation/compensation plan should include but may not be limited to:

1. Provisions for avoidance and protection of wetland vegetation to the greatest possible extent. Mitigation should include nonconstruction buffer areas adequate to protect the aquatic resource from degradation and disturbance. The DFG recommends a 50-foot minimum buffer area around intermittent watercourses, and a 100-foot minimum buffer area around permanent wetlands. These distances should be expanded to protect any associated riparian vegetation.
2. Unavoidable disturbance/removal of wetland vegetation (after examination of all feasible avoidance alternatives) should be compensated for so that no-net-loss of habitat value and acreage occurs. Pre-project habitat values should be quantified (acreage) and qualified (type and condition of vegetation). Habitat variables considered during the evaluation should include percent of canopy coverage, amount of shaded aquatic habitat, plant species diversity and dominance, levels of vegetative strata, seral (development) stage of the habitat, proximity of disturbance factors, special status plant species, wildlife species associated with the habitat, etc.
3. The wetland compensation and mitigation plan for unavoidably impacted wetlands should include proposed replacement ratios for individual plant species and/or canopy coverage for multi-trunked plants. Replacement ratios are dependent on seral (development) stage of disturbed vegetation/habitat versus seral stage of reestablished vegetation/habitat; types of vegetation

Mr. James Louie
November 3, 1994
Page Three

proposed for the compensation area; and the location of compensation area. The replacement ratio for on-site, in-kind compensation may be as low as 1:1 to accomplish no-net-loss of habitat value and acreage. Off-site, out-of-kind replacement ratios must be proportionately higher to provide similar habitat value.

In this same section under WILDLIFE RESOURCES, surveys for both the Swainson's hawk (Buteo swainsoni) and the California tiger salamander (Ambystoma californiense) are proposed as mitigation measures. Surveys do not qualify as mitigation as surveys do not lessen an impact caused by the project.

DFG would concur with mitigation measure B-E under Swainson's hawk if it read "Project proponents will participate in the Solano County-wide Habitat Management Plan".

In order to comply with Public Resources Code Section 21081.6, a detailed monitoring program must be developed for all required mitigation conditions. The monitoring program should include the following:

1. Specific criteria to measure the effectiveness of mitigation.
2. Annual monitoring for a minimum of five years.
3. Annual monitoring reports (submitted to the lead agency and the DFG), each of which include corrective recommendations that shall be implemented in order to ensure that mitigation efforts are successful.

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notification should be sent to this office.

This project will have an impact to fish and/or wildlife habitat. Assessment of fees under Public Resources Code Section 21089 and as defined by Fish and Game Code Section 711.4 is necessary. Fees are payable by project applicant upon filing of the Notice of Determination by the lead agency.

4.4

4.5

4.6

4.7

4.8

Mr. James Louie
November 3, 1994
Page Four

If we can be of further assistance, please contact
Mr. Roger Scoonover, Associate Wildlife Biologist, telephone
(916) 666-3407 or Ms. Cindy Chadwick, Environmental Services
Supervisor, telephone (916) 355-7030.

Sincerely,

A handwritten signature in cursive script that reads "Bruce Forman" followed by a small mark that looks like "for".

L. Ryan Broddrick
Regional Manager

cc: Ms. Cindy Chadwick
Department of Fish and Game
Rancho Cordova, California

Mr. Roger Scoonover
Department of Fish and Game
Rancho Cordova, California

LETTER 4: DEPARTMENT OF FISH AND GAME (11-3-94)

Comment 4.1: Impact of Off-Site Drainage Improvements

The discussion on surface water hydrology on pages 4-32 through 4-34, is not specific as to what method or combination of methods will be used to handle stormwater run-off. There is a statement at the end of the second paragraph on page 4-34 which says the project has the "option to retain all on-site drainage", but there is also discussion which alludes to the increase in downstream flows as a result of this project and improvements in downstream channels to accommodate these increased flows. The DFG recommends that projects be designed so they do not increase pre-project peak flows. If this project will result in downstream improvements, then this document must describe the impacts these improvements will have on the fish and wildlife and mitigate these impacts to less than significant.

Response to Comment 4.1

As a program-level document, it is not possible to assess construction-level impacts. The intent of the NQSP is that the pre-project flows will be detained on site in basins incorporated in the landscape and parking areas surrounding each building. Given the relatively low site coverage typical of the proposed land uses, the potential to accomplish on-site detention is considered feasible. Specific design of the detention basins cannot be provided in the absence of definitive building locations. Under the assumptions of this plan there will be no increase in pre-project flows.

When a specific development project is submitted to the City, the project will be required to submit a detailed drainage improvement plan. If that project proposes a drainage program that does not provide for pre-project flow detention on-site, the project will be required to provide a master drainage plan. The environmental effects of the drainage improvements will be evaluated at that time.

Comment 4.2: Statement on Mitigation Measures for Seasonal Freshwater Marsh

Under Section 4.5.3 Environmental Impacts and Mitigation, starting on page 4-58, the discussion concerning this project's impacts on the 5.3-acre on-site seasonal freshwater marsh is ambiguous. None of the mitigation measures listed on page 4-59 are mitigation, but rather ways that mitigation might be accomplished if the project is to impact this seasonal wetland.

Response to Comment 4.2

As a program-level document, it is not appropriate to assess construction-level impacts. The NQSP DEIR identifies where there is the potential for a significant environmental impact, such as the potential alteration of a seasonal freshwater marsh, and then identifies how the mitigation measure will need to be implemented through a subsequent construction level of analysis. Where there is currently insufficient data to make more than a speculative guess as to what the mitigation measure should be, it is the intent of the DEIR to define the parameters through which a future construction-level analysis will develop and/or implement a detailed mitigation measure. This includes describing the threshold the mitigation measure is to achieve and how it will be achieved and monitored.

A program EIR serves as a "first tier" document, with the formulation of details regarding site-specific issues deferred until later project EIRs or negative declarations are prepared. In such situations, the program EIR may properly focus on "broad policy alternatives and

program-wide mitigation measures," as well as "regional influences, secondary effects, cumulative impacts,... and other factors that apply to the program as a whole" (CEQA Guidelines, § 15168, subds. (b)(4)). The mitigation measure relative to the potential impact on the seasonal freshwater marsh is therefore consistent with CEQA requirements for a program EIR.

Comment 4.3: Impact on Seasonal Freshwater Marsh

The NQSP DEIR should provide for no-net-loss of wetland habitat value and acreage. Mitigation should include non-construction buffer areas adequate to protect the aquatic resource from degradation and disturbance. The DFG recommends a 50-foot minimum buffer area around intermittent watercourses and a 100-foot minimum buffer around permanent wetlands. These distances should be expanded to protect any associated riparian vegetation. The wetland compensation and mitigation plan for unavoidably impacted wetlands should include proposed replacement ratios for individual plant species and/or canopy coverage for multi-trunked plants. Replacement ratios are dependent on seral (development) stage of disturbed vegetation/habitat versus seral stage of reestablished vegetation/habitat; types of vegetation proposed for the compensation area; and the location of compensation area. The replacement ratio for on-site, in-kind compensation may be as low as 1:1 to accomplish no-net-loss of habitat values and acreage. Off-site, out-of-kind replacement ratios must be proportionately higher to provide similar habitat value.

Response to Comment 4.3

Comment noted. Impact B-3 on pages 4-58 and 4-59 and Cumulative Impact B-8 of Section 4.5, Biological Resources, have been amended as follows:

SEASONAL FRESHWATER MARSH

Impact B-3: Project will result in the alteration of a seasonal freshwater marsh.

Implementation of the proposed project may alter the present on-site 5.3-acre seasonal freshwater marsh. Degradation or fill of this habitat may be subject to Section 404 of the Clean Water Act and Section 1603 of the DFG Streambed Alteration Code. A detailed wetland delineation should be conducted to precisely define wetland boundaries and acreages.

Significance: Significant

Mitigation Measure B-A: Prior to the issuance of improvement or development approvals by the City, a detailed wetland delineation should be conducted to precisely define seasonal wetland boundaries and acreage. Habitat values should also be qualified by type and condition of vegetation.

Mitigation Measure B-B: Prior to the issuance of improvement or development approvals by the City, a chain link fence, or acceptable alternative, shall be installed around the seasonal wetland area. The fencing should not be removed until the completion of construction activities. Written release from the

City Planning Department must be received prior to the removal of any fencing.

Mitigation Measure **B-A-C**: Where practicable, the wetlands area should be avoided through land use planning.

Mitigation Measure **B-B-D**: Preserved wetlands area should be protected from development by a **50-foot** buffer or easement, so that the **seasonal** wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjacent proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.

In general, the following standards shall apply to the buffer and preserved wetlands area:

- All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetlands area.
- No mowing shall be allowed to occur in a wetland easement.
- Surface water runoff from any paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.

Mitigation Measure **B-C-E**: If the removal or total destruction of the marshland area is unavoidable as a result of the project, after examination of all feasible avoidance alternatives, it may be required that the impacted wetland be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.

Residual Significance: Less than significant

4.5.4 CUMULATIVE IMPACTS

Impact B-8: Project will contribute to a cumulative loss of seasonal freshwater marsh.

Cumulative development in the Dixon area would result in the conversion of seasonal freshwater marshes and wetlands. The project's potential loss of 5.3 acres of seasonal freshwater marsh habitat is only a small part of cumulative losses. However, the Corps of Engineers and DFG require a minimum of a 1:1 replacement ratio if protected wetlands are disturbed or destroyed by development, resulting in no-net-loss of habitat value and acreage.

Significance: Less than significant

Comment 4.4: Impact on Swainson's Hawk and California Tiger Salamander

Surveys for both the Swainson's hawk (*Buteo swainsoni*) and the California tiger salamander (*Ambystoma californiense*) are proposed as mitigation measures. Surveys do not qualify as mitigation as surveys do not lessen an impact caused by the project.

Response to Comment 4.4

Surveys for each of these species are required in order to determine what the mitigation measure shall be. Therefore, the mitigation measure is the threshold established for the future construction-level analysis, and the survey is the requirement needed to determine what the construction-level mitigation measure shall be.

The Northeast Quadrant Specific Plan Draft EIR calls for mitigation measures for habitat modification of various animal species, including the Swainson's hawk (Impact B-5), California tiger salamander (Impact B-6), the disturbance of foraging habitat to the northern harrier, black-shouldered kite, and tri-colored blackbird (Impact B-7), and the cumulative disturbance of Swainson's hawk habitat (Impact B-9).

The Northeast Quadrant Specific Plan EIR is a Program EIR under Section 15168 of CEQA. A Program EIR may be prepared on a series of actions that can be characterized as one large project and are related either: geographically; as a logical part in the chain of contemplated actions; in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As identified in Section 15146 of CEQA, the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR. An EIR on a construction level project will necessarily be more detailed in specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance (or in this case, a specific plan) because the effects of the construction can be predicted with greater accuracy.

As a Program EIR, a detailed biological analysis was not conducted, but would be anticipated with the subsequent "construction-level" analysis. Therefore, the extent of the exact biological mitigation measures cannot be determined at this time. The purpose of the mitigation measures identified was to indicate the process required for this project to proceed and to identify the range of mitigation measures that could be required to reduce significant impacts to a less-than-significant level.

CEQA requires a mandatory finding of significance if impacts to threatened or endangered species are likely to occur (Section 21001(c), 21083. Guidelines 15380, 15064, 150650). Avoidance or mitigation must be presented to reduce impacts to a less than significant level.

The DEIR identifies potential mitigation measures that will meet the requirements of CEQA and the recommendations of the California Department of Fish and Game (DFG). Key to the Biological Resources mitigation measures are that breeding survey shall be conducted in order to determine if the species nest on the project site, and to develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. The potential mitigation measures also identified that future development shall participate in

a County-wide Habitat Management Plan. Whether the imposition of a mitigation measure relative to habitat modification is a "taking" under state law, is a legal question and not an environmental question.

What the DEIR may not have clearly communicated is that additional steps will be required to determine the appropriate action to be implemented before the development of the project can proceed.

Impacts B-5 through B-7 and B-9, on pages 4-60 and 4-61 OF Section 4.5, Biological Resources, have been amended as follows:

SWAINSON'S HAWK

Impact B-5: Disturbance to Swainson's hawk habitat.

Implementation of the proposed project would convert approximately 460 acres of potential foraging habitat for the state-listed Swainson's hawk to development.

Because the project site is located within a 10-mile radius of multiple Swainson's hawk nest sites, the DFG may consider construction within the project area a significant impact to Swainson's hawk foraging habitat. The DFG considers foraging habitat "necessary to maintain the reproductive effort" and its destruction may be classified as a "take" under the California Endangered Species Act (CESA).

For additional information on Swainson's hawk, please refer to Appendix G of the Technical Appendices which contains the DFG's current Draft Mitigation Guidelines for Swainson's Hawk in the Central Valley of California.

Significance: Significant

Mitigation Measure B-D: The following mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a breeding survey shall be conducted between April and July in order to:

- Determine if the species nests on the project site;
- To develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.

Mitigation Measure B-E: Future development Project proponents shall participate in a County-wide Habitat Management Plan as appropriate. Also, the Dixon General Plan Update EIR's mitigation measure for wildlife impact requires developer participation in a Habitat Mitigation Plan.

Residual Significance: Less than significant

TIGER SALAMANDER

Impact B-6: Project may cause a disturbance to California tiger salamander habitat.

The wetlands area on the project site is potential habitat for the California tiger salamander, and the species is known to occur in the Dixon area.

Significance: Significant

Mitigation Measure B-F: No tiger salamanders were observed to occupy the wetland area of the project site during the field surveys. However, the following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented.

The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a field survey shall be conducted during the spring months in order to:

- Determine if the species occurs on the project site;
- To develop appropriate mitigation measures.

Residual Significance: Less than significant

Impact B-7: Project may result in a disturbance to habitat of the northern harrier, black-shouldered kite and tri-colored blackbird.

Development of the proposed project would eliminate the potential foraging habitat for other special status bird species including the northern harrier, black-shouldered kite and tri-colored blackbird. However, these species were not observed foraging on the project site during the field surveys.

Significance: Potentially significant

Mitigation Measure B-G: The following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, Future development- project proponents shall participate in a County-wide Habitat Management Plan addressing the loss of potential foraging habitat as appropriate.

Residual Significance: Less than significant

Impact B-9:

Project will contribute to a cumulative disturbance to Swainson's hawk habitat.

Cumulative development would further disturb the breeding habitat of the Swainson's hawk, thereby contributing to the reduction of its population. The proposed project is located in part of the Swainson's hawk breeding range.

However, ~~The~~ the DFG recommends development projects which impact the species habitat to enter into an agreement to ensure adequate mitigation. This may be accomplished through a 1:1 replacement ratio of land to be dedicated as Swainson's hawk foraging habitat, or through participation in a DFG County-wide Habitat Management Plan (CHMP) with other development projects or in other methods recommended by DFG. The actual mitigation measure required will be determined through the subsequent construction-level analysis for this project. Therefore, the implementation of mitigation measures B-D and B-E will minimize the cumulative loss to Swainson's hawk foraging habitat to a less than significant level.

Significance:

Less than significant

Comment 4.5: Solano County-Wide Habitat Management Plan

DFG would concur with mitigation measure B-E under Swainson's Hawk if it read "Project proponents will participate in the Solano County-wide Habitat Management Plan".

Response to Comment 4.5

Comment noted. See Response to Comment 4.4.

Comment 4.6: Monitoring Program

In order to comply with Public Resources Code Section 21081.6, a detailed monitoring program must be developed for all required mitigation conditions. The monitoring program should include the following:

1. Specific criteria to measure the effectiveness of mitigation.
2. Annual monitoring for the minimum of five years.
3. Annual monitoring reports (submitted to the lead agency and the DFG), each of which include corrective recommendations that shall be implemented in order to ensure that mitigation efforts are successful.

Response to Comment 4.6

A draft mitigation monitoring program is included in Appendix D of the DEIR. A final mitigation monitoring program will be prepared after the FEIR is certified.

Comment 4.7: Notification of DFG

Pursuant to Public Resources Code Section 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notification should be sent to this office.

Response to Comment 4.7

Comment noted.

Comment 4.8: Fees

This project will have an impact to fish and/or wildlife habitat. Assessment of fees under Public Resources Code Section 21089 and as defined by Fish and game Code Section 711.4 is necessary. Fees are payable by project applicants upon filing of the Notice of Determination by the lead agency.

Response to Comment 4.8

Comment noted.

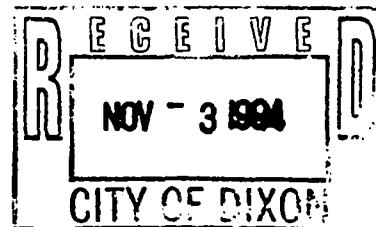
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MICHAEL A. HACKARD
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JOHN J. SPANGLER
NICHOLAS J. CAMMAROTA

October 18, 1994



Planning Commission
City of Dixon
600 East A Street
Dixon, California 95616

Re: Comments on the Northeast Quadrant Specific Plan Draft EIR

Dear Members of the Planning Commission:

The Northeast Quadrant Specific Plan Draft EIR calls for mitigation measures for habitat modification of various animal species. These species are protected by the federal or state endangered species acts. Of the species studied, the Swainson Hawk is state-listed as a "threatened", though not endangered, species. The EIR states that no evidence of protected species were found on the properties in the Northeast Quadrant.

The California Department of Fish & Game ("DFG") is charged with enforcing both the California and federal endangered species acts. Modification of habitat used by a protected species has been considered a taking¹ of an endangered species ("take") by DFG. Hence, the EIR requires that for every acre of land developed, the project applicants must buy one acre of land, give it to DFG, and further, the applicant must maintain the property in perpetuity.²

¹ See 16 U.S.C. 1532. This section defines take as harassment, harm, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting, or any attempts to engage in such conduct.

² The requirement that the project applicants acquire and dedicate land to the government is a different kind of "take" (see Amendments 5 and 14 to the U.S. Constitution and similar provisions in the California Constitution) from that discussed herein generally. However, the project applicants object to this requirement on these grounds also, i.e., that it violates their right to just compensation for property taken for public use. Further, a 1:1 replacement requirement is a perversion of the plain meaning of the California Endangered Species Act which provides that "it is the intent of the Legislature, consistent with conserving the species, to acquire lands for habitat for these species." (Emphasis added). California Fish & Game Code section 2052. "Acquire" implies that the subject of the action, the Legislature, intends to

HACKARD & HOLT

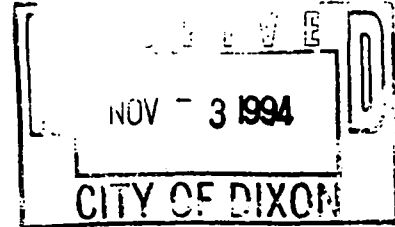
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JOHN J. SPANGLER
NICHOLAS J. CAMMAROTA

October 31, 1994



Planning Commission
City of Dixon
600 East A Street
Dixon, California 95616

Re: Comments on the Northeast Quadrant Specific Plan Draft EIR

Dear Members of the Planning Commission:

It has been brought to my attention that the letter I submitted at the October 18, 1994, Planning Commission public hearing on the Northeast Quadrant Specific Plan Draft EIR, was a preliminary draft. Herewith please find the final draft. I have not attached the two exhibits with this version because they have already been submitted with the preliminary draft. The exhibits should be read in conjunction with the final draft. I apologize for any confusion this may have caused.

Very truly yours,

Nick J. Cammarota

Enclosure

cc: Jim Louie (w/enclosure)
Wade & Associates (w/enclosure)

NJC/LMC
esa.12

DFG is pursuing a policy which requires mitigation for any land developed within a 10 mile radius of a Swainson Hawk nest. This is an area encompassing more than 200,000 acres per nest. According to DFG, there are 550 nests in California. The area required to be set aside for the Swainson Hawk totals 110 million acres, an area 10% larger than the entire state of California. Further, it is worth noting that only 15,000 acres per nest is necessary, according to DFG's 1992 letter contained in the EIR.

On March 11 of this year the case of Sweet Home Chapter of Communities for a Great Oregon v. Bruce Babbitt, Secretary of the Interior, 17 F.3d 1463,³ ("Sweet Home") was decided. This case removed DFG's power to require mitigation in cases where the only impact on the protected species is habitat modification.

Sweet Home stands for the proposition that habitat modification can not be considered a "take" of an endangered species. In Sweet Home, the court reasoned that Congress, in passing the Endangered Species Act, considered specifically whether habitat modification should be considered a take. During the legislative process, "habitat modification" was removed from the act. Since habitat modification was not part of the definition of "take" in the final form of the act, it is contrary to legislative intent to construe habitat modification as a "take". Prior to this decision, habitat modification had been treated as a take pursuant to a Fish and Wildlife Service regulation defining "harm"⁴. Sweet Home prevents the agency from accomplishing, through its internal regulations, what it could not accomplish under the law.

Sweet Home was further supported by a recent opinion of the Legislative Counsel of California.⁵ The Legislative Counsel applied Sweet Home to the California Endangered Species Act (the "California Act") and in

act on its own and to pay for it. Indeed, California Fish & Game code section 2061 provide for a regulated taking only "in the *extraordinary* case where population pressures within a given ecosystem cannot be otherwise relieved." (Emphasis added). Section 2061 also indicates that a species mere status as threatened or endangered is not enough to be classified as an extraordinary case.

³ A copy of this case is attached hereto as Exhibit A and incorporated herein by this reference.

⁴ Pursuant to 16 U.S.C. 1538(a)(1)(B).

⁵ Legislative Counsel Of California, Opinion #19094, May 19, 1994, a copy of which is attached hereto as Exhibit B. The Legislative Counsel's Office is a department of the state of California. The Office is made up of attorney's who draft laws and bills and advise the members of the legislature on legal matters. This opinion was drafted at the request of Assemblyman Curt Pringle.

particular to the Swainson Hawk's habitat.⁶ The Legislative Counsel reasoned that since the California Act's definition of "take"⁷, is more narrow than the federal version and does not include the terms "harm" or "harass", habitat modification can not be considered a take pursuant to the California Act:

However, it is our opinion that a "taking" is limited to the actual or attempted hunting, pursuing, catching, capturing, or killing of a species and that loss of habitat or disturbances of nesting pairs of Swainson's Hawks does not constitute an actual or attempted taking under the act (see Sweet Home Chapter v. Babbitt (D.C. Cir.), 17 F. 3d 1463).

* * *

Further support for this conclusion is based upon the fact that the Legislature has defined the term "take" in the act in a different manner than the Congress has defined that term in the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 and following). Under the federal act, the term "take" is defined to include "harm" and "harass" (16 U.S.C. Sec. 1532(19)), whereas the definition of "take" in the act does not include those additional factors. The term "harm" has been interpreted by the federal Fish and Wildlife Service to encompass any significant habitat modification that leads to an injury to an endangered species of wildlife (50 C.F.R. 17.3). It is a general rule of statutory construction that "[w]hen a statute, with reference to one subject, contains a given provision, the omission of such a provision from a similar statute concerning a related subject ... is significant to show that a different intention existed" (Anthony v. Superior Court, 109 Cal. App. 3d 346, 355-356). Thus, we think that by defining "take" in the act in a different manner than the Congress has used in the federal Endangered Species Act of 1973, the Legislature intended to exclude habitat modification from the definition of that term.

Legislative Counsel Of California, Opinion #19094, May 19, 1994, pp. 6-8.

⁶ Based on the reasoning of the Legislative Counsel's opinion, there is no reason to limit the opinion to the Swainson Hawk.

⁷ California Fish & Game Code section 86. For purposes of the act, "take" is defined by Section 86 as follows: "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The Legislative Counsel puts forth another reason which precludes construing habitat modification as a take. Such an interpretation necessarily usurps the power of the lead agency and is contrary to the statutory scheme of the California Act:

The department's role in situations where a project may lead to loss of habitat is limited, under Section 2090, to issuing a written finding to a state lead agency. The guidelines interfere with the authority of a state lead agency, after consultation with the department under Section 2090, to approve a project that results in loss of habitat or disturbances of nesting pairs of Swainson's Hawks that may jeopardize the continued existence of the species (subds. (a) and (b), Sec. 2092), short of resulting in extinction of the species (subd. (c), Sec. 2092).

Stated somewhat differently, the guidelines elevate the role of the department in the CEQA analysis from consultative to determinative. That is, by equating habitat modification under Section 2090 to a taking under Section 2080, the determination delegated to the department by Section 2090 becomes, in effect, authority for the department to prohibit a project when it finds a loss of habitat or disturbance of a nesting pair of Swainson's Hawks, contrary to the authority granted to the state lead agency pursuant to Section 2092 to approve a project notwithstanding the detrimental impact of the project on the species short of causing its extinction. "[I]t is fundamental in our law that an administrative agency may not, under the guise of its rule-making power, abridge or enlarge its authority or act beyond the powers given to it by the statute which is the source of its power ..." (Kerr's Catering Service v. Department of Industrial Relations, 57 Cal. 2d 319, 329-330). Furthermore, "administrative regulations that alter or amend the statute or enlarge or impair its scope are void and courts not only may, but it is their obligation to strike down such regulations ..." (Morris v. Williams, 67 Cal. 2d 733, 748; citations omitted). Rules and regulations in conflict with the authorizing statute are void (Oddo v. Hedde, 101 Cal. App. 2d 375, 388). It is our opinion that the enlargement of the scope of the department's authority in the guidelines is in conflict with the authorizing statute and is, to that extent, void.

Legislative Counsel Of California, Opinion #19094, May 19, 1994, pp. 6-7.

The California Act section 2092 provides authority for the Dixon Planning Commission and City Council to approve a project despite a finding by DFG

that the project will result in loss of habitat. If the loss of habitat is treated as a "take", DFG will have veto power over the project, thereby taking this decision away from the Dixon Planning Commission and City Council. This will take control over land use decisions away from local government and the community and give it to a state agency.

The Legislative Counsel concluded:

We conclude, therefore, that the term "take," as defined by the California Endangered Species Act, does not include habitat modification or other acts that might indirectly harm the Swainson's Hawk. However, whenever the Department of Fish and Game consults with a state lead agency with respect to a proposed project subject to the California Environmental Quality Act, as discussed above, the department is required to issue a written finding based on its determination of whether a proposed project would jeopardize the continued existence of the Swainson's Hawk or result in the destruction or adverse modification of habitat essential to the continued existence of that species.

Legislative Counsel Of California, Opinion #19094, May 19, 1994, p. 8.

Even though DFG is required to issue a written finding as to whether a project will result in adverse modification of habitat essential to the continued existence of the Swainson Hawk, it may not veto a project or require a mitigation measure solely for habitat modification.

5.1

CEQA section 21004 provides that a public agency may exercise only those express or implied powers provided by law in mitigating or avoiding significant effects.⁸ Thus, DFG does not have the authority to require this mitigation, whether acting to enforce the federal or the state act. Therefore, I respectfully request that you change the EIR to reflect the Sweet Home decision and these comments.

5.2

Additionally, the EIR references two underground storage tanks on the Auction Yard property. These tanks have been removed under the supervision of Solano County Department of Environmental Management. Soil samples below the tanks were taken and the lab results were clean. Therefore, the mitigation measures in this regard are unnecessary.

⁸ A statute should be interpreted with reference to the whole system of law of which it is a part (People v. Cominaore, 20 Cal. 3d 142, 147) and should be construed so as to harmonize, if possible, with other laws relating to the same subject (Isobe v. Unemployment Ins. Appeals Bd., 12 Cal. 3d 584, 590-591).

Finally, forcing the project applicant to buy replacement land as a mitigation measure is not feasible.⁹ The applicant is prepared to show¹⁰ infeasibility and will submit supporting materials to the City of Dixon prior to the close of the public comment period.

Very truly yours,



Nick J. Cammarota

⁹ CEQA section 21061.1 (which has been adopted by the California Endangered Species Act - see California Fish & Game Code section 2063) provides that "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Only feasible mitigation measures may be imposed on a project. CEQA section 21002 and 21002.1(b).

¹⁰ Pursuant to CEQA section 21160.

Letter #5- Hackard & Holt (10-18-94)
Letter #6- Hackard & Holt (11-14-94)
Letter #7- Hackard & Holt (11-17-94)

This series of letters from Hackard & Holt deal with the same issues. In the interest of clarity these letters are gathered together to address each topic in a cohesive manner.

LETTER 5: HACKARD & HOLT, ATTORNEYS AT LAW (10-18-94)

Comment 5.1: Swainson's Hawk Mitigation vis DFG Authority

Even though DFG is required to issue written findings to whether a project will result in adverse modification of habitat essential to the continued existence of the Swainson's hawk, it may not veto a project or require a mitigation measure solely for habitat modification.

CEQA Section 21004 provides that a public agency may exercise only those express or implied powers provided by law in mitigating or avoiding significant effects. Thus, DFG does not have the authority to require this mitigation measure solely for habitat modification.

Response to Comment 5.1:

The role of DFG in the preparation of the DEIR is that of a "trustee agency". A trustee agency is defined as "a state agency having jurisdiction by law over natural resources affected by projects which are held in trust for the people of California." (CEQA Guidelines §15386). For projects requiring EIRs, trustee agencies are consulted both as regards to the proper "scope" of the EIR and as to the substance of the draft EIR. The DFG does not have veto power over the project through CEQA, but rather, is in an advisory role to review and comment on the draft EIR. Any mitigation measures provided by DFG are recommendations. It is the role of the lead agency, in this case the City of Dixon, to determine what is an appropriate mitigation measure or to determine if the project should be approved. The role of DFG is advisory. However, DFG can take legal actions if it feels an EIR does not meet the legal requirements of CEQA to mitigate significant environmental impacts.

Comment 5.2: Underground Storage Tanks on Auction Yard Property

The EIR references two underground storage tanks on the Auction Yard property. These tanks have been removed under the supervision of Solano County Department of Environmental Management. Soil samples below the tanks were taken and the lab results were clean. Therefore, the mitigation measures in this regard are unnecessary.

Response to Comment 5.2

Page 4-142 of the DEIR will be revised as follows:

UNDERGROUND STORAGE TANKS

Impact PH-1: Underground storage tanks presently exist on the project site.

~~Implementation of the proposed project would create the need to condemn existing land uses occurring on site including the Dixon Livestock Auction Yard. The auction yard contains two underground fuel storage tanks that may be approximately 40-years old. In addition, the fuel storage tanks that were removed from the~~

~~Bartholomew Enterprises site in 1985 might have contaminated the soil beneath the project site. These tanks may have leaked which might have caused contamination to the soil and/or.~~

The two underground storage tanks on the Auction Yard property have been removed under the supervision of Solano County Department of Environmental Management. Soil samples below the tanks were taken and the lab results indicate no contamination of soils.

~~Significance: _____ Significant~~

Significance: Less than significant

~~Mitigation Measure PH-A: A qualified geotechnical engineer shall excavate existing tanks and inspect the areas where tanks have been previously removed. Soil samples shall be taken from the base of the excavations and analyzed for contamination. If contaminants are found, additional sampling shall be required to determine the extent of the contamination and how it will be remediated (excavation, removal and/or venting). If it is found in the base of the excavation or in bore holes, the CRWQCB may require the installation and sampling of one or more monitoring wells. If contamination is identified and the levels of contaminants do not appear to decrease over time, remediation of the may also be required.~~

None required.

Residual Significance: Less than significant

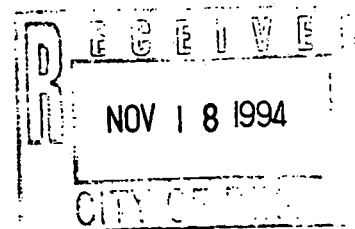
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November 14, 1994



VIA CERTIFIED MAIL

Planning Commission
City of Dixon
600 East A Street
Dixon, California 95616

Re: Comments on the Northeast Quadrant Specific Plan Draft EIR

Dear Members of the Planning Commission:

I am submitting these comments to supplement those I transmitted to you on October 31, 1994 which were dated October 18, 1994.

These comments discuss first the legislative history of the California Endangered Species Act, particularly those sections bearing on the meaning of "take" and its relation to habitat modification. Second, mitigation measures required under CEQA for habitat modification, only apply to actions by a state lead agency, not a local lead agency. And finally, cities and counties are exempt from the consultation requirements of California Fish and Game Code¹ section 2090. The conclusion of these comments is the same as those previously submitted², i.e., there is no legal authority to require mitigation measures for habitat modification in the Northeast Quadrant.

The courts have repeatedly explained, "The intent of the Legislature is the end and aim of all statutory construction." Title Ins. & Trust Co. v. County of Riverside, 48 Cal. 3d 84, 95 (1989); Al-Sal Oil Co. v. State Bd. of Equalization, 232 Cal. App. 3d 969, 976 (1991). Therefore, the intent of the

¹ Unless otherwise specified, all references are to the California Fish and Game Code.

² However, the project applicants do not intend to render null and void any other comments it has already made. For example, project applicants still maintain that to prevent development of the Northeast Quadrant or alternatively, to require replacement land, is a regulatory taking pursuant to the Takings Clause of the U.S. Constitution, similar provisions of the California Constitution and case law such as Dolan v. City of Tigard, 114 S. Ct 2309 (1994) and its predecessors.

Legislature is a fitting and proper beginning point for a determination of the whether habitat modification may be construed as a take.

In this case, that intent is clear: the history of the "take" prohibition in California law, the legislative history of the Act, the language of the Act itself, and a comparison of the terms of the Act with the federal Endangered Species Act all compel the conclusion that the term "take" in the Act does not include habitat modification or other acts that might indirectly harm a state-listed species.³ The term "take" as used in the Act encompasses only an actual or attempted killing, wounding or capturing of a member of the species. In addition, the consultation requirements of Fish and Game Code section 2090 apply only to state agencies, and they do not apply to cities and counties.

I.

THE LEGISLATIVE HISTORY AND THE TEXT OF THE ACT
DEMONSTRATE THAT THE LEGISLATURE MEANT THE TERM
"TAKE" TO INCLUDE ONLY AN ACTUAL OR ATTEMPTED
KILLING, WOUNDING, OR CAPTURING
OF A MEMBER OF A LISTED SPECIES.

A. Historically. The Definition Of "Take" In The Fish
And Game Code Was Limited And Applied Only To
Activities That Directly Killed Wounded Or
Captured Fish Or Game. Or Attempted To Do So.

The protection of threatened or endangered species is a relatively recent addition to the California Fish and Game Code. For example, in 1933 the California Legislature enacted the Fish and Game Code which then provided that it was unlawful to "take" any fish or game, except as provided in the Fish and Game Code itself or pursuant to regulations adopted by the Fish and Game Commission ("the Commission"). Stats. 1933, Chap. 780, §450. "Take" was then defined only as including acts that directly affected fish or wildlife, such as to possess, hunt, pursue, catch, capture, kill, or attempt to do any of those acts. Id. at §2(e).

In 1957, the Legislature enacted a revised Fish and Game Code. In that revision, the Legislature revised and recodified the statutory prohibition against the "taking" of any "bird, mammal, fish, reptile, or amphibian" except as provided in the Fish and Game Code or regulations adopted by the Commission. Fish and Game Code §2000. In that revision, the Legislature also enacted the current language of Fish and Game Code section 86 which defines "take" as meaning "hunt, pursue, catch, capture, or kill, or attempt to

³ These comments are intended to apply to the impact of any and all protected species.

hunt, pursue, catch, capture, or kill." That definition has remained unchanged since 1957.

It was not until 1970 that the Legislature enacted the first statutory provisions dealing with protection of threatened or endangered species. Stats. 1970, Ch. 1510. That legislation provided that "[n]o person shall import into this state, or take, possess, or sell within this state, any bird, mammal, fish, amphibia, or reptile, or any part or product thereof, that the commission determines to be an endangered animal or rare animal, except as otherwise provided in this chapter." Former Section 2052; Stats. 1080, Ch. 1510, §3. That legislation did not vary the existing definition of "take" and it thus incorporated the definition derived from the 1933 legislation.

As a result, the interpretation of "take" in Section 86 is one that cannot be divorced from a historical context in which protections for threatened or endangered species had not yet been codified: as originally enacted the "take" prohibition had nothing to do with current notions of protecting fish and game by protecting against loss of habitat or against other possible indirect harm.

That historical context necessarily provides some limits in current interpretation of Section 86, for whether that provision should be amended to reflect different concepts of indirect harm such as modification or destruction of habitat is a question for the Legislature, rather than one for statutory interpretation. People v. Dillon, 34 Cal. 3d 441, 463 (1983); People v. Russell, 22 Cal. App. 3d 330, 335 (1971).

B. The Legislative History And The Text Of The Act Demonstrate That The Term "take" Does Not Include Habitat Modification Or Other Acts That Might Indirectly Harm A State-Listed Species.

In addition to the historical derivation and context of the definition of "take" in the Fish and Game Code, the legislative history of the Act indicates that the Legislature expressly considered language which would have codified a broader definition, but rejected it. That fact is of great significance because of the long-recognized principle of statutory construction that where the Legislature explicitly rejects a specific provision, the legislation may not properly be construed to include it.

Moreover, the Legislature also considered and enacted several sections as part of the Act that explicitly distinguish between habitat modification and "taking." That action is also of great significance because of the equally long-recognized rule of statutory construction that such differences in wording must be presumed to be deliberate and to have a difference in meaning.

1. The Legislature Considered, But Rejected An Expansive Definition Of "Take."

The 1984 California Endangered Species Act was a composite of two legislative bills: Assembly Bill 3270 authored by Assembly Member Campbell, and Assembly Bill 3309 by Assembly Member Costa. For purposes of this analysis, AB 3309 is the most important since it alone explicitly addressed the question of the definition of "take."

As first introduced on February 16, 1984, AB 3309 did not propose a definition of "take" different from that found in Section 86. Instead, it would have amended then-Section 2052 to protect "endangered species, threatened species, or species of special concern," and to specify that "[n]o person shall import into this state, or take, possess, purchase, or sell within this state" any such species. Thus, as originally introduced, AB 3309 would have applied the historical definition of "take" to the new protections which would be provided for threatened or endangered species.

However, the proposed legislation soon took a new form. On April 23, 1984, AB 3309 was amended. In its amended form, it would have repealed the 1970 legislation dealing with threatened or endangered species, and instead would have enacted a completely new California Endangered Species Act. As part of that April 23, 1984 amendment, the bill would have enacted two significant protections for threatened or endangered species:

1. First, with exceptions not pertinent here, it would have enacted a new section providing that

"[n]o person shall import into this state, or take, possess, purchase or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts" (Id, §2075)⁴

2. Second, it would have enacted a completely new section of law that more broadly defined "take":

⁴ The prohibition against "taking" a listed species is now found in Section 2080, in a slightly different form:

"No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of this code), or in the California Desert Native Plants Act (Division 23 (commencing with Section 70500) of the Food and Agricultural Code)."

"Take' means take as defined in Section 86. 'Take' also means to harass harm shoot. wound destroy. trap or collect a species. or to attempt any of those acts." (Id., §2066)(emphasis added)⁵

Thus, for the first time, the Legislature proposed expansion of the definition of take beyond the definition derived from the 1933 legislation. As the Department of Fish and Game itself noted in a bill analysis dated June 26, 1984, AB 3309, as so amended, included "an expansion of the definition of the term `take' to include actions not currently defined in Section 86." In that same analysis, the Department declared that under current law, "[s]hort of fee acquisition of private lands or interest therein for refuges and reserves, the Department has no direct authority to protect the habitat of endangered or rare species."

However, on August 6, 1984, AB 3309 was again amended, and the proposed new definition of "take" was deleted from the bill. As finally enacted and signed into law, the Act contains no new definition of "take," and the prohibition against the "take" of a listed species now found in Section 2080 thus incorporates the definition found in Section 86. Dep't of Fish & Game v. Cottonwood Irr. District, 8 Cal. App. 4th 1554, 1562 n.6 (1992).

That legislative history is highly significant. The Legislature considered a broader definition of "take" which would have included harassing or harming a listed species, in addition to the existing language prohibiting "take" through activities that directly affected fish or wildlife. However, by the amendment of AB 3309 on August 6, the Legislature explicitly rejected that broader definition. That legislative action is highly probative that the Legislature did not intend the statutory prohibition against "taking" a listed species to go beyond direct affects, because of the long-established rule of legislative construction that

"[t]he fact that the Legislature chose to omit a provision from the final version of a statute which was included in an earlier version constitute strong evidence that the act as adopted should not be construed to incorporate the original provision." (Central Delta Water Agency v. State Water Resources Control Board, 17 Cal. App. 4th 621, 634 (1993))

As another court explained,

⁵ The definition of "take" included in the April 23, 1984 amendment would have almost exactly paralleled the definition of "take" in the federal Endangered Species Act. That Act defines "take" as meaning "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. §1532(19).

"[w]e cannot now insert in the statute [a provision] expressly rejected by the Legislature. To do so would not be interpreting the legislative intent but would be a gross example of judicial legislation in contravention of the legislative intent logically implied from the rejection by the Legislature of an identical provision.'" (Western Land Office, Inc. v. Cervantes, 175 Cal. App. 3d 724, 741 (1985)(quoting People v. Brannont, 32 Cal. App. 3d 971, 977 (1973))⁶

Indeed, that rule applies with special force here. Even before the amendment of AB 3309 to include the language virtually identical to the "take" prohibition in the federal Endangered Species Act, the United States Fish and Wildlife Service had defined "harm" in the federal definition as encompassing "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. §17.3 (46 Fed. Reg. 54,748, November 4, 1981). Thus, the Legislature's action rejected not only the broader definition proposed by the April 23, 1984 amendment, but the expansive gloss previously placed on that language by the Fish and Wildlife Service.

2. The Text Of The Act Demonstrates That The Term "Take" Does Not Include Habitat Modification Or Other Acts That Might Indirectly Harm A State-Listed Species.

As finally enacted into law, the Act imposes certain obligations on state lead agencies under the California Environmental Quality Act ("CEQA"). In particular, Section 2090(b) now specifies that when the Department consults with a state lead agency under CEQA:

"the department shall issue a written finding based on its determination of whether a proposed project would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of the species. The written finding shall also include the department's determination of whether a proposed project would result in any taking of an endangered species or a threatened species incidental to the proposed project...." (emphasis added)

⁶ That rule has been repeatedly and consistently expressed by the California courts. E.g., Wilson v. City of Laguna Beach, 6 Cal. App. 4th 543, 555 (1992)(such rejection is "most persuasive"); Crispin v. Kizer, 226 Cal. App. 3d 498, 514 (1990)(same); Ford Motor Co. v. County of Tulare 145 Cal App. 3d 688, 692 (1983)(same).

Section 2091 further specifies that if jeopardy is found

“the department shall determine and specify to the state lead agency reasonable and prudent alternatives consistent with conserving the species which would prevent jeopardy to the continued existence of the species or the destruction or adverse modification of the habitat essential to the continued existence of the species....” (emphasis added)

Section 2090 thus explicitly distinguishes between a determination and a written finding by the department whether a proposed project would, on the one hand, “result in the destruction or adverse modification of habitat essential to the continued existence of the species” and also, on the other, whether it “would result in any taking of an endangered species or a threatened species incidental to the proposed project.”

There would have been no need whatsoever for the Legislature to specify the two required findings if the first finding of “destruction or adverse modification of habitat essential to the continued existence of the species” by definition would also necessarily include a determination that a “taking” had occurred. In other words, the Legislature obviously viewed the two determinations as separate issues, and not as part of the single issue whether a “taking” had occurred.

That reading of the statute is compelled by yet another familiar principle of statutory construction:

“It is an elementary rule of construction that effect must be given, if possible, to every word, clause, and sentence of a statute.” A statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant, and so that one section will not destroy another unless the provision is the result of obvious mistake or error.” (Rodriguez v. Superior Court,¹⁴ Cal. App. 4th 1260, 1269 (1993)(quoting 2A Sutherland, Statutory Construction (5th ed. 1992) §226.06))⁷

⁷ In other words, where reasonably possible, courts will avoid statutory constructions that “render particular provisions superfluous or unnecessary.” Dix v. Superior Court 53 Cal. 3d 442, 459 (1991).

“Courts should construe all provisions of a statute together, significance being given—if possible—to every word, phrase, sentence, and part of an act in pursuance of the legislative purpose....” And thus, in attempting to ascertain the intent of the Legislature, no part or provision of a statute should be rendered useless or deprived of meaning.” (Guelfi v. Marin County Employees' Retirement Ass'n, 145 Cal. App. 3d 297, 305 (1983))

Construing the "take" prohibition as including adverse habitat modification would contravene that principle, since it would make the last sentence of Section 2090(b) meaningless.

Moreover, the references to habitat modification in Sections 2090 and 2091 also demonstrate beyond any doubt that the Legislature knew how to provide protection against such modification for threatened or endangered species. That it did not do so explicitly in the definition of "take" is conclusive evidence that it did not intend the term "take" to include such modification: "[w]here the Legislature has carefully employed a term or phrase in one place and has excluded it in another, it should not be implied where excluded." California Radioactive Materials Management Forum v. Dep't of Health Services, 15 Cal. App. 4th 841, 857 (1993). As the Court explained in the Radioactive Materials case, in language particularly analogous here, "we find it inconceivable that the Legislature would have chosen such an abstruse and ambiguous means" of expressing its intent in light of its use of clear and unambiguous language in the other provisions.

Put differently,

"Where the Legislature uses different language in similar statutory provisions, it is presumed that it did so advertently and had a different legislative intent with regard to each provision." (Interinsurance Exchange v. Spectrum Investment Corp., 209 Cal. App. 3d 1243, 1258 (1989))

We should also note that there are numerous other references to habitat modification in the Act. For example, Section 2051 contains legislative findings, including the finding that certain species of fish, wildlife and plants are in danger of or threatened with extinction in part "because their habitats are threatened with destruction, adverse modification, or severe curtailment" Section 2052 contains an additional finding that "it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat and that it is the intent of the Legislature, consistent with conserving the species, to acquire lands for habitat for these species." Section 2053 likewise finds that

"is the policy of the state that state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

Finally, the definition of "endangered species" in Section 2062 refers to

"a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

Each of these additional sections thus also demonstrates that the Legislature knew how to refer to habitat modification or habitat protection when appropriate.

It might be suggested that, in light of the legislative concerns about habitat modification expressed in these sections, the statutory prohibition against "taking" a listed species ought to be interpreted broadly to encompass habitat modification. But, all of the legislative history and text of the Act discussed above is to the contrary, and, in fact, other legislative history makes clear that habitat protection was an obligation imposed only on state lead agencies under CEQA, and was not an obligation imposed by the prohibition against "taking" a listed species.

The legislative history of AB 3309 makes clear that the primary purpose of the bill was the imposition of new obligations on state agencies. For example, the very first legislative analysis of AB 3309 was prepared for the Assembly Committee on Water, Parks and Wildlife, chaired by the bill's author Assembly Member Costa. That analysis discussed only state agency obligations and did not refer to the "take" prohibition at all:

"Analysis: This bill would clarify and strengthen the California Endangered Species Act by incorporating key provisions and concepts of the federal Endangered Species Act into state law. AB 3309 provides a coordinated approach to the protection of endangered species through formalizing the consultation process required under existing law pursuant to the California Environmental Quality Act. This process would ensure that a state action is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of a species habitat.

Specifically, AB 3309 would:

- * Clarify the responsibility of the Department of Fish and Game with respect to the consultation process required under existing law....
- * Clarify state lead agency responsibility and authority with respect to endangered species and their habitat...

STAFF COMMENTS

Patterned largely after Section 7 of the federal Endangered Species Act, this bill would ensure that a state action would not jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of a species habitat." (emphasis added and underlining deleted)

The Assembly Third Reading Analysis of the bill likewise refers only to state agency obligations.⁸

The analysis for the Senate Committee on Natural Resources, the Senate policy committee that considered the bill, also focused on the CEQA obligations of state lead agencies:

"This bill would . . . [r]equire the Department of Fish and Game to participate in state lead agency consultation under CEQA where a proposed project would jeopardize the continued existence of a threatened or endangered species or cause adverse habitat modification." (emphasis added)⁹

In light of this legislative history, there is no inconsistency between the legislative concern for habitat protection expressed in the sections of the Act noted above and the conclusion that the prohibition against "taking" a listed species does not include habitat modification. The Legislature clearly intended its references to habitat protection or habitat modification to refer to and be enforceable only through state lead agency obligations under CEQA, and not through the prohibition against "taking" a listed species.

⁸ That analysis noted that

"This bill: . . .

ii) Prohibits the importation, possession or sale of any threatened or endangered species, including plants.

b) Requires state lead agencies to incorporate measures that the Department of Fish and Game (DFG) determines are reasonable and prudent to conserve a species or its habitat in any project that would jeopardize the existence of a threatened or endangered species or its habitat." (emphasis added and in original)

⁹ Other legislative history is similar. E.g., Department of Fish and Game Bill Analysis, dated June 26, 1984; Assembly Water, Parks and Wildlife Committee Minority Report, dated June 12, 1984; Legislative Analyst's Analysis, dated July 2, 1984; Legislative Analyst's Analysis, dated August 8, 1984; Department of Finance Analysis, dated August 9, 1984; Senate Democratic Caucus Analysis, dated August 22, 1984.

That conclusion is supported by the Court of Appeals recent decision in Sweet Home Chapter v. Babbitt, 17 F.3d 1463 (D.C. Gr. 1994). The court there invalidated a United States Fish and Wildlife Service regulation defining "harm" within the "take" prohibition of the federal Endangered Species Act as including adverse habitat modification. Like the state Act, the federal Act refers in many instances to habitat modification. The court nonetheless rejected the claim that those references supported the conclusion that the federal prohibition against "take" should be construed broadly to encompass habitat modification:

"The structure and history of the Act confirm this reading. The ESA pursues its conservation purposes through three basic mechanisms: (1) a federal land acquisition program . . . (2) the imposition of strict obligations on federal agencies to avoid adverse impacts on endangered species . . . and (3) a prohibition on the taking of endangered species by anybody.... The Act addresses habitat preservation in two ways—the federal land acquisition program and the directive to federal agencies to avoid adverse impacts. The latter frames the duty in terms that the Service has now transposed to the private anti-`take' provision: every such agency is to `insure that any action authorized, funded, or carried out by the agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical', unless an exemption is granted.... Thus, on a specific segment of society, the federal government, the Act imposes very broad burdens, including the avoidance of adverse habitat modifications; on a broad segment, every person, it imposes relatively narrow ones.

The legislative history reflects this balance, and confirms the intention to assign the primary task of habitat preservation to the government." (17 F.3d at 1466 (emphasis in original))

Precisely the same analysis applies to interpretation of the California Endangered Species Act. The Sweet Home analysis is especially persuasive since, as noted above, that Act was modeled in large part on concepts from the federal Act.

II.

THE LEGISLATURE CONSCIOUSLY DEFINED "TAKE" DIFFERENTLY FROM THE DEFINITION OF "TAKE" IN THE FEDERAL ENDANGERED SPECIES ACT, AND IT MUST THEREFORE BE GIVEN A DIFFERENT INTERPRETATION THAN THE INTERPRETATION UNDER FEDERAL LAW.

As noted earlier, "take" in the federal Endangered Species Act is defined as meaning "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. §1532(19). That definition is thus more expansive than the state law definition of the same term. And as also noted, the United States Fish and Wildlife Service has interpreted the word "harm" in the federal definition of "take" as including any significant habitat modification that leads to an injury to an endangered species of wildlife. 50 C.F.R. §17.3.¹⁰

Nonetheless, as previously described, the expansive federal law definition which had been included in AB 3309 on April 23, 1984 was explicitly rejected by the Legislature and removed from the legislation, and the final text of the "take" provision of the Act thus differs quite substantially from that found in the federal Act.

As a result, any interpretation of the federal Act as encompassing protection against habitat modification is not controlling. Wildlife Alive v. Chickering 18 Cal. 3d 190, 201-02 (1976)(even though CEQA was modeled after the National Environmental Policy Act ("NEPA"), the functional equivalency standard of NEPA is not part of CEQA in light of the substantial differences in language of CEQA: "Federal judicial interpretations of NEPA are relevant to our consideration only to the extent that the provisions of NEPA may be fairly said to parallel CEQA").

Indeed, the opposite conclusion must be drawn, since the Legislature was obviously aware of the federal definition of "take" but nonetheless explicitly rejected it.¹¹ The Legislature explicitly decided against including the federal definition as part of state law, and under those circumstances such "[c]hanges in wording and phraseology are presumed to have been deliberately made" (Estate of Simpson, 43 Cal. 2d 594, 600 (1954)) and a

¹⁰ As discussed, the Court of Appeals for the District of Columbia Circuit invalidated that regulation. Sweet Home Chapter v. Babbitt, 17 F.3d 1463. The project applicants agree with the Sweet Home analysis, and the reasoning of that case provides further support for the conclusion that the even more limited language of the California "take" provision cannot properly be interpreted to include habitat modification. Obviously, if even the more expansive definition of "take" in the federal Act does not encompass habitat modification, the narrower version in the state Act cannot.

¹¹ As noted earlier, the expanded definition of "take" that was included in the April 23, 1984 amendments to AB 3309 would have resulted in a definition of "take" that would have paralleled the federal definition almost exactly.

different legislative intent must therefore be presumed. Williams v. County of San Joaquin, 225 Cal. App. 3d 1326, 1332-33 (1990).¹²

III.

CITIES AND COUNTIES ARE EXEMPT FROM THE FORMAL CONSULTATION REQUIREMENTS OF FISH AND GAME CODE SECTION 2090.

Section 2090, as discussed above, imposed new Endangered Species Act requirements on the Department when it consults with "state lead agencies" under CEQA. The term "state agency," however, has a defined meaning both under the Act and under CEQA, and it does not include cities and counties.

Fish and Game Code section 2065 explicitly defines "state lead agency" as "the state agency, board, or commission which is a lead agency" under CEQA. In turn, CEQA (Public Resources Code section 21063) defines "public agency" very broadly, as including "any state agency, board, or commission" as well as "any county, city and county, [or] city." And, Public Resources Code section 21062 defines "local agency" as "any public agency other than a state agency, board or commission." (Emphasis added). Hence, by definition cities and counties are local agencies, rather than state agencies, and they thus are exempt from the consultation requirements of the Act applicable to "state lead agencies."

That reading is confirmed by the legislative history of the Act. As the Senate Committee on Natural Resources analysis of AB 3309 declared:

"The bill would expressly require the Department to consult, pursuant to the existing procedures of the California Environmental Quality Act, with any state lead agency which has the principal responsibility under CEQA for carrying out or approving a project which might have a significant effect upon the environment. The Department would be required to determine whether a proposed project would jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of the species' habitat. No consultation with a local government lead agency under CEQA would be required." (emphasis in original)¹³

¹² That rule too has been repeatedly applied in other cases.. E.g., Garat v. City of Riverside, 2 Cal. App. 4th 259, 296 (1991); Lawler v. City of Redding 7 Cal. App. 4th 778, 282-83 (1992)("the Legislature's intent . . . must have been different").

¹³ Other legislative history also supports that conclusion. E.g., Assembly Committee on Water, Parks and Wildlife analysis of AB 3309, dated April 24, 1994 ("this bill would ensure that a state action would not jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of a species habitat"

A legislative analysis of AB 3309 prepared by the Department of Fish and Game, dated June 26, 1984, confirms that point, since it notes that the consultation requirements of the legislation "constitute[] a significant improvement in the degree of protection afforded endangered (and threatened) species. However, as proposed, it applies only to state agency actions subject to CEQA." (Emphasis added).

We very much appreciate the opportunity to make these additional comments. If you have any questions or concerns, please telephone me.

Very truly yours,



Nick J. Cammarota

cc: Jim Louie
David Wade

NJC:lmc
NJC//L.

(emphasis added)); Legislative Analyst's Analysis of AB 3309, dated July 2, 1984 (referring to "[p]otential unknown costs to the General Fund and special funds for state agencies to provide additional mitigation measures for construction, development, or acquisition projects" but only to "[p]otential minor enforcement costs; not state-reimbursable" for local agencies).

LETTER 6: HACKARD & HOLT, ATTORNEYS AT LAW (11-14-94)

Comment 6.1: Mitigation for Habitat Modification

Mitigation measures required under CEQA for habitat modification only apply to actions by a state lead agency, not a local lead agency. Cities and counties are exempt from the consultation requirements of California Fish and Game Code Section 2090. There is no legal authority to require mitigation measures for habitat modification in the Northeast Quadrant.

Response to Comment 6.1

Comment noted. See Response to Comment 5.1.

HACKARD & HOLT

ATTORNEYS AT LAW

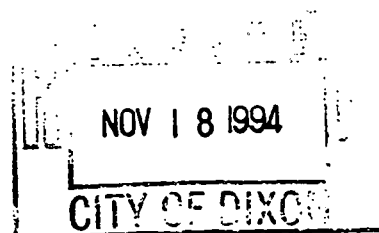
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MICHAEL A. HACKARD
THEODORE J. HOLT
JOHN J. SPANGLER
NICHOLAS J. CAMMAROTA

CONFIDENTIAL

November 17, 1994



VIA FEDERAL EXPRESS

Jim Louie
City of Dixon
600 East A Street
Dixon, California 95616

Re: Confidentiality of and Comments on the
Northeast Quadrant Specific Plan Draft EIR

Dear Mr. Louie:

As you are aware, I have submitted comments on the Northeast Quadrant Specific Plan Draft EIR on behalf of the project applicants. My prior comments are those dated November 14, October 31, and October 18, 1994. In my comments of October 18, 1994, I mentioned that I would be submitting comments which demonstrate the infeasibility of the mitigation measures which the Draft EIR places on the project. The purpose of these comments is to do just that.

Before entering into the following discussion, certain facts will be disclosed including economic, commercial, marketing and financial information that is confidential information or is proprietary in nature. This information gives the project applicant an opportunity to obtain a business advantage over competitors who do not know or use it. If this information were to become public, it would have a grave financial impact on the project applicants. Therefore, the project applicants consider this confidential information a "trade secret" pursuant to California Government Code section 6254.7 and respectfully request, pursuant to California Public Resources Code section 21160, that this confidential information be disclosed only to members of the Planning Commission of the City of Dixon, and the EIR consultant,

David Wade. California Public Resources Code section 21160 provides that such information "shall not be included in the impact report or otherwise disclosed by any public agency". California Public Resources Code section 21160 would similarly apply to the members of the Planning Commission and to Mr. Wade. By disclosing this information, the project applicants do not waive their right to privacy as provided for pursuant to the state and federal constitutions. If for some reason it becomes necessary to disclose this information to any other person or entity, please seek written permission from the project applicants by a request addressed to me at the above address.

California Public Resources Code section 21002 and 21002.1(b) provides that only feasible mitigation measures may be imposed on a project. California Public Resources Code section 21061.1 provides that "Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account *economic*, environmental, social, and technological factors." (Emphasis added). Economic feasibility is determined by whether the project will make a reasonable profit.

7.1

**(Confidential or proprietary information
deleted at author's request.)**

We very much appreciate your cooperation in keeping this information confidential. If you have any questions or concerns, or if you need additional information regarding this matter, please telephone me.

Very truly yours,



Nick J. Cammarota

ENCLOSURE

LETTER 7: HACKARD & HOLT, ATTORNEYS AT LAW (11-17-94)

Comment 7.1: Economic Feasibility of Proposed Mitigation Measures

California Public Resources Code Section 21002 and 21002.1 (b) provides that only feasible mitigation measures may be imposed on a project. California Public Resources Code Section 21061.1 provides that "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Economic feasibility is determined by whether the project will make a reasonable profit.

Response to Comment 7.1

The specific mitigation measure required in association with the loss of wildlife habitat has not been determined; however, thresholds have been defined for future project implementation to achieve. This will be determined when a specific project is proposed, a detailed Swainson's hawk breeding survey is conducted and the appropriate mitigation measure is defined. Therefore, at this time, it does not seem reasonable to conclude that the mitigation is "not feasible". When the project level environmental analysis is prepared, if it is determined that a mitigation measure is not economically feasible, the decision makers will be required to make such a finding and consider the preparation of a statement of overriding consideration pertinent to a significant and unavoidable impact.

Section 15093 of CEQA requires that decision makers balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. If the benefits of a proposed project outweighs the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable".

It is the role of the lead agency to determine whether a mitigation measure is unfeasible. In this case, the Dixon City Council, not the preparer of the EIR, will need to make the finding that a mitigation measure is unfeasible based on economic considerations. If this finding is made and substantiated in the public record, the EIR will need to be certified with a statement of overriding consideration with regards to the loss of Swainson's hawk habitat. This would be an allowed action under CEQA.

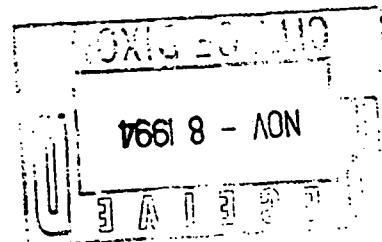
State of California

MEMORANDUM

To: Project Coordinator
Resources Agency

Date: November 3, 1994

Mr. Jim Louie
Planning Department
City of Dixon
600 East "A" Street
Dixon, CA 95620



From: Department of Conservation
Governmental and Environmental Relations

Subject: Draft Environmental Impact Report (DEIR) for the Northeast Quadrant Specific Plan -
SCH# 92113073

The Department of Conservation has reviewed the Draft Environmental Impact Report (DEIR) for the Northeast Quadrant Specific Plan. Approximately 643 acres of prime agricultural land will be converted to urban uses. The site is currently used for production of row crops, walnut orchards, hay and alfalfa. Sixty acres of the site is enrolled in the Williamson Act. The Department has special expertise in agricultural land conservation and in hydrocarbon production, conservation, and production safety.

Agricultural Land Conservation

The Department's Office of Land Conservation monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act. The Office notes the following comments.

The DEIR identifies the loss of currently productive prime agricultural land as significant and unavoidable. While the types of agricultural commodities produced have been identified, we suggest that an additional assessment of the impacts of farmland conversion through use of economic multipliers. The University of California Cooperative Extension's study, "Economic Impacts of Agricultural Production and Processing in Stanislaus County", can be used as a model. This study can be obtained from the Stanislaus County Extension Service, 733 County Center #3 Court, Modesto, CA 95355 (209-525-6654).

8.1

The DEIR notes that a Williamson Act contract exists on sixty (60) acres of the site. If annexation is approved, removal of the contracted land from the Agricultural Preserve by the City of Dixon would have the effect of initiating the nonrenewal process (Government Code Section 51236). If Williamson Act contract cancellation is sought before completion of the nonrenewal process, the City Council must make specific findings in order to approve tentative contract cancellation (Government Code Section 51282). As a general rule, land can be withdrawn from Williamson Act contract only through the nine-year nonrenewal process. Cancellation is reserved for "extraordinary" situations (See Sierra Club v. City of Hayward (1981) 28 Cal.3d 840, 852-855).

8.2

Government Code Section 51284 states that no contract may be canceled until after the County has given notice of and has held a public hearing on the matter. Notice of the hearing and a copy of the landowner's petition for cancellation must be mailed to the Director of the Department of Conservation ten working days prior to the hearing on tentative cancellation.

Mitigation measures and alternatives that would lessen farmland conversion impacts should be addressed pursuant to Public Resources Code Section 21081.6. Some mitigation possibilities include:

- Directing urban growth to lower quality soils in order to protect prime agricultural land.
- Adopting a farmland protection program utilizing land use planning tools such as transfer of development rights, purchase of development rights or conservation easements, and land trusts.

8.3

Oil and Gas Issues

8.4 | The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) offers the following comments. Presently, there are two plugged and abandoned dry-holes, one plugged and abandoned gas well, and one gas well proposed to be drilled within the project boundaries. For your convenience, attached is a copy of the map shown on page 4-7 of the document with the approximate location of the four wells plotted.

8.5 | If any structure is to be located over or in the proximity of a previously plugged and abandoned well(s), the well(s) may require plugging to current Division specifications. Section 3208.1 of the Public Resources Code authorizes the State Oil and Gas Supervisor to order the reabandonment of any previously plugged and abandoned well when construction of any structure over or in the proximity of the well could result in a hazard. The cost of reabandonment operations is the responsibility of the owner of the property upon which the structure will be located. Furthermore, if any plugged and abandoned or unrecorded wells are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office in Sacramento must be contacted to obtain information on the requirements for and approval to perform remedial operations.

Written approval from the Supervisor is required prior to drilling, reworking, injecting into, plugging, or abandoning any well. Prior to commencing operations, the project applicant must consult with the Division's district office in Sacramento to obtain information on the wells, requirements, and approval to conduct any of the work mentioned above.

8.6 | The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote. However, we suggest that a diligent effort be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system should be placed over the well.

8.7 | Also, the potential for future hydrocarbon exploration should be considered. Access should be maintained for future exploration and potential oil and gas development. Establishing open areas, such as drilling islands, is one method of allowing for potential exploratory drilling.

If you have any questions, please contact me (916-445-8733), Ken Trott for land conservation issues at (916)324-0864, or Bob Reid for oil and gas issues at (916) 322-1110.


Jason Marshall
Environmental Analyst

Attachment

cc: Bob Reid, Division of Oil, Gas, and Geothermal Resources, Sacramento
Mike Stettner, Division of Oil, Gas, and Geothermal Resources, Sacramento

LETTER 8: STATE OF CALIFORNIA - RESOURCES AGENCY (11-3-94)

Comment 8.1: Economic Effect of Agricultural Land Conversion

The DEIR identifies the loss of currently productive prime agricultural land as significant and unavoidable. While the types of agricultural commodities produced have been identified, we suggest an additional assessment of the impacts of farmland conversion through use of economic multipliers.

Response to Comment 8.1

Economic information is not required under CEQA regulation (Section 15131), and was not requested through the EIR scoping process. Therefore, an economic analysis of the conversion of farmland is not appropriate at this time and will not be incorporated as part of the final EIR.

Comment 8.2: Williamson Act Contract

The DEIR notes that a Williamson Act contract exists on sixty (60) acres of the site. If annexation is approved, removal of the contracted land from the Agricultural Preserve by the City of Dixon would have the effect of initiating the nonrenewal process (Government Code Section 51236). If Williamson Act contract cancellation is sought before completion of the nonrenewal process, the City Council must make specific findings in order to approve tentative contract cancellation (Government Code Section 51282). As a general rule, land can be withdrawn from Williamson Act contract only through the nine-year nonrenewal process. Cancellation is reserved for "extraordinary" situations (See Sierra Club v. City of Hayward (1981) 28 Cal.3d 840, 582-855).

Response to Comment 8.2

Comment noted. It is not proposed as part of this project to remove land from Williamson Act contract. The potential for the property owner to remove the property from the contract through the non-renewal process is in effect irrespective of the proposed project.

Comment 8.3: Farmland Conversion

Mitigation measures and alternatives that would lessen farmland conversion impacts should be addressed pursuant to Public Resources Code Section 21081.6. Some mitigation possibilities include:

- Directing urban growth to lower quality soils in order to protect prime agricultural land.
- Adopting a farmland protection program utilizing land use planning tools such as transfer of development rights, purchase of development rights or conservation easements, and land trusts.

Response to Comment 8.3

Comment noted. These mitigation measures are more appropriately directed toward a city's general plan. (The proposed NQSP is consistent with the Dixon General Plan.) Therefore, it would not be appropriate to include these mitigation measures a part of the specific plan or mitigation monitoring program.

Comment 8.4: Existing and Proposed Gas Well Sites

The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) offers the following comments. Presently, there are two plugged and abandoned dry-holes, one plugged and abandoned gas well, and one gas well proposed to be drilled within the project boundaries.

Response to Comment 8.4

Comment noted. See Response to Comment 8.5.

Comment 8.5: Plugging Wells

If any structure is to be located over, or in the proximity of, a previously plugged and abandoned well(s), the well(s) may require plugging to current Division specifications. Section 3208.1 of the Public Resources Code authorizes the State Oil and Gas Supervisor to order the reabandonment of any previously plugged and abandoned well when construction of any structure over, or in the proximity of, the well could result in a hazard. The cost of reabandonment operations is the responsibility of the owner of the property upon which the structure will be located. Furthermore, if any plugged and abandoned or unrecorded wells are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office in Sacramento must be contacted to obtain information on the requirements for an approval to perform remedial operations.

Response to Comment 8.5

Comment noted. The following text will be added to the environmental setting of Section 4.11, Public Health and Safety, page 4-142.

OIL AND GAS ISSUES

Presently, there are two plugged and abandoned dry-holes, one plugged and abandoned gas well, and one gas well proposed to be drilled within the project boundaries. Figure 4.11.1 shows the approximate location of the four wells.

If any structure is to be located over, or in the proximity of, a previously plugged and abandoned well(s), the well(s) may require plugging to current Division specifications. Section 3208.1 of the Public Resources Code authorizes the State Oil and Gas Supervisor to order the reabandonment of any previously plugged and abandoned well when construction of any structure over or in the proximity of the well could result in a hazard. The cost of reabandonment operations is the responsibility of the owner of the property upon which the structure will be located. Furthermore, if any plugged and abandoned or unrecorded wells are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office in Sacramento must be contacted to obtain information on the requirements for and approval to perform remedial operations.

Written approval from the Supervisor is required prior to drilling, reworking, injecting into, plugging, or abandoning any well. Prior to commencing operations, the project applicant must consult with the Division's district office in Sacramento

to obtain information on the wells, requirements, and approval to conduct any of the work mentioned above.

Comment 8.6: Avoidance of Existing Plugged Wells

The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote. However, we suggest that a diligent effort be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system should be placed over the well.

Response to Comment 8.6

Comment noted. The text of the draft EIR will be changed in Section 4.11, Public Health and Safety (Environmental Impacts and Mitigations) on page 4-144 as follows:

PRESENCE OF OIL AND GAS WELLS

Impact PH-5: The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote, but should none the less be considered.

Significance: Significant

Mitigation Measure PH-E: Diligent effort shall be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system shall be placed over the well.

Residual Significance: Less than significant

Comment 8.7: Future Drilling Exploration

Also, the potential for future hydrocarbon exploration should be considered. Access should be maintained for future exploration and potential oil and gas development. Establishing open areas, such as drilling islands, is one method of allowing for potential exploratory drilling.

Response to Comment 8.7

Comment noted. The proposed business park will not be an appropriate location for future hydrocarbon exploration. Thus, access for drilling islands is not considered appropriate for this specific plan.

SOLANO COUNTY
 TRANSPORTATION DEPARTMENT
 333 Sunset Avenue
 Suite 230
 Suisun City, California 94585
 Telephone (707) 421-6060



JOHN GRAY
 DIRECTOR
 RECEIVED
 NOV 17 1994

November 14, 1994

Mr. Jim Louie
 City of Dixon
 600 East "A" Street
 Dixon, CA 95620

Dear Mr. Louie:

SUBJECT: Draft EIR for the Northeast Quadrant Specific Plan

The Transportation Department has reviewed the Draft Environmental Impact Report for the Northeast Quadrant Specific Plan and have prepared the following comments:

TRAFFIC:

Comparing traffic volumes from Figures 4.7.2 and 4.7.7, the peak hourly volumes on Pedrick Road south of Vaughn Road, and Vaughn Road east of Pedrick Road will change as follows:

	Current		Current plus Project	
	AM	PM	AM	PM
Pedrick Road (northbound)	78	61	376	315
Pedrick Road (southbound)	67	81	277	436
Vaughn Road (eastbound)	15	20	74	131
Vaughn Road (west bound)	14	22	113	107

Based on these figures, the project will be increasing traffic volumes on those County roads by a factor of four to eight times. Pedrick and Vaughn Roads are narrow low volume roads, suitable for low traffic volumes. The increase in traffic volumes created by this project is a significant impact.

To mitigate this impact, the following measures are required:

1. Further study should be performed to determine the average daily traffic at present plus project conditions, for Pedrick and Vaughn roads in addition to other county roads which will be significantly impacted. The county road system in the area should be fully studied to determine whether the project will increase traffic on Dixon Avenue East, Midway Road, and other county roads which feed Pedrick and Vaughn Roads.

2. The EIR should include an inventory of existing conditions for Solano County roads which may be affected by the project, including pavement width and structural section.

9.2

3. When reviewing the possible impacts on County roads, the report should address the adequacy of the County roads to safely support the proposed traffic (with reference to the existing pavement and shoulder width), as well as the structural capacity (with reference to the existing pavement structural section and condition).

9.3

4. The project shall provide for the improvement of all impacted portions of county roads, including Pedrick and Vaughn Roads. The roads shall be improved to the Solano County Road Improvement Standards. Intersection improvements shall also be addressed.

DRAINAGE:

Existing drainage patterns are inadequate to accommodate existing run-offs. The increased run-off onto the unincorporated areas is therefore unacceptable. Additional drainage from the proposed development will only compound an existing deficient condition. The draft report does not address the existing conditions or recommend mitigation for the increased run-off. The draft report shall include a master drainage plan delineating:

9.4

1. What additional facilities will be required to mitigate the increased run-off.
2. Who will be responsible for the construction of these facilities and the time line in relation to the construction of the development.
3. Who is responsible for the maintenance of these facilities.
4. Who is to fund the costs of the facilities.

ANNEXATION:

The Transportation Department requires cities to annex the entire frontage of County roads abutting developments within their jurisdiction.

9.5

1. Pedrick Road shall be annexed, from I-80 south including the Vaughn Road intersection.
2. Vaughn Road shall be annexed, from North First Street east including the Pedrick Road intersection.

Sincerely,



Claire C. Hawkins
Survey & Land Development Supervisor

**LETTER 9: SOLANO COUNTY TRANSPORTATION DEPARTMENT
(11-14-94)**

Comment 9.1: Pedrick and Vaughn Road Traffic Volumes

Comparing traffic volumes from Figures 4.7.2 and 4.7.7, the peak hourly volumes on Pedrick Road south of Vaughn Road, and Vaughn Road east of Pedrick Road will increase by a factor of four to eight times. Pedrick and Vaughn Roads are narrow low volume roads, suitable for low traffic volumes. The increase in traffic volumes created by this project is a significant impact.

The County road system in the area should be fully studied, including average daily traffic volumes, to determine whether the project will increase traffic on Dixon Avenue East, Midway Road, and other County roads which feed Pedrick and Vaughn Roads.

Response to Comment 9.1

The project will contribute to a cumulative increase in traffic on the surrounding street system that will require improvements as the project incrementally adds traffic over a period of years. This situation lends itself to a cooperative approach between the City and County to develop a regional traffic improvement program. Such a program will require identification of needed improvements and a reasonable cost sharing approach.

The following information will be added to page 4-103, Section 4.7.5, Transportation, Circulation and Access.

4.7.5 CUMULATIVE IMPACTS-WITH PROJECT

Impact T-13: Project could contribute to a cumulative increase in average daily traffic on County roads adjacent to the site.

The project is demonstrated to increase peak hour traffic on adjacent County roads. The average daily traffic may contribute to a cumulative increase in traffic that will require improvements to County roads as the project incrementally adds traffic over a period of years.

Significance: Significant

Mitigation Measure T-U A master traffic improvement plan shall be prepared for the City and County roads around the City. The improvement plan will identify:

- 1. What additional facilities will be required to mitigate the increased traffic**
- 2. Responsibility and time line for construction of these facilities.**
- 3. Responsibility for the maintenance of these facilities.**

4. Funding the costs of the facilities.

Residual Significance: Less than significant

Comment 9.2: Inventory of Existing Conditions on County Roads

The EIR should include an inventory of existing conditions for Solano County roads which may be affected by the project, including pavement widths and structural sections.

When reviewing the possible impacts on County roads, the report should address the adequacy of the County road to safely support the proposed traffic) with reference to the existing pavement and shoulder width), as well as the structural capacity (with reference to the existing pavement structural section and conditions).

Response to Comment 9.2

Refer to Response to Comment 9.1. The information recommended in this comment would be included in the preparation of a City/County master traffic improvement plan.

Comment 9.3: Impact to County Roads

The project shall provide for the improvement of all impacted portions of the County roads, including Pedrick and Vaughn Roads. The roads shall be improved to the Solano County Road Improvement Standards. Intersection improvements shall also be addressed.

Response to Comment 9.3

Refer to Response to Comment 9.1. The information recommended in this comment would be included in the preparation of a City/County master traffic improvement plan.

Comment 9.4: Off-site Drainage

The increased run-off onto the unincorporated areas is unacceptable because existing drainage patterns are inadequate to accommodate existing run-offs. The draft report does not address the existing conditions or recommend mitigation for the increased run-off. The draft report shall include a master drainage plan.

Response to Comment 9.4

Refer to Response to Comment 4.1.

Comment 9.5: Annexation of County Frontage Roads

The Transportation Department required cities to annex the entire frontage of County roads abutting developments within their jurisdiction.

Response to Comment 9.5

Revise the draft EIR, Section 4.1, Environmental Plans and Goals of the Community on page 4-18 as follows:

Mitigation Measure LU-B: The project will require review and approval by the Solano County LAFCo before it can be annexed to the City of Dixon or developed. The City of Dixon will annex the entire frontage of County roads abutting developments within their jurisdiction. This will include:

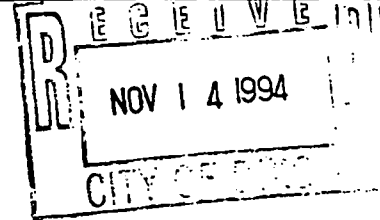
1. Pedrick Road from I-80 south including the Vaughn Road intersection.
2. Vaughn Road from North First Street east including the Pedrick Road intersection.

Residual Significance: Less than significant

DEPARTMENT OF TRANSPORTATION

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November 9, 1994

10-Sol-I-80 PM 38.2
Northeast Specific Plan-Dixon
SCH# 92113073

Mr. Jim Louie
City of Dixon
600 East "A" Street
Dixon, CA 95620

Dear Mr. Louie:

Thank you for the opportunity to review the DEIR for the Northeast Dixon Specific Plan area, bounded by North First Street (S.R. 113), Pedrick Road, I-80 and Vaughn Road in northeast Dixon. The Specific Plan proposes development of approximately 643 acres to commercial, business-professional and light industrial uses, including a major truck stop facility near the I-80/Pedrick Road interchange. Our Traffic, Engineering, and Planning Departments have reviewed the subject plans and offer the following comments:

Buildout of the Specific Plan area is estimated to generate approximately 99,100 ADT with 7826 at AM peak hour and 9786 in PM peak hour traffic. These volumes will overload the I-80/S.R. 113 and I-80/Pedrick Road interchanges and result in an "F" level of service on I-80. The mitigations will require at least one new freeway lane in each direction. The volumes and level of service need to be shown clearly in the DEIR.

10.1

The cumulative impacts of the Northeast and Southwest Area Specific Plans are very significant. Preliminary review of the traffic study indicates that widening I-80 to 8 lanes will not provide enough capacity to meet demand. For the purpose of future network development, identification of impacts, and establishment of mitigation (including development and local jurisdiction responsibilities) cumulative land-use assumptions within the I-80 Corridor should be consistently identified. Current proposals for substantial new development projects along the I-80 corridor need to be addressed in regard to build-out patterns, both residential and employment based and the impacts this would have on project and cumulative transportation conditions. Each developer should be assessed their "fair share" based on traffic loadings on the system to mitigate their respective impacts to the State Highway System.

10.2

An estimated 99,124 ADT with 52% of trips using I-80 equates to 51,500 project generated trips on the Interstate (an increase of 37% over the existing volumes). At an assumed future 10% peak hour/55% directional split, a traffic lane on I-80 can accommodate about 1770 vehicles per lane maximum at "D" LOS, with an assumed 7% trucks. Assuming 10% peak hour, the 5150 peak hour traffic would exceed the capacity of two freeway lanes and equates to about 1.6 freeway lanes per direction to maintain a "D" LOS. Right of way should be preserved for an ultimate 10 lanes with 13-foot median shoulders for CHP enforcement and disabled vehicles. All new structures should be planned for outside widening. A chart showing existing, project and cumulative volumes and level of service on I-80 is needed to assist in determining necessary mitigations. A fair share contribution for widening I-80 is discussed in the report.

10.3

10.4 | The traffic generation chart shows a 60% reduction for drive-by traffic to the highway commercial uses. This under-estimates the ramp and intersection volumes. Our review indicates the peak hour volumes exceed the capacity of standard ramps. Two lane off-ramps with auxiliary lanes are needed for projected volumes of 2000+ an hour. The projected 11,000 employees with a 25% car pool reduction will produce approximately 8200 work trips and 5000 peak hour trips. Ramp metering of all the interchanges with HOV bypass lanes should be considered as mitigation to help achieve the stated goal of 1.33 vehicle occupancy.

Pedrick Road Interchange

10.5 | The traffic study shows 2300 vph on the westbound off-ramp to Pedrick Road. This will require a two-lane off-ramp with an auxiliary lane. The 2070 vph for the westbound on-ramp to I-80 will need a two-lane on-loop with a freeway lane to receive it. This volume exceeds the capacity of one freeway lane. The northbound to eastbound on-ramp of 2369 vph will require a two-lane ramp with a new freeway lane. The 1996 vph from eastbound to southbound exceeds the ramp capacity and will back up onto the freeway. The frontage road east of Pedrick Road needs to be relocated to provide for the new on-ramp. This will affect the Flying J truck stop site and should be resolved soon. Prior to approval of a final location for the "Flying J" facility or any other development, right of way requirements for the Pedrick Road/I-80 interchange (as well as mainline I-80) must be determined in order to preserve the necessary right of way. This could be determined through development of a Project Study Report. The proposed design concepts for the interchange modifications should contain no design exceptions as this is a rural interchange and no spatial limitations are present.

North First Street Interchange

- 10.6 | • A new bridge is needed over I-80 from North First Street to Currey Road. The existing two-lane bridge would be used for off-ramp traffic. A new two-lane on-ramp is needed to accommodate projected traffic. Ramp metering and an HOV bypass lane should be considered.
- 10.7 | • The Currey Road connection to the I-80 westbound off-ramp needs to be removed and realigned to the frontage road. The Milk Farm Road off-ramp may need to be removed due to the high volumes projected to use the North First Street off-ramp.
- 10.8 | • The Study mentions direct access to the development from the North First Street interchange. The meaning of this statement is not clear. Please clarify. A new ramp south of the Cattleman's could connect to a new frontage road and connect to the arterial system.
- 10.9 | • The DEIR identifies the need for 6-lanes on North First Street. Sufficient right of way should be preserved to accommodate the widening.

Local Circulation

To assist in developing an adequate circulation system to accommodate projected traffic, we offer the following comments for consideration:

- 10.10 | • A new Pedrick Road expressway with direct connection ramps to I-80 should be considered. The interchange could be west of the existing bridge in the project area and the old bridge could serve local circulation. Such a facility could serve as a major north/south arterial connecting residential land uses in Southwest Dixon to the planned Employment Center in Northeast Dixon.

- The DEIR indicates the project site will be developed to accommodate non-motorized travel. The City may also wish to consider development of bike-way/lane facilities between the Northeast and Southwest Specific Plan areas to promote connectivity for non-motorized modes between residential and employment-based land uses. 10.11
- A parallel arterial from east of Pedrick Road to west of North First Street would provide some relief on I-80 and provide a better level of service by spreading traffic to more intersections. A frontage road would also improve traffic circulation. 10.12
- A new overcrossing half-way between Pedrick Road and North First Street should be considered. A frontage road on both sides of I-80 may reduce projected congestion (F LOS) created by excess demand on the two bridges. 10.13

Cost Estimates

The cost estimates contained in the appendix are very low. A new interchange will be required at I-80/Pedrick Road to accommodate the projected traffic volumes. The appendix estimate appears that it may only include the cost for the eastbound on-ramp. The \$12 million estimate for the I-80/North First Street interchange also appears to be low. Similar projects in Vacaville and Tracy are estimated at \$15-\$20 million. Right of way costs should also be included in this estimate. A planning estimate of \$100/sq. ft. for bridges is typical. 10.14

The DEIR estimates the cost of the Pedrick Road railroad overpass at \$2.1 to \$2.9 million. This estimate appears to be for a 2-lane project. The study discusses a 4-lane arterial. The cost of a similar 4-lane overpass typically runs between \$5 and \$10 million. 10.15

General

Conceptual Approval Reports (CAR) and Project Study Reports (PSR) will need to be completed to State standards under the direction of a Caltrans Project Engineer and approved by Caltrans for identified improvements to the State Highway System and impacted interchanges/intersections identifying specific improvements. The PSR(s) should identify estimated costs and the mechanism(s) for ensuring completion of necessary improvements) relative to project build-out. It is strongly recommended the City, Caltrans, the Solano Transportation Authority and the Metropolitan Transportation Commission reach a consensus on the project's planning level design concept and scope prior to initiation of PSRs. This is critical for air quality conformity purposes. This consensus should be reached prior to finalization of mitigation measures. For those improvements which are substantially/fully locally funded projects, the local agency will be responsible for all project development and associated costs under the oversight of Caltrans. 10.16

Any highway related mitigation which plans the involvement of federal funds (such as state/local jointly funded projects or which is a totally locally funded project which will require any form of federal action on routes likely to be in the National Highway System (including I-80) will be required to be included in MTC's FTIP and must be consistent with the Regional Transportation Plan. These mitigations will have to be found consistent with the Air Quality Attainment Plan before they can proceed beyond the programming stage. This makes it critical that the project concept design and scope are identified as early as possible in the planning process. Additionally, federal law requires that the RTP and FTIP be "constrained" documents from a financial perspective. This requirement re-emphasizes the need for local roadway financing programs to identify and plan the concrete local financing mechanisms necessary to make the identified improvements a reality. The RTP and FTIP requirements would also pertain to public transportation projects where federal funds are anticipated. In addition, if any Federal funds were to be used for major capacity enhancement projects on the State Highway System (such as widening I-80), it is possible a Major Investment Study would be required to comply with Federal mandates. 10.17

10.18 Caltrans supports development and implementation of an integrated multimodal transportation system. The DEIR contains several mitigation measures designed to reduce single occupancy vehicle trips and the associated air quality impacts. The identified measures are consistent with General Plan policies and designed to achieve a 25% reduction in employee trips. A Transportation Management Association should be created to provide assistance in implementing the 25% carpool and vanpool goal. The DEIR should identify tangible implementation programs including financing, operational responsibility, and phased service availability relative to project buildout. The DEIR should contain definite timelines and operational details and funding commitments on when and how these measures will be implemented. A permanent funding source to supplement fares for provision of expanded transit service to the project area should be identified. The EIR should demonstrate realistic financial support for all such services proposed as mitigation. A source of bus subsidy could be a fee per square foot of development to purchase and operate buses to this major employment center.

10.19 As stated in the DEIR, the Solano County Transportation Authority is currently conducting a Rail Feasibility Study which will examine potential rail station sites in various cities throughout the County (including Dixon). The selection of actual station sites is contingent upon the findings and recommendations of the Study. The DEIR identifies two possible locations in Dixon, one of which is within the Specific Plan area. It should be noted that any such station and the related rail passenger service located within the project would primarily serve commuters. Commuter service requires a 50% local match of the non-federal project costs. If the Rail Feasibility Study recommends a station site within the Specific Plan area, this project should be assessed a "fair share" contribution toward the local match requirement for commuter rail service.

Again, thank you for the opportunity to review the DEIR for the Northeast Specific Plan. If you have any questions, please contact Mary Jo Rosina of my staff at (209) 948-3642.

Sincerely,



EDWIN J. ERWIN
Chief, Transportation
Planning Branch "A"

cc: M Chiriatti/State Clrhse
J Gray/Sol TA
C Goldblatt/MTC.

LETTER 10: STATE DEPARTMENT OF TRANSPORTATION (11-9-94)

Comment 10.1: Level of Service at Buildout

Buildout of the Specific Plan area is estimated to generate volumes that will overload the I-80/S.R. 113 and I-80/Pedrick Road interchanges and result in an "F" level of service on I-80. The volumes and level of service need to be shown clearly in the DEIR.

Response to Comment 10.1

Table 4.7.12 on page 4-100 shows the impact on the I-80/Pedrick Road as LOS "F". Mitigation Measure T-L indicates the need to improve the interchange and recommends the preparation of a Route Concept Approval Study and Project Study Report in cooperation with Caltrans.

Comment 10.2: Cumulative Traffic Impacts of Northeast and Southwest Area Specific Plans

The cumulative impacts of the Northeast and Southwest Area Specific Plans are very significant. Preliminary review of the traffic study indicates that widening I-80 to 8 lanes will not provide enough capacity to meet demand. For the purpose of future network development, identification of impacts, and establishment of mitigation (including development and local jurisdiction responsibilities) cumulative land-use assumptions within the I-80 corridor should be consistently identified. Current proposals for substantial new development projects along the I-80 corridor need to be addressed in regard to buildout patterns, both residential and employment based and the impacts this would have on project and cumulative transportation conditions. Each developer should be assessed their "fair share" based on traffic loading on the system to mitigate their respective impacts to the State Highway System.

Response to Comment 10.2

Comment noted. Mitigation Measure T-R states that a Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

Comment 10.3: Right-of-Way for Planned I-80 Widening

It is projected that right-of-way on I-80 should be preserved for an ultimate 10 lanes with 13-foot median shoulders for CHP enforcement and disabled vehicles. All new structures should be planned for outside widening.

Response to Comment 10.3

Refer to Response to Comment 10.2.

Comment 10.4: Ramp Capacity

The estimate of trip generation underestimates the ramp and intersection volumes. Caltrans review indicates the peak hour volumes exceed the capacity of standard ramps. Ramp metering of all the interchanges with HOV bypass lanes should be considered as mitigation to help achieve the stated goal of 1.33 vehicle occupancy.

Response to Comment 10.4

Refer to Response to Comment 10.1. In addition, Mitigation Measure T-M recommends similar study of the North First Street/I-80 interchange.

Comment 10.5: Pedrick Road Interchange

The projected traffic on the Pedrick Road off-ramp volume exceeds the capacity of one freeway lane. Traffic moving eastbound to southbound exceeds the ramp capacity and will back up onto the freeway. The frontage road east of Pedrick Road needs to be relocated to provide for the new on-ramp.

Response to Comment 10.5

Refer to the Response to Comment 10.1. Prior to the full development of the project, the interchange will need to be upgraded. In the short term, it is necessary to ensure that no new development will restrict the future design of the full interchange improvements.

Revise the draft EIR, Section 4.7, Transportation, Circulation, and Access on page 4-103 as follows:

Impact T-14: Project could impinge on the necessary right-of-way for future interchange improvements..

The "Flying J" truck stop site is proposed to be located near the Pedrick Road/I-80 interchange such that the right-of-way for future interchange improvements may be constrained.

Significance: Significant

Mitigation Measure T-V Prior to approval of a final location for the "Flying J" facility or any other development, right-of-way requirements for the Pedrick Road/I-80 interchange (as well as mainline I-80) must be determined in order to preserve the necessary right-of-way.

Residual Significance: Less than significant

Comment 10.6: I-80 Bridge and On-Ramp

A new bridge is needed over I-80 from North First Street to Currey Road. The existing two-lane bridge would be used for off-ramp traffic. A new two-lane on-ramp is needed to accommodate projected traffic. Ramp metering and an HOV bypass lane should be considered.

Response to Comment 10.6

Refer to the Response to Comment 10.1.

Comment 10.7: Currey Road Connection

The Currey Road connection to the I-80 westbound off-ramp needs to be removed and realigned to the frontage road. The Milk Farm Road off-ramp may need to be removed due to the high volumes projected to use the North First Street off-ramp.

Response to Comment 10.7

Refer to the Response to Comment 10.1.

Comment 10.8: Clarification of Direct Access from North First Street Interchange

The Study (Specific Plan) mentions direct access to the development from the North First Street interchange. The meaning of this statement is not clear. Please clarify. A new ramp south of the Cattlemens could connect to a new frontage road and connect to the arterial system.

Response to Comment 10.8

The Specific Plan considers a reconstruction of the eastbound off-ramp at North First Street to allow a signal at the intersection with North First Street. This would allow eastbound traffic to exit I-80 and enter the project from North First Street. The precise alignment of this ramp is not determined and may be consistent with the concept described in the Caltrans comment. The precise design of the interchange improvements must be determined as part of the Project Study Report specified in Mitigation Measure T-M.

Comment 10.9: Right-of-Way for North First Street Widening

The DEIR identifies the need for 6 lanes on North First Street. Sufficient right-of-way should be preserved to accommodate the widening.

Response to Comment 10.9

The Specific Plan (page 4-3) specifies that North First Street will initially be a 4-lane arterial street, but will provide for two additional expansion lanes in the landscaped median to accommodate six travel lanes and a 14-foot-wide median.

Comment 10.10: Local Circulation

A new Pedrick Road expressway with direct connection ramps to I-80 should be considered. The interchange could be west of the existing bridge in the project area and the old bridge could serve local circulation. Such a facility could serve as a major north/south arterial connecting residential land uses in Southwest Dixon to the planned Employment Center in Northeast Dixon.

Response to Comment 10.10

Refer to Comments 10.1 and 10.2. The configuration of Pedrick Road as an expressway is a regional circulation issue that must be addressed in a regional forum.

Comment 10.11: Non-Motorized Traffic

The DEIR indicates the project site will be developed to accommodate non-motorized travel. The City may also wish to consider development of bikeway/lane facilities between the Northeast and Southwest Specific Plan areas to promote connectivity for non-motorized modes between residential and employment-based land uses.

Response to Comment 10.11

Comment noted. The Specific Plan is designed to accommodate connections of the bike and pedestrian path system to a larger community based system.

Comment 10.12: Parallel Arterial

A parallel arterial from east of Pedrick Road to west of North First Street would provide some relief on I-80 and provide a better level of service by spreading traffic to more intersections. A frontage road would also improve traffic circulation.

Response to Comment 10.12

The Specific Plan circulation system provides a major street system parallel to I-80, but does not provide for a frontage road. Such a road may be considered in the site specific design of parcels adjacent to I-80. These parcels have sufficient depth to accommodate a frontage road and suitable development of the designated land use.

Comment 10.13: I-80 Overcrossing and Frontage Road

A new overcrossing halfway between Pedrick Road and North First Street should be considered. A frontage road on both sides of I-80 may reduce projected congestion (F LOS) created by excess demand on the two bridges.

Response to Comment 10.13

Comment noted. Such a major improvement would require a regional approach to the circulation plan. The project area does not include both sides of I-80, thus the planning for such an improvement cannot be included in this project.

Comment 10.14: Cost Estimates as Listed in Appendix

The cost estimates contained in the appendix are very low. A new interchange will be required at I-80/Pedrick Road to accommodate the projected traffic volumes. The appendix estimate appears that it may only include the cost for the eastbound on-ramp. The \$12 million estimate for the I-80/North First Street interchange also appears to be low. Similar projects in Vacaville and Tracy are estimated at \$15-\$20 million. Right-of-way costs should also be included in this estimate. A planning estimate of \$100/sq. ft. for bridges is typical.

Response to Comment 10.14

Comment noted. The cost of improvements and the funding of major facilities will need to be shared among all benefiting properties. The evaluation of the regional circulation system and the cost of specific improvements is beyond the scope of this project.

Comment 10.15: Cost Estimate for 4-Lane Arterial

The DEIR estimates the cost of the Pedrick Road railroad overpass at \$2.1 to \$2.9 million. This estimate appears to be for a 2-lane project. The study discusses a 4-lane arterial. The cost of a similar 4-lane overpass typically runs between \$5 and \$10 million.

Response to Comment 10.15

Refer to Response to Comment 10.14.

Comment 10.16: Conceptual Approval Reports and Project Study Reports

Conceptual Approval Reports (CAR) and Project Study Reports (PSR) will need to be completed to State standards under the direction of a Caltrans Project Engineer and approved by Caltrans for identified improvements to the State Highway System and impacted interchanges/intersections identifying specific improvements. The PSR(s) should identify estimated costs and the mechanisms(s) for ensuring completion of necessary improvements relative to project buildout. It is strongly recommended the City, Caltrans, the Solano Transportation Authority and the Metropolitan Transportation Commission reach a consensus on the project's planning level design concept and scope prior to initiation of PSRs. This is critical for air quality conformity purposes. This consensus should be reached prior to finalization of mitigation measures. For those improvements which are substantially/fully locally funded projects, the local agency will be responsible for all project development and associated costs under the oversight of Caltrans.

Response to Comment 10.16

Comment noted. It is recognized that the improvement of major infrastructure components such as freeway interchanges is a regional issue.

Comment 10.17: Federal Funds

Any highway related mitigation which plans the involvement of federal funds (such as state/local jointly funded projects or which is a totally locally funded project which will require any form of federal action on routes likely to be in the National Highway System (including I-80) will be required to be included in MTC's FTIP and must be consistent with the Regional Transportation Plan. These mitigations will have to be found consistent with the Air Quality Attainment Plan before they can proceed beyond the programming stage. This makes it critical that the project concept design and scope are identified as early as possible in the planning process. Additionally, federal law requires that the RTP and FTIP be "constrained" documents from a financial perspective. This requirement re-emphasizes the need for local roadway financing programs to identify and plan the concrete local financing mechanisms necessary to make the identified improvements a reality. The RTP and FTIP requirements would also pertain to public transportation projects where federal funds are anticipated. In addition, if any Federal funds were to be used for major capacity enhancement projects on the State Highway System (such as widening I-80), it is possible a Major Investment Study would be required to comply with Federal mandates.

Response to Comment 10.17

Comment noted. The comment is consistent with the previous responses indicating the regional nature of the required improvements program. The comment provides the outline of a process for implementing the required improvement design and funding.

Comment 10.18: Multimodal Transportation System

Caltrans supports development and implementation of an integrated multimodal transportation system. The DEIR contains several mitigation measures designed to reduce single occupancy vehicle trips and the associated air quality impacts. The identified measures are consistent with General Plan policies and designed to achieve a 25% reduction in employee trips. A Transportation Management Association should be created to provide assistance in implementing the 25% carpool and vanpool goal. The DEIR should identify tangible implementation programs including financing, operational responsibility, and phased service availability relative to project buildout. The DEIR should contain definite timelines and operational details and funding commitments on when and how these measures will be implemented. A permanent funding source to supplement fares for provision of expanded transit service to the project area should be identified. The EIR should demonstrate realistic financial support for all such services proposed as mitigation. A source of bus subsidy could be a fee per square foot of development to purchase and operate buses to this major employment center.

Response to Comment 10.18:

The specific timelines and operational details and funding commitments recommended in this comment are well beyond the scope of this project. The issues raised are regional in scope and require a regional resolution as outlined in the comment.

Comment 10.19:

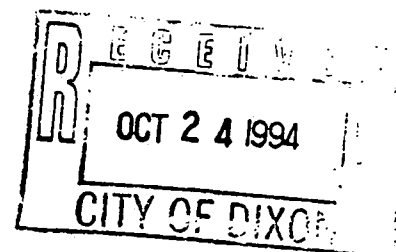
As stated in the DEIR, the Solano County Transportation Authority is currently conducting a Rail Feasibility Study which will examine potential rail station sites in various cities throughout the County (including Dixon). The selection of actual station sites is contingent upon the findings and recommendations of the Study. The DEIR identifies two possible locations in Dixon, one of which is within the Specific Plan area. It should be noted that any such station and the related rail passenger service located within the project would primarily serve commuters. Commuter service requires a 50% local match of the non-federal project costs. If the Rail Feasibility Study recommends a station site within the Specific Plan area, this project should be assessed a "fair share" toward the local match requirement for commuter rail service.

Response to Comment 10.19:

Commented noted. The referenced study is underway and the outcome of the possible alternatives directly affecting the project area have been provided for in the Specific Plan Section 4.6.2, page 4-7.

Robert L. Gill

6410 SILVEYVILLE ROAD
DIXON, CALIFORNIA 95620
PH. (916) 678-3300
FAX (916) 678-9327



October 21, 1994

Jim Louie
Planning Director
City of Dixon
600 East A St.
Dixon, CA 95620

Dear Jim:

I am writing these comments to supplement my oral comments given at the public hearing on October 18, 1994. I would ask that both these written comments and my oral comments be placed in the records of the Draft Environmental Impact Report for the Northeast Quadrant.

The first issue is in regard to the alternative scenarios which were used to show this project to be the most environmentally sound. The authors of this DEIR compared the "no project", "mixed use project" and "alternative site project" scenarios. My question deals with the alternate site project. There is no mention of where this "alternate" site is located and no data to support their findings that the present project site is superior to the alternate site.

My second concern is with the mitigation for off site drainage. The DEIR states that two possible means of mitigating the off site drainage would be to take the drain water southwest along the east side of the Southern Pacific Railroad tracks to the proposed location of Pond B. Pond B would have to be enlarged to handle the additional water. It infers that this would be in compliance with the City of Dixon Master Drainage Plan. My understanding is that this is not true.

During my discussions with City of Dixon Public Works Director Ron Tribbett, Ron Bernal with Public Works, and City Attorney Ron Moe, they have all said that this is not what they want. They said that the northeast quadrant would have to develop a drainage plan that did not include using Pond B or the remainder of the drainage system which is part of the North First Street Assessment District.

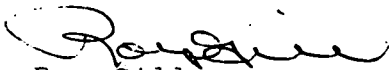
The second alternative, that goes northeast along the SPRR tracks to Putah Creek has not been proven to be feasible at this time. It may well be a very good way to mitigate the drainage problems associated with the northeast quadrant, but further study is necessary before anyone could possibly state that going to Putah Creek is a mitigation for the off site drainage.

I would also like to point out that the proposed drainage system map on page 4-33 is inaccurate. It is my understanding that no drainage will drain down North First St. and Vaughn Rd. into the NFSAD. The northeast quadrant declined to participate in the drainage portion of the NFSAD, so none of the drainage has been planned for in the capacities developed for the NFSAD.

In both the North First St. Assessment District and the West A St. Assessment District, EIR's were approved with drainage mitigations that were not based on actual off site drainage designs that could be implemented. Their conceptual mitigations proved to cause lengthy delays later in the process.

I urge the Planning Commission and City Council to withhold approval of the Northeast Quadrant Environmental Impact Report until additional studies have been done on the off site drainage problems and until a factual, workable drainage plan has been established.

Sincerely,


Roy Gill

cc: Mayor and City Council members
Planning Commission members

LETTER 11: ROBERT L. GILL (10-21-94)

Comment 11.1: Alternative Site

The authors of this DEIR compared the "no project", "mixed use" project and "alternative project site" scenarios. My question deals with the alternative site project. There is no mention of where this alternative site is located and no data to support their findings that the present project site is superior to the alternative site.

Response to Comment 11.1

Figure 8.3.1 on page 8-7 of the draft EIR shows the location of the Alternative Project Site. This is meant to be a conceptual area, and not one specific parcel. Pages 8-8 through 8-9 provides the data to support the conclusion that the project site is environmentally superior to the alternative site.

Comment 11.2: Off-Site Drainage

The DEIR states that two possible means of mitigating off-site drainage would be to take the drain water southwest along the east side of the Southern Pacific Railroad tracks to the proposed location of Pond B. Pond B would have to be enlarged to handle the additional water. It infers that this would be in compliance with the City of Dixon Master Drainage Plan. This may not be correct.

Discussion with City of Dixon Public Works Director Ron Tribbett, Ron Bernal with Public Works, and City Attorney Ron Moe indicate that the northeast quadrant would have to develop a drainage system which is part of the North First Street Assessment District.

Response to Comment 11.2

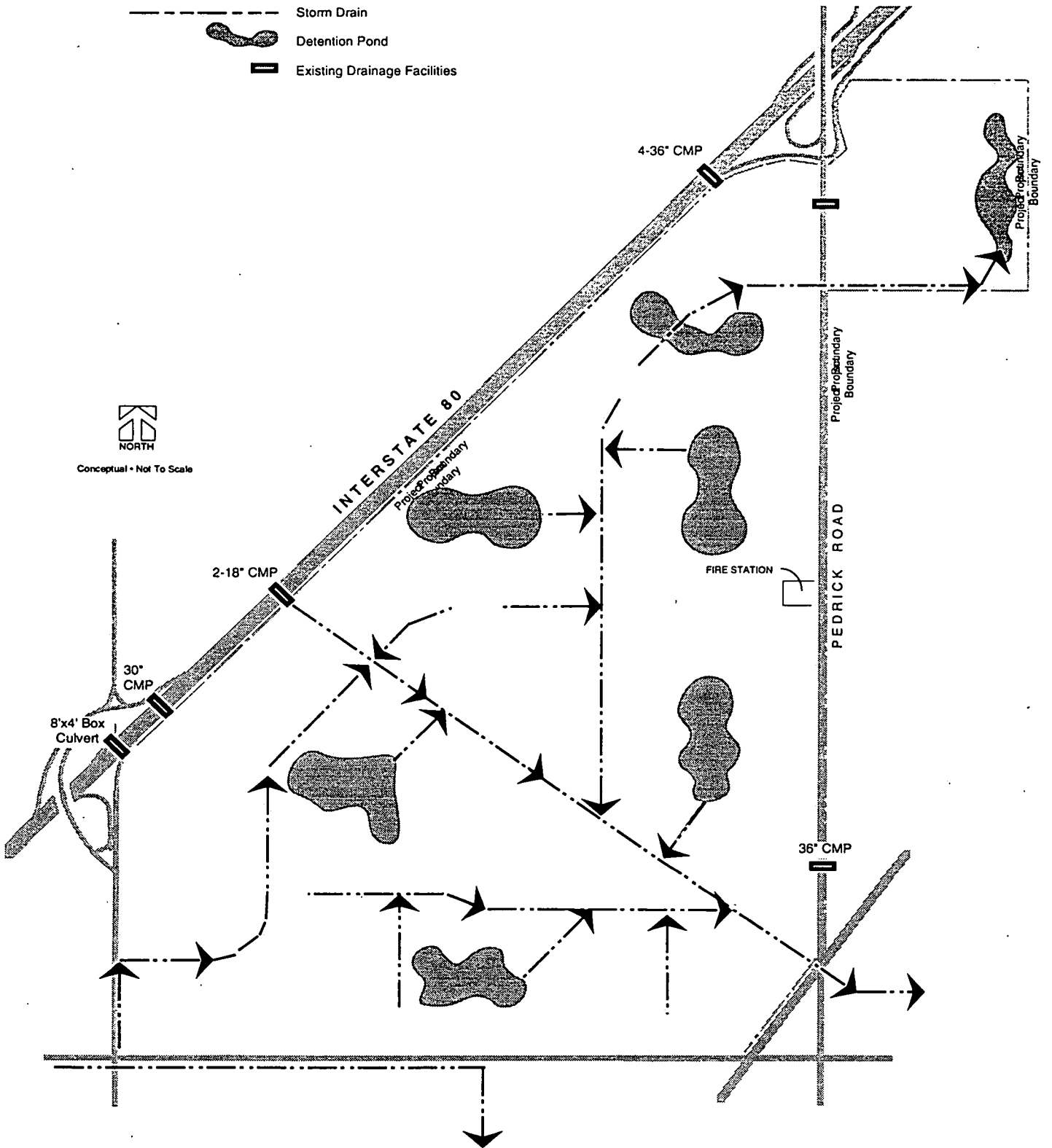
Comment noted. Pages 4-32 and 4-34 of the draft EIR discuss the two alternative outfall systems identified by the Preliminary Investigation of Storm Drainage, Wastewater, Water System and Street Improvements, The Northeast Quadrant Specific Plan (Morton & Pitalo, 1993). The first alternative, involving an expansion to the outfall system constructed with the North First Street Assessment District improvements is not meant to indicate compliance with the City of Dixon's Master Drainage Plan, but rather, to provide an option for off-site drainage.

Comment 11.3: Drainage System Map

I would also like to point out that the proposed drainage system map on page 4-33 is inaccurate. It is my understanding that no drainage will drain down North First Street and Vaughn Road into the NFSAD. The northeast quadrant declined to participate in the drainage portion of the NFSAD, so none of the drainage has been planned for in the capacities developed for the NFSAD.

Response to Comment 11.3

Comment noted. The map on page 4-33 has been revised on the following page.



**FIGURE 4.3.2
PROPOSED DRAINAGE SYSTEM**

October 17, 1994

Mr. James Louie
Community Development Director
City of Dixon
600 East A Street
Dixon, CA 95620

Dear Mr. Louie:

Attached is a copy of our proposed Site Plan which we are submitting as an alternative to the one currently under discussion for the Northeast Specific Plan.

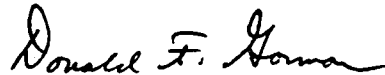
We have made offers to and are currently in discussion with the owners of the subject properties through Jay Stewart of The Galbreath Company.

We plan to file this plan formally when the properties are under contract and our financing is complete.

Please consider this plan as a viable alternative which may mitigate some of the concerns about the proposed plan and EIR currently under discussion.

Sincerely,

FTP Enterprises



Donald F. Gorman
Managing Partner

cc: Jay R. Stewart
Encl.: Alternative Site Plan

LETTER 12: DONALD GORMAN - FTP ENTERPRISES (10-17-94)

Comment 12.1: Alternative Site Plan

Attached is a copy of our proposed Site Plan which we are submitting as an alternative to the one currently under discussion for the Northeast Specific Plan.

We plan to file this plan formally when the properties are under contract and our financing is complete.

Please consider this plan as a viable alternative which may mitigate some of the concerns about the proposed plan and EIR currently under discussion.

Response to Comment 12.1

Comment noted.

Cindy Gno



NORTHEAST QUADRANT SPECIFIC PLAN

ENVIRONMENTAL IMPACT REPORT

DRAFT
AUGUST 1994

PREPARED FOR: THE CITY OF DIXON
600 EAST A STREET
DIXON, CALIFORNIA 95620
(916) 678-7000

PREPARED BY:  **WADE ASSOCIATES**
urban planning & design

2140 professional drive, suite 140
roseville, california 95661
(916)783-8980 • (916)969-8980

SCH 92113073



City of Dixon
 Community Development Department
 600 East A Street, Dixon, CA 95620
 Ph: (916) 678-7000

Notice of Completion

See NOTE below

SCH # 92113073

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: Northeast Quadrant Specific Plan Draft EIR

Lead Agency: City of Dixon **Contact Person:** Jim Louie
Street Address: 600 East A Street **Phone:** (916) 678-7000
City: Dixon **Zip:** 95620 **County:** Solano

Project Location

County: Solano **City/Nearest Community:** City of Dixon
Cross Streets: I-80/SR 113(N. First) Pedrick Rd & Vaughn Rd **Total Acres:** 643 ac
Assessor's Parcel No.: Various **Section:** _____ **Twp.:** _____ **Range:** _____ **Base:** _____
Within 2 Miles: **State Hwy #:** I-80&SR113 **Waterways:** _____
Airports: _____ **Railways:** SP **Schools:** Dixon HS, Anderson

Document Type

CEQA: NOP Supplement/Subsequent NEPA: NOI **Other:** Joint Document
 Early Cons EIR (Prior SCH No.) EA Final Document
 Neg Dec Other _____ Draft EIS Other _____
 Draft EIR FONSI

Local Action Type

General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, Parcel Map, Tract Map, etc.) Other _____

Development Type

Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD _____
 Office: Sq.ft. _____ Acres 105 Employees _____ Transportation: Type _____
 Commercial: Sq.ft. _____ Acres 194 Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres 214 Employees _____ Power: Type _____ Watts _____
 Educational _____ Waste Treatment: Type _____
 Recreational _____ Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document

Aesthetic/Visual Flood Plain/Flooding Schools/Universities Water Quality
 Agricultural Land Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Air Quality Geologic/Seismic Sewer Capacity Wetland/Riparian
 Archeological/Historical Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Landuse
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Fiscal Recreation/Parks Vegetation Other _____

Present Land Use/Zoning/General Plan Use

County - Agricultural, Farming and Trucking Operation, GP- Employment Ctr

Project Description

Specific Plan for the development of Northeast Quadrant Employment Center covering 643 acres. Mixed land uses consisting of 142.2 ac Highway Commercial, 51.9 ac Community Commercial, 105.4 ac Professional Offices, 214.4 ac Light Industrial and 129.1 ac major roads drainage easement and open space

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in. Revised October 1989



NOTICE OF COMPLETION

PROJECT TITLE: Northeast Quadrant Specific Plan Draft EIR
SCH# 92113073

PROJECT LOCATION: I-80, SR113(North First St), Pedrick Rd and Vaughn Rd

CITY: Dixon

COUNTY: Solano

DESCRIPTION OF THE NATURE AND PURPOSE OF THIS PROPOSED PROJECT:

Specific Plan for the development of the Northeast Quadrant Employment Center, covering 643 acres. Mixed land uses consisting of 142.2 acres of Highway Commercial, 51.9 acres of Community Commercial, 105.4 acres of Professional/Administrative Offices, 214.4 acres of Light Industrial and 129.1 acres of major roads, drainage easements and open space.

LEAD AGENCY: City of Dixon **PHONE:** (916) 678-7000
CONTACT PERSON: Jim Louie, Community Development Director

ADDRESS WHERE COPY OF THE DRAFT EIR IS AVAILABLE: Dixon City Hall, 600
East A Street, Dixon, California 95620

REVIEW PERIOD: October 3, 1994 to November 21, 1994

NOTICE OF PUBLIC HEARING

The Planning Commission for the City of Dixon, on Tuesday, October 18, 1994 will conduct a public hearing on the Draft EIR for the Northeast Quadrant Specific Plan, to accept public comments on the report. The hearing will be held in the City Council Chambers, 600 East A Street, Dixon, California, starting at 7:30 p.m.

Written comments on the Draft EIR will be accepted after the public hearing until the end of the review period, which is November 21, 1994.

City of Dixon

600 East A Street • Dixon, California 95620 • (916) 678-7000

TABLE OF CONTENTS
NORTHEAST QUADRANT SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

1.0	PROJECT SUMMARY	1-1
1.1	Executive Summary	
1.2	Summary of Environmental Impacts and Mitigation Measures	1-3
1.3	Summary of Project Alternatives	1-3
1.4	Environmentally Superior Alternative	1-4
1.5	Conclusion	1-4
2.0	INTRODUCTION	2-1
2.1	Project Summary	2-1
2.2	Purpose of the Environmental Impact Report	2-1
2.3	Scope of the EIR	2-1
2.4	Terminology Used in the EIR	2-2
2.5	Tiering of the EIR	2-2
2.6	Requested Discretionary Actions	2-3
2.7	Agencies that Will Use the EIR	2-4
2.8	The EIR Process	2-5
2.9	Mitigation Monitoring Program	2-5
2.10	Key Assumptions Used in Preparing the EIR	2-6
3.0	PROJECT DESCRIPTION	3-1
3.1	Project Overview	3-1
3.2	Project Location	3-1
3.3	Regional Setting	3-5
3.4	Project History	3-5
3.5	Project Objectives	3-6
3.6	Project Characteristics	3-6
4.0	ENVIRONMENTAL ANALYSIS	4-1
4.1	Existing and Adjacent Land Uses	4-1
4.2	Geology, Soils, and Seismicity	4-19
4.3	Surface and Water Quality	4-27
4.4	Air Quality	4-36
4.5	Biological Resources	4-52
4.6	Cultural Resources	4-62
4.7	Traffic, Circulation, and Access	4-67

4.8	Noise	4-103
4.9	Public Services and Utilities	4-109
4.10	Visual Resources	4-128
4.11	Public Health and Safety	4-137
5.0	GROWTH INDUCING IMPACTS	5-1
6.0	SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE OF LONG-TERM PRODUCTIVITY	6-1
7.0	IRREVERSIBLE CHANGES TO THE ENVIRONMENT IF THE PROJECT IS IMPLEMENTED	7-1
8.0	PROJECT ALTERNATIVES	8-1
8.1	No-Project Alternative	8-1
8.2	Mixed Use Development Alternative	8-3
8.3	Alternative Project Site	8-6
9.0	CUMULATIVE IMPACTS	9-1
10.0	SIGNIFICANT AND UNAVOIDABLE IMPACTS	10-1
11.0	EIR AUTHORS AND PERSONS CONSULTED	11-1
11.1	EIR Authors	11-1
11.2	Persons Consulted	11-2
12.0	CITATIONS	12-1
12.1	Documents Incorporated by Reference	12-1
12.2	Bibliography	12-1

APPENDICES (Under This Cover)

A	Notice of Preparation
B	Notice of Preparation Responses
C	Dixon Northeast Quadrant Specific Plan
D	Draft Mitigation Monitoring Program

TECHNICAL APPENDICES (Under Separate Cover)

E	Environmental Site Assessment prepared by Anderson Consulting Group
F	Preliminary Investigations of Storm Drainage, Wastewater, Water, and Street Systems prepared by Morton & Pitalo, Inc.
G	Biotic Survey and Wetlands Assessment prepared by Sugnet & Associates
H	Cultural Resources Assessment prepared by Peak & Associates, Inc.
I	Traffic Report prepared by Fehr & Peers Associates Transportation Consultants

LIST OF TABLES

1.2.1	Summary of Environmental Impacts and Mitigation Measures	
1.3.1	Comparative Summary of Project Alternatives	1-4
2.7.1	Affected Agencies	2-5
3.6.1	Land Use Summary	3-6
3.6.2	Employment Projections	3-10
4.2.1	Project Site Soil Associations and Engineering Constraints	4-23
4.2.2	Project Site Soil Series and Agricultural Limitations	4-24
4.4.1	Ambient Air Quality Standards	4-38
4.4.2	Air Pollutant Summary, 1986-1990	4-40
4.4.3	Existing Baseline CO Concentrations	4-43
4.4.4	Threshold Levels (Lbs Per Day)	4-44
4.4.5	Construction Emissions (Pollutants in Lbs/Day)	4-45
4.4.6	Daily Operational Emissions (Lbs Per Day)	4-48
4.4.7	Future CO Concentrations (PPM)	4-48
4.5.1	Special Status Species in the Area	4-29
4.6.1	Existing Intersection Level of Service	4-40
4.6.2	Project Trip Generation	4-45
4.6.3	Project Trip Distribution	4-45
4.6.4	Existing Plus Project Intersection Level of Service	4-48
4.6.5	Cumulative AM and PM Peak Hour Intersection Level of Service	4-53
4.7.1	Level of Service Definitions for Signalized Intersections	4-76
4.7.2	Level of Service Definitions for Stop Controlled Intersections	4-77
4.7.3	Minimum Level of Service (LOS) at Intersections During Peak Hour	4-78
4.7.4	Existing Intersection Level of Service	4-79
4.7.5	Existing Street Level of Service	4-80
4.7.6	Land Use Summary	4-81
4.7.7	Trip Generation Assumptions	4-86
4.7.8	Trip Generation	4-87
4.7.9	Project Trip Distribution	4-88
4.7.10	Assumed Lane Geometry for Future Intersections	4-88
4.7.11	Existing Plus Project Intersection Level of Service	4-89
4.7.12	Cumulative AM and PM Peak Hour Intersection Level of Service	4-100
4.8.1	Typical Noise Levels	4-103
4.8.2	Typical Construction Noise Levels	4-107
4.9.1	Estimated Water Demand	4-112
4.9.2	Estimated Wastewater Demand - Average Flow	4-115
4.9.3	Estimated Wastewater Demand - Peak Flow	4-117
9.1.1	Cumulative Development	9-1

LIST OF FIGURES

3.2.1	Regional Location	3-2
3.2.2	Vicinity Map	3-3
3.2.3	Aerial Photograph	3-4
3.6.1	Land Use Plan	3-7
4.1.1	Existing Land Uses	4-2
4.1.2	Surrounding Land Uses	4-3
4.1.3	North First Street Assessment District	4-4
4.1.4	Existing County General Plan and Zoning Designations	4-5
4.1.5	Existing City of Dixon General Plan and Zoning Designations	4-7
4.1.6	Property Ownership	4-8
4.1.7	Agricultural Land Status	4-9
4.2.1	Geologic Cross-Section	4-22
4.2.2	On-Site Soils	4-22
4.3.1	Existing Drainage System	4-29
4.3.2	Proposed Drainage System	4-33
4.4.1	Receptor Location Map	4-42
4.5.1	Biological Resources	4-53
4.6.1	Historic Resources	4-64
4.7.1	Project Intersections	4-69
4.7.2	Current Peak Hour Traffic Volumes	4-71
4.7.3	Existing Road System	4-72
4.7.4	Planned Roadway Improvements	4-74
4.7.5	Conceptual Traffic Separation Zones and Circulation Network	4-82
4.7.6	Existing Plus Project Intersections	4-90
4.7.7	Existing Plus Project AM and PM Peak Hour Traffic Volumes	4-91
4.7.8	Existing Plus Project AM and PM Peak Hour Traffic Volumes	4-92
4.7.9	Cumulative AM and PM Peak Hour Traffic Volumes (Without Project)	4-96
4.7.10	Cumulative Existing Intersections (With Project)	4-97
4.7.11	Cumulative AM and PM Peak Hour Traffic Volumes	4-98
4.7.12	Cumulative AM and PM Peak Hour Traffic Volumes	4-99
4.8.1	Existing and Proposed Noise Contours	4-105
4.8.2	Acceptable Levels of Noise Exposure	4-106
4.9.1	Water Service Boundaries	4-111
4.9.2	Proposed Water System	4-113
4.9.3	Wastewater Service Boundaries	4-116
4.9.4	Proposed Wastewater System	4-118
4.10.1	Photograph Location Key	4-130
4.10.2	Site Photographs	4-131
4.10.3	Site Photographs	4-132
4.10.4	Site Photographs	4-133
4.10.5	Site Photographs	4-134
8.2.1	Mixed Use Development Alternative	8-4
8.3.1	Alternative Project Site	8-7
9.1.1	Cumulative Project Locations	9-2

LIST OF ACRONYMS

ac-ft	acre-feet
ADT	average daily traffic
AMSL	above mean sea level
APCD	Air Pollution Control District
BLM	Bureau of Land Management
BMP	Best Management Practices
CAA	Federal Clean Air Act
Cal-EPA	California Environmental Protection Agency
CalOSHA	California Occupational Safety and Health Administration
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFG	California Department of Fish and Game
CDHS	California Department of Health Services
CDWR	California Division of Water Resources
CEQA	State of California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CMP	corrugated metal pipe
CNDDB	California Natural Diversity Data Base
CO	carbon monoxide
CRWQCB	California Regional Water Quality Control Board
CSWRB	California State Water Resource Board
CWSC	California Water Service Company
dB	decibel
DEIR	Draft Environmental Impact Report
DFD	Dixon Fire Department
DPD	Dixon Police Department
DRCDD	Dixon Resource Conservation District
DSMWS	Dixon-Solano Municipal Water Service
DTSC	Department of Toxic Substances Control
DUSD	Dixon Unified School District
E	Employment
EIR	environmental impact report
FEMA	Federal Emergency Management Agency
g	gallons
gpd	gallons per day
gpm	gallons per minute
HC	Highway Commercial
HSAA	Hazardous Substance Account Act
HWCL	Hazardous Waste Control Law
I-80	Interstate 80
kV	kilovolt
LAFCo	Local Agency Formation Commission
Ldn	day-night average level
Leq	average hourly noise levels
LOS	level of service
MCL	maximum contaminant level
mg	million gallons
mgd	million gallons per day

mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NFSAD	North First Street Assessment District
NRHP	National Register of Historic Places
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NQSP	Northeast Quadrant Specific Plan
O	Office
OES	Office of Emergency Services
O ₃	ozone
P6	lead
PG&E	Pacific Gas & Electric Company
P-D	Planned Development
PI	Planned Industrial
PM ₁₀	respirable particulate matter
psi	pounds per square inch
RCB	reinforced concrete box
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
SAAQS	State Ambient Air Quality Standards
SARA	Superfund Amendments and Reauthorization Act
SO ₂	Sulfur dioxide
SR 113	State Route 113
SVAB	Sacramento Valley Air Basin
SWRCB	State Water Resources Control Board
TDA	Transportation Development Act
TDS	total dissolved solids
TMP	Transportation Management Plan
tpd	tons per day
TSM	Transportation System Management
UBC	Uniform Building Code
U.S.COE	U.S. Army Corps of Engineers
U.S. EPA	U. S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST's	Underground Storage Tanks
YSAQMD	Yolo/Solano Air Quality Management District

1.1 EXECUTIVE SUMMARY

The proposed Northeast Quadrant Specific Plan (NQSP) is the second step in the entitlement process involved in converting raw land outside the Dixon city limits to urban development. The first step, the designation of the 643-acre area from agriculture to an Employment Center and Highway Commercial use, was implemented by the updated Dixon General Plan adopted in December of 1993.

The purpose of the NQSP is to implement the goals, policies and objectives defined by the General Plan and to further develop the specific land use classifications and development guidelines for the plan area. Specifically, this involves defining future land use categories for highway commercial, light industrial, professional/administrative office, and community commercial development. It also involves defining the specific development requirements to: establish a scenic gateway to the community; provide for efficient vehicular and pedestrian circulation; facilitate alternative transportation choices; establish an open space system for habitat management, drainage and agricultural buffer; and to ensure that all development in the plan area is integrated with the City's provision of infrastructure and service.

The Initial Study prepared for the NQSP determined that the project required a full EIR. Since the project is a policy document, it was determined that a Program EIR was the appropriate action under CEQA. Subsequent actions facilitated by the NQSP will require an individual environmental assessment to determine the appropriate action under CEQA. This could require that future projects prepare: a Project EIR; a Supplemental EIR; an Addendum to the EIR; a Mitigated Negative Declaration; or if no additional environmental analysis is deemed necessary, a Negative Declaration of Environmental Impact.

The following is a summary of the environmental impacts associated with the NQSP and the project alternatives. Section 1.2 provides a tabular summary of all impacts and mitigation measures, identified in the EIR (Section 4.0), and Section 1.3 provides a summary of the project alternatives (identified in Section 8.0).

1.1.1 EXISTING AND ADJACENT LAND USES

The NQSP will convert prime agricultural land to urbanization in conformance with the Dixon General Plan. Environmental impacts will potentially result in terms of: agricultural land conversion; residential displacement; conflicts with land use policies; conflicts with adjacent land uses and the cumulative growth inducing impact of extending sewer lines into an agricultural area. Mitigation measures can reduce most impacts to a less-than-significant level. However, the conversion of prime agricultural land to a non-agricultural use, and the extension of urban services into an agricultural area, remain as **significant and unavoidable impacts**.

1.1.2 GEOLOGY, SOILS AND SEISMICITY

The project will result in potential environmental impacts in terms of: soils and seismicity. However, these impacts can all be reduced to a **less-than-significant level** through mitigation measures.

1.1.3 SURFACE AND WATER QUALITY

The NQSP will have potential environmental impacts in terms of: on-site hydrology; off-site hydrology; surface water quality; and surface water quantity. These impacts can all be mitigated to a less-than-significant level.

1.1.4 AIR QUALITY

The project will have potential environmental impacts in terms of: construction impacts; long term traffic impacts; stationary impacts; and cumulative impacts. Both construction impacts and stationary impacts can be mitigated to a less-than-significant level. However, buildout of the project will cause air quality impacts associated with traffic and cumulative development which are significant and unavoidable.

1.1.5 BIOLOGICAL RESOURCES

The NQSP will have potential biological impacts in terms of: vegetation; seasonal freshwater marshes; wildlife resources; Swainson's hawk; Tiger Salamander; and cumulative impacts. However, these impacts can all be reduced to a less-than-significant level by implementing the mitigation measures identified in the EIR.

1.1.6 CULTURAL RESOURCES

Cultural resources potentially impacted by the NQSP include: prehistoric resources, historic resources; and cumulative development. However, these impacts can all be reduced to a less-than-significant level by the mitigation measures identified in the EIR.

1.1.7 TRAFFIC, CIRCULATION AND ACCESS

The project will result in potential traffic and circulation related impacts, including: existing plus project traffic conditions at key intersections; existing plus project traffic conditions at various road segments, and cumulative traffic impacts. However, these impacts can be reduced to a less-than-significant level by implementing the mitigation measures identified in the EIR.

1.1.8 NOISE IMPACTS

The NQSP will result in potential noise impacts associated with: project construction; traffic; on-site noise generation; and cumulative development. These impacts can be reduced to a less-than-significant level by implementing the mitigation measures identified in the EIR.

1.1.9 PUBLIC SERVICES AND UTILITIES

Buildout of the NQSP will potentially have significant impacts on public services and utilities, including: expansion of the North First Street Assessment District; substantial need for additional domestic water; the extension of sewer lines; the expansion of wastewater treatment facilities; the need for solid waste services; fire protection; police protection; education facilities; and cumulative impacts. However, these impacts can all be reduced to a less-than-significant level by implementing the mitigation measures required in the EIR.

1.1.10 VISUAL RESOURCES

The project will potentially result in visual impacts regarding: existing views; future visual impacts; light and glare; and cumulative impacts. However, these impacts can all be reduced to a less-than-significant level by implementing the mitigation measures in the EIR.

1.1.11 PUBLIC HEALTH AND SAFETY

Potential public health and safety impacts identified by the EIR include: underground storage tanks; previous use of pesticides and herbicides; airborne pesticides and herbicides associated with adjacent agriculture; and the use of future hazardous material. These impacts will all be reduced to a less-than-significant level by implementing the mitigation measures identified in the EIR.

1.2 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The following Table 1.2.1 provides a summary of all environmental impacts and mitigation measures identified in Section 4.0. This information is incorporated into the Draft Mitigation Monitoring program located in Appendix D.

1.3 SUMMARY OF PROJECT ALTERNATIVES

1.3.1 PROJECT ALTERNATIVES

Project alternatives selected for analysis in this EIR include alternatives which provide a sample of the range of potential environmental effects associated with constructing (or not constructing) the proposed development. Three alternatives to the proposed project are evaluated in Section 8.0, including:

- Alternative 1: (the no project alternative);
- Alternative 2: (mixed-use development alternative); and
- Alternative 3: (alternative project site).

These three development scenarios were selected to allow for a complete evaluation of the merits of various potentially feasible combinations and locations for development. Alternative 1 assess the impacts if the project site is not developed. Alternative 2 provides a reasonable basis for assessing the environmental consequences of different combinations of land uses including residential development. Alternative 3 assesses the impacts of implementing the NQSP on an alternative project site.

1.3.2 COMPARATIVE SUMMARY

The proposed project was compared to the three project alternatives. This comparative review indicates that the no-project alternative is environmentally superior to the project in nine of the eleven impact categories, including: land use and agricultural resources; air quality; biological resources; cultural resources; traffic and circulation; noise, public services and utilities; visual resources; and public health and safety. Both the mixed-use development and the alternative project site alternatives had no impact categories that were considered

**TABLE 1.2.1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
<u>EXISTING ADJACENT LAND USES</u>			
AGRICULTURAL LAND CONVERSION			
LU-1: Prime agricultural land will be converted to non-agricultural use, including 60 acres regulated by Williamson Act Agricultural Preserve.	S	No feasible mitigation measure	SU
EXTENSION OF SEWER LINE			
LU-2: The project will extend a sewer line with capacity to serve new development.	LS	No mitigation required	LS
ADJACENT LAND USES			
LU-3: The project may impair the agricultural productivity of prime agricultural land adjacent to the NQSP area.	PS	LU-A: Ensure that all future development within the NQSP strictly enforce the landscape medians and agricultural buffer zones established by the specific plan.	LS
RESIDENT DISPLACEMENT			
LU-4: The project will cause the displacement of existing residents.	LS	No mitigation required	LS
ENVIRONMENTAL PLANS AND GOALS OF THE COMMUNITY			
LU-5: This project may conflict with adopted community plans or goals established by LAFCo.	PS	LU-B: The project will require review and approval by the Solano County LAFCo before it can be annexed to the City of Dixon or developed.	LS

NA = Not Applicable LS = Less-than-Significant PS = Potentially Significant S = Significant SU - Significant and Unavoidable

IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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LU-6:	The project conflicts with adopted community plans and goals established by the Williamson Act Agricultural Preserve	PS	LU-C:	The proposed NQSP shall be reviewed by the Dixon City Council and the Solano County Board of Supervisors and findings shall be made that the 60 acres of the project site currently under Williamson Act should be withdrawn from Agricultural Preserve.	LS
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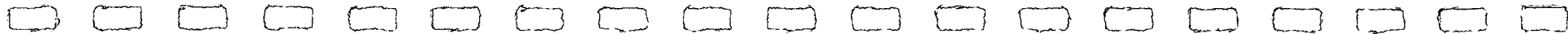
CUMULATIVE IMPACTS

LU-7:	Cumulative impact - Growth inducement.	S		No feasible mitigation	SU
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SOILS

G-1:	Construction associated with project implementation may cause soil erosion, wind and water erosion, and siltation of local drainages.	S	G-A:	An erosion control plan shall be prepared prior to construction. This plan shall include standards for permanent erosion control design, requirements for full establishment of vegetation, and emphasize drought-tolerant and climate-adapted vegetation.	LS
			G-B:	Disturbed areas of the project site that are not actively under construction during the winter rainy season shall not be left exposed for more than one month.	
G-2:	Damage to structures and infrastructure caused by soils prone to shrink/swell behavior.	S	G-C:	Prior to development of any facility within the specific plan area, a detailed geotechnical investigation of on-site soils shall be conducted to identify the soils subject to shrink/swell behavior.	LS
			G-D:	Hazards associated with shrink/swell soils shall be avoided through proper construction methods which include site drainage, and responsive grading, excavation and foundation design. Potential adverse affects due to soils with high shrink/swell are avoidable if these soils are identified prior to the design and construction, and appropriate design and construction methods are applied.	

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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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GEOLOGY AND SEISMICITY

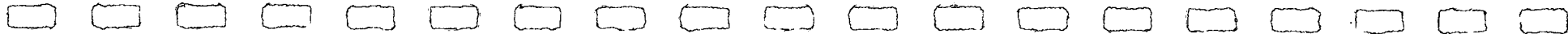
SEISMICITY

G-3:	Ground-shaking and liquefaction could occur due to possible seismic event along active faults in the area.	S	<p>G-E: All structures and new buildings constructed within the project area shall conform to the latest seismic structural standards of the Uniform Building Code (UBC) as a minimum standard.</p> <p>G-F: Plans for individual buildings subject to public occupancy shall be accompanied by an investigative report prepared by a geologist specialized in engineering. This report shall identify underlying geology including depth of water table, depth to bedrock, and presence and characteristics of sand lenses. Necessary structural measures to adequately respond to the degree of probable risk attributable to these underlying formations shall be recommended.</p> <p>G-G: No public or private electrical, water, wastewater or gas lines shall be permitted to cross identified potential ground failure areas without sufficient precautionary emergency provisions for: rapid shut-off, minimum disruption of service, and any adverse impact on adjoining and surrounding uses in the event of seismic-induced ground failure.</p>	LS
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CUMULATIVE IMPACTS

G-4:	The project will minimally contribute to cumulative soil erosion or the potential for exposing people to a possible seismic event.	LS	No mitigation required	LS
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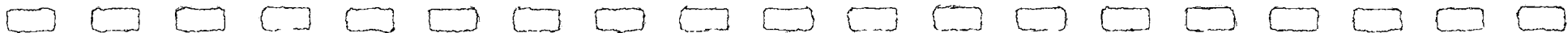
IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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SURFACE AND WATER QUALITY

SURFACE WATER QUANTITY

WQ-1: Change in land use from agriculture to urban uses will result in potential increases to the quantity of surface water runoff.	S	WQ-A: Prior to commencement of on-site grading, the project shall demonstrate, via a detailed hydraulic analysis of post development topographic and drainage conditions, that the final project design would not substantially cause flooding to adjacent or downstream parcels or conveyance facilities. The project proponent shall participate in city-wide drainage improvements in order to increase downstream flow capacities to accommodate this project. WQ-B: Final detention basin(s) design, conveyance facilities, and management of the proposed facilities on-site shall, as demonstrated by the hydraulic analysis of the project proponent and approved by the City of Dixon, adequately accommodate runoff from a 10-year and 100-year storm event. Ultimate development of the entire site must be considered, although drainage infrastructure construction could be phased as needed.	LS
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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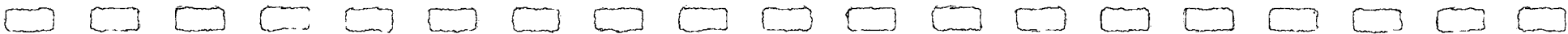
SURFACE WATER QUALITY

WQ-2	Change to the quality of runoff would result from the fundamental change in land uses from agriculture to urban uses.	S	WQ-C:	Prior to commencement of on-site grading, the project sponsor shall develop a surface water quality control plan, to be implemented and approved by the City of Dixon. The plan shall include, but not necessarily be limited to reducing runoff contaminant concentrations by: <ul style="list-style-type: none">• installing sediment and grease traps at all catch basins or within storm drain lines;• properly maintaining sediment and grease traps, with responsibility for maintenance assigned to site operations to be established by the project sponsors prior to completion of construction of the first phase of development;• incorporating infiltration facilities (porous pavement or grass swales) within the project to reduce peak flow of runoff;• reducing source pollution causes through practices such as minimal use of fertilizer, pesticides and herbicides, proper application of water for landscape irrigation, keeping roadways and parking lots free of litter and sediments, proper methods and locations for disposal of automobile hazardous wastes; and• maximizing distances between inlets and outlets perhaps using elongated basin shapes.	LS
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CUMULATIVE IMPACTS

WQ-3:	The project will cumulatively contribute to increased surface water runoff and degradation to surface water quality.	LS	No mitigation required	LS
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AIR QUALITY

CONSTRUCTION IMPACTS

AQ-1: The NQSP will result in short-term construction impacts to air quality. S LS

Measures to Reduce PM₁₀

Although only the NO_x emissions exceed the YSAQMD significance thresholds, the following mitigation measures will help to minimize all short term construction air quality impacts.

AQ-A: The project construction site shall be watered at least two times per day. Emphasis shall be placed on the watering of unpaved roadways during periods of high vehicle movement.

AQ-B: Tarpaulins or other effective covers shall be used on haul trucks when transferring earth materials.

AQ-C: Where feasible, all inactive portions of the project construction site shall be seeded and watered until vegetation is grown.

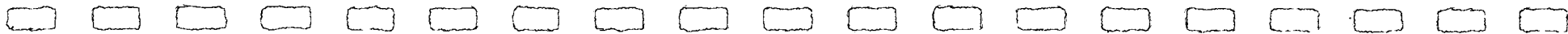
AQ-D: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the YSAQMD.

AQ-E: Soils shall not be exposed nor grading occur during periods where wind speeds are greater than 20 mph averaged over one hour.

AQ-F: Vehicle speed shall not exceed a maximum of 15 mph on all unpaved roads.

AQ-G: All roadways, driveways, and sidewalks shall be paved as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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Measures to Reduce O₃ Precursors (ROG and NO_x)

AQ-H:	Proper maintenance of equipment and engines shall be maintained at all times.	LS
AQ-I:	Vehicle idling shall be kept to an absolute minimum. As a general rule idling shall be kept below 10 minutes.	
AQ-J:	During smog season (April through October), the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.	
AQ-K:	Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible.	

Measures to Reduce Petroleum Contamination of Soils

AQ-L:	A site assessment shall be conducted before construction activities begin. At locations where petroleum contamination has occurred, the soils shall be remediated using appropriate techniques (Section 4.10, Public Health and Safety). Removal of petroleum contamination will also eliminate the generation of hydrogen sulfide and its associated odor. If unforeseen areas of subsurface contamination are encountered during excavation activities, grading shall be curtailed in the contaminated area until the area is evaluated and remediated as appropriate.	LS
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EXISTING AIR QUALITY

AQ-2:	Existing Air Quality in the project area currently exceeds the YSAQMD's threshold of significant for O ₃ and PM ₁₀ .	SU	No feasible mitigation measure	SU
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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PROJECT GENERATED EMISSIONS

AQ-3:	Long-term mobile sources of air pollution will result from implementation of the NQSP.	SU	No feasible mitigation measure	SU
AQ-4	The project plus future (2010) generated emissions will result in vilations of ambient CO standards and a net increase of the O ₃ precursors.	SU	<p>The following mitigation measures will help to reduce air quality impacts; however, this remains as a significant and unavoidable impact.</p> <p>AQ-M: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.</p> <p>AQ-N: Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities. Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.</p> <p>AQ-O: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.</p>	SU

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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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Mitigation Through Land Use Planning and Site Design

- AQ-P: Mixed land uses will reduce vehicle trips and vehicle miles traveled (VMT). Supportive land uses shall be sited within walking/biking distance of one another. SU
- AQ-Q: Support facilities to encourage modes of transportation other than the automobile shall include pedestrian and bicycle pathways.
- AQ-R: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.
- AQ-S: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.
- AQ-T: Street design standards, including landscape areas between the sidewalk and street, night lighting, safe islands in the center of major arterials, automatic street or pedestrian-activated "walk" signals, and adequate "walk" times, shall be enforced.
- AQ-U: PM₁₀ emissions shall be reduced by curtailing fugitive dust through effective landscaping, and paving all vehicle roads and parking lots.

AQ-5:	Stationary sources of air pollution associated with energy generating.	LS	No mitigation required	LS
AQ-6:	Airborne PM ₁₀ from adjacent agricultural operations.	S	AQ-V: An agricultural buffer is proposed on the east side of the project site.	LS
AQ-7:	Airborne PM ₁₀ from adjacent agricultural burning.	S	AQ-W: Air pollution control districts regulate the timing and methods of field burning in order to reduce the impact on local and regional air quality. AQ-X: An agricultural buffer is proposed on the east side of the project site.	LS

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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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CUMULATIVE IMPACTS

AQ-8:	Cumulative emissions of ozone (O ₃) precursors.	SU	AQ-Y: <ul style="list-style-type: none"> • Establish a priority system favoring multi-rider vehicles. • Establish parking pricing strategies. • Maximize telecommunication, including appropriate network infrastructure. • Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.) • Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment. • Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home. • Employer-sponsored subscription buses to supplement or substitute for public transit service. • Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants. • Request minibus, jitney or other para-transit service within the project. • Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development. • Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance. • Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules. • Request convenient bus schedules to accommodate unusual schedules. 	SU
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.
- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

BIOLOGICAL RESOURCES

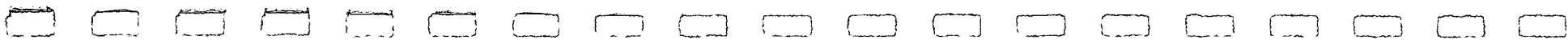
VEGETATION RESOURCES

B-1:	Project will result in the displacement of existing vegetation.	LS	No mitigation required	LS
B-2:	Proposed project will result in the removal of agricultural vegetation.	LS	No mitigation required	LS

SEASONAL FRESHWATER MARSH

B-3:	Project will result in the alteration of a seasonal freshwater marsh.	S	<p>B-A: Where practicable, the wetlands area should be avoided through land use planning.</p> <p>B-B: Preserved wetlands area should be protected from development by a buffer or easement, so that the wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjacent proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.</p>	LS
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In general, the following standards shall apply to the buffer and preserved wetlands area:

- All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetlands area.
- No mowing shall be allowed to occur in a wetland easement.
- Surface water runoff from any paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.

B-C: If the removal or total destruction of the marshland area is unavoidable as a result of the project, it may be required that the impacted wetland be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.

WILDLIFE RESOURCES

B-4:	Project will cause a disturbance to wildlife resources.	LS	No mitigation required	LS
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SWAINSON'S HAWK

B-5	Disturbance to Swainson's hawk habitat.	S	<p>B-D: A breeding survey shall be conducted between April and July in order to:</p> <ul style="list-style-type: none"> • Determine if the species nest on the project site; • To develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets. <p>B-E: Future development shall participate in a County-wide Habitat Management Plan.</p>	LS
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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TIGER SALAMANDER

B-6:	Project may cause a disturbance to California tiger salamander habitat.	S	B-F: A field survey shall be conducted during the spring months in order to: <ul style="list-style-type: none"> • Determine if the species occurs on the project site; • To develop appropriate mitigation measures. 	LS
B-7:	Project may result in a disturbance to habitat of the northern harrier, black-shouldered kite and tri-colored blackbird.	PS	B-G: Future development shall participate in a County-wide Habitat Management Plan addressing the loss of potential foraging habitat.	LS

CUMULATIVE IMPACTS

B-8:	Project will contribute to a cumulative loss of seasonal freshwater marsh.	LS	No mitigation required	LS
B-9:	Project will contribute to a cumulative disturbance to Swainson's hawk habitat.	LS	No mitigation required	LS

CULTURAL RESOURCES

PREHISTORIC RESOURCES

C-1:	Potential damage to undiscovered cultural resources.	PS	C-A: Consultant with qualified archaeologist if buried archaeological deposits are discovered during construction.	LS
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HISTORIC RESOURCES

C-2:	Construction of the project will result in destruction of Vaughn House.	S	C-B: Future development shall be required to preserve, avoid, or relocate the Vaughn House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Vaughn House, then the structure shall be fully recorded before demolition.	LS
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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C-3:	Construction of the project will result in destruction of Dudley House.	S	C-C: Future development shall be required to preserve, avoid, or relocate the Dudley House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Dudley House, then the structure shall be fully recorded before demolition.	LS
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CUMULATIVE IMPACTS

C-4:	Cumulative impact to archaeological and historic resources.	LS	No mitigation required	LS
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TRANSPORTATION, CIRCULATION AND ACCESS

EXISTING LEVELS OF SERVICE

T-1	Existing intersections and streets within the project area currently function within a level of service in conformance with the City's policies.	LS	No mitigation required	LS
T-2	The NQSP establishes land use patterns and circulation concepts that must conform with the Dixon General Plan and the Solano County Congestion Management Plan.	PS	T-A: Future development shall comply with the design guidelines included in the NQSP, ensuring that the project will comply with transportation congestion management and circulation policies in the General Plan and Solano County Plan.	LS

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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
T-3	The existing traffic conditions, plus the traffic generated by the NQSP will exceed the required LOS at four intersections. All intersections will warrant signalization.	<p>S</p> <p>T-B: All intersections identified in the EIR would warrant signalization. A specific analysis shall be prepared as part of any future development to determine the specific signalization required at the fair share contribution to funding such improvements.</p> <p>T-C: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.</p> <p>T-D: Improve the North First Street interchange with Interstate 80. Separate studies such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.</p> <p>T-E: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B.</p>	LS
T-4	The existing plus project conditions will result in unacceptable levels of service for various road segments.	<p>S</p> <p>T-F: Widen North First Street to six lanes between Interstate 80 and Arterial B.</p> <p>T-G: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.</p> <p>T-H: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.</p>	LS

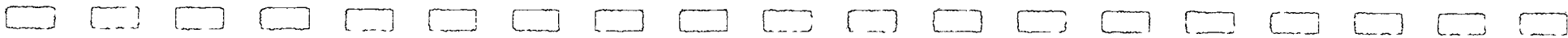
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
T-5	Implementation of the project would introduce significant development to an area not directly served by public transit.	No mitigation required	LS
T-6	Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.	<p>T-I: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.</p> <p>T-J: Implementation of the project includes a bikeway and pedestrian trail system for public use.</p>	LS

CUMULATIVE IMPACTS - WITHOUT PROJECT

T-7	The cumulative traffic impact in the City of Dixon without the development of the NQSP will require significant improvement to the interchanges of I-80 and Pedrick Road and North First Street, and to sections of both North First Street and Pedrick Road.	<p>T-K: The mitigation of traffic impacts associated with the cumulative - no project scenario would not be the responsibility of the proposed project. Therefore, no mitigation measures have been identified. However, it can be assumed that other projects that make up the cumulative scenario would be responsible for mitigating this impact, and that funding such improvements would be based on a "fair share" assessment based on all future development.</p>	LS
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
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CUMULATIVE IMPACTS - WITH PROJECT

T-8	The cumulative traffic conditions would exceed LOS at six intersections.	S	T-L: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80. T-M: Improve the North First Street interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system. T-N: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection. T-O: Construct additional turn lanes at the North First Street/Vaughn Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the eastbound approach of Vaughn Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.	LS
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IMPACT	LEVEL OF SIGNIFICANCE PRIOR TO/WITHOUT MITIGATION	MITIGATION MEASURE	RESIDUAL SIGNIFICANCE AFTER/WITH MITIGATION
T-9 The cumulative traffic scenarios for 2010 will result in unacceptable levels of service for various road segments.	S	T-P: Widen North First Street to six lanes between Interstate 80 and Arterial B. T-Q: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive. T-R: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements. T-S: The Pedrick Road Overcrossing of the railroad tracks is mentioned in the General Plan as a possible location to be considered as a part of a separate study. The overcrossing, if implemented, would cross over the railroad tracks and would not affect the traffic forecasts. This shall be considered with all future cumulative development implementing this project.	
T-10 Since the site is not in the City of Dixon, it is not directly served by public transit.	LS	No mitigation required	LS
T-11 Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.	S	T-T: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.	LS
T-12 Implementation of the project includes a bikeway and pedestrian trail system for public use.	LS	No mitigation required	

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SHORT-TERM CONSTRUCTION

N-1:	Short-term construction noise impacts associated within the NQSP.	S	<p>N-A: All contractors shall comply with local, state and federal noise regulations, including fitting all equipment with mufflers according to the manufacturer's specifications.</p> <p>N-B: Construction activities shall not take place between 7:00 p.m. and 7:00 a.m. on weekdays and Saturday, and shall not be permitted on Sunday or on federal holidays.</p>	LS
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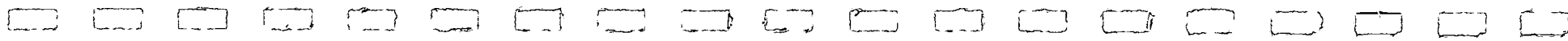
LONG-TERM NOISE IMPACTS

N-2:	Long-term noise impacts associated with traffic.	S	N-C: Future development shall comply with the City of Dixon. Development criteria in the NQSP shall be required to demonstrate conformance with the City's noise standard or site specific mitigation measures to ensure that noise thresholds are not exceeded.	LS
N-3:	On-Site Noise	S	N-D: Residential land uses are not proposed for this project. Commercial and office uses located within the proposed year 2010 70 CNEL noise contour, and industrial uses proposed within the 75 CNEL noise contour (Figure 4.8.1), shall be sited and designed to be sensitive to the adjacent I-80 noise source by incorporating appropriate building materials and design techniques to improve both the interior and exterior noise environment. In addition, the use of landscape barriers shall be explored to reduce noise levels adjacent to I-80.	LS

CUMULATIVE IMPACTS

N-4	Cumulative noise impacts.	LS	No mitigation required	LS
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PUBLIC SERVICES AND UTILITIES

WATER

PS-1	Approximately half of the NQSP land area is currently not within the NFSAD and does not have access to a municipal water system.	S	PS-A: Prior to approval of the NQSP, the entire project area shall join the NFSAD to ensure water supply services.	LS
PS-2	Implementation of the NQSP would generate a substantial need for domestic water, increasing current municipal water storage requirements	S	PS-B: Prior to the issuance of a building permit, the project proponent shall obtain evidence that a water supply is available to meet the minimum demand (2.3 mgd) of the project and submit this evidence (will serve letter) to the City of Dixon.	LS

CUMULATIVE IMPACTS

PS-3	Implementation of cumulative development in the area would generate the need for additional water supply, conveyance, treatment and storage facilities and services.	LS	No mitigation required	LS
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WASTEWATER

PS-4	Buildout of the proposed NQSP would generate an average flow of 694,320 gpd and a peak flow of approximately 1.7 mgd of wastewater. Existing wastewater collection infrastructure would need to be extended to serve the project site.	S	PS-C: Prior to the issuance of a building permit, evidence that the city's wastewater treatment plant has capacity to accommodate the proposed project shall be submitted to the City of Dixon. PS-D: Prior to the issuance of a building permit, the 60 acres of the project site located east of Pedrick Road shall be annexed into the service district boundaries of the city's sewer service area. PS-E: The project proponent shall be responsible for contributing to the appropriate hook-up fees to help offset the costs of necessary sewage treatment facility expansions. In addition, the project proponent shall be responsible for the construction of sewer lift stations, sewer mains and any other facility improvements deemed necessary to serve the proposed project.	LS
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CUMULATIVE IMPACTS

PS-5	Implementation of cumulative development in the area would generate wastewater which would need to be treated at the City of Dixon wastewater treatment plant.	LS	No mitigation required	LS
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SOLID WASTE

PS-6	Implementation of construction activities would generate lumber, sheetrock, and other scrap materials during construction. In addition, implementation of the proposed project would generate approximately 138,992 pounds of solid waste per day.	S	<p>PS-F: Prior to final map approval, the project proponent shall submit a construction waste; commercial and industrial; and an open space waste recycling program for long-term handling of recycled waste from the project site.</p> <p>PS-G: The project proponent shall provide provisions for an on-site recycling center for commercial and industrial uses. In addition, adequate collection facilities for recyclable materials shall be located throughout the project site including outside storage and collection containers.</p> <p>PS-H: Grass clippings, prunings and other organic waste resulting from open space maintenance are classified as clean waste and shall be made available for composting or recycling.</p>	LS
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CUMULATIVE IMPACTS

PS-7	Implementation of cumulative development in the area would generate solid waste which would need to be disposed of in the B&J Landfill.	LS	No mitigation required	LS
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FIRE PROTECTION SERVICES

PS-8	The substantial increases in employees and structures associated with implementing the NQSP would increase the demand for fire protection and emergency medical aid services provided by the Dixon Fire Department and Foothill Ambulance.	S	<p>PS-I: Prior to recordation of a final map or issuance of a grading permit, the project proponent shall <u>either</u> dedicate land for a fire station and provide financial contributions toward equipment and/or personnel <u>or</u> shall participate in establishment of an assessment district in which all property owners in the area would dedicate funds towards establishment of adequate fire protection facilities.</p> <p>PS-J: Prior to the issuance of building permits, the project proponent shall design and submit a plan to the Dixon Fire Department showing all required fire hydrant locations, detailed calculations to determine fire flow based on future structural design requirements, and access to all developed areas in accordance with city standards.</p> <p>PS-K: Prior to the issuance of building permits, the project proponent shall prepare and submit a plan for emergency response including details of each proposed facility and the business conducted, an inventory of hazardous materials handled or stored on-site and a training program for employees.</p>	LS
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CUMULATIVE IMPACTS

PS-9	Cumulative development in the area would impact existing fire protection and emergency medical aid services.	LS	No mitigation required	LS
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POLICE PROTECTION

PS-10	Implementation of the proposed project would increase the daily population in the City of Dixon which would generate additional traffic on local roadways. Implementation of the project would also generate additional traffic accidents, vehicle thefts, office burglaries, vandalism, and personal disputes.	S	<p>PS-L: Prior to final map approval or issuance of a building permit, the project proponent shall request the city to commit to increase funding for necessary police services and required equipment. The city shall also verify that funding can be increased during buildout of the proposed project, through either a combination of impact fees imposed on new development and/or an increase in general fund allocations. In any event, the project proponent shall be responsible for paying its fair share for additional staff and equipment to serve the project site. This shall be established prior to occupancy of any structure occupying the project site.</p> <p>PS-M: The project proponent shall be responsible for providing an on-site private security staff to adequately serve the proposed project. This staff would be responsible for securing future structures and providing security in parking lots during and after normal business hours.</p>	LS
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CUMULATIVE IMPACTS

PS-11	Cumulative development in the area would impact existing police protection services.	LS	No mitigation required	LS
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EDUCATIONAL FACILITIES

PS-12	Implementation of the proposed project would increase the daily population in the City of Dixon, however, it would not directly increase student enrollment at any of the existing educational facilities.	PS	<p>MS-N The project proponent shall be responsible for paying \$0.27 per square feet of commercial and industrial development consistent with Assembly Bill 2926, which requires the contribution of developer's fees to fund future educational facilities.</p>	LS
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CUMULATIVE IMPACTS

PS-13	Implementation of cumulative development in the area could impact existing educational facilities and services.	LS	No mitigation required	LS
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ELECTRICITY AND NATURAL GAS

PS-14	Implementation of the proposed project would generate the need for electricity and natural gas services.	LS	No mitigation required	LS
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CUMULATIVE IMPACTS

PS-15	The project will cumulatively contribute to the need for energy in the project area.	LS	No mitigation required	LS
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TELECOMMUNICATIONS

PS-16	Implementation of the proposed project would generate the need for telecommunications services and facilities.	LS	No mitigation required	LS
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PARKS AND RECREATIONAL FACILITIES

PS-17	Implementation of the proposed project would involve construction of commercial, administrative office, and industrial uses and would not generate the need for additional public parks and recreational facilities. The need for private recreational facilities would be necessary for future employees who might want to exercise during lunch or in the evening.	LS	No mitigation required	LS
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CUMULATIVE IMPACTS

PS-18	The project will have a minimal impact on cumulative park and recreation facilities.	LS	No mitigation required	LS
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VISUAL RESOURCES

EXISTING VIEWS

VR-1	Implementation of the proposed project would result in the elimination of views of the existing open space and agricultural uses	LS	No mitigation required	LS
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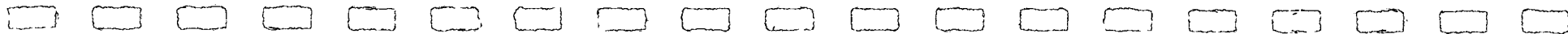
FUTURE DEVELOPMENT

VR-2	Development of the proposed project would change existing views from I-80, North First Street, Vaughn Road and Pedrick Road.	LS	No mitigation required	LS
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LIGHT AND GLARE

VR-3	Implementation of the proposed project would generate daytime glare and reflections off building finishes and vehicles in parking lots. In addition, the project would result in an increase in nighttime lighting from adjacent locations and scenic highways.	S	VR-A: Bare metallic surfaces such as pipes, vents, gutters, and flashings shall be painted or concealed from view in a manner harmonious to the structure. All flashing and sheet metal must be treated to match the adjacent materials. VR-B: Primary roofing materials shall be non-reflective. VR-C: Monolithic glass structures shall not be allowed unless used as a portion of a building to highlight an entry. VR-D: Building mass colors shall be of varied hues that minimize glare with bright colors limited to use around doors, trims, awnings and other pedestrian-oriented features.	LS
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CUMULATIVE IMPACTS

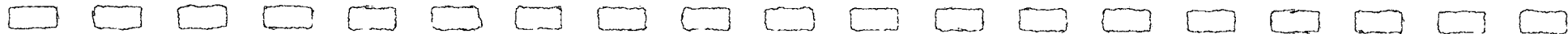
VR-4	The long-term visual aesthetic issue associated with implementation of cumulative development generally includes the replacement of visual qualities of natural and altered open space with urban uses associated with development.	LS No mitigation required	LS
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PUBLIC HEALTH AND SAFETY

UNDERGROUND STORAGE TANKS

PH-1	Underground storage tanks presently exist on the project site.	S PH-A: A qualified geotechnical engineer shall excavate existing tanks and inspect the areas where tanks have been previously removed. Soil samples shall be taken from the base of the excavations and analyzed for contamination. If contaminants are found, additional sampling shall be required to determine the extent of the contamination and how it will be remediated (excavation, removal and/or venting). If groundwater is found in the base of the excavation or in bore holes, the CRWQCB may require the installation and sampling of one or more monitoring wells. If groundwater contamination is identified and the levels of contaminants do not appear to decrease over time, remediation of the groundwater may also be required.	LS
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PESTICIDES AND HERBICIDES

PH-2	Pesticides and herbicides may have been used on the project site.	S	PH-B: Soil samples in areas identified in the Preliminary Site Assessment shall be taken. These areas include locations where pesticides were stored, mixed and applied. PH-C: The entire site occupied by Mistler Trucking/Mistler Farm operations shall be excavated and surveyed for contaminants. A Level One Toxic's Analysis shall be prepared by a qualified geotechnical engineer to define the level of contamination and any required remediation techniques. This analysis shall be performed prior to grading or construction activities to reduce potential exposure of construction workers and the general public to hazardous materials.	LS
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AIRBORNE PESTICIDES AND HERBICIDES

PH-3	Airborne pesticides and herbicides in the project vicinity could impact future development.	S	PH-D: The restrictions of the Solano County Agricultural Commissioner on pesticide and herbicide spraying shall be followed, especially conditions restricting the aerial spraying of specific chemicals in proximity to the project site. If regulations concerning pesticide and herbicide spraying are not being enforced effectively, the Cal-EPAs Department of Pesticide Regulation shall be notified and enforcement action requested.	LS
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PRESENCE OF HAZARDOUS MATERIALS

PH-4	Hazardous materials may be used and stored in association with future development.	S	PH-E: A hazardous waste reduction program shall be prepared prior to leasing a portion of the site to a business handling hazardous materials. The goal of the hazardous waste reduction program is to reduce the project site's contribution to hazardous waste generation and disposal. This program shall consider the wastes generated by the occupants of the site, except for occupants required by law to implement similar programs because they generate substantial quantities of hazardous waste greater than those triggering the legal requirements for waste minimization.	LS
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CUMULATIVE IMPACTS

PS-5	Cumulative impacts to public health and safety.	LS	No mitigation required	LS
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GROWTH INDUCING IMPACTS

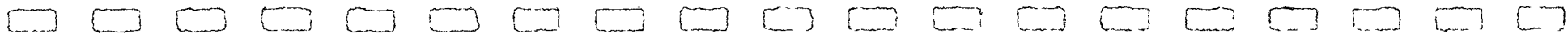
ECONOMIC AND POPULATION GROWTH

GI-1:	The project will indirectly generate a daytime population increase of approximately 11,000 people.	LS	No mitigation required	LS
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EXPANDED CAPACITY

GI-2:	The project would contribute to the need for expanded capacity at the City's wastewater treatment plant.	LS	No mitigation required	LS
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EFFECTS ON ADJACENT LAND

GI-3:	The project could cause growth-inducing effects on adjacent agricultural land.	S No feasible mitigatino measure	SU
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environmentally superior to the proposed project. Table 1.21 shows a comparative summary of the project to the three alternatives.

**TABLE 1.3.1
COMPARATIVE SUMMARY OF PROJECT ALTERNATIVES**

	NO PROJECT	MIXED-USE DEVELOPMENT	ALTERNATIVE PROJECT SITE
Land Use and Agricultural Resources	S	NS	NS
Geology, Soils and Seismicity	NS	NS	NS
Surface and Water Quality	NS	NS	NS
Air Quality	S	NS	NS
Biological Resources	S	NS	NS
Cultural Resources	S	NS	NS
Traffic and Circulation	S	NS	NS
Noise	S	NS	NS
Public Services and Health	S	NS	NS
Visual Resources	S	NS	NS
Public Health and Safety	S	NS	NS

S = Environmentally superior
NS = Not environmentally superior

1.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE:

Section 15126(d)(2) of CEQA requires that if the environmentally superior alternative is the no-project alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

As shown in Table 1.2.1, the no-project alternative is considered the environmentally superior alternative because, in comparison to the proposed project, it clearly has the most environmentally superior characteristics. This means that, per CEQA, the other two alternatives must be considered as the environmentally superior alternative. However, it is clear that in comparison to the proposed project, neither the mixed development or the alternative project site can be deemed as environmentally superior. Both alternatives are defined as not being environmentally superior to the project in each of the 11 impact categories.

Therefore, the proposed NQSP project is considered to be the environmentally preferred project.

1.5 CONCLUSION

The NQSP will implement the intent of the Dixon General Plan to develop the project site as an employment center and to create a visually pleasing, well planned gateway to the community. However, there are four impact areas associated with the NQSP that are considered significant and unavoidable. This includes:

- conversion of prime agricultural land to a non-agricultural use;
- growth inducement potential of extending urban services into an agricultural area;

- existing plus project air pollution impacts; and
- cumulative air quality deterioration.

The Alternatives Analysis considered the environmental impacts of allowing no development on the project site, of changing the NQSP land use mix to include residential development, and the relocation of the NQSP somewhere off the project site. The fewest environmental impacts would result from the no-project alternative. However, this option would not be consistent with the Dixon General Plan and would not meet the project objectives. The other two alternatives were assumed as having greater environmental impacts than the project. It was therefore concluded that the NQSP is the environmentally preferred project.

Section 15093 of CEQA requires that decision makers balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. If the benefits of the proposed NQSP are deemed to outweigh the significant and unavoidable impacts, the adverse environmental effects may be considered "acceptable".

Where the decision of the public agency allows the occurrence of significant and unavoidable impacts identified in the Final EIR, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the public record. If the agency makes a statement of overriding consideration, the statement should be included in the record of the project approval and should be inventoried in the Notice of Determination.

2.1 PROJECT SUMMARY

The purpose of the Northeast Quadrant Specific Plan (NQSP) is to define the land use pattern and development guidelines for a 643-acre commercial, business-professional, and light industrial park in conformance with the Dixon General Plan. The plan area is located northeast of the City of Dixon in unincorporated Solano County, adjacent to the City of Dixon corporate boundaries and within the City of Dixon Sphere of Influence.

2.2 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

This Environmental Impact Report (EIR) has been prepared to assess the impacts of the proposed NQSP, pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (14 California Administrative Code Section 15000 et seq.), and the City of Dixon environmental review procedures.

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority. Approval of the NQSP constitutes a "project" under CEQA.

The EIR is a public document used to analyze the environmental effects of a proposed project, indicate ways to reduce or avoid possible environmental damage, and identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided, growth-inducing impacts, and significant cumulative impacts of all past, present, and reasonably anticipated future projects.

The EIR is an informational document used in the local planning and decision-making process. It is not the purpose of the EIR to recommend either approval or denial of a project.

2.3 SCOPE OF THE EIR

As provided for in the State CEQA Guidelines, the focus of the EIR is limited to specific issues and concerns identified by the City of Dixon as significant or potentially significant. The city prepared and circulated an NOP of an environmental impact report in November 1992. The NOP contained a project description and environmental checklist form (initial study checklist) included in Appendix A of the EIR. The purpose of the NOP was to inform agencies that an EIR would be prepared. Ten agencies responded to the NOP; responses are contained in Appendix B.

The EIR scoping process identified areas of controversy and concluded that a full EIR was required for the NQSP. The following impact categories were identified as having the potential of creating adverse environmental impacts and have, therefore, been analyzed in this EIR:

- Land Use
- Geology, Soils and Seismicity
- Surface and Water Quality
- Air Quality
- Biological Resources
- Cultural Resources
- Traffic, Circulation and Access
- Noise
- Public Services and Utilities
- Visual Resources
- Public Health and Safety

This EIR is a Program EIR as defined by Section 15168 of CEQA. A Program EIR is intended where there are a series of actions that are related as a logical part in a chain of contemplated actions. This allows for a more general review of a policy document, and a more detailed "construction- level" analysis when specific projects are proposed that implements the policy document.

The proposed NQSP is the second step in the entitlement process involved in converting raw land to urban development. The first step, the designation of the land as an Employment Center (E) and Highway Commercial (HC) on the Dixon General Plan Land Use Map, was adopted in December 1993. Future actions, include: annexation; zoning; and specific project construction. Subsequent projects under the NQSP must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared. Environmental review of subsequent projects may be substantially reduced to the extent that this Program EIR reviews project impacts and sets forth mitigation measures (Public Resources Code Sections 21156-21159).

Projects subsequent to the Program EIR will be subject to preparation of an initial study to determine whether the subsequent project and its significant environmental effects were included in the Program EIR. If the City of Dixon finds that the subsequent project will have no additional significant environmental effect, and that no new mitigation measures or alternatives may be required, it may prepare a negative declaration of environmental impact (CEQA, Section 15153(c)).

2.4 TERMINOLOGY USED IN THE EIR

The NQSP project will herein be referred to as the project, and the geographical boundaries of the project will be referred to as the plan area throughout the document.

The EIR recognizes the following terminology, which may be used to denote the significance of impacts:

- "no change" means that no change from the existing conditions is expected to occur;
- a "less-than-significant" impact would cause no substantial change in the environment (no mitigation is recommended);
- a "potentially significant" impact might cause a substantial change in the environment; however, additional information not presently available is needed to determine the extent of the impact (mitigation is recommended);
- a "significant" impact is one that would cause substantial change in the environment (mitigation is recommended); and
- a "significant and unavoidable" impact is one that would cause a substantial impact on the environment and cannot be avoided if the project is implemented. Mitigation may be recommended to lessen impacts but will not reduce the impact to a less-than-significant level.

2.5 TIERING OF THE EIR

As provided by Section 15152 of CEQA, agencies are encouraged to tier EIRs for separate but related projects, including general plans, zoning changes and development projects. This

approach is intended to eliminate repetitive discussions of the same issues and focus the EIR on the actual issues ripe for decision at each level of environmental review.

The intent of the NQSP is to implement the policies of the General Plan. The objective of the Dixon General Plan is to develop a balanced community that will provide residents with a wide range of housing, employment, recreational, shopping and cultural opportunities. This will involve a balancing of traditional values and lifestyles with contemporary, fiscally responsible municipal services and economic progress. The General Plan is intended to control and guide change in accordance with the development principles expressed by community residents and their representatives.

The General Plan was developed using a time horizon of approximately twenty years (through the year 2010). It is based on analyses and assumptions concerning social, economic and physical conditions which may be subject to change over time. Once the City of Dixon adopted its general plan, it was assumed that "area plans" and "specific plans" would be adopted to address local concerns in additional detail. The NQSP is such a specific plan.

The environmental review process used to adapt the 1993 Dixon General Plan was an Environmental Assessment (EA). The EA was prepared to evaluate the probable environmental effects associated with the implementation of the City of Dixon's General Plan. The discussion in an EA is necessarily presented at a generalized level, since General Plan impacts cannot be predicted with the same degree of accuracy as the impacts associated with a site-specific construction project. It was assumed that supplemental assessments would be required in circumstances where a specific development proposal presents some factors or characteristics that were unforeseen in the General Plan.

For purposes of preparing the NQSP, the General Plan Environmental Assessment was used as the baseline data to initiate analysis. This information was therefore used in the NQSP EIR both by reference, and where appropriately, by direct incorporation, as part of the tiering process directed by CEQA.

As the next stage in the entitlement process, the NQSP implements goals, policies and objectives outlined by the General Plan. The specific plan further defines development policies by breaking down the basic land use classifications of Employment Center (E) and Highway Commercial (HC) into specific categories, including: highway commercial, light industrial, professional/administrative office, and community commercial.

Future steps in the entitlement process will include annexation, zoning, the preparation of parcel maps, and the development of specific projects. At each level of the development process, individual environmental assessments will be required.

2.6 REQUESTED DISCRETIONARY ACTIONS

The project proponent requests the following discretionary actions from the City of Dixon:

- Dixon Northeast Quadrant Specific Plan general plan amendment to amend the text and the land use map of the Dixon General Plan;
- Adoption of the Northeast Quadrant Specific Plan;
- Certification of the Northeast Quadrant Specific Plan Environmental Impact Report;
- Adoption of the Mitigation Monitoring Program;
- Approval of zoning consistent with Northeast Quadrant Specific Plan land uses; and

- Resolution of Intent to request the Solano County Local Agency Formation (LAFCo) to undertake proceedings for the Northeast Quadrant Specific Plan annexation to the City of Dixon.

The following actions are requested from the Solano County Local Agency Formation Commission (LAFCo) and Solano County:

- Detachment of the Northeast Quadrant Specific Plan area from existing Solano County service districts;
- Annexation of the Northeast Quadrant Specific Plan area to the City of Dixon; and
- Amend Solano County General Plan and Zoning to create consistency between city and county planning documents.

Full implementation of the land uses described in the specific plan will require additional approvals:

- Approval of project development agreements between the project proponent and the City of Dixon;
- Final Subdivision Map approval for the major parcels into which the plan area is to be subdivided;
- Approval of tentative and final maps for individual projects;
- Building permits for all structures within the plan area;
- Grading permits to allowing grading of the project site; and
- Potential requirements for U.S. Army Corps of Engineers permits under Section 404 of the Clean Water Act.

2.7 AGENCIES THAT WILL USE THE EIR

The City of Dixon Community Development Department is the lead agency responsible for management, preparation, review and approval of this EIR, as defined in Section 15051(b) of the State CEQA Guidelines. The City of Dixon will have discretionary authority over primary project approvals. Responsible agencies are public entities that have similar discretionary authority through the environmental review process including, but not limited to, the California Regional Water Quality Control Board (CRWQCB), U.S. Army Corps of Engineers (COE), and the California Department of Fish and Game (CDFG). Table 2.7.1 shows the agencies affected by the project and the action or permit required.

**TABLE 2.7.1
AFFECTED AGENCIES**

ACTION OR PERMIT	AGENCY
Approval of Project/Specific Plan	City of Dixon
Certification of EIR	City of Dixon
Adoption of Mitigation Monitoring Program	City of Dixon
Detachment	Solano County LAFCo
Annexation	Solano County LAFCo and City of Dixon
Environmental Clearance (Section 1603 Agreement)	California Department of Fish and Game
Environmental Clearance (Section 404 Permit)	U.S. Army Corps of Engineers
Waste Discharge Permit	California Regional Water Quality Control Board
Air Quality Permit to Construct	Yolo-Solano APCD
Air Quality Permit to Operate	Yolo-Solano APCD
NPDES Permit	U.S. Environmental Protection Agency

2.8 THE EIR PROCESS

The City of Dixon is encouraging public review of the EIR through various means including the notice of preparation (NOP) of an EIR and future public hearings before the planning commission on the Draft and Final EIR and the city council on the Final EIR. The EIR will be initially published as a Draft EIR, and made available to the public, responsible and trustee agencies, and all other interested jurisdictions, agencies and organizations for review and comment.

Written comments received on the Draft EIR will be reviewed, responded to, and incorporated into a Final EIR. Public hearings will then be conducted by the Dixon City Council on the Final EIR and the associated specific plan application.

2.9 MITIGATION MONITORING PROGRAM

Effective as of January 1, 1989, State of California Public Resources Code Section 21081.6 requires lead agencies to adopt reporting or monitoring programs to ensure implementation of any mitigation measures outlined in an EIR. The proposed project shall comply with the requirements of Public Resources Code Section 21081.6 and shall be subject to a mitigation monitoring report in accordance with the City of Dixon CEQA procedures in effect at the time of certification of the EIR.

The monitoring program shall include 1) a list of all mitigation, 2) a description of the procedures to be followed and the reporting forms to be used, and 3) a discussion of responsibility and authority and provisions for enforcement. A Draft Mitigation Monitoring Program is included in Appendix D of the Draft EIR, and the Final Mitigation Monitoring Program in its entirety will be included with the Final EIR.

2.10 KEY ASSUMPTIONS USED IN PREPARING THE EIR

- The 1993 Dixon General Plan and Environmental Assessment are incorporated by reference.
- The time frame for implementing the NQSP is 2010 (20 years) as is the projected time frame for the Dixon General Plan.
- A Program EIR is the appropriate type of EIR to prepare for the NQSP because the specific plan provides policies, but is not at a construction level of detail.
- Future construction-level analysis associated with implementation of the NQSP will require separate independent environmental assessment under CEQA.
- Where there is presently insufficient information to accurately predict the significance of an impact, an assessment of "potentially significant" will be identified.
- Economical social effects are not required under CEQA (Section 15131) and were not requested as part of the EIR's analysis.
- A Mitigation Monitoring Program will be adopted as part of the Final EIR (FEIR).

3.1 PROJECT OVERVIEW

The Dixon Northeast Quadrant Specific Plan (NQSP) establishes a land use and circulation plan, policies and guidelines for the ultimate development of 643 acres within the City of Dixon. The specific plan defines the land use and development standards that will be applied to the plan area upon annexation to the city and is intended to implement the objectives and policies of the City of Dixon General Plan which projects growth through the year 2010.

The NQSP policies add emphasis and detail to the City of Dixon General Plan policies and establish policies applicable only to the plan area. All general plan policies applied within the specific plan area are incorporated by reference. The specific plan map provides greater detail of uses within the plan area but is consistent with the general plan.

All subsequent subdivision and development, public works projects and zoning regulations within the plan area must be consistent with the specific plan and the mitigation measures identified in this EIR.

Several factors have resulted in the City of Dixon's decision to prepare the NQSP at this time. The City has received three separate requests for annexation from properties within the plan area. Further, a major commercial truck gas station has been proposed at the Pedrick Road/I-80 interchange, which would create a commercial node within the City's sphere of influence but outside of the city limits. The recently adopted Dixon General Plan designates the NQSP area as an Employment Center (E) and Highway Commercial (HC), clearly planning for this area to be developed. It was, therefore, concluded that the timing was appropriate for developing specific planning standards to direct the future development of this area.

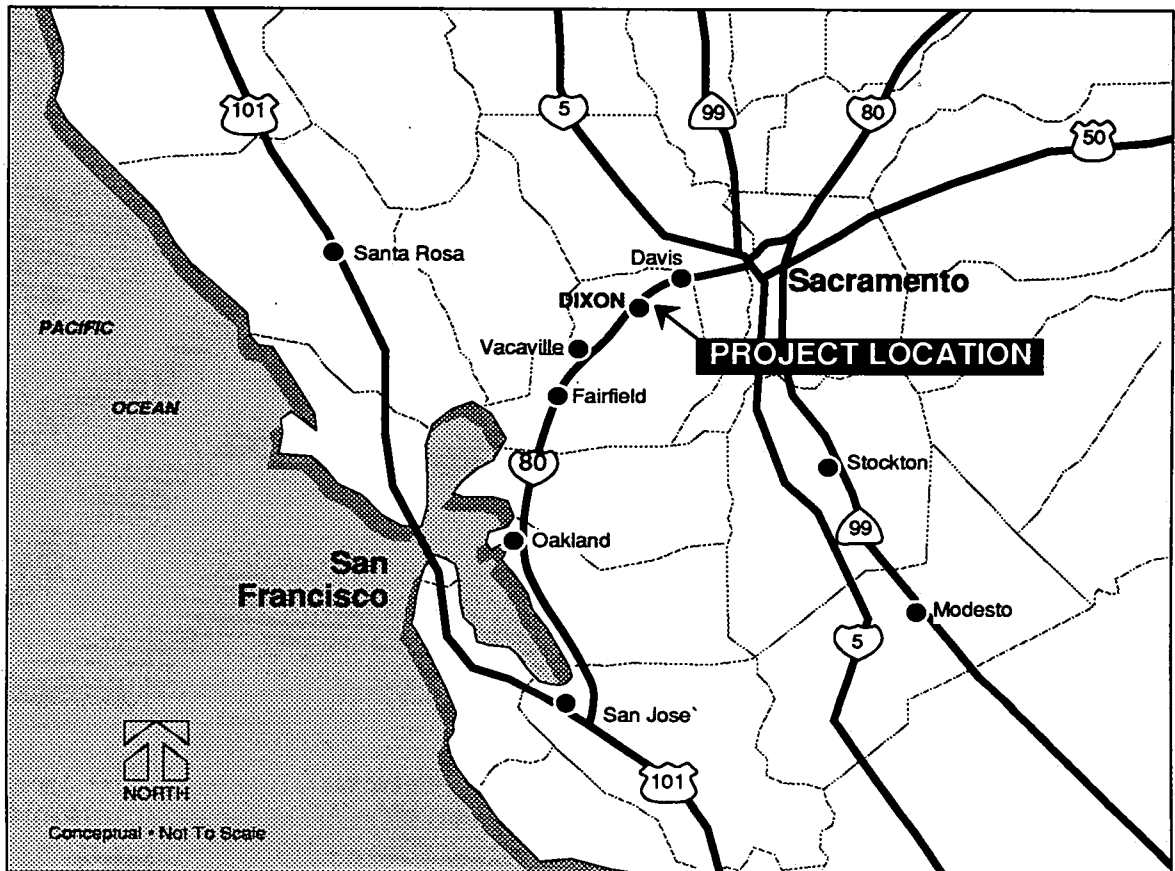
3.2 PROJECT LOCATION

The proposed project is situated in the Central Valley region of Northern California, approximately 25 miles west of Sacramento and 65 miles east of San Francisco, as shown on Figure 3.2.1. The proposed NQSP project site encompasses 643 acres of unincorporated land generally located north of Travis Air Force Base, south of the City of Davis and Yolo County, east of the City of Vacaville and the Vaca Mountains, and west of the City of Sacramento and the Yolo Bypass. Specifically, the site is situated north of Vaughn Road, south of Interstate 80, east of North First Street, and west of Pedrick Road adjacent to the Dixon city limits in unincorporated Solano County (See Figure 3.2.2).

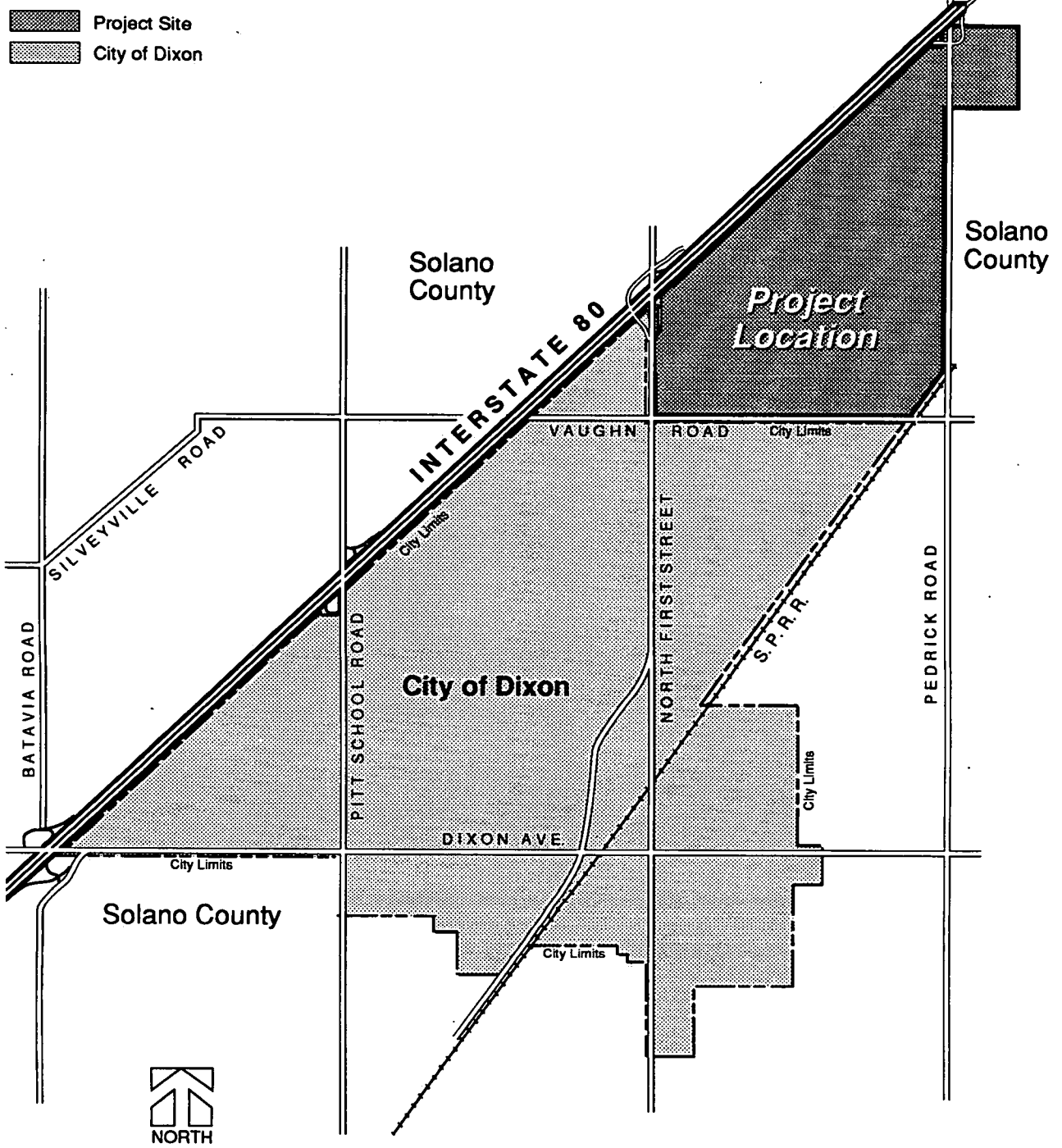
Land uses in the vicinity of, and surrounding the project site include a combination of agricultural, industrial, commercial, and residential uses. Uses occupying the 643-acre site include a livestock auction facility, Christmas tree farm (vacant), a trucking and maintenance operation, industrial fabrication/storage facility, and eleven residential structures.

The remainder of the site is currently in agricultural production and is intensively cultivated to grow orchard, field, and row crops.

Regional access to the project site is provided via Interstate 80 with interchanges located on both North First Street and Pedrick Road. Local access to the project site is provided via North First Street, Vaughn Road, and Pedrick Road. The Southern Pacific Railroad (SPRR) diagonally intersects the southeast corner of the property. Figure 3.2.3 is an aerial photograph of the area showing the project site, I-80, and the Southern Pacific Railroad (SPRR) right-of-way.



**FIGURE 3.2.1
REGIONAL LOCATION**



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**FIGURE 3.2.2
VICINITY MAP**

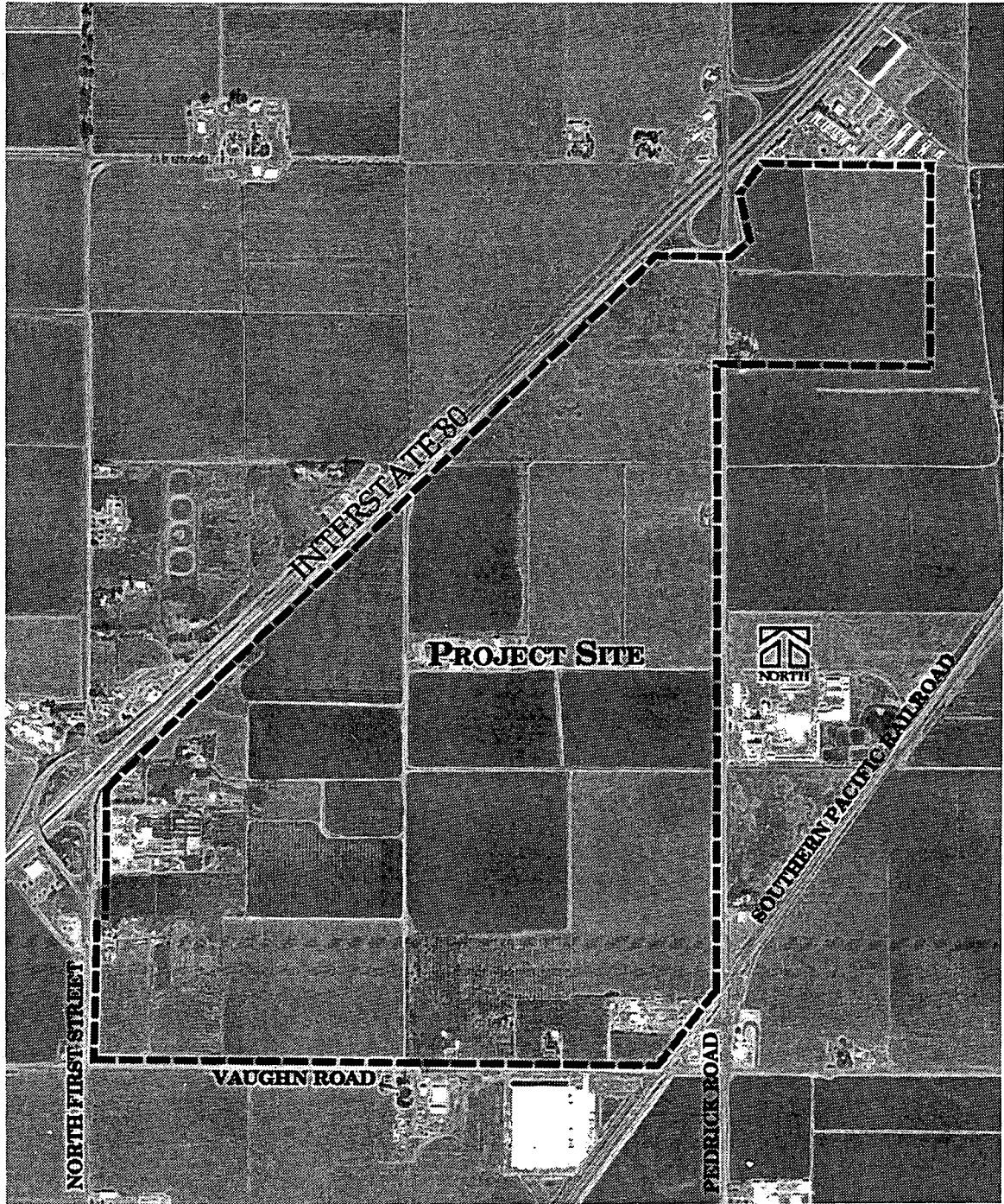


FIGURE 3.2.3
AERIAL PHOTOGRAPH

3.3 REGIONAL SETTING

The project is located in a relatively flat portion of the Great Central Valley between the Vaca Mountains to the west and the Sierra Nevada's to the east. The area in the vicinity of the project site consists of relatively flat land occupying elevations ranging from 50 - 75 feet above mean sea level (AMSL). On-site slopes averages approximately 0.1 to 1 percent.

The project site is underlain by deeply deposited continental sediments formed within the last 38 million years. Towards the city of Davis to the east, these sediments measure up to 2,800 feet, whereas towards the city of Vacaville, the thickness measures around 1,200 feet.

The area generally consists of relatively level, mostly well drained soils deposited on alluvial fans and are generally classified as loam with differing percentages of silts and clays. In terms of agricultural productivity, approximately seventy five percent of the site (483 acres) is Class I soil and the balance, (approximately 160 acres) is Class II soil .

The project site encompasses a flat alluvial fan formed by Putah Creek slightly sloping to the southeast. Although the site is not located within a defined 100-year flood channel, localized ponding is typical during peak rainfall periods because of the flat topography of the area.

Existing on-site vegetation and wildlife is primarily defined by the agricultural uses typical of this portion of the Central Valley. Present vegetation habitats found in the area are dominated by various types of agricultural uses including hay fields, orchards, row crops and livestock pastures as well as freshwater marshland. Prior to the establishment of intensive agriculture uses, the project site was dominated by native perennial grasses such as Stipa grass generally categorized within the California Prairie association. Fremont cottonwood (*Populus fremontii*) may have occurred on-site in a widely dispersed pattern as typical of the few remaining undisturbed native vegetation stands in the Central Valley.

The project site is highly visible along I-80, Pedrick Road, and North First Street, because of the flat topography and lack of major stands of trees. Three noise-generating sources in the immediate site vicinity include: 1) Interstate 80 to the northwest; 2) the SPRR tracks to the southeast, and 3) Highway 113 (North First Street) to the west. Although high levels of noise are a potential constraint for most types of land uses, proposed land uses (commercial, offices, and industrial) are generally less noise sensitive.

3.4 PROJECT HISTORY

The project site has historically been the subject of extensive agricultural operations. More recently, three separate requests for annexation have been received by the City of Dixon for properties within the project site. As each of the requests involved similar circumstances in terms of current use and site conditions, the city determined that a specific plan encompassing all of the separate annexation proposals would be beneficial and would avoid considerable redundancy in processing separate proposals while affording a more comprehensive analysis of the entire area. Consequently, this Program EIR is intended to review the potential annexation of the proposed project and provide analysis of the possible environmental effects resulting from the urban conversion of land uses within the area.

3.5 PROJECT OBJECTIVES

For purposes of preparing an EIR, the project is often defined by the objectives the project intends to achieve. Objectives are useful not only to help the reader better understand the project, but to also ensure that proposed mitigation measures are compatible with the needs of the project and that the project alternatives evaluated in the EIR are realistic and can achieve the desired goals.

Specific objectives have been established for the proposed project. The NQSP establishes a land use and circulation plan, and policies and guidelines for the ultimate development of 643 acres within the City of Dixon. The specific plan defines the land uses and development standards that would be applied to the project site upon annexation to the city and is intended to implement the objectives and policies of the City of Dixon General Plan. More specifically, the project objectives are as follows:

- to provide the City of Dixon with a major employment center;
- to provide shopping and services for city residents and travelers on I-80;
- to establish a gateway statement for the City of Dixon;
- to provide for efficient vehicular circulation and facilitate and encourage pedestrian and alternative transportation choices;
- to provide for potential linkage with future commuter/passenger rail transportation serving the City of Dixon;
- to integrate proposed drainage corridors, landscape frontage treatments, a pedestrian promenade, and agricultural buffers as parts of an open space system;
- to create short-term and long-term construction related and long-term employment opportunities; and
- to ensure that future urban development associated with the proposed commercial truck gas station is appropriately planned and integrated with the City of Dixon's infrastructure and services.

3.6 PROJECT CHARACTERISTICS

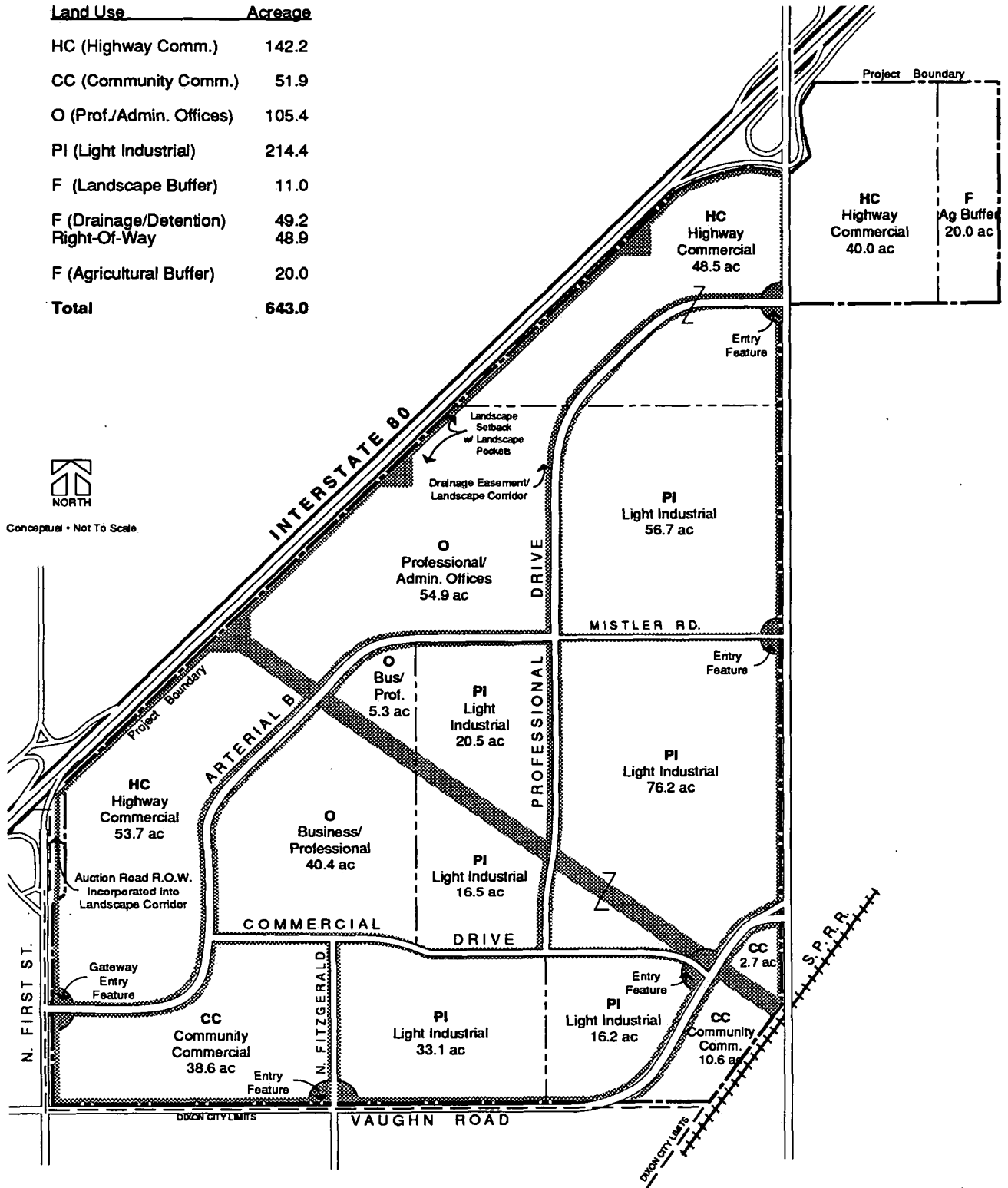
The study area encompasses a total of 643 acres allocated to commercial, business-professional, industrial and ancillary uses. The acreage allocated to each land use designation is summarized in Table 3.6.1 and shown on Figure 3.6.1.

**TABLE 3.6.1
LAND USE SUMMARY**

LAND USES AND ZONING DESIGNATIONS	ACRES
Highway Commercial - (HC)	142.2
Community Commercial - (CC)	51.9
Professional and Administrative Office - (PAO)	105.4
Light Industrial - (PI)	214.4
Major Roads, Drainage Easements, and Open Space	129.1
TOTAL	643.0

3.0 PROJECT DESCRIPTION

Land Use	Acres
HC (Highway Comm.)	142.2
CC (Community Comm.)	51.9
O (Prof./Admin. Offices)	105.4
PI (Light Industrial)	214.4
F (Landscape Buffer)	11.0
F (Drainage/Detention Right-Of-Way)	49.2
F (Agricultural Buffer)	48.9
Total	643.0




 Conceptual - Not To Scale

**FIGURE 3.6.1
 LAND USE PLAN**

The NQSP provides a more detailed breakdown of the current General Plan land use classification of Employment Center (E). The specific plan proposes a mix of commercial, industrial, and business-professional land uses which include highway commercial, community commercial, light industrial, and professional and administrative office uses. The primary function of the land uses are to provide a variety of employment opportunities and to provide a retail and service center for the residents of the city of Dixon, the employees in the area, and travelers on I-80. The primary land uses incorporate and are defined by landscape buffers, agricultural buffers, pedestrianways, and storm detention and drainage corridors.

The plan area is a prominent gateway to the city and will be designed to establish an image of quality and coordinated planning. The character and image of the specific plan is expressed in the types and character of land uses, landscaping, and building designs.

LAND USE CLASSIFICATIONS

The following is a summary of land uses within the NQSP. These basic land use districts may be combined in the Planned Development (P-D) zoning district, if so desired by the City of Dixon, to allow greater discretion on the design of individual projects.

HIGHWAY COMMERCIAL (HC)

Highway Commercial uses accommodate commercial goods and services in places conveniently and safely accessible from the freeway, while discouraging those uses that are unrelated to the needs of freeway users. Permitted uses would be consistent with provisions and requirements described in the Highway Commercial (CH) District section of the Dixon Zoning Ordinance (Section 12.10). Permitted uses typically include, but are not limited to, auto sales and services, gasoline service stations, auto and trailer sales, service and supply stores, restaurants, hotels, and motels.

Highway Commercial sites are proposed to be located adjacent to the east and west sides of the south side of the Pedrick Road/I-80 interchange and on the east side of the North First Street/I-80 interchange. The three sites total approximately 142 acres. These sites afford a high level of visibility and direct vehicular access from I-80.

COMMUNITY COMMERCIAL (CC)

Community Commercial (CC) designated land use, defined by the Dixon General Plan Land Use Element, provides retail and services for city residents and employees in the area. Uses would be consistent with provisions and requirements as described in the Neighborhood Commercial (CN) District section of the Dixon Zoning Ordinance (Section 12.08). Typical uses include, but are not limited to, banks, office and business machine stores, art and hobby stores, bakeries, and gift shops.

An approximately 39-acre commercial shopping center site is located in the southwest corner of the project site at the intersection of Vaughn Road and North First Street. The commercial use would be highlighted by signature landscape and architectural treatment to establish a city "gateway" feature. Pedestrian linkage from other land use areas within the specific plan as well as from other adjoining developed areas will be incorporated into specific facility design.

An approximately 13-acre Community Commercial (CC) site would also be located in the southeast corner of the project site near the Vaughn/Pedrick Road intersection. This site will be developed with commercial uses which are essentially ancillary to and supporting of other employment generating uses. Such uses may include restaurants, banks, personal services, shops, and recreational facilities. The site is located adjacent to the SPRR rail line which would be an excellent location for a future rail transit station.

PROFESSIONAL AND ADMINISTRATIVE OFFICE(O)

Business-professional, administrative office, and mixed office uses are consistent with provisions of the Professional and Administrative Office (PAO) district in the Dixon Zoning Ordinance (Section 12.07). Other permitted uses may include, but are not limited to, health and legal services and clinics, advertising and management agencies, and membership organizations. The business-professional land use also permits limited amounts of service commercial and retail activities provided for the convenience of employees within the area.

The specific plan provides approximately 105 acres of business-professional land use along the frontage of Interstate 80. The site is an excellent opportunity for office park type uses serving businesses desiring high visibility sites. The business-professional land uses will be combined in a Planned Development (P-D) zoning district to allow for mixed use business-professional projects. Common recreation/open space, landscaping, dining, and meeting facilities are amenity features which are encouraged within these business-professional developments.

LIGHT INDUSTRIAL (PI)

Light Industrial (PI) uses provided for in the NQSP are consistent with provisions of the Light Industrial (ML) district in the Dixon Zoning Ordinance. (Section 12.13) Permitted uses may include, but are not limited to, specialized light manufacturing uses, research institutions, back office uses, and administrative facilities, all of a non-nuisance type. Commercial support uses would be permitted where appropriate, and there would be no functional conflict with industrial uses. Commercial support uses would not exceed 10 percent of the total gross floor area in any defined light industrial parcel. These uses would generally be located within light industrial building complexes, and not as freestanding structures. Convenience-related commercial uses would be intended to serve employees in the light industrial area and thereby provide a service amenity to the working environment. It is anticipated that such uses would reduce the need for extended travel for goods and services needed by employees in the course of a normal workday.

A total of 214.4 acres of the site have been designated for light industrial use. The parcels are bordered by Pedrick Road and portions of Vaughn Road. The light industrial land uses proposed for the project site have been located to provide easy access for truck and employee traffic while maintaining a continuity with the contiguous existing and proposed industrial land uses south of Vaughn Road.

OPENSOURCE (F)

Open space is an integral part of the project that helps to define and complement the other land uses. The open space will include drainageways, recreation facilities, pedestrian corridors, setbacks from major roads, aesthetic amenities, buffers against active agricultural areas; and preservation and enhancement of natural features. In most instances the open space corridor is intended to serve several purposes simultaneously. For example, open space corridors typically would provide pedestrian walkways, an informal jogging path, a

pathway for open drainage swales that are landscaped as a visual amenity, and a site for cleansing urban run-off before being discharged to a natural water course.

It is intended that the open space areas be incorporated in the individual site development plans where applicable and made continuous throughout the specific plan area. This would make the most effective use of open space on the site and would provide linkages for pedestrians to travel freely to the commercial and service sites. Open space accounts for approximately 129 acres of the plan area.

INTENSITY OF DEVELOPMENT AND EMPLOYMENT POTENTIAL

The proposed land uses are expected to provide a substantial employment base. It is estimated that all uses would provide a total of approximately 11,000 jobs in a variety of industries. Table 3.6.2 summarizes the employment potential by land use based on an assumption that the uses would employ between 13 and 34 employees per acre. These are averages that may be exceeded in some instances.

Most land uses would have a floor area ratio (FAR) of between 0.3 to 0.6 to allow for two-story buildings covering thirty percent of the site. Land uses may be combined, at the discretion of the city, in a P-D zone, which would affect land use floor area ratios.

**TABLE 3.6.2
EMPLOYMENT PROJECTIONS**

LAND USE	NET ACRES	PROJECTED	
		EMPLOYEES PER ACRE	NUMBER OF EMPLOYEES
Highway Commercial	142.2	25	3,555
Community Commercial	<u>51.9</u>	25	<u>1,298</u>
Subtotal	194.1		4,853
Professional and Administrative Office	105.4	34	3,583
Light Industrial	<u>214.4</u>	13	<u>2,787</u>
Subtotal	319.8		6,370
TOTAL	513.9		11,223

CIRCULATION

The circulation system in the NQSP area is intended to provide a range of transportation options for the safe and efficient movement of people and materials. The circulation system includes provisions for transit (including local and regional bus links, and rail transit), public streets, pedestrian paths, shuttle system routes, bikeways and parking lots. Convenient pedestrian connections through-out the project site is a primary circulation objective of the project.

ROADS

The NQSP area is served by a network of streets organized according to function and size. Streets are sized to accommodate the intensity of land uses they serve. North First Street,

Vaughn Road and Pedrick Road are city-wide roads which connect the plan area to the city and regional transportation network. An internal road system provides access throughout the specific plan area. For purposes of this EIR, the major arterial roads within the NQSP are defined as Arterial B, Mistler Drive and Professional Drive. Secondary roads are Commercial Drive and North Fitzgerald Drive.

PEDESTRIAN PATHWAYS

Pedestrian pathways will set back from the curb along all of the major public streets in the NQSP area. The pedestrian system is linked to the various land use categories within the site. Arterial B and North Fitzgerald also provide for Class I bicycle lanes set back from the curb on both sides of the street.

BUS SERVICE

Dixon is currently served by two public transit systems. CITYLink provides intercity bus service between the cities of Fairfield, Vacaville, Dixon and Davis. Connecting public transit service is available in Fairfield to the Bay Area and in Davis, connecting service is also available into Sacramento. Dixon Readi-Ride provides regularly scheduled fixed route service. The Readi-Ride system would be expanded to the specific plan area as demand for these services occurs and funds are available as determined by the city. Bus turnouts would be provided as determined by the City of Dixon Public Works Department to accommodate future needs.

RAIL SERVICE

The City of Dixon is currently studying siting options for a commuter/passenger rail station within the city. There are many good reasons for locating the station within the NQSP area including ample parking areas, easy vehicular access, as well as serving a significant employment center. A rail connection between Sacramento and the NQSP area would provide a logical linkage within the region. Preliminary discussions with city staff have indicated that a station could be accommodated within or near the project site. Until a final decision is made, this document presumes that land use organization should accommodate the possibility of rail connection including right-of-way and station locations. The rail station adjoining the NQSP area would be of significant benefit to adjacent land uses as well. Setbacks at the intersection of Vaughn and Pedrick could accommodate a spur track rail line. The right-of-way would be preserved in accordance with the provisions of future specific plan development agreements.

PARK AND RIDE LOTS

The specific plan has designated park and ride facilities locations within the specific plan area to accommodate commuter car pooling. Park and ride facilities would be located in the principal employment hubs. The park and ride lots would typically include approximately 25 to 50 spaces incorporated in the parking for a commercial, business-professional usage.

4.1 EXISTING AND ADJACENT LAND USES

Sources of information used in the preparation of the land use section include: the Solano County General Plan and Zoning Ordinance; the Dixon General Plan and Zoning Ordinance; the Dixon General Plan Environmental Assessment; Solano County Local Agency Formation Commission (LAFCo) policies; and the Northeast Quadrant Specific Plan.

4.1.1 ENVIRONMENTAL SETTING

The site consists of topography that is essentially flat, with vertical variations of approximately twenty-five feet between the lowest and highest portions within the 643-acre site. There are several visually distinctive man-made boundaries of the site including Interstate 80 to the north, Vaughn Road to the south, Pedrick Road and agricultural land to the east, and North First Street to the west, as shown on Figure 4.1.1.

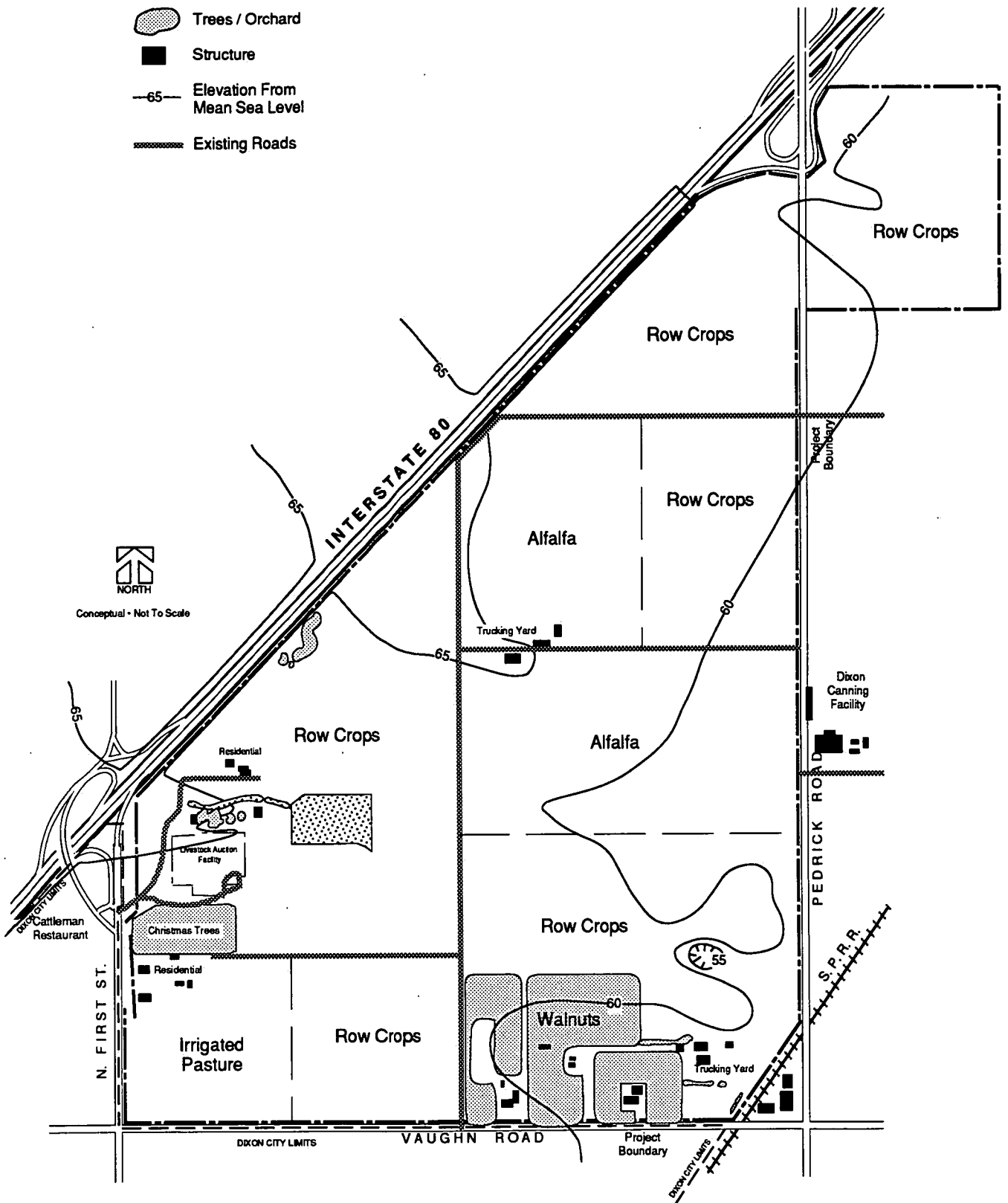
Historically, the site has been intensively cultivated to grow field and orchard crops. At present, approximately 580 acres of the site is used for field and row crops, and the remainder of the project site contains a livestock auction facility, Christmas tree farm (vacant), a trucking and maintenance operation, industrial fabrication/storage facility, a farm and eleven residential structures, as shown on Figure 4.1.1. The project site provides a substantial area of visual open space because of the predominantly agricultural uses and is valuable as visual open space because of its location adjacent to I-80.

Surrounding undeveloped areas are visually similar to the project site, characterized by relatively flat topography and either used for agricultural production or vacant. Existing urban development is located adjacent to the site's west, south and east boundaries. I-80 traverses the northern portion of the project site and further north there are several farms, a building supply facility, and a produce stand. South of Vaughn Road lies the Kragen Auto Distribution Center and a metal fabrication facility. East of Pedrick Road lie several storage tanks, a trucking facility, the Dixon Canning facility, a farm, and agricultural uses. West of the project site and North First Street lie the Farm Credit Bureau and Cattlemen's Restaurant as shown on Figure 4.1.2. All development on and adjacent to the project site is fairly visible from all portions of the subject site and from roadways in the vicinity, including I-80, North First Street, Vaughn Road, and Pedrick Road.

The NQSP is located outside of, but adjacent to, the Dixon city limits and within the Dixon Sphere of Influence. The project site is also partially located within the North First Street Assessment District (NFSAD) as shown on Figure 4.1.3.

EXISTING COUNTY GENERAL PLAN AND ZONING DESIGNATIONS

The 643-acre project site is located in unincorporated Solano County. The adopted Solano County General Plan elements include: Land Use and Circulation; Health and Safety, Seismic Safety and Noise; Resource Conservation and Open Space, and Housing. Existing land uses within the project site are regulated by the General Plan, including the Land Use Element which designates the site as Intensive Agriculture (A). The Solano County Zoning Ordinance reflects an Agriculture 40-acre Minimum (A-40) designation. Existing on-site and adjacent county general plan designations and zoning classifications are shown on Figure 4.1.4.



**FIGURE 4.1.1
EXISTING LAND USES**

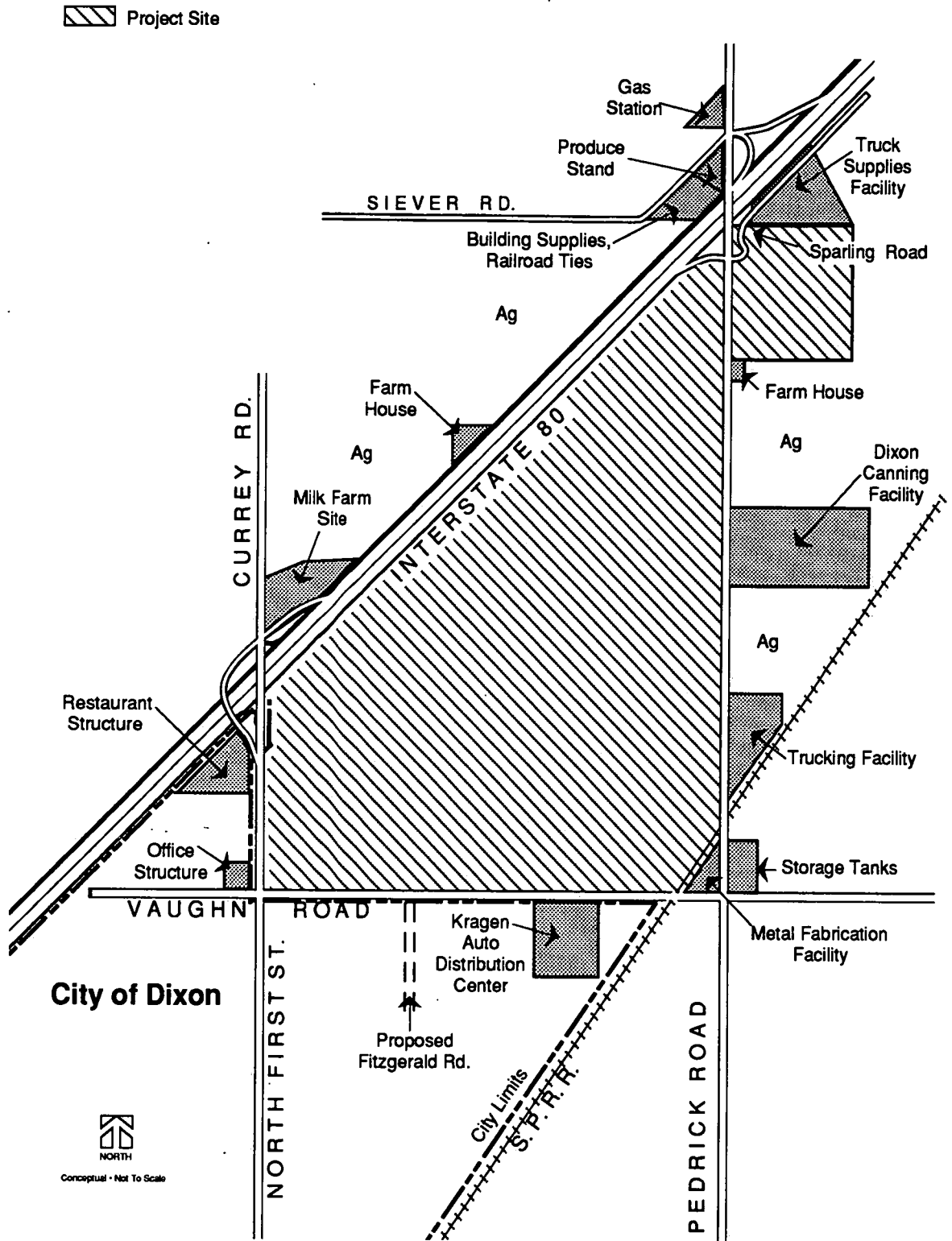
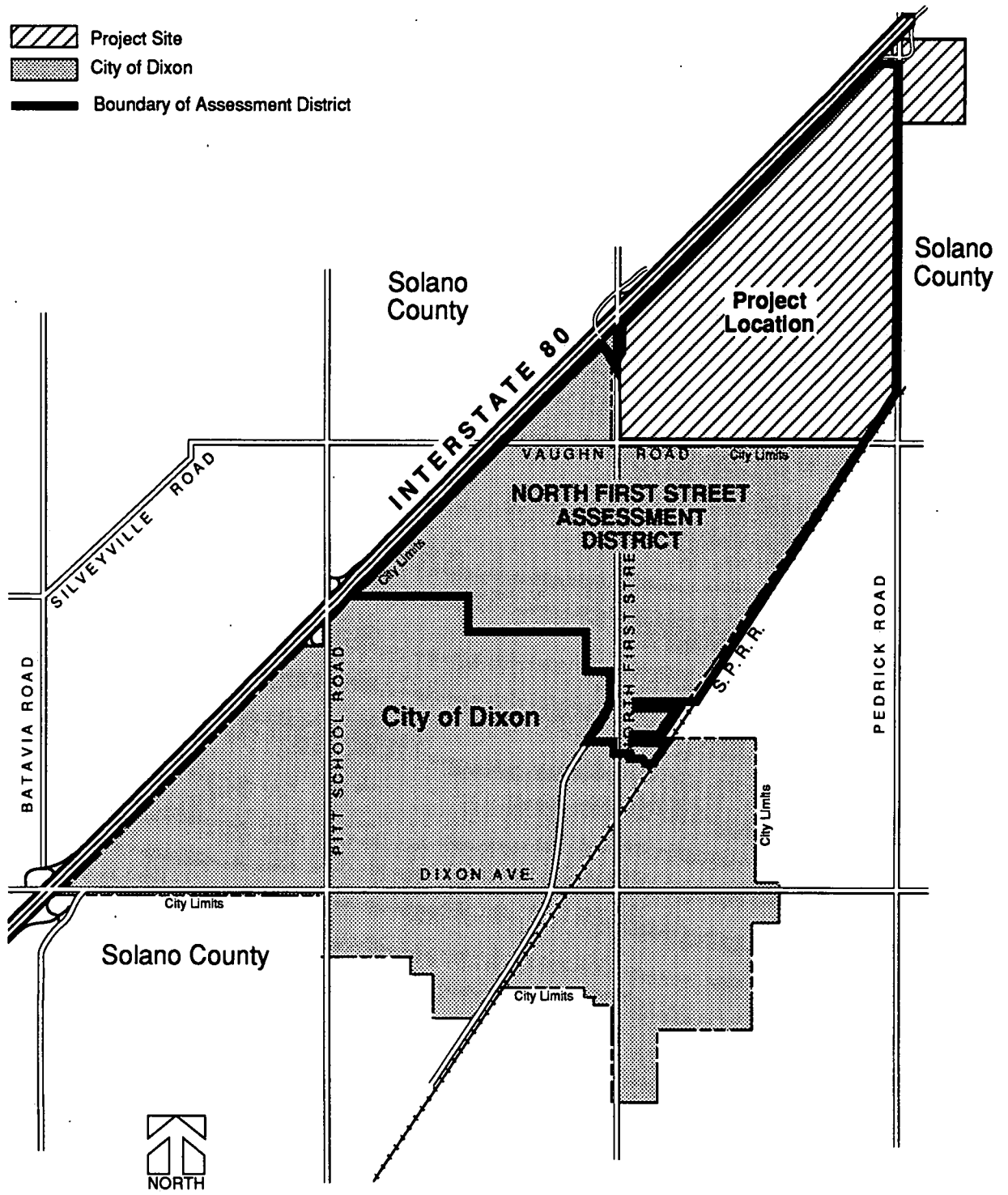


FIGURE 4.1.2
SURROUNDING LAND USES



Conceptual - Not To Scale

FIGURE 4.1.3
NORTH FIRST STREET ASSESSMENT DISTRICT

4.0 ENVIRONMENTAL ANALYSIS

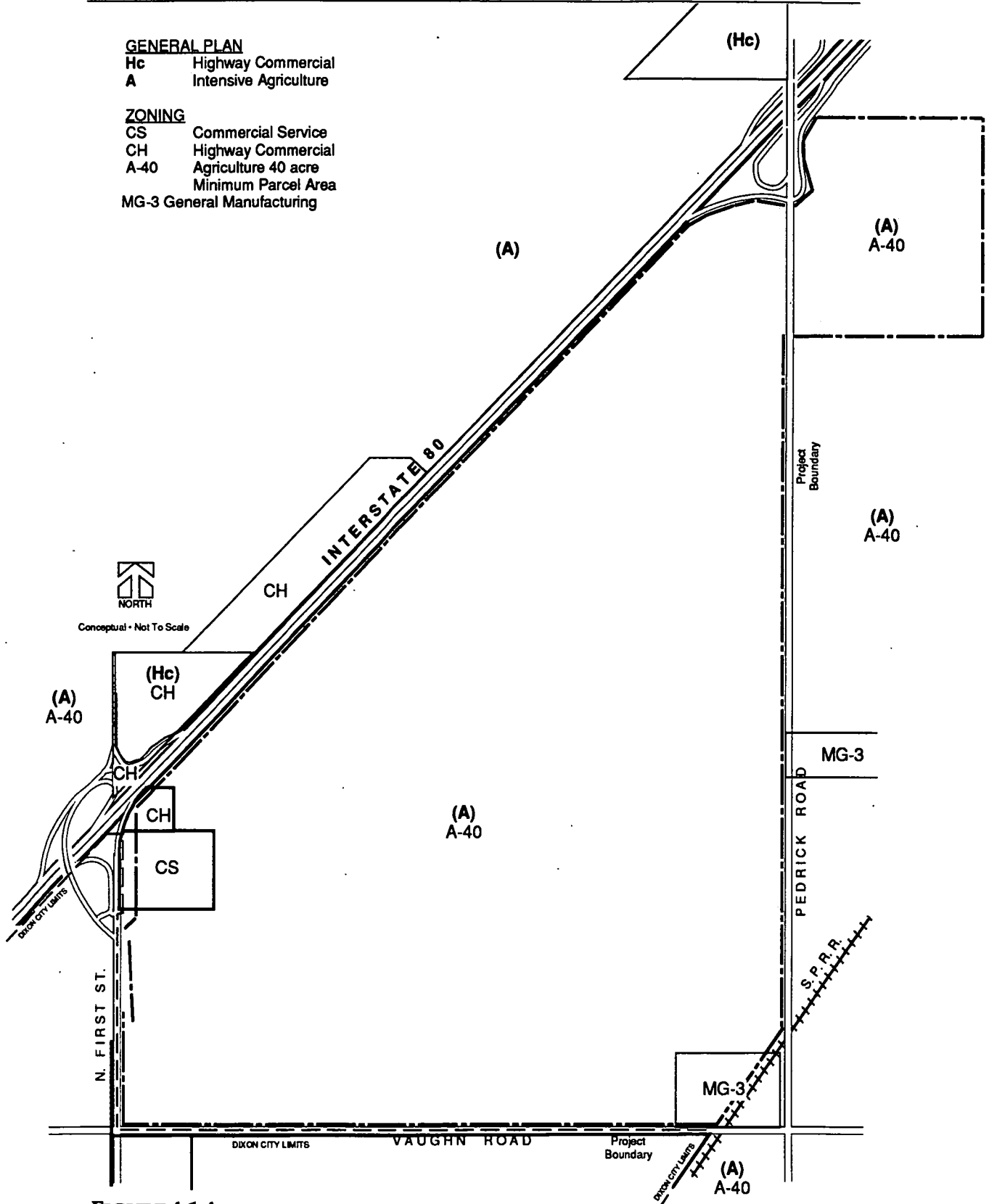


FIGURE 4.1.4
EXISTING COUNTY GENERAL PLAN AND ZONING DESIGNATIONS

CITY OF DIXON GENERAL PLAN AND ZONING DESIGNATIONS

The project site is located outside of, but adjacent to the Dixon city limit. However, the site is within the City of Dixon Sphere of Influence. The Dixon General Plan has predesignated the 643-acre site as Employment Center (E) and Highway Commercial (HC) as shown on Figure 4.1.5. Both the E and HC land use designations specify that specific plan approval is required. Surrounding the project site to the south and west are land classified as a combination of highway commercial, professional administrative, light industrial, and service commercial (shown on Figure 4.1.5) The project site will be prezoned consistent with uses proposed in the specific plan document upon annexation.

LAND OWNERSHIP

The project site is comprised of many parcels of land which are owned by a variety of individuals and corporations. There are approximately eight major land owners as shown on Figure 4.1.6. Of the eight major land owners, two of them are considered to be non-participating owners in this specific plan effort. The Cammarota property comprises of 138 acres while the Mistler property, representing the second largest parcel of land, comprises 128 acres. The remaining parcels range from 59 to 101 acres in size.

AGRICULTURAL LAND STATUS

With the exception of a 60-acre parcel of land located east of Pedrick Road, no parcels within the boundaries of the project site that are currently under the Land Conservation Act (Williamson Act) contract. The Williamson Act contract allows a land owner to enter into an agreement with the county or city whereby the property owner agrees to maintain the land in agriculture or open space for a period of at least ten years in exchange for a reduction in property taxes for the subject parcel. The contract serves as a mechanism for keeping lands in agricultural use. The 60-acre parcel of land east of Pedrick Road is under contract and must file for either non-renewal or cancellation of the contract to develop. Figure 4.1.7 displays portions of the project site that are subject to the provisions of the Williamson Act.

LOCAL AGENCY FORMATION COMMISSION SPHERE OF INFLUENCE

The project site is regulated by the Solano County Local Agency Formation Commission (LAFCo)/City of Dixon Sphere of Influence (SOI). This includes land in Solano County located within Dixon's ultimate physical boundaries and service areas. The project site is within the Dixon SOI and is therefore planned to be annexed into the City of Dixon at some time within the next 20 years.

The Solano County LAFCo adopted standards and procedures for the evaluation of annexation proposals in (May 1987). Among the mandatory standards to be considered:

Standard No. 1: Consistency with Sphere of Influence (SOI) boundaries.

An area proposed for annexation shall be within the affected city's Sphere of Influence. An annexation application for lands outside an adopted Sphere of Influence may be considered concurrently with a request for amendment to the Sphere of Influence.

GENERAL PLAN

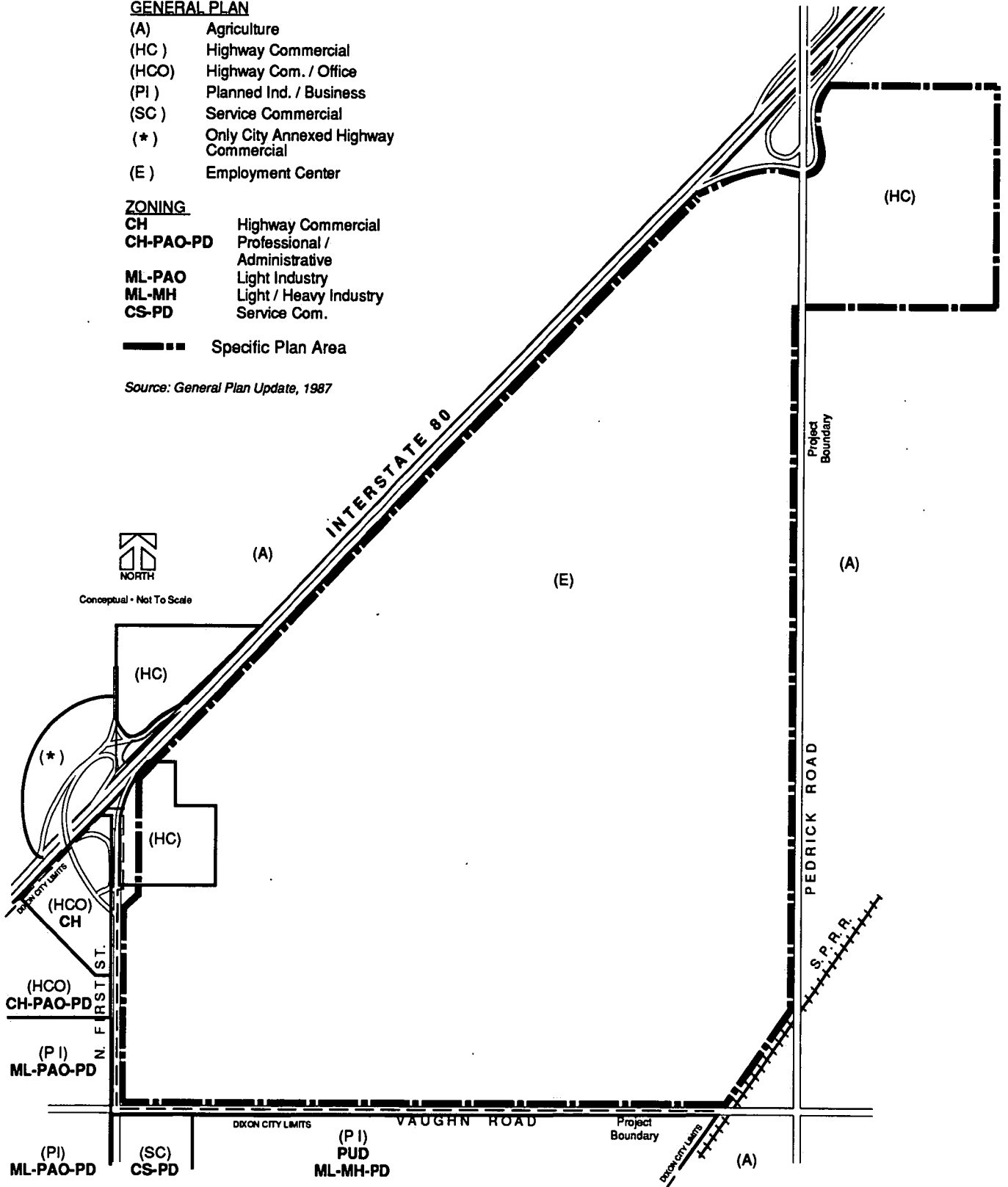
- (A) Agriculture
- (HC) Highway Commercial
- (HCO) Highway Com. / Office
- (PI) Planned Ind. / Business
- (SC) Service Commercial
- (*) Only City Annexed Highway Commercial
- (E) Employment Center

ZONING

- CH Highway Commercial
- CH-PAO-PD Professional / Administrative
- ML-PAO Light Industry
- ML-MH Light / Heavy Industry
- CS-PD Service Com.

--- Specific Plan Area

Source: General Plan Update, 1987



**FIGURE 4.1.5
EXISTING CITY OF DIXON GENERAL PLAN AND ZONING DESIGNATIONS**

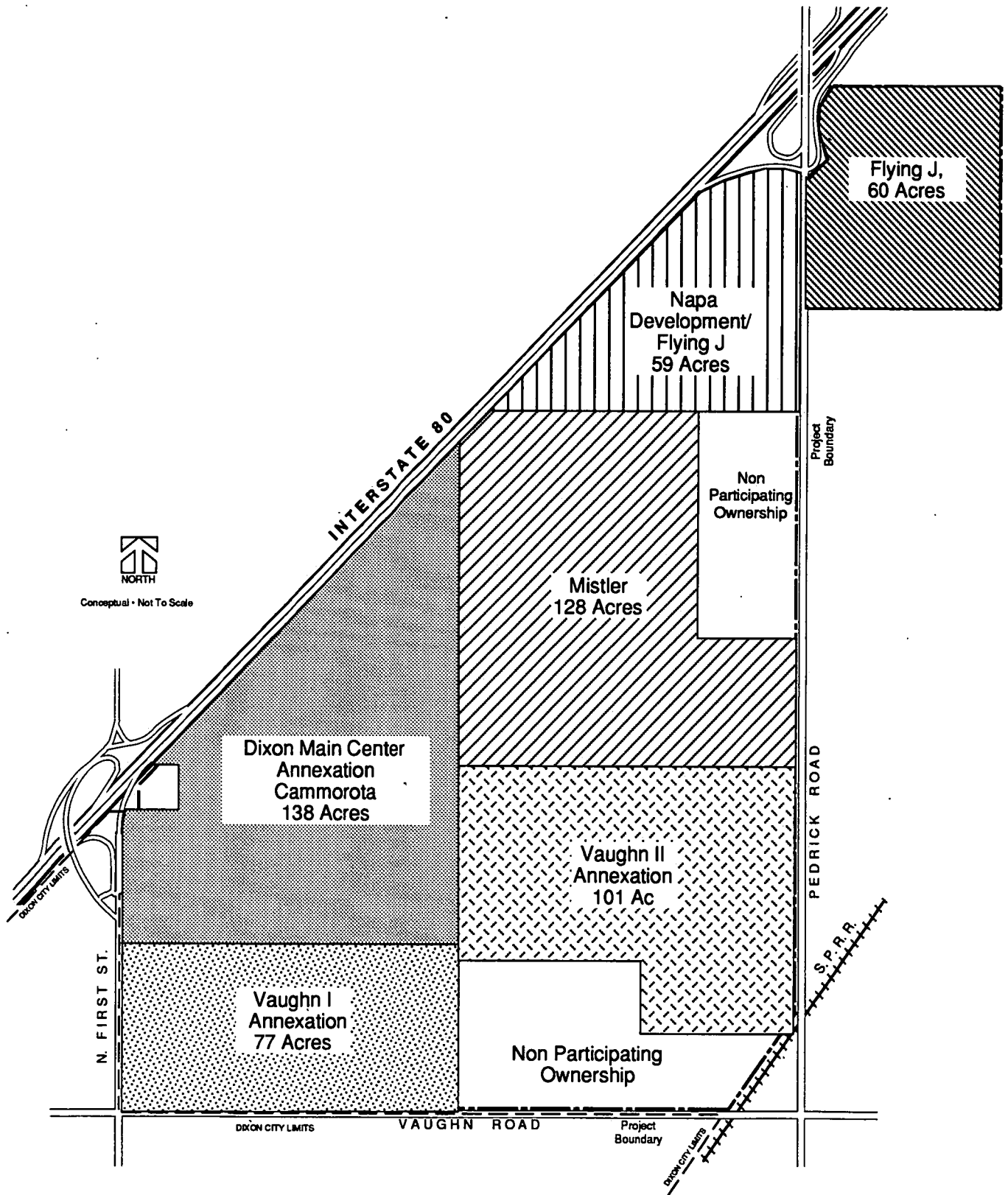


FIGURE 4.1.6
PROPERTY OWNERSHIP

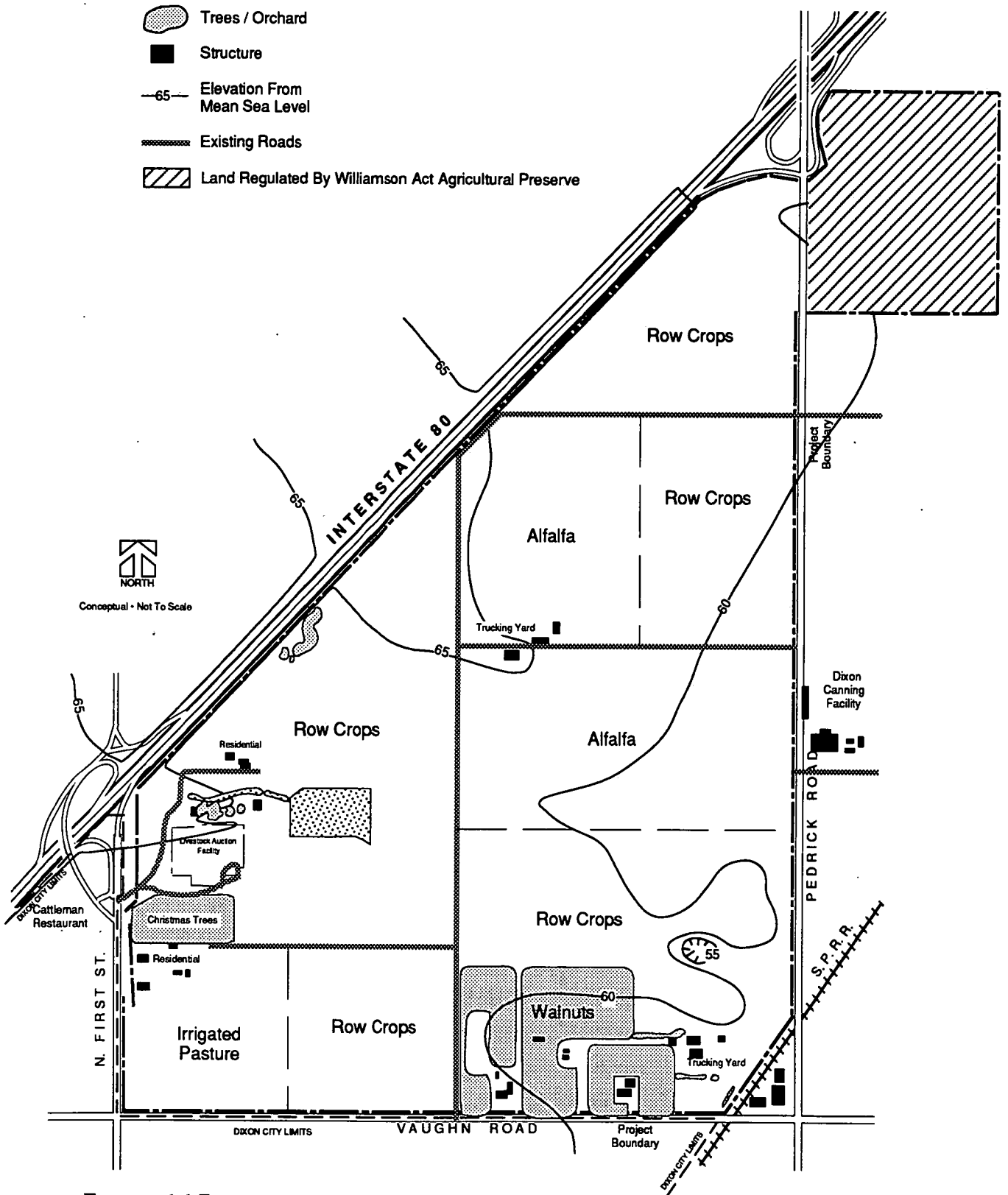


FIGURE 4.1.7
AGRICULTURAL LAND STATUS

Standard No. 2: Annexation to the limits of the sphere of influence (SOI) boundaries.

Annexation to the limits of the SOI boundary shall not be allowed if the proposal includes land designated for open space use by the affected city's general plan unless such open space logically relates to existing or future needs of the agency. Open space uses which may be located within agency limits include but are not limited to community and city-wide parks, recreational facilities, wind energy projects, reservoirs, and stormwater detention basins.

Standard No. 3: Consistency with appropriate general plan, specific plan, area-wide plan and zoning ordinance.

An application for annexation which involves the conversion of open space lands to urban use shall be denied by LAFCo if the proposed conversation is not consistent with applicable general plans, specific plans, area-wide plans, or zoning ordinances. The determination of consistency shall be the responsibility of the affected agency, and shall be met by a resolution approved by the agency council certifying that the proposed annexation meets all applicable consistency requirements of State Law, including internal consistency between city's adopted plans and the city's zoning ordinance. In the event plan consistency is contested, LAFCo shall retain the discretion to determine the consistency question and may require additional environmental information.

Standard No. 4: Consistency with the County General Plan of proposed reorganization outside of a city's Sphere of Influence boundary.

An application for annexation to a special district for lands outside an adopted Sphere of Influence boundary in unincorporated territory shall be denied by LAFCo if the land use proposed within the area of the proposed annexation is not consistent with the Solano County General Plan and Zoning Ordinance. A determination of consistency shall be the responsibility of the County, and shall be met by a resolution of the Board of Supervisors certifying that the proposed annexation meets all applicable consistency requirements of State Law, including internal consistency between the County's General Plan and Zoning Ordinance. This Standard shall also be made to apply to proposals for the creation of new special districts and the incorporation of new agencies within unincorporated territory which lies outside adopted Sphere of Influence boundaries.

Standard No. 5: Requirement for pre-approval.

Prior to approval of annexation by LAFCo, the affected agency shall have granted one or more of the following development approvals: (a) rezoning, (b) area-wide plan, (c) specific plan, or (d) development agreement.

Standard No. 6: Effect on natural resources.

An application for annexation shall describe the amount of land area involved, and the land, water, air, and biological resources affected, including topography, slope, geology, soils, natural drainages, vegetative cover, and plant and animal populations. Effects to be covered include those which will be both positive and negative and the means proposed to offset potential negative impact. LAFCo shall certify that provisions of the Solano County Environmental Guidelines for the Implementation of the California Environmental Quality Act have been complied with.

Standard No. 7: Relationship to established boundaries, streets and roads, lines of assessment, remaining unincorporated territory, proximity to other populated areas, assessed valuation.

LAFCo shall, where possible, avoid irregularities and overlapping of established boundaries in the annexation process which would otherwise create problems for taxing districts, including the loss of tax revenues required for district operation. City boundaries at County roads and city streets shall be delineated to provide an orderly division of road maintenance, and law enforcement responsibilities between cities and counties.

Standard No. 8: Likelihood of significant growth and effect on other incorporated or unincorporated territory.

Prior to approving an annexation, LAFCo shall make a finding that the proposed conversion of open space lands to urban use is justified by probable urban growth within a 10-year period of time. A finding of likelihood of significant growth justifying the conversation shall be based on an analysis of local and regional demand for the proposed use.

Standard No. 9: Protection of prime agricultural land.

Urban growth shall be guided away from prime agricultural land unless such action would not promote planned, orderly, and efficient development for the agency. Development of existing vacant or non-prime agricultural lands within the agency limits should be encouraged before any proposal is approved for urbanization outside of the agency limits.

Standard No. 10: Provision and cost of community services.

Adequate urban services shall be available to areas proposed for annexation. Prior to submittal of individual annexation proposals, the affected city shall submit an Urban Service Delivery Plan identifying the availability of and methods for providing the full range of urban services. The requirement for service availability to annexation proposals consistent with the affected agency's Urban Service Delivery Plan can be satisfied, at the discretion of LAFCo, by a "will serve" verification by the affected agency. "Will Serve" letters shall also address the availability of school facilities.

Standard No. 11: The effect of the proposed action on adjacent areas, mutual social and economic interest, and on local governmental structure.

The application shall describe the effect which the annexation could have on adjacent areas within and outside the agency. It shall also describe any social and economic benefits which will accrue to the agency and other affected agencies. The proposal should not be motivated by inner-city rivalry, land speculation, or other motives not in the public interest and should create no significant negative social or economic effects on the County or neighboring agencies.

DIXON GENERAL PLAN POLICIES

The Dixon General Plan was adopted by the City Council in December, 1993. The principal goals applicable to this specific plan as stated in the 1993 Dixon General Plan are as follows:

- To maintain and enhance the amenities enjoyed by residents of the area, and to preserve its semi-rural, small town character, while accommodating a balanced mix of new industrial, commercial, and residential land uses by phasing development into compact, orderly contiguous pattern consistent with Solano County LAFCo standards for annexations.
- To ensure that new urban development reflects the opportunities, constraints, and natural characteristics implicit in the areas affected.
- To maintain and preserve the existing rural character and agricultural uses in the unincorporated area surrounding the city, to ensure that urban development within the planning area occurs only within the city limits, and that final development approval is given only after the sites are annexed to the city.
- To limit the use of land on the other side of I-80 to agriculture. The only urban use which would be acceptable in this area would be highway commercial immediately adjacent to the three intersections and only if the sites are annexed to the city.
- To promote improvements in the visual quality and character of Dixon (e.g. street trees, landscaping, beautification, underground overhead wires, and requiring high standards of design.)
- To strive to prevent economic or physical damage, injury or loss of life resulting from natural or other hazards by responsive land planning.
- To protect residents from noise generated by freeway/highway traffic, industrial activity and railroad use by defining acceptable noise exposure standards, applying buffering, other land use and acoustical design requirements.
- To encourage new industrial and commercial uses that can provide additional local employment opportunities for Dixon residents and decrease out commuting by designating acreage for these uses in compatible locations.
- To maintain and enhance where feasible, the quality of all public service provisions, while expanding the service delivery systems to meet new demands on capacity consistent with the contiguous pattern of land use defined for future growth.
- To ensure that new development pays all the incremental costs of expanding public service provisions and facilities required to meet the demand it generates.

The Urban Development and Community Development Section of the general plan specifies additional policies and provisions which are more specifically related to this specific plan area:

- The city will phase development in an orderly, contiguous manner in order to maintain a compact development pattern and to avoid premature investment for the extension of public facilities and services. New urban development will occur in areas where municipal services and capacities exist prior to the approval of development in areas which would require major new facility expansion.

The project site is identified as Employment Center (E) and Highway Commercial (HC) on the 1993 Dixon General Plan land use map. Employment center uses, as interpreted by the specific plan, include: Light Industrial (PI), Professional and Administrative Office (O), Community Commercial (CC), and Highway Commercial (HC). The general plan addresses the development of industrial and business-professional land uses as follows:

- Planned Industrial/Business Park (PI) includes those uses which demonstrate, by the quality of their development and the nature of operations, that they can locate in close proximity to residential and commercial uses with a minimum of environment conflict. Strict landscaping, buffering and design standards would be adhered to by businesses and industries located in these areas.

The NQSP policies add emphasis and detail to the City of Dixon General Plan policies or establish policies applicable only to the project site. The specific plan map provides greater detail of uses within the site, however, is consistent with the general plan.

DIXON ZONING

The project site is not zoned by the City of Dixon since it is within the jurisdiction of Solano County.

4.1.2 STANDARDS OF SIGNIFICANCE

As defined by Appendix G of CEQA (Significant Effects), a project will have a significant impact if it will:

- Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.
- Extend a sewer trunk line with capacity to serve new development;
- Displace a large number of people;
- Disrupt or divide the physical arrangement of an established community;
- Conflict with adopted environmental plans and goals of the community;

These standards are the thresholds used to establish a significant land use impact associated with this project.

4.1.3 ENVIRONMENTAL IMPACTS

AGRICULTURAL LAND CONVERSION

Impact LU-1: Prime agricultural land will be converted to non-agricultural use, including 60 acres regulated by Williamson Act Agricultural Preserve.

The proposed project will convert approximately 483 acres of Class I and approximately 160 acres of Class II soils from an agricultural use to a mixture of business-professional and light industrial land use. Although the project is consistent with the Dixon General Plan's land use designation, this conversion will represent a significant physical change to the existing agricultural use of the site and a conversion of prime agricultural land to a non-agricultural use.

Significance: Significant

Mitigation Measures: None

Residual Significance: Significant and unavoidable

EXTENSION OF SEWER LINE

Impact LU-2: The project will extend a sewer line with capacity to serve new development.

The project will require the extension of sewer lines into an area that currently does not have sewer services. However, the Dixon General Plan has determined that the NQSP area will be

annexed and developed as an Employment Center. Therefore, although a sewer line will be extended to serve new development, this area is planned for development.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

ADJACENT LAND USES

Impact LU-3: The project may impair the agricultural productivity of prime agricultural land adjacent to the NQSP area.

The NQSP is abutted on the east side by agricultural land. The development of commercial and light industrial projects could conflict with adjoining agricultural operations. However, agricultural buffers and setbacks have been incorporated into the NQSP to reduce potential impacts to adjacent agricultural operations.

Significance: Potentially significant

Mitigation Measure LU-A: Ensure that all future development within the NQSP strictly enforce the landscape medians and agricultural buffer zones established by the specific plan.

Residual Significance: Less than significant

RESIDENT DISPLACEMENT

Impact LU-4: The project will cause the displacement of existing residents.

The project will result in the conversion of eleven residential parcels to a commercial or light industrial use. Existing residences are associated with the existing agricultural use of the land and are not the predominant land use. Since there are relatively few people that would be displaced by the project, and since these individuals would choose to sell their land, this is considered less than significant.

Significance: Less than Significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

ENVIRONMENTAL PLANS AND GOALS OF THE COMMUNITY

Impact LU-5: This project may conflict with adopted community plans or goals established by LAFCo.

Significance: Potentially significant

Annexation of the 643 acres of Solano County land under agricultural use to the City of Dixon will require approval by the Solano County LAFCo. LAFCo evaluation criteria will generally address issues associated with annexations, including the following:

Standard No. 1: Consistency with Sphere of Influence (SOI) boundaries.

A finding of consistency with adopted SOI boundaries becomes the first test in evaluating an annexation proposal. In most cases, location within or outside the boundary will determine whether the application should be accepted. Since the site is within the Dixon Sphere of Influence, the NQSP meets this standard.

Standard No. 2: Annexation to the limits of the Sphere of Influence (SOI) boundaries.

The NQSP will result in an annexation that is contiguous to the existing Dixon city limits and will not extend to the limits of the SOI boundary. This land is designated for an Employment Center and Highway Commercial by the Dixon General Plan. Therefore the NQSP meets this standard.

Standard No. 3: Consistency with appropriate General Plan, Specific Plan, Area-Wide Plan and Zoning Ordinance.

The NQSP is consistent with the Dixon General Plan, but not consistent with the County land use designation of agriculture. This will need to be resolved before LAFCo can make this finding.

Standard No. 4: Consistency with the County General Plan of proposed reorganization outside of a city's Sphere of Influence boundary.

This standard does not apply to this project.

Standard No. 5: Requirement for pre-approval.

The project is the specific plan required for annexation. This is consistent with this LAFCo standard.

Standard No. 6: Effect on natural resources.

CEQA requires the decision maker to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. In accordance with CEQA Guidelines Section 15091, the LAFCo shall not approve or carry out a project for which an environmental impact report has been completed which identifies one or more significant effects of the project unless the LAFCo makes one or more of the following written findings for each of those significant effects, accompanied by a statement of the facts supporting each finding.

- (a) (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects thereof as identified in the Final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, social, or other considerations make it infeasible for mitigation measures or project alternatives identified in the Final EIR.

- (b) The findings required by subsection (a) shall be supported by substantial evidence in the record.
- (c) The finding in subsection (a) (2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives.

Under CEQA Guidelines Section 15092, after considering the Final EIR and in conjunction with making findings under Section 15091:

- (b) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless either:
 - (1) The project as approved will not have a significant effect on the environment, or
 - (2) The agency has:
 - (A) Eliminated or substantially lessened all significant effects on the environment where feasible as shown in findings under Section 15091, and
 - (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093."

CEQA Guidelines Section 15093 stipulates that:

- (a) CEQA requires the decision-maker to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."
- (b) Where the decision of the public agency allows the occurrence of significant effects which are identified in the Final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. This statement may be necessary if the agency also makes a finding under Section 15091 (a) (2) or (1) (3).
- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination.

Standard No. 7: Relationship to established boundaries, streets and roads, lines of assessment, remaining unincorporated territory, proximity to other populated areas, assessed valuation.

LAFCo shall consider the following as factors favorable to approval of an annexation.

- (a) The proposal would not create islands, near-islands, or irregular and/or illogical configuration of existing city limits.

- (b) The boundaries of the proposal include appropriate areas and are otherwise properly drawn.
- (c) The proposed area has total population and/or development density requiring municipal or urban type services; or, if not presently urban in character, consistent with development approvals required under Standard No. 5, it is expected that the area will be urban within ten years.
- (d) The proposed area is in close proximity to the developed portion of the city and would be a logical extension of city growth.

Although the projected time frame for buildout of the NQSP is the same as the Dixon General Plan (through the year 2010), it is anticipated that substantial development will occur over the next 10 years. The NQSP is consistent with this LAFCo standard.

Standard No. 8: Likelihood of significant growth and effect on other incorporated or unincorporated territory.

LAFCo shall require each City to submit a Comprehensive Annexation Plan and periodically request that the Plan be updated. The Plan shall be adopted at least every five years or following major revisions to the affected city's General Plan. The Plan should cover a 15-year time frame, but can be extended to the horizon date of the city's General Plan provided it does not exceed 10 years. The Plan shall address issues in the following time increments: 1-5 years and 5 years and beyond.

An application for annexation shall be accompanied by evidence including a market analysis which will justify the proposed conversion of open space to urban use. The market analysis will consider the appropriate factors of supply and demand and the Comprehensive Annexation Plan. This will be required before the NQSP area can be annexed.

LAFCo will use the affected city's Comprehensive Annexation Plan, its resolution of review and comment on the Plan, and the market analysis to evaluate annexation proposals and to make findings on the likelihood of significant growth. LAFCo's evaluation will consider all aspects of the Plan including the affected city's progress toward meeting infill goals.

Standard No. 9: Protection of prime agricultural land.

In reviewing lands identified as prime agriculture, consideration will be given to the economic viability of the property and whether the land can be economically and productively farmed.

An annexation is considered to promote the planned orderly and efficient development of an area if:

- The proposed annexation either abuts a developed portion of the agency or abuts properties which already are committed to urban development by the extension of streets and other public facilities where service extensions were predicated on adjacent lands within the proposed annexation area being developed to assist in meeting bond obligations or other financial instruments against the property; or
- It can be demonstrated that there are insufficient vacant non-prime lands within the Sphere of Influence planned for the same general purposes. The proposed NQSP meets these standards.

Standard No. 10: Provision and cost of community services.

Adequate urban services shall be available to areas proposed for annexation. The project complies with this standard.

Standard No. 11: The effect of the proposed action on adjacent areas, mutual social and economic interest, and on local governmental structure.

Examples of mutual social and economic benefits, include achieving a balanced housing supply within the community, the provision of commercial areas where existing commercial development does not meet needs of residents, the creation of new employment opportunities to meet the needs of unemployed or under-employed, protecting sensitive resources, advancing the time when public improvements needed by the larger community may be provided, and improving levels of service within the community without incurring additional costs.

These types of benefits may, in a given case, argue for a project as off-setting negative consequences identified in responding to other Standards. The NQSP complies with this standard.

Mitigation Measure LU-B: The project will require review and approval by the Solano County LAFCo before it can be annexed to the City of Dixon or developed.

Residual Significance: Less than significant

Impact LU-6: The project conflicts with adopted community plans and goals established by the Williamson Act Agricultural Preserve.

The proposed NQSP is consistent with the general plan land use designations of Employment Center (E) and Highway Commercial (HC). The Dixon General Plan has policies to accommodate a balanced mix of new industrial, commercial and residential land uses by phasing development into a compact, orderly contiguous pattern consistent with Solano County LAFCo standards. The General Plan specifies that the City will phase development in an orderly, contiguous manner in order to maintain a compact development pattern and to avoid premature investment for the extension of public facilities and services. The City also requires that new urban development occur in areas where municipal services and capacities exist prior to the approval of development in areas which would require major new facility expansion. The NQSP complies with these established community goals, however, 60 acres of the plan area is designated as Williamson Act Agricultural Preserve. This is not consistent with the proposed HC development.

Significance: Potentially significant

Mitigation Measure LU-C: The proposed NQSP shall be reviewed by the Dixon City Council and the Solano County Board of Supervisors, and findings shall be made that the 60 acres of the project site currently under Williamson Act should be withdrawn from Agricultural Preserve.

Residual Significance: Less than significant

4.1.4 CUMULATIVE IMPACTS

Impact LU-7: Cumulative impact - Growth inducement.

The NQSP will result in the conversion of prime agricultural land to a non-agricultural use and will have the potential to extend development further northeast than projected by either the Solano County or City of Dixon General Plans at this time.

The extension of urban services into an undeveloped area always has the potential to have growth inducing implications. Although the NQSP is designated for urban development by the Dixon General Plan, the adjacent land is planned for agriculture. Future decision makers will have the discretion to consider further annexation and development of agricultural land to the northeast of the NQSP area. However, the development of the NQSP plan area will increase development pressures and may accelerate the timing of future annexations considerations.

Significance: Significant

Mitigation Measures: None

Residual Significance: Significant and unavoidable

4.1.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The NQSP represents a land use policy interpretations for both Solano County and the City of Dixon. Implementation of mitigation measures LU-A, LU-B and LU-C will eliminate potential project conflicts with adopted community plans and goals to a less-than-significant level. If these mitigation measures are not enacted, annexation will not be approved and the project will not be allowed to proceed.

Land use impacts associated with the loss of prime agricultural land are not so easily remedied. Potential conflicts between the NQSP and adjacent agricultural land can be successfully mitigated through the use of buffers and setbacks as provided for in the specific plan. However, at this time, neither Solano County or the City of Dixon have developed an agricultural land mitigation program to "off-set" the permanent conversion of 643 acres to a non-agricultural use. Similarly, the extension of a sewer line into an agricultural area presently not served by public infrastructure will cause growth pressures and could further exacerbate the loss of regional agricultural lands. Therefore, the conversion of prime agricultural land to a non-agricultural use and the extension of a sewer line into an agricultural area will remain as significant and unavoidable impacts.

4.2 GEOLOGY, SOILS, AND SEISMICITY

The following section, describing the geology, soils, and seismicity in the vicinity of the specific plan area, was compiled from information contained in a Preliminary Site Assessment prepared by the Anderson Consulting Group (1993); Soil Survey of Solano County, California prepared by the United States Department of Agriculture Soil Conservation Service in cooperation with the University of California Agricultural Experiment Station (1977), City of Dixon Final Draft General Plan and Environmental Assessment prepared by Duncan & Jones (1993); and the Solano County General Plan Health and Safety Element, Seismic Safety, Safety, and Noise Elements prepared by Sedway Cooke (1977).

4.2.1 ENVIRONMENTAL SETTING

GEOLOGY

The project site is located in the Central Valley of California, which is shaped like a long, linear, westwardly-tilting trough. The base of the trough is composed of granite rocks which are overlaid by approximately 3,000 feet of marine rocks, deposited when the valley was a portion of the Pacific Ocean floor. On top of the marine rocks lie thick deposits of alluvium (clay, silt, sand, and gravel), eroded from the bordering mountain ranges. The alluvium covers the valley, giving it its unusually flat appearance. Flanking the Central Valley on the east and west are mountain ranges; the Sierra Nevada to the east and the Coastal Range to the west as shown on Figure 4.2.1.

The project site, like most of the western edge of the Sacramento Valley, is underlain by deeply deposited continental and marine sediments (Lorens et al). Below the City of Davis to the east, these sediments measure up to depths of 2,800 feet whereas in the western limits, towards Vacaville, the thickness measures around 1,200 feet. The principle water bearing formation in the Dixon area is the Tehama formation composed of coarse sandy deposits. The Tehama formation ranges up to 2,250 feet thick. Overlying the Tehama formation are sediments of the Putah Plain. These sediments range up to 165 feet thick and sometimes bear water.

SOILS

The surface in the vicinity of the project site is underlain with soils of Quaternary-age alluvium, consisting of an unstratified mix of sand, silt, clay, and gravel. Project site soils consist of five soil series in two agricultural classes including: Brentwood clay loam, Yolo loam and Yolo silty clay loam which are Class I Agricultural Soils; and Capay-silty loam and Yolo loam, clay substratum which are Class II Agricultural Soils (Table 4.2.2). These soil series are categorized into three soil associations including: Yolo-Brentwood, Rincon-Yolo, and Capay-Clear Lake. Project site soils are shown in Figure 4.2.2.

Two soil characteristics are pertinent to the specific plan: the soil's inherent physical properties as they relate to engineering requirements, and soil characteristics as they pertain to the agricultural potential of the site. In general, the soils are classified as loams with differing percentages of silts and clays.

ENGINEERING-RELATED SOIL CHARACTERISTICS

Soil types within the project site fall into three associations as indicated in Table 4.2.1. The Yolo-Brentwood soil association is most suited for development as these soils possess the lowest potential for shrinkage and swelling (lowest clay content), the lowest potential for corrosivity and water-induced erosion, and moderate limitations for the placement of septic facilities. The remaining associations have relatively higher potentials for shrink/swell, corrosivity and surface runoff. Because of the high clay content found in some of the on-site soils, and minimal gradients for drainage, certain areas of the site are prone to surface ponding and consequently seasonal flooding. Due to the presence of impermeable layers and the tendency for higher water table conditions, the Capay-Clear Lake soil association is more prone to liquefaction during a seismic event.

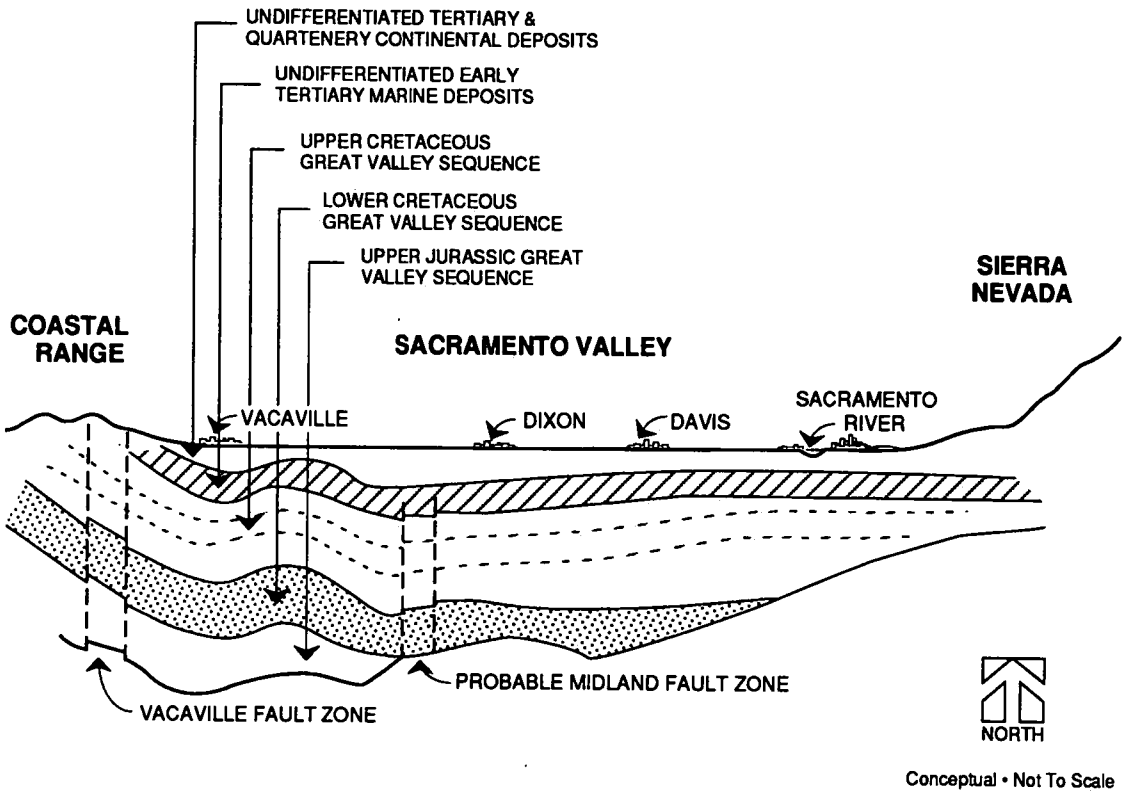
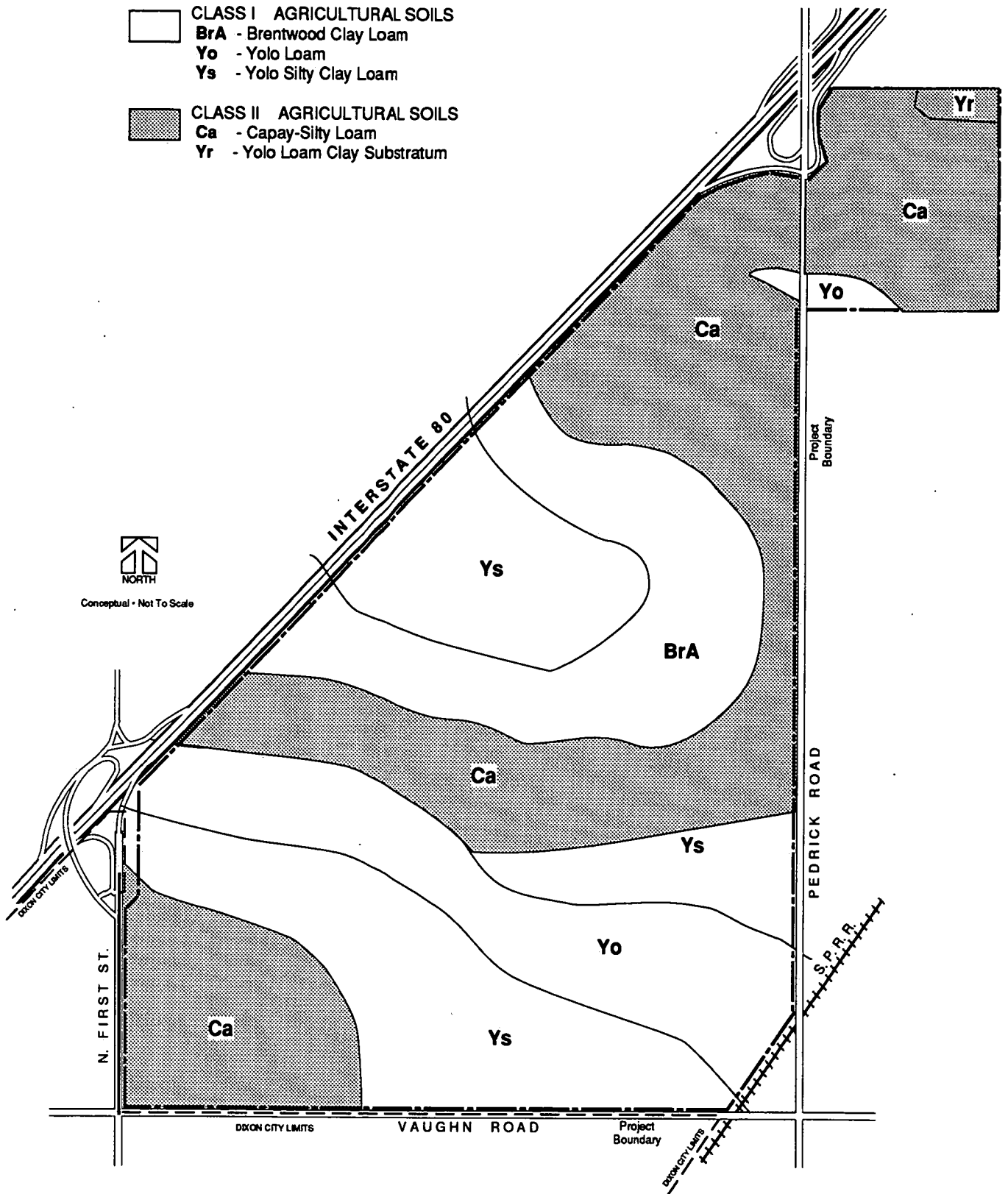


FIGURE 4.2.1
GEOLOGIC CROSS-SECTION



**FIGURE 4.2.2
ON-SITE SOILS**

TABLE 4.2.1
PROJECT SITE SOIL ASSOCIATIONS AND ENGINEERING CONSTRAINTS

SOIL ASSOCIATION	ENGINEERING CONSTRAINTS		
	SHRINK/SWELL POTENTIAL	CORROSIVITY	DRAINAGE RUNOFF
Yolo-Brentwood (loams to silty clay loams)	moderate/high	moderate	moderate infiltration, well-drained.
Rincon-Yolo (loam and clay loams)	high	high	slow infiltration, impermeable layers.
Capay-Clear Lake (silty clay loams to clays)	high	high	slow infiltration, high runoff, impermeable.

(Source: Soil Survey of Solano County, California, United States Department of Agriculture, Soil Conservation Service, in cooperation with University of California Agricultural Experiment Station, May 1977.)

AGRICULTURAL RELATED SOIL CHARACTERISTICS

As stated above, the specific plan area contains both Class I and Class II soils. Class I soils have generally few limitations that restrict their use, while Class II soils have some limitations that reduce the choice of plants or require moderate soil conservation practices as described in Table 4.2.2. Within these soil classes, soil types are further broken down into "capability units" which further describe the limitations of the soil types. Project site soils have capability units listed as: 1) an actual or potential erosion hazard; and, 2) a limitation caused by slow permeability or very slow permeability of the subsoil. Soil types are still further broken down into "capability subclasses", which are soil groups within one class, and are designated by lower case letters. The two Class II project site soils contain the letter "s" in their capability unit description which shows that the soil is limited mainly because it is shallow, droughty, saline, or stony.

Soil types area further described in terms of a "land resource area", which is a broad geographical area that has a distinct combination of climate, soils, management needs, and cropping systems. Project site soil types are listed in land resource area (17) which includes the valley portions of the county. Most of the land in this area is irrigated for intensive cultivation. The rest of the area is used for dry-farmed grain or pasture.

SEISMICITY

The City of Dixon is located within a region prone to seismic occurrences, most notably associated with the San Andreas fault system located approximately 60 miles to the west. No earthquake faults are known to traverse the specific plan area.

Historically, damage due to seismic occurrences in the Dixon area have been minimal primarily because of the general absence of presently active faults in the vicinity. One exception was the 1892 Vacaville-Dixon earthquake which is estimated to have been in the range of 6.5 on the Richter scale. While several active faults have been mapped in the western region of Solano County, including the Green Valley Fault, the Concord Fault, and the potentially active Midland Fault which traverses the City of Dixon between I-80 and the intersection of West A Street and Pitt School Road, no known fault has been associated with the Vacaville-Dixon seismic occurrence (Heeley, and Herd 1988; Jennings, 1988). Present

Table 4.2.2
PROJECT SITE SOIL SERIES AND AGRICULTURAL LIMITATIONS

SYMBOL/SOILSERIES	CAPABILITY UNIT	SLOPE	CHARACTERISTICS
<i>CLASS I AGRICULTURAL SOILS</i>			
BrA/Brentwood clay loam	I-1 (17)	0-2%	runoff very slow, slight erosion hazard.
Yo/Yolo loam	I-1 (17)	nearly level	moderate permeability, slow runoff, slight erosion hazard.
Ys/Yolo silty clay loam	I-1 (17)	nearly level	moderate permeability, slow runoff, slight erosion hazard.
<i>CLASS II AGRICULTURAL SOILS</i>			
Ca/Capay-silty loam	IIs-3 (17)	nearly level	slow surface runoff, low erosion hazard.
Yr/Yolo loam, clay substratum	IIs-3 (17)	nearly level	slow permeability, slow runoff, slight erosion hazard.

(Source: Soil Survey of Solano County, California, United States Department of Agriculture, Soil Conservation Service, in cooperation with University of California Agricultural Experiment Station, May 1977.)

speculation suggests that the epicenter of this historic earthquake may be along a buried fault north of Vacaville and east of the crest of the Vaca Mountains (Bennet, 1987; Wong, 1989). Additional faults which have been active within the last 10,000 years include an unnamed fault approximately 11 miles north of the City of Dixon, and the Cordelia Fault located approximately 20 miles southwest of the city.

A fault is considered potentially active if evidence indicates that surface displacement along the fault has occurred within the last two million years (Quaternary period). Potentially active faults include faults which may be associated with historic seismicity. The position of the Midland Fault coincides generally with the regional geologic boundary separating the Coast Range to the west and the Great Central Valley to the east. Recent investigations of seismicity and geologic structures suggest that large historic earthquakes have occurred and future earthquakes are probable along this general boundary, which extends 360 miles along the western side of the Great Central Valley.

Although there are no recorded events conclusively attributable to the Midland Fault zone, the anticipated magnitude for a seismic occurrence, based on the Modified Mercalli Intensity measuring the expected ground level shaking intensity, is IX. The seismicity of the area is minimal, and is not likely to produce ground shaking of over 0.5g.

GROUND SHAKING/LIQUEFACTION

Despite the infrequency of significant seismic activity within the vicinity of the project site, other existing extenuating factors which require planning consideration include the potential for liquefaction. Due to the deeply deposited layers of alluvial sediments underlying the specific plan area, intense ground shaking and liquefaction could accompany a seismic event.

The magnitude of both effects depends on the composition of the sediments and soils below the groundwater level and the proximity to the epicenter.

Ground failure resulting from earthquake-induced liquefaction is an important risk affecting existing and future urbanization of the area. As the specific plan site is underlain by recent alluvial deposits, some of these deposits, if consisting of silty sands and if situated in high groundwater conditions, may be prone to liquefaction during seismic shaking. Saturated granular materials in liquefaction-prone soils can be transformed by seismic shaking into a fluid-like state causing ground failure and consequent structural damage.

4.2.2 THRESHOLD SIGNIFICANCE

The following criteria was considered when determining the significance of development of the proposed project with respect to geology, soils and seismicity. An earth resources impact is significant under CEQA whenever one or more of the following occur with development of a proposed project:

- Exposes people, structures, or property to major geologic hazards such as earthquakes, landslides, mudslides, or ground failure;
- Results in unstable earth conditions or changes in geologic substructure;
- Destroys, covers, or modifies any unique geologic or physical features;
- Increases wind or water erosion of soils, either on or off-site; or
- Has the potential for deformation of foundations or damage to structures due to shrink-swell behavior.

4.2.3 ENVIRONMENTAL IMPACTS AND MITIGATIONS

SOILS

Impact G-1: Construction associated with project implementation may cause soil erosion, wind and water erosion, and siltation of local drainages.

Implementation of the proposed project would result in increased soil erosion, wind and water erosion, and siltation of local drainages during and after construction from excavation and grading activities. Disturbed soils due to grading roadways, building pads, and trenching for foundations and underground utilities would also cause the potential for increased soil disturbance.

Significance: Significant

Mitigation Measure G-A: An erosion control plan shall be prepared prior to construction. This plan shall include standards for permanent erosion control design, requirements for full establishment of vegetation, and emphasize drought-tolerant and climate-adapted vegetation.

Mitigation Measure G-B: Disturbed areas of the project site that are not actively under construction during the winter rainy season shall not be left exposed for more than one month.

Residual Significance: Less than significant

Impact G-2: **Damage to structures and infrastructure caused by soils prone to shrink/swell behavior.**

Soils prone to shrink/swell response due to moisture fluctuations may cause damage to buildings and infrastructure due to differential movement in rigid structures such as foundations, pavement, and utility lines.

Significance: **Significant**

Mitigation Measure G-C: **Prior to development of any facility within the specific plan area, a detailed geotechnical investigation of on-site soils shall be conducted to identify the soils subject to shrink/swell behavior.**

Mitigation Measure G-D: **Hazards associated with shrink/swell soils shall be avoided through proper construction methods which include site drainage, and responsive grading, excavation and foundation design. Potential adverse effects due to soils with high shrink/swell are avoidable if these soils are identified prior to the design and construction, and appropriate design and construction methods are applied.**

Residual Significance: **Less than significant**

SEISMICITY

Impact G-3: **Ground-shaking and liquefaction could occur due to possible seismic event along active faults in the area.**

Major earthquakes along the San Andreas Fault system and other active faults in the area may cause ground shaking and liquefaction in the vicinity of the project site, resulting in structural damage to building foundation and paved areas. The severity of seismic activity would vary depending on the characteristics and the epicenter of the earthquake. As the specific plan proposes land uses involving publicly occupied buildings, a risk is created with development in regards to seismic safety.

Significance: **Significant**

Mitigation Measure G-E: **All structures and new buildings constructed within the project area shall conform to the latest seismic structural standards of the Uniform Building Code (UBC) as a minimum standard.**

Mitigation Measure G-F: **Plans for individual buildings subject to public occupancy shall be accompanied by an investigative report prepared by a geologist specialized in engineering. This report shall identify underlying geology including depth of water table, depth to bedrock, and presence and characteristics of sand lenses. Necessary structural measures to adequately respond to the degree of probable risk attributable to these underlying formations shall be recommended.**

Mitigation Measure G-G: **No public or private electrical, water, wastewater or gas lines shall be permitted to cross identified potential ground**

failure areas without sufficient precautionary emergency provisions for: rapid shut-off, minimum disruption of service, and any adverse impact on adjoining and surrounding uses in the event of seismic-induced ground failure.

Residual Significance: Less than significant

4.2.4 CUMULATIVE IMPACTS

Impact G-4: The project will minimally contribute to cumulative soil erosion or the potential for exposing people to a possible seismic event.

Significance: Less than significant

Geology and soil impacts are site-specific and are not considered substantial in a cumulative scale. Therefore, the project would not contribute to cumulative geologic and soil-related impacts.

4.2.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Grading and erosion control measures, as well as state-mandated seismic design criteria, would be required for development within the specific plan area. The mitigation measures recommended in Section 4.2.3 would mitigate adverse soils and seismic constraints to a level below significant.

4.3 SURFACE AND WATER QUALITY

This section provides an overview of surface hydrology and water quality issues associated with the Northeast Quadrant Specific Plan (NQSP). Information contained in this section was integrated from several technical studies including the Dixon Regional Master Drainage Plan and Environmental Impact Report prepared by Brown and Caldwell Consulting Engineers (1989); Preliminary Investigation of Storm Drainage, Wastewater, Water, and Street Systems prepared by Morton & Pitalo, Inc. (1993); Urban Runoff Discharges from Sacramento Report prepared by the California Regional Water Quality Control Board Report Number 87-15P55 and Surface Water Quality Data Evaluation for Selected Streams in Central District prepared by the Department of Water Resources (1989). A copy of the Preliminary Investigation of Storm Drainage is contained in Appendix F of the Technical Appendices and the Dixon Regional Master Drainage Plan and EIR which are available for review at the City of Dixon's Community Development Department.

4.3.1 ENVIRONMENTAL SETTING

REGIONAL WATERSHED CHARACTERISTICS

The project site is located on an alluvial plain formed by Putah Creek, which is located in the greater Sacramento Valley of Central California. The general drainage pattern in the vicinity of the City of Dixon is to the southeast (0.1 to 1 percent slope) through relatively flat farmland and a series of roadside ditches and canals which ultimately discharge to the Sacramento Delta.

The land form in the vicinity was originally composed of gently rolling land with natural drainageways. Agricultural practices have significantly changed the land and have caused increases in the rates of runoff. Specific changes which have contributed to increased runoff rates include: 1) land leveling for grading and drainage; 2) use of irrigated farming techniques; 3) furrowing for summer and winter crops; and 4) changes from pasture and field crops to row crops.

Increases in runoff rates in the area have also occurred due to urbanization. Development in the City of Dixon has also caused increases in the amount of impervious surface and decreases in the times of concentration of watersheds.

Areas which would be flooded as a result of a 100-year storm (the single storm with the greatest rainfall which would be expected over a 100-year period) have been designated by the Federal Emergency Management Agency (FEMA). Major flood hazard areas in the Dixon area are located along Dickson and Dudley Creeks. Areas in the vicinity of the project site (including the project site) are not located within a 100-year floodplain according to FEMA.

SURFACE WATERSHED CHARACTERISTICS

The 643-acre specific plan site is located on the same alluvial plain formed by Putah Creek which generally slopes from the northwest to the southeast at a 0.1 to 1 percent slope. Elevations across the site range from a high of 75 feet above mean sea level (AMSL) to a low of 50 feet AMSL. The climate in the region is semi-arid with hot, dry summers and wet, mild winters. Annual rainfall ranges from 16 to 24 inches, and 90 percent of it falls during the months of November to April.

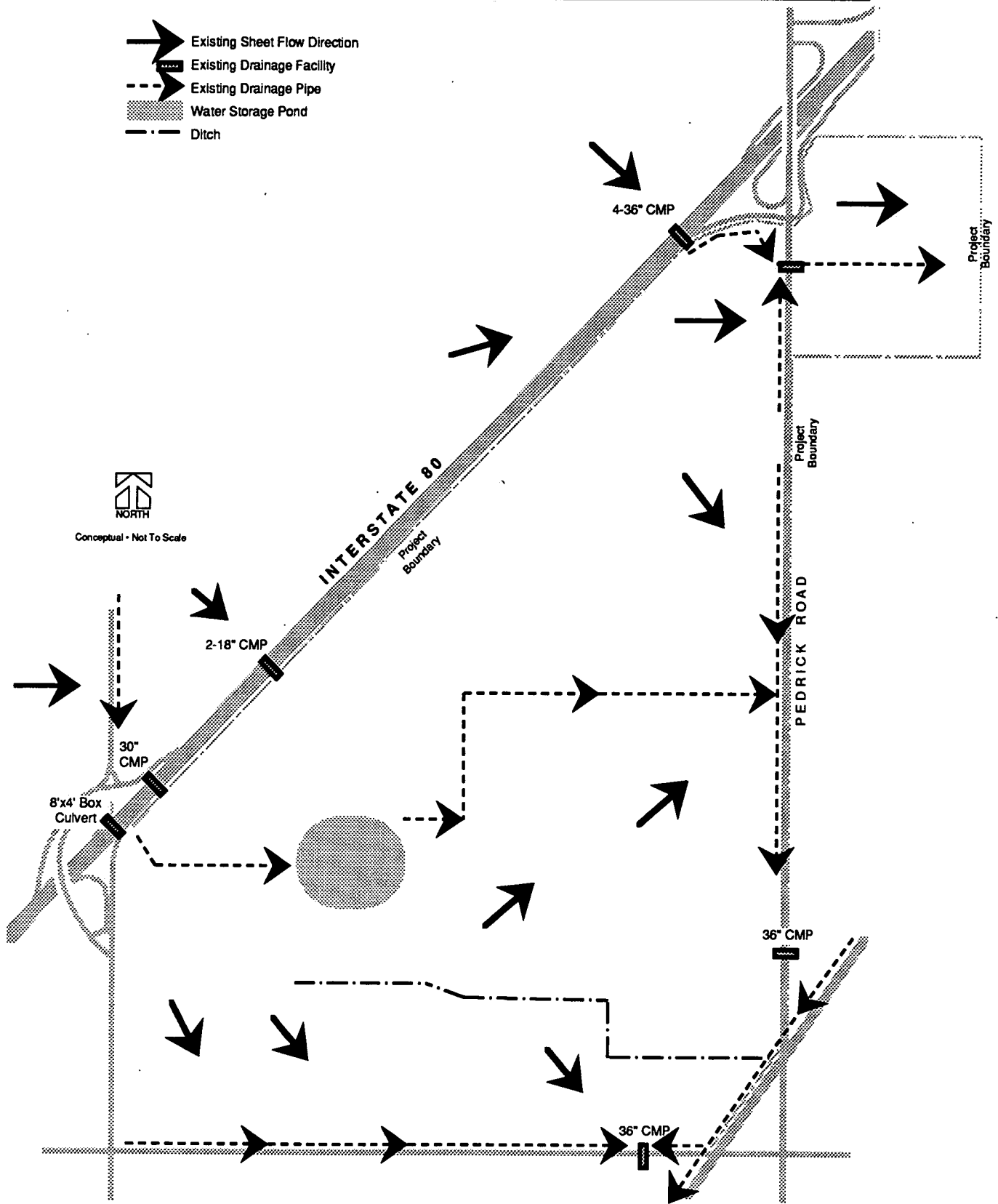
The majority of the parcels within the specific plan site are used for irrigated row crops and orchards. Runoff is collected in roadside ditches adjacent to Pedrick Road on the east and Vaughn Road on the south, and conveyed to a depressed area adjacent to the Southern Pacific Railroad (SPRR) tracks. The project site is not located within the Dixon Resource Conservation District (DRCD) service area and therefore no outlet channel has been provided. Flows appear to be stored within the depressed area adjacent to the SPRR and ultimately drain into the downstream system as shown on Figure 4.3.1.

Additional flows from the northwest side of I-80 contribute to the site. Field inspection of the existing drainage patterns within the project site indicate that approximately 1,460 acres are tributary to this drainage system. This area drains onto the NQSP site via an eight-foot by four-foot reinforced concrete box (RCB) culvert crossing of I-80 near the Curry Road/North First Street interchange, as well as a 30-inch corrugated metal pipe (CMP) pipe and two 18-inch CMPs northeast of the interchange. The flows are conveyed from this point eastward by channel to a depressed area of approximately 4.5-acres. This area remains wet year round due to irrigation runoff. A channel conveys the flows from this point to Pedrick Road.

An additional 360 acres are tributary to the four 36-inch CMP archpipe culvert crossings of I-80 southwest of the Pedrick Road Interchange. An existing channel bisecting the proposed 60-acre parcel east of Pedrick Road carries flows eastward and away from the project site.

SURFACE WATER QUALITY

A report prepared by the California Regional Water Quality Control Board (CRWQCB) revealed that water quality of surface water runoff in the Sacramento area is highly variable. In the absence of data particular to the City of Dixon, this information can be assumed to be approximate surface runoff in the vicinity of the proposed project. Contaminants in surface water runoff are dependent upon land use, proximity to those uses and the length of time



**FIGURE 4.3.1
EXISTING DRAINAGE SYSTEM**

between rains that produce the "first flush" runoff. Based on the above-mentioned study, urban surface runoff is typically higher in concentrations of copper, lead, cadmium, chromium, and zinc than acute U.S. Environmental Protection Agency (EPA) Water Quality Criteria for the protection of freshwater aquatic organisms. Metals found in surface runoff typically originate from automobile use including lead from exhaust fumes and zinc and copper from brake shoes.

The California Department of Water Resources (DWR) is responsible for assessing the quality of the state's water resources including surface water. According to a Surface Water Quality Data Evaluation for Selected Streams in Central District prepared by the DWR (1989), a monitoring site in Putah Creek near Winters has been identified as having potential water quality problems affecting beneficial uses due to the total hardness and alkalinity. Total Dissolved Solids (TDS) are in the range of 150 - 500 mg. The secondary Maximum Contaminant Level (MCL) for TDS is 500 mg/L (however, short-term exposure to drinking water containing up to 1,500 mg/L TDS is considered acceptable). Crop irrigation may be adversely affected by TDS of 500 mg/L and can be severely limited at higher concentrations.

Recent data is limited on water quality of surface water resources immediately adjacent to the project site. Local drainage ditches and canals are intermittent and often have no appreciable surface flow during the dry season. However, during low-flow periods, surface water from these facilities may contain appreciable concentrations of agricultural pollutants including pesticides, herbicides, and fertilizers.

GROUNDWATER

The majority of groundwater resources in the vicinity of the City of Dixon are within Quaternary alluvial deposits of Putah Creek. The major aquifers consist of sand and gravel channel deposits created by past migrations of the creek channel upon the valley floor. These deposits are moderately to highly permeable and typically provide high well yields. These channel deposits are covered by younger alluvium consisting of mostly silt and fine sand approximately 40 to 150 feet thick over older alluvium. The groundwater region south of Dunnigan Hills in the Putah Plain receives recharge from Cache and Putah Creek drainages.

*LAFCo Comments -
SID study*

Groundwater in this area is plentiful, with the water table rising over the past 30 years due to increased agricultural irrigation. The depth to groundwater in the area is estimated to be 20 to 40 feet and no free groundwater has been observed within the boundaries of the project site. The groundwater flow direction is normally to the southeast. The higher strata of groundwater has been determined to contain high nitrate levels, caused by the large dairies that once existed in this area (personal communication, Darrell Rosenkild, Director of Water Operations, Solano Irrigation District).

FEDERAL CLEANWATER ACT

The Federal Clean Water Act places the primary responsibility over the control of water pollution and for planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs. Thus, in California the regulatory program created by the Porter-Cologne Water Quality Act of 1970 and the planning activities of the state and regional boards are the primary means by which the federal objective of restoration and maintenance of the integrity of the nation's waters is met.

Water quality objectives for all waters in the state are established under applicable provisions of Section 303 of the Federal Clean Water Act and the Porter-Cologne Water Quality Control Act.

INLAND SURFACE WATER QUALITY STANDARDS

The State Water Resources Control Board (SWRCB) has developed water quality objectives for inland surface waters in the 1991 Inland Surface Waters Plan. Included among the provisions pertaining to the objectives are the following: (a) that all point and non-point discharges must comply with identified water quality objectives; and (b) that effluent limits are to be imposed, either through National Pollutant Discharge Elimination System (NPDES) permits or Waste Discharge Requirements (Water Code Section 13260), such that the water quality objectives shall not be exceeded in the receiving water outside a designated mixing zone.

SACRAMENTO RIVER BASIN WATER QUALITY CONTROL PLAN

Water quality objectives have been established for the Sacramento River (and its tributaries), and are contained in the 1991 Sacramento River Basin Plan prepared by the CRWQCB in compliance with the Federal Clean Water Act and the Porter-Cologne Water Quality Control Act. The basin plan establishes water quality objectives, and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Sacramento River watershed basin.

The Inland Surface Waters Plan established water quality objectives for priority pollutants that are more stringent than those water quality objectives in the pre-existing Basin Plan. Therefore, the Inland Surface Waters Plan takes precedence. However, if the basin plan is amended to include more stringent objectives for the Sacramento River Basin than those established in the Inland Surface Waters Plan, the basin plan objectives would apply.

EPA STORMWATER DISCHARGE PERMITTING REGULATIONS

The Federal Clean Water Act prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a NPDES permit. With respect to pollutants in stormwater discharges, the Federal Clean Water Act currently only requires two sizes of municipalities, large (population 250,000 or above) and medium (population 100,000 to 250,000), certain industrial activities, and certain construction activities to obtain permit coverage. The EPA may adopt regulations for small municipalities with populations with less than 100,000. The goal of newly issued regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent possible" through the use of Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops for informing the public of what impacts result when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures (label storm drain inlets as to impacts of dumping on receiving waters), and structural measures (filter strips, grass swales, and detention ponds).

CALIFORNIA GENERAL CONSTRUCTION ACTIVITY STORMWATER PERMIT

Effective October 1, 1992, General Stormwater Discharge Permits are required by the State for stormwater discharges associated with construction activities that disturb five acres or more. Construction on sites less than five acres require a permit if part of a larger development or land sale. Land owners are responsible for obtaining and complying with the permits, however, associated duties may be delegated to developers and contractors by mutual consent.

Permit applicants are required to prepare, and retain at the construction site, a Stormwater Pollution Prevention Plan that describes the site, erosion and sediment controls, means of

waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect their construction sites before and after storms to identify stormwater discharge associated with construction activity, and to identify and implement controls where necessary.

4.3.2 THRESHOLD SIGNIFICANCE

The following criteria was considered when determining the significance of development of the proposed project. An impact to water quality was considered significant under CEQA if one or more of the following could occur:

- substantially degrade water quality;
- contaminate a public water supply;
- substantially degrade or deplete groundwater resources; *
- interfere substantially with groundwater recharge; *
- cause substantial flooding, erosion or siltation;
- adversely change off-site flooding; or
- release urban or agricultural pollutants in stormwaters.

4.3.3 ENVIRONMENTAL IMPACTS

ON-SITE HYDROLOGY

The proposed drainage system for the NQSP is shown on Figure 4.3.2. As shown, site improvements for the project site would collect and convey runoff to localized detention ponds and channels. The drainage channel located within the 100-foot landscape easement in combination with the roadside drainage channel at Professional Drive would combine and distribute the flows to seven local detention ponds, as well as convey outlet flows to an outfall system.

The actual amount of containment area required for the proposed detention ponds would be determined in the design of individual development projects within the specific plan area. A preliminary estimation of approximately 32 acres (5 percent of the entire site), has been determined to be required to accommodate all on-site detention basins. The ponds would be located and integrated into the landscaping typically required for industrial, business-professional, and commercial land uses. In addition, the on-site storm drainage collection system would also be incorporated in easements which feature landscaped pedestrian pathways. The easements would provide pedestrian pathways and drainage swales that link all the detention pond areas on-site. The ponds, swales and pedestrianways would provide a network linking all areas of the specific plan.

OFF-SITE HYDROLOGY

Two alternative outfall systems are identified by the Preliminary Investigation of Storm Drainage (Appendix F of the Technical Appendices). The first involves an expansion to the outfall system to be constructed with the North First Street Assessment District (NFSAD) improvements. Outlet flows could be discharged from the project site drainage system by a pump located at the southeast end of the 100 landscape corridor. A 36-foot diameter pipe undercrossing of the SPRR tracks could be constructed at Vaughn Road. The flows that would be conveyed southwest along the east side of the SPRR right of way to the existing city Pond 'B' site. The capacity of Pond 'B' would need to be expanded by approximately 200-acre feet to maintain outflows at acceptable levels.

waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect their construction sites before and after storms to identify stormwater discharge associated with construction activity, and to identify and implement controls where necessary.

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- substantially degrade or deplete groundwater resources;
- interfere substantially with groundwater recharge;
- cause substantial flooding, erosion or siltation;
- adversely change off-site flooding; or
- release urban or agricultural pollutants in stormwaters.

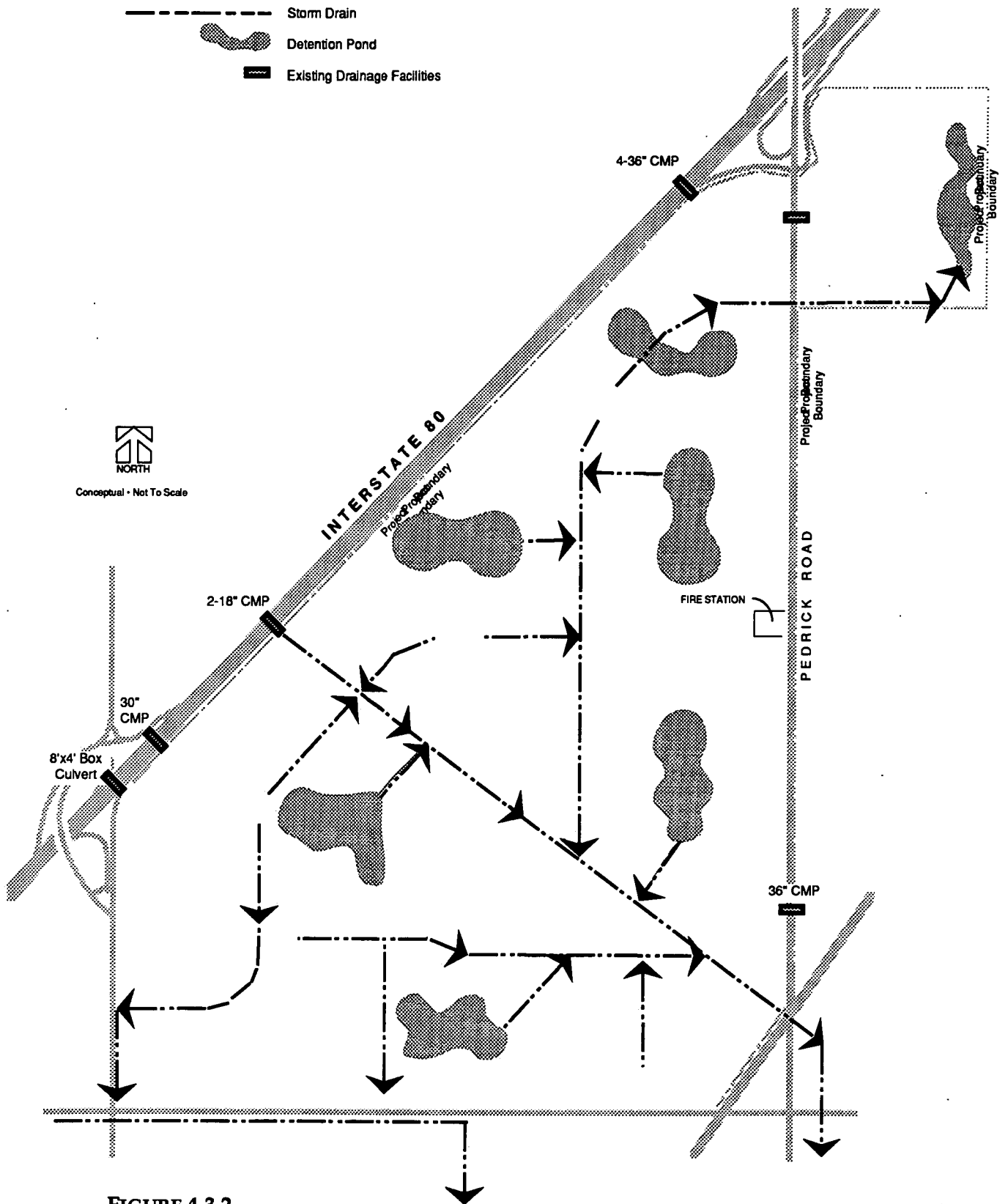
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The Dixon Northeast Quadrant Specific Plan proposes that the principal stormwater system will consist of a series of small detention basins. The purpose of these detention basins is to provide sufficient volume to retain 100% of the on-site stormwater in a 100-year event if no other drainage system is available. Each application for a PUD pursuant to this specific plan will be required to demonstrate the capacity to retain all stormwater in a 100-year event unless a comprehensive storm drainage system is available to serve the proposed project. Other alternative stormwater control measures may be considered in the PUD review process for development projects. On-site detention ponds will be incorporated as amenity features in individual land uses. The ponds will be shallow, typically four-foot deep, with gradual slopes and visually enhanced with landscaping.



**FIGURE 4.3.2
PROPOSED DRAINAGE SYSTEM**

The second alternative outfall system would be the construction of channel improvements from the developed area northeast to Putah Creek. The flows would be conveyed eastward from Pedrick Road at the intersection with Professional Drive to the SPRR tracks. From this location, the flows could be conveyed along the west side of the SPRR right-of-way to Putah Creek. At the Putah Creek Levee, a pump station would be constructed to lift the flows into the creek. This alternative is not in compliance with the City of Dixon Master Drainage Plan, which could be amended if this alternative is selected.

SURFACE WATER QUANTITY

Impact WQ-1: Change in land use from agriculture to urban uses will result in potential increases to the quantity of surface water runoff.

The conversion of predominately agricultural land to urban uses have^s the potential to create an impact on local surface waters as a result of precipitation events and ongoing irrigation practices in the area. Because of the limited downstream flow capacities, additional runoff generated by the proposed project would not be allowed at this time. Therefore, this project is dependent on improvements to the city-wide drainage system or has the option to retain all on-site drainage.

Significance: Significant

Mitigation Measure WQ-A: Prior to commencement of on-site grading, the project shall demonstrate, via a detailed hydraulic analysis of post development topographic and drainage conditions, that the final project design would not substantially cause flooding to adjacent or downstream parcels or conveyance facilities. The project proponent shall participate in city-wide drainage improvements in order to increase downstream flow capacities to accommodate this project.

Mitigation Measure WQ-B: Final detention basin(s) design, conveyance facilities, and management of the proposed facilities on-site shall, as demonstrated by the hydraulic analysis of the project proponent and approved by the City of Dixon, adequately accommodate runoff from a 10-year and 100-year storm event. Ultimate development of the entire site must be considered, although drainage infrastructure construction could be phased as needed.

Residual Significance: Less than significant

SURFACE WATER QUALITY

Impact WQ-2: Change to the quality of runoff would result from the fundamental change in land uses from agriculture to urban uses.

Fine sediments and various types of pollutants would be generated by human activity within the proposed project. These materials would accumulate on the impervious surfaces (i.e., streets, parking lots and roofs) between rainstorms and would be subsequently washed off various surfaces and transported into detention basins and receiving conveyance facilities. In

addition, land that is not covered by impervious surfaces would generally be landscaped and routinely treated with fertilizers and pesticides which would also get carried into surface water courses during a storm event.

Significance: Significant

Mitigation Measure WQ-C: Prior to commencement of on-site grading, the project sponsor shall develop a surface water quality control plan, to be implemented and approved by the City of Dixon. The plan shall include, but not necessarily be limited to reducing runoff contaminant concentrations by:

- installing sediment and grease traps at all catch basins or within storm drain lines;
- properly maintaining sediment and grease traps, with responsibility for maintenance assigned to site operations to be established by the project sponsors prior to completion of construction of the first phase of development;
- incorporating infiltration facilities (porous pavement or grass swales) within the project to reduce peak flow of runoff;
- reducing source pollution causes through practices such as minimal use of fertilizer, pesticides and herbicides, proper application of water for landscape irrigation, keeping roadways and parking lots free of litter and sediments, proper methods and locations for disposal of automobile hazardous wastes; and
- maximizing distances between inlets and outlets perhaps using elongated basin shapes.

Residual Significance: Less than significant

GROUNDWATER

The project's impact on groundwater quantities is addressed in Section 4.9 (Public Services and Utilities). Regarding groundwater quality, the project site has been farmed for decades. The potential exists that hazardous materials (fertilizers, insecticides, diesel fuel) were used and possibly disposed of on the site. A Preliminary Site Assessment, contained in Appendix E of the Technical Appendices has been conducted. Please refer to Section 4.10 (Public Health and Safety) of this EIR for a discussion on hazardous materials and their potential impacts to the local groundwater.

4.3.4 CUMULATIVE IMPACTS

Impact WQ-3: The project will cumulatively contribute to increased surface water runoff and degradation to surface water quality.

Implementation of cumulative development within the cumulative sphere of influence would result in altering the existing topography and increasing the potential for increased runoff volumes and flow rates. The cumulative area is characterized as being relatively flat (0.1 to 1 percent) and sloping to the southeast as is the proposed project. A total of 1,323 acres are

planned for a variety of residential, commercial, industrial and other land uses which would contribute to alteration of topsoils. However, this impact is not considered to be significant because the issues associated with soil erosion and surface water quality can be mitigated through grading, drainage, and revegetation features and other efforts identified in Section 4.3.3.

Significance: Less than significant

4.3.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measures recommended in Sections 4.3.3 would reduce impacts to surface water to a less-than-significant level.

4.4 AIR QUALITY

The primary source of information for this Section is the Draft CEQA Review Handbook, Determination of Significance, Yolo/Solano Air Quality Management District, January, 1993.

4.4.1 ENVIRONMENTAL SETTING

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topographic and atmospheric characteristics of the Sacramento Valley tend to inhibit the dispersal of air pollutants.

REGIONAL GEOGRAPHY AND CLIMATE

The plan area is located to the northeast of the City of Dixon in the Sacramento Valley. From a geographic and meteorologic standpoint, the Sacramento Valley is relatively uniform. Essentially, the valley is characterized by flat terrain with climate described as Mediterranean: hot and dry in the summer and cold and wet in the winter. This combination of geographical and meteorological characteristics, coupled with an extensive irrigation system, have made the valley some of the most productive agricultural land in the world.

The meteorology of the Sacramento Valley has a significant influence on the formation and transport of air pollutants. Regional wind patterns and temperatures are extremely influential in determining the rate and frequency of the horizontal and vertical dispersion of pollutants. The inland location and surrounding mountains shelter the valley from the ocean breezes which keep the coastal regions moderate in temperature. The only breach in the barrier is the Carquinez Straits which exposes the midsection of the valley to the coastal air mass. Compared to the coastal area, temperatures in the Sacramento Valley are much more extreme. For example, the warmest and coolest months of the year are July and January with average temperatures of 96 and 53 degrees F, respectively. Furthermore, daily temperatures exceeding 90 degrees F occur an average of 95 days per year, while a reading of 32 degrees occurs an average of 23 days per year.

The average annual precipitation in the Sacramento Valley is 17.9 inches, most of which occurs between November and April. Between May and October average precipitation is less than one inch per month. The record maximum monthly rainfall was 11.7 inches in

December, 1955. The record maximum daily rainfall was 3.2 inches, also occurring in December of that same year.

The relative humidity in the Sacramento Valley is variable throughout the year. Typically, humidity levels are low during the summer. Winter storms create higher relative humidities during the months of November through March. During December through February a dense layer of ground fog often forms at night and can continue for several weeks.

AIR QUALITY RULES, REGULATIONS AND STANDARDS

Regulation of air quality is achieved through both federal and state ambient quality standards and emissions limits for individual sources of air pollutions. Regional Air Quality Management Districts and local Air Pollution Control Districts enforce these standards and implement stationary and mobile emission control programs.

FEDERAL

The Federal Clean Air Act (CAA) required the U.S. EPA to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the six "criteria" air pollutants: ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); suspended particulate matter (PM₁₀); and lead (Pb). These pollutants are called criteria air pollutants because EPA publishes criteria documents to justify the choice of standards to protect public health. Table 4.4.1 displays ambient state and federal air quality standards.

Pursuant to the 1990 CAA Amendments, the EPA has classified air basins, or portions thereof, as either "attainment" or "non-attainment" for each criteria air pollutant, based on whether or not the NAAQS have been achieved. The EPA identifies the Sacramento Valley Air Basin (SVAB) as non-attainment for O₃ and PM₁₀.

STATE

The California Air Resources Board (CARB) regulates mobile emissions sources and oversees the activities of County Air Pollution Control Districts (APCDs) and regional Air Quality Management Districts (AQMDs). The CARB regulates local air quality indirectly through established State Ambient Air Quality Standards (SAAQS) and vehicle emission standards, by conducting research activities and by planning and coordinating activities.

California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. Under the California Clean Air Act (CCAA), patterned after the Federal Act, areas have been designated as attainment or non-attainment with respect to the SAAQS. The SVAB is designated as non-attainment for O₃ and PM₁₀ with respect to the state standards.

The Environmental Quality Act (CEQA) of 1970 was enacted by the state legislature in response to an increasing concern for the state's natural resources. The primary purposes of the Act are to: 1) require the full evaluation and disclosure of the environmental impacts of proposed projects; 2) ensure that a reasonable range of alternatives that could feasibly attain a project's basic objectives are evaluated; 3) require that significant environmental impacts are avoided whenever possible through the adoption of mitigation measures; and 4) ensure that agencies which approve projects where significant environmental effects are involved provide full disclosure of their reasons to do so.

TABLE 4.4.1
AMBIENT AIR QUALITY STANDARDS

<u>Air Pollutant</u>	<u>California</u>	<u>Federal</u>	
	<u>Concentration</u>	<u>Primary (>)</u>	<u>Secondary (>)</u>
Ozone (O ₃)	0.09 ppm, 1-hr. avg. >	0.12 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.
Carbon Monoxide (CO)	9.0 ppm, 8-hr. avg. > ^a 20 ppm, 1-hr. avg. >	9 ppm, 8-hr. avg. ^b 35 ppm, 1-hr. avg. >	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg. >
Nitrogen Dioxide (NO ₂)	0.25 ppm, 1-hr. avg. > ^c	0.053 ppm, annual avg. ^d	0.053 ppm, annual avg. ^e
Sulfur Dioxide (SO ₂)	0.05 ppm, 24-hr. avg. > with ozone ≥ 0.10 ppm, 1-hr. avg. or TSP ≥ 100 ug/m ³ , 24-hr. avg. 0.25 ppm, 1-hr. avg. > ^e	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.50 ppm, 3-hr. avg.
Suspended Particulate Matter (PM 10)	30 ug/m ³ , annual geometric mean > 50 ug/m ³ , 24-hr. avg. > ^f	50 ug/m ³ , annual § arithmetic mean 150 ug/m ³ , 24-hr. avg.	50 ug/m ³ , annual § arithmetic mean 150 ug/m ³ , 24-hr. avg.
Sulfates	25 ug/m ³ , 24-hr. avg. >=		
Lead (Pb)	1.5 ug/m ³ , 30-day avg. >=	1.5 ug/m ³ , calendar quarter	1.5 ug/m ³ , calendar quarter
Hydrogen Sulfide	0.03 ppm, 1-hr. avg. >=		
Vinyl Chloride	0.010 ppm, 24-hr. avg. >=		
Visibility Reducing Particles	In sufficient amount to reduce the visual range to less than 10 miles at relative humidity less than 70%, 8-hr. avg. (9am-5pm) ^h		

^a Effective December 15, 1982. The standards were previously 10 ppm, 12-hour average and 40 ppm, 1-hour average.

^b Effective September 13, 1985, standard changed from ? 10 mg/m³ (>= 9.3 ppm) to >9ppm (>= 9.5 ppm).

^c Effective March 9, 1987, standard changed from >= .25 ppm to > .25 ppm.

^d Effective July 1, 1985, standard changed from > 100 ug/m³ (> .0532 ppm) to (> .0534 ppm).

^e Effective October 5, 1984. The standard was previously .5 ppm, 1-hour average.

^f Effective August 19, 1983. The standards were previously 60 ug/m³ TSP, annual geometric mean, and 100 ug/m³ TSP, 24-hour average.

§ Effective July 1, 1987. The standards were previously: Primary - Annual geometric mean TSP > 75 ug/m³, and a 24-hour average TSP > 260 ug/m³. Secondary- Annual geometric mean TSP > 60 ug/m³, and a 24-hour average TSP > 150 ug/m³.

^h Effective October 18, 1989. The standard was previously "In sufficient amount to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation", and was based on human observation rather than instrumental measurement.

SOURCE: South Coast Air Quality Management District, April 1991.

REGIONAL

Located in the Sacramento Valley Air Basin, the Yolo/Solano Air Quality Management District (YSAQMD) constitutes roughly 1,500 square miles. The YSAQMD encompasses all of Yolo County and the northeastern half of Solano County. Bordering the District is Colusa and Sutter Counties to the north, portions of Solano County to the south, and Sacramento and Napa Counties to the east and west, respectively. The cities of West Sacramento, Davis, Woodland, Dixon, Rio Vista, Vacaville, and Winters are all included within the YSAQMD's jurisdiction.

Each county in the SVAB has been required to develop an air quality attainment plan in order to meet attainment status for the non-attainment criteria pollutants. YSAQMD accordingly has developed an Air Quality Attainment Plan for both Yolo and Solano Counties that describes its strategies to reach attainment status.

The YSAQMD regulates air quality through its permit authority over most types of stationary emission sources through its inspection and enforcement activities. The Air Quality Attainment Plan primarily seeks to reduce mobile sources of O₃ emissions by integrating transportation, land use and air quality planning. Airborne particulate matter equal to or less than 10 microns in diameter (PM₁₀) is also addressed in the plan, but with less emphasis.

EXISTING AIR QUALITY

Air quality within the Sacramento basin varies from season to season with ambient concentrations of ozone and PM₁₀, of particular concern in the summer and winter, respectively. The presence of persistent temperature inversions exacerbate the air pollution in the valley by prohibiting the vertical dispersion of pollutants. During half of the days in July and August, a phenomenon called the "Schuyltz Eddy" prevents the normal horizontal distribution of pollutants to the north. In the winter, the cold temperatures create an environment which make CO and PM₁₀ the pollutants of most concern. Air pollution transport is common because of the absence of geographical barriers within the valley.

The YSAQMD has been designated as non-attainment for O₃ and PM₁₀. The YSAQMD non-attainment status for O₃ and PM₁₀ is categorized as "serious" with respect to the state air quality standards.

The YSAQMD's regional air quality monitoring network provides information on average concentrations of the criteria air pollutants. Since the implementation of stationary and mobile emission control policies in the mid-1970's, the average number of air pollution violations per year in the district has fluctuated. Table 4.4.2 is a five-year summary of the highest annual concentrations for the two criteria air pollutants for which the YSAQMD is non-attainment (O₃ and PM₁₀), collected at the YSAQMD's nearest air quality monitoring stations at Davis and Woodland. The highest annual concentrations are also shown for CO for which the YSAQMD is currently attainment. This data is expected to be representative of air quality in the vicinity of the project site. Air pollutant concentrations are compared with the SAAQS air quality standards, which are more stringent than the corresponding NAAQS. Motor vehicle traffic on local roads and highways is the major source of air pollution near the project site. These three criteria air pollutants are described below.

Ozone (O₃)

The federal O₃ standard is violated occasionally in some parts of the Sacramento Valley and therefore, the air basin is non-attainment for O₃. Levels of O₃ in the area have also exceeded the state standard regularly over the past five years, including the YSAQMD. In the YSAQMD the formation of ozone is most common from April through October.

Ozone is not emitted into the atmosphere but is instead formed through a complex series of reactions in the atmosphere. The reactions involve combining reactive organic gasses (ROGs) and nitrogen oxides (NO_x) in the presence of sunlight.

ROGs are emitted from both combustion and organic solvent evaporation. In 1990, 54% of ROG emissions were attributable to on-road and off-road vehicles, while area sources and point sources accounted for 46%. NO_x are formed solely from combustion. The primary sources of ROGs and NO_x include power plants, automobiles, petroleum industry, pesticides, and organic solvents.

Several studies have shown that ozone damages alveoli, the tiny individual air sacs in the lungs. Consequently, prolonged exposure to ozone worsens the condition of victims suffering

TABLE 4.4.2
AIR POLLUTANT SUMMARY, 1986-1990

Pollutant	Std.***	Monitoring Data by Year*				
		1986	1987	1988	1989	1990
<u>Ozone (O₃)</u>						
Highest 1-hr. average, ppm**	0.09	<u>0.11</u>	<u>0.10</u>	<u>0.11</u>	<u>0.10</u>	<u>0.11</u>
Number of standard excesses (days)		4	2	15	1	4
<u>Particulate Matter (PM₁₀)</u>						
Highest 24-hr. average, ug/m ³	50	<u>94</u>	<u>102</u>	<u>96</u>	<u>113</u>	<u>80</u>
Standard Excesses (days)		7	8	19	8	7
Annual Geometric Mean, ug/m ³	30	<u>32.5</u>	<u>30.9</u>	<u>33.6</u>	<u>30.4</u>	<u>25.8</u>
<u>Carbon Monoxide (CO)</u>						
Highest 1-hr. average, ppm	20.0	13.0	14.0	9.0	13.0	12.0
Number of standard excesses (days)		0	0	0	0	0
Highest 8-hr. average, ppm	9.0	6.0	8.4	4.9	5.4	5.0
Number of standard excesses (days)		0	0	0	0	0

* 1986-1990 ozone data are taken in Davis. PM₁₀ and CO data are taken in Woodland.

** ppm = parts per million; ug/m³ - micrograms per cubic meter.

*** State standard, not to be exceeded

Underlined values are in excess of applicable standard.
California Air Resources Board, Air Quality Data Summaries, 1986-1990

from bronchitis, asthma and other respiratory ailments. Individuals with less developed or damaged respiratory systems, such as infants or the elderly, are particularly vulnerable to prolonged exposure to ozone. Studies have shown the ozone also causes damage to vegetation.

Particulate Matter (PM₁₀)

Particulate matter (PM₁₀) refers to particulates with an aerometric diameter equal to or less than ten microns. At the Woodland monitoring station, the PM₁₀ standard was exceeded regularly between 1986 and 1990.

The sources of PM₁₀ are many. Included among them are fume-producing industry and agriculture, motor vehicle combustion, as well as tire wear and wind-raised particulates. A primary source within the district is the soot generated from agricultural burning. In 1989, 96% of particulate emissions came from area and point sources, while 4% came from mobile sources.

Because of its ability to bypass the human body's natural filtering mechanisms, particulate matter of less than 10 microns in diameter has the potential to cause irritation and damage to the respiratory tract. Other effects of exposure to PM₁₀ include irritation of the eyes, throat, and nose, and even damage to alveoli.

Carbon Monoxide (CO)

The YSAQMD is attainment for CO; however, the Sacramento Air Quality Management Area (AQMA) is non-attainment.

CO is an odorless, colorless toxic gas. It is a byproduct of incomplete combustion. Motor vehicles and industrial sources are the primary sources of CO in the YSAQMD. In 1990, 88% of CO emissions came from mobile sources while 12% came from area and point sources.

CO has been shown to deprive organs of oxygen by entering the bloodstream and attaching to hemoglobin. For this reason, prolonged exposure to CO can be particularly damaging to individuals with heart disease. Other effects from exposure to CO range from fatigue and nausea to impairment of the central nervous system and changes in heart function. The severity of the health disorder caused by CO exposure depends largely on the concentrations and length of exposure.

Other Criteria Air Pollutants The standards for nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb) are being met within the region, and ambient concentrations of these pollutants show no signs of exceeding state or federal standards in the future.

Local Air Quality

Carbon monoxide is the pollutant of major concern along roadways. CO is considered a primary pollutant. Unlike ozone, CO is directly emitted from a variety of sources. The most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network. As shown on Table 4.4.2, state and federal CO standards were not exceeded in the area during the period 1986-1990.

Even though the standards were not exceeded, existing CO levels in the project vicinity were assessed using the CALINE 4 computer model. CALINE 4 is a fourth generation one source air quality model developed by the California Department of Transportation (CALTRANS). The purpose of the model is to assess air quality impacts near transportation facilities in what is known as the microscale region. Given source strength, meteorology, site geometry, and site characteristics, the model can reliably predict pollutant concentrations.

Worst case atmospheric conditions were modeled to estimate worst case concentrations of CO from existing traffic in the project area. For worst case meteorological conditions, a wind speed of five meters per second (one MPH), and a stability class G were used for a one-hour and an eight-hour averaging time.

Five (5) receptor locations were modeled, as shown on Figure 4.4.1. Emission factors were obtained from the YSAQMD's Draft CEQA Review Handbook and reflect vehicle mix and operating characteristics typical of arterial traffic in Solano County. Receptor locations were chosen to represent a range of emission concentrations near existing and proposed high volume intersections and arterials located in the project vicinity. Peak hour traffic volumes for the local roadways were obtained from the traffic study prepared for this proposed project. The results of the modeling effort for existing air quality are shown on Table 4.4.3. The pollutant levels shown are expressed in parts per million (ppm) for each receptor. The

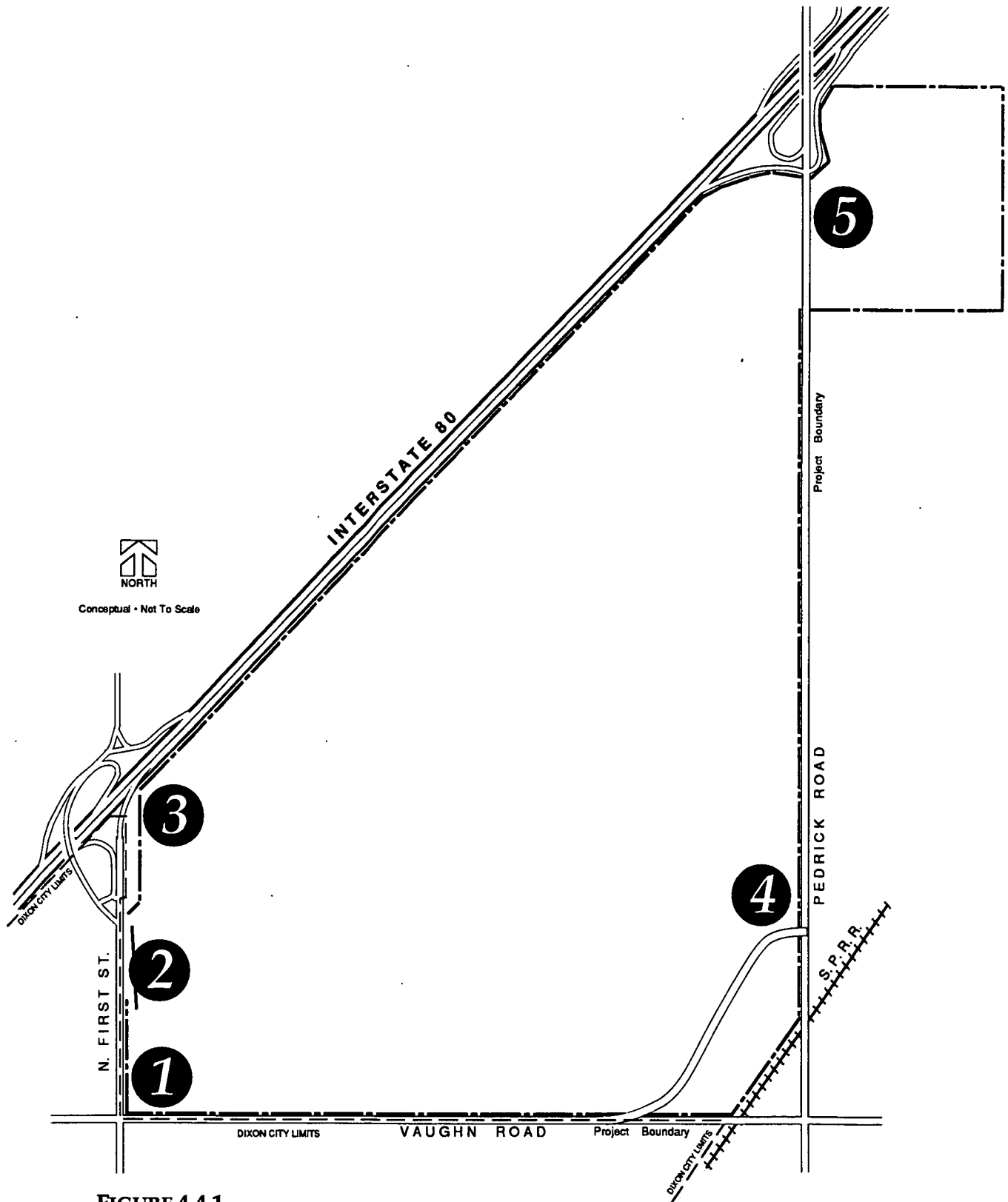


FIGURE 4.4.1
RECEPTOR LOCATION MAP

results indicate that under the worst-case conditions, state and federal standards are not being exceeded at locations within the project area. State and federal standards are not being exceeded at locations within the project area.

**TABLE 4.4.3
EXISTING BASELINE CO CONCENTRATIONS**

<u>Receptor/Intersection</u>	<u>Maximum CO Concentrations (PPM)</u>		<u>State Standard</u>		<u>Federal Standard</u>	
	<u>1-hour</u>	<u>8-hour</u>	<u>1-hour</u>	<u>8-hour</u>	<u>1-hour</u>	<u>8-hour</u>
	1. N. First St./Vaughn Road	12.5	7.5	20 ppm	9.1 ppm	35 ppm
2. N. First St./Future Arterial B	12.7	7.6	20 ppm	9.1 ppm	35 ppm	9.1 ppm
3. N. First St./I-80	14.1	8.5	20 ppm	9.1 ppm	35 ppm	9.1 ppm
4. Pedrick Road/Vaughn Road	11.8	6.4	20 ppm	9.1 ppm	35 ppm	9.1 ppm
5. Pedrick Road/I-80	13.3	8.0	20 ppm	9.1 ppm	35 ppm	9.1 ppm
Background Concentration	11.0	5.1	-	-	-	-

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Land uses such as playgrounds and schools, hospitals, rehabilitation centers, long-term health care facilities, and convalescent/retirement homes are considered to be relatively sensitive to poor air quality because the young, the old, and the infirm are more susceptible to respiratory infections and other air-quality-related health problems than the general public. Residential land uses are considered sensitive to air pollution, as residents, including the young and the elderly, could be exposed to ambient air pollutant concentrations that could have adverse health impacts.

There are currently eight residential structures on the project site. However, these residences will be either demolished or removed from the site.

There are no other sensitive receptors in the vicinity of the proposed project.

4.4.2 THRESHOLD SIGNIFICANCE

The State CEQA Guidelines state that a significant effect on the environment will:

- Conflict with adopted environmental plans and goals of the community where it is located;
- Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentration.

To evaluate impacts from an air quality perspective, one needs to examine emissions and compare these emissions with determined quantitative thresholds of significance. If the lead agency finds that a project has the potential to exceed the given thresholds, then the project should be considered significant.

Threshold criteria are needed to evaluate the impacts of indirect sources (i.e., motor vehicles) associated with urban and industrial development. The district's thresholds are based, in part, on Section 182 (d) of the California Clean Air Act (CCAA) which identifies 15 tons or more per year of volatile organic gases as the significance level for stationary sources of emissions in serious non-attainment areas for ozone. The CCAA is used instead of the Federal Clean Air Act because the state standard is stricter. As a result, the District will comply with the CAA by using the CCAA's standards. The YSAQMD also takes into account thresholds established by other air quality management agencies in California.

The district advocates that the threshold be 80 lbs. for ROG, NO_x, and PM₁₀, and 550 lbs. per day for CO (Table 4.4.4). The carbon monoxide (CO) threshold is significantly higher than other pollutants because the district is attainment for CO. Carbon monoxide, though, does need regulation since it is a precursor to ozone. The district also recommends thresholds be used by lead agencies in making a determination of significance for mobile or indirect sources. However, the final determination of whether or not a project is significant is within the jurisdiction of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines.

**TABLE 4.4.4
THRESHOLD LEVELS
(LBS. PER DAY*)**

<u>POLLUTANT</u>	<u>THRESHOLD</u>
Reactive Organic Gasses (ROG)	80
Nitrogen Oxides (NO _x)	80
Particulate Matter (PM ₁₀)	80
Carbon Monoxide (CO)	550

*CA State 1-hour or 8-hour standard for ROG, NO_x, and CO; CA State 24-hour standard for PM₁₀.

4.4.3 ENVIRONMENTAL IMPACTS AND MITIGATIONS

Air quality impacts can result both from construction activities and from the on-going operations of the completed project. Construction emissions would have a short-term effect, while operational emissions would continue to affect air quality throughout the lifetime of the project. Motor vehicles would be the primary source of project-generated air pollutant emissions. Emissions also would result from natural gas used for space heating.

CONSTRUCTION IMPACTS

Impact AQ-1: The NQSP will result in short-term construction impacts to air quality.

Significance: Significant

Construction of the project would generate fugitive dust including PM₁₀ emissions from construction activities, ROG emissions from paints and asphalts, and exhaust emissions (ROG and NO_x) from construction vehicles.

Construction activities would also cause combustion emissions from utility engines. On-site heavy-duty construction activities envisioned would vary from day-to-day as construction activity levels change. Construction equipment emissions for a worst-case day are envisioned during the earlier phases of the project. Equipment usage was estimated from construction requirements for a similar project. These equipment requirements and associated emissions are detailed in Table 4.4.5.

Short-term grading operations have the potential to generate fugitive dust containing oil residues. Although the majority of such fugitive dust is inert, some areas contain minor petroleum spills as a result of historic and current agricultural and trucking operations. Petroleum residue present in some soils could be stirred-up during grading operation. This residue acts as a binder to trap fine soil particles that might otherwise escape into the air during handling. These larger particles then settle-out of the air much more rapidly than unagglomerated particles. As a result, the potential for off-site travel of petroleum-contaminated soils is considered low.

**TABLE 4.4.5
CONSTRUCTION EMISSIONS
(POLLUTANTS IN LBS/DAY)**

<u>Equipment Type</u>	<u>Equipment Used</u>	<u>Hours in Operation</u>	<u>CO</u>	<u>ROG</u>	<u>NO_x</u>	<u>PM₁₀</u>
Scraper	5	40	33.0	6.6	101.1	11.0
Wheeled Loader	2	16	6.6	2.2	19.8	2.2
Track type Loader	2	16	2.2	2.2	8.8	2.0
Off-highway Truck	1	8	8.8	2.2	22.0	2.2
Roller	2	16	2.2	2.0	8.8	2.0
Misc.	20	80	35.2	8.8	90.1	6.6
Total Emissions	-	-	88.0	24.0	250.6	26.0
Significance Threshold	-	-	550.0	80.0	80.0	80.0

With the exception of NO_x, all estimated construction emissions are below the threshold criteria. As shown in Table 4.4.5, worst-case NO_x emissions exceed the YSAQMD significance threshold. However, because of the mobile nature of such equipment, emissions

will not result in concentrations that would threaten local attainment of the clean air standards, given the existing source-to-receptor separation near the project site.

Measures to Reduce PM₁₀ Although only the NO_x emissions exceed the YSAQMD significance threshold, the following mitigation measures will help to minimize all short term construction air quality impacts:

Mitigation Measure AQ-A: The project construction site shall be watered at least two times per day. Emphasis shall be placed on the watering of unpaved roadways during periods of high vehicle movement.

Mitigation Measure AQ-B: Tarpaulins or other effective covers shall be used on haul trucks when transferring earth materials.

Mitigation Measure AQ-C: Where feasible, all inactive portions of the project construction site shall be seeded and watered until vegetation is grown.

Mitigation Measure AQ-D: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the YSAQMD.

Mitigation Measure AQ-E: Soils shall not be exposed nor grading occur during periods where wind speeds are greater than 20 mph averaged over one hour.

Mitigation Measure AQ-F: Vehicle speed shall not exceed a maximum of 15 mph on all unpaved roads.

Mitigation Measure AQ-G: All roadways, driveways, and sidewalks shall be paved as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Measures to reduce O₃
Precursors (ROG and NO_x)

Mitigation Measure AQ-H: Proper maintenance of equipment and engines shall be maintained at all times.

Mitigation Measure AQ-I: Vehicle idling shall be kept to an absolute minimum. As a general rule idling shall be kept below 10 minutes.

Mitigation Measure AQ-J: During smog season (April through October), the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

Mitigation Measure AQ-K: Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible.

Measures to reduce petroleum contamination of soils

Mitigation Measure AQ-L: A site assessment shall be conducted before construction activities begin. At locations where petroleum contamination has occurred, the soils shall be remediated using appropriate techniques (Section 4.11, Public Health and Safety). Removal of petroleum contamination will also eliminate the generation of hydrogen sulfide and its associated odor. If unforeseen areas of subsurface contamination are encountered during excavation activities, grading shall be curtailed in the contaminated area until the area is evaluated and remediated as appropriate.

Residual Significance: Less than significant

EXISTING AIR QUALITY

Impact AQ-2: Existing air quality in the project area currently exceeds the YSAQMD's threshold of significance for O₃ and PM₁₀.

Significance: Significant and unavoidable

PROJECT GENERATED EMISSIONS

Impact AQ-3: Long-term mobile sources of air pollution will result from implementation of the NQSP.

Significance: Significant and unavoidable

Long-term air quality impacts occur due to air pollutant emissions from both mobile and stationary sources. The emissions attributable to the project are primarily from project-generated motor vehicle traffic, which could increase ambient air pollutant concentrations.

Operational air quality impacts from the proposed land uses per day would result primarily from 99,124 additional motor vehicle trips generated by the project. Using URBEMIS 3, an emissions estimating program developed by the CARB, traffic-generated emissions from the project, at full-buildout, would be approximately 7,098.2 pounds per day (lb/day) of CO, 1,258.2 lb/day of NO_x, 709.8 lb/day of ROG, 134.5 lb/day of SO_x, and 1,194.4 lb/day of PM₁₀, as shown on Table 4.4.6, these violate the YSAQMP significance thresholds.

PROJECT PLUS FUTURE GENERATED EMISSIONS

Impact AQ-4: The project plus future (2010) generated emissions will result in violations of ambient CO standards and a net increase of the O₃ precursors.

Projected traffic conditions in 2010 (Table 4.4.6 and Appendix J) show that the project would cause ambient CO standards to be violated locally. Project-generated emissions would also cause a net increase of the O₃ precursors.

Significance: Significant and unavoidable

TABLE 4.4.6

TABLE 4.4.6
DAILY OPERATIONAL EMISSIONS
(LBS PER DAY)

Source	Maximum Daily Pollutant Emissions				
	ROG	CO	NO _x	PM ₁₀	SO _x
Highway Commercial	406.0	4002.8	724.8	259.6	77.1
Community Commercial	131.8	1299.2	235.2	84.2	25.0
Prof. & Admin. Office	70.6	736.6	122.5	350.8	13.3
Light Industrial	101.4	1059.6	175.7	499.8	19.1
TOTAL:	709.8	7098.2	1258.2	1194.4	134.5
YSAQMP Significance Thresholds:	80.0	550.0	80.0	80.0	N/A

Projected roadside CO concentrations at full buildout were modeled with the CALINE 4 dispersion model on the basis of peak-hour traffic volumes and worst-case meteorological assumptions. The results of this modeling are shown in Table 4.4.7.

Although emission factors are expected to be lower in the future because of cleaner-burning fuels, improved engine efficiencies, and the potential availability of a rail access, the project plus future emissions will result in a significant impact to air quality.

TABLE 4.4.7
FUTURE CO CONCENTRATIONS (PPM)

<u>Receptor/Intersection</u>	<u>Existing CO Concentrations</u>		<u>Future CO Concentrations w/Project</u>		<u>Future Cumulative CO Concentrations</u>	
	<u>1-hour</u>	<u>8-hour</u>	<u>1-hour</u>	<u>8-hour</u>	<u>1-hour</u>	<u>8-hour</u>
	1. N. First St./Vaughn Road	12.5	7.5	12.0	7.2	13.9
2. N. First St./Future Arterial B	12.7	7.6	10.7	6.4	12.3	7.4
3. N. First St./I-80	14.1	8.5	11.5	6.9	13.4	8.0
4. Pedrick Road/Vaughn Road	11.8	6.4	9.9	5.9	12.5	7.5
5. Pedrick Road/I-80	13.3	8.0	11.4	6.8	13.3	8.0
Background Concentration	11.0	5.1	7.0	3.6	7.0	3.6

The following mitigation measure will reduce the air quality impacts associated with traffic generated by the NQSP, but it will not result in projected daily operational emissions below the YSAQMP significance thresholds. However, the existing air quality is considered non-attainment, therefore, any additional traffic would be considered significant. Further, regardless of where a development like the NQSP is built in the region, the air impacts would be the same as the proposed project.

The following mitigation measures will help to reduce air quality impacts. However, this remains as a significant and unavoidable impact.

Mitigation Measure AQ-M: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.

Mitigation Measure AQ-N: Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities. Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.

Mitigation Measure AQ-O: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.

Mitigation Through Land Use Planning and Site Design

Mitigation Measure AQ-P: Mixed land uses will reduce vehicle trips and vehicle miles traveled (VMT). Supportive land uses shall be sited within walking/biking distance of one another.

Mitigation Measure AQ-Q: Support facilities to encourage modes of transportation other than the automobile shall include pedestrian and bicycle pathways.

Mitigation Measure AQ-R: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.

Mitigation Measure AQ-S: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.

Mitigation Measure AQ-T: Street design standards, including landscape areas between the sidewalk and street, night lighting, safe islands in the center of major arterials, automatic street or pedestrian-activated "walk" signals, and adequate "walk" times, shall be enforced.

Mitigation Measure AQ-U: PM₁₀ emissions shall be reduced by curtailing fugitive dust through effective landscaping, and paving all vehicle roads and parking lots.

Residual Significance: Significant and unavoidable

Impact AQ-5: Stationary sources of air pollution associated with energy generating.

Stationary source emissions would be primarily emissions from electricity and natural gas usage generated by future uses.

Significance: Less than significant

Impact AQ-6: Airborne PM₁₀ from adjacent agricultural operations.

Operation of the proposed project adjacent to active agricultural operations would result in potential incompatibility between employee health and agricultural activities. Fugitive dust generated by machinery operations on adjacent agricultural properties to the north and east of the proposed project could increase the frequency of PM₁₀ standard violations and therefore, result in risks to future employees.

Migration of airborne dust can present health hazards because of the inhaleable characteristics of fine dust particles, and the concomitant health issues of dust particles entering and persisting in lung tissue. Agricultural operations can generate substantial dust through activities such as plowing, cultivating, and harvesting.

Significance: Significant

Mitigation Measure AQ-V: An agricultural buffer is proposed on the east side of the project site.

Residual Significance: Less than significant

Impact AQ-7: Airborne PM₁₀ from adjacent agricultural burning.

Agricultural burning to dispose of dead row crop plants produces substantial amounts of PM₁₀ emissions, depending on the substance being burned. While other methods of field waste elimination, such as disking or shredding, can be employed to eliminate waste materials without burning, such methods are more labor and machinery-intensive and are less effective in suppressing crop parasites. Depending on atmospheric conditions, such as wind speed, wind direction, and precipitation, the amount of PM₁₀ generated could be substantial. The region is already non-attainment for PM₁₀.

Significance: Significant

Mitigation Measure AQ-W: Air pollution control districts regulate the timing and methods of field burning in order to reduce the impact on local and regional air quality.

Mitigation Measure AQ-X: An agricultural buffer is proposed on the east side of the project site.

Residual Significance: Less than significant

4.4.4 CUMULATIVE IMPACTS

Impact AQ-8: Cumulative emissions of ozone (O₃) precursors

The region is non-attainment for O₃. The project, contributing to cumulative development, would add to ROG and NO_x emissions, which are O₃ precursors. The YSAQMD has not projected a date for the attainment of the O₃ standard.

Significance: Significant and unavoidable

Future mitigations for employers will help to reduce the cumulative impacts to air quality; however, this remains as a significant and unavoidable impact.

Mitigation Measure AQ-Y:

- Establish a priority system favoring multi-rider vehicles.
- Establish parking pricing strategies.
- Maximize telecommunication, including appropriate network infrastructure.
- Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.)
- Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment.
- Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home.
- Employer-sponsored subscription buses to supplement or substitute for public transit service.
- Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants.
- Request minibus, jitney or other para-transit service within the project.
- Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development.
- Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance.
- Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules.
- Request convenient bus schedules to accommodate unusual schedules.
- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.
- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

Residual Significance: Significant and unavoidable

4.4.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Even with the implementation of mitigation measures, the project and the project in conjunction with cumulative future development would generate significant air quality impacts. The YSAQMP significance thresholds would not be attained regardless of where a project of this nature was prepared within this air basin. Therefore, this remains as a significant and unavoidable impact.

4.5 BIOLOGICAL RESOURCES

Vegetation, wildlife, and wetland resources within and surrounding the project site were characterized and assessed using a variety of sources, databases, and field research. A search of the California Natural Diversity Database (CNDDDB) for special status plant and wildlife species was conducted, followed by an extensive review of appropriate literature, and discussions with personnel at the California Department of Fish and Game (CDFG). This information was supplemented with biological field surveys conducted in September and October of 1991. Subsequent to the field surveys, a Biotic Survey and Wetlands Assessment was prepared by Sugnet & Associates which is contained in Appendix G of the Technical Appendices.

4.5.1 ENVIRONMENTAL SETTING

VEGETATION RESOURCES

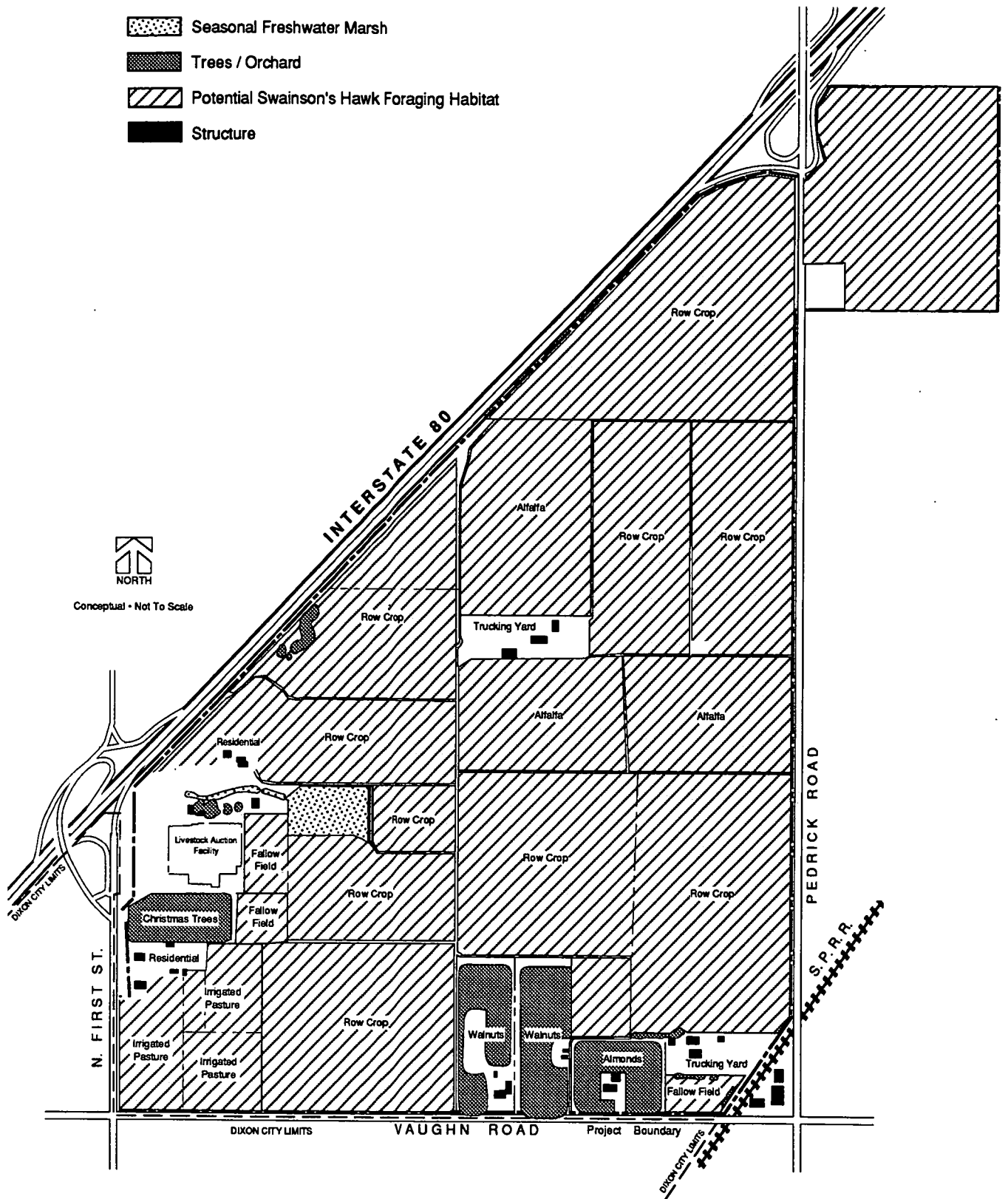
The project site is located in the southwestern portion of the Sacramento Valley and is typical of valley grassland habitat: agricultural fields, open expanses of annual plants, and few perennial species. Approximately 580 acres of the site are currently in agricultural production containing row crops and orchards. Current crops include tomatoes, oat hay, and alfalfa. Other habitat types present on-site include an orchard, pine grove, irrigated pasture, and a seasonal freshwater marsh as shown on Figure 4.5.1. Several isolated fields were fallow.

These habitats vary in their complexity and specialized environmental conditions. General descriptions of these habitats, their species composition, environmental characteristics and wildlife resources are described below. A list of plant and wildlife species observed on-site is also included in Appendix G of the Technical Appendices.

ROW CROPS

Row crops are actively cultivated and therefore support few natural species. The edges of these fields harbor the greatest plant diversity because they are not as frequently plowed. Although the repeated manipulation of the land is not conducive to most plant and animal species, there are certain opportunistic plants and animals that can survive under these conditions. Many weedy plant species such as field bindweed, Johnson grass, wild oat, and filaree grow in and around the cultivated fields. These species are not particularly desirable but they do provide variety, forage, and cover for wildlife. Most of these species are naturalized annuals (non-native but common components of the Sacramento Valley) and can reproduce over a short period of time.

These cultivated fields are also used by rodents (mostly ground squirrels and deer mice) and rabbits as foraging and nesting habitats. Birds such as crows, blackbirds, mourning doves, finches and sparrows which typically use the fields for foraging. Hawks may also forage in these fields, feeding on rodents, insects or occasionally on small birds.



**FIGURE 4.5.1
BIOLOGICAL RESOURCES**

FALLOW FIELDS

Portions of the project site are currently fallow and harbor several weedy plant species. Habitat value in these fallow areas is similar to, but slightly better than, the cultivated areas. Fallow fields are a more stable environment because they are generally less frequently disturbed and thus allow plants and animals to become more established. Small fallow areas among large disturbed areas may act as refuges for species escaping constant agricultural disturbance. Plant species observed in these areas are essentially the same as in and around cultivated areas.

Bird species utilizing the open areas for food, cover, and/or nesting include the western meadowlark, savannah sparrow, house finch, and killdeer. Raptors including the red-tailed hawk, Swainson's hawk, black-shouldered kite, kestrel, and turkey vulture may also forage over these fallow areas, feeding on rodents, rabbits and insects, although they were not observed during field surveys.

IRRIGATED PASTURES

The southwest portion of the project site is currently used as an irrigated pasture. Bermuda grass and dallisgrass are the dominant plant species. Cattle, horse, and sheep were observed grazing during the field surveys. These fields likely host a similar variety of birds and mammals as do row crop and fallow field habitat.

ORCHARDS AND PINE GROVES

A walnut orchard and two almond orchards are located in the south and southwestern portions of the project site. In addition, a pine grove is located just north of the irrigated pasture. These areas are dominated by a relatively uniform tree cover and an understory consisting of many of the same weedy species found in the cultivated fields. The orchard provides habitat for wildlife species such as common flicker, scrub jay, American crow, white crowned sparrows, and house finches. Squirrels and rabbits are common mammals. Coyotes and other mammals may use orchards for foraging and cover.

SEASONAL FRESHWATER MARSH

In order to determine the nature and extent of wetland related resources occurring within the boundaries of the project site, a wetland assessment was conducted concurrent with a special status species survey during the months of September and October of 1991.

A large contiguous seasonal freshwater marsh covering approximately 5.3 acres area is located in the west central portion of the project site. The marsh area appears to have resulted from grading associated with construction of the I-80 freeway/North First Street Interchange. Excess drainage from the north side of I-80 is conveyed to the site by culverts. The marsh area consists of a long channel-like feature terminating in a rectangular depression (topographical low) where the water tends to accumulate. The wetland is dominated by tall flatsedge and smartweed. The marsh was dry during the fall of 1991 field surveys. Portions of the channel contained cattails and bulrush. To the north, east, and south of the depression area are active row crop production, while to the west is a fallow field currently being used for livestock grazing.

The seasonal freshwater marsh provides habitat for a variety of wildlife species, particularly birds. Species likely to utilize this area on a seasonal basis include red-winged blackbirds, Herons, egrets, and a variety of ducks and shorebirds. Other wildlife species likely to occur here include raccoon, western toad, Pacific tree frog, bullfrog and garter snakes.

SPECIAL STATUS SPECIES

A special status species or habitat survey was conducted for the site in September and October of 1991. Special status species is a broad term used to refer to all the plant and animal species inventoried in the CDFG's Natural Diversity Database, regardless of their legal or protective status. Special plant and animal taxa are species, subspecies, or varieties that fall into one or more of the following categories:

- Officially listed by California or the Federal Government as Endangered, Threatened, or Rare;
- A candidate for state or federal listing as Endangered, Threatened, or Rare under Section 15380(d) of the CEQA guidelines;
- A Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS) or U.S. Forest Service (USFS) sensitive species;
- Taxa listed in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California;
- Taxa that are biologically rare, very restricted in distribution or declining throughout their range but not currently threatened with extirpation;
- Population(s) in California that may be peripheral to the major portion of a taxon's range but are threatened with extirpation in California; or
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g. wetlands, riparian, old growth forests, native grasslands, valley shrubland habitats, vernal pools, etc.).

No special status plant species were identified from the CNDDDB for the project vicinity. This information was verified during the field surveys. Due to the prevalence of intensive agriculture activity in the vicinity, endemic plant species are scarce. Native valley oak trees were not found on the site, but may possibly occur in residential areas of the site that were not intensively surveyed. The valley oak has no state or federal protection, but has been designated as a "plant of limit distribution" (List 4) by the California Native Plant Society (CNPS).

The CNDDDB printouts for the USGS Dixon and Merritt 7.5-minute quadrangles listed four potential special status wildlife species: California tiger salamander, giant garter snake, Swainson's hawk, and burrowing owl. Four other special status species were considered by the CNPS or the U.S. Fish and Wildlife Service (USFWS) to have the potential to occur in the vicinity of the project site, as documented on Table 4.5.1.

CALIFORNIA TIGER SALAMANDER

California Tiger salamander is a Category 2 candidate for federal listing as a threatened or endangered species. Tiger salamanders are found in grassland habitats within one to two miles of water. They use ground burrows during their summer dormancy period but require a water source for breeding. No California Tiger Salamanders were observed to occupy the wetland area of the project site during the field surveys.

BLACK-SHOULDERED KITE

The black-shouldered kite is designated as a CDFG species of special concern. The species prefers open country adjacent to woodlands, and may often be found in open agricultural or grassland habitats. They typically nest in trees or tall shrubs adjacent to open foraging habitat that includes grasslands and alfalfa fields where they prey upon voles and other small

prey. The on-site row crops are suitable foraging habitat; however, no black-shouldered kites were observed during field surveys.

**TABLE 4.5.1
SPECIAL STATUS SPECIES IN THE AREA ***

TARGET SPECIES	STATUS	
	FEDERAL/STATE/CNPS	HABITAT
FLORA:		
Valley oak (<i>Quercus lobata</i>)	-/-/4	valley/foothill grassland
FAUNA:		
California tiger salamander (<i>Ambystoma californiense</i>)	C2/CSC	annual grassland valley/foothill hardwood (understory), stream courses
Black-shouldered kite (<i>Elanus caeruleus</i>)	-/*	riparian/ woodland (nest): savannah/grassland (forage)
Swainson's hawk (<i>Buteo swainsoni</i>)	-/ST	open grassland (forage); mature trees (nest)
Northern harrier (<i>Circus cyaneus</i>)	-/CSC	marsh/grassland
Burrowing owl (<i>Athene cunicularia</i>)	-/CSC	open grassland (rodent burrows)
Tri-colored blackbird (<i>Agelaius tricolor</i>)	C2/-	nesting; marsh/riparian scrub
Giant garter snake (<i>Thamnophis couchii gigas</i>)	C2/ST	slow moving bodies of water

- C2 Category 2 Candidate for Federal listing (Taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking).
 FT Federally listed, threatened.
 CE State listed, endangered.
 ST State listed, threatened.
 CSC California Department Fish and Game "Species of Special Concern"
 4 Plant of limited distribution.

- * Falls into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines.
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range.
- Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California.
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands).

(*Based on data obtained by the California Department of Fish and Game's Natural Diversity Data Base (NDDB) and lists from the California Native Plant Society (CNPS) and the U.S. Fish and Wildlife Service (USFWS)

SWAINSON'S HAWK

The Swainson's hawk is a Buteo or soaring hawk, unique among California raptors in that its migration spans from the Central Valley to South America. It migrates to the Central Valley region in late March and early April to nest, then returns to the pampas of Argentina and neighboring countries for the fall and winter periods (USFW, 1990).

The Swainson's hawk is a state-listed threatened species inhabiting open grassland and agricultural habitats of the Central Valley. It is believed that loss of native habitat is one of the major causes for the 90 percent decline of this species in California. The CNDDDB lists numerous sightings within the project vicinity over the last 10 years, and at least one pair was known to have nested during 1991 along Pedrick Road within a mile of the site. Nesting pairs are also known from the Putah Creek and Willow Slough areas where the highest nesting densities in the state occur. Since the hawk may forage at least 10 miles out from its nest, any suitable foraging cover including alfalfa, grassland, and most row crops (excluding rice) within a 10-mile radius of a known nest is considered Swainson's hawk habitat. As identified by the CDFG, this project is located within 10 miles of known nest sites.

NORTHERN HARRIER

The Northern harrier is a CDFG species of special concern. It is associated with marsh and grassland habitats. While this species was not observed during the survey, it may forage in the grassland patches, open agricultural lands, and wetland areas of the project site. No suitable nesting habitat was observed to occur within the boundaries of the project site.

BURROWING OWL

The burrowing owl is designated by CDFG as a second-priority species of special concern. This designation indicates that this species is declining in a large portion on its range in California, however, populations are still sufficiently large that danger is not immediate. This species lives and breeds in burrows, typically in abandoned ground squirrel colonies. Optimal habitat conditions include dry, open, and nearly level grasslands or prairies. No burrowing owls were observed during the on-site field survey.

TRI-COLORED BLACKBIRD

Tri-colored blackbird is a Category 2 candidate species for federal listing. Its preferred nesting habitat is freshwater marsh, but it may also nest in riparian scrub and giant reed grass among other nesting substrates. Foraging habitat includes wetlands and adjacent agricultural or grasslands. The cattail area in the wetland channel represents marginal but potential nesting habitat for the tri-colored blackbird. However, none were observed during the field survey.

GIANT GARTER SNAKE

The giant garter snake is a Category 2 candidate for federal listing as a threatened or endangered species. It is also a state-listed threatened species. This snake inhabits tules, cattails, and banks of irrigation canals. The CNDDDB lists sightings of the snake along Putah Creek in Davis. Any irrigation canal supporting a fish population as a food base may be considered potential habitat. No water habitat exists on the site that would support a fish population, and giant garter snakes were not observed to occupy the project site during the field surveys.

4.5.2 THRESHOLD SIGNIFICANCE

The following significance criteria was considered when determining the significance of the proposed project with regard to biological impacts. Impacts to vegetation, wildlife, and wetland resources were considered to be significant if the proposed project:

- substantially affects a special-status plant or animal species or the species' habitat;
- interferes substantially with the movement of any resident wildlife species;
- substantially affects, reduces the number of, or restricts the range of an endangered species of animal, or the habitat of the species;
- substantially diminishes the acreage or value of local habitat for wildlife or plants;
- deteriorates existing wildlife habitat;
- adversely affects significant riparian lands, wetlands, or other wildlife habitats; or
- results in filling a jurisdictional wetland.

4.5.3 ENVIRONMENTAL IMPACTS AND MITIGATIONS

VEGETATION RESOURCES

Impact B-1: Project will result in the displacement of existing vegetation.

Because the majority of the area is currently in row crops, the greatest disruption will occur to the occupants of these areas. Generally, the plant species that occupy Central Valley row crop areas are common and opportunistic. No special status species were identified from the CNDDB for the project vicinity. The vast majority of plant species are weedy annuals that grow in similar situations. A widespread seed bank exists for most of these species throughout the Sacramento Valley. Development will not have a significant impact on these species.

Significance: Less than significant

Impact B-2: Proposed project will result in the removal of agricultural vegetation.

Implementation of the proposed project would remove all agricultural vegetation on the site, including: row crops, fallow fields, irrigated pasture, orchards, and a pine grove. This will not effect any special status plants or habitats.

Significance: Less than significant

SEASONAL FRESHWATER MARSH

Impact B-3: Project will result in the alteration of a seasonal freshwater marsh.

Implementation of the proposed project may alter the present on-site 5.3-acre seasonal freshwater marsh. Degradation or fill of this habitat may be subject to Section 404 of the Clean Water Act and Section 1603 of the CDFG Streambed Alteration Code. A detailed wetland delineation should be conducted to precisely define wetland boundaries and acreages.

Significance: Significant

Mitigation Measure B-A: Where practicable, the wetlands area should be avoided through land use planning.

Mitigation Measure B-B: Preserved wetlands area should be protected from development by a buffer or easement, so that the wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjacent proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.

In general, the following standards shall apply to the buffer and preserved wetlands area:

- All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetlands area.
- No mowing shall be allowed to occur in a wetland easement.
- Surface water runoff from any paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.

Mitigation Measure B-C: If the removal or total destruction of the marshland area is unavoidable as a result of the project, it may be required that the impacted wetland be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.

Residual Significance: Less than significant

WILDLIFE RESOURCES

Impact B-4: Project will cause a disturbance to wildlife resources.

Wildlife populations, other than species with special status, would be impacted to a greater extent during the grading phase of the project. Direct and indirect impacts would include removal of existing vegetation and agriculture from the site, some of which would be replaced by landscaping, landscape buffers, drainage and detention basins, and agricultural buffers. The noise and other human disturbances associated with development would cause avoidance of the site by certain wildlife species including rodents, ground squirrels, rabbits and deer mice. It is expected that the existing impacted wildlife would move to other non-disturbed lands adjacent to the site.

Many birds including crows, blackbirds, mourning doves, finches and sparrows would continue to utilize the project site, especially those that migrate through the area on their way to other locations. However, there would be a reduction of year-around resident birds due to the loss of vegetation and agriculture. Once the project site is fully developed, sufficient habitat on-site and adjacent to the project site would be utilized by some of these birds.

Reptiles on the project site would be directly impacted. A certain percentage of these animals would be destroyed by bulldozers and other heavy equipment during grading activities. The

remainder of reptiles in the area would be displaced and would either utilize adjacent undisturbed land or die. Some may become available as food for raptors and other wildlife. These disturbed species are not considered significant under the definition of a threshold of significance.

Significance: Less than significant

SWAINSON'S HAWK

Impact B-5: Disturbance to Swainson's hawk habitat.

Implementation of the proposed project would convert approximately 460 acres of potential foraging habitat for the state-listed Swainson's hawk to development.

Because the project site is located within a 10-mile radius of multiple Swainson's hawk nest sites, the CDFG may consider construction within the project area a significant impact to Swainson's hawk foraging habitat. The CDFG considers foraging habitat "necessary to maintain the reproductive effort" and its destruction as a "take" under the California Endangered Species Act (CESA).

For additional information on Swainson's hawk, please refer to Appendix G of the Technical Appendices which contains the CDFG's current Draft Mitigation Guidelines for Swainson's hawk in the Central Valley of California.

Significance: Significant

Mitigation Measure B-D: A breeding survey shall be conducted between April and July in order to:

- Determine if the species nest on the project site;
- To develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.

Mitigation Measure B-E: Future development shall participate in a County-wide Habitat Management Plan.

Residual Significance: Less than significant

TIGER SALAMANDER

Impact B-6: Project may cause a disturbance to California tiger salamander habitat.

The wetlands area on the project site is potential habitat for the California tiger salamander, and the species is known to occur in the Dixon area.

Significance: Significant

Mitigation Measure B-F: A field survey shall be conducted during the spring months in order to:

- Determine if the species occurs on the project site;
- To develop appropriate mitigation measures.

Residual Significance: Less than significant

Impact B-7: Project may result in a disturbance to habitat of the northern harrier, black-shouldered kite and tri-colored blackbird.

Development of the proposed project would eliminate the potential foraging habitat for other special status bird species including the northern harrier, black-shouldered kite and tri-colored blackbird. However, these species were not observed foraging on the project site during the field surveys.

Significance: Potentially significant

Mitigation Measure B-G: Future development shall participate in a County-wide Habitat Management Plan addressing the loss of potential foraging habitat.

Residual Significance: Less than significant

4.5.4 CUMULATIVE IMPACTS

Impact B-8: Project will contribute to a cumulative loss of seasonal freshwater marsh.

Cumulative development in the Dixon area would result in the conversion of seasonal freshwater marshes and wetlands. The project's potential loss of 5.3-acres of seasonal freshwater marsh habitat is only a small part of cumulative losses. However, the Corps of Engineers and CDFG require a minimum of a 1:1 replacement ratio if protected wetlands are disturbed or destroyed by development.

Significance: Less than significant

Impact B-9: Project will contribute to a cumulative disturbance to Swainson's hawk habitat.

Cumulative development would further disturb the breeding habitat of the Swainson's hawk, thereby contributing to the reduction of its population. The proposed project is located in part of the Swainson's hawk breeding range.

However, the CDFG requires development projects which impact the species habitat to enter into an agreement to ensure adequate mitigation. This is accomplished through a 1:1 replacement ratio of land to be dedicated as Swainson's hawk foraging habitat, or through participation in a CDFG County-wide Habitat Management Plan (CHMP) with other development projects. Therefore, the implementation of mitigation measures B-D and B-E will minimize the cumulative loss to Swainson's hawk foraging habitat.

Significance: Less than significant

4.5.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts to seasonal freshwater marshes and species of special concern have been *mitigated to a level below significance* with implementation of the recommended mitigation measures in Section 4.5.3 and 4.5.4.

4.6 CULTURAL RESOURCES

Archaeological and historical investigations of the project site were conducted by Peak & Associates, Inc. in April and May of 1993. The survey technique employed included complete coverage. The project site was walked in parallel transects with no more than 20 meters of space between the members of the field team. Although most of the land is in agricultural use, visibility was generally good because crops had either been just harvested or the fields had just been prepared for planting. Areas that have received too much impact to merit inspection included two large excavated pools, a razed motel, and the livestock auction yard.

Because of the potential for buried sites, historic maps were consulted to identify former waterways and to assist the field study and guide recommendations for future work. A complete copy of the Cultural Resources Assessment prepared by Peak & Associates, Inc. is contained in Appendix H of the Technical Appendices.

4.6.1 ENVIRONMENTAL SETTING

The 643 acre project site is located on the lower alluvial plains of the Dudley and Putah Creek drainageways on the western margin of the Sacramento Valley. According to a records and literature review performed by the Northwest Information Center of the Archeological Sites Inventory at California State University, Sonoma, (September 1991) no formal cultural resources inventory has been conducted on-site, or in the immediate vicinity of the project area and no prehistoric resources recorded in the project vicinity. However, the project is in an area which is inherently difficult to evaluate for potential impacts to prehistoric-era cultural resources because of the far-reaching impacts caused by intensive agricultural activities.

The old slough system in the vicinity of the City of Dixon was once an area of Native American occupation, as evidenced by the recent discovery of a major site with minimal to no surface evidence two miles west of the project site. Archeologically sensitive areas such as old water courses are often now invisible due to the pervasive and intensive grading, plowing and other earthworks conducted for agricultural purposes. Given the conditions as described above, there is a moderate possibility of prehistoric cultural resources existing on-site.

ETHNOLOGY

The Patwin group occupied the lower western half of the Sacramento Valley where the project site is situated. Patwin territory extended approximately 90 miles north to south and 40 miles east to west. Distinction is made between the River Patwin who resided in large villages near the Sacramento River, and the Hill Patwin, whose villages were situated in the small valleys along the lower hills of the Vaca Mountains and Coast Range, with concentrations in Long, Indian, Bear, Capay, Cortina, and Napa Valleys. Together, these two groups are classified as southern Wintuan and belong to the Penutian language family as do the languages of the Miwok and Costanoan peoples.

Patwin territory includes the riverine environment of the tule marshes, vines, and brush near the Sacramento River, the flat grasslands dotted with oak groves, and the hills and small valleys of the Coast Ranges. The villages situated on small bluffs near the river were often very large, estimated upwards at 1,000 residents. In the hills, the Patwin settled in the small valleys, particularly at Cache and Putah Creeks, where large populations were reported. The

plains were least hospitable there, villages were sparse because of winter flooding and lack of reliable water sources during the dry months.

Historical accounts of the Patwin include the early mission registers of baptisms, marriages, and deaths of Indians taken to Mission Delores and Mission San Jose as early as 1800. In 1823, Mission San Francisco Solano was established in nearby Sonoma until about 1836 when all the missions were secularized. During this time, several Mexican land grants were awarded and large ranchos were established on Putah and Cache Creeks.

HISTORY

The history of the region around the City of Dixon is associated with agriculture. The development of the area centered on the development of farms and the transportation facilities necessary to bring farm produce to market.

An early settler in the vicinity was Elijah Silvey, who settled on property on the old road from Napa to Sacramento in 1852. He built a house and corral (he had established a herd of about 100 milk cows) which became a waystation on the road. Eventually a trade center named Silveyville developed around the spot. This was short-lived as the whole community was moved five miles east to the line of the railroad upon its construction in 1868. The name lives on in the designation of Silveyville Township, but the town quickly disappeared after the establishment of Dixon as the main freight depot in the area. The Silveyville post office was discontinued in 1871.

The town of Dixon was originally to have been named Dickson after Thomas Dickson who donated 10 acres for the town site and freight depot. Possible explanations for the change in spelling of the town's name include an error by the postal service, or the first freight sent to the new depot was labeled Dixon. In any event, the correct spelling is retained in the name of the creek that borders the townsite on the north and the east. Dixon grew as a shipping and marketing point for the extensive agricultural industry that developed in Solano County.

The project vicinity, being convenient to the new station, went into agricultural production in short order. The county map of 1890 shows all the land around Dixon in private ownership, mostly in 160-acre parcels. The 1906 USGS map, however, shows very few residences outside the town limit, indicating agriculture and pasturage were the primary land uses.

EXISTING PREHISTORIC AND HISTORIC RESOURCES

Comparing the current inventory of structures found on-site with those depicted on a 1952 USGS map version reveals that only 14 of 26 structures currently present were built prior to 1952. Comparison with a 1906 USGS map shows that none of the current buildings were present at that time.

No known prehistoric resources exist on the project site. However, old water courses on the site indicate potential archaeologically sensitive areas (see Figure 4.6.1) which will require individual analysis as specific projects are developed.

Vaughn House

The State Office of Historic Preservation lists a structure known as the "Vaughn House," located on-site along North First Street on the Historic Properties Directory (see Figure 4.6.1). The citation for the Vaughn house (prepared by Pamela McGuire) denotes an estimated date of construction of 1910. Mr. Bill Seidel of the Office of Historic Preservation stated that the

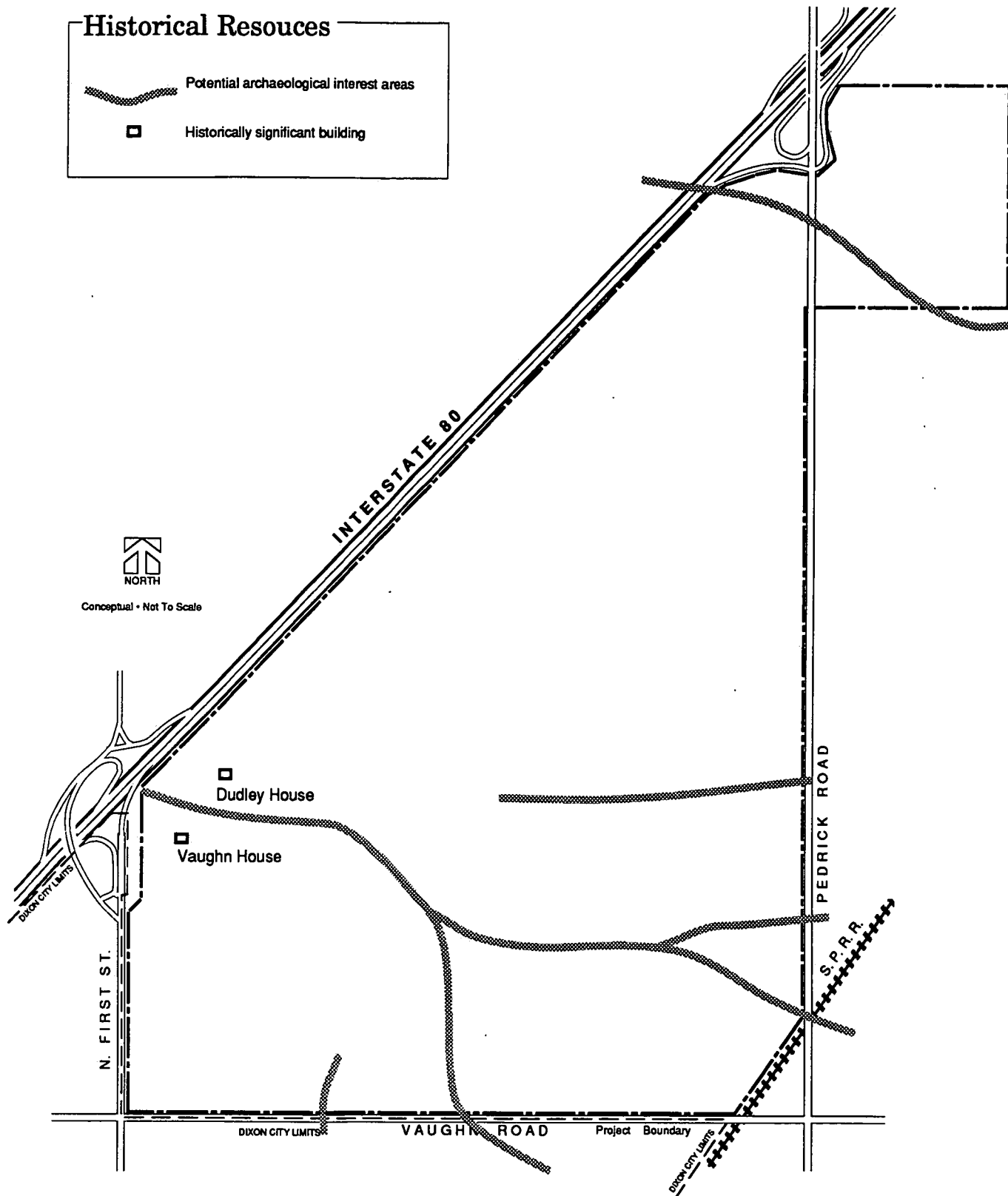


FIGURE 4.6.1
HISTORIC RESOURCES

"Vaughn House" was originally cited in a historical survey for the Dixon area. The historical survey in which the Vaughn House appears, states that it is "eligible for local listing". This designates the property as a discretionary local issue.

DUDLEY RESIDENCE

Similarly, the Dudley residence, a house built for the daughter of the founder of the City of Dixon in the 1870's and relocated to the project site around 1911, is situated in the northwest corner of the project site (see Figure 4.6.1). Although this residence does not qualify for state or national historical significance, it also may be eligible for local listing as established by the city or county.

Since several structures are shown within the specific plan site boundaries on the 1952 Dixon USGS topographic quadrangle, archeological deposits and/or structural remains reflecting settlement and early commercial activities may exist within the specific plan area.

With exception of the two historic buildings, no significant cultural resources were identified on the surface of the project area. No evidence of prehistoric occupation or use of the project site was found.

4.6.2 THRESHOLD SIGNIFICANCE

Appendix K of the CEQA Guidelines lists the criteria to be utilized for evaluating cultural resources for CEQA projects. Under CEQA, important cultural resources are those that are either listed upon or eligible to be listed on the National Register of Historic Places (NRHP); registered or eligible to be listed as a State Historical Landmark; or included in any responsible inventory of historic properties.

The following significance criteria described below was considered when determining the significance of development of the proposed project. A cultural and/or historic resources impact was considered to be significant if the proposed project would:

- disrupt or adversely affect a prehistoric or historic archeological site;
- disrupt a property of historic or cultural significance to a community or ethnic or social group; or
- disrupt a structure that embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant or distinguishable entity whose components may lack individual distinction.

4.6.3 ENVIRONMENTAL IMPACTS

PREHISTORIC RESOURCES

Impact C-1: Potential damage to undiscovered cultural resources.

Implementation of the proposed project would not destroy a known archeological resource since no recorded prehistoric archeological resources have been found within the specific plan area. In addition, the project site was intensively surveyed and no prehistoric archeological sites were identified.

Although the specific plan site area is of moderate archeological sensitivity, it is not surprising, given the long history of agriculture in the area, that there was no positive finding

for archeological evidence as resulting from the field surveys. In particular, land leveling and filling of the old sloughs would very likely obscure surface evidence if present. However, as with most projects involving earthwork, there is the potential that prehistoric resources might be uncovered during construction.

Significance: Potentially Significant

Mitigation Measure C-A: Consultant with qualified archaeologist if buried archaeological deposits are discovered during construction.

Residual Significance: Less than significant

HISTORIC RESOURCES

Impact C-2: Construction of the project will result in destruction of Vaughn House.

Implementation of the proposed project would destroy the Vaughn residence which is listed on the California Register of Historic Structures.

Significance: Significant

Mitigation Measure C-B: Future development shall be required to preserve, avoid, or relocate the Vaughn House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Vaughn House, then the structure shall be fully recorded before demolition.

Residual Significance: Less than significant.

Impact C-3: Construction of the project will result in destruction of Dudley House.

Development of the proposed specific plan would affect the Dudley residence. However, this impact is not, however, considered to be significant because the structure has been relocated from its original location and it is not listed on the California Register of Historic Structures.

Significance: Significant

Mitigation Measure C-C: Future development shall be required to preserve, avoid, or relocate the Dudley House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Dudley House, then the structure shall be fully recorded before demolition.

Residual Significance: Less than significant.

4.6.4 CUMULATIVE IMPACTS

Impact C-4: Cumulative impact to archaeological and historic resources.

Impacts to prehistoric archeological sites and historic resources are specific to the development of each site but are part of the cumulative loss of cultural resources. As such, development of the project area would contribute to the cumulative impact on resources. The City of Dixon, Solano County, and other state agencies have policies for protection and require adequate survey and mitigation to avoid such impacts to these resources.

Significance: **Less than significant**

4.6.5 LEVEL OF SIGNIFICANCE

Implementation of the mitigation measures identified in Section 4.6.3 will reduce all potential impacts to cultural resources to a less-than-significant level.

4.7 TRANSPORTATION, CIRCULATION, AND ACCESS

This analysis of the transportation, circulation, and access characteristics of the proposed project is compiled from the Northeast Dixon Specific Plan Traffic Analysis, Fehr & Peers Associates Inc., March 18, 1994, the City of Dixon, Environmental Assessment of the Hearing Draft General Plan, Responses To Comments, Appendix A, Traffic Analysis, Duncan & Jones, October 29, 1993 and the 1991 Solano Congestion Management Program, Solano Transportation Authority. A summary of these reports is presented below. The full report of the Fehr & Peers Associates traffic reports, and Environmental Assessment are available at the City of Dixon Planning Department.

The section begins with a description of the existing conditions in the vicinity of the project and generally throughout the city, providing the quantitative basis for analysis of future conditions. This is followed by a description of transit related facilities, programs and road network improvements that are approved but not yet implemented or built. This portion is intended to establish the cumulative conditions as they are and will be irrespective of the proposed project or any other projects not yet approved by the City of Dixon.

The EIR also provides a description of the project, including the circulation concepts incorporated in the specific plan, and quantification of the project traffic characteristics apart from any other development. This is followed by an analysis of the traffic impacts of the existing traffic plus the project traffic, cumulative conditions without the project, as well as the existing traffic, plus project traffic, plus cumulative traffic projected to the year 2010.

For each traffic input identified, the level of significance is defined, and mitigation measures are established as appropriate.

The methodology for the development of traffic forecasts was set by the City of Dixon in order to maintain consistency with the assumptions used for the General Plan analysis. The City's direction for assumptions on traffic forecasts are outlined in a memorandum from J. Daniel Takacs, P.E., Consulting Traffic Engineer, September 30, 1993. This memo includes direction on a variety of assumptions including trip generation, distribution, and floor-to-area ratios.

Traffic forecasts were developed for the following scenarios:

- Existing Conditions - Existing conditions were based on traffic data provided from the Preliminary Circulation Element of the Northeast Dixon Specific Plan, Fehr & Peers Associates, Inc., March 18, 1994.

- Existing plus Project Conditions - Projected-generated traffic was manually added to the existing traffic volumes based on trip generation and distribution assumptions prescribed by the City of Dixon.
- Cumulative Conditions without the Project - Forecasts were provided by the City of Dixon which included the following assumptions regarding the other proposed developments in the City: 100 percent of the residential units and 80 percent of the non-residential development in the South park and the Southwest plan areas.
- Cumulative Conditions with the Project - Projected-generated traffic was manually added to the traffic projections for Cumulative Conditions without the project. Site traffic was generated and distributed based on assumptions prescribed by the City of Dixon for cumulative conditions.

4.7.1 ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The area surrounding the proposed specific plan is largely undeveloped. Therefore, the current traffic volumes at the intersections and on the roadways are relatively low and most of the circulation network operates well.

Overview of Street System

Traffic conditions on city and county roads as well as the state highway system in the vicinity of the proposed project are influenced by commuter travel patterns and by travel to and from regional destinations and attractions. In general, regional circulation in the area is composed of one major east-west facility (Interstate 80) with north-south circulation limited due to local two-lane roads. Interstate 80 (I-80) provides regional access to the project site and will serve as a primary route for project-generated traffic to and from the area. Pedrick Road and North First Street both provide north-south circulation including access to the project site with interchanges at I-80. Vaughn Road is a local two-lane road paralleling the southern boundary of the NQSP area, providing access between North First Street and Pedrick Road. Interstate and local streets are shown on Figure 4.7.1.

Existing Roadways

The local street system in Dixon is primarily developed within a north-south/east-west grid system. North First Street, the west boundary of the project area, begins at I-80 and extends south as the main commercial street in the city of Dixon. North First Street, also designated State Route (SR) 113, currently carries approximately 7,500 daily vehicle trips north of Vaughn Road and 8,800 daily trips north of Stratford Avenue⁽¹⁾. Pedrick Road a north-south road is the east boundary of the majority of the land within the project area. This street begins as Road 98 north of Woodland (Yolo County) and runs south becoming Pedrick Road at the Solano County line. The road then crosses I-80, passing by the specific plan area, and then continues south ending at Main Prairie Road south of Dixon. The current volume of traffic on this road ranges from 1,500 to 2,000 daily trips near the project. Vaughn Road is an east-west road which begins at North First Street and ends east to Runge Road. It currently carries approximately 650 daily trips.⁽¹⁾ (Fehr & Peers Associates, February, 1993)

(1) Daily traffic volumes on the study roadways were estimated by factoring the PM peak hour volumes.

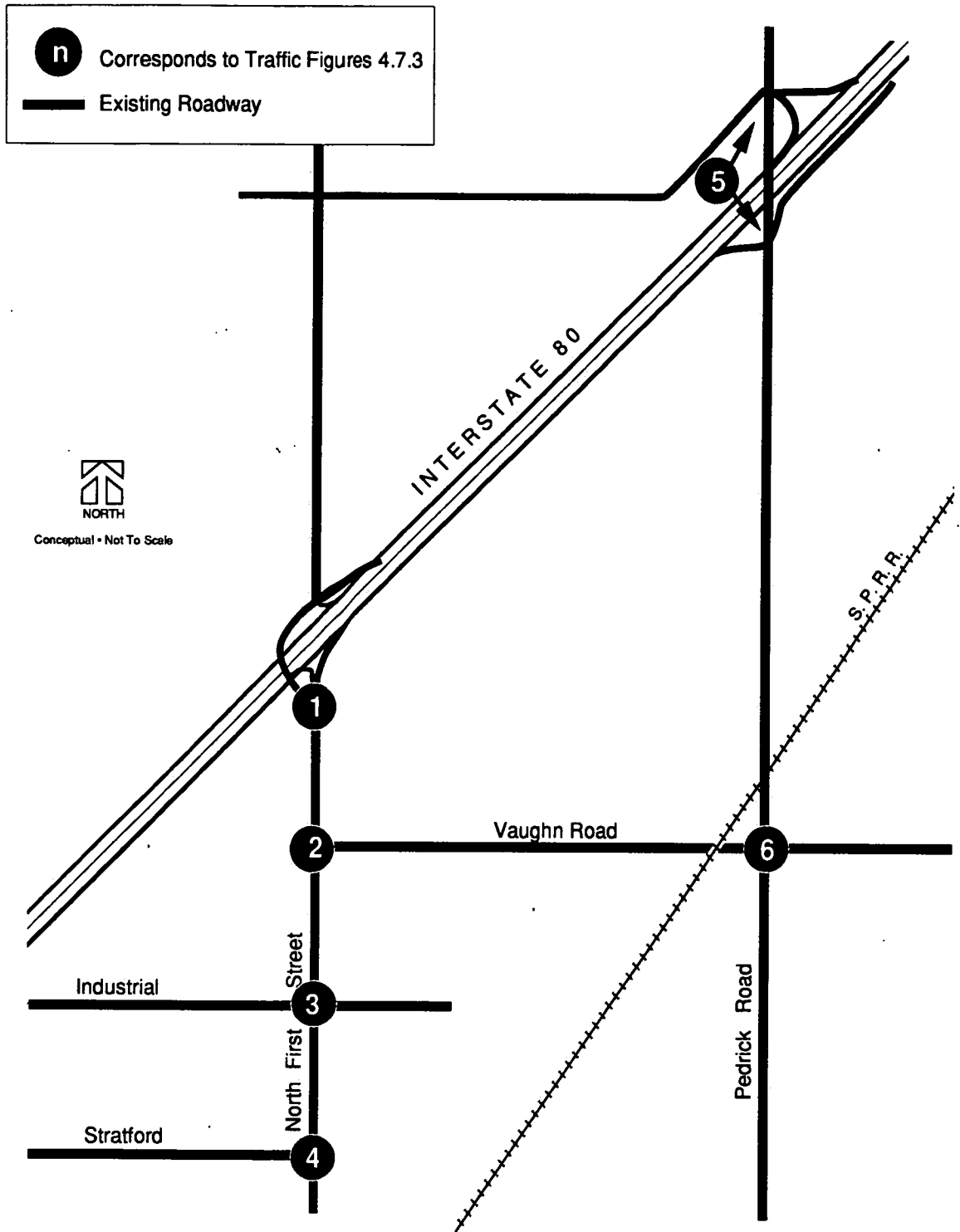


FIGURE 4.7.1
PROJECT INTERSECTIONS

Existing Intersections

Six existing intersections were identified by the City of Dixon for analysis of this project. This includes: 1) I-80 Interchange/North First Street (I-80 eastbound ramp and I-80 westbound ramp/Curray Road); 2) North First Street/Vaughn Road; 3) North First Street/Industrial Way; 4) North First Street/Stratford Avenue; 5) I-80 Interchange/Pedrick Road (I-80 westbound ramp and I-80 eastbound ramp); 6) Pedrick Road/Vaughn Road. Fehr & Peers Associates conducted AM and PM peak hour traffic counts at the six existing intersections, all of which are currently unsignalized. Figure 4.7.2 shows the location of each study intersection and Figure 4.7.3 illustrates the existing AM and PM peak hour turning volumes at the study intersections.

Interstate 80

Interstate 80 is a major inter-regional freeway that serves as the northern boundary of the project site. It connects the San Francisco Bay Area with Sacramento and other major cities across the western portion of the United States. In the vicinity of the project, I-80 currently has three lanes in each travel direction. According to 1992 *Traffic Volumes on California State Highways*, Caltrans, 1993, this section of I-80 serves approximately 90,000 vehicles per day, with 8,600 traveling during the peak hour.

Existing Transit Services

The City of Dixon currently is not served by regularly scheduled public transit service; however, the city operates a general public dial-a-ride system (Readi-Ride). The service operates within the city limits and, to a limited extent, to immediately adjacent unincorporated areas. Ridership consists of primarily school-aged children, handicapped residents, and seniors. Approximately 100 trips per day are typically provided. CITYLink intercity transit service provides public bus service to the cities of Vacaville, Fairfield, and Davis. Morning, mid-day and late afternoon service are provided by CITYLink with two regular bus stops in Dixon. Connecting transit service to the Bay Area is available in Fairfield and connecting service to Sacramento is available in Davis.

Existing Rail Services

The Southern Pacific Railroad (SPRR) provides freight service to the City of Dixon. Rail passenger service is not provided to the city, although passenger trains utilize the rail line through the area. The SPRR right-of-way crosses the southeast corner of the project site. Amtrak services from the Bay Area to the Sacramento Region has already been implemented with three eastbound and three westbound commuter trains per day. Presently, the closest station is located in Davis approximately eight miles to the east.

Existing Transportation System Management

The City of Dixon Trip Reduction Ordinance (Ordinance Number. 9203) establishes Transportation System Management (TSM) requirements for employers in the city. The primary objective of the program is to reduce traffic congestion and vehicle emissions by reducing peak period traffic. Employers with 25 or more employees are required to post information concerning the availability and benefits of alternative commute modes, and to designate a Transportation Coordinator to coordinate with local transit and ridesharing

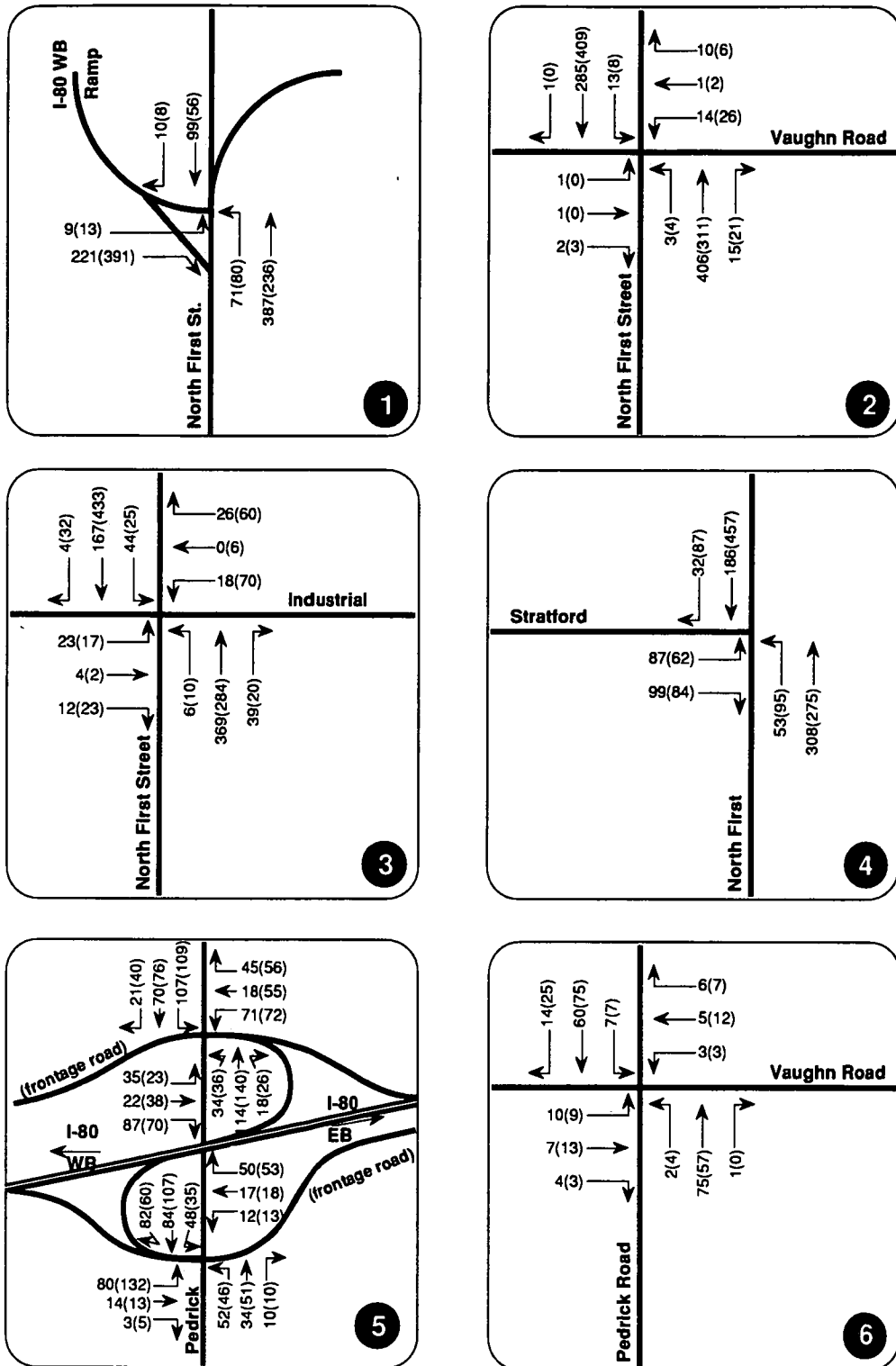
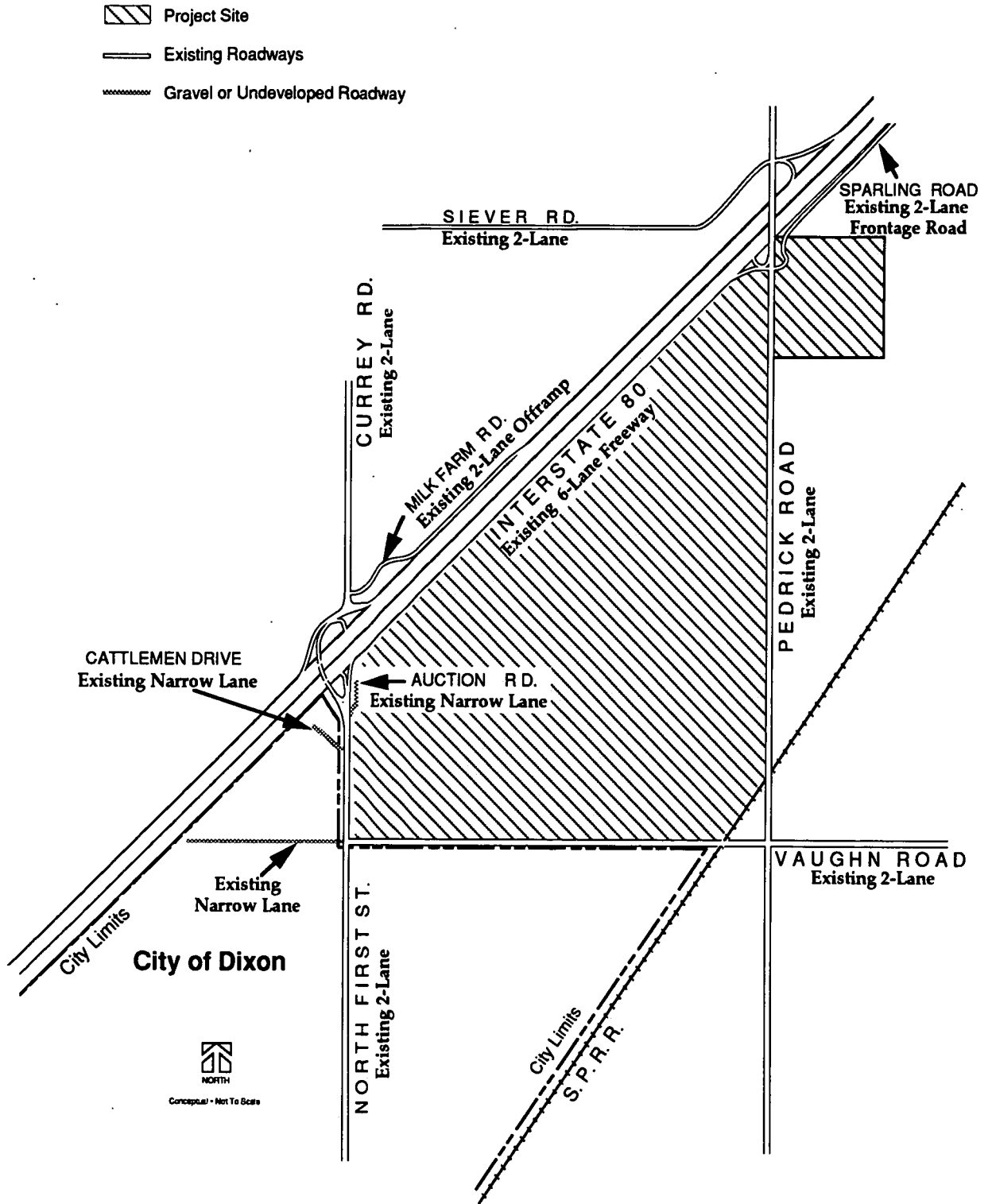


FIGURE 4.7.2
CURRENT PEAK HOUR TURNING VOLUMES



**FIGURE 4.7.3
EXISTING ROAD SYSTEM**

agencies. Employers of 100 or more employees are also required to file a Transportation Management Plan (TMP) which includes a description of TSM measures that will be implemented by the employer during the following year and a status report on current employee commute modes.

Trip reduction ordinances will attempt to effect a 25 percent reduction in commute trips. There are a number of TSM measures which can be implemented, as part of the TMP, to achieve a 25 percent reduction in commuter trips which may include:

- Distribution of information on alternative modes of travel (busses, bicycles, etc.) to employees within the project site.
- Carpool and vanpool matching services to assist employees with similar origins, destinations, and schedules in finding other employees with whom to share a ride.
- Showers and lockers at employee locations to encourage pedestrian and bicycle commuting.
- Designation of an on-site TSM coordinator to assist in disseminating information and monitoring the status of any transportation management activities.

PLANNED CONDITIONS

Planned Roadway Improvements

Although certain road improvements are not currently in place, they are planned to be completed within the time frame of the development of the proposed project. These improvements will be completed irrespective of whether the proposed project ever occurs, therefore the planned improvements are identified as part of the project existing conditions.

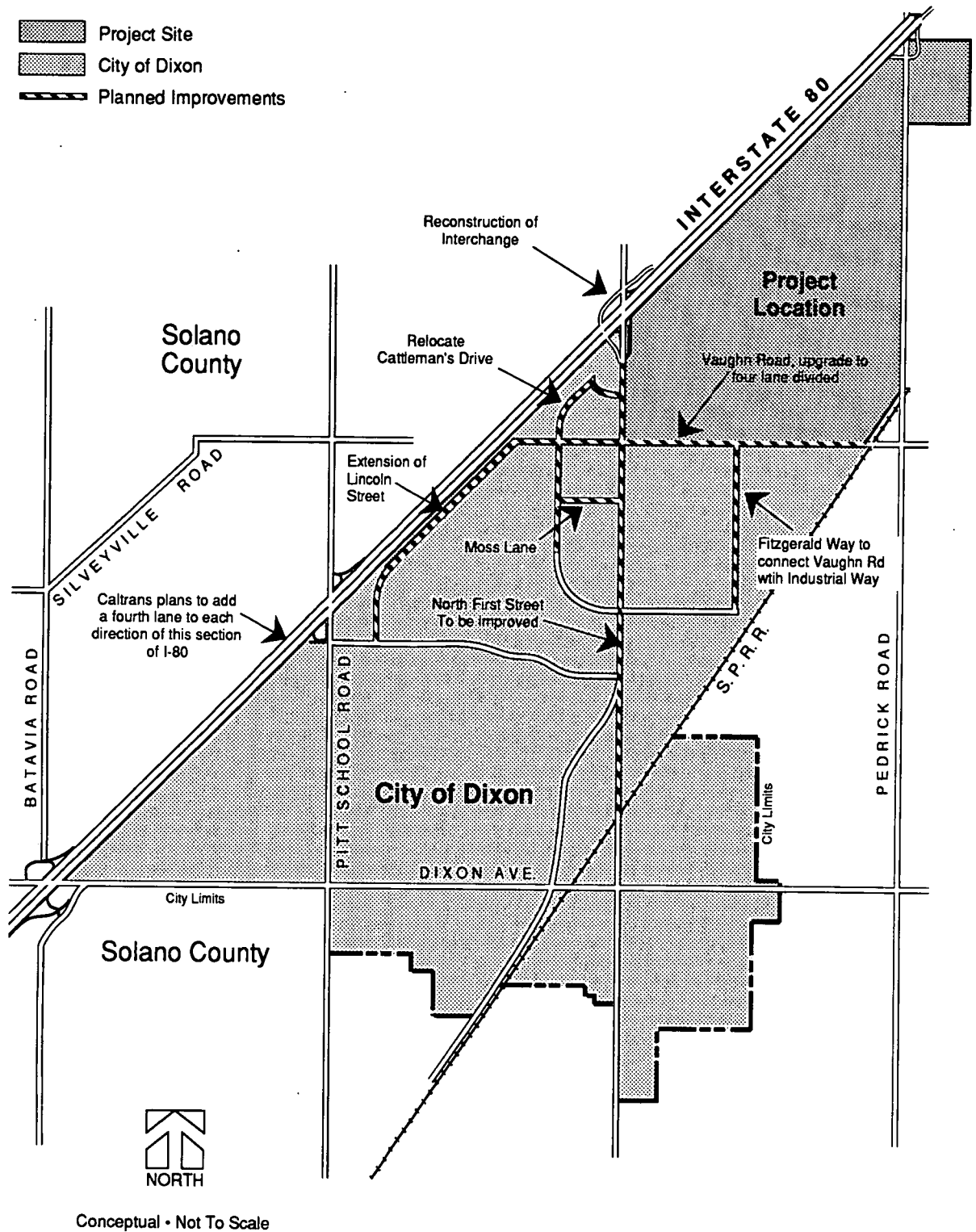
Most of the road improvements in the city are located in the project area and will be included in the North First Street Assessment District. The road improvements include:

- Improvement of Vaughn Road to a four lane divided cross-section;
- Extension of North Lincoln Street to Vaughn Road;
- Construction of Fitzgerald Way between Vaughn Road and Industrial Way;
- Improvement of North First St. north of the SP railroad tracks;
- Relocation of Cattleman's Drive; and
- Ultimately, Caltrans plans to add a fourth lane to each direction of this section of Interstate 80.

The planned improvements are illustrated in Figure 4.7.4.

Planned Bikeways

The City of Dixon has recently approved a Bikeways Master Plan which will be used to plan future extensions of the existing system and provide coordination with a regional bikeways plan. It will also be used in conjunction with the Dixon Unified School District (DUSD) to develop a "Suggested Route To School". A bike lane striping and delineation project was completed in 1993 using Transportation Development Act (TDA) Article 3 funding, and additional TDA funds have been requested for another project along North First Street to construct bike lanes in conjunction with the North First Street Assessment District (NFSAD). A longer term project is an inter-city bike path parallel to the SPRR tracks between Davis and Vacaville.



**FIGURE 4.7.4
 PLANNED ROADWAY IMPROVEMENTS**

Congestion Management Program

The Congestion Management Program (CMP) is a statutory requirement of counties that contain a population center of 50,000 or more. The Program is intended to enhance or maintain mobility on the transportation system, encourage examination of the links between land use decisions and the transportation system, arrange for mitigations for the effects of the land use decisions on a county-wide basis, improve air quality, increase the use of alternate transportation modes, improve the efficiency of the extant transportation system, and plan for the future coordination of land use and transportation decisions.

A CMP has five basic elements: 1) a system of streets and highways that is to be monitored annually; 2) standards for the frequency, routing and coordination of public transit services; 3) a trip reduction and travel demand element; 4) a program to analyze the impact of land use decisions on the transportation network and; 5) a seven year capital improvement program for transportation system improvements.

To make this as simple as possible, many of the tasks involved in the maintenance of the CMP have been placed on the shoulders of the individual jurisdictions. Each year, the jurisdictions must certify to the Authority that the requirements of the program have been fulfilled.

The Level of Service for the county CMP system has been set at Level of Service (LOS) E unless the roadway is already operating at LOS F. The transit frequency and routing standards vary according to the size of the jurisdiction. The standards range from hour headways serving 85 percent of the population in the largest jurisdiction to no standards at all in the sparsely populated unincorporated region. The transit coordination standards are those adopted by the Metropolitan Transportation Commission under the requirements of Senate Bill 602. The model trip reduction and travel demand ordinance crafted by the Citizens' Committee requires the distribution of alternate transportation mode information to individuals who have changed residences, employees of small employers and employees in existing complexes containing 100 or more employees. Large employers (over 100 employees) new complexes with over 100 employees on site and projects that will contain 100 or more employees are required to create a plan that will result in an average vehicle occupancy rate of 1.33 or greater. The analysis and mitigation of impacts to the transportation system caused by land use decisions will be completed for large projects by the jurisdiction in which that project is slated for construction.

Planned Rail Services

As this Environmental Impact Report is being prepared, the City of Dixon is considering the potential location of a commuter rail station within the city. The siting of a commuter station may occur along the existing rail line from Pedrick Road west to West A Street. A location in the Central Business District (CBD) near North First Street (SR 113) is currently under study. The location of the commuter rail station will have an influence on the circulation for this project. If the station is located in the CBD, a shuttle bus system would be appropriate to connect the commuter station to the employment center. If the station is located closer to, or within, the project area the emphasis will be on a local pedestrian circulation network in addition to the shuttle system.

4.7.2 THRESHOLD SIGNIFICANCE

LEVEL OF SERVICE (LOS) STANDARDS

Level of Service (LOS), the measure by which roads and intersections are analyzed, is an alphabetic performance rating of a facility from A (best) to F (worst). Table 4.7.1 summarizes the LOS criteria for signalized intersections in the Transportation Research Circular 212, Transportation Research Board, 1980.

**TABLE 4.7.1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS**

Level of Service	Description	Range of Volume Capacity Ratio
A	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits through more than one red indication; excellent traffic operation.	0.00 - 0.59
B	Stable Operation/Minimum Delays: An occasional approach phase is fully utilized; platoons of vehicles are formed; very good traffic operation.	0.60 - 0.69
C	Stable Operation/Acceptable Delays: Major approach phase may become fully utilized; driver may occasionally have to wait through more than one indication; good traffic operation.	0.70 - 0.79
D	Approaching Unstable/Tolerable Delays: Queues may develop but dissipate rapidly without excessive delays; fair traffic operation.	0.80 - 0.89
E	Unstable Operation/Significant Delays: Volumes at or near capacity; vehicles may wait through several signal cycles, long queues form upstream from intersection; poor traffic operation.	0.90 - 0.99
F	Forced Flow/Excessive Delays: Represents jammed conditions; intersection operates below capacity with low volumes; queues may block upstream intersections.	1.00 - over

Source: 1980 Transportation Research Board Circular 212

LEVEL OF SERVICE AT A SIGNALIZED INTERSECTION

The service level at a signalized intersection was determined by computing the critical volumes approaching the intersection as a percentage of the total intersection capacity during the peak hour. The LOS for a signalized intersection is a function of the volume-to-capacity ratio computed for each peak hour.

LEVEL OF SERVICE AT A TWO-WAY STOP SIGN

The service level at a two-way stop-controlled unsignalized intersection was based on the reserve capacity method identified in the Highway Capacity Manual - Special Report 209, Transportation Research Board, 1985. This methodology computes the reserve capacity of each movement through the intersection; therefore, each turning movement has its own level of service. In almost all cases the left-turn movement from the minor to the major street is the most difficult movement at an unsignalized intersection. For simplicity, the operation of an unsignalized intersection is described by the level of service of this turn movement.

For an all-way stop controlled intersection, the average stopped delay was computed for the intersection according to the procedure identified in Transportation Research Circular 373, Transportation Research Board, 1991.

The service level at a signalized intersection was determined by computing the critical volumes approaching the intersection as a percentage of the total intersection capacity during the peak hour. The LOS for a signalized intersection is a function of the volume-to-capacity ratio computed for each peak hour.

The level of service for stop controlled intersections is expressed in terms of the reserve capacity to accommodate additional traffic volume. When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvement to the intersection. Table 4.7.2 provides a level of service definition for stop controlled intersections.

**TABLE 4.7.2
LEVEL OF SERVICE DEFINITIONS FOR STOP CONTROLLED INTERSECTIONS**

Reserve Capacity (PCPH)	Level of Service	Expected Delay
≥ 400	A	Little or no delay
300-399	B	Short traffic delays
200-299	C	Average traffic delays
100-199	D	Long traffic delays
0-99	E	Very long traffic delays
less than 0	F	Severe congestion, intersection fails

Source: 1985 Highway Capacity Manual

STANDARDS OF SIGNIFICANCE

The City of Dixon established LOS standards for the various facilities in the study area. The General Plan establishes the basic policy on LOS throughout the city. Policy E.1. states:

"The City shall ensure that Dixon's existing and proposed street configuration and highway network maintains traffic operations at Level of Service "C" or better, while acknowledging that this objective may be difficult to achieve in those locations where traffic currently operates at Levels of Service below "C" for limited periods of time.
...."

This policy was further defined in a communication from the Dixon Community Development Department regarding minimum acceptable levels of service for intersections during morning (AM) and afternoon (PM) commute peak traffic hours. (Memorandum RE: Traffic Analysis Assumptions, Tasha Houston, Dixon Community Development Department, February 2, 1994).

Table 4.7.3 identifies the minimum LOS allowed at intersections during peak hours. This allows for different thresholds of significance for signalized intersections, all way stop intersections, stop sign controlled turn movement at minor intersections and mid-block roadway segments.

**TABLE 4.7.3
MINIMUM LEVEL OF SERVICE (LOS) AT INTERSECTIONS DURING PEAK HOUR**

Intersection Condition	Minimum LOS
Signalized intersections	D
All way stop intersections	D
Stop sign controlled turn movements at minor intersections	E
Mid-block roadway segments	D

Roadway segments and signalized intersections are considered to be impacted if the project causes a change in LOS from acceptable levels (LOS A, B, C, or D) to unacceptable levels (LOS E or F). For unsignalized intersections, the worst turning movement must not exceed LOS E.

The specific criteria for determining the significance of various circulation impacts is defined as follows:

1. When an intersection or roadway segment with an acceptable existing operation experiences an unacceptable level of service with the addition of project traffic.
2. When volumes at an unsignalized intersection are increased above peak hour signal warrant criteria levels.
3. When intersections with existing acceptable operation maintain acceptable operation with the addition of projected traffic, but project traffic increases existing volume levels by 10 percent or greater.
4. When intersections with existing unacceptable operation have their volume levels increased by two percent or greater.
5. When, in the opinion of a registered traffic engineer, a significant safety problem is created.

Source: Dixon Community Development Department, February 2, 1994

4.7.3 ENVIRONMENTAL IMPACTS

EXISTING LEVELS OF SERVICE

Impact T-1: Existing intersections and streets within the project area currently function within a level of service in conformance with the City's policies.

Significance: Less than significant

Morning (AM) and afternoon (PM) peak hour traffic counts were conducted at project intersections and at nearby intersections as part of the General Plan Update Traffic Analysis, Fehr & Peers Associates Inc., July, 1993 and City of Dixon, Environmental Assessment of the Hearing Draft General Plan, Responses To Comments, Appendix A, Traffic Analysis, Duncan & Jones, October 29, 1993.

Table 4.7.4 summarizes the existing levels of service for each study intersection. As expected in a relatively undeveloped area, the results indicate that each intersection operates within the city's threshold during the AM and PM peak hours. All intersections are currently unsignalized and operate at Level of Service (LOS) C or better during the AM peak hour. During the PM peak hour, six of the eight study intersections operate at LOS C or better. At the North First Street intersections with Industrial Way and Stratford Avenue, the left turns from the side street operate at LOS D during the PM peak hour.

Similar to the intersections, all roadway segments currently operate at acceptable levels, as shown on Table 4.7.5.

Residual Significance: Less than significant

LAND USE AND PROJECT CIRCULATION CONCEPT

Impact T-2: The NQSP establishes land use patterns and circulation concepts that must conform with the Dixon General Plan and the Solano County Congestion Management Plan.

Significance: Potentially significant

**TABLE 4.7.4
EXISTING INTERSECTION LEVEL OF SERVICE**

UNSIGNALIZED INTERSECTIONS	AM PEAK HOUR LOS	PM PEAK HOUR LOS
North First Street/Vaughn Road (2)	B	C
North First Street/Industrial Way (3)	C	D
North First Street/Stratford Avenue (4)	C	D
Pedrick Road/Vaughn Road (6)	A	A
I-80 EB Ramp/North First Street (1)	B	A
I-80 WB Ramp/Curry Road (1)	A	A
I-80 WB Ramp/Pedrick* (5)	A	A
I-80 EB Ramp/Pedrick* (5)	A	A

(* 4-way stop-controlled.)

(1) Number corresponds with intersections on Figure 4.7.2

Source: City of Dixon

**TABLE 4.7.5
EXISTING STREET LEVEL OF SERVICE**

<u>Road Segment</u>	<u>Travel Direction</u>	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
		<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>
Pedrick Rd s/o I-80	NB	0.12	A	0.13	A
	SB	0.12	A	0.16	A
Pedrick Rd n/o Vaughn	NB	0.11	A	0.09	A
	SB	0.10	A	0.13	A
Pedrick Rd s/o Vaughn	NB	0.10	A	0.08	A
	SB	0.08	A	0.10	A
Pedrick Rd n/o Dixon	NB	0.10	A	0.04	A
	SB	0.10	A	0.09	A
Pedrick Rd s/o Dixon	NB	0.05	A	0.04	A
	SB	0.04	A	0.04	A
Vaughn Rd w/o Pedrick	EB	0.03	A	0.03	A
	WB	0.03	A	0.05	A
Vaughn Rd e/o SH 113	EB	0.11	A	0.06	A
	WB	0.02	A	0.05	A
Vaughn Rd w/o SH 113	EB	0.05	A	0.17	A
	WB	0.01	A	0.06	A
SH 113 n/o Collector B	NB	0.46	A	0.32	A
	SB	0.32	A	0.45	A
SH 113 n/o Vaughn	NB	0.42	A	0.32	A
	SB	0.30	A	0.42	A
SH 113 s/o Vaughn	NB	0.42	A	0.34	A
	SB	0.30	A	0.44	A
SH 113 s/o Industrial	NB	0.41	A	0.31	A
	SB	0.20	A	0.51	A
SH 113 s/o H	NB	0.36	A	0.41	A
	SB	0.33	A	0.40	A
SH 113 n/o A	NB	0.24	A	0.38	A
	SB	0.24	A	0.41	A
SH 113 s/o A	NB	0.26	A	0.36	A
	SB	0.18	A	0.36	A

Source: City of Dixon, Environmental Assessment Responses to Comments, Hearing Draft General Plan, Duncan & Jones, October 29, 1994, Table A-4

LAND USE

The land use proposed in the plan include only highway commercial, commercial, professional office and administrative uses. The number of acres proposed for each use, the ratio of floor area to developable site area (Floor Area Ratio or FAR) and the total 1,000 square feet (KSF) in each use are tabulated in Table 4.7.6.

TABLE 4.7.6
LAND USE SUMMARY

LAND USES AND ZONING DESIGNATIONS	ACRES	FAR	KSF
Highway Commercial - (HC)	142.2	0.25	1,548.6
Community Commercial - (CC)	51.9	0.25	565.2
Professional and Administrative Office - (O)	105.4	0.30	1,377.0
Light Industrial - (ML)	214.4	0.25	2,334.8
Major Roads, Drainage Easements, and Open Space	<u>129.1</u>	0	
Total Land Use	643.0		5,825.6

ORGANIZATION OF LAND USE TO FACILITATE CIRCULATION

Land uses in the specific plan are organized to separate heavier truck traffic from passenger vehicle traffic, to facilitate shuttle bus service and ride sharing arrangements, and to facilitate pedestrian circulation. If the anticipated commuter rail station is located in the project area, these circulation design features will enhance and support the function of the station.

Traffic is segregated in zones corresponding to the primary land uses. In the east quadrant the primary land uses will be warehousing, manufacturing and truck service businesses. It is expected that the majority of the heavy truck traffic will enter and exit the project area along Pedrick Road. Truck traffic will penetrate the site from the east and will generally not extend beyond the central portion of the site. Direct routing through the site from east to west is limited.

Traffic on the west side of the site is expected to be directed primarily to the commercial and highway commercial uses and will be comprised primarily of passenger vehicles. The traffic in the central and south portions of the site will include both passenger vehicles and truck traffic relating to the business uses.

The internal circulation system is intended to allow for these different traffic types to enter and exit the plan area without necessarily intermixing with the other types. The circulation system does allow flexibility in routing and traffic can travel freely from one portion of the plan area to another. The basic internal circulation system is a looped street pattern with multiple exits to the perimeter arterial streets. The basic road system and the general traffic zone concept are illustrated in Figure 4.7.5.

The looped road system is intended to facilitate a local shuttle system connecting uses within the plan area and the future commuter rail station as well as ridesharing drop off and pick up.

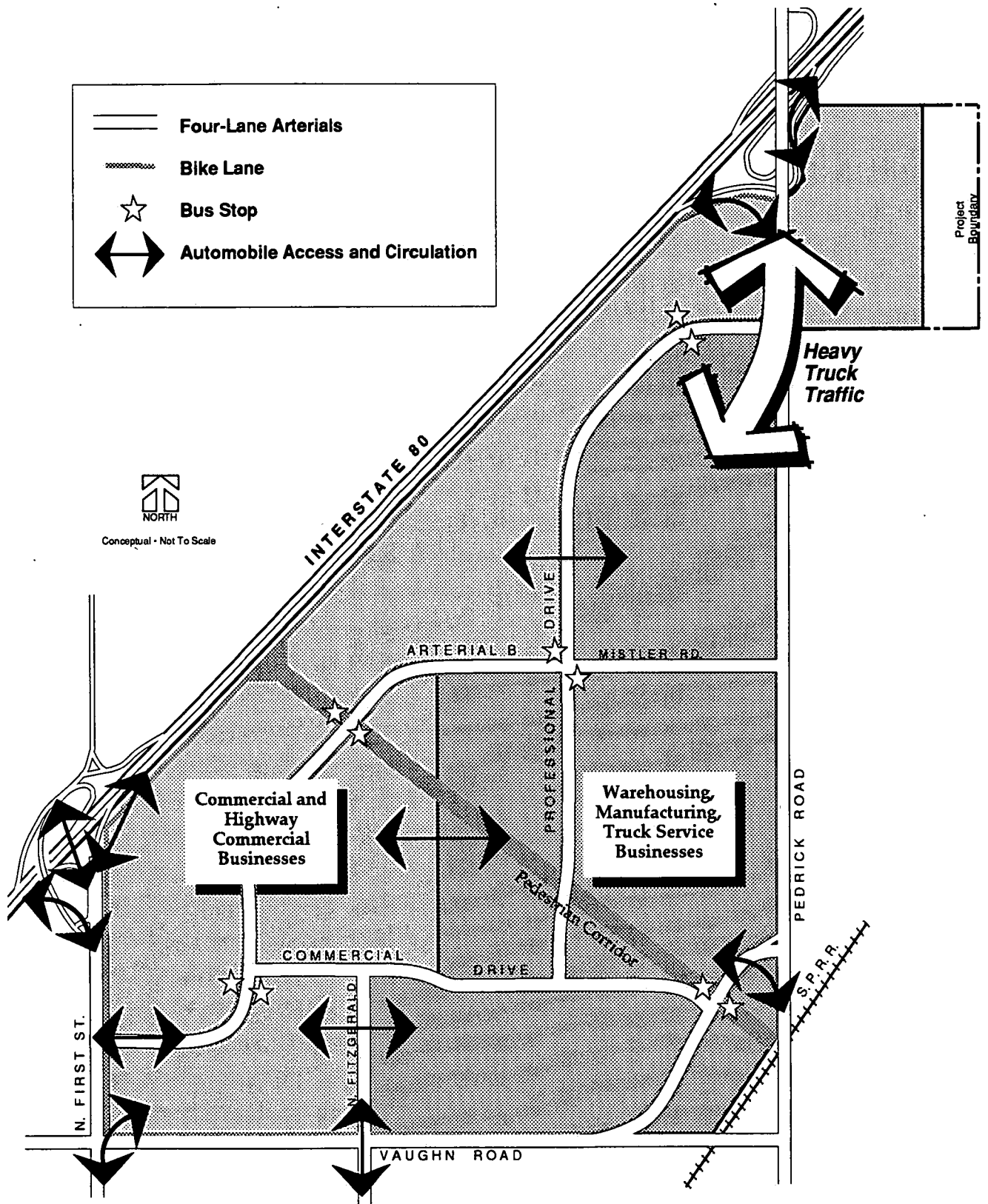


FIGURE 4.7.5
CONCEPTUAL TRAFFIC SEPARATION ZONES AND CIRCULATION NETWORK

TRANSPORTATION DESIGN GUIDELINES

Based on the lane assumptions in the Northeast Quadrant Specific Plan, Wade Associate, Pedrick Road, Vaughn Road and North First Street have been identified as four-lane arterial roadways. Arterial B, Mistler Road, Professional Drive and Commercial Drive are also identified as four-lane roads. The other major roads within the site are identified as commercial collectors, with provisions for two lanes. These should be sufficient flexibility in the further development's design to adjust these lane requirements, based on site specific traffic studies conducted as development applications are submitted.

The NQSP establishes General Design Guidelines that focus on the themes and design features typical in many of the land uses found throughout the plan area. Guidelines are included which detail the treatment of common elements or issues found in a number of different land use types. A primary focus is on the interface between individual uses that will provide for pedestrian access throughout the plan area.

The following transportation related design guidelines are generally applicable to all land uses within the plan area:

- Commercial uses shall have a comprehensive parking plan designed to maximize shared parking facilities, establish efficient circulation, promote the visual quality of the site, and accommodate pedestrian circulation. Angled parking with one-way circulation is to be utilized whenever feasible.
- Each commercial area shall be accessible from at least one major collector or arterial street, with sufficient design capacity to accommodate traffic generated by the businesses as well as other local traffic.
- Commercial areas shall be accessible by public transportation, and from pedestrian sidewalks and bicycle routes. Consideration shall be given at the design review stage to on-site transit stops, including but not limited to bus stops.
- The master plan for all parcels adjacent to potential light and heavy rail corridors shall take into consideration the possible future extension of light rail, including right-of-way and station needs.
- Bicycle racks, lockers, and showers for employees are generally encouraged to be placed within projects to promote walking and cycling to work. Bicycle parking should be provided in highly visible and convenient locations.

PEDESTRIAN CIRCULATION

The provision of convenient pedestrian access and circulation throughout the plan area is a principal goal in the organization of NQSP. In order to achieve a comprehensive and convenient pedestrian/bicycle system, continuity and integration is required between plan-wide pedestrianways and the individual facility accommodations for pedestrian users. The following guidelines address the specific requirements for achieving this continuity:

- Land uses shall be easily accessible by public transportation, pedestrian, and bicycle routes.
- All land uses shall be designed to facilitate pedestrian cross-connections to adjacent uses and access to the area-wide trail system.
- Pedestrian walkways in landscape corridors shall provide access from sidewalks into projects separate from major vehicular driveways and circulation. Connections

between private and public pathways shall be the responsibility of the project developer.

- To ensure pedestrian access within the plan area, clear connections should be provided between facilities and public pathways. Pedestrian pathway access should occur at the perimeter of a project and at a maximum interval of 300 linear feet. The location of pedestrian access should coincide with transit stop locations to facilitate the use of public transit. Pedestrian connections between public pathways and buildings will be the responsibility of the project developer.

BIKEWAYS/PEDESTRIAN PATHWAYS

Bicycling and walking are alternatives to driving that people will use regularly for short trips if the distance is sufficiently short and relatively safe. The strategic placement of land uses will reduce the travel distance between employment centers, services and shopping. Convenient access will be facilitated by providing an extensive network of walking and cycling paths.

The plan features a loop pathway system which serves cyclists and pedestrians. Sidewalks will be provided on all streets within the project area to serve pedestrian traffic. Class I bikeways will be provided on plan area arterial streets and commercial collectors. Class I bike paths along the arterial and collector streets consist of slightly undulating, eight-foot wide paved paths, separated from the streets within the landscape corridors. Pathways are designed to accommodate both pedestrians and cyclists. Since the bikeways are intended to provide a safe and convenient route for commuting cyclists at a reasonable speed, the alignment of the routes will not meander too greatly to impede the safe and convenient movement of cycle traffic.

Within commercial areas, pedestrian corridors will extend from buildings through parking areas to connect with plan arterials or other major roads. The pedestrian corridors will be landscaped walkways of sufficient width to allow groups of people to walk and to sit. Pathway landscaping will provide a shade canopy and will buffer pedestrians from adjacent parking. The corridor will include rest islands at the center medians, special lighting and paving and markings to facilitate pedestrian direction.

PUBLIC TRANSPORTATION

BUS SERVICE

The City of Dixon is currently served by two public transit systems. Greyhound provides commuter bus service between Dixon and Sacramento as well as inter- and intra-state service. The Dixon Redi-Ride provides regularly scheduled fixed route service. The Redi-Ride system will be expanded to the plan area as demand for these services occurs. Employees within the plan area will be in close proximity of a bus turnout.

RAIL SERVICE

The Southern Pacific Railroad crossing in the southeast corner of the plan area provides an opportunity for a future transit station. The specific plan has been designed to accommodate a future rail line or alternative transit use of the railroad easement. As an employment center, the plan area is located to optimize use of a rail line or other transportation facility that reduces daily automobile uses.

PARK AND RIDE & RIDESHARING

Park and ride lots will be located within the plan area to provide convenient places for commuter car pooling. Park and ride facilities are intended for commuters in the Dixon area who may utilize the plan area as a parking or meeting point to commute outside of the plan area. The park and ride lots will typically include approximately 25 to 50 spaces and be incorporated in the parking for a commercial, business-professional or light industrial uses.

Where park and ride lots are within a business parking area, they should be located so as to not interfere with business operations. The park and ride spaces may be included as part of the normal parking requirement for the planned business or commercial use if peak use of the park and ride does not coincide with peak use of the business or commercial use and if approved by the city. Park and ride spaces will be clearly marked through pavement markings and directional signage. Spaces are reserved exclusively for park and ride on Monday through Friday from 6:30 a.m. to 6:30 p.m.

Ridesharing facilities will be provided in plan area employment uses to promote alternatives to the use of automobiles for commuting to work. Ridesharing facilities consist of preferential parking or specialized facilities for vanpools, carpools or commuter buses.

TRANSPORTATION SYSTEM MANAGEMENT (TSM)

Traffic impacts on Dixon streets may be reduced through Transportation Systems Management (TSM) measures which encourage employees to rideshare and to use non-peak hours for travel. The Dixon Congestion Management Program requires a Trip Reduction Ordinance (TRO) to create a twenty-five percent (25%) reduction in commute trips. The following TSM measures will promote a reduction in vehicle commuting within plan area employment centers:

- Distribution of information on alternative modes of travel (buses, bicycles, etc.) to employees within the specific plan.
- Carpool and vanpool matching services to assist employees with similar origins, destination, and schedules in finding other employees with whom to share a ride.
- Showers and lockers at employment locations to encourage pedestrian and bicycle commuting.
- Designation of an on-site employment TSM coordinator to assist in disseminating information and monitoring the status of any transportation management activities.

Mitigation Measure T-A: Future development shall comply with the design guidelines included in the NQSP, ensuring that the project will comply with transportation congestion management and circulation policies in the General Plan and Solano County Plan.

Residual Significance **Less than significant**

PROJECT TRIP GENERATION

The NQSP will generate, at buildout, 7,826 AM peak hour trips and 9,786 PM peak hour trips with a total of 99,124 daily trips.

The amount of automobile traffic which could be expected to be generated by this project was estimated through application of trip generation rates developed through statistical analysis of similar uses which may exist elsewhere. For this project, such a procedure was utilized with consideration also given to the share of potential trips which would remain within the

City of Dixon. Table 4.7.7 provides the assumptions used in calculating the NQSP's trip generation potential.

**TABLE 4.7.7
TRIP GENERATION ASSUMPTIONS**

Land Use Type	Gross Daily Trip Rate	Pass-By Reduction	Internalization Reduction
Highway			
Commercial	120/1,000 sq.ft. ¹	60% ¹	20%
Community			
Commercial	70/1,000 sq.ft. ¹	30% ¹	20%
Service			
Commercial	25/1,000 sq.ft. ¹	0% ¹	20%
	8.7-15.6/1,000 sq.ft. of		
Office	gross leasable area ²	0% ¹	20%
	6.97/1,000 sq.ft. of		
Light Industrial	gross leasable area ³	0% ¹	20%

¹ Source: Memo from J. Daniel Takacs Dated September 30, 1993.

² Based on ITE Trip Generation Manual, 5th edition, 1991, page 492. The office trip rates varied based on the size of the parcel and expected quantity of building area. Eighty-five percent of the gross floor area was assumed to be leasable.

³ Based on ITE Trip Generation Manual, 5th edition, 1991, page 92. Eighty-five percent of the gross floor area was assumed to be leasable.

To complete a trip generation analysis for the proposed project, it was necessary to develop an understanding of the operational characteristics of the specific plan development. Once the trip generation rates were established, the rates were then adjusted for the retail uses by 30 percent (for the non-highway commercial uses) to 60 percent (for highway commercial) to account for the presence of pass-by traffic. As shown on Table 4.7.8, the proposed project is expected to generate 7,826 AM peak hour trips, 9,783 PM peak hour trips, and 99,124 daily trips.

PROJECT TRIP DISTRIBUTION

The distribution of project trips was identified by the City of Dixon. Different distribution assumptions were prescribed for the existing and cumulative scenarios. Table 4.7.9 summarizes the trip distribution percentages utilized for the assignment of project traffic for both the existing and cumulative scenarios.

Under existing plus project conditions, 52 percent of the project traffic is expected to access the site via Interstate 80, (east via I-80, 21%, west via I-80, 31%), with another 31% oriented to and from the south via Pedrick Road (6%) and North First Street (25%). In the cumulative condition, the estimated proportion of project traffic using Interstate 80 is 72 percent, with the majority of the remaining traffic dispersed to the south and north along Pedrick Road and North First Street. The percentages represent a summation of the rates of all land uses within the site. The totals were adjusted between existing and cumulative conditions given that changes in future year travel patterns should be anticipated due to changes in development patterns.

TABLE 4.7.8 TRIP GENERATION

Land Use	KSF	AM PEAK HOUR			PM PEAK HOUR			Daily
		In	Out	Total	In	Out	Total	
Highway Commercial	1,548.55	2,378	2,378	4,756	2,674	2,676	5,350	59,608
Community/Service Commercial	565.19	366	242	608	968	969	1,937	19,374
Office (Professional/ Admin)	1,314.63	1,045	117	1,162	215	865	1,080	8,316
Light Industrial (PI)	<u>2,495.09</u>	<u>1,144</u>	<u>156</u>	<u>1,300</u>	<u>282</u>	<u>1,134</u>	<u>1,416</u>	<u>11,826</u>
TOTAL:	5,923.46	4,933	2,893	7,826	4,139	5,644	9,783	99,124

With: 60% Reduction for Pass By For Highway Commercial
 30% Reduction for Pass By for Community Commercial
 15% Reduction for Gross Leasable Area For PI & Office Uses
 20% Reduction For Internalization of Trips

**TABLE 4.7.9
PROJECT TRIP DISTRIBUTION**

DIRECTION*	EXISTING PLUS PROJECT PERCENTAGE*	CUMULATIVE PLUS PROJECT
East via I-80	21%	36
East via Vaughn Road	2%	1
West via I-80	31%	36
West via Vaughn Road	0%	8
South via Pedrick Road	6%	4
South via North First Street	25%	4
North via Pedrick Road	15%	11
TOTAL	100%	100%

(* The trip distribution was obtained by analyzing existing traffic patterns.)

For intersection operations, assumptions were made regarding the number of turn lanes based on the number of lanes of the cross streets. The following table displays the lane assumptions for intersections.

**TABLE 4.7.10
ASSUMED LANE GEOMETRY FOR FUTURE INTERSECTIONS**

Facility Type	Intersection Type	Intersection Approach Lanes		
		Left	Through	Right
4-lane arterial	Full	1	2	1
2-lane arterial	Full	1	1	1
4-lane arterial	T	2	0	1
2-lane arterial	T	1	0	1

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

Impact T-3: The existing traffic conditions, plus the traffic generated by the NQSP will exceed the required LOS at four intersections. All intersections will warrant signalization.

Significance: Significant

The existing plus project traffic conditions will exceed the required LOS at four intersections. This includes:

- I-80 Westbound Ramps/Pedrick Road - operates at LOS F during the PM peak hour. The large volume of project traffic, particularly the westbound left turning movement, cannot be adequately accommodated by the existing intersection.
- I-80 Eastbound Ramps/Pedrick Road - operates at LOS F during both the AM and PM peak hours. Heavy eastbound right turns and northbound movements cause unacceptable operations.

4.0 ENVIRONMENTAL ANALYSIS

- I-80 Eastbound Ramps/North First Street - operates at LOS E during the PM peak hour. This location is primarily affected by heavy northbound and eastbound turning movements.
- North First Street/Arterial B - operates at LOS F during the PM peak hour. Heavy southbound left turns and westbound right turns degrade the intersection operations.

For purposes of preparing the analysis of the existing conditions plus the project, five additional intersection were added to the analysis. These intersections are shown on Figure 4.7.6 and include:

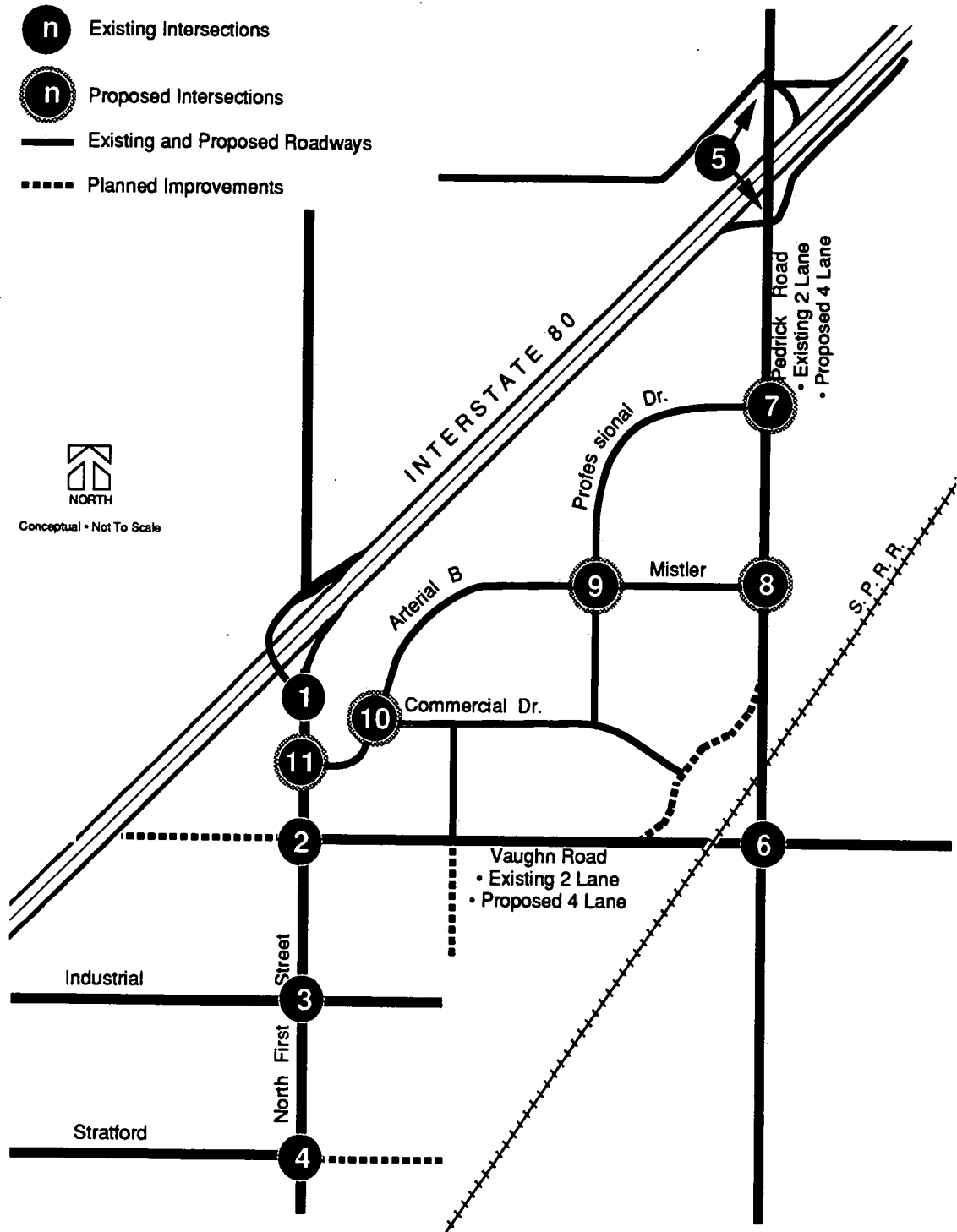
- Professional Drive/Pedrick Road (7)
- Mistler Drive/Pedrick Road (8)
- Arterial B/Professional Drive (9)
- Arterial B/Commercial (10)
- Arterial B/North First Street (11)

AM and PM peak hour trips projected to be generated by the proposed project were added to "existing base" intersection and roadway volumes. The "Existing Plus Project" daily peak hour volumes are displayed on Figures 4.7.6, 4.7.7 and 4.7.8, while Table 4.7.11 displays projected intersection LOS.

**TABLE 4.7.11
EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE**

INTERSECTIONS	AM PEAK HOUR		PM PEAK HOUR	
	LOS	V/C	LOS	V/C
North First Street/I-80 EB Ramp (1)	B	0.62	D	0.86
North First Street/Vaughn Road (2)	C	0.78	D	0.87
North First Street/Industrial Way (3)	B	0.65	C	0.75
North First Street/Stratford Avenue (4)	B	0.60	C	0.77
Pedrick Road/I-80 WB Ramp (5)	C	0.76	F	1.14
Pedrick Road/I-80 EB Ramp (5)	F	1.26	F	1.26
Pedrick Road/Vaughn Road (6)	A	0.51	D	0.80
Pedrick Road/Professional Drive (7)	D	0.82	D	0.88
Pedrick Road/Mistler Road (8)	A	0.45	C	0.72
Professional Drive/Mistler Road (9)	B	0.66	B	0.69
Arterial B/Commercial Drive (10)	C	0.72	D	0.89
North First Street/Arterial B (11)	D	0.88	F	1.36

(1) Number corresponds with intersections on Figure 4.6.2



**FIGURE 4.7.6
EXISTING PLUS PROJECT INTERSECTIONS**

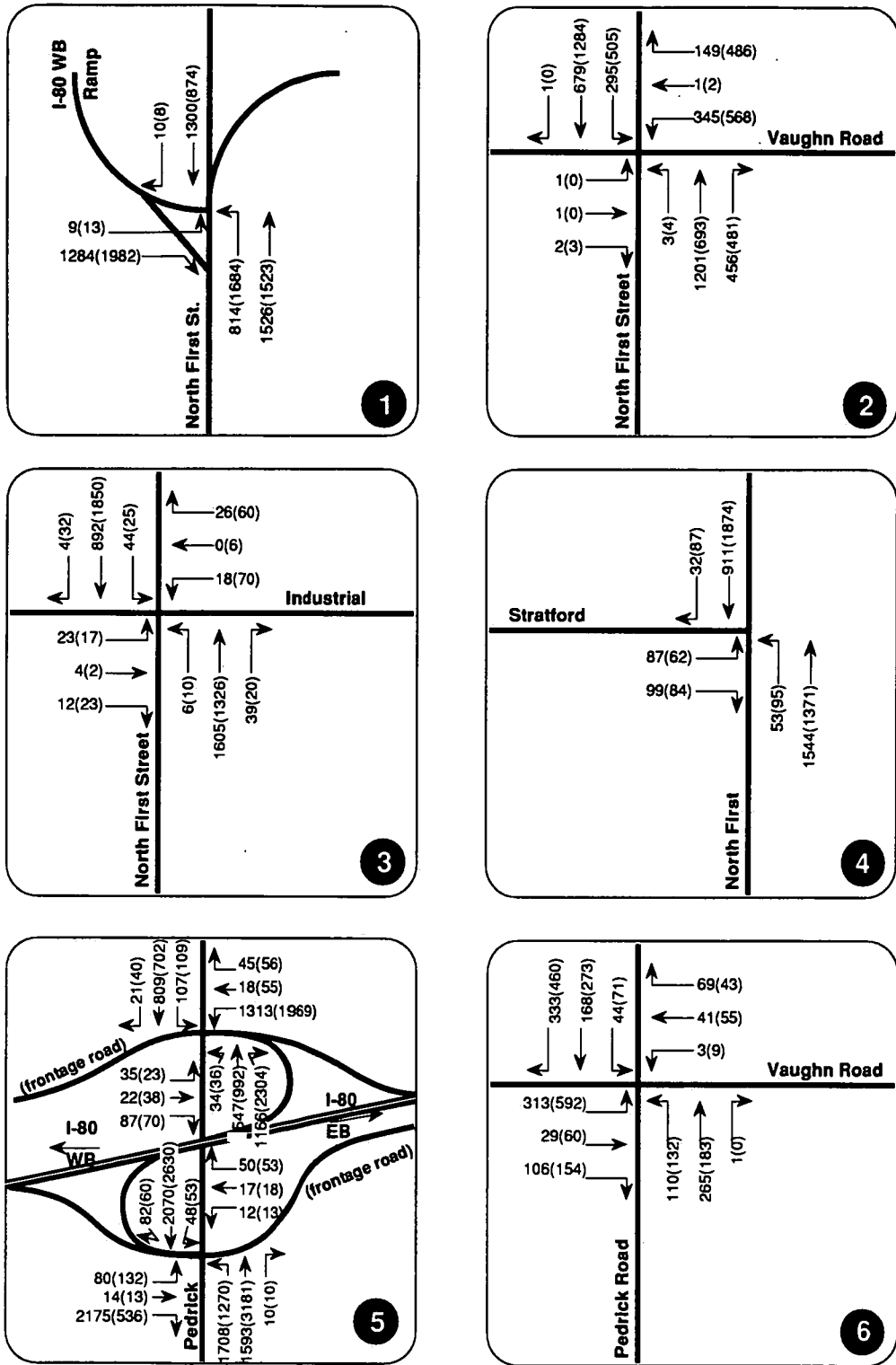
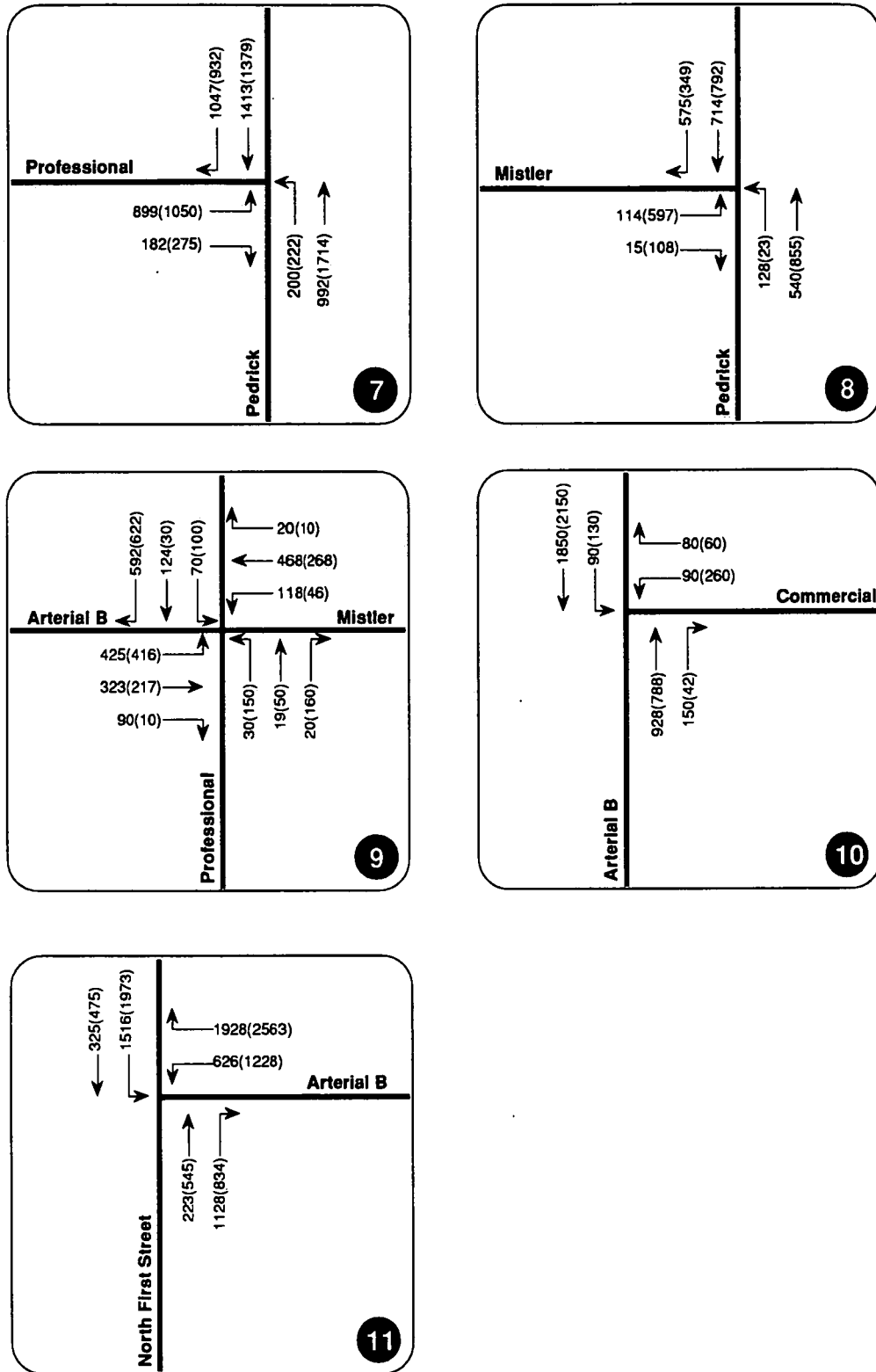


FIGURE 4.7.7
EXISTING PLUS PROJECT AM AND PM PEAK HOUR TRAFFIC VOLUMES



**FIGURE 4.7.8
EXISTING PLUS PROJECT AM AND PM PEAK HOUR TRAFFIC VOLUMES**

As shown on Table 4.7.10, the attraction of the commercial land uses along I-80 places a substantial burden on the interchanges with Pedrick Road and North First Street. The intersection of Arterial B with North First Street would require improvements as all project-bound (generated) traffic must enter the site via a left Turn at the intersection. In addition, the sections of Pedrick Road and North First Street between I-80 and the first major cross street would operate unacceptably as four-lane arterials.

Mitigation Measure T-B: All intersections identified in the EIR would warrant signalization. A specific analysis shall be prepared as part of any future development to determine the specific signalization required and the fair share contribution to funding such improvements.

Mitigation Measure T-C: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

Mitigation Measure T-D: Improve the North First Street interchange with Interstate 80. Separate studies such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

Mitigation Measure T-E: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B.

Residual Significance: Less than significant

Impact T-4 The existing plus project conditions will result in unacceptable levels of service for various road segments.

Based on the trip generation and the trip distribution of project traffic, it is estimated that this project will add approximately 51,500 trips per day to Interstate 80. In the cumulative condition, this total is expected to increase to approximately 71,000 trips per day. This includes significant volumes of pass-by traffic (i.e., traffic already on I-80, but stopping at the site), particularly for the highway commercial uses. The addition of this quantity of traffic constitutes a significant impact. The impact will be mitigated via recommendations of studies typically required by Caltrans and the Federal Highway Administration for local development projects including a Concept Approval Report for I-80 and Project Study Reports for the interchanges of Pedrick Road and North First Street. However, three major local road segments are projected to experience unacceptable levels of service as a result of the project.

- Significance:** Significant
- Mitigation Measure T-I: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.
- Mitigation Measure T-J: Implementation of the project includes a bikeway and pedestrian trail system for public use.
- Residual Significance:** Less than significant

4.7.4 CUMULATIVE IMPACTS - WITHOUT PROJECT

- Impact T-7:** The cumulative traffic impact in the City of Dixon without the development of the NQSP will require significant improvement to the interchanges of I-80 and Pedrick Road and North First Street, and to sections of both North First Street and Pedrick Road.

The results of the cumulative conditions analysis are similar to that for the existing plus project analysis in that the interchanges of Pedrick Road and North First Street with Interstate 80 will require significant improvement, along with sections of both North First Street and Pedrick Road. The peak hour traffic volumes (AM and PM) for the cumulative - no project scenario are shown on Figures 4.7.9.

- Significance:** Significant
- Mitigation Measure T-K: The mitigation of traffic impacts associated with the cumulative - no project scenario would not be the responsibility of the proposed project. Therefore, no mitigation measures have been identified. However, it can be assumed that other projects that make up the cumulative scenario would be responsible for mitigating this impact, and that funding such improvements would be based on a "fair share" assessment based on all future development.
- Residual Significance:** Less than significant

4.7.5 CUMULATIVE IMPACTS - WITH PROJECT

- Impact T-8:** The cumulative traffic conditions would exceed LOS at six intersections.
- Significance:** Significant

Figures 4.7.10, 4.7.11 and 4.7.12 display the traffic scenarios and peak hour intersection traffic forecasts for the study locations roadways for the cumulative condition (2010) with the project, respectively. Table 4.7.12 summarizes the results of the intersection analysis for both cases.

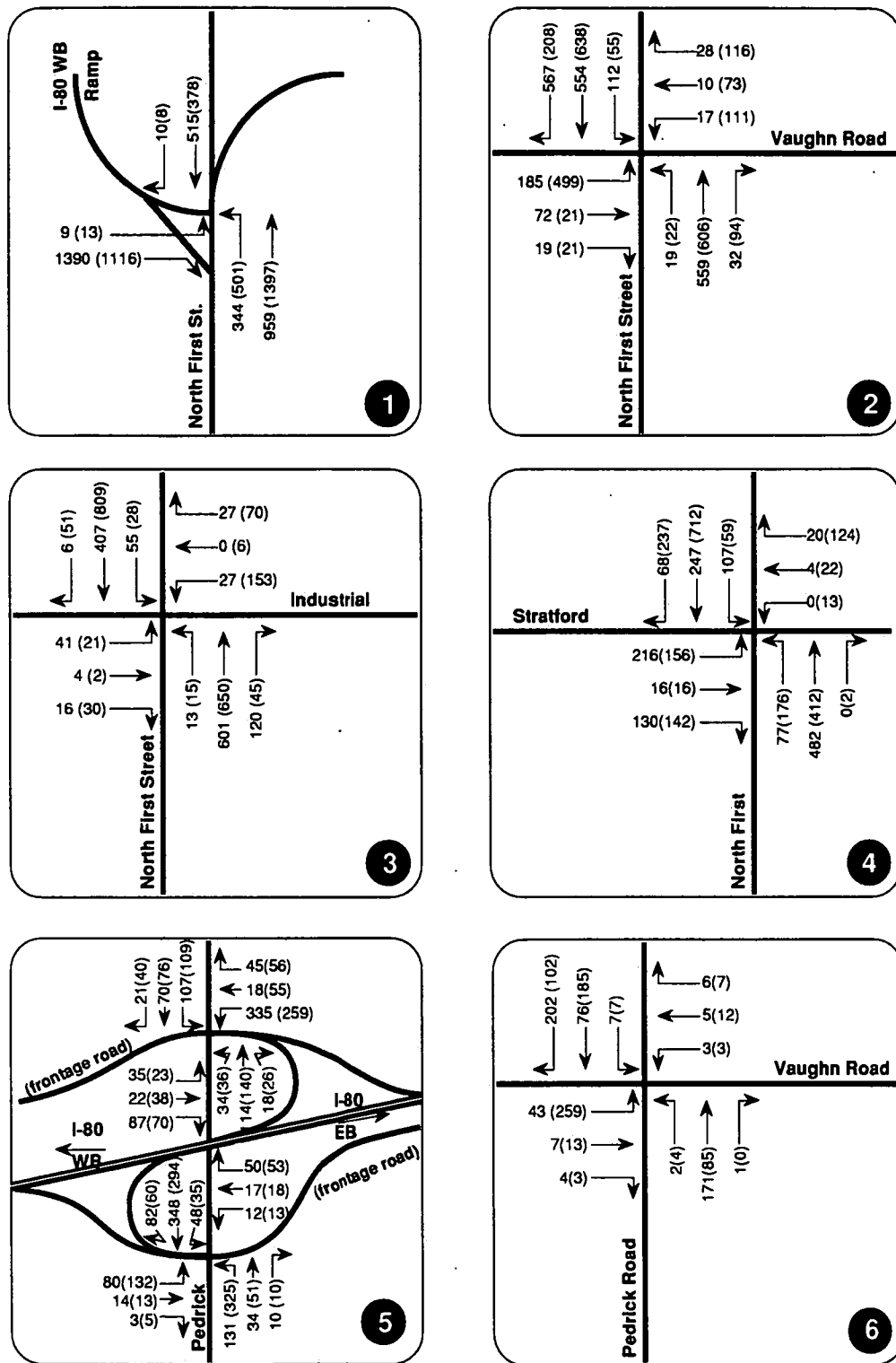


FIGURE 4.7.9
CUMULATIVE AM AND PM PEAK HOUR TRAFFIC VOLUMES (WITHOUT PROJECT)

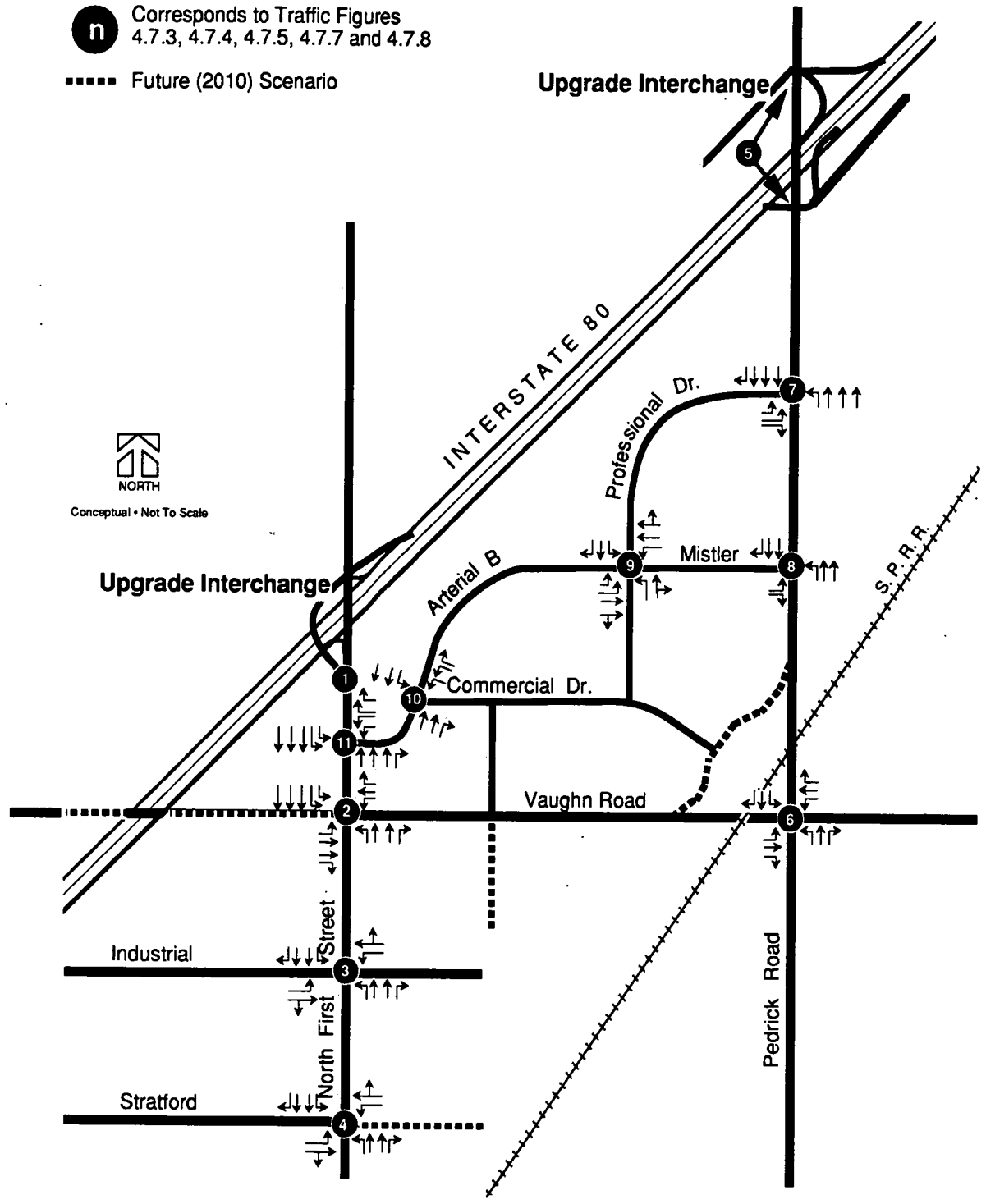


FIGURE 4.7.10
CUMULATIVE EXISTING INTERSECTIONS (WITH PROJECT)

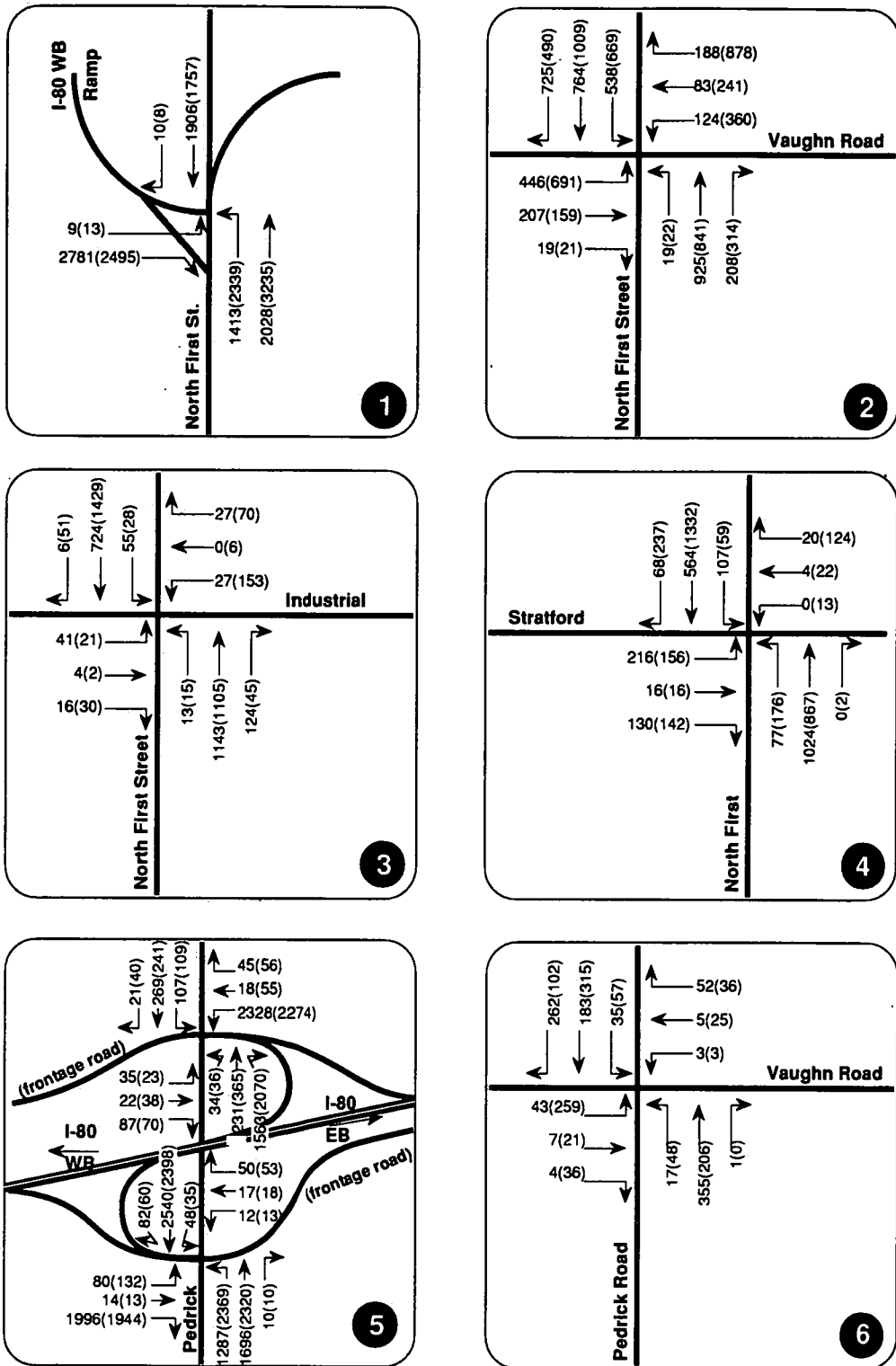


FIGURE 4.7.11
CUMULATIVE AM AND PM PEAK HOUR TRAFFIC VOLUMES

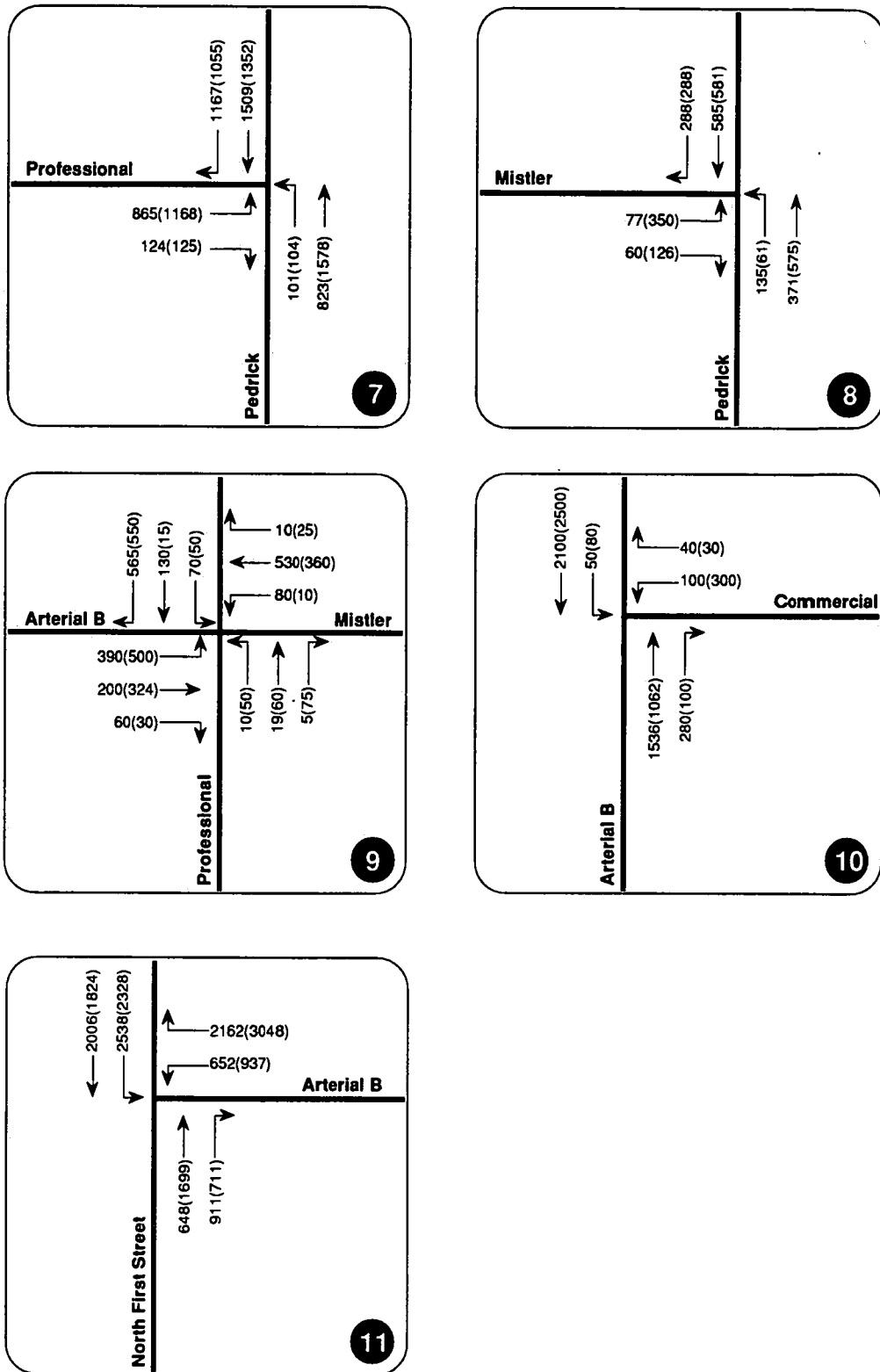


FIGURE 4.7.12
CUMULATIVE AM AND PM PEAK HOUR TRAFFIC VOLUMES

TABLE 4.7.12
CUMULATIVE AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

INTERSECTIONS	AM PEAK HOUR		PM PEAK HOUR	
	LOS	V/C	LOS	V/C
North First Street/I-80 EB Ramp (1)	E	1.00	F	1.32
North First Street/Vaughn Road (2)	C	0.79	F	1.03
North First Street/Industrial Way (3)	A	0.51	B	0.67
North First Street/Stratford Avenue (4)	B	0.62	D	0.83
Pedrick Road/I-80 WB Ramp (5)	F	1.08	F	1.11
Pedrick Road/I-80 EB Ramp (5)	F	1.20	F	1.64
Pedrick Road/Vaughn Road (6)	A	0.34	A	0.47
Pedrick Road/Professional Drive (7)	C	0.76	D	0.84
Pedrick Road/Mistler Road (8)	A	0.55	A	0.49
Professional Drive/Mistler Road (9)	B	0.67	B	0.65
Arterial B/Commercial Drive (10)	D	0.81	E	0.99
North First Street/Arterial B (11)	F	1.45	F	1.86

Number corresponds with intersections on Figure 4.6.2. ⁽¹⁾

The results of the cumulative conditions analysis are similar to that for the existing plus project analysis in that the interchanges of Pedrick Road and North First Street with I-80 would require significant improvements, along with sections of both North First Street and Pedrick Road. Within the project site, the intersection of Arterial B with Commercial Drive is expected to operate unacceptably during the PM peak hour. Like the interchange impacts, this deficiency is a result of the large volumes of traffic entering the site on Arterial B from I-80 via North First Street.

Unacceptable Levels of Service for Various Intersections, including:

- I-80 Westbound Ramps/Pedrick Road (5) - operates at LOS F during both the AM and PM peak hours. The large volume of project traffic, particularly the westbound left turning movement, cannot be adequately accommodated by the existing intersection.
- I-80 Eastbound Ramps/Pedrick Road (5) - operates at LOS F during both the AM and PM peak hours. Heavy eastbound right turns and northbound movements cause unacceptable operations.
- I-80 Eastbound Ramps/North First Street (1) - operates at LOS E during the AM peak hour and LOS F during the PM peak hour. This location is primarily affected by heavy northbound and eastbound turning movements.
- North First Street/Arterial B (11) - operates at LOS F during the AM and the PM peak hour. Heavy southbound left turns and westbound right turns degrade the intersection operations.
- North First Street/Vaughn Road (2) - operates at LOS F during the PM peak hour. The primary cause of the problem is the heavy southbound left turning movements and through movements on North First Street.
- Arterial B/Commercial Drive (10) - operates at LOS E during the PM peak hour because of large volumes of site traffic accessing the site via Arterial B.

Mitigation Measure T-L: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

Mitigation Measure T-M: Improve the North First Street interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

Mitigation Measure T-N: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

Mitigation Measure T-O: Construct additional turn lanes at the North First Street/Vaughn Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the eastbound approach of Vaughn Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

The provision of direct site access from the I-80 interchange will reduce the overall traffic volumes at the Arterial B/Commercial Drive intersection, and therefore can improve the operations to acceptable levels.

Residual Significance: Less than significant

Impact T-9: The cumulative traffic scenarios for 2010 will result in unacceptable levels of service for various road segments.

Three major road segments are projected to experience unacceptable levels of service as a result of the project at the following roadways.

- North First Street - between Interstate 80 and Arterial B. Heavy volumes entering and exiting the site will use this route causing unacceptable operations for this four lane road.
- Pedrick Road - between Interstate 80 and Professional Drive. This four-lane road will also experience unacceptable levels of service as a result of the project.
- Interstate 80 - Implementation of the project results in the addition of a significant volume of traffic on Interstate 80.

Significance: Significant

Mitigation Measure T-P: Widen North First Street to six lanes between Interstate 80 and Arterial B.

Mitigation Measure T-Q: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

The above improvements should be implemented when the peak hour volume on the subject roads exceed 3,600 vehicles per hour.

Mitigation Measure T-R: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

Mitigation Measure T-S: The Pedrick Road Overcrossing of the railroad tracks is mentioned in the General Plan as a possible location to be considered as a part of a separate study. The overcrossing, if implemented, would cross over the railroad tracks and would not affect the traffic forecasts. This shall be considered with all future cumulative development implementing this project.

Residual Significance: Less than significant

Impact T-10 Since the site is not in the City of Dixon, it is not directly served by public transit.

Since the specific plan includes the provision of bus routes, turnouts, transit shelters and park-and-ride lots and a Transportation Management Plan, sufficient facilities will be in place to accommodate the extension of transit services to the site. Therefore, no further mitigation measures are required.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact T-11: Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.

Significance: Significant

Additional traffic-related conflicts will occur with bicyclists and pedestrians along the adjacent street system including Pedrick Road, North First Street and Vaughn Road.

Mitigation Measure T-T: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

Residual Significance: Less than significant

Impact T-12: Implementation of the project includes a bikeway and pedestrian trail system for public use.

Significance: Less than significant

Included in the Northeast Quadrant Specific Plan are provisions for a multimodal Class I trail system throughout the area. This is considered to be a *beneficial impact*. No mitigation is required.

4.7.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures listed in Section 4.7.3 and 4.7.4 would reduce project specific and cumulative traffic and circulation impacts to a level below significant.

4.8 NOISE

The purpose of this section is to summarize the existing and future ambient noise environment within the vicinity of the proposed project, and to recommend noise mitigation measures for all identified significant noise impacts.

Noise is often described as unwanted sound and reactions to noise are subjective and variable. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are well correlated with subjective reaction to noise. Variations in sound levels over time are represented by statistical descriptors, and by time-weighted composite noise metrics such as Day-Night average level (Ldn). The unit of sound level measurement is the decibel (dB), sometimes expressed as dBA.

Representative noise sources and their corresponding noise levels are shown on Table 4.8.1.

**TABLE 4.8.1
TYPICAL NOISE LEVELS**

Noise Sources	Noise Level dBA (Leq)
Rustle of leaves in Wind	10
Whispering	20
Average Residence	30
Refrigerator	40
Average Office	50
Normal Speech	60
Vacuum Cleaner	70
Garbage Disposal	80
Food Blender	90
Automobile Horn	100

Source: Environmental Noise Pollution, Patrick F. Cuniff (1977)

EXISTING NOISE ENVIRONMENT

The existing ambient noise environment in the project vicinity is defined primarily by traffic on I-80 and Highway 113 (North First Street), and rail operations along the SPRR tracks that traverse the southeastern portion of the project site. Traffic along Pedrick Road and activities at the Dixon Canning Facility also contribute a minor amount of noise to the ambient noise environment, but to a much lesser extent.

To generally describe ambient noise levels in the project vicinity, the Dixon General Plan was consulted. As shown on Figure 4.8.1, 1993 noise contours indicate Interstate 80 as the major source of the most intense noise for the project area. The noise level immediately adjacent to the freeway is 80 CNEL (decibels stated as the Community Noise Equivalent Level), decreasing to 60 CNEL inside the site. The noise levels from the SPRR are 65 CNEL adjacent to the tracks, also decreasing to 60 CNEL inside the site. Ambient noise levels in the interior portion of the project site are below 60 CNEL.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both time and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, parks and outdoor recreation areas are generally more sensitive than are commercial and industrial uses. There are eleven sensitive receptors (residences) located on the project site, including the Vaughn and Dudley homes built in the late 1800's and early 1900's. These residential structures are to be either relocated or demolished (Section 4.6, Cultural Resources).

There are no sensitive receptors adjacent to the project site.

STATE AND LOCAL NOISE GUIDELINES

There are state and local regulations for preventing environmental noise that can jeopardize the public health and welfare. The regulations which are applicable to the project site include those outlined by the California Department of Health Services (CDHS) and the City of Dixon.

CALIFORNIA DEPARTMENT OF HEALTH SERVICES NOISE GUIDELINES

The CDHS published guidelines in 1987 for the noise elements of local general plans. These guidelines identify noise levels which are compatible with different land uses. There are four categories of outdoor DNL ranges: normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable as shown on Figure 4.8.2.

Noise levels up to 65 DNL are normally acceptable for the non-residential uses. Levels from 65 DNL to 75 DNL are conditionally acceptable, requiring noise reduction measures.

CITY OF DIXON GENERAL PLAN

The Dixon General Plan addresses noise impacts in its Natural Environment section. There are five policies outlined in this section:

- The city shall protect existing noise sources from future noise-sensitive development.
- The city shall establish performance standards to limit noise generation.
- The city shall establish physical development patterns compatible with the noise environment of Dixon.
- The city shall, where feasible, mitigate traffic and other noise to the levels defined as "Acceptable Levels of Noise Exposure." Areas in which noise levels currently exceed, or as a result of future development, will exceed these levels of noise exposure are deemed inappropriate for the development in question.

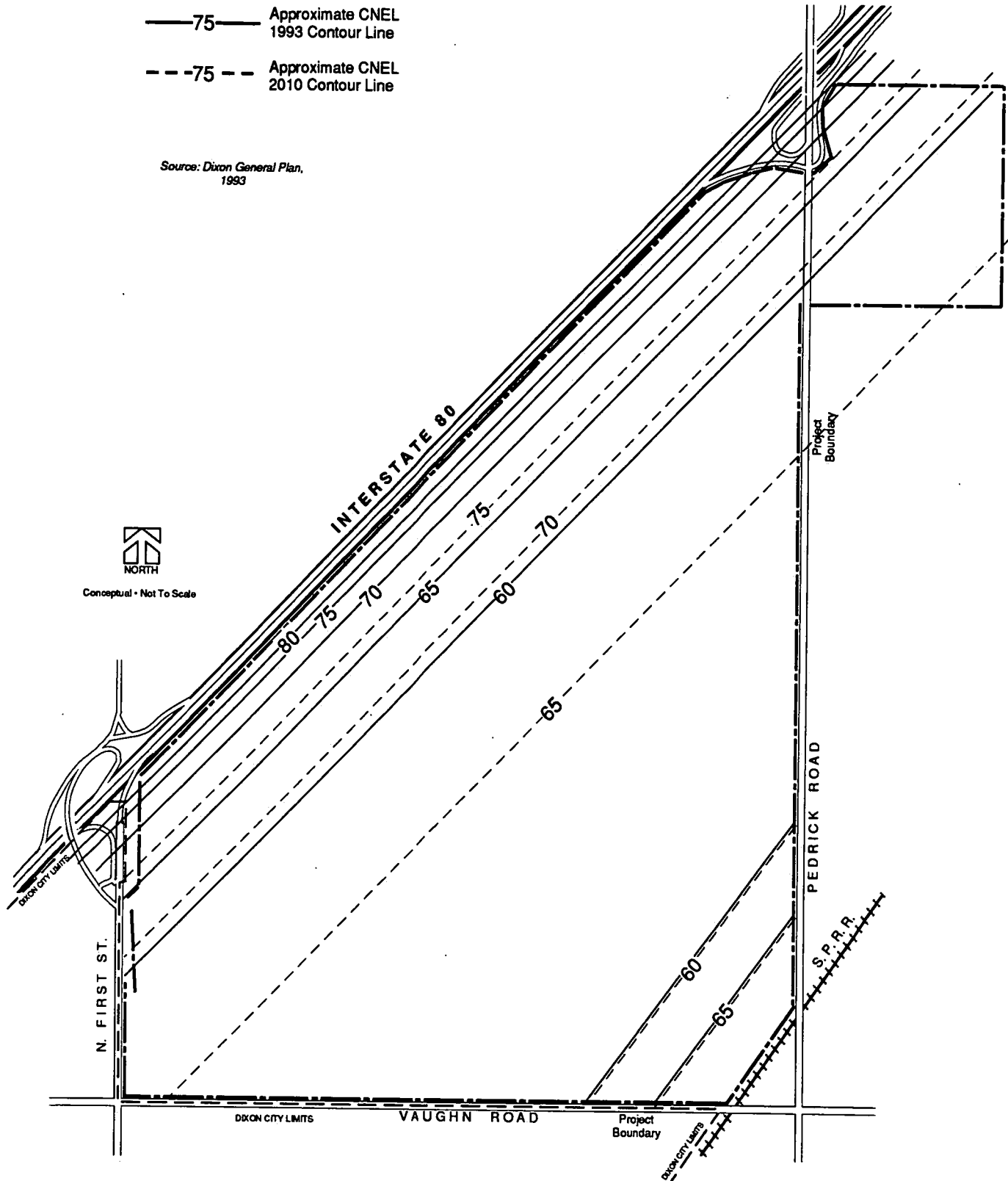
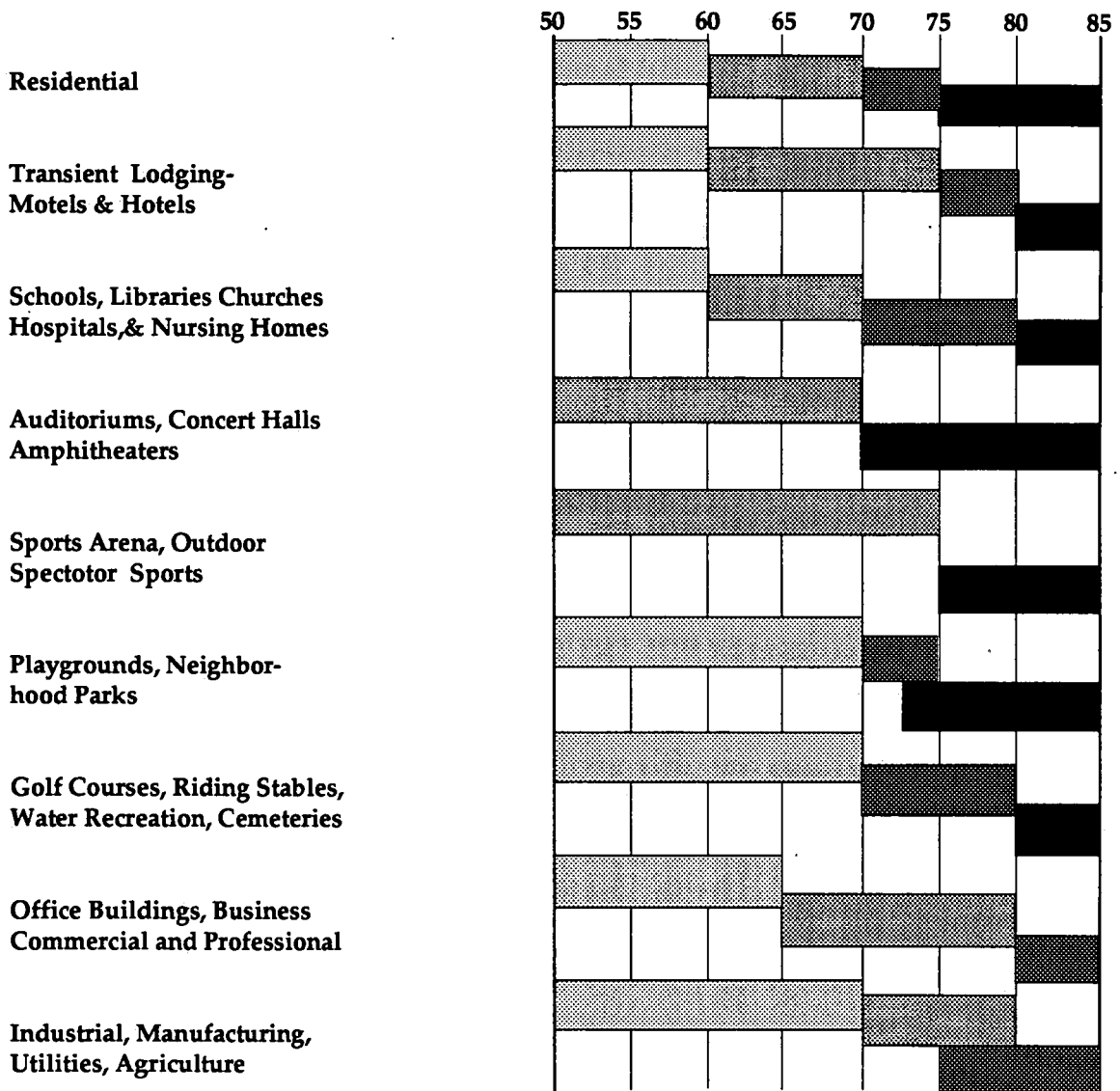


FIGURE 4.8.1
EXISTING AND PROPOSED NOISE CONTOURS

Land Use Category

Community Noise Exposure (DNL)



Normally Acceptable
Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Normally Unacceptable
New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation requirements or features included in the design.



Clearly Unacceptable
New construction or development should not be undertaken.

Source: State of California General Plan Guidelines, June 1987.

FIGURE 4.8.2
ACCEPTABLE LEVELS OF NOISE EXPOSURE

- The city shall develop buffering standards and procedures to protect residents from freeway/highway traffic and industrial noise. Acoustical design to reduce noise levels will be an important consideration in all projects and developments.

CITY OF DIXON ZONING ORDINANCE

The noise performance standards described in the Dixon Zoning Ordinance indicate that the maximum sound level permitted for commercial uses is 70 decibels, and 75 decibels for industrial uses (City of Dixon Zoning Ordinance, 1991 Update).

4.8.2 THRESHOLD SIGNIFICANCE

The City of Dixon Zoning Ordinance specifies noise performance standards and maximum exterior noise levels permitted for commercial and industrial uses. The noise performance standards indicate that maximum sound levels permitted for commercial uses is 70 dB and 75 dB for industrial uses.

A project is considered to have a significant impact on the environment if:

- a project results in a substantial increase in ambient noise levels at adjoining noise-sensitive land uses or if it violates noise compatibility guidelines for land use.

4.8.3 ENVIRONMENTAL IMPACTS AND MITIGATIONS

SHORT-TERM CONSTRUCTION

Impact N-1: Short-term construction noise impacts associated within the NQSP.

During project construction, noise from construction activities could dominate the noise environment, depending on the location of the actual construction operation. Construction activities could generate noise levels ranging from 78 to 89 dB at a distance of 50 feet as shown on Table 4.8.2. This exceeds the City's noise performance threshold of 70 dB for commercial and 75 dB for industrial uses. Construction noise levels can be attenuated to approximately 60 dB at about 1,200 feet from the noise source through mitigation measures.

**TABLE 4.8.2
TYPICAL CONSTRUCTION NOISE LEVELS**

CONSTRUCTION OPERATIONS	NOISE LEVEL DBA (LEQ) AT A DISTANCE OF 50 FEET
	Ground Clearing
	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

Source: Bolt, Berdnek, and Newman, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances (1971)

Construction activities would be temporary in nature, typically occurring during normal working hours. There are no sensitive receptors close enough to the project site to be adversely impacted by short-term noise from construction activities. In addition, the initial and final transport of construction equipment along local streets would not raise ambient noise levels noticeably.

Significance: Significant

Mitigation Measure N-A: All contractors shall comply with local, state and federal noise regulations, including fitting all equipment with mufflers according to the manufacturer's specifications.

Mitigation Measure N-B: Construction activities shall not take place between 7:00 p.m. and 7:00 a.m. on weekdays and Saturday, and shall not be permitted on Sunday or on federal holidays.

Residual Significance: Less than significant

LONG-TERM NOISE IMPACTS

Impact N-2: Long-term noise impacts associated with traffic.

Implementation of the proposed project is expected to generate approximately 99,124 average daily trips. A substantial percent of trips would be traveling to and from the project site via I-80 and would not affect noise adjacent to the east, south and west portions of the site. However, the remaining trips would travel south and west of the site into the existing City of Dixon.

Traffic generated by the proposed project would affect ambient noise levels over the long-term through related motor vehicle trips on roadways that would serve as access to the project site. Traffic noise generated by the project would have a significant impact on roadways in the vicinity of the project which already experience from 60 dB to 80 dB from I-80 and the existing SPRR.

Significance: Significant

Mitigation Measure N-C: Future development shall comply with the City of Dixon. Development criteria in the NQSP shall be required to demonstrate conformance with the City's noise standard or site specific mitigation measures to ensure that noise thresholds are not exceeded.

Residual Significance: Less than significant

Impact N-3: On-Site Noise

Implementation of the proposed project would introduce a variety of commercial, office and industrial uses to land that is located adjacent to I-80 and the SPRR.

Noise levels between 65-75 CNEL are conditionally acceptable and noise levels greater than 75 CNEL are normally unacceptable, according to guidelines established by the CDHS (Figure 4.8.2). Levels greater than 80 CNEL are considered either normally or clearly unacceptable for these uses.

The portion of the project site within 1,000 feet of I-80 and 200 feet of the SPRR are subject to relatively higher noise levels of 65 dB to 70 dB. Areas directly adjacent to the freeway (within 200 feet of the Caltrans right-of-way) are subject to noise levels that are potentially above 70 dB.

Significance: Significant

Mitigation Measure N-D: Residential land uses are not proposed for this project. Commercial and office uses located within the proposed year 2010 70 CNEL noise contour, and industrial uses proposed within the 75 CNEL noise contour (Figure 4.8.1), shall be sited and designed to be sensitive to the adjacent I-80 noise source by incorporating appropriate building materials and design techniques to improve both the interior and exterior noise environment. In addition, the use of landscape barriers shall be explored to reduce noise levels adjacent to I-80.

Residual Significance: Less than significant

4.8.4 CUMULATIVE IMPACTS

Impact N-4: Cumulative noise impacts

Implementation of cumulative development in the vicinity of the proposed project and within the City of Dixon would contribute to increases in noise exposures for locations already experiencing noise levels above local and state standards, including land located along I-80. The city is implementing noise performance standards as part of their General Plan update program to protect existing and future sensitive land uses. The potential for increased noise associated with cumulative development would be controlled with these standards and required mitigation measures.

Significance: Less than significant

4.8.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures recommended in Sections 4.8.3 and 4.8.4 would reduce short- and long-term noise impacts to levels below significance.

4.9 PUBLIC SERVICES AND UTILITIES

The intent of this section is to: 1) describe the current capabilities of the various public services and utility companies and agencies that might be affected by implementation of the proposed project; 2) present a quantitative analysis, whenever possible, of the project-related impacts to these agencies; and 3) provide suggestions and recommendations in the form of mitigation measures to reduce project-related impacts to below significant levels, if feasible.

4.9.1 WATER

4.9.1.1 ENVIRONMENTAL SETTING

Domestic water service in the vicinity of the project site and within the City of Dixon is provided by two water purveyors, including the Dixon-Solano Municipal Water Service (DSMWS) and the California Water Service Company (CWSC). The remainder of water in the area is extracted from private water wells and used, for the most part, for agricultural irrigation.

Water in the vicinity is produced from alluvial deposits recharged from rainfall and irrigation from the Sacramento Valley floor area. The aquifer in the Dixon area is plentiful, with limitations to existing or proposed development in the region (Personal conversation, Darrell Rosenkild, Director of Water Operations, SID). The groundwater quality in the area is very good, with natural filtration taking place as water percolates through the porous layers of the soil. Because the water is drawn from deep, protected aquifers, very little treatment is required to ensure a safe palatable supply. Only chlorine is added to the domestic water supply to provide residual disinfection in system pipelines. All wells in the area generally have high yields, ranging from 675 to 1,250 gallons per minute (gpm). The average depth of groundwater in the vicinity is approximately 40-45 feet.

Approximately half of the proposed project is located within the service district boundaries of the Dixon-Solano Municipal Water Service (DSMWS) (see Figure 4.9.1). The remaining portion of the site is not served or located with a designated water service area. DSMWS currently maintains 12-inch water mains in Vaughn Road and North First Street and provides irrigation water to a number of customers in the area.

DIXON-SOLANO MUNICIPAL WATER SERVICE

The Dixon-Solano Municipal Water Service (DSMWS) was established in 1987 under a joint powers agreement between the City of Dixon and the Solano County Irrigation District. The DSMWS currently serves the Dixon Industrial Park, the Watson Ranch Subdivision, the Pheasant Run Subdivision, portions of the West "A" Street Assessment District and the Regency and Connemara Subdivisions. Water in the DSMWS system is extracted from groundwater from naturally occurring aquifers. Three wells pump this water from hundreds of feet below the ground surface into the overall distribution system. The total capacity of these wells is 3,990 gpm at a pressure range of 57 to 61 pounds per square inch (psi). Total water delivered in 1992 was 575-acre-feet. The peak water demand for July 1994 was 1,387,677 gpd. The average daily demand for water in 1993 was 730,353 gpd. Storage capacity will be over one million gallons within the next year. It is the policy of the DSMWS to serve all new developing areas within the city limits of Dixon. There are presently no water limitations to accommodate planned development.

CALIFORNIA WATER SERVICE COMPANY

The California Water Service Company (CWSC) currently serves the remainder of developed land within the City of Dixon. The CWSC operates eight wells having a capacity to produce approximately 5,760 gpm at a pressure ranging from 40 to 55 psi. This production capacity can provide an average of 1.34 million gallons of water per day (gpd) and 489 million gallons of water per year, although a maximum consumption has been 2.9 million gallons per day (mgd). The estimated safe yield of 5,760 gpm equates to approximately 829 million gallons per year.

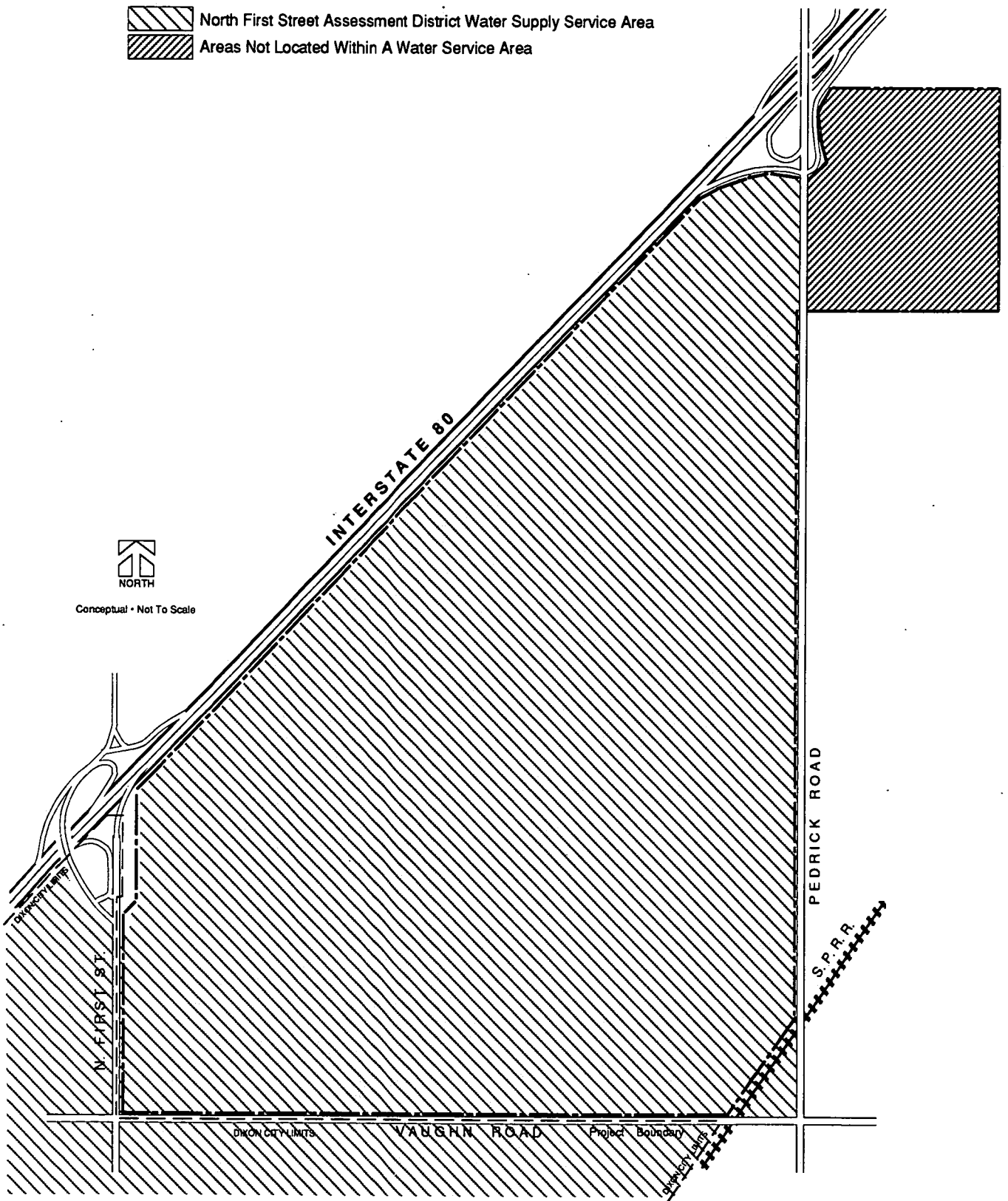


FIGURE 4.9.1
WATER SERVICE BOUNDARIES

4.9.1.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact on the environment if:

- a groundwater resource is substantially depleted
- a local water supply or distribution facilities were not adequate to meet future demand.

4.9.1.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact PS-1: Approximately half of the NQSP land area is currently not within the NFSAD and does not have access to a municipal water system.

Significance: Significant

Mitigation Measure PS-A: Prior to approval of the NQSP, the entire project area shall join the NFSAD to ensure water supply services.

Residual Significance: Less than significant

Impact PS-2: Implementation of the NQSP would generate a substantial need for domestic water, increasing current municipal water storage requirements.

The demand for water availability has been estimated to be approximately 2,331,435 gpd or 2.3 mgd as shown on Table 4.9.1. This is three times greater than the 1993 average daily demand. It should be noted that usage rates on Table 4.9.1 include the use of water for maintaining proposed ornamental landscaping within each land use category.

Significance: Significant

**TABLE 4.9.1
ESTIMATED WATER DEMAND**

Land Use	Acres	Rate (gpd)*	Water Demand (gpd)
Commercial	194.1	5,760	1,118,000
Professional Offices	105.4	2,880	303,552
Light Industrial	214.4	2,880	617,472
Drainage Easements and Open Space			
Irrigation	<u>129.1</u>	<u>2,265</u>	<u>292,411</u>
	643.0 acres		2,331,435 gpd (2.3 mgd)

* Based on projections contained in the Northeast Quadrant Specific Plan

The NQSP proposes that domestic water would be distributed throughout the project site by a series of 10- and 12-inch water mains as shown in Figure 4.9.2.

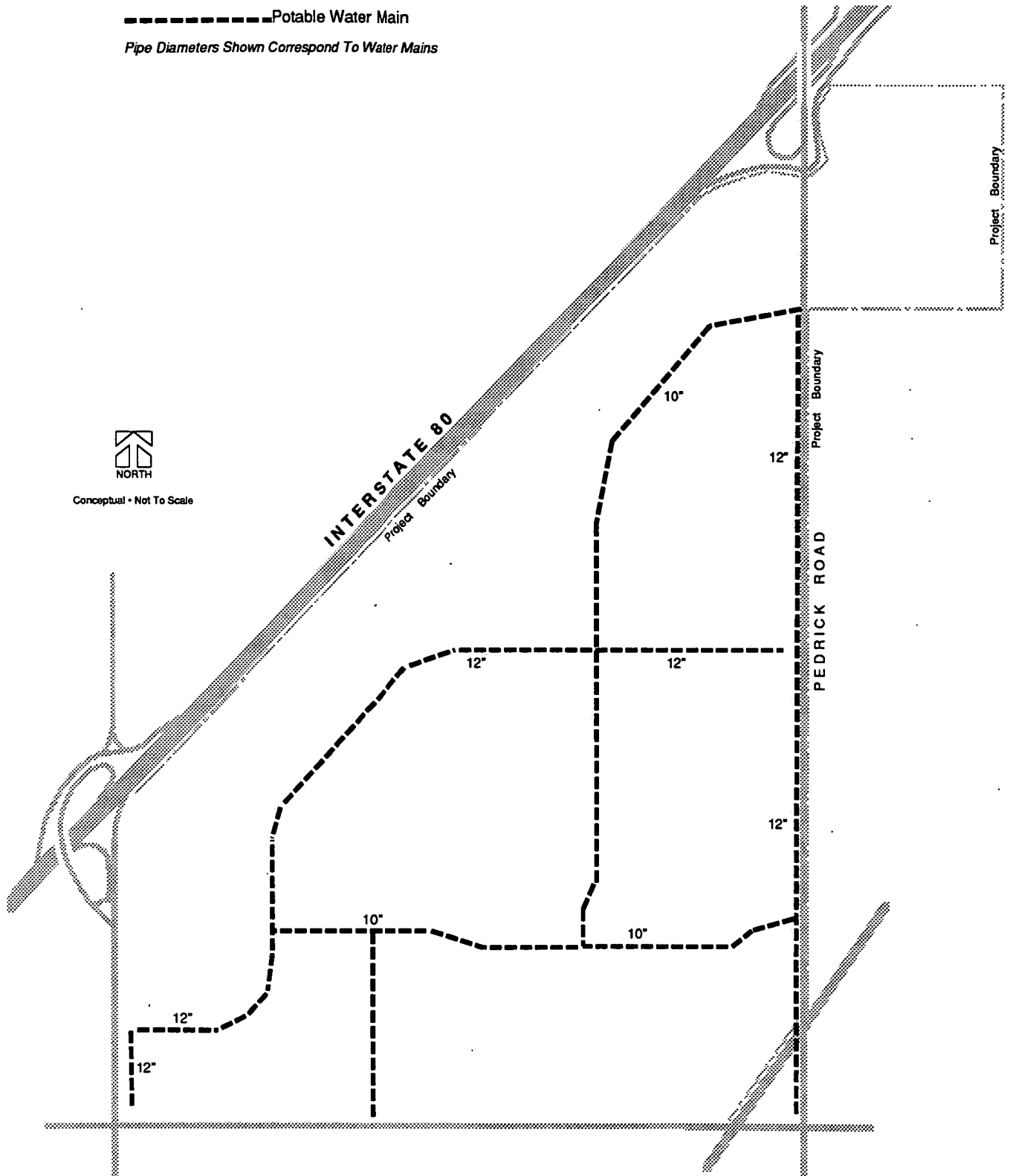


FIGURE 4.9.2
PROPOSED WATER SYSTEM

In addition, the system would include the extension of existing 12-inch water mains in Vaughn Road and North First Street into the project site at Arterial 'B', Pedrick Road, and Fitzgerald Way. The system would be designed to meet the requirements of the DSMWS with fire hydrants and mains installed to meet current fire prevention standards.

Present expansion plans of the DSMWS water service area include two new storage tanks which would increase capacity to 1.4 million gallons. Upon completion, overall pumping capacity of the system is expected to be 13,000 gallons per minute (gpm) or 18.7 million gallons per day (mgd) which will be reached at projected buildout date of 2005.

Mitigation Measures PS-B: Prior to the issuance of a building permit, the project proponent shall obtain evidence that a water supply is available to meet the minimum demand (2.3 mgd) of the project and submit this evidence (will serve letter) to the City of Dixon.

Residual Significance: Less than significant

4.9.1.4 CUMULATIVE IMPACTS

Impact PS-3: Implementation of cumulative development in the area would generate the need for additional water supply, conveyance, treatment and storage facilities and services.

Significance: Less than significant

Cumulative development would generate the need for approximately 5 mgd of water. This impact is not considered to be significant because the City of Dixon is currently anticipating growth (as identified in the general plan) and public services and utility districts are planning to serve this future growth. It is unlikely that cumulative water needs would exceed the service capacity of local water purveyors if the development of each cumulative project is contingent upon providing evidence for or acquiring an adequate water supply.

Residual Significance: Less than significant

4.9.2 WASTEWATER

4.9.2.1 ENVIRONMENTAL SETTING

The City of Dixon provides domestic wastewater collection and treatment for land within the corporate boundaries of the city as well as several unincorporated areas in the vicinity of the project site. Most other areas of unincorporated Solano County utilize individual septic systems. The City of Dixon wastewater treatment plant is located three miles south of the city. Treatment capacity is currently approximately 0.73 mgd. Current average daily flow into the treatment plant is approximately 1.2 mgd, which represents approximately 164 percent of existing capacity. A treatment capacity expansion project is currently under consideration which would expand primary treatment capacity to a total range of 1.8 mgd.

Existing sewer collection infrastructure in the vicinity of the project site consists of 10- and 12-inch sewer lines in North First Street. The remainder of wastewater generated by development in the city is collected by sewer lines varying in size from 6 - 27 inches in diameter.

It is anticipated that future services will be provided via a new 21-inch sewer line extending from the existing line on Industrial Way east, and north on Fitzgerald Way to the NQSP area. However, this is not planned to accommodate the region's ultimate capacity for the North First Street Assessment District. Future sewer trunk line capacity will require further expansion to the sewer line to accommodate the ultimate projected flows from the northeast area of Dixon to the sewage treatment plant.

As shown on Figure 4.9.3, the westerly most portion of the project site is located within the existing service area of the city. The remaining portion of the project site west of Pedrick Road is currently located within the North First Street Assessment District service area. Portions of the project site located east of Pedrick Road are not currently located within an existing service district boundary.

4.9.2.2 THRESHOLD SIGNIFICANCE

The following significance criteria were considered when determining the significance of the proposed project. Impacts to wastewater would be considered to be significant if the proposed project would:

- create a potential public health hazard or involve the use, production or disposal of waste materials which pose a hazard to people or to animals;
- contaminate a public water supply; and
- generate wastewater and local collection and treatment facilities ^{here} where not adequate to meet this demand.

4.9.2.3 ENVIRONMENTAL IMPACTS

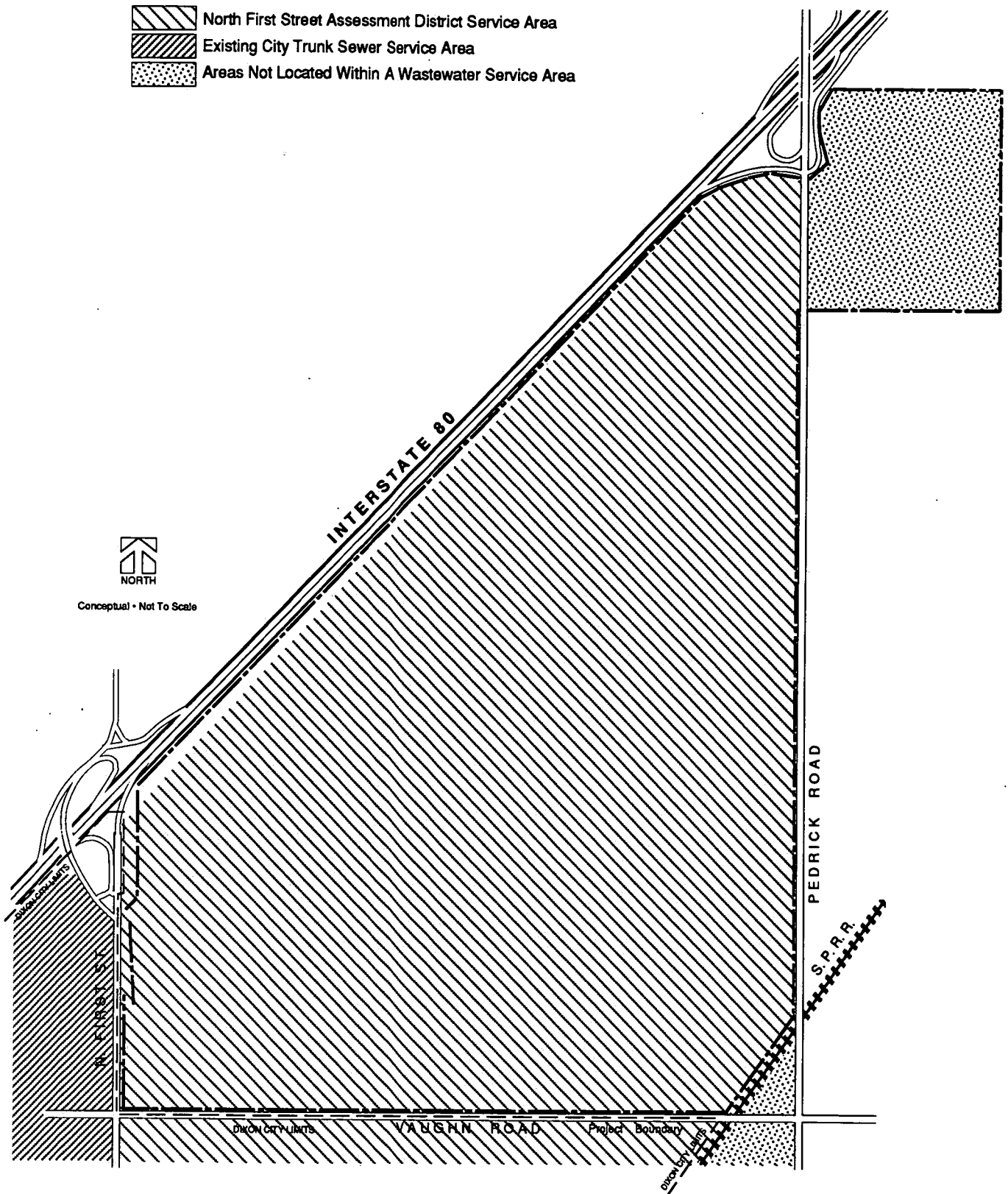
Impact PS-4: Buildout of the proposed NQSP would generate an average of 694,320 gpd and a peak flow of approximately 1.7 mgd of wastewater. Existing wastewater collection infrastructure would need to be extended to serve the project site.

Significance: Significant

The existing wastewater treatment facility is operating at 164% of capacity. Expansion plans will increase capacity to 1.89 mgd. Tables 4.9.2 and 4.9.3 show the wastewater projections of the NQSP as determined by the project's preliminary investigation of wastewater improvements prepared by Morton & Pitalo, Inc. This shows a projected average flow of 694,320 and a peak flow wastewater generation of 1,735,800 gpd based on the proposed land uses and acreages.

**TABLE 4.9.2
ESTIMATED WASTEWATER DEMAND - AVERAGE FLOW**

Land Use	Net Developable Acres	Average Flows (gpd)	Wastewater Generated (gpd)
Commercial	194.1	1,600	310,560
Professional Offices	105.4	1,200	126,480
Light Industrial	214.4	1,200	257,280
	513.9		694,320 gpd



**FIGURE 4.9.3
WASTEWATER SERVICE BOUNDARIES**

TABLE 4.9.3
ESTIMATED WASTEWATER DEMAND - PEAK FLOW

Land Use	Net Developable Acres	Peak Flow (gpd)	Wastewater Generated (gpd)
Commercial	194.1	4,000	776,400
Professional Offices	105.4	3,000	316,200
Light Industrial	<u>214.4</u>	3,000	<u>643,200</u>
	513.9		1,735,800 gpd

As shown on Figure 4.9.4, the NFSAD trunk sewer system would be extended from Fitzgerald Way to the intersection of Vaughn Road and Fitzgerald Way. The main collection system would then be extended eastward along Vaughn Road and north along Pedrick Road with branch lines connecting at Commercial Drive, Mistler Road and Professional Drive to serve the eastern half of the NQSP area. A lift station would be constructed at the intersection of Mistler Road and Pedrick Road. A second collection system would be extended north at Fitzgerald Way and west at Commercial Drive to collect wastewater from the western portion of the project site.

An area-wide assessment, including areas beyond the project site boundaries, may be required to fund the construction of the planned parallel 36-inch diameter trunk south of Hall Park to the wastewater treatment plant. The City of Dixon Public Works Department has indicated that the existing 27-inch trunk in First Street is nearing capacity and that a proposed parallel 36-inch main would need to be installed to serve future developments within the City of Dixon.

Prior to providing the necessary wastewater infrastructure and obtaining capacity at the city's wastewater treatment plant, portions of the project site not currently located within a sewer service area would need to be annexed to be considered for future service.




Mitigation Measure PS-C: Prior to the issuance of a building permit, evidence that the city's wastewater treatment plant has capacity to accommodate the proposed project shall be submitted to the City of Dixon.

Mitigation Measure PS-D: Prior to the issuance of a building permit, the 60 acres of the project site located east of Pedrick Road shall be annexed into the service district boundaries of the city's sewer service area.

Mitigation Measure PS-E: The project proponent shall be responsible for contributing to the appropriate hook-up fees to help offset the costs of necessary sewage treatment facility expansions. In addition, the project proponent shall be responsible for the construction of sewer lift stations, sewer mains and any other facility improvements deemed necessary to serve the proposed project.

Residual Significance: Less than significant

4.0 ENVIRONMENTAL ANALYSIS

-  Proposed Sewer Main
-  Existing Sewer Main
-  Lift Station

Pipe Diameters Shown Correspond To Sewer Mains

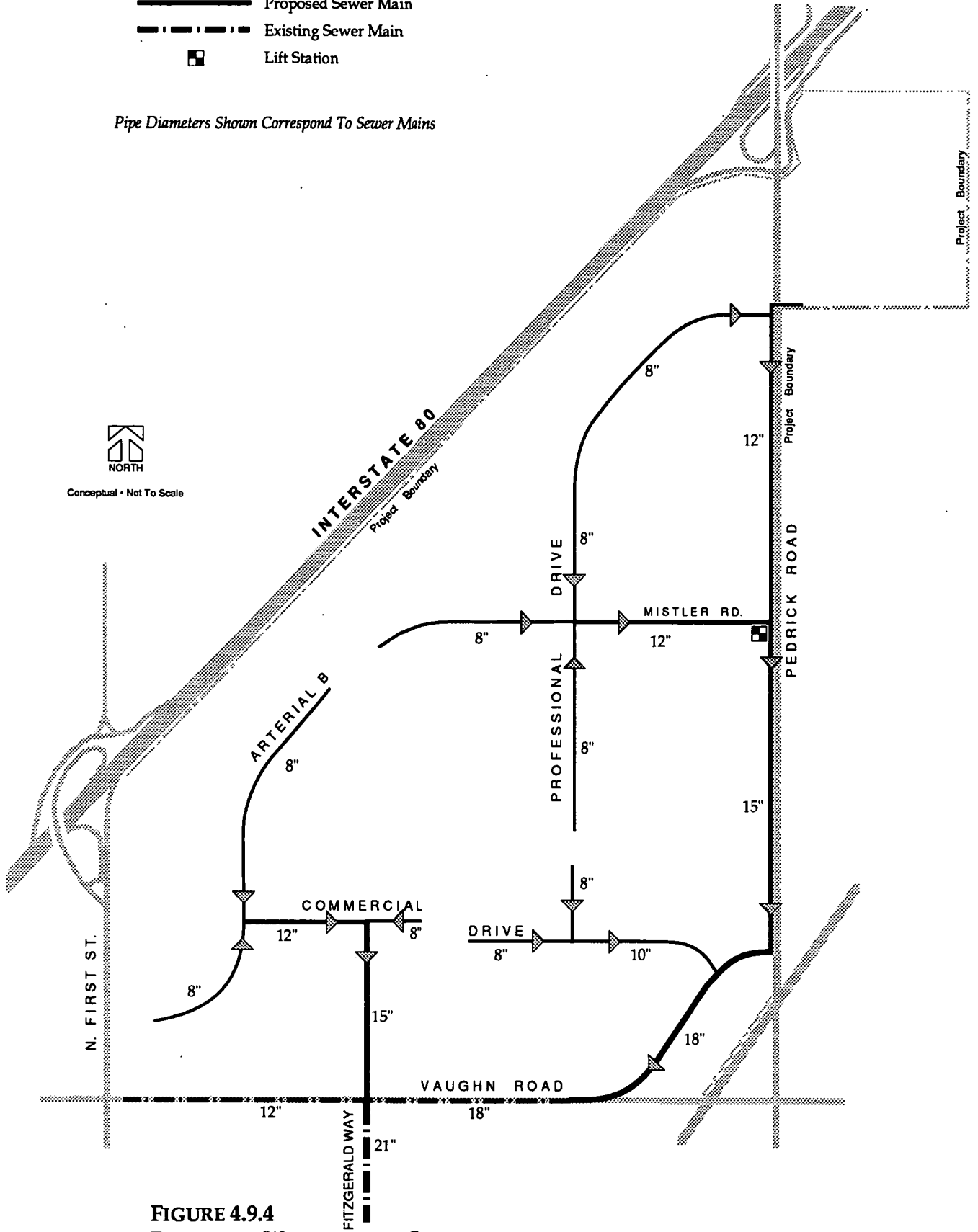


FIGURE 4.9.4
PROPOSED WASTEWATER SYSTEM

4.9.2.4 CUMULATIVE IMPACTS

Impact PS-5: Implementation of cumulative development in the area would generate wastewater which would need to be treated at the City of Dixon wastewater treatment plant.

Significance: Less than significant

Mitigation Measures: No mitigation required

Cumulative development would generate approximately 2.5 mgd of wastewater. This impact is not considered to be significant because the City of Dixon is currently anticipating growth and public service and utility districts are planning to serve this future growth. It is unlikely that cumulative wastewater generation would exceed the service capacity of the City of Dixon wastewater treatment plant if the development of each project is contingent upon providing evidence or acquiring an adequate amount of capacity at the plant.

Residual Significance: Less than significant

4.9.3 SOLID WASTE

4.9.3.1 ENVIRONMENTAL SETTING

The Dixon Sanitary Service, a private waste disposal company, provides collection and transfer services for solid waste generated within the City of Dixon and in the vicinity of the project site. They also serve Vacaville and Northern Solano County. There is generally one collection per week in residential, commercial, and light industrial area while the frequency of collection increases to three times per week for heavy industrial uses.

The solid waste collected in the vicinity is transported to the B&J Landfill located at 6426 Hay Road, west of State Highway 113, approximately eight miles south of the City of Dixon. This landfill is rated Class II, accepting only municipal waste. The landfill is currently several hundred acres in size with a 30 - 40 year life expectancy remaining. The current average daily quantities received at the landfill is 250 tons.

Recycling programs for glass, aluminum and paper are privately operated and are located in the City of Dixon. In addition, tires, auto batteries, freon and white goods (refrigerators and other household appliances) are recycled at the landfill by Vacaville Sanitary Service.

4.9.3.2 THRESHOLD SIGNIFICANCE

The following significance criteria was considered when determining the significance of the proposed project. Impacts to the collection, transfer and storage of solid waste would be considered to be significant if:

- local solid waste collection and disposal services and facilities were not adequate to accept solid waste;
- opportunities for feasible recycling of substantial amounts of resources would be neglected; or
- collection services were substantially impeded.

4.9.3.3 ENVIRONMENTAL IMPACTS

Impact PS-6: Implementation of construction activities would generate lumber, sheetrock, and other scrap materials during construction. In addition, implementation of the proposed project would generate approximately 138,992 pounds of solid waste per day.

Significance: Significant

Materials not suited to be disposed of in a Class II landfill may also be generated within the proposed project. Please refer to Section 4.11 for a complete discussion of the generation of hazardous materials.

Mitigation Measure PS-F: Prior to final map approval, the project proponent shall submit a construction waste; commercial and industrial; and an open space waste recycling program for long-term handling of recycled waste from the project site.

Mitigation Measure PS-G: The project proponent shall provide provisions for an on-site recycling center for commercial and industrial uses. In addition, adequate collection facilities for recyclable materials shall be located throughout the project site including outside storage and collection containers.

Mitigation Measure PS-H: Grass clippings, prunings and other organic waste resulting from open space maintenance are classified as clean waste and shall be made available for composting or recycling.

Residual Significance: Less than significant

4.9.3.4 CUMULATIVE IMPACTS

Impact PS-7: Implementation of cumulative development in the area would generate solid waste which would need to be disposed of in the B&J Landfill.

Significance: Less than significant

Mitigation Measures: No mitigation required

Cumulative development would generate approximately 228,698 pounds of solid waste. This impact is not considered to be significant because this facility is expecting growth. It is unlikely that cumulative solid waste generation would exceed the service capacity of the landfill if development of each cumulative project was to provide and encourage recycling as well as obtain a will serve letter prior to approval of each project.

Residual Significance: Less than significant

4.9.4 FIRE PROTECTION SERVICES

4.9.4.1 ENVIRONMENTAL SETTING

Fire protection services in the City of Dixon and in surrounding unincorporated areas is provided by the Dixon Fire Department. The Dixon Fire District includes a 300-square mile rural area extending from the community of Winters to Rio Vista. The Dixon Fire Department operates from three stations with a staff of four paid firefighters, 56 volunteer firefighters and one part-time office clerk. The department's main station, located on North Jackson Street in central Dixon, is considered the first response station for the proposed project and maintains an eight-minute response time to the project site.

The City of Dixon is served by Foothill Ambulance, which provides basic and advanced life support, emergency and non-emergency services. The ambulance service is located in the City of Davis and average response times for emergency calls originating in the City of Dixon involve approximately 12 minutes.

The City of Dixon currently collects fire protection impact fees, consistent with Assembly Bill 1600, to fund the expansion of existing fire protection facilities. Current development fees for impacts on fire protection services are \$600/single family unit, \$655/multi-family unit, \$0.18/square foot of industrial uses and \$0.15/square foot of commercial uses.

4.9.4.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing fire protection services if:

- a response time is greater than five minutes;
- less than one firefighter per an additional 1,000 population exists;
- commercial structures larger than 4,000 square feet do not have built-in fire protection provisions;
- fire stations are further than one and one-half miles from new development; or
- water systems cannot provide flows of 4,000 gpm for a minimum two hour period.

4.9.4.3 ENVIRONMENTAL IMPACTS

Impact PS-8: The substantial increases in employees and structures associated with implementing the NQSP would increase the demand for fire protection and emergency medical aid services provided by the Dixon Fire Department and Foothill Ambulance.

Implementation of the proposed project would result in a net new daytime employment population of approximately 11,000 and 512 acres of commercial, business-professional, and light industrial structures and uses. Both the Dixon Fire Department and Foothill Ambulance currently do not have the employees, facilities, or the equipment to handle the response required from the proposed project.

Significance: Significant

Mitigation Measure PS-I: Prior to recordation of a final map or issuance of a grading permit, the project proponent shall either dedicate land for a fire station and provide financial contributions toward equipment and/or personnel or shall participate in

establishment of an assessment district in which all property owners in the area would dedicate funds towards establishment of adequate fire protection facilities.

Mitigation Measure PS-J: Prior to the issuance of building permits, the project proponent shall design and submit a plan to the Dixon Fire Department showing all required fire hydrant locations, detailed calculations to determine fire flow based on future structural design requirements, and access to all developed areas in accordance with city standards.

Mitigation Measure PS-K: Prior to the issuance of building permits, the project proponent shall prepare and submit a plan for emergency response including details of each proposed facility and the business conducted, an inventory of hazardous materials handled or stored on-site and a training program for employees.

Residual Significance: Less than significant

4.9.4.4 CUMULATIVE IMPACTS

Impact PS-9: Cumulative development in the area would impact existing fire protection and emergency medical aid services.

Significance: Less than significant

Mitigation Measures: No mitigation required

This impact is not considered to be significant because existing agencies and services are anticipating growth and future growth would be expected to pay its fair share for facilities and equipment. It is unlikely that cumulative projects would exceed the service capacity of the responsible fire protection agency if they are mitigated with the measures identified above

Significant impacts to existing fire protection and emergency medical aid services would be reduced to a level below significant, if the identified mitigation measures in the previous section are implemented

Residual Significance: Less than significant

4.9.5 POLICE PROTECTION

4.9.5.1 ENVIRONMENTAL SETTING

Law enforcement in the vicinity of the project site is currently provided by the Solano County Sheriff's Department. In addition, the Dixon Police Department (DPD) responds to urgent calls in areas adjacent to the City of Dixon, including the project site. The DPD is located near the intersection of South Jackson and "A" Streets, in the City of Dixon and employs 21 employees. The department employs 17 sworn officers, who are responsible for conventional law enforcement tasks (making arrests, traffic stops, serving warrants etc.) and four non-sworn personnel responsible for administrative and community service duties.

4.9.5.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing police protection services if:

- additional personnel and/or equipment is required, based on department standards for service calls per officer, and no commitment has been made for a long-term funding source for this additional service; or
- a project would significantly hinder police access and surveillance capabilities.

4.9.5.3 ENVIRONMENTAL IMPACTS

Impact PS-10: Implementation of the proposed project would increase the daily population in the City of Dixon which would generate additional traffic on local roadways. Implementation of the project would also generate additional traffic accidents, vehicle thefts, office burglaries, vandalism, and personal disputes.

The exact number of crimes associated with the proposed project cannot be accurately forecasted, however, the project would generate the need for additional police protection services. Although existing law enforcement staffing levels are adequate at present, existing staff and equipment are not adequate to maintain a sufficient level of service at buildout of the proposed project.

The DPD has indicated that upon annexation into the city, the department would provide police protection services to the site. The department does not anticipate the need for a new substation, however, Chief Fuller has indicated that the proposed project would require the need to establish a new beat which would necessitate one additional officer per shift. This would result in a total of four additional officers. This increase is mainly expected due to the higher service needs associated with the proposed highway commercial uses.

Significance: Significant

Mitigation Measure PS-L: Prior to final map approval or issuance of a building permit, the project proponent shall request the city to commit to increase funding for necessary police services and required equipment. The city shall also verify that funding can be increased during buildout of the proposed project, through either a combination of impact fees imposed on new development and/or an increase in general fund allocations. In any event, the project proponent shall be responsible for paying its fair share for additional staff and equipment to serve the project site. This shall be established prior to occupancy of any structure occupying the project site.

Mitigation Measure PS-M: The project proponent shall be responsible for providing an on-site private security staff to adequately serve the proposed project. This staff would be responsible for securing future structures and providing security in parking lots during and after normal business hours.

Residual Significance: Less than significant

4.9.5.4 CUMULATIVE IMPACTS

Impact PS-11: Cumulative development in the area would impact existing police protection services.

Significance: Less than significant

Mitigation Measures: No mitigation required

This impact is not considered to be significant because existing agencies are anticipating growth and future growth would be expected to pay its fair share for additional staff, facilities and equipment. It is unlikely that cumulative projects would exceed the service capacity of the DPD if projects are required to mitigate impacts with mitigation measures similar to the mitigation presented below.

Residual Significance: Less than significant

4.9.6 EDUCATIONAL FACILITIES

4.9.6.1 ENVIRONMENTAL SETTING

The proposed project is located within the boundaries of the Dixon Unified School District (DUSD) which serves the City of Dixon and the northern portion of Solano County. The DUSD serves kindergarten through grade twelve at one of six educational facilities. Student enrollment in grades K-12 in 1992 was 3,006 students with a capacity of 3,332. This indicates that existing educational facilities are below capacity, however, actual capacity at each school and within each classroom fluctuates.

The DUSD is constantly expanding its facilities to serve the existing and proposed student populations. The District has recently completed construction of a new elementary school as well as a continuation high school. Additional elementary schools are also planned to be constructed to serve new residential development within the area.

4.9.6.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing educational facilities if:

- school capacities would be substantially exceeded, due to new students generated by a proposed project.

4.9.6.3 ENVIRONMENTAL IMPACTS

Impact PS-12: Implementation of the proposed project would increase the daily population in the City of Dixon, however, it would not directly increase student enrollment at any of the existing educational facilities.

According to the DUSD's Twenty year Facilities City-Wide Plan non-residential development does indirectly impact the capacity of educational facilities and should have to contribute its fair share to fund future facilities.

Significance: Potentially significant

Mitigation Measure MS-N The project proponent shall be responsible for paying \$0.27 per square feet of commercial and industrial development consistent with Assembly Bill 2926, which requires the contribution of developer's fees to fund future educational facilities.

Residual Significance: Less than significant

4.9.6.4 CUMULATIVE IMPACTS

Impact PS-13: **Implementation of cumulative development in the area could impact existing educational facilities and services.**

Significance: **Less than significant**

Mitigation Measures: No mitigation required

However, this impact is not considered to be significant because existing agencies are anticipating growth and future growth would be expected to pay its fair share for additional teachers, facilities, and equipment. It is unlikely that cumulative projects would exceed the service capacity of the DUSD if projects are required to mitigate impacts with mitigation measures similar to the one presented below.

Residual Significance: Less than significant

4.9.7 ELECTRICITY AND NATURAL GAS

4.9.7.1 ENVIRONMENTAL SETTING

Electricity and natural gas in the vicinity of the project site is currently provided by Pacific Gas & Electric Company (PG&E). The project site is currently served by several 12 kilovolt (kV) overhead electrical lines located along North First Street, Vaughn, and Pedrick Roads to serve the on-site existing residences and the B&M Trucking Operation. While no natural gas distribution facilities are currently available to serve the project site, existing natural gas mains, maintained by PG&E, are located within the right-of-ways of North First Street, Vaughn and Pedrick Roads.

4.9.7.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing electricity and natural gas facilities if:

- existing or proposed electrical and natural gas distribution facilities were not adequate to serve the proposed project.

4.9.7.3 ENVIRONMENTAL IMPACTS

Impact PS-14: **Implementation of the proposed project would generate the need for electricity and natural gas services.**

Significance: **Less than significant**

Mitigation Measures: No mitigation required

PG&E has indicated that it would be able to serve the proposed project as long as distribution capabilities were increased. In addition, the project proponent would be responsible for upgrading existing electrical and natural gas mains, distribution facilities and substations to serve the project site.

Residual Significance: **Less than significant**

4.9.7.4 CUMULATIVE IMPACT

Impact PS-15: **The project will cumulatively contribute to the need for energy in the project area.**

Significance: **Less than significant**

Mitigation Measures: **No mitigation required**

Residual Significance: **Less than significant**

4.9.8 TELECOMMUNICATIONS

4.9.8.1 ENVIRONMENTAL SETTING

Telecommunications in the vicinity of the project site is currently provided by the Pacific Bell Telephone Company. The project site is currently served by overhead telephone lines located along Vaughn Road.

4.9.8.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing telecommunications facilities if:

- existing or proposed telephone facilities were not adequate to serve the proposed project.

4.9.8.3 ENVIRONMENTAL IMPACTS

Impact PS-16: **Implementation of the proposed project would generate the need for telecommunications services and facilities.**

Pacific Bell has indicated that it would be able to serve the proposed project.

Significance: **Less than significant**

Residual Significance: **Less than significant**

4.9.9 PARKS AND RECREATIONAL FACILITIES

4.9.9.1 ENVIRONMENTAL SETTING

Parks and recreational facilities in the vicinity of the project site are currently operated and maintained by the City of Dixon. The city currently has responsibility to operate and maintain four municipal parks which serve the existing population of the area. Hall Park consists of 32 developable acres and provides tennis courts, ballfields, a swimming pool,

children's play equipment, picnic facilities and an amphitheater. Northwest Park consists of 22 acres and provides facilities for soccer games. Women's Improvement Club Park provides one-acre picnic facilities. In addition to the three active parks, the city also maintains a one-acre linear greenbelt which provides for passive recreational and visual amenities.

4.9.9.2 THRESHOLD SIGNIFICANCE

A project is considered to have a significant impact to existing parks and recreational facilities if:

- existing or proposed facilities were not adequate to serve the proposed population of a project.

4.9.9.3 ENVIRONMENTAL IMPACTS

Impact PS-17: Implementation of the proposed project would involve construction of commercial, administrative office, and industrial uses and would not generate the need for additional public parks and recreational facilities. The need for private recreational facilities would be necessary for future employees who might want to exercise during lunch or in the evening.

Proposed zoning would allow the development of a private recreational facility or club. In addition, most larger employers are incorporating recreational facilities within existing business establishments.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

4.9.9.4 CUMULATIVE IMPACTS

Impact PS-18: The project will have a minimal impact on cumulative park and recreation facilities.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

4.9.9.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The implementation of the NQSP will potentially have a significant impact on water, wastewater, solid waste, fire protection, police protection, educational facilities and electrical and natural gas. However, the mitigation measures identified for each impact can reduce the impact to a less-than-significant level.

4.10 VISUAL RESOURCES

4.10.1 ENVIRONMENTAL SETTING

EXISTING VISUAL CHARACTER OF THE REGION

The existing visual character of the City of Dixon is characterized by urban uses (residential, commercial establishments, industries, roadways, a railroad line, schools, parks and the supporting infrastructure) surrounded by agricultural uses. The architectural features associated with some of the structures within the Dixon area lend a certain historical character to the area and reflect a period when the City of Dixon served as the primary service center for a population which was, for the most part, actively involved in agricultural operations.

The undeveloped portions of the city retain the visual characteristics associated with active agricultural operations and there are no physical landmarks which dominate the generally flat visual landscape of the area.

EXISTING VISUAL CHARACTER OF THE PROJECT SITE

The existing visual character of the project site is determined by land forms, land uses, vegetation, structures, and roads. The existing visual character exhibits some variation in color, form and texture resulting from planting and harvesting seasonal crops. The site consists of topography that is essentially flat, with vertical variations of approximately twenty-five feet between the lowest and highest portions within the 643-acre site. The man-made boundaries of the site include Interstate 80 to the north, Vaughn Road to the south, Pedrick Road and agricultural land to the east and North First Street to the west as shown.

The project site does not contain any visually distinctive topographic features. The fairly level site is the result of geologic and hydrologic processes and of continued agricultural production. Historically, the site has been intensively cultivated to grow field and orchard crops. At present, approximately 580 acres of the site is used for field and row crops, and the remainder of the project site contains a livestock auction facility, Christmas tree farm (vacant), a trucking and maintenance operation, industrial fabrication/storage facility, a farm and eleven residential structures. The project site provides a substantial area of visual open space adjacent to I-80 because of the predominantly agricultural uses.

Surrounding undeveloped areas are visually similar to the project site, characterized by relatively flat topography and either used for agricultural production or vacant. Existing urban development is located adjacent to the west, south and east boundaries. Interstate 80 traverses the northern portion of the project site and further north there are several farms, a building supply facility and a produce stand. South of Vaughn Road lies the Kragen Auto Distribution Center, the SPRR and a metal fabrication facility. East of Pedrick Road lie several storage tanks, a trucking facility, the Dixon Canning facility, a farm, and agricultural uses. West of the project site and North First Street lie the Farm Credit Bureau and Cattlemen's Restaurant. All development on and adjacent to the project site is fairly visible from all portions of the subject site and from roadways in the vicinity, including Interstate 80, North First Street, Vaughn Road and Pedrick Road.

PROJECT VIEWSHEDS

The project site is highly visible from Interstate 80, Vaughn Road, Pedrick Road, and North First Street. Except for some partial screening due to intermittent trees, there are broad vistas from the Interstate along the entire site. Open views are afforded along North First Street, except where obscured by the Christmas tree farm and the auction facility. The northwest corner of the project site is the most obscured as a result of the farm related tree cover and the I-80/S.R. 113 Interchange. The northeast corner of the site is completely exposed with open views from both Pedrick Road and I-80. The southwest corner is somewhat screened by the existing facilities and the surrounding walnut orchard. Partial views are possible from Vaughn Road with orchards limiting much of the area north of the project site.

Figure 4.10.1 displays a photograph location key and Figures 4.10.2 - 4.10.5 depict views of the site and surrounding land uses.

SCENIC HIGHWAY DESIGNATIONS

The Scenic Roadways Element of the County of Solano's General Plan designates North First Street south of Interstate 80 and the segment of Interstate 80 adjoining the project site as "scenic roadways". The element states that commercial and industrial development along designated scenic roadways should be subject to design review procedures, and that the placement of off-site advertising should be prohibited, except for standardized sign programs that provide signage for roadway related services. The element identifies foreground and distant components that are important visual features along designated scenic roadways and contains specific policies to preserve these features. The foreground components identified within the project site include flat croplands and grasslands. Distant view components are made up of open fields, windbreaks and, to the west, the English Hills and Vaca Mountains.

DIXON GENERAL PLAN

Policy II-22 in the updated City of Dixon General Plan supports the preservation and maintenance of visual separation between developed areas of City of Dixon and the freeway corridor. Elements used to create a sense of separation may include vegetation, landscaping, berms, and devices other than standard acoustical walls.

4.10.2 THRESHOLD SIGNIFICANCE

The CEQA Guidelines state that significant effects on the environment include substantial, or potentially substantial, demonstrable adverse changes on objects having aesthetic significance. Under CEQA Guidelines Appendix I, two criteria for determining significant aesthetic effects are obstruction of a scenic vista or public view, and creation of an aesthetically offensive site open to public view. Another criterion of the CEQA Guidelines in determining a project's potential to result in a substantial, negative aesthetic effect is the potential for impairment of scenic quality, considered under CEQA Guidelines to be part of the resource base.

Analysis of aesthetic impacts under CEQA Guidelines criterion of significance requires identification of important public views of, and through the project site, and evaluation of the following two types of potential adverse effects:

- the effects of the project on the availability of important public views; and
- the effects of the project on the scenic quality of the project site or on objects of aesthetic significance (the site itself or features of the site).

Note: Arrows Correspond To Photographs On Figures 4.9.2 - 4.9.5

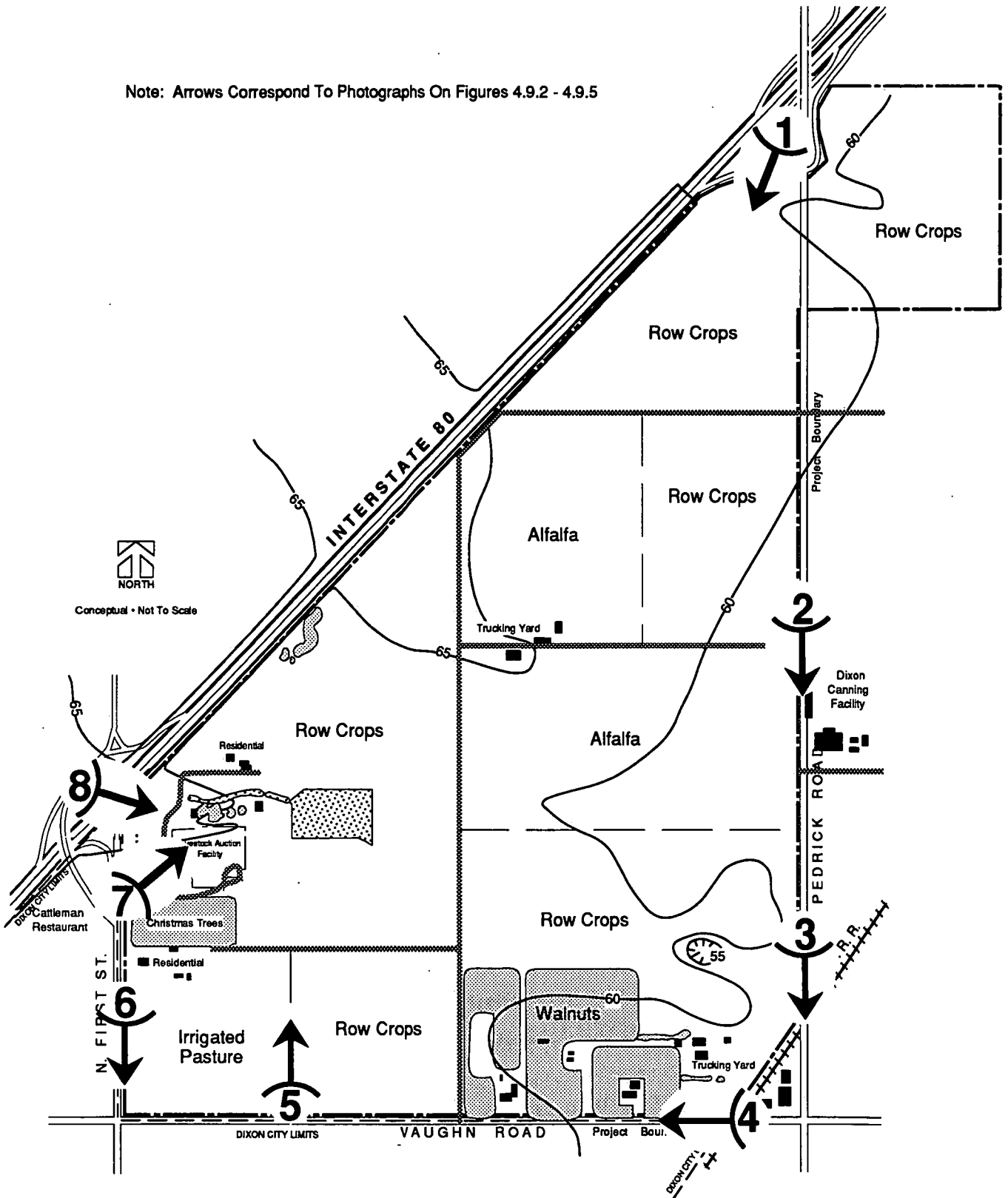
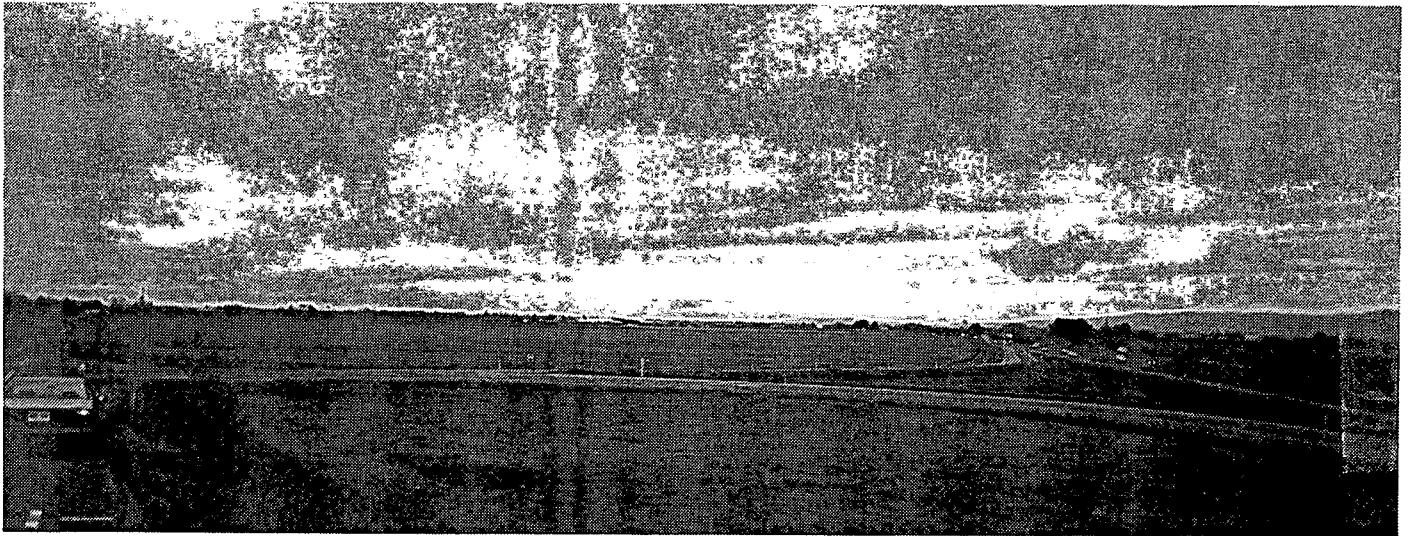


FIGURE 4.10.1
PHOTOGRAPH LOCATION KEY



Photograph 1: View looking south at the northeast portion of the project site from the Pedrick Road/I-80 Interchange.



Photograph 2: View looking south on Pedrick Road. The Dixon Canning Facility is located on the left side of Pedrick Road and the project site is located on the right.

FIGURE 4.10.2
SITE PHOTOGRAPHS

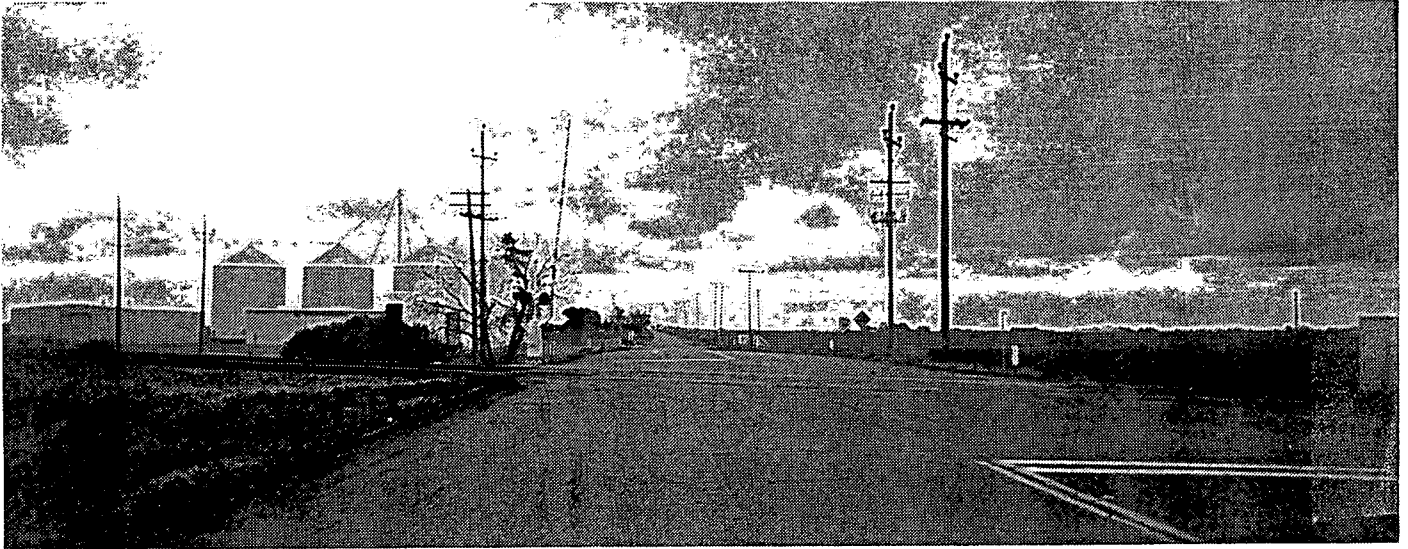


Photograph 3: View looking northwest on the project site. The field yields row crops.

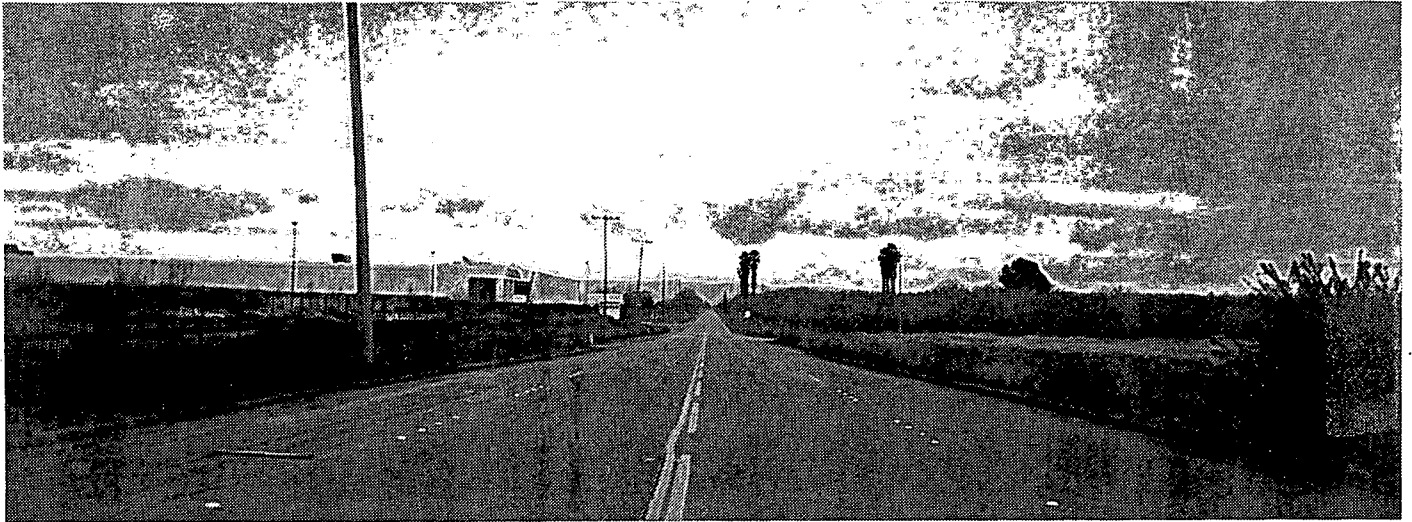


Photograph 4 : View looking south on North First Street. The Farm Credit Bureau is located on the right and the project site is located on the left.

**FIGURE 4.10.3
SITE PHOTOGRAPHS**

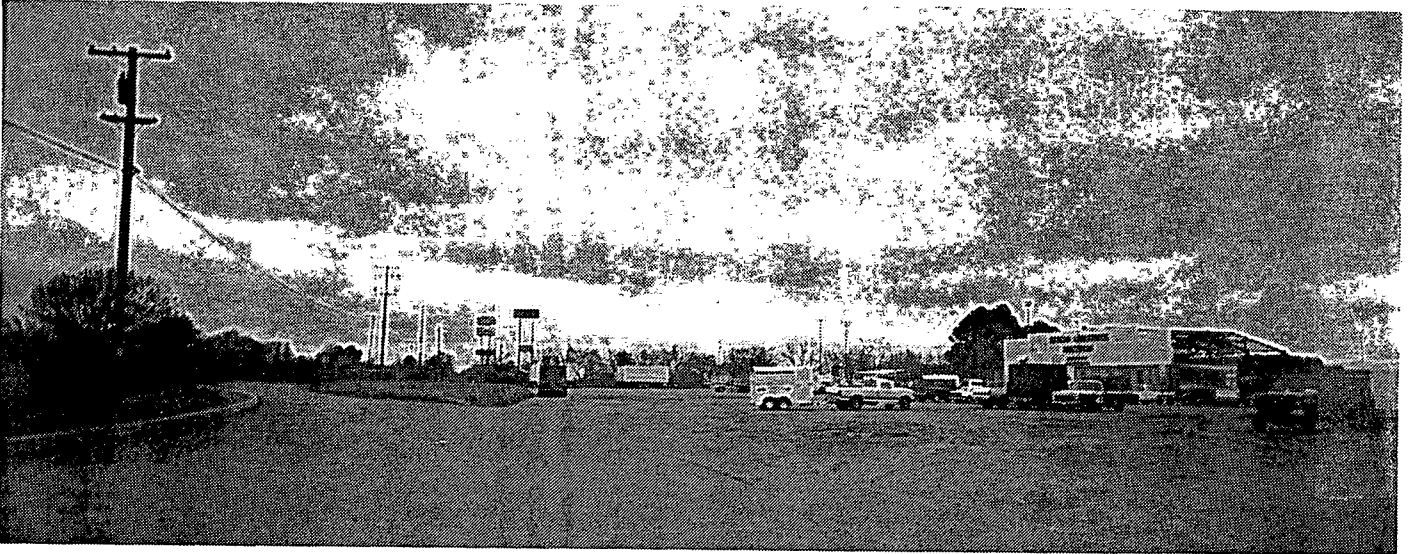


Photograph 5: View looking south on Pedrick Road at the Southern Pacific Railroad and some existing storage tanks. The project site is located on the right side of the project site.



Photograph 6: View looking west on Vaughn Road at the Kragen Auto Distribution Center to the left and the existing walnut orchard (right) located on the project site.

FIGURE 4.10.4
SITE PHOTOGRAPHS



Photograph 7: View looking north at the existing livestock auction facility.



Photograph 8: View looking southeast at the project site from the North First Street/I-80 interchange. The majority of the project site is visible from I-80.

**FIGURE 4.10.5
SITE PHOTOGRAPHS**

NQSP include provisions for the NQSP area to function as a principal entry or gateway to the City of Dixon. The special landscape enhancement along the frontage area of Interstate 80 and North First Street serves the dual purpose of complimenting the adjoining land uses while accentuating the gateway environment to the City Scenic Roadway Landscape Treatment. Special landscape provisions are required for areas along the Interstate 80 and North First Street rights-of-way to create a variegated edge of open space, landscaping and development. The NQSP also provides numerous policies to ensure the visual enhancement of future development within the plan area including: Project Design Guidelines (3.2.1); Pedestrian Circulation (3.2.2); General Architectural Guidelines (3.2.3) Street Landscape Guidelines (3.2.4); Landscape Adjacent to Natural Open Space Areas (3.2.5); Screening and Fencing Guidelines (3.2.6); Lighting Guidelines (3.2.7); Signage (3.2.8); and Street Furniture (3.2.9).

Residual Significance: Less than significant

FUTURE DEVELOPMENT

Impact VR-2: Development of the proposed project would change existing views from I-80, North First Street, Vaughn Road and Pedrick Road.

Significance: Less than significant

Mitigation Measures: No mitigation required

The proposed Northeast Quadrant Specific Plan (Appendix C) proposes special landscaping and design guidelines and screening provisions for areas of the site that are adjacent to scenic highways and roadways. The plan further establishes siting and design requirements and review procedures to ensure visual compatibility and aesthetic appropriateness of the proposed uses along I-80, North First Street, Vaughn Road and Pedrick Road. No further mitigation is required.

Residual Significance: Less than significant

LIGHT AND GLARE

Impact VR-3: Implementation of the proposed project would generate daytime glare and reflections off building finishes and vehicles in parking lots. In addition, the project would result in an increase in nighttime lighting from adjacent locations and scenic highways.

Significance: Significant

The Northeast Quadrant Specific Plan proposes a set of lighting guidelines which are intended to provide safety and security as well as mitigate nighttime glare for project occupants, adjacent land uses and motorists. The guidelines address the use of high pressure sodium vapor lights with cutoff-style fixtures to reduce flare impacts.

The inclusion of the following mitigation measure will further reduce the potential impact of daytime glare:

Mitigation Measure VR-A: Bare metallic surfaces such as pipes, vents, gutters, and flashings shall be painted or concealed from view in a

manner harmonious to the structure. All flashing and sheet metal must be treated to match the adjacent materials.

Mitigation Measure VR-B: Primary roofing materials shall be non-reflective.

Mitigation Measure VR-C: Monolithic glass structures shall not be allowed unless used as a portion of a building to highlight an entry.

Mitigation Measure VR-D: Building mass colors shall be of varied hues that minimize glare with bright colors limited to use around doors, trims, awnings and other pedestrian-oriented features.

Residual Significance: Less than significant

4.10.4 CUMULATIVE IMPACTS

Impact VR-4: The long-term visual aesthetic issue associated with implementation of cumulative development generally includes the replacement of visual qualities of natural and altered open space with urban uses associated with development.

Significance: Less than significant

Mitigation Measures: No mitigation required

The Dixon General Plan, Solano County General Plan, the Dixon Northeast Quadrant Specific Plan and all other specific plan documents associated with the cumulative development of the region have established goals, policies, guidelines and/or standards for development occurring in the area. As future development projects are proposed, each individual project is subject to separate environmental review by city and county staff members to ensure that visual effects and impacts are minimized. Therefore, cumulative development would not result in cumulative visual aesthetic impacts.

Residual Significance: Less than significant

4.10.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the Dixon Northeast Quadrant Specific Plan reduces most visual impacts to a level below significant while the mitigation measures VR-A, -B, -C, and -D reduce impacts associated with daytime glare to non-significant levels. Therefore, the project will have a less-than-significant impact on visual resources.

4.11 PUBLIC HEALTH AND SAFETY

The following section describing the public health and safety of the project site was compiled from information contained in a Preliminary Site Assessment prepared by the Anderson Consulting Group (1993). Appendix E of the Technical Appendices contains a copy of the project site specific Preliminary Site Assessment.

4.11.1 ENVIRONMENTAL SETTING

A number of properties may cause a substance to be considered hazardous, including toxicity, ignitability, corrosivity or reactivity. For the purposes of this discussion, a hazardous materials is defined as a substance or combination of substances which, because of its quantity, concentration, physical, chemical or infectious characteristics, may either: 1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed according to the California Code of Regulations, Title 22, Division 4, Environmental Health, Section 66084.

Once a hazardous material is ready for discard, it becomes a hazardous waste. The same criteria that renders a material hazardous make a waste hazardous: toxicity, ignitability, corrosivity or reactivity. Toxic, ignitable, corrosive and reactive materials are all subsets of hazardous materials and wastes. For example, if a material is toxic, it is hazardous, but not all hazardous materials are toxic.

PRELIMINARY SITE ASSESSMENT

EXISTING LAND USES

The preliminary site assessment performed in July of 1993 identified five businesses located on the project site including: 1) Dixon Livestock Auction Yard; 2) Mistler Trucking Facility; 3) Bartholomew Enterprises; 4) plumbing business; and 5) former Budget Inn property. With the exception of the fifth business, which has closed, all of these facilities currently handle hazardous materials. The following concerns were noted at these sites:

- There were two independent fuel storage tanks at the Dixon Livestock Yard, which may be 40 years old, or older. At the time of the preliminary assessment the tanks were not used and were scheduled for removal in 45 days.
- Areas of soil staining from petroleum spillage were noted in both the livestock yard and the Mistler Trucking/Mistler Farms property.
- A trench containing garbage was noted on the Mistler Trucking/Mistler Farms site.
- Equipment for steam cleaning was noted on the Mistler Trucking/Mistler Farms property, and at the Bartholomew Enterprises property. If steam cleaning has been done, automotive fluids from the vehicles could have infiltrated the soil in this area, resulting in soil contamination.
- A gas well was noted east of the Mistler yard. If the well's use is to be discontinued in the future, it is important that the well be properly abandoned. Otherwise, petroleum products from the well may continue to contaminate the shallow groundwater aquifers.
- Three underground fuel-storage tanks were removed from the Bartholomew Enterprises site in 1985: one 550-gallon tank with unleaded gasoline, one 550-gallon tank with leaded gasoline, and one 1,000-gallon tank with diesel fuel.

In addition to the above mentioned business, there are a total of eight single-family residences located on-site. The residences are equipped with garages, barns, and various out-buildings. It should be assumed that each of these properties may have at one time maintained underground storage tanks to store heating fuel and possibly vehicle fuels. Given the agricultural setting, it is also likely that these properties have been used to store and mix pesticides.

4.0 ENVIRONMENTAL ANALYSIS

The fields on the site have been used to grow tomatoes, almonds, hay, alfalfa, dry grains, and other miscellaneous row crops, as well as to graze sheep. A large number of pesticides may have been applied to these crops over the years.

According to Mr. Mack Cody of the Solano County Agricultural Commissioner's Office (Personal communication), the following pesticides may have been used on the site:

- Dry Grains and Wheat: 2, 4-D, MCPA, Banville, Disyston;
- Tomatoes: Sevin, Diazinon, Lannate, Disyston, Parathion, Methyl Parathion, Other General Organophosphates, Other General Carbamates;
- Sugar Beets: Disyston, Lannate, Monitor, Phosdrin, Parathion, Methyl Parathion, Sevin, Metasystox, Other General Organophosphates, Other General Carbamates;
- Alfalfa: Furadan, 2,4-D, Gromoxyn, Paraquat;
- Corn: Lasso, 2, 4-D, Banville, Parathion, Methyl Parathion;
- Almonds: Benolate Copper, Captan, Diazinon, Parathion, 2, 4-D, Princep, Karmax;
- Walnuts: Benolate Copper, Captan, Diazinon, Parathion, 2, 4-D, Princep, Karmax, Lorsban;
- Insect control at Auction Yard: Malathion, Coopertex.

SURROUNDING LAND USES

The project site is surrounded with commercial, industrial, and agricultural, uses including: 1) a Caltrans maintenance yard; 2) five service stations (closed); 3) a warehouse for Krage Auto Parts; 4) a cashew treating facility (closed) which had stored large quantities of Anhydrous ammonia; 5) the Dixon Canning Company; and 6) Smith's Auto Repair.

At the time of the preliminary site assessment, environmental investigations were underway at four of the five former service stations, and the Caltrans yard. Information that is currently available does not indicate that the project site has been adversely affected by surrounding uses.

REGULATORY SETTING

The management, transportation, and disposal of hazardous materials and wastes in Solano County are regulated by the Environmental Protection Agency (EPA), U.S. Department of Transportation (DOT), California Department of Health Services (CDHS), California State Water Resources Control Board, and California Regional Water Quality Control Board (CRWQCB), California Highway Patrol (CHP), and the State Fire Marshal. In addition, all development must be in compliance with the following state and federal regulations pertaining to hazardous waste materials.

HAZARDOUS SUBSTANCE ACCOUNTACT (CALIFORNIA SUPERFUND PROGRAM)

In 1981, the California Legislature enacted California's Superfund Program with the passage of the Carpenter-Presley Tanner Hazardous Substance Account Act (HSAA). The HSAA, which is administered by the Department of Toxic Substances Control (DTSC) of the California EPA, gives the state authority to order, oversee, and perform cleanups of hazardous substance releases. The act also provides for compensation of persons injured by hazardous substances and provides funds for California's mandatory 10 percent contribution toward California site cleanup costs covered by the federal Superfund law, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

Another set of provisions that bear closely on the HSAA subject matter are the Hazardous Waste Control Law provisions regarding others for compliance or correction of violations, and imposition of use restrictions on property contaminated by hazardous materials releases and on adjacent "border zone" property.

Plans to develop a property for residential, hospital, school or similar purposes may require a review by the State of California (Cal-EPA), if the site in question is located within 2,000 feet of a state or federally listed Superfund site ("Border Zone Property Law", State of California Health and Safety Code Article 11 Sections 25220-25241). These regulation do not usually apply to commercial, industrial, and agricultural developments. The project site is not located within 2,000 feet of a Superfund site and therefore should not qualify as a border zone property as defined by this statute.

HAZARDOUS WASTE CONTROL LAW

The primary state statutory provisions governing hazardous waste management are contained in Chapter 6.5 of Division 20 of the Health and Safety Code, entitled "Hazardous Waste Control". These provisions are referred to as the Hazardous Waste Control Law (HWCL). The HWCL directs the State Department of Toxic Substances Control (DTSC) within the California Environmental Protection Agency (Cal-EPA), formerly the Toxic Substances Control Program of the CDHS, to adopt regulations to adopt the statute and the DTSC has adopted a substantial body of regulations that were recodified in 1991.

It is unlawful to "manage" hazardous waste except as provided in the HWCL and the regulations adopted by the DTSC thereunder (Health and Safety Code Section 25154). "Management" of hazardous waste is broadly defined to include virtually everything that is performed with a material once it becomes a waste, including holding ("storing") it. Thus, the statute has a broad impact, regulating hazardous waste from cradle (*i.e.*, generation) to grave (*i.e.*, final deposition). The HWCL scheme is generally similar to the federal scheme for regulating hazardous waste under the Resource Conservation and Recovery Act (RCRA).

Under the federal RCRA, the generator is responsible for its hazardous waste from "cradle to grave." Once the generator produces a waste material, the generator is responsible for its location at any time and is liable for any future degradation attributable to it. It is the responsibility of the waste generator to ascertain the degree of risk associated with the produced material and to determine the appropriate handling measures.

SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65)

The Safe Drinking Water and Toxic Enforcement Act (Proposition 65) was enacted in 1986. Cal-EPA has been designated by the Governor as the lead governmental agency to implement the Proposition's provisions; Governor's Reorganization Plan Number One [dated April 16, 1991 and effective July 17, 1991]; Executive Order W-13-91). Within the Cal-EPA, the Office of Environmental Health Hazard Assessment is responsible for Proposition 65 enforcement.

Proposition 65 applies to certain listed chemicals and to defined business activities. The Act has two operative provisions. The provision with the broader impact requires, generally, that businesses warn people prior to exposing them to certain amounts of any chemical. This provision has broad impact because: it effects chemicals commonly found in businesses, such as benzene and tobacco smoke; the threshold of exposure requiring a warning is quite low; and, it effects out-of-state businesses shipping material into California as well as in-state businesses. The other operative provision of the Act prohibits businesses from discharging significant amounts of listed chemicals into, or where they probably will migrate into,

sources of drinking water. This provision does not impact nearly as many businesses as the warning requirement, but its impact can be more severe because it prohibits discharges of listed chemicals that may otherwise be permitted by law.

UNDERGROUND STORAGE OF HAZARDOUS SUBSTANCES

In 1983, California became one of the first states in the nation to regulate the construction, permitting, and monitoring of underground storage tanks (USTs) containing hazardous substances by adopting provisions entitled Underground Storage of Hazardous Substance. The statute directs the State Water Resources Control Board (SWRCB) to adopt regulations governing underground storage tanks.

The federal program regulating USTs was established by Title VI of the Hazardous and Solid Waste Amendments of 1984 to the federal Resource Conservation and Recovery Act (RCRA). The EPA promulgated final regulations in 1988 with respect to tank construction and monitoring methods.

The federal regulations set standards for new UST system design, construction, installation and notification, upgrading UST systems, general operating requirements, release detection, reporting and investigation, corrective action and out-of-service and closed UST systems. The EPA regulations also impose financial responsibility requirements on all regulated UST owners and operators to be promulgated in the future.

HAZARDOUS MATERIALS INVENTORIES AND EMERGENCY PLANS

California has adopted statutory provisions relating to emergency responses to hazardous materials releases or threatened releases and to avoidance of accidents involving certain hazardous materials. These provisions require preparation of area plans by local agencies and business plans by businesses for responding to releases or threatened releases as well as submission of registration forms for some businesses handling acutely hazardous materials and risk management and prevention programs to prevent accident risks by some businesses handling such materials. The statutory provisions also require immediate notice to state and local emergency response agencies of releases or threatened releases of hazardous materials.

In addition to developing an emergency response program, the state has begun to focus on reducing the volume of hazardous materials. Regulations implementing the inventory and reporting provisions have been adopted by the Office of Emergency Services (OES), however, the provisions are in large part administered by counties, or by cities that have assumed responsibility.

The provisions of state hazardous materials disclosure laws are in addition to the federal Emergency Planning and Community Right-To-Know Act requirements adopted by Title III of the Superfund Amendments and Reauthorization Act (SARA).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) is the principal statute mandating environmental impact review of governmental actions in California. The Act applies generally to all activities undertaken by state and local agencies, and to private activities financed, regulated or approved by state and local agencies.

There are two sections of CEQA that address hazardous waste sites. CEQA Section 21151.8, involves school site acquisition on hazardous waste disposal sites. This section does not apply to the project site as no school site is proposed within the area.

Section 21092.6 deals with the location of projects on hazardous waste sites lists. Various government agencies compile lists of sites which they believe may be contaminated with hazardous materials. These agencies also create inventories of facilities that handle or create hazardous waste, but may not be contaminated. These lists are not comprehensive but rather list known problems, or sites which are known to handle hazardous materials. Lists were examined to determine whether the site, or any neighboring sites, are included. This list does not include uses on the project site. (Appendix E of the Technical Appendices).

4.11.2 THRESHOLD SIGNIFICANCE

According to CEQA standards, a project would have a significant impact on the environment or to the public health and safety of humans or animals if:

- the use, production or disposal of materials that pose a hazard;
- it would interfere with emergency response plans or emergency evacuation plans; or
- it would expose building occupants to working situations that exceed health standards or that would present an undue potential risk for health-related accidents.

4.11.3 ENVIRONMENTAL IMPACTS AND MITIGATIONS

UNDERGROUND STORAGE TANKS

Impact PH-1: **Underground storage tanks presently exist on the project site.**

Implementation of the proposed project would create the need to condemn existing land uses occurring on-site including the Dixon Livestock Auction Yard. The auction yard contains two underground fuel storage tanks that may be approximately 40-years old. In addition, the fuel storage tanks that were removed from the Bartholomew Enterprises site in 1985 might have contaminated the soil beneath the project site. These tanks may have leaked which might have caused contamination to the soil and/or groundwater.

Significance: **Significant**

Mitigation Measure PH-A: A qualified geotechnical engineer shall excavate existing tanks and inspect the areas where tanks have been previously removed. Soil samples shall be taken from the base of the excavations and analyzed for contamination. If contaminants are found, additional sampling shall be required to determine the extent of the contamination and how it will be remediated (excavation, removal and/or venting). If groundwater is found in the base of the excavation or in bore holes, the CRWQCB may require the installation and sampling of one or more monitoring wells. If groundwater contamination is identified and the levels of contaminants do not appear to decrease over time, remediation of the groundwater may also be required.

Residual Significance: **Less than significant**

PESTICIDES AND HERBICIDES

Impact PH-2: Pesticides and herbicides may have been used on the project site.

Current and past occupants of the project site may have used and disposed of pesticides and pesticide containers. The soil and possibly the groundwater, in specific locations identified in the Preliminary Site Assessment, may have been contaminated with petroleum contaminants and pesticide residuals. This also includes areas of the project site that were used to grow tomatoes, walnuts, almonds, hay, alfalfa, dry grains and other miscellaneous row crops.

Significance: Significant

Mitigation Measure PH-B: Soil samples in areas identified in the Preliminary Site Assessment shall be taken. These areas include locations where pesticides were stored, mixed and applied.

Mitigation Measure PH-C: The entire site occupied by Mistler Trucking/Mistler Farm operations shall be excavated and surveyed for contaminants. A Level One Toxic's Analysis shall be prepared by a qualified geotechnical engineer to define the level of contamination and any required remediation techniques. This analysis shall be performed prior to grading or construction activities to reduce potential exposure of construction workers and the general public to hazardous materials.

Residual Significance: Less than significant

AIRBORNE PESTICIDES AND HERBICIDES

Impact PH-3: Airborne pesticides and herbicides in the project vicinity could impact future development.

Crop spraying of agricultural land in the vicinity of the project site could expose future occupants of the site to airborne pesticides and herbicides.

Significance: Significant

Mitigation Measure PH-D: The restrictions of the Solano County Agricultural Commissioner on pesticide and herbicide spraying shall be followed, especially conditions restricting the aerial spraying of specific chemicals in proximity to the project site. If regulations concerning pesticide and herbicide spraying are not being enforced effectively, the Cal-EPAs Department of Pesticide Regulation shall be notified and enforcement action requested.

Residual Significance: Less than significant

PRESENCE OF HAZARDOUS MATERIALS

Impact PH-4: Hazardous materials may be used and stored in association with future development.

Industrial uses proposed within the project site would contribute to an increase in the transportation, storage and use of hazardous materials and hazardous waste generation. In California, as with the remainder of the nation, hazardous waste landfills are reaching capacity. In addition, the EPA has begun to restrict the type of wastes that can be sent to landfills. In California, hazardous waste landfill capacity is limited. Treatment capacity is also limited and is likely to increase as technologies are developed and implemented in order to safely and effectively treat hazardous waste.

On a national level, hazardous waste landfill space is currently available. Future capacity will depend on a number of factors, including: 1) the success of hazardous waste minimization nationwide; 2) the capability of new techniques for reducing the hazard level of hazardous wastes; and 3) the permitting of new treatment or disposal capacity. As of mid-1989, there were 24 hazardous waste landfills in the United States that were open to commercial hazardous waste generators.

The EPA is sponsoring research on alternatives to landfill disposal of hazardous waste. New technologies are being developed, and some private entities are pursuing siting for facilities exploiting existing alternatives to landfill disposal. While California continues to develop hazardous waste treatment and disposal capacity, California generators rely on out-of-state treatment and disposal facilities to meet hazardous waste disposal needs.

Significance: Significant

Mitigation Measure PH-E: A hazardous waste reduction program shall be prepared prior to leasing a portion of the site to a business handling hazardous materials. The goal of the hazardous waste reduction program is to reduce the project site's contribution to hazardous waste generation and disposal. This program shall consider the wastes generated by the occupants of the site, except for occupants required by law to implement similar programs because they generate substantial quantities of hazardous waste greater than those triggering the legal requirements for waste minimization.

Residual Significance: Less than significant

4.11.4 CUMULATIVE IMPACTS

Impact PH-5: Cumulative impacts to public health and safety.

Significance: Less than significant

Mitigation Measures: No mitigation required

Development within the NQSP would contribute to the increased presence of hazardous materials in the region. Slight increases of hazardous material shipments, storage and use are not expected to impact public health and safety or the environment as all uses are expected to obey local, state and federal regulations.

Residual Significance: Less than significant

4.11.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures identified in Section 4.11.3 will reduce all impacts to public health and safety to a less than significant level.

Residual Significance: **Less than significant**

EFFECTS ON ADJACENT LAND

Impact GI-3: **The project could cause growth-inducing effects on adjacent agricultural land.**

Project approval could have a growth-inducing effect on adjacent agricultural land. In particular, the project could have a growth-inducing effect on land north and east of the project site. The project could set a precedent for development on adjacent parcels, which could have an effect on increasing land values. However, I-80 and the future agricultural buffer proposed as part of the specific plan development, would act as man-made buffers to adjacent parcels. In addition, this land would have to be annexed into an existing water, wastewater and other service district areas to be served with water, sewer, electricity, natural gas, and other urban services and utilities. The City of Dixon's General Plan does not anticipate, and has not planned for such development (other than the proposed project) to take place within the next 20 years. However, the NQSP project, or any urban development in this area, could increase development pressures on the adjacent properties sooner than is projected by the Dixon General Plan.

Significance: **Significant**

Mitigation Measures: **None**

Residual Significance: **Significant and unavoidable**

6.0 SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE OF LONG-TERM PRODUCTIVITY

Section 15125(e) of the CEQA Guidelines requires that an EIR evaluate the cumulative and long-term effects of the proposed project which adversely affect the state of the environment. Special attention should be given to impacts which narrow the range of beneficial uses of the environment or d safety. In addition, the reasons why the proposed project is believed by the sponsor to be justified now, rather than reserving an option for further alternatives, should be explained.

The relationship between the short term use and the long term productivity of the NQSP site involves providing commercial, office and light industrial development, and the commitment of land resources to urban development rather than agriculture.

The justification for requesting the proposed project at this time is based on the market demand and the annexation requests that the City of Dixon is currently reviewing.

Implementation of the proposed project would result in the permanent conversion of agricultural land to urban uses, except for approximately 20 acres of land set aside for an agricultural buffer. Development of the remainder of the site would prevent future use of the land for other than urban uses. Urban development would also result in cumulative impacts discussed in Section 9.0. Implementation of the proposed project, in conjunction with cumulative development, would require a commitment of groundwater resources and non-renewable energy resources. Additional sewer and solid waste disposal would also be required.

Thus there would be a trade-off between short-term provision of jobs and the enhancement of the local economy, and the long-term degradation of air quality and reduction in agricultural land in the region.

The proposed project would generate additional short-term construction related employment opportunities as well as long-term professional and non-professional employment for the city and county.

The CEQA Guidelines require a discussion of why a project is justifiable now, rather than into the future. The project proponent and the city believe that the proposed uses would meet an immediate existing need for highway commercial uses, industrial uses, commercial development and the employment opportunities generated by these uses. No other 600-acre project sites are located within the city's sphere of influence especially along I-80 or Highway 113 which would result in overall fewer environmental impacts than the proposed project site.

**7.0 IRREVERSIBLE CHANGES TO THE ENVIRONMENT
IF THE PROJECT IS IMPLEMENTED**

Section 15126(f) of CEQA requires that an EIR look at any significant irreversible environmental changes which would be involved in the proposed action should it be implemented.

Uses of non-renewable resources, such as energy and water supplies, during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or non-use therefore unlikely. However, the projects will have a minimal impact on non-renewable resources because of the relatively small size of the project. Further, the project is justified because it is consistent with the Dixon General Plan and is responding to regional development pressures.

The project would commit 643 acres of agricultural land to urban uses, which is an irreversible environmental change. Development of the site would result in the reduction in biotic diversity and loss of habitat. The conversion of agricultural land to commercial, office, and industrial uses would irretrievably alter the area from an agricultural to urban environment.

Impacts to soils and geology, surface water, biological resources, air quality, noise, traffic, visual aesthetics, and public safety would occur due to the development of the site. Even though the project would cause an irreversible change in the site, the specific plan development would serve to mitigate these impacts, for the most part, to a less-than-significant level.

Land uses associated with the project would be considered irreversible because it would not be realistic to redevelop the project site back to the site's natural environment or agricultural use after it has been developed.

Section 15126 of the State CEQA Guidelines, as amended, requires all EIRs to incorporate a comparative evaluation of the proposed project with alternatives to the project, including the no-project alternative. As described in Section 2.0, the proposed project consists of the development of 643 acres of commercial, business-professional, and light industrial uses within a business park setting. The primary function of the land uses are to provide a variety of employment opportunities and to provide a retail and service center for the residents of the City of Dixon.

In general, the direct environment effects of the proposed project include traffic, noise, air quality, biological resources, and agricultural resources.

Project alternatives selected for analysis in this section include alternatives which provide a sample of the range of potential environmental effects associated with constructing (or not constructing) the proposed development. Three alternatives to the proposed project are evaluated in this section including:

- the no project alternative;
- mixed-use development alternative; and
- alternative project site.

These development scenarios were selected to allow for a complete evaluation of the merits of various potentially feasible combinations and locations for development. Alternatives to the development must be located within close proximity to I-80; therefore, the possible development sites meeting this criteria are limited. The range chosen in Alternative 2 provides a reasonable basis for understanding and contrasting the environmental consequences of different combinations of land uses including residential development. Alternative 3 assesses the impacts of implementing the NQSP on an alternative project site. Please refer to Section 3.3 for a summary of the development alternatives and comparative analysis.

8.1 "NO-PROJECT" ALTERNATIVE

The no-project alternative is defined as the continued use of the project site for agricultural uses without the proposed development. It also includes the continued use of the site supporting a livestock auction facility, Christmas tree farm, a trucking and maintenance facility, an industrial fabrication facility, and limited residential uses. For the purposes of this analysis, it is assumed that the no-project alternative would result in the continuation of agricultural and related uses, and would not include the development of a commercial, office, or industrial park. Adverse environmental effects associated with the no-project alternative would primarily include those associated with the continued use of the site for agricultural and light industrial uses, summarized as follows:

8.1.1 LAND USE AND AGRICULTURAL RESOURCES

The no-project alternative will result in no change to land use or agricultural resources. *This is environmentally superior to the proposed project.*

8.1.2 GEOLOGY, SOILS AND SEISMICITY

The no-project alternative will have the continued potential for soil erosion associated with agricultural cultivation and livestock grazing; however, impacts could be mitigated to a level

below significant in either the no-project or the proposed project scenario. *This is not environmentally superior to the project.*

8.1.3 SURFACE AND WATER QUALITY

The no-project alternative will have the continued potential water quality impacts associated with agricultural cultivation and livestock grazing; however, impacts could be mitigated to a level below significant in either the no-project or the proposed project scenario. *This is not environmentally superior to the project.*

8.1.4 AIR QUALITY

Air quality impacts associated with this alternative would be minimal and substantially less than the project. *This is environmentally superior to the project.*

8.1.5 BIOLOGICAL RESOURCES

The continued use of the site for agricultural land will have no further disruption to biological resources. *This is environmentally superior to the project.*

8.1.6 CULTURAL RESOURCES

The continued use of the project area as it currently exists will have minimal impacts on cultural resources. *This is environmentally superior to the project.*

8.1.7 TRAFFIC AND CIRCULATION

The no-project alternative will have a minimal impact on traffic and circulation. *This is environmentally superior to the proposed project.*

8.1.8 NOISE

The no-project alternative will result in no increase in noise levels and will have a minimal impact on the environment. *This is environmentally superior to the proposed project.*

8.1.9 PUBLIC SERVICES AND UTILITIES

The no-project alternative will result in no increase in needs for services or utilities. *This is environmentally superior to the proposed project.*

8.1.10 VISUAL RESOURCES

The no-project alternative will result in no change to the visual setting. *This is environmentally superior to the proposed project.*

8.1.11 PUBLIC HEALTH AND SAFETY

The no-project alternative will have no increase in need for public health and safety. *This is environmentally superior to the proposed project.*

COMPARISON WITH THE PROPOSED PROJECT

Compared with the proposed project, the no-project alternative would result in fewer environmental impacts. The no-project alternative would not result in significant direct impacts to air quality and traffic and circulation, and may have a fewer impact on visual resources. In addition, the no-project alternative would not result in impacts such as loss of agricultural resources; increases in noise; demand for public services and natural resources (energy and water); and public health and safety concerns. While most of these impacts of the proposed project can be mitigated to a level of non-significance, several impacts such as an increase in air pollution and loss of agricultural land are considered significant and unavoidable.

However, it should be noted that the no-project alternative would not provide any employment opportunities, as directed by the Dixon General Plan, nor would it provide opportunities for creating and expanding the commercial and service retail base of the area as proposed by the project. Additionally, the no-project alternative would not provide short-term construction employment opportunities. This would create a greater dependency on residents commuting to other communities for employment opportunities.

It should also be noted that the project is bordered on three sides by urban development (including I-80) which are constraints to the continuation of agricultural operations. With exception to the one 60-acre parcel east of Pedrick Road, the remainder of the project site is not entitled to Williamson Act contracts. Maintaining the current agricultural uses therefore, will become increasingly difficult. Additionally, freeway adjoining lands not secured through city annexation will be subject to county-based urbanization pressures.

Properties within the specific plan area are currently supporting infrastructure improvements associated with the NFSAD. Properties situated along North First Street are also funding water, sewer, road, and drainage improvements. The remainder of the project owners are funding offsite sewer improvements. The financial liabilities for these committed improvements make the current agricultural uses unrealistic in the long-term.

8.2 MIXED USE DEVELOPMENT ALTERNATIVE

The mixed use development alternative proposes the development of a commercial, business-professional, and industrial park with the inclusion of 1,208 single and multiple family residential units. Other land uses have been reduced in acres to accommodate the residential uses. Conceptually, these residential units represent approximately 20 percent of the project site and would be constructed on 147 acres of land as shown on Figure 8.2.1.

8.2.1 LAND USE AND AGRICULTURAL RESOURCES

Development under this alternative would generate similar impacts to land use and agricultural resources because the same number of acres devoted to agriculture would be removed. *This is not environmentally superior to the proposed project.*

8.2.2 GEOLOGY, SOILS, AND SEISMICITY

Grading pertaining to the mixed use development alternative would affect a similar amount of acreage when compared to the proposed project and would require similar amounts of earth to be disturbed. This alternative would result in similar grading and erosion impacts

Mixed Land Use Alternative

Land Use Summary	Acres	Units
Residential		
5-7 du/ac S.F.	116.0	696
15-18 du/ac M.F.	31.0	512
Commercial		
Highway	132.0	
Community	50.0	
Neighborhood	8.0	
Business Professional	115.0	
Light Industrial	60.0	
Parks	16.0	
K-6 School	10.0	
Fire Station	1.0	
Highway/Landscape Buffer	12.0	
Detention Ponds (estimated)	32.0	
Drainage Channels	17.0	
Roadway (New or increased ROW)	40.0	
Agricultural Buffer	20.0	
Total	643.0	1208

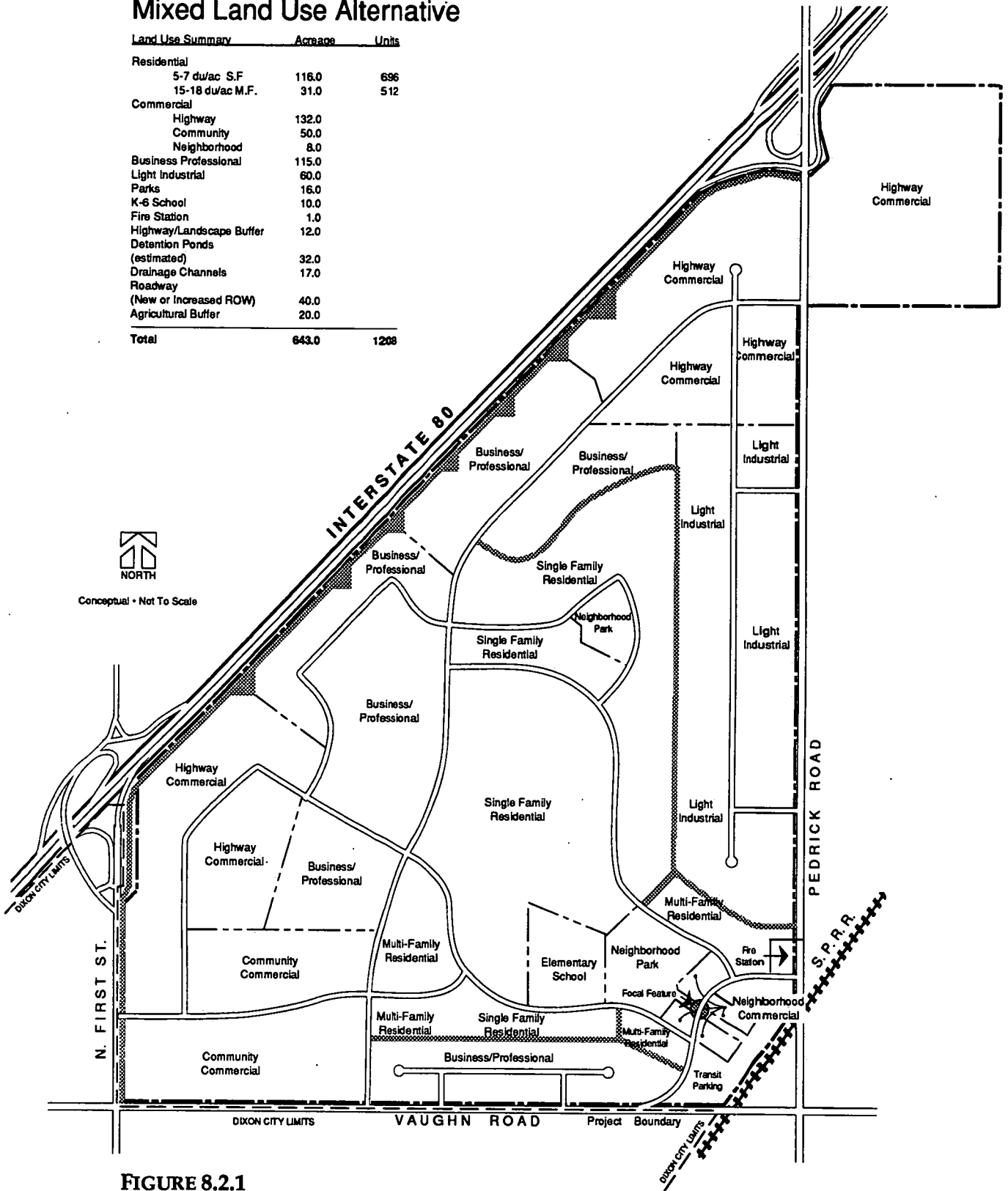


FIGURE 8.2.1
MIXED USE DEVELOPMENT ALTERNATIVE

although all identified impacts would be mitigated to a level below significant. *This is not environmentally superior to the proposed project.*

8.2.3 SURFACE AND WATER QUALITY

Long-term drainage characteristics of this alternative would be similar to those from the proposed project because drainage improvements are required under all development scenarios. This alternative would not necessarily represent an improvement over the proposed project, however, impacts could be mitigated to a level below significant in either scenario. *This is not environmentally superior to the proposed project.*

8.2.4 AIR QUALITY

Based on an increase in traffic generated by this alternative, it would be expected that air quality impacts associated with this alternative would be slightly greater when compared to the proposed project. This alternative includes 147 acres of residential uses and, therefore, air quality impacts from mobile sources would be greater than the proposed project. *This is not environmentally superior to the proposed project.*

8.2.5 BIOLOGICAL RESOURCES

The mixed use development alternative would have similar impacts on biological resources within and adjacent to the proposed project because a similar amount of site disturbance would occur under this alternative. Both scenarios would require the removal of agricultural land supporting the Swainson's hawk and impacts to on-site wetlands; and this alternative would not represent a major improvement over the proposed project. *This is not environmentally superior to the proposed project.*

8.2.6 CULTURAL RESOURCES

This alternative would result in similar impacts to cultural resources and similar impacts to paleontological resources when compared to the proposed project. Adherence to the identified mitigation measures would reduce impacts associated with either development alternative to levels below significant. *This is not environmentally superior to the proposed project.*

8.2.7 TRAFFIC AND CIRCULATION

This alternative proposes approximately 1,208 dwelling units resulting in 10,544 daily trips generated by the residential portion of the project. Increasing the project to 1,208 dwelling units and decreasing light industrial uses by 154 acres would generate a greater amount of average daily trips. The level of increased residential development would alter the need to provide additional facilities improvements throughout the project area. The need for additional intersection improvements would also need to be considered. *This is not environmentally superior to the proposed project.*

8.2.8 NOISE

Based on a slight increase in traffic generated by this alternative, it would be expected that noise contributed by traffic associated with this alternative would be slightly greater than noise contributed by the proposed project. *This is not environmentally superior to the proposed project.*

8.2.9 PUBLIC SERVICES AND UTILITIES

Similar to the proposed project, this alternative would require extension of public services and utilities to the project site. An increased number of residential units would increase energy consumption and demands placed on these public services and utilities. Like the proposed project, the demand for public services and utilities posed by these new homes could be mitigated through payment of development fees, actual construction, and dedication of land for the extension and/or establishment of facilities, services, and utilities. *This is not environmentally superior to the proposed project.*

8.2.10 VISUAL RESOURCES

This alternative would have similar impacts on the visual resources as the proposed project. There is a slight increase in open space with this alternative (9 acres), however, the site would appear similar to the proposed project with an increase or presence of residential dwelling units. *This is not environmentally superior to the proposed project.*

8.2.11 PUBLIC HEALTH AND SAFETY

Development under the mixed use development alternative would generate similar impacts associated with public health and safety because the residential component of the project would still require similar mitigation associated with cleaning the existing soil of potential agricultural pesticide residue. However, this alternative proposes fewer acres of industrial uses which would reduce the number of future employers handling and storing hazardous materials. *This is not environmentally superior to the proposed project.*

COMPARISON WITH THE PROPOSED PROJECT

Based on this conceptual design, the mixed use development alternative would be similar to the proposed project except that an increase of residential units would occur and a decrease in industrial uses would be proposed. This alternative would have a fewer impact than the proposed project in regard to public health and safety only. This alternative would be expected to create similar impacts to land use, soils and geology, surface and water quality; biological resources; cultural resources and public services and utilities. This alternative would be expected to generate greater impacts related to air quality, traffic and circulation, and noise.

This alternative is not proposed by the project proponent or the city because of the residential uses located in close proximity to I-80, and is *not environmentally superior to the proposed project*,

8.3 ALTERNATIVE PROJECT SITE

The alternative project site assumes development of the proposed project on an alternative site in Solano County. The project site is located north of I-80 between Curry and Pedrick Roads. This site is not located within the City of Dixon's Sphere of Influence and would not be annexed into the City of Dixon. In addition, the majority of this site is currently in agricultural production and the local roadways would not be able to accommodate future traffic without substantial improvements. Figure 8.3.1 displays the location of the alternative project site.

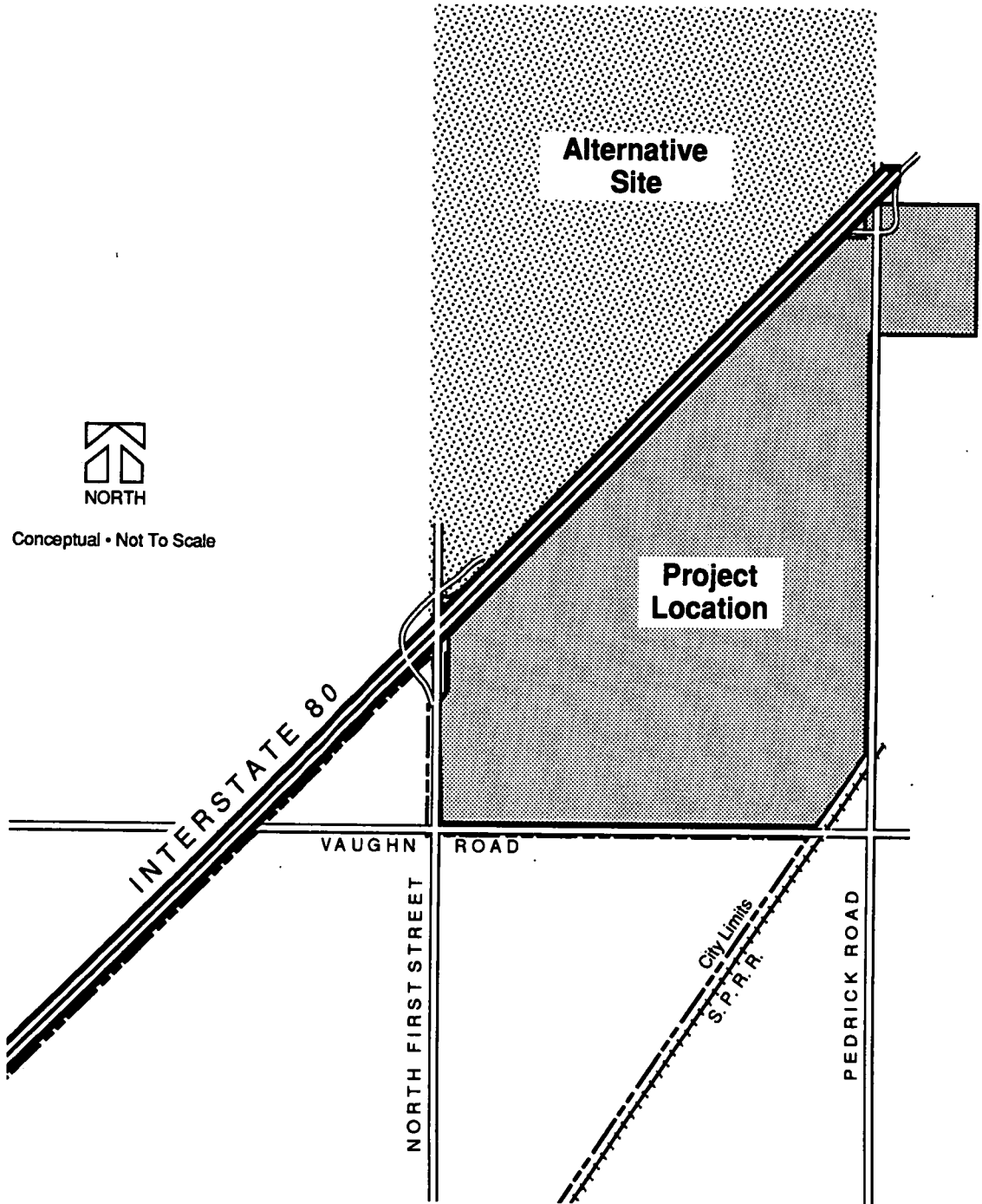


FIGURE 8.3.1
ALTERNATIVE PROJECT SITE

8.3.1 LAND USE AND AGRICULTURAL RESOURCES

Land use associated with this alternative would not be consistent with the growth associated with the county's growth projections. The employment opportunities presented by this alternative would not be consistent as well. This alternative would provide a similar amount of impacts to agricultural resources. *This is not environmentally superior to the proposed project.*

8.3.2 GEOLOGY, SOILS, AND SEISMICITY

Grading pertaining to the alternative project site would affect similar amounts of land when compared with the proposed project and would require similar amounts of earth to be disturbed. This alternative would result in similar grading impacts because it would require development of approximately the same number of acres throughout the alternative site. *This is not environmentally superior to the proposed project.*

8.3.3 SURFACE AND WATER QUALITY

Long-term drainage characteristics of this alternative would be similar to those from the proposed project because this alternative site is located within the same drainage system. This alternative would not necessarily represent an improvement over the proposed project. Long-term groundwater hydrology impacts from the site's urban runoff would be expected to be similar in comparison to the proposed project. *This is not environmentally superior to the proposed project.*

8.3.4 AIR QUALITY

Based on similar amounts of traffic generated by this alternative, it would be expected that air quality impacts associated with this alternative would also be similar when compared to the proposed project. However, this alternative and the proposed project would both be considered to contribute to unavoidable adverse air quality impacts. *This is not environmentally superior to the proposed project.*

8.3.5 BIOLOGICAL RESOURCES

The alternative project site would have similar impacts on biological resources within and adjacent to the proposed project because a similar amount of site disturbance would occur under this alternative. Both scenarios would require the removal of potential foraging habitat associated with the Swainson's hawk. *This is not environmentally superior to the proposed project.*

8.3.6 CULTURAL RESOURCES

This alternative would result in similar impacts to cultural resources and similar impacts to paleontological resources when compared to the proposed project. Adherence to the identified mitigation measures would reduce impacts and potential impacts associated with either development alternative to levels below significant. *This is not environmentally superior to the proposed project.*

8.3.7 TRAFFIC AND CIRCULATION

This alternative proposes the same development resulting in the same number of peak hour trips generated by the project. The need for intersection improvements would remain the same in either development scenario; however, the improvements would need to be made within Solano County and not within the City of Dixon. Project-specific roadway improvements and transportation demand strategies as identified for the proposed project would be applicable to this alternative. *This is not environmentally superior to the proposed project.*

8.3.8 NOISE

Based on similar amounts of traffic generated by this alternative, it would be expected that noise contributed by traffic associated with this alternative would be similar to noise contributed by the proposed project. *This is not environmentally superior to the proposed project.*

8.3.9 PUBLIC SERVICES AND UTILITIES

Similar to the proposed project, this alternative would still require extension of public services and utilities to the project alternative site. The demand for public services and utilities could be mitigated through payment of development fees, actual construction, and dedication of land for the extension and/or establishment of facilities, services, and utilities. *This is not environmentally superior to the proposed project.*

8.3.10 VISUAL RESOURCES

This alternative would have similar impacts on the visual resources in comparison to the proposed project because this alternative proposes the same development north of I-80. *This is not environmentally superior to the proposed project.*

8.3.11 PUBLIC HEALTH AND SAFETY

Development on an alternative project site would have similar impacts to public health and safety as compared with the proposed project.

COMPARISON WITH THE PROPOSED PROJECT

Based on this conceptual design, the alternative project site would be similar to the proposed project. This alternative would not have a fewer impact than the proposed project in regard to any environmental issues. This alternative would be expected to create similar impacts to all environmental resource issues except land use. Land use issues would be slightly greater because the project would be built in Solano County and would not be annexed into the city of Dixon.

This alternative, is not proposed by the project proponent because it is not located within the sphere of influence of the City of Dixon. In addition urban services would have to be extended to this site, projecting growth to the north side of I-80. *This is not environmentally superior to the proposed project.*

9.1 CUMULATIVE IMPACTS

Section 15130 of the State CEQA Guidelines requires that cumulative impacts be discussed where they are considered significant. Cumulative impacts represent the change caused by the incremental impact of a project in conjunction with other proposed or committed projects in the vicinity. In some cases, a project may have environmental impacts that may be individually inconsequential but cumulatively significant. This section briefly identifies the cumulative projects which have been identified in the area. Table 9.1.1 provides a list of pending projects, in the vicinity of the project site, monitored by the City of Dixon Community Development Department. Figure 9.1.1 displays the locations of the cumulative projects which have the potential to cause cumulative impacts in conjunction with the proposed project. Section 4.0 also includes a discussion of the cumulative impacts associated with each environmental resource issue.

TABLE 9.1.1
CUMULATIVE DEVELOPMENT

CUMULATIVE PROJECTS	SOUTHWEST DIXON SPECIFIC PLAN	NORTHEAST QUADRANT SPECIFIC PLAN	SOUTHPARK PROJECT
<u>Land Use (Acres)</u>			
Residential	285.0	0.0	162.7
Commercial	41.5	194.1	3.7
Office	0.0	105.4	0.0
Industrial	47.0	214.4	0.0
Parks	37.0	0.0	16.4
School	10.0	0.0	13.8
Other*	47.5	129.1	16.1**
TOTAL ACRES	468.0	643.0	212.3
TOTAL UNITS	1,892	0	951

*Other-Includes land designated for agricultural use, roadways/medians, drainage channels/ponds and other landscape/open space/buffers.

**Includes 3 acres of land designated for mineral extraction.

CUMULATIVE IMPACTS

LAND USE

Impact LU-7: Cumulative impact - Growth inducement.

The NQSP will result in the conversion of prime agricultural land to a non-agricultural use and will have the potential to extend development further northeast than projected by either the Solano County or City of Dixon General Plans at this time.

The extension of urban services into an undeveloped area often has the potential to have growth inducing implications. Although the NQSP is designated for urban development by the Dixon General Plan, the adjacent land is planned for agriculture. Future decision makers

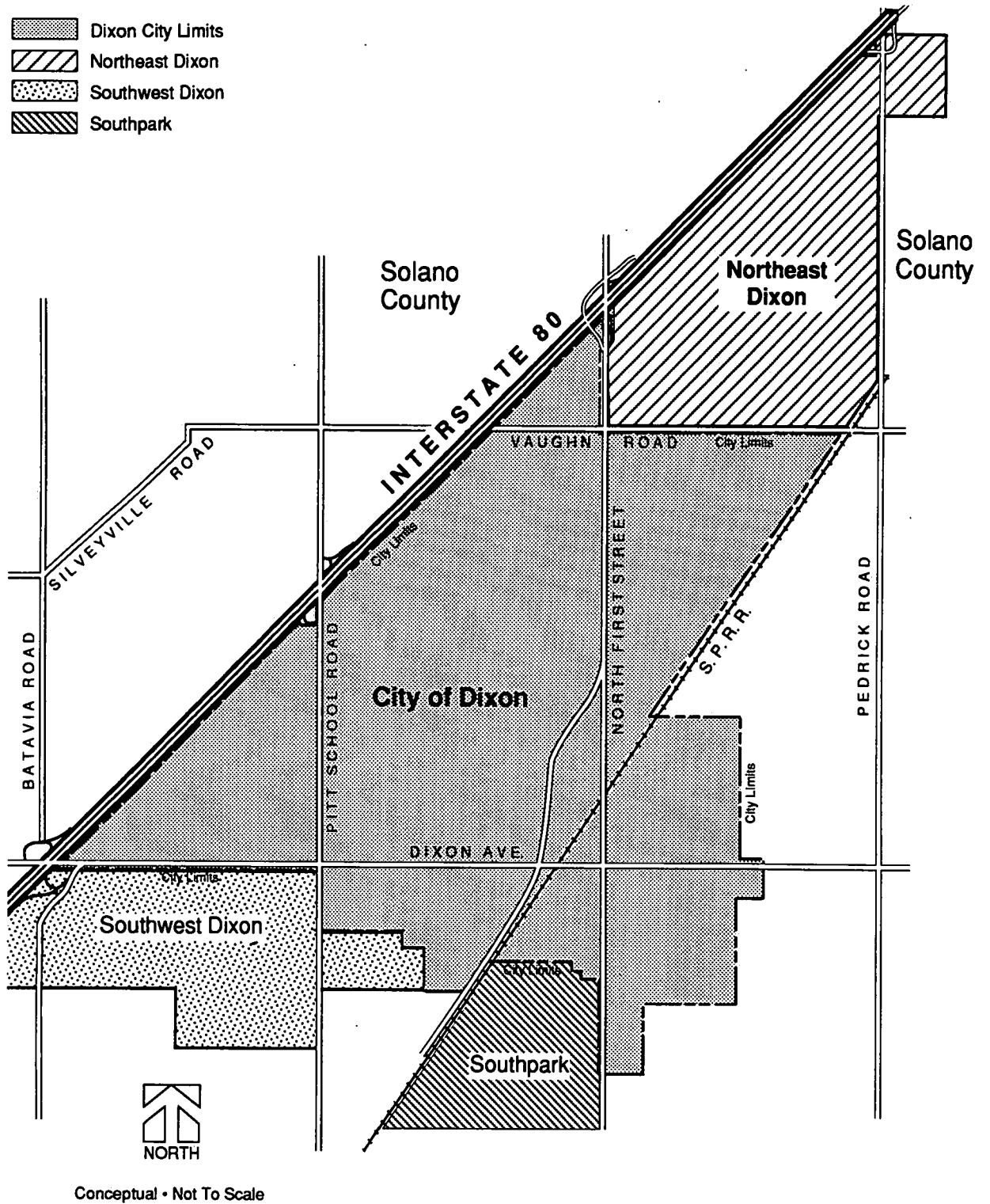


FIGURE 9.1.1
CUMULATIVE PROJECT LOCATIONS

will have the discretion to consider further annexation and development of agricultural land to the northeast of the NQSP area. However, the development of the plan area will increase development pressures and may accelerate the timing of further annexations considerations.

Significance: Significant
Mitigation Measures: None
Residual Significance: Significant and unavoidable

GEOLOGY, SOILS AND SEISMICITY

Impact G-4: The project will minimally contribute to cumulative soil erosion or the potential for exposing people to a possible seismic event.

Geology and soil impacts are site-specific and are not considered substantial in a cumulative scale. Therefore, the project would not contribute to cumulative geologic and soil-related impacts.

Significance: Less than significant
Mitigation Measures: No mitigation required
Residual Significance: Less than significant

SURFACE WATER QUALITY

Impact WQ-3: The project will cumulatively contribute to increased surface water runoff and degradation to surface water quality.

Implementation of cumulative development within the cumulative sphere of influence would result in altering the existing topography and increasing the potential for increased runoff volumes and flow rates. The cumulative area is characterized as being relatively flat (0.1 to 1 percent) and sloping to the southeast as is the proposed project. A total of 1,323 acres are planned for a variety of residential, commercial, industrial and other land uses which would contribute to alteration of topsoils. However, this impact is not considered to be significant because the issues associated with soil erosion and surface water quality can be mitigated through grading, drainage, and revegetation features and other efforts identified in Section 4.3.3 and conditions of approval associated with other cumulative projects.

Significance: Less than significant
Mitigation Measures: No mitigation required
Residual Significance: Less than significant

AIRQUALITY

Impact AQ-8: Cumulative emissions of ozone (O₃) precursors

The region is non-attainment for O₃. The project, contributing to cumulative development, would add to ROG and NO_x emissions, which are O₃ precursors. The YSAQMD has not projected a date for the attainment of the O₃ standard.

Significance: Significant and unavoidable

Mitigation Measure AQ-Y:

- Establish a priority system favoring multi-rider vehicles.
- Establish parking pricing strategies.
- Maximize telecommunication, including appropriate network infrastructure.
- Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.)
- Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment.
- Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home.
- Employer-sponsored subscription buses to supplement or substitute for public transit service.
- Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants.
- Request minibus, jitney or other para-transit service within the project.
- Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development.
- Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance.
- Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules.
- Request convenient bus schedules to accommodate unusual schedules.
- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.
- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

Residual Significance: Significant and unavoidable

BIOLOGICAL RESOURCES

Impact B-8: Project will contribute to a cumulative loss of seasonal freshwater marsh.

Cumulative development in the Dixon area would result in the conversion of seasonal freshwater marshes and wetlands. The project's potential loss of 5.3-acres of seasonal freshwater marsh habitat is only a small part of cumulative losses. However, the Corps of Engineers and CDFG require a minimum of a 1:1 replacement ratio if protected wetlands are disturbed or destroyed by development.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact B-9: Project will contribute to a cumulative disturbance to Swainson's hawk habitat.

Cumulative development would further disturb the breeding habitat of the Swainson's hawk, thereby contributing to the reduction of its population. The proposed project is located in part of the Swainson's hawk breeding range.

However, the CDFG requires development projects which impact the species habitat to enter into an agreement to ensure adequate mitigation. This is accomplished through a 1:1 replacement ratio of land to be dedicated as Swainson's hawk foraging habitat, or through participation in a CDFG County-wide Habitat Management Plan (CHMP) with other development projects. Therefore, the implementation of mitigation measures B-D and B-E will minimize the cumulative loss to Swainson's hawk foraging habitat.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

CULTURAL RESOURCES

Impact C-4: Cumulative impact to archaeological and historic resources.

Impacts to prehistoric archeological sites and historic resources are specific to the development of each site but are part of the cumulative loss of cultural resources. As such, development of the project area would contribute to the cumulative impact on resources. The City of Dixon, Solano County, and other state agencies have policies for protection and require adequate survey and mitigation to avoid such impacts to these resources.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

TRAFFIC, CIRCULATION AND ACCESS

Impact T-8: The cumulative traffic conditions would exceed LOS at six intersections.

Significance: Significant

Figures 4.7.10, 4.7.11 and 4.7.12 display the traffic scenarios and peak hour intersection traffic forecasts for the study locations roadways for the cumulative condition (2010) with the project, respectively. Table 4.7.11 summarizes the results of the intersection analysis for Cumulative AM and PM Peak Hour Intersection Level of Service.

**TABLE 4.7.11
CUMULATIVE AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE**

INTERSECTIONS	AM PEAK HOUR		PM PEAK HOUR	
	LOS	V/C	LOS	V/C
North First Street/I-80 EB Ramp (1)	E	1.00	F	1.32
North First Street/Vaughn Road (2)	C	0.79	F	1.03
North First Street/Industrial Way (3)	A	0.51	B	0.67
North First Street/Stratford Avenue (4)	B	0.62	D	0.83
Pedrick Road/I-80 WB Ramp (5)	F	1.08	F	1.11
Pedrick Road/I-80 EB Ramp (5)	F	1.20	F	1.64
Pedrick Road/Vaughn Road (6)	A	0.34	A	0.47
Pedrick Road/Professional Drive (7)	C	0.76	D	0.84
Pedrick Road/Mistler Road (8)	A	0.55	A	0.49
Professional Drive/Mistler Road (9)	B	0.67	B	0.65
Arterial B/Commercial Drive (10)	D	0.81	E	0.99
North First Street/Arterial B (11)	F	1.45	F	1.86

Number corresponds with intersections on Figure 4.6.2 ⁽¹⁾

The results of the cumulative conditions analysis are similar to that for the existing plus project analysis in that the interchanges of Pedrick Road and North First Street with I-80 would require significant improvements, along with sections of both North First Street and Pedrick Road. Within the project site, the intersection of Arterial B with Commercial Drive is expected to operate unacceptably during the PM peak hour. Like the interchange impacts, this deficiency is a result of the large volumes of traffic entering the site on Arterial B from I-80 via North First Street.

Unacceptable Levels of Service for Various Intersections. including:

- I-80 Westbound Ramps/Pedrick Road (5) - operates at LOS F during both the AM and PM peak hours. The large volume of project traffic, particularly the westbound left turning movement, cannot be adequately accommodated by the existing intersection.
- I-80 Eastbound Ramps/Pedrick Road (5) - operates at LOS F during both the AM and PM peak hours. Heavy eastbound right turns and northbound movements cause unacceptable operations.
- I-80 Eastbound Ramps/North First Street (1) -operates at LOS E during the AM peak hour and LOS F during the PM peak hour. This location is primarily affected by heavy northbound and eastbound turning movements.
- North First Street/Arterial B (11) - operates at LOS F during the AM and the PM peak hour. Heavy southbound left turns and westbound right turns degrade the intersection operations.
- North First Street/Vaughn Road (2) - operates at LOS F during the PM peak hour. The primary cause of the problem is the heavy southbound left turning movements and through movements on North First Street.

- Arterial B/Commercial Drive (10) - operates at LOS E during the PM peak hour because of large volumes of site traffic accessing the site via Arterial B.

Significance: Significant

Mitigation Measure T-L: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

Mitigation Measure T-M: Improve the North First Street interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

Mitigation Measure T-N: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

Mitigation Measure T-O: Construct additional turn lanes at the North First Street/Vaughn Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the eastbound approach of Vaughn Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

The provision of direct site access from the I-80 interchange will reduce the overall traffic volumes at the Arterial B/Commercial Drive intersection, and therefore can improve the operations to acceptable levels.

Residual Significance: Less than significant

Impact T-9: The cumulative traffic scenarios for 2010 will result in unacceptable levels of service for various road segments.

Three major road segments are projected to experience unacceptable levels of service as a result of the project at the following roadways.

- North First Street - between Interstate 80 and Arterial B. Heavy volumes entering and exiting the site will use this route causing unacceptable operations for this four lane road.
- Pedrick Road - between Interstate 80 and Professional Drive. This four-lane road will also experience unacceptable levels of service as a result of the project.

- Interstate 80 - Implementation of the project results in the addition of a significant volume of traffic on Interstate 80.

Significance: Significant

Mitigation Measure T-P: Widen North First Street to six lanes between Interstate 80 and Arterial B.

Mitigation Measure T-Q: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

The above improvements should be implemented when the peak hour volume on the subject roads exceed 3,600 vehicles per hour.

Mitigation Measure T-R: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

Mitigation Measure T-S: The Pedrick Road Overcrossing of the railroad tracks is mentioned in the General Plan as a possible location to be considered as a part of a separate study. The overcrossing, if implemented, would cross over the railroad tracks and would not affect the traffic forecasts. This shall be considered with all future cumulative development implementing this project.

Impact T-10 Since the site is not in the City of Dixon, it is not directly served by public transit.

Since the specific plan includes the provision of bus routes, turnouts, transit shelters and park-and-ride lots and a Transportation Management Plan, sufficient facilities will be in place to accommodate the extension of transit services to the site. Therefore, no further mitigation measures are required.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact T-11: Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.

Significance: Significant

Additional traffic-related conflicts will occur with bicyclists and pedestrians along the adjacent street system including Pedrick Road, North First Street and Vaughn Road.

Mitigation Measure T-U: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure

safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

Residual Significance: Less than significant

Impact T-12: Implementation of the project includes a bikeway and pedestrian trail system for public use.

Significance: Less than significant

Included in the Northeast Quadrant Specific Plan are provisions for a multimodal Class I trail system throughout the area. This is considered to be a *beneficial impact*. No mitigation is required.

NOISE

Impact N-4: Cumulative noise impacts

Implementation of cumulative development in the vicinity of the proposed project and within the City of Dixon would contribute to increases in noise exposures for locations already experiencing noise levels above local and state standards, including land located along I-80. The city is implementing noise performance standards as part of their General Plan update program to protect existing and future sensitive land uses. The potential for increased noise associated with cumulative development would be controlled with these standards and required mitigation measures.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

PUBLIC SERVICES AND UTILITIES

Impact PS-3: Implementation of cumulative development in the area would generate the need for additional water supply, conveyance, treatment and storage facilities and services.

Cumulative development would generate the need for approximately 5 mgd of water. This impact is not considered to be significant because the City of Dixon is currently anticipating growth (as identified in the general plan) and public services and utility districts are planning to serve this future growth. It is unlikely that cumulative water needs would exceed the service capacity of local water purveyors if the development of each cumulative project is contingent upon providing evidence for or acquiring an adequate water supply.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-5: Implementation of cumulative development in the area would generate wastewater which would need to be treated at the City of Dixon wastewater treatment plant.

Cumulative development would generate approximately 2.5 mgd of wastewater. This impact is not considered to be significant because the City of Dixon is currently anticipating growth and public service and utility districts are planning to serve this future growth. It is unlikely that cumulative wastewater generation would exceed the service capacity of the City of Dixon wastewater treatment plant if the development of each project is contingent upon providing evidence or acquiring an adequate amount of capacity at the plant.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-7: Implementation of cumulative development in the area would generate solid waste which would need to be disposed of in the B&J Landfill.

Cumulative development would generate approximately 228,698 pounds of solid waste. This impact is not considered to be significant because this facility is expecting growth. It is unlikely that cumulative solid waste generation would exceed the service capacity of the landfill if development of each cumulative project was to provide and encourage recycling as well as obtain a will serve letter prior to approval of each project.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-9: Cumulative development in the area would impact existing fire protection and emergency medical aid services.

This impact is not considered to be significant because existing agencies and services are anticipating growth and future growth would be expected to pay its fair share for facilities and equipment. It is unlikely that cumulative projects would exceed the service capacity of the responsible fire protection agency if they are mitigated with the measures identified above

Significant impacts to existing fire protection and emergency medical aid services would be reduced to a level below significant, if the identified mitigation measures in the previous section are implement.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-11: Cumulative development in the area would impact existing police protection services.

This impact is not considered to be significant because existing agencies are anticipating growth and future growth would be expected to pay its fair share for additional staff, facilities and equipment. It is unlikely that cumulative projects would exceed the service capacity of the DPD if projects are required to mitigate impacts with mitigation measures similar to the mitigation presented below.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-13: Implementation of cumulative development in the area could impact existing educational facilities and services.

However, this impact is not considered to be significant because existing agencies are anticipating growth and future growth would be expected to pay its fair share for additional teachers, facilities, and equipment. It is unlikely that cumulative projects would exceed the service capacity of the DUSD if projects are required to mitigate impacts with mitigation measures similar to the one presented below.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-15: The project will cumulatively contribute to the need for energy in the project area.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

Impact PS-18: The project will have a minimal impact on cumulative park and recreation facilities.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

VISUAL RESOURCES

Impact VR-4: The long-term visual aesthetic issue associated with implementation of cumulative development generally includes the replacement of visual qualities of natural and

altered open space with urban uses associated with development.

The Dixon General Plan, Solano County General Plan, the Dixon Northeast Quadrant Specific Plan and all other specific plan documents associated with the cumulative development described in Section 2.8 have established goals, policies, guidelines and/or standards for development occurring in the area. As future development projects are proposed, each individual project is subject to separate environmental review by city and county staff members to ensure that visual effects and impacts are minimized. Therefore, cumulative development would not result in cumulative visual aesthetic impacts.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

PUBLIC HEALTH AND SAFETY

Impact PH-5: Cumulative impacts to public health and safety.

Development within the NQSP would contribute to the increased presence of hazardous materials in the region. Slight increases of hazardous material shipments, storage and use are not expected to impact public health and safety or the environment as all uses are expected to obey local, state and federal regulations.

Significance: Less than significant

Mitigation Measures: No mitigation required

Residual Significance: Less than significant

10.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Impact LU-1: Prime agricultural land will be converted to non-agricultural use, including 60 acres regulated by Williamson Act Agricultural Preserve.

The proposed project will convert approximately 483 acres of Class I and approximately 160 acres of Class II soils from an agricultural use to a mixture of business-professional and light industrial land use. Although the project is consistent with the Dixon General Plan's land use designation, this conversion will represent a significant physical change to the existing agricultural use of the site and a conversion of prime agricultural land to a non-agricultural use.

Significance: Significant
Mitigation Measures: None
Residual Significance: Significant and unavoidable

Impact LU-7: Cumulative impact - Growth inducement.

The NQSP will result in the conversion of prime agricultural land to a non-agricultural use and will have the potential to extend development further northeast than projected by either the Solano County or City of Dixon General Plans at this time.

The extension of urban services into an undeveloped area often has the potential to have growth inducing implications. Although the NQSP is designated for urban development by the Dixon General Plan, the adjacent land is planned for agriculture. Future decision makers will have the discretion to consider further annexation and development of agricultural land to the northeast of the NQSP area. However, the development of the plan area will increase development pressures and may accelerate the timing of further annexations considerations.

Significance: Significant
Mitigation Measures: None
Residual Significance: Significant and unavoidable

Impact AQ-2: Existing air quality in the project area currently exceeds the YSAQMD's threshold of significance for O₃ and PM₁₀.

Significance: Significant and unavoidable

Impact AQ-3: Long-term mobile sources of air pollution will result from implementation of the NQSP.

Significance: Significant

Long-term air quality impacts occur due to air pollutant emissions from both mobile and stationary sources. The emissions attributable to the project are primarily from project-generated motor vehicle traffic, which could increase ambient air pollutant concentrations.

Operational air quality impacts from the proposed land uses per day would result primarily from 99,124 additional motor vehicle trips generated by the project. Using URBEMIS 3, an emissions estimating program developed by the ARB, traffic-generated emissions from the

10.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

project, at full-buildout, would be approximately 7,098.2 pounds per day (lb/day) of CO, 1,258.2 lb/day of NO_x, 709.8 lb/day of ROG, 134.5 lb/day of SO_x, and 1,194.4 lb/day of PM₁₀, as shown on Table 4.4.6, these violate the YSAQMP significance thresholds.

**TABLE 4.4.6
DAILY OPERATIONAL EMISSIONS
(POUNDS PER DAY)**

Source	Maximum Daily Pollutant Emissions				
	ROG	CO	NO _x	PM ₁₀	SO _x
Highway Commercial	406.0	4002.8	724.8	259.6	77.1
Community Commercial	131.8	1299.2	235.2	84.2	25.0
Prof. & Admin. Office	70.6	736.6	122.5	350.8	13.3
Light Industrial	101.4	1059.6	175.7	499.8	19.1
TOTAL:	709.8	7098.2	1258.2	1194.4	134.5
YSAQMP Significance Thresholds:	80.0	550.0	80.0	80.0	N/A

Residual Significance: Significant and unavoidable

Impact AQ-4: The project plus future (2010) generated emissions will result in violations of ambient CO standards and a net increase of the O₃ precursors.

Projected traffic conditions in 2010 (Table 4.4.6 and Appendix J) show that the project would cause ambient CO standards to be violated locally. Project-generated emissions would also cause a net increase of the O₃ precursors.

Significance: Significant and unavoidable

The following mitigation measure will reduce the air quality impacts associated with traffic generated by the NQSP, but it will not result in projected daily operational emissions below the YSAQMP significance thresholds. However, the existing air quality is considered non-attainment, therefore, any additional traffic would be considered significant. Further, regardless of where a development like the NQSP is built in the region, the air impacts would be the same as the proposed project.

The following mitigation measures will help to reduce air quality impacts. However, this remains as a significant and unavoidable impact.

Mitigation Measure AQ-M: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.

Mitigation Measure AQ-N: Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities.

Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.

Mitigation Measure AQ-O: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.

Mitigation Through Land Use Planning and Site Design

Mitigation Measure AQ-P: Mixed land uses will reduce vehicle trips and vehicle miles traveled (VMT). Supportive land uses shall be sited within walking/biking distance of one another.

Mitigation Measure AQ-Q: Support facilities to encourage modes of transportation other than the automobile shall include pedestrian and bicycle pathways.

Mitigation Measure AQ-R: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.

Mitigation Measure AQ-S: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.

Mitigation Measure AQ-T: Street design standards, including landscape areas between the sidewalk and street, night lighting, safe islands in the center of major arterials, automatic street or pedestrian-activated "walk" signals, and adequate "walk" times, shall be enforced.

Mitigation Measure AQ-U: PM₁₀ emissions shall be reduced by curtailing fugitive dust through effective landscaping, and paving all vehicle roads and parking lots.

Residual Significance: Significant and unavoidable

Impact AQ-8: Cumulative emissions of ozone (O₃) precursors

The region is non-attainment for O₃. The project, contributing to cumulative development, would add to ROG and NO_x emissions, which are O₃ precursors. The YSAQMD has not projected a date for the attainment of the O₃ standard.

Significance: Significant

The following mitigation measure will help to reduce the cumulative air quality impact; however, this remains as a significant and unavoidable impact.

Mitigation Measure AQ-Y:

- Establish a priority system favoring multi-rider vehicles.
- Establish parking pricing strategies.

10.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

- Maximize telecommunication, including appropriate network infrastructure.
- Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.)
- Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment.
- Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home.
- Employer-sponsored subscription buses to supplement or substitute for public transit service.
- Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants.
- Request minibus, jitney or other para-transit service within the project.
- Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development.
- Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance.
- Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules.
- Request convenient bus schedules to accommodate unusual schedules.
- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.
- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

Residual Significance:

Significant and unavoidable

11.1 EIR AUTHORS

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12.1 DOCUMENTS INCORPORATED BY REFERENCE

The following documents are incorporated into this EIR by reference and have been utilized frequently by direct inclusion or summary. These documents are available at the City of Dixon's Community Development Department for review.

- City of Dixon Environmental Assessment, prepared by Duncan & Jones, 1993
- City of Dixon Environmental Assessment Response to Comments, prepared by Duncan & Jones, 1993
- City of Dixon Final Draft General Plan, prepared by Duncan & Jones, 1993
- City of Dixon Zoning Ordinance, 1992
- Solano County General Plan, prepared by Sedway/Cooke, 1977
- Preliminary Investigations of Storm Drainage, Wastewater, Water System, and Street Improvements Within the Northeast Quadrant Specific Plan, prepared by Morton Pitalo, 1993
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Guide to the California Environmental Quality Act (CEQA), 1993 Edition, Solano Press Books, 1993.

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Preliminary Biotic and Wetland Assessment, Dixon Northeast Quadrant Annexation, Solano County, California, Sugnet & Associates, October 24, 1991.

Preliminary Circulation Element of the Northeast Dixon Specific Plan, Fehr & Peers Associates, July 21, 1993.

Preliminary Investigations of Storm Drainage, Wastewater, Water System, and Street Improvements, The Northeast Quadrant Specific Plan, Morton & Pitalo, September 16, 1993.

Preliminary Site Assessment, Vaughn Road PSA, Dixon, Solano County, California, Anderson Consulting Group, July 12, 1993.

Resource Conservation & Open Space Plan, (Phase 2), Solano County, California, A Part of the Environmental Resource Management Element of the Solano County General Plan, May 1981.

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Solano County Solid Waste Management Plan, Trotter-Yoder and Associates, December 1976.

Standards and Procedures for the Evaluation of Annexation Proposals Submitted to the Solano County Local Agency Formation Commission, The Solano County Local Formation Commission, May 1987.

Successful CEQA Compliance: A Step-by-Step Approach, Solano Press Books, January 1992.

Surface Water Quality Data Evaluation for Selected Streams in Central District, Department of Water Resources, 1989.

Urban Runoff Discharges from Sacramento Report, California Regional Water Quality Control Board, Report Number 87-15P55.

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Yolo/Solano Air Pollution Control District Air Quality Attainment Plan, Volume 2, Air Quality and Emission Inventory, Yolo/Solano Air Quality Management District, February 1992.

Yolo/Solano Air Pollution Control District Air Quality Attainment Plan, Volume 3, Public Education Program, Yolo/Solano Air Quality Management District, February 1992.

Yolo/Solano Air Pollution Control District Air Quality Attainment Plan, Volume 4, Stationary Source Control Program, Yolo/Solano Air Quality Management District, February 1992.

NOTICE OF PREPARATION

Notice of Preparation

Date _____

To: _____

Address: _____

**Subject: Notice of Preparation of a Draft Environmental Impact Report
for the Northeast Quadrant Area of the City of Dixon**

Lead Agency:

City of Dixon
600 East Street,
Dixon, CA. 95620
Tel: (916) 678-7000
Contact: Mr Jim Louie

Consulting Firm:

Wade Associates
2150A Douglas Boulevard, Suite 220
Roseville CA. 95661
Tel: (916) 783-8980
Contact: Mr David Wade

The City of Dixon will be the Lead Agency and will coordinate and monitor this environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached material. A copy of the Initial Study is(is not) attached.

Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but *not later than 30 days* after receipt of this notice.

Please send your response to **David Wade** at the consulting firm's address shown above. Also, we will need the name for a contact person in your agency.

Project Title: Specific Plan for the Northeast Quadrant Area of the City of Dixon

Project Location: The area south of I-80, east of S.R. 113 / North First Street and west of Pedrick Road adjoining the City of Dixon in Solano County.

Project Description: The project involves the preparation of a Specific Plan for, and the annexation of 583 acres of land located south of I-80 and east of S.R. 113. The current General Plan designates the properties for primarily agricultural uses. The applicant(s) is proposing to annex the area to the City of Dixon. General Plan Amendment and Rezoning to commercial, office and light industrial uses are requested.

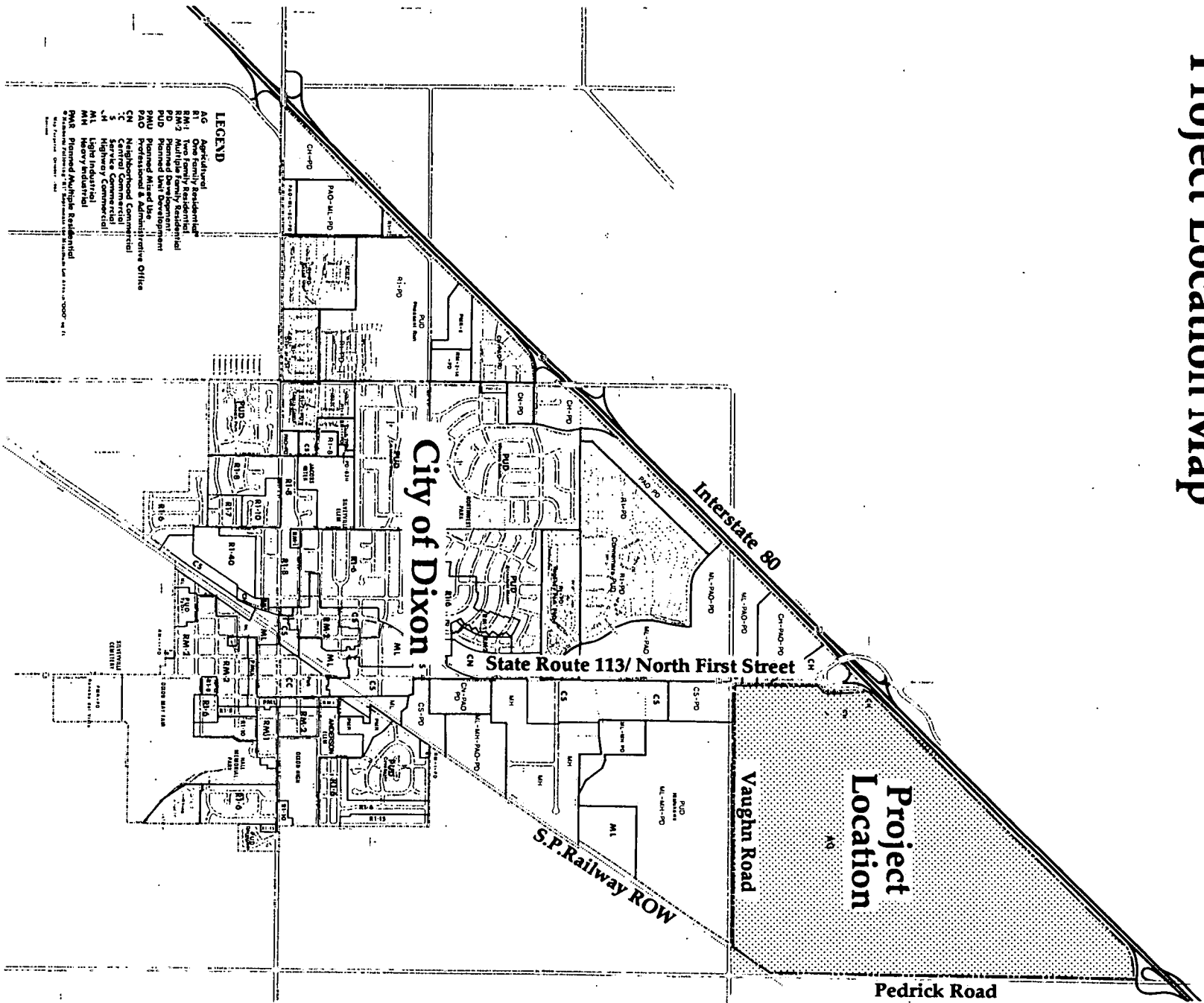
Date: _____

Signature _____

Title: _____

Telephone _____

Project Location Map



ENVIRONMENTAL CHECKLIST FORM
(To be completed by Lead Agency)

Title of Proposal: Dixon Northeast Quadrant Annexation and Specific Plan

Date Checklist Submitted: 10/30/92

Agency Requiring Checklist: City of Dixon

Agency Address: 600 East A Street

City/State/Zip: Dixon, California 95620

Agency Contact: Jim Louie **Phone:** (916) 678-7000

PROJECT LOCATION: Dixon Solano County
City *County*

PROJECT ADDRESS: North First Street/I-80/Vaughn Road/Pedrick Road

DESCRIPTION OF PROJECT: The preparation of a specific plan for, and the annexation of 583 acres of land located south of I-80 and east of S.R. 113. The current General Plan designates the properties primarily for agricultural use. The applicant is proposing to annex the area to the City of Dixon.

ENVIRONMENTAL IMPACTS:

(CEQA requires that an explanation of all "yes" and "maybe" answers be provided along with this checklist, including a discussion of ways to mitigate the significant effects identified. You may attach separate sheets with the explanations on them.)

	Yes	Maybe	No
I. EARTH. Will the proposal result in:			
a) Unstable earth conditions or in changes in geologic substructures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Disruptions, displacements, compaction or overcovering of the soil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Change in topography or ground surface relief features?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) The destruction, covering or modification of any unique geologic or physical features?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Any increase in wind or water erosion of soils, either on or off the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Changes in deposition or erosion of beachsands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

II. AIR. Will the proposal result in:

- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| a) Substantial air emissions or deterioration of ambient air quality? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) The creation of objectionable odors? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

III. WATER. Will the proposal result in:

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Changes in currents, or the course of direction of water movements, in either marine or freshwaters? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Alterations to the course or flow of flood waters? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Changes in the amount of surface water in any water body? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Discharge into surface waters, or in any alteration of surface water quality, including, but not limited to, temperature, dissolved oxygen or turbidity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Alteration of the direction or rate of flow of ground waters? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Substantial reduction in the amount of water otherwise available for public water supplies? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) Exposure of people or property to water related hazards such as flooding or tidal waves? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

IV. PLANT LIFE. Will the proposal result in:

- | | | | |
|--|-------------------------------------|-------------------------------------|--------------------------|
| a) Change in the diversity of species, or number or any species of plants (including trees, shrubs, grass, crops, and aquatic plants)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Reduction of the numbers of any unique, rare, or endangered species of plants? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Reduction in acreage of any agricultural crop? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

V. ANIMAL LIFE. Will the proposal result in:

- | | | | |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Change in the diversity of species, or numbers of any species of animals (birds; land animals, including reptiles; fish and shellfish, benthic organisms or insects)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Reduction of the numbers of any unique, rare, or endangered species or animals? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Deterioration to existing fish or wildlife habitat? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

VI. NOISE. Will the proposal result in:

- | | | | |
|---|-------------------------------------|--------------------------|--------------------------|
| a) Increases in existing noise levels? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Exposure of people to severe noise levels? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

VII. LIGHT and GLARE. Will the proposal:

- | | | | |
|--------------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Produce new light or glare? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------------|-------------------------------------|--------------------------|--------------------------|

VIII. LAND USE. *Will the proposal result in:*

- a) Substantial alteration of the present or planned land use of an area?

IX. NATURAL RESOURCES. *Will the proposal result in:*

- a) Increase in the rate of use of any natural resources?

X. RISK OF UPSET. *Will the proposal involve:*

- a) A risk of an explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?
- b) Possible interference with an emergency response plan or an emergency evacuation plan?

XI. POPULATION. *Will the proposal:*

- a) Alter the location, distribution, density or growth rate of the human population of an area?

XII. HOUSING. *Will the proposal:*

- a) Affect existing housing, or create a demand for additional housing?

XIII. TRANSPORTATION/CIRCULATION. *Will the proposal result in:*

- a) Generation of substantial additional vehicular movement?
- b) Effects on existing parking facilities, or demand for new parking?
- c) Substantial impact upon existing transportation systems?
- d) Alterations to present patterns of circulation or movement of people and/or goods?
- e) Alterations to waterborne, rail or air traffic?
- f) Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?

XIV. PUBLIC SERVICES. *Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:*

- a) Fire protection?
- b) Police protection?
- c) Schools?
- d) Parks or other recreational facilities?
- e) Maintenance of public facilities, including roads?
- f) Other governmental services?

XV. ENERGY. *Will the proposal result in:*

- a) Use of substantial amounts of fuel or energy?
- b) Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?

XVI. UTILITIES and SERVICE SYSTEMS. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:

- | | | | |
|------------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Power or natural gas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Communications systems? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Water? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Sewer or septic tanks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Storm water drainage? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Solid waste and disposal? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

XVII. HUMAN HEALTH. Will the proposal result in:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Creation of any health hazard or potential health hazard (excluding mental health)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of people to potential health hazards? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVIII. AESTHETICS. Will the proposal result in:

- | | | | |
|---|--------------------------|-------------------------------------|--------------------------|
| a) The obstruction of any scenic vista or view open to the public? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) The creation of an aesthetically offensive site open to public view? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XIX. RECREATION. Will the proposal result in:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Impact upon the quality or quantity of existing recreational opportunities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|

XX. CULTURAL RESOURCES. Will the proposal:

- | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|
| a) Result in the alteration of or the destruction of a prehistoric or historic archaeological site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Have the potential to cause a physical change which would affect unique ethnic cultural values? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Restrict existing religious or sacred uses within the potential impact area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

- | | | | |
|---|-------------------------------------|-------------------------------------|--------------------------|
| a) Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively, brief, definitive period of time. Long-term impacts will endure well into the future.) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Cumulative: Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect on the total of those impacts on the environment is significant.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Substantial adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XXII. DISCUSSION OF ENVIRONMENTAL EVALUATION.

(This section may be filled out by using narrative, or by using a form, such as the example given in the CEQA Guidelines.)

XXIII. DISCUSSION OF LAND USE IMPACTS.


(An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls.)

XXIV. DETERMINATION.

(To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- a) I find that the proposed project *could not* have a significant effect on the environment, and
A NEGATIVE DECLARATION will be prepared
- b) I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the *mitigation* measures described on an attached sheet have been added to the project.
A NEGATIVE DECLARATION will be prepared
- c) I find the proposed project *may* have a significant effect on the environment, and
An ENVIRONMENTAL IMPACT REPORT is required


Signature
City of Dixon
For

Jim Louie
Print Name
Oct 30, 1992
Date

(Note: This is only a suggested form pursuant to CEQA Guidelines, Section 15063(d). Public agencies are free to devise their own format for initial studies. However, the DETERMINATION is an essential component of this form.)



RECEIVED JUN 03 1993

LETTER OF TRANSMITTAL

To: Brian Collett
WADE ASSOCIATES
2150-A Douglas Boulevard, Ste.220
Roseville, CA 95661

Date: June 2, 1993

Copy To:

Subject:
Notice of Preparation Routing

WE ARE TRANSMITTING:

- As You Requested
- Herewith
- Under Separate Cover

THE FOLLOWING:

A copy of the list of people and agencies who received the NOP for the Northeast Quadrant EIR

THESE ARE FOR:

- Your File
- Your Approval
- Recording
- Payment
- Return
-

REMARKS:

This list is the standard routing list used for environmental notices for the proposed annexations, specific plans, and EIRs.

Very truly yours,

By Tasha Huston
Tasha Huston
Title Assistant Planner

City of Dixon

600 East A Street • Dixon, California 95620 • (916) 678-7000

Routing for Annexations

City of Dixon

- City Manager
- City Clerk
- Assistant Planner
- Community Development Technician
- Senior Building Inspector
- Public Works Director
- Finance Director
- Recreation Director
- Police Chief
- Fire Chief

Outside Agencies

- Solano Irrigation District
- Solano County Planning Dept.
- Solano County LAFCO
- Solano Economic Development Corp.
- Solano County Health Department (Environmental Management)
- Solano County Public Works
- State Clearing House Office of Planning & Research
- Silveyville Cemetery Dist.
- Chamber of Commerce
- Dixon May Fair
- Pacific Bell
- PG & E
- Sonic Cable Television
- Dixon Unified School District
- Resources Conservation District
- Caltrans, District 10
- Yolo-Solano Air Pollution Control District

All applicants and agents

NOTICE OF PREPARATION RESPONSES

DEPARTMENT OF FISH AND GAME

REGION 2

1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CALIFORNIA 95670

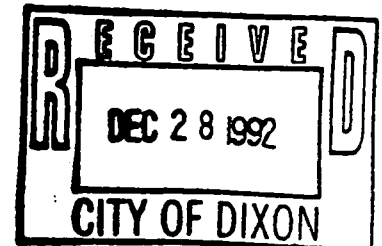
(916) 355-7020

RECEIVED JAN 8 1993



December 23, 1992

Mr. David Wade
City of Dixon
600 East Street
Dixon, California 95620



Dear Mr. Wade:

The Department of Fish and Game (DFG) has reviewed the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Specific Plan for Northeast Quadrant Area of Dixon, SCH 92113073. The project is located between Pedrick Road on the east, North First Street (State Route 113) on the west, Interstate 80 on the north and Vaughn Road on the south, just northeast of the city limits of the city of Dixon in Solano County.

This project involves the preparation of a specific Plan for, and the annexation of, 583 acres of land. Also requested, is a General Plan Amendment and rezoning to commercial, office and light industrial. The current General Plan designates the properties for primarily agricultural uses.

Wildlife habitat conditions on-site consist of mostly intensively farmed agricultural fields, an orchard, and irrigated pasture land. Large mature trees are associated with the North First Street/I-80 intersection as screening for the homesite and livestock auction yard at that location, and a few incidental trees are found around other farm homesites within this project area.

Putah Creek, which is approximately four miles north of this site, supports a large population of State-threatened Swainson's hawks, (Buteo Swainsoni). The DFG records indicate that there are a minimum of 12 Swainson's hawk nest sites on Putah Creek and as many as 25 within a ten mile radius of the proposed project site. The total Statewide estimated population of Swainson's hawks is only 550 nesting pair.

Agricultural lands in the proximity of raptor nesting territories provide critical forage habitat for Swainson's hawks, as well as many other wildlife species. The proposed project has the potential to eliminate 500-plus acres of foraging area for the Swainson's hawk and other resident migrant raptors. The DFG

Mr. David Wade
December 23, 1992
Page Two

recommends that the Draft EIR discuss and provide mitigation for the following:

1. The project's impacts on fish and wildlife and their habitat. The focus should be on the loss of agricultural lands and its impact on wildlife dependent on this habitat type.
2. The project's impact on State- or Federally-listed threatened or endangered species with particular emphasis on the Swainson's hawk. The Draft EIR should discuss the impacts to the Swainson's hawk resulting from loss of habitat and provide the mitigation measures necessary to reduce these impacts to an insignificant level. Mitigation should be based on DFG guidelines dated January 1, 1992 (attached).
3. The project's impact upon wetlands. The subject lands should be surveyed for wetlands. All wetlands, streams, and swales should be identified and protected. If the proposed project unavoidably impacts wetlands, mitigation should be provided that is based upon the concept of no net loss of wetland habitat values or acreage. Intermittent streams and swales should be protected by a 50-foot nonbuilding setback buffer established on each side of the stream.
4. The growth inducing impacts associated with the proposed project and potential impacts to the Swainson's hawk.

In order to comply with Public Resources Code Section 21081.6, a detailed monitoring program must be developed for all required mitigation conditions. The monitoring program should include the following:

1. Specific criteria to measure effectiveness of mitigation.
2. Annual monitoring for a minimum of five years. Annual written reports submitted to the lead agency and the DFG.
3. Annual monitoring reports, each of which include corrective recommendations that shall be implemented in order to ensure that mitigation efforts are successful.

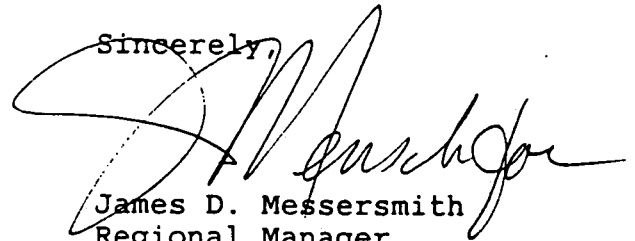
Mr. David Wade
December 23, 1992
Page Three

Any activity resulting in loss of habitat, decreased reproductive success, or other negative effects on population levels of State-listed endangered or threatened species may be construed as "take" by DFG. Take of a threatened or endangered species may be allowed after consultation with the DFG. This process would require a management plan entered into by the project proponent and the DFG that would require formalized mitigation to reduce the significance of the impact. Similar Federal Endangered Species Act sections (9 and 10a) apply for Federally-listed species.

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office.

If we can be of further assistance, please contact Mr. Bob Mapes, Associate Wildlife Biologist, or Mr. Jerry Mensch, Environmental Services Supervisor, telephone (916) 355-7030.

Sincerely,



James D. Messersmith
Regional Manager

Attachment

cc: Mr. Bob Mapes
Department of Fish and Game
Rancho Cordova, California

Mr. Jerry Mensch
Department of Fish and Game
Rancho Cordova, California

**Draft Mitigation Guidelines
for Swainson's Hawks (Buteo swainsoni)
in the Central Valley of California
(Revised January 1, 1992)**

CURRENT AND RECOMMENDED MANAGEMENT

The Department of Fish and Game has established the mitigation goal of no net loss of Swainson's hawk breeding or foraging habitat value, and has developed the following strategies and mitigation criteria to reverse the dramatic population decline of this species in the Central Valley. These criteria provide guidelines for lead agencies and project sponsors to follow in developing adequate mitigation for the loss of Swainson's hawk habitat. Direction for management towards restoration of this species is also included within this document. These guidelines are to be considered interim and will remain in effect until a comprehensive Swainson's Hawk Recovery Plan is completed by the Department. Several Habitat Management Plans (HMP's) for Swainson's hawk within specific project areas are currently being proposed. These guidelines will be used in conjunction with a Swainson's Hawk Recovery Plan to establish criteria for species recovery through population expansion into former habitat, recruitment of young into the population, and other identified recovery goals. Currently, translocation of active nests will not be considered a viable option to enable development to proceed. Hacking (controlled release) of captive reared young has not been employed to enhance the population at this time.

During project review, the Department will consider whether suitable foraging habitat occurs within a ten (10) mile radius of an active nest and contributes to maintaining that Swainson's hawk breeding territory. This ten-mile radius standard was developed through evaluation of the results of Department funded telemetry studies. It is within the documented flight distance from active nest sites to suitable foraging habitats within the home range of a Swainson's hawk. Therefore, proposed development projects may be required to mitigate impacts at active nest sites and surrounding suitable feeding habitat areas; both of which are essential to the integrity of the breeding territory. In addition, since over 95% of Swainson's hawk nests occur on private land, a program of incentives for the private landowner is needed to ensure that crops which are compatible to the foraging needs of Swainson's hawks are not replaced by incompatible agriculture practices, urbanization, or other land uses.

If you have any questions, please contact Mr. David Zezulak, Environmental Specialist, Region 2, (916) 355-7030, or Mr. Ron Schlorff, Nongame Section, Wildlife Management (916) 654-4262.

LEGAL STATUS

The Swainson's hawk is a migratory bird species protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). The Swainson's hawk is designated as a Candidate species for listing by the U.S. Fish and Wildlife Service under the federal Endangered Species Act (ESA; 16 U.S.C. 1513-1543). The State of California listed the Swainson's hawk as a Threatened species, thus providing them protection under the California Endangered Species Act [CESA] (Chapter 1.5 Fish and Game Code). In addition, Sections 3503, 3503.5, 3800 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. The DFG has interpreted the "take" clause in the CESA to include the destruction of either nesting and/or foraging habitat necessary to maintain the reproductive effort. Implementation of the take provisions of the CESA requires that project-related disturbance at active Swainson's hawk territories be reduced or eliminated during critical phases of the nesting cycle (March 1 - August 15 annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

The California Environmental Quality Act (CEQA) requires a mandatory findings of significance if impacts to threatened or endangered species are likely to occur (Sections 21001(c), 21083. Guidelines 15380, 15064, 15065). Avoidance or mitigation must be presented to reduce impact to less than significant levels (See Mitigation Criteria #2.).

NATURAL HISTORY

The Swainson's hawk is a large, broad winged buteo which frequents open country. Approximately the same size as a red-tailed hawk (*Buteo jamaicensis*), but trimmer, Swainson's hawks weigh approximately 800 - 1100 g (1 3/4 - 2 lbs), and have about a 125 cm. (4+') wingspan. The basic body plumage may be highly variable and is characterized by several color phases - light, dark, and rufous. In dark phase birds, the entire body of the bird may be sooty black. Adult birds generally have dark backs. The ventral or underneath sections may be light with a characteristic dark, wide "bib" from the lower throat down to the upper breast. The tail is gray ventrally with a subterminal dusky band, and narrow, less conspicuous barring proximally. The sexes are similar in appearance; females however, are slightly larger than males, as is the case in most sexually dimorphic raptors. There are no recognized subspecies (Palmer 1988).

The Swainson's hawk is a long distance migrator, leaving nesting grounds in northwestern Canada, the western U.S. and Mexico, most populations migrate to wintering grounds in the open pampas areas of South America (Argentina, Uruguay, southern Brazil). This round trip journey may exceed 14,000 miles. The birds will return to the nesting grounds in early March to establish breeding territories.

Swainson's hawks are monogamous and will remain so until the loss of a mate (Palmer 1988). Nest construction and courtship continues through April. The clutch (commonly 3-4 eggs) is commonly laid in early-April to early-May. However, may extend significantly later. Incubation lasts 34-35 days, with both parents participating in the brooding of eggs and young. The young leave the nest approximately 42-44 days after hatching. The young remain with their parents and gain hunting practice until they depart on migration in the fall. Large groups (up to 100+ birds) may congregate in holding areas in the fall and may delay migration depending upon forage availability. The specific purpose of these congregation areas is as yet unknown, but is likely related to the timing of migration, the learning of migration routes for each year's young, and provides a pairing and courtship opportunity for unattached adults.

General Reproductive Chronology

MAR	APR	MAY	JUN	JUL	AUG	SEPT
	X-----X					
	X-----X					
	X-----X					
	NESTLING STAGE		X-----X			
			FLEDGLING		X-----X	
					MIGRATION	X-----?

FORAGING REQUIREMENTS

Swainson's hawk nests in the Central Valley of California are generally found in scattered trees or along riparian systems adjacent to agricultural fields or pastures. These open fields and pastures are the primary forage areas. Major prey items for Central Valley birds include: California voles (Microtus californicus), valley pocket gophers (Thomomys bottae), deer mice (Peromyscus maniculatus), California ground squirrels (Spermophilus beecheyi), mourning doves (Zenaida macroura), ring-necked pheasants (Phasianus colchicus), meadowlarks (Sturnella neglecta), other passerines, grasshoppers (Conocephalinae), crickets (Gryllidae), and silphadids (Estep 1989). Swainson's hawks generally search for prey by soaring in open country and agricultural fields similar to northern harriers (Circus cyaneus) and ferruginous hawks (Buteo regalis). Often many hawks may be seen foraging together following tractors or other farm equipment capturing prey escaping from farming operations. During the breeding season, Swainson's hawks eat mainly vertebrates (small rodents and reptiles), whereas during migration vast numbers of insects are consumed (Palmer 1988).

Department of Fish and Game funded research has documented the importance of suitable foraging habitats (e.g., native grasslands, pasture lands, alfalfa and other hay crops, and combinations of hay grain and row crops) within an energetically efficient flight distance from active Swainson's hawk nests (Estep pers. comm.). Recent telemetry studies to determine foraging requirements have shown that birds may utilize in excess of 15,000 acres of habitat or range up to 18.0 miles from the nest in search of prey (Estep 1989). The area needed for foraging is determined by crop types, agricultural practices, harvesting regimes, prey abundance, and availability. Estep (1989) found that 73.4% of observed prey captures were in fields being harvested, disced, mowed, or irrigated. Some of the preferred foraging habitats for Swainson's hawks include: (1) Alfalfa - low prey abundance but steady prey accessibility. (2) Fallow fields - high prey abundance and prey accessibility if not dominated by thistle. (3) Beet and Tomato fields - largest prey populations but dense cover reduces prey accessibility, except during harvesting operations when Swainson's hawks have been observed foraging almost exclusively in these fields from late-July to early-September. (4) Dry-land pasture provided the primary forage area for 1 radioed pair, and appears to be an important foraging area. (5) Irrigated pasture provides some forage habitat, especially during flooding. (6) Rice land appears to provide valuable early season (prior to flooding) and late season (fall and winter migration periods) foraging habitat. Unsuitable foraging habitat types include any crop where prey are not available due to the high density of vegetation, or have low abundance of prey such as vineyards, mature orchards, and cotton fields.

NESTING REQUIREMENTS

Swainson's hawks nest throughout most of the floor of the Central Valley, although nesting habitat is fragmented and unevenly distributed. More than 85% of the known nests in the Central Valley are within riparian systems in Sacramento, Yolo, and San Joaquin Counties. Much of the potential nesting habitat remaining in this area is in riparian forests, lone trees, oak groves, and roadside trees. The riparian areas are generally adjacent to and within easy flying distance to alfalfa or hay fields. Department research has shown that valley oaks (Quercus lobata), Fremont's cottonwood (Populus fremontii), willows (Salix spp.), sycamores (Platanus spp.), and walnut (Juglans spp.) are the preferred nest trees for Swainson's hawks (Bloom 1980, Estep 1989).

FALL AND WINTER MIGRATION HABITATS

During their annual fall and winter migration periods. Swainson's hawks may congregate in large groups (up to 100+ birds) Some of these sites may be used during delayed migration periods lasting up to three months. Such sites have been identified in Yolo and San Joaquin Counties. Specific protection is needed for these areas and surrounding foraging areas.

HISTORICAL AND CURRENT POPULATION STATUS

The Swainson's Hawk was historically (ca 1900) regarded as one of the most common and numerous raptor species in the state, so much so that they were often not given special mention in field notes. The breeding population has declined by an estimated 91% in California since the turn of the century (Bloom 1980). The historical Swainson's hawk population estimate, based on current densities and estimates of former available habitat, is 4,284 - 17,136 pairs (Bloom 1980). In 1979, approximately 375 ±50 breeding pairs of Swainson's hawks were estimated in California, and 280 (75%) of those pairs were estimated to be in the Central Valley (Bloom 1980). In 1988, 241 active breeding pairs were found in the Central Valley, with an additional 78 active pairs known in northeastern California. The 1989 population estimate was 430 pairs for the Central Valley and 550 pairs statewide. This difference in population estimates reflect increased survey intensity, not an actual population increase.

REASONS FOR DECLINE

The dramatic population decline from historic levels has been attributed to loss of native nesting and foraging habitat, and more recently from the conversion of agriculture to urban land uses, changes to incompatible crop types and loss of suitable nesting trees. In addition, pesticides, shooting, disturbance at the nest site, and other disturbances on wintering areas may have contributed to their decline. The loss of nesting habitat within riparian areas has been accelerated by flood control practices and bank stabilization programs. Smith (1977) estimated that in 1850 over 770,000 acres of riparian habitat were present in the Sacramento Valley alone. Today less than 12,000 acres of riparian habitat remain. A 98% decrease in riparian vegetation has been documented within the Central Valley (Katibah 1983).

In summary, management needs of the Central Valley population of Swainson's hawks include ensuring the availability of suitable nesting habitat through the 1) preservation and recruitment of suitable nesting trees, 2) protection of existing nesting habitat from destruction or disturbance, 3) maintenance of compatible agricultural practices to preserve forage habitat, and 4) mitigation for loss of breeding and/or foraging habitat. Coordination and cooperation with local agencies must be continued to prevent further habitat destruction from development projects.

MITIGATION CRITERIA

GOAL: NO NET LOSS OF SWAINSON'S HAWK NESTING OR FORAGING HABITAT VALUE

I. Consultation under California Environmental Quality Act (CEQA) and/or California Endangered Species Act (CESA).

A. Project Consultation

Project proponent should consult with the DFG regarding take of an endangered species or its habitat pursuant to CESA, and appropriate Fish and Game Code Sections.

- 1. Pursuant to Article 4 of CESA, State agencies are required to consult with the DFG to ensure that any action authorized, funded or carried out by that state agency will not jeopardize the continued existence of any endangered species.
- 2. Any project public or private which results in the take of nesting or foraging habitat must enter into a management agreement and take permit with the DFG under Fish and Game Code Section 2081

B. CEQA and Subdivision Map Act

Project proponents are encouraged to consult the Department's California Natural Diversity Data Base and Nongame Section to receive updated locational information regarding active Swainson's hawk territories. Due to the complexities of individual cases, it is advisable that developers or others planning projects or actions that may impact one or more Swainson's hawk territories initiate communication with the Department as early as possible.

- 1. CEQA Guidelines Sec. 15065 directs that a mandatory finding of significance is required for projects that have the potential to substantially degrade or reduce the habitat of, or restrict the range of a threatened or endangered species. CEQA requires agencies to implement feasible mitigation measures or feasible alternatives identified in EIR's for projects which will otherwise cause significant adverse impacts (Sections 21002, 21081, 21083; Guidelines, sections 15002, subd. (a)(3), 15021, subd. (a)(2), 15091, subd. (a).).

Handwritten notes and annotations:

- Next to item 1: "create"
- Next to item 2: "What is..."
- Next to item 1 (B): "Mandatory finding of significance"
- Bottom left: "Is this applicable to broader plan document such as species plan?"
- Bottom right: "Pic"

① avoid impact altogether
 - minimize impact by limiting the degree or magnitude of the action and its implementation
 ② rectifying the impact by repairing, rehabilitating or restoring the impacted environment

To be legally adequate, mitigation measures must be capable of "avoiding the impact altogether by not taking a certain action or parts of an action"; "minimizing impacts by limiting the degree or magnitude of the action and its implementation"; "rectifying the impact by repairing, rehabilitating or restoring the impacted environment"; "or reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action." (Guidelines, section 15370).

2. Section 66474 (e) of the Subdivision Map Act states "a legislative body of a city or county shall deny approval of a tentative map or parcel map for which a tentative map was not required, if it makes any of the following findings: ... (e) that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish and wildlife or their habitat". In recent court cases, the court upheld that Section 66474(e) provides for environmental impact review separate from and independent of the requirements of CEQA (Topanga Assn. for a Scenic Community v. County of Los Angeles, 263 Cal. Rptr. 214 (1989)). The finding in Section 66474 is in addition to the requirements for the preparation of an EIR or Negative Declaration.

II. Maintenance of breeding pairs and their habitat.

A. Prevention of disturbance at the nest site.

1. No disturbance should occur within 1/2 mile of an active nest between March 1 - August 15 or until fledglings are no longer dependent upon nest tree habitat. Recent experience indicates this may be as late as September 15. If the nest tree is to be removed and fledglings are present, the nest tree may not be removed until September 15 or until the DFG has determined that the young are no longer dependent on the nest tree. If construction or other project related activities which may cause nest abandonment or forced fledging are proposed within this 1/2 mile buffer zone, intensive monitoring (funded by the project sponsor) by a Department approved raptor biologist will be required. Exact implementation of this measure will be based upon specific information at the project site.

B. Prevention of loss of nest trees.

1. Projects should be designed to avoid direct and indirect impacts to nest trees.

2. Revegetation of historical nesting habitat with suitable native nest trees species (e.g., oaks, cottonwoods, sycamores, etc.) adjacent to adequate forage habitat shall be undertaken. Sites at least five acres in size are recommended.

C. Maintenance of sufficient foraging habitat to support breeding pairs and successful fledging of young.

1. Impact avoidance and project alternatives must be thoroughly analyzed and discussed with DFG representatives prior to adverse modification of foraging habitat as required by CEQA (Section 21002; Guidelines sec. 15002, 15021, 15126, 21100). This discussion must focus on alternatives capable of either eliminating any significant adverse environmental effect or reducing them to a level less than significant, even if such alternatives would be more costly or to some degree impede the project's objectives.
2. Potential foraging areas are described as identified foraging habitat types located within a 10-mile radius from an active Swainson's hawk nesting territory. Any adverse modification of these foraging areas may require mitigation for loss of foraging habitat. The criteria for assessing this mitigation is as follows:
 - a. Territory must have been used at least once historically (as determined by DFG Swainson's hawk nesting records or other confirmed sources).
 - b. Mitigation will be required for all lands within the defined foraging area (10 miles), excluding the following: Lands which are currently in urban use or lands that have no existing or potential value for foraging Swainson's hawks as determined by site specific surveys by a DFG approved raptor biologist.

Basic Requirements

1:1 replacement ratio for each acre lost - with a min. 10% acquired in fee and actually managed for Swainson's hawk habitat.

- but
- Increased ratios may be necessary in order to maintain adequate foraging habitat to support hawk populations or if a project site provides breeding or foraging habitat for more than one pair.
- c. Mitigation for foraging areas shall be a minimum 1:1 acre ratio (i.e., 1 acre replacement for each 1 acre loss of habitat) and with a minimum of 10% acquired in fee and actually managed for Swainson's hawk habitat. Increased mitigation ratios may be necessary in certain instances in order to maintain adequate foraging habitat to support Swainson's hawk populations or if a project site provides breeding or foraging habitat for more than one pair. Due to its seasonal availability and potential high value during limited periods, mitigation for rice lands shall be at a minimum of 0.5:1 ratio. Lands shall be considered as rice habitat only if farmed to rice for seven of the ten previous years and 15 of the previous 20 years.

Habitat management plans for several areas are currently being prepared which may identify new information regarding habitat requirements for nesting pairs. Therefore, these criteria are to be considered interim guidelines and mitigation ratios may increase for future projects based on additional information from scientific research on this species.

D. Retention of Habitat

Retain and create sufficient quality habitat to maintain existing population levels and to allow for future population increases to meet recovery goals for the Swainson's hawk (as to be determined by the Swainson's Hawk Recovery Plan).

1. Restoration and enhancement of Swainson's hawk nesting and foraging habitats through the creation and establishment of habitat management areas.
 - a. Mitigation areas must meet the following minimum criteria:
 - i. Minimum acreage size of 1,280 contiguous or semi-contiguous acres of suitable habitat. Smaller individual projects may participate in mitigation banks or fee assessment programs to acquire the minimum acreage needed to support a nesting pair.

- ii. Creation or enhancement of oak and riparian woodlands may be required for some projects. These riparian areas should be of appropriate width, with the successful establishment of native riparian species, such as: cottonwoods, oaks, sycamores, and willows. Revegetation plans submitted by the project sponsor shall include but are not limited to the following:
 - (a) Tree densities
 - (b) Species compositions
 - (c) Amount of cover
 - (d) Compensated revegetation for loss due to fire or pests
- iii. Agriculture practices shall be incorporated into the bank or mitigation area to produce crop types such as but not limited to: alfalfa, dry pasture or native grasslands, or other crops which are compatible for foraging Swainson's hawks.
- iv. Fee title to land or permanent conservation easements obtained for the Department of Fish and Game, or its designee.
- v. Management, enhancement, restoration, and operation plans must be incorporated with the mitigation plan and implemented by the project proponent prior to project construction.
- vi. Project proponent would be responsible for the successful establishment of Swainson's hawk nesting/foraging areas in perpetuity. Monitoring programs will require an annual written review submitted to the DFG for the first 5 years, and thereafter written reviews will be required every 3-5 years for private mitigation projects.

III. Restoration of Swainson's hawk population.

- A. Support and acquire funding to continue research related to breeding success, effects of contaminants, dispersal, movement, mortality, habitat use, and other identified research needs. Responsibility: DFG Nongame Bird and Mammal Section.
- B. Development and completion of a Recovery Plan. Responsibility: DFG Nongame Bird and Mammal Section.

C. Coordinate with local agencies for long term planning to maintain sufficient quality habitat for Swainson's hawks. Regional Environmental Services function:

1. Maintain close coordination with city and county agencies, other state agencies, local agricultural districts, federal agencies, and private conservation organizations to organize a concerted land use plan sensitive to the need of the Swainson's hawk and other listed or sensitive species.
2. Protect and maintain agricultural preserves.
3. Coordinate management planning with responsible agencies.

Bibliography

Bloom, P.H. 1980. The Status of the Swainson's Hawk in California, 1979. Federal Aid in Wildlife Restoration, Project W-54-R-12, Nongame Wildl. Invest. Job Final Rept. 11-8.0. Calif. Dept. of Fish and Game, Sacramento, CA. 24 pp. + appendix.

Estep, J. 1989. Biology, movements, and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. Calif. Dept. of Fish and Game, Nongame Bird and Mammal Sec. Rep., Sacramento, CA. 52 pp.

Katibah, E.F. 1983. A brief history of riparian forests in the Central Valley of California. IN: R.E. Warner and K.M. Hendrix (eds.) California Riparian Systems: Ecology, Conservation, and Productive Management. Univ. of Ca. Press, Berkeley. 1035 p.

Palmer, R.S. 1988. Handbook of North American Birds: Raptors Vol. II. Smithsonian Instit. Washington, D.C.

Schmultz, J. 1980. IN: R.S. Palmer.

Smith, F. 1977. Short review of the status of riparian forests in California. In: Sands, A. (ed.) Riparian forests in California : their ecology and conservation. Inst. of Ecology Publ. 15 Univ. of Calif., Davis. 122 p.

California Dept. of Fish and Game, Region 2, Environmental Services,
Revised January 1, 1992.

IRRIGATION



DRAINAGE

RECLAMATION DISTRICT NO. 2068

November 30, 1992

David Wade
Wade Associates
2150 A Douglas Boulevard, Suite 220
Roseville, CA 95661

REGARDING: Specific Plan for the Northeast Quadrant Area of
the City of Dixon

Dear Mr. Wade:

After reviewing the Notice of Preparation for the above referenced project, Reclamation District No. 2068 provides the following comments:

General Concerns

Reclamation District No. 2068's primary concerns are related to drainage impacts created by this project. To the extent that drainage waters from this area are transmitted to or through the drainage works of the Dixon Resource Conservation District drainage works to the facilities of the District, consultation and consent is required from this District for additions, alterations or improvement to those works. This is provided for in agreements between Dixon Resource Conservation District and Reclamation District No. 2068.

CHECKLIST FORM

I (f) Changes in drainage that result in either increases in quantity or duration of drainage flows that are transmitted to Haas Slough through the Dixon Resource Conservation District/Reclamation District No. 2068 drainage works has the potential to increase the deposition of materials in those waters tributary to the Sacramento River.

III (a) Whereas the State Water Resources Control Board has undertaken the regulation of California waters, particularly through the Inland Waters Plan, and acquired the classification of drainage conveyances as to the nature and water source of these facilities, changes in drainage works may affect the classification and designation of existing

conveyance facilities or create new reportable facilities. This item should be reported as a "maybe".

III (b) Until final drainage plans are approved and/or in place the impact of this proposal on existing downstream flooding problems can not be adequately assessed. Item III (b) should be answered "maybe".

III (d) The creation of a 22 acre detention pond/water feature along with potentially increased storm water runoff from development of the 583 acres as a result of change in runoff coefficients can change the amount of surface waters present in various water bodies both in and off site. Item III (d) is appropriately answered as "maybe". *also?*

III (e) Surface water quality is definitely affected by the proposed development. Detention can ~~alter~~ temperatures of discharged waters, surface water runoff from developed areas differ significantly in quality from that of the existing land uses. Item III (e) should be answered "yes".

III (i) Areas southeast of the city of Dixon are currently exposed to flooding due to drainage from the watershed generally south and east of Dixon. To the extent this project either increases the quantity or duration of storm flows in the drainage systems the potential for increased or prolonged flooding is present. Item III (i) should be answered "maybe".

The stated assumption the plan area will be integrated with the city wide Master Drainage system does not adequately address the potential impacts. The Master Drainage Plan has not been sufficiently developed to address these issues. It is inappropriate to "export" these items to the incomplete Master Drainage Plan.

District Contract: Mike Hardesty
Reclamation District No. 2068
7178 Yolano Road
Dixon, CA 95620
(916) 678-5412

Sincerely,

RECLAMATION DISTRICT NO. 2068


T.M. Hardesty, Manager

YOLO SOLANO

AIR
POLLUTION
CONTROL
DISTRICT

1947 Galileo Ct., Suite 103
Davis, CA 95616
(800) 287-3650
(916) 757-3650
(916) 757-3670 FAX

December 8, 1992

To: Mr. David Wade
From: David B. Smith

Subject: Northeast Quadrant NOP

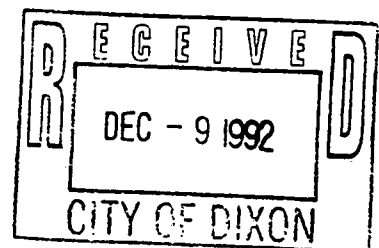
The Yolo/Solano APCD presents the following comments on the above referenced project(s):

The air quality analysis for this project should at a minimum address:

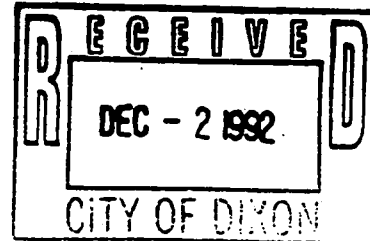
- 1) The project's estimated emissions from all possible future uses should be evaluated. All emissions factors and supporting information used should be provided.
- 2) Cumulative impacts of project emissions on local and regional air quality. This should consider both existing and future planned development in the area. The project's emissions should be addressed in the context of the California Clean Air Act, AB2595.
- 3) Proposed mitigation measures, a plan for their implementation and expected emissions reductions.

Enc.

(WP51:nequad.ltr)



GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

DATE: Nov 30, 1992

TO: Reviewing Agency

RE: CITY OF DIXON's NOP for
SPECIFIC PLAN FOR NORTHEAST QUADRANT AREA OF DIXON
SCH # 92113073

Attached for your comment is the CITY OF DIXON's Notice of Preparation of a draft Environmental Impact Report (EIR) for the SPECIFIC PLAN FOR NORTHEAST QUADRANT AREA OF DIXON.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

DAVID WADE
CITY OF DIXON
600 EAST STREET
DIXON, CA 95620

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Michael Chiriatti at (916) 445-0613.

Sincerely,

A handwritten signature in cursive script that reads "Christine Kinne".

Christine Kinne
Deputy Director, Permit Assistance

Attachments

cc: Lead Agency

RECEIVED DEC 21 1992

Dixon Resource Conservation District

1170 N. Lincoln, Suite 110, Dixon, CA 95620 - Phone (916) 678-1655

December 18, 1992

David Wade
Wade Associates
2150A Douglas Boulevard
Suite 220
Roseville, Ca. 95661

Dear Mr. Wade:

Subject: Notice of Preparation of a Draft Environmental Impact Report for the North Quadrant Area of the City of Dixon

The Dixon Resource Conservation District's (DRCD) main concern is drainage and development of prime agricultural land.

The 22 acre pond ^{sl.} ~~sight~~, if engineered the correct size, is an adequate means for drainage for this annexation. The DRCD is under contractual agreement with other district's south of them and are not to take in any additional lands, or drainage areas, therefore, the DRCD agrees with the drainage proposal for this annexation.

The loss of prime agricultural land should be identified and treated as a significant environmental impact. The California Code of Regulations (Section 15000 et seq., Appendix G (y)) states that a project will normally have a significant effect on the environment if it will convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land. Since it appears that the annexation will have this effect, the Draft Environmental Impact Report should provide information on the number of acres of ag land to be developed, the potential ag value of the sites, the impact of farmland conversion, and the irreversible impacts, and possible mitigation actions.

Farm land loss

Our contact person is District Manager Kevin Keefer, and he can be reached at (916)678-1655.

Sincerely,

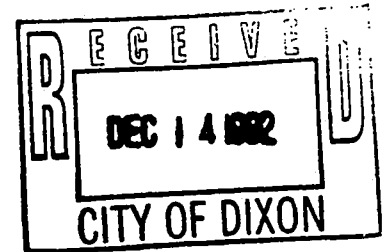
Pete J. Braun
VICE PRESIDENT

Pete J. Braun
President, Dixon RCD



LOCAL AGENCY FORMATION COMMISSION

501 Texas Street
Fairfield, California 94533
(707) 421-6775



December 11, 1992

Jim Louie, Director
Department of Community Development
City of Dixon
600 East "A" Street
Dixon, CA 95620

RE: Notice of Preparation for Northeast Quadrant Area of the City
of Dixon

Dear Jim:

Solano County LAFCO is in receipt of a Notice of Preparation (NOP) for the above project. This project will require action by LAFCO and therefore LAFCO as a responsible agency will be utilizing the environmental documentation in its review of the project.

We have previously commented on NOP's for several General Plan Amendment applications currently being processed by the City. This project along with the other applications currently filed with your city represent significant amendments to the City's existing General Plan. While they are separate applications, their review should be done in a coordinated fashion to ensure internal consistency in maintaining your General Plan.

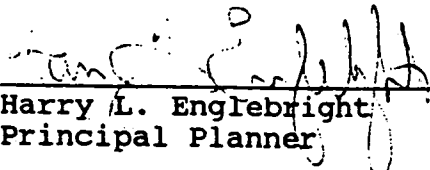
Section 15165 of the CEQA guidelines allows an agency with multiple projects to prepare either "one EIR for all projects or one for each project, but shall in either case comment upon the cumulative effect". For LAFCO purpose, it is imperative that a complete and thorough analysis of each impact be done on a cumulative basis with the other projects currently being considered by the City.

Under LAFCO adopted standards, several address environmental concerns and should be considered in the preparation of the environmental documentation. They include Standard No. 6, Effect on the National Resources; Standard No. 8, Likelihood of Significant Growth and Effect on other incorporated or unincorporated territory; Standard No. 9, Protection of Prime Agricultural Land as defined under the Cortese/Knox Act; Standard No. 10, Provision and Cost of Community Services; and Standard No. 11, The Effect of the proposed Action on Adjacent Areas, Mutual Social and Economic Interests and Local Governments Structure. A full analysis is essential with respect to these standards since the City does not have a Comprehensive Annexation Plan. Again, the

City may wish to consider preparation of a Comprehensive Annexation Plan in light of these proposals. In addition, while not required under CEQA, a Market Analysis and Fiscal Impact Analysis will need to be undertaken as part of the annexation proposal and could be incorporated as part of the environmental review.

If you have any questions concerning our comments, please feel free to contact me.

Sincerely,



Harry L. Englebright
Principal Planner

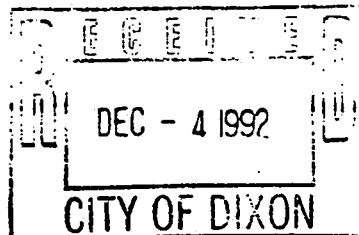
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ATTORNEYS
STEPHEN J. CARBONARO
TREASURER

December 3, 1992

James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, California 95620



Dear Jim:

**NOTICE OF PREPARATION OF A DRAFT EIR
FOR THE NORTHEAST QUADRANT AREA OF THE CITY OF DIXON**

Our staff has completed its review of the Notice of Preparation of a Draft EIR for the Northeast Quadrant area of the City of Dixon. The subject property is located within the Solano Irrigation District boundary and, therefore, is subject to the assessments and charges of the District. The following are the District's requirements for the development of this property:

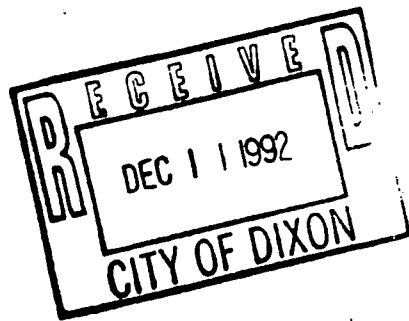
1. There are agricultural irrigation facilities within this project area that will require removal and/or replacement per the District's Standard Specification Details, latest revisions, and will be at the developer's expense.
2. We will require that the District review, approve and sign all Final/Parcel Maps and Improvement Plans of this development.
3. The District's Plan Review Fees apply and are due upon submittal of maps/plans for review.

These requirements are a result of the review of the Notice of Preparation of a Draft EIR. Additional comments will be required upon review of final/parcel maps and improvement plans of this development. We ask that a copy of the EIR be sent for review and comments. Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Frank Weber of my staff.

Sincerely,


Robert L. Isaac,
Assistant Manager

cc: Ron Tribbett
Ron Bernal
Suzanne Butterfield
Darrell Rosenkild
Jay Jones
Frank Weber



December 3, 1992

James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, California 95620

Dear Jim:

**NOTICE OF PREPARATION OF A DRAFT EIR
FOR THE NORTHEAST QUADRANT AREA OF THE CITY OF DIXON**

Our staff has completed its review of the Notice of Preparation of a Draft EIR for the Northeast Quadrant area of the City of Dixon. The subject property, once annexed to the City of Dixon, will be within the Dixon Solano Municipal Water Service (DSMWS) area which will serve domestic water to the subject lands. The following are the DSMWS requirements for the development of this property:

1. The developer will be responsible for all infrastructure at his expense. The water system shall be constructed in accordance with DSMWS Standard Specification Details, latest revisions.
2. There is currently no domestic water service to the subject property. A study will have to be conducted to determine what, if any deepwells, pumping plants, storage tanks and appurtenant facilities will have to be constructed to serve this area.
3. We request that the DSMWS review, approve and sign all Final/Parcel Maps and Improvement Plans of this development.
4. The DSMWS Plan Review Fees apply and are due upon submittal of maps/plans for review.

These requirements are a result of the review of the Notice of Preparation of a Draft EIR. Additional comments will be required upon review of final/parcel maps and improvement plans of this development. We ask that a copy of the EIR be sent for review and comments.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Frank Weber of my staff.

Sincerely,

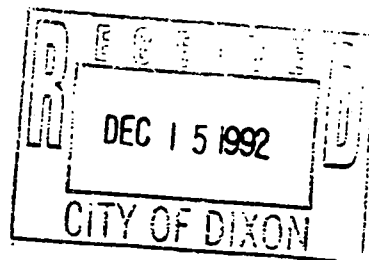
Suzanne Butterfield
Suzanne Butterfield,
Special Assistant to the Manager, SID
On behalf of DSMWS
cc/ concurrence of Ron Tribbett

cc: Ron Tribbett, Ron Bernal, Bob Isaac
Darrell Rosenkild, Jay Jones, Frank Weber

Pacific Gas and Electric Company

Dixon Office
275 North First Street
Dixon, CA 95620
916/678-2317

December 11, 1992



Jim Louie
City of Dixon
600 East A Street
Dixon, CA 95620

Re: Draft Environmental Impact Report
Northeast Quadrant Area

Dear Jim:

We have reviewed the above Notice of Preparation and offer the following comments:

The increased energy demand that will accompany development within the Northeast Quadrant Area will have cumulative impacts on our gas and electric system. This may require expansion of PG&E's system inside and outside the development boundaries. Facilities such as a gas regulation station, electric substation and Gas & Electric distribution systems must be built, upgraded or expanded to meet the projects demands.

PG&E recently completed the purchase of a four acre parcel (APN 111-100-16) near the project area for a substation site. The new substation will meet the increasing demand for electricity within the Dixon service area.

As each project is proposed, developers should consult with PG&E regarding the availability of Gas and Electric Service, the use of New Construction Conservation Incentive Programs and extension rules for new gas and electric service extensions.

Anticipated expansion of gas and electric facilities should be identified in environmental reviews in the same manner as storm drains, sewer, water and other public/private utilities.

On-site utility easements are necessary along all street frontages and as necessary to utilize common facilities to serve more than one parcel. We request public utility easements be dedicated by map and reviewed as each project is submitted for plan review.

PG&E facilities serve existing structures and agricultural equipment within the project area. Relocation and/or removal of these facilities should be discussed with PG&E at the time of plan review.

Sincerely,


JAMES A. REDMAN
Manager



Department of
Environmental Management

601 TEXAS STREET
FAIRFIELD, CALIFORNIA 94533

RECEIVED DEC 15 1992

December 11, 1992

Wade Associates
David Wade
2150 Douglas Boulevard, Suite 220
Roseville, CA 95661

Re: E. I. R. for Specific Plan for the N.E. Quadrant Area
of the City of Dixon

Dear Mr. Wade:

Thank you for permitting our agency to comment on the proposed project. Our major environmental concerns involve the fate of the existing water wells and septic tanks located within the project area.

In order to prevent potential degradation of the groundwater, all abandoned wells shall be properly destroyed in accordance with Solano County Code, Chapter 13.10 and permits secured from this office prior to site development.

Abandoned or discontinued cesspools, septic tank, or seepage pits shall be pumped by a licensed contractor and completely filled with sand or compacted soil.

Should you have any questions, please contact me at (707) 421-6770.

Sincerely,

Clifford K. Covey, REHS, CHMM
Program Manager, Environmental Health

A handwritten signature in cursive script that reads "Ronald F. Scheufler".

Ronald F. Scheufler, REHS
Environmental Health Supervisor

RFS/dg

rswade

DEPARTMENT OF FISH AND GAME

REGION 2

1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CALIFORNIA 95670

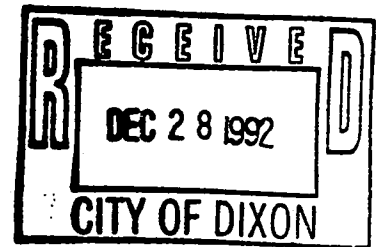
(916) 355-7020

RECEIVED JAN 8 1993



December 23, 1992

Mr. David Wade
City of Dixon
600 East Street
Dixon, California 95620



Dear Mr. Wade:

The Department of Fish and Game (DFG) has reviewed the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Specific Plan for Northeast Quadrant Area of Dixon, SCH 92113073. The project is located between Pedrick Road on the east, North First Street (State Route 113) on the west, Interstate 80 on the north and Vaughn Road on the south, just northeast of the city limits of the city of Dixon in Solano County.

This project involves the preparation of a specific Plan for, and the annexation of, 583 acres of land. Also requested, is a General Plan Amendment and rezoning to commercial, office and light industrial. The current General Plan designates the properties for primarily agricultural uses.

Wildlife habitat conditions on-site consist of mostly intensively farmed agricultural fields, an orchard, and irrigated pasture land. Large mature trees are associated with the North First Street/I-80 intersection as screening for the homesite and livestock auction yard at that location, and a few incidental trees are found around other farm homesites within this project area.

Putah Creek, which is approximately four miles north of this site, supports a large population of State-threatened Swainson's hawks, (Buteo Swainsoni). The DFG records indicate that there are a minimum of 12 Swainson's hawk nest sites on Putah Creek and as many as 25 within a ten mile radius of the proposed project site. The total Statewide estimated population of Swainson's hawks is only 550 nesting pair.

Agricultural lands in the proximity of raptor nesting territories provide critical forage habitat for Swainson's hawks, as well as many other wildlife species. The proposed project has the potential to eliminate 500-plus acres of foraging area for the Swainson's hawk and other resident migrant raptors. The DFG

Mr. David Wade
December 23, 1992
Page Two

recommends that the Draft EIR discuss and provide mitigation for the following:

1. The project's impacts on fish and wildlife and their habitat. The focus should be on the loss of agricultural lands and its impact on wildlife dependent on this habitat type.
2. The project's impact on State- or Federally-listed threatened or endangered species with particular emphasis on the Swainson's hawk. The Draft EIR should discuss the impacts to the Swainson's hawk resulting from loss of habitat and provide the mitigation measures necessary to reduce these impacts to an insignificant level. Mitigation should be based on DFG guidelines dated January 1, 1992 (attached).
3. The project's impact upon wetlands. The subject lands should be surveyed for wetlands. All wetlands, streams, and swales should be identified and protected. If the proposed project unavoidably impacts wetlands, mitigation should be provided that is based upon the concept of no net loss of wetland habitat values or acreage. Intermittent streams and swales should be protected by a 50-foot nonbuilding setback buffer established on each side of the stream.
4. The growth inducing impacts associated with the proposed project and potential impacts to the Swainson's hawk.

In order to comply with Public Resources Code Section 21081.6, a detailed monitoring program must be developed for all required mitigation conditions. The monitoring program should include the following:

1. Specific criteria to measure effectiveness of mitigation.
2. Annual monitoring for a minimum of five years. Annual written reports submitted to the lead agency and the DFG.
3. Annual monitoring reports, each of which include corrective recommendations that shall be implemented in order to ensure that mitigation efforts are successful.

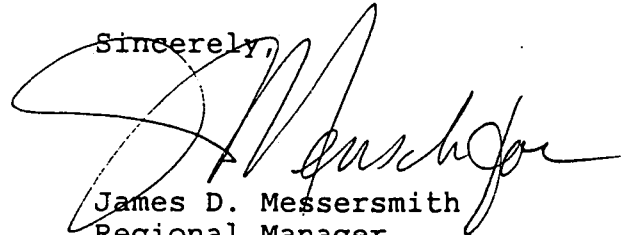
Mr. David Wade
December 23, 1992
Page Three

Any activity resulting in loss of habitat, decreased reproductive success, or other negative effects on population levels of State-listed endangered or threatened species may be construed as "take" by DFG. Take of a threatened or endangered species may be allowed after consultation with the DFG. This process would require a management plan entered into by the project proponent and the DFG that would require formalized mitigation to reduce the significance of the impact. Similar Federal Endangered Species Act sections (9 and 10a) apply for Federally-listed species.

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office.

If we can be of further assistance, please contact Mr. Bob Mapes, Associate Wildlife Biologist, or Mr. Jerry Mensch, Environmental Services Supervisor, telephone (916) 355-7030.

Sincerely,



James D. Messersmith
Regional Manager

Attachment

cc: Mr. Bob Mapes
Department of Fish and Game
Rancho Cordova, California

Mr. Jerry Mensch
Department of Fish and Game
Rancho Cordova, California

**Draft Mitigation Guidelines
for Swainson's Hawks (Buteo swainsoni)
in the Central Valley of California
(Revised January 1, 1992)**

CURRENT AND RECOMMENDED MANAGEMENT

The Department of Fish and Game has established the mitigation goal of no net loss of Swainson's hawk breeding or foraging habitat value, and has developed the following strategies and mitigation criteria to reverse the dramatic population decline of this species in the Central Valley. These criteria provide guidelines for lead agencies and project sponsors to follow in developing adequate mitigation for the loss of Swainson's hawk habitat. Direction for management towards restoration of this species is also included within this document. These guidelines are to be considered interim and will remain in effect until a comprehensive Swainson's Hawk Recovery Plan is completed by the Department. Several Habitat Management Plans (HMP's) for Swainson's hawk within specific project areas are currently being proposed. These guidelines will be used in conjunction with a Swainson's Hawk Recovery Plan to establish criteria for species recovery through population expansion into former habitat, recruitment of young into the population, and other identified recovery goals. Currently, translocation of active nests will not be considered a viable option to enable development to proceed. Hacking (controlled release) of captive reared young has not been employed to enhance the population at this time.

During project review, the Department will consider whether suitable foraging habitat occurs within a ten (10) mile radius of an active nest and contributes to maintaining that Swainson's hawk breeding territory. This ten-mile radius standard was developed through evaluation of the results of Department funded telemetry studies. It is within the documented flight distance from active nest sites to suitable foraging habitats within the home range of a Swainson's hawk. Therefore, proposed development projects may be required to mitigate impacts at active nest sites and surrounding suitable feeding habitat areas; both of which are essential to the integrity of the breeding territory. In addition, since over 95% of Swainson's hawk nests occur on private land, a program of incentives for the private landowner is needed to ensure that crops which are compatible to the foraging needs of Swainson's hawks are not replaced by incompatible agriculture practices, urbanization, or other land uses.

If you have any questions, please contact Mr. David Zezulak, Environmental Specialist, Region 2, (916) 355-7030, or Mr. Ron Schlorff, Nongame Section, Wildlife Management (916) 654-4262.

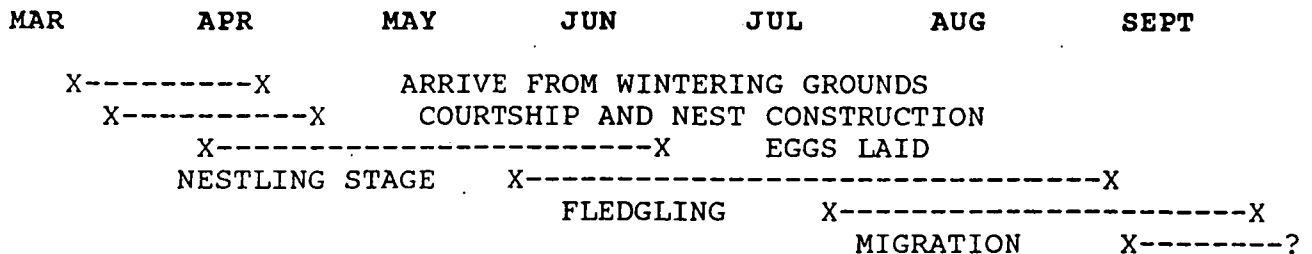
NATURAL HISTORY

The Swainson's hawk is a large, broad winged buteo which frequents open country. Approximately the same size as a red-tailed hawk (*Buteo jamaicensis*), but trimmer, Swainson's hawks weigh approximately 800 - 1100 g (1 3/4 - 2 lbs), and have about a 125 cm. (4+') wingspan. The basic body plumage may be highly variable and is characterized by several color phases - light, dark, and rufous. In dark phase birds, the entire body of the bird may be sooty black. Adult birds generally have dark backs. The ventral or underneath sections may be light with a characteristic dark, wide "bib" from the lower throat down to the upper breast. The tail is gray ventrally with a subterminal dusky band, and narrow, less conspicuous barring proximally. The sexes are similar in appearance; females however, are slightly larger than males, as is the case in most sexually dimorphic raptors. There are no recognized subspecies (Palmer 1988).

The Swainson's hawk is a long distance migrator, leaving nesting grounds in northwestern Canada, the western U.S. and Mexico, most populations migrate to wintering grounds in the open pampas areas of South America (Argentina, Uruguay, southern Brazil). This round trip journey may exceed 14,000 miles. The birds will return to the nesting grounds in early March to establish breeding territories.

Swainson's hawks are monogamous and will remain so until the loss of a mate (Palmer 1988). Nest construction and courtship continues through April. The clutch (commonly 3-4 eggs) is commonly laid in early-April to early-May. However, may extend significantly later. Incubation lasts 34-35 days, with both parents participating in the brooding of eggs and young. The young leave the nest approximately 42-44 days after hatching. The young remain with their parents and gain hunting practice until they depart on migration in the fall. Large groups (up to 100+ birds) may congregate in holding areas in the fall and may delay migration depending upon forage availability. The specific purpose of these congregation areas is as yet unknown, but is likely related to the timing of migration, the learning of migration routes for each year's young, and provides a pairing and courtship opportunity for unattached adults.

General Reproductive Chronology



NESTING REQUIREMENTS

Swainson's hawks nest throughout most of the floor of the Central Valley, although nesting habitat is fragmented and unevenly distributed. More than 85% of the known nests in the Central Valley are within riparian systems in Sacramento, Yolo, and San Joaquin Counties. Much of the potential nesting habitat remaining in this area is in riparian forests, lone trees, oak groves, and roadside trees. The riparian areas are generally adjacent to and within easy flying distance to alfalfa or hay fields. Department research has shown that valley oaks (Quercus lobata), Fremont's cottonwood (Populus fremontii), willows (Salix spp.), sycamores (Platanus spp.), and walnut (Juglans spp.) are the preferred nest trees for Swainson's hawks (Bloom 1980, Estep 1989).

FALL AND WINTER MIGRATION HABITATS

During their annual fall and winter migration periods. Swainson's hawks may congregate in large groups (up to 100+ birds) Some of these sites may be used during delayed migration periods lasting up to three months. Such sites have been identified in Yolo and San Joaquin Counties. Specific protection is needed for these areas and surrounding foraging areas.

HISTORICAL AND CURRENT POPULATION STATUS

The Swainson's Hawk was historically (ca 1900) regarded as one of the most common and numerous raptor species in the state, so much so that they were often not given special mention in field notes. The breeding population has declined by an estimated 91% in California since the turn of the century (Bloom 1980). The historical Swainson's hawk population estimate, based on current densities and estimates of former available habitat, is 4,284 - 17,136 pairs (Bloom 1980). In 1979, approximately 375 \pm 50 breeding pairs of Swainson's hawks were estimated in California, and 280 (75%) of those pairs were estimated to be in the Central Valley (Bloom 1980). In 1988, 241 active breeding pairs were found in the Central Valley, with an additional 78 active pairs known in northeastern California. The 1989 population estimate was 430 pairs for the Central Valley and 550 pairs statewide. This difference in population estimates reflect increased survey intensity, not an actual population increase.

MITIGATION CRITERIA

GOAL: NO NET LOSS OF SWAINSON'S HAWK NESTING OR FORAGING HABITAT VALUE

I. Consultation under California Environmental Quality Act (CEQA) and/or California Endangered Species Act (CESA).

A. Project Consultation

Project proponent should consult with the DFG regarding take of an endangered species or its habitat pursuant to CESA, and appropriate Fish and Game Code Sections.

1. Pursuant to Article 4 of CESA, State agencies are required to consult with the DFG to ensure that any action authorized, funded or carried out by that state agency will not jeopardize the continued existence of any endangered species.
2. Any project public or private which results in the take of nesting or foraging habitat must enter into a management agreement and take permit with the DFG under Fish and Game Code Section 2081

B. CEQA and Subdivision Map Act

Project proponents are encouraged to consult the Department's California Natural Diversity Data Base and Nongame Section to receive updated locational information regarding active Swainson's hawk territories. Due to the complexities of individual cases, it is advisable that developers or others planning projects or actions that may impact one or more Swainson's hawk territories initiate communication with the Department as early as possible.

1. CEQA Guidelines Sec. 15065 directs that a mandatory finding of significance is required for projects that have the potential to substantially degrade or reduce the habitat of, or restrict the range of a threatened or endangered species. CEQA requires agencies to implement feasible mitigation measures or feasible alternatives identified in EIR's for projects which will otherwise cause significant adverse impacts (Sections 21002, 21081, 21083; Guidelines, sections 15002, subd. (a)(3), 15021, subd. (a)(2), 15091, subd. (a).).

2. Revegetation of historical nesting habitat with suitable native nest trees species (e.g., oaks, cottonwoods, sycamores, etc.) adjacent to adequate forage habitat shall be undertaken. Sites at least five acres in size are recommended.

C. Maintenance of sufficient foraging habitat to support breeding pairs and successful fledging of young.

1. Impact avoidance and project alternatives must be thoroughly analyzed and discussed with DFG representatives prior to adverse modification of foraging habitat as required by CEQA (Section 21002; Guidelines sec. 15002, 15021, 15126, 21100). This discussion must focus on alternatives capable of either eliminating any significant adverse environmental effect or reducing them to a level less than significant, even if such alternatives would be more costly or to some degree impede the project's objectives.
2. Potential foraging areas are described as identified foraging habitat types located within a 10-mile radius from an active Swainson's hawk nesting territory. Any adverse modification of these foraging areas may require mitigation for loss of foraging habitat. The criteria for assessing this mitigation is as follows:
 - a. Territory must have been used at least once historically (as determined by DFG Swainson's hawk nesting records or other confirmed sources).
 - b. Mitigation will be required for all lands within the defined foraging area (10 miles), excluding the following: Lands which are currently in urban use or lands that have no existing or potential value for foraging Swainson's hawks as determined by site specific surveys by a DFG approved raptor biologist.

- ii. Creation or enhancement of oak and riparian woodlands may be required for some projects. These riparian areas should be of appropriate width, with the successful establishment of native riparian species, such as: cottonwoods, oaks, sycamores, and willows. Revegetation plans submitted by the project sponsor shall include but are not limited to the following:
 - (a) Tree densities
 - (b) Species compositions
 - (c) Amount of cover
 - (d) Compensated revegetation for loss due to fire or pests
- iii. Agriculture practices shall be incorporated into the bank or mitigation area to produce crop types such as but not limited to: alfalfa, dry pasture or native grasslands, or other crops which are compatible for foraging Swainson's hawks.
- iv. Fee title to land or permanent conservation easements obtained for the Department of Fish and Game, or its designee.
- v. Management, enhancement, restoration, and operation plans must be incorporated with the mitigation plan and implemented by the project proponent prior to project construction.
- vi. Project proponent would be responsible for the successful establishment of Swainson's hawk nesting/foraging areas in perpetuity. Monitoring programs will require an annual written review submitted to the DFG for the first 5 years, and thereafter written reviews will be required every 3-5 years for private mitigation projects.

III. Restoration of Swainson's hawk population.

- A. Support and acquire funding to continue research related to breeding success, effects of contaminants, dispersal, movement, mortality, habitat use, and other identified research needs. Responsibility: DFG Nongame Bird and Mammal Section.
- B. Development and completion of a Recovery Plan. Responsibility: DFG Nongame Bird and Mammal Section.

Bibliography

Bloom, P.H. 1980. The Status of the Swainson's Hawk in California, 1979. Federal Aid in Wildlife Restoration, Project W-54-R-12, Nongame Wildl. Invest. Job Final Rept. 11-8.0. Calif. Dept. of Fish and Game, Sacramento, CA. 24 pp. + appendix.

Estep, J. 1989. Biology, movements, and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. Calif. Dept. of Fish and Game, Nongame Bird and Mammal Sec. Rep., Sacramento, CA. 52 pp.

Katibah, E.F. 1983. A brief history of riparian forests in the Central Valley of California. IN: R.E. Warner and K.M. Hendrix (eds.) California Riparian Systems: Ecology, Conservation, and Productive Management. Univ. of Ca. Press, Berkeley. 1035 p.

Palmer, R.S. 1988. Handbook of North American Birds: Raptors Vol. II. Smithsonian Instit. Washington, D.C.

Schmultz, J. 1980. IN: R.S. Palmer.

Smith, F. 1977. Short review of the status of riparian forests in California. In: Sands, A. (ed.) Riparian forests in California : their ecology and conservation. Inst. of Ecology Publ. 15 Univ. of Calif., Davis. 122 p.

California Dept. of Fish and Game, Region 2, Environmental Services,
Revised January 1, 1992.

CITY OF DIXON

600 EAST "A" ST.

DIXON, CALIFORNIA 95620

(916) 678-2326

LETTER OF TRANSMITTAL

To: Brian Collett
WADE & ASSOCIATES

Date: December 21, 1992

Copy To:

Subject: Northeast Quadrant NOP responses

WE ARE TRANSMITTING:

- As You Requested
- Herewith
- Under Separate Cover

THE FOLLOWING:

Responses to the Notice of Preparation for the Northeast
Quadrant Specific Plan

THESE ARE FOR:

- Your File
- Your Approval
- Recording
- Payment
- Return
-

REMARKS:

I expect to send you a weekly mailing of the responses
received as long as they come in.

Very truly yours,

CITY OF DIXON

By Tasha Huston
Tasha Huston

Title Assistant Planner

RECEIVED DEC 1 6 1992

TELEPHONE
(916) 678-5412

7178 YOLAND ROAD
DIXON, CALIF. 95620

IRRIGATION



DRAINAGE

RECLAMATION DISTRICT NO. 2068

November 30, 1992

David Wade
Wade Associates
2150 A Douglas Boulevard, Suite 220
Roseville, CA 95661

REGARDING: Specific Plan for the Northeast Quadrant Area of
the City of Dixon

Dear Mr. Wade:

After reviewing the Notice of Preparation for the above referenced project, Reclamation District No. 2068 provides the following comments:

General Concerns

Reclamation District No. 2068's primary concerns are related to drainage impacts created by this project. To the extent that drainage waters from this area are transmitted to or through the drainage works of the Dixon Resource Conservation District drainage works to the facilities of the District, consultation and consent is required from this District for additions, alterations or improvement to those works. This is provided for in agreements between Dixon Resource Conservation District and Reclamation District No. 2068.

CHECKLIST FORM

I (f) Changes in drainage that result in either increases in quantity or duration of drainage flows that are transmitted to Haas Slough through the Dixon Resource Conservation District/Reclamation District No. 2068 drainage works has the potential to increase the deposition of materials in those waters tributary to the Sacramento River.

III (a) Whereas the State Water Resources Control Board has undertaken the regulation of California waters, particularly through the Inland Waters Plan, and acquired the classification of drainage conveyances as to the nature and water source of these facilities, changes in drainage works may affect the classification and designation of existing

conveyance facilities or create new reportable facilities. This item should be reported as a "maybe".

III (b) Until final drainage plans are approved and/or in place the impact of this proposal on existing downstream flooding problems can not be adequately assessed. Item III (b) should be answered "maybe".

III (d) The creation of a 22 acre detention pond/water feature along with potentially increased storm water runoff from development of the 583 acres as a result of change in runoff coefficients can change the amount of surface waters present in various water bodies both in and off site. Item III (d) is appropriately answered as "maybe".

III (e) Surface water quality is definitely affected by the proposed development. Detention can alter temperatures of discharged waters, surface water runoff from developed areas differ significantly in quality from that of the existing land uses. Item III (e) should be answered "yes".

III (i) Areas southeast of the city of Dixon are currently exposed to flooding due to drainage from the watershed generally south and east of Dixon. To the extent this project either increases the quantity or duration of storm flows in the drainage systems the potential for increased or prolonged flooding is present. Item III (i) should be answered "maybe".

The stated assumption the plan area will be integrated with the city wide Master Drainage system does not adequately address the potential impacts. The Master Drainage Plan has not been sufficiently developed to address these issues. It is inappropriate to "export" these items to the incomplete Master Drainage Plan.

District Contract: Mike Hardesty
Reclamation District No. 2068
7178 Yolano Road
Dixon, CA 95620
(916) 678-5412

Sincerely,

RECLAMATION DISTRICT NO. 2068



T.M. Hardesty, Manager

YOLO
SOLANO

AIR
POLLUTION
CONTROL
DISTRICT

1947 Galileo Ct., Suite 103
Davis, CA 95616
(800) 287-3650
(916) 757-3650
(916) 757-3670 FAX

December 8, 1992

To: Mr. David Wade
From: David B. Smith
Subject: Northeast Quadrant NOP

The Yolo/Solano APCD presents the following comments on the above referenced project(s):

The air quality analysis for this project should at a minimum address:

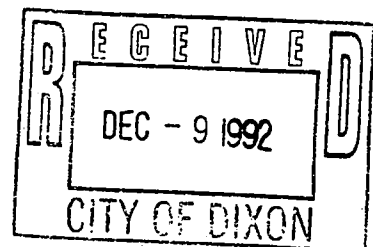
1) The project's estimated emissions from all possible future uses should be evaluated. All emissions factors and supporting information used should be provided.

2) Cumulative impacts of project emissions on local and regional air quality. This should consider both existing and future planned development in the area. The project's emissions should be addressed in the context of the California Clean Air Act, AB2595.

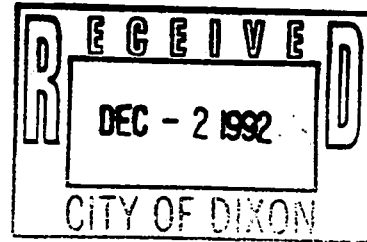
3) Proposed mitigation measures, a plan for their implementation and expected emissions reductions.

Enc.

(WP51:nequad.ltr)



GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

DATE: Nov 30, 1992

TO: Reviewing Agency

RE: CITY OF DIXON's NOP for
SPECIFIC PLAN FOR NORTHEAST QUADRANT AREA OF DIXON
SCH # 92113073

Attached for your comment is the CITY OF DIXON's Notice of Preparation of a draft Environmental Impact Report (EIR) for the SPECIFIC PLAN FOR NORTHEAST QUADRANT AREA OF DIXON.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

DAVID WADE
CITY OF DIXON
600 EAST STREET
DIXON, CA 95620

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Michael Chiriatti at (916) 445-0613.

Sincerely,

A handwritten signature in cursive script that reads "Christine Kinne".

Christine Kinne
Deputy Director, Permit Assistance

Attachments

cc: Lead Agency

RECEIVED DEC 21 1992

Dixon Resource Conservation District

1170 N. Lincoln, Suite 110, Dixon, CA 95620 - Phone (916) 678-1655

December 18, 1992

David Wade
Wade Associates
2150A Douglas Boulevard
Suite 220
Roseville, Ca. 95661

Dear Mr. Wade:

Subject: Notice of Preparation of a Draft Environmental Impact Report for the North Quadrant Area of the City of Dixon

The Dixon Resource Conservation District's (DRCD) main concern is drainage and development of prime agricultural land.

The 22 acre pond sight, if engineered the correct size, is an adequate means for drainage for this annexation. The DRCD is under contractual agreement with other district's south of them and are not to take in any additional lands, or drainage areas, therefore, the DRCD agrees with the drainage proposal for this annexation.

The loss of prime agricultural land should be identified and treated as a significant environmental impact. The California Code of Regulations (Section 15000 et seq., Appendix G (y)) states that a project will normally have a significant effect on the environment if it will convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land. Since it appears that the annexation will have this effect, the Draft Environmental Impact Report should provide information on the number of acres of ag land to be developed, the potential ag value of the sites, the impact of farmland conversion, and the irreversible impacts, and possible mitigation actions.

Our contact person is District Manager Kevin Keefer, and he can be reached at (916)678-1655.

Sincerely,

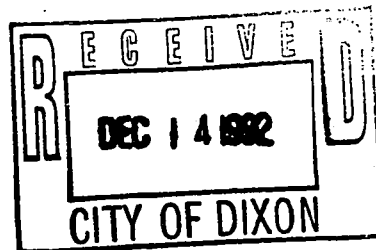
Pete J. Braun
VICE PRESIDENT

Pete J. Braun
President, Dixon RCD



LOCAL AGENCY FORMATION COMMISSION

501 Texas Street
Fairfield, California 94533
(707) 421-6775



December 11, 1992

Jim Louie, Director
Department of Community Development
City of Dixon
600 East "A" Street
Dixon, CA 95620

RE: Notice of Preparation for Northeast Quadrant Area of the City
of Dixon

Dear Jim:

Solano County LAFCO is in receipt of a Notice of Preparation (NOP) for the above project. This project will require action by LAFCO and therefore LAFCO as a responsible agency will be utilizing the environmental documentation in its review of the project.

We have previously commented on NOP's for several General Plan Amendment applications currently being processed by the City. This project along with the other applications currently filed with your city represent significant amendments to the City's existing General Plan. While they are separate applications, their review should be done in a coordinated fashion to ensure internal consistency in maintaining your General Plan.


Section 15165 of the CEQA guidelines allows an agency with multiple projects to prepare either "one EIR for all projects or one for each project, but shall in either case comment upon the cumulative effect". For LAFCO purpose, it is imperative that a complete and thorough analysis of each impact be done on a cumulative basis with the other projects currently being considered by the City.

Under LAFCO adopted standards, several address environmental concerns and should be considered in the preparation of the environmental documentation. They include Standard No. 6, Effect on the National Resources; Standard No. 8, Likelihood of Significant Growth and Effect on other incorporated or unincorporated territory; Standard No. 9, Protection of Prime Agricultural Land as defined under the Cortese/Knox Act; Standard No. 10, Provision and Cost of Community Services; and Standard No. 11, The Effect of the proposed Action on Adjacent Areas, Mutual Social and Economic Interests and Local Governments Structure. A full analysis is essential with respect to these standards since the City does not have a Comprehensive Annexation Plan. Again, the

City may wish to consider preparation of a Comprehensive Annexation Plan in light of these proposals. In addition, while not required under CEQA, a Market Analysis and Fiscal Impact Analysis will need to be undertaken as part of the annexation proposal and could be incorporated as part of the environmental review.

If you have any questions concerning our comments, please feel free to contact me.

Sincerely,



Harry L. Englebright
Principal Planner

DIRECTORS

MARION "MAC" MAGINNIS
PRESIDENT - DIV. #3

WILLIAM WETZEL
VICE PRESIDENT - DIV. #4

ALFRED ALONZO
DIV. #1

HOWARD ROGERS, JR.
DIV. #2

ROBERT HANSEN
DIV. #5



OFFICERS

BRICE BLEDSOE
SECTY-MGR.

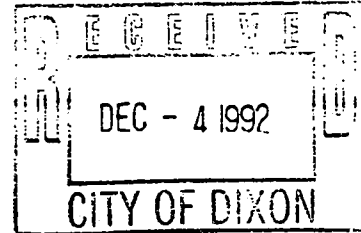
JOSEPH B. SUMMERS
DISTRICT ENGINEER

MINASIAN, MINASIAN,
MINASIAN, SPRUANCE, BABER,
MEITH, SOARES & SEXTON
ATTORNEYS

STEPHEN J. CARBONARO
TREASURER

December 3, 1992

James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, California 95620



Dear Jim:

**NOTICE OF PREPARATION OF A DRAFT EIR
FOR THE NORTHEAST QUADRANT AREA OF THE CITY OF DIXON**

Our staff has completed its review of the Notice of Preparation of a Draft EIR for the Northeast Quadrant area of the City of Dixon. The subject property is located within the Solano Irrigation District boundary and, therefore, is subject to the assessments and charges of the District. The following are the District's requirements for the development of this property:

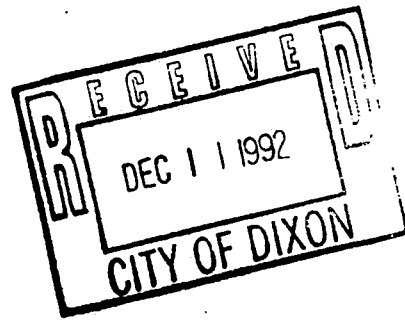
1. There are agricultural irrigation facilities within this project area that will require removal and/or replacement per the District's Standard Specification Details, latest revisions, and will be at the developer's expense.
2. We will require that the District review, approve and sign all Final/Parcel Maps and Improvement Plans of this development.
3. The District's Plan Review Fees apply and are due upon submittal of maps/plans for review.

These requirements are a result of the review of the Notice of Preparation of a Draft EIR. Additional comments will be required upon review of final/parcel maps and improvement plans of this development. We ask that a copy of the EIR be sent for review and comments. Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Frank Weber of my staff.

Sincerely,


Robert L. Isaac,
Assistant Manager

cc: Ron Tribbett
Ron Bernal
Suzanne Butterfield
Darrell Rosenkild
Jay Jones
Frank Weber



December 3, 1992

James Louie, Planning Director
Community Development Department
City of Dixon
600 East A Street
Dixon, California 95620

Dear Jim:

**NOTICE OF PREPARATION OF A DRAFT EIR
FOR THE NORTHEAST QUADRANT AREA OF THE CITY OF DIXON**

Our staff has completed its review of the Notice of Preparation of a Draft EIR for the Northeast Quadrant area of the City of Dixon. The subject property, once annexed to the City of Dixon, will be within the Dixon Solano Municipal Water Service (DSMWS) area which will serve domestic water to the subject lands. The following are the DSMWS requirements for the development of this property:

1. The developer will be responsible for all infrastructure at his expense. The water system shall be constructed in accordance with DSMWS Standard Specification Details, latest revisions.
2. There is currently no domestic water service to the subject property. A study will have to be conducted to determine what, if any deepwells, pumping plants, storage tanks and appurtenant facilities will have to be constructed to serve this area.
3. We request that the DSMWS review, approve and sign all Final/Parcel Maps and Improvement Plans of this development.
4. The DSMWS Plan Review Fees apply and are due upon submittal of maps/plans for review.

These requirements are a result of the review of the Notice of Preparation of a Draft EIR. Additional comments will be required upon review of final/parcel maps and improvement plans of this development. We ask that a copy of the EIR be sent for review and comments.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Frank Weber of my staff.

Sincerely,

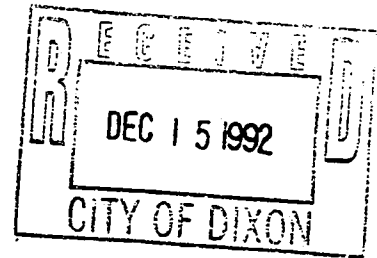
Suzanne Butterfield
Suzanne Butterfield, *with concurrence of Ron Tribbett*
Special Assistant to the Manager, SID
On behalf of DSMWS

cc: Ron Tribbett, Ron Bernal, Bob Isaac
Darrell Rosenkild, Jay Jones, Frank Weber

Pacific Gas and Electric Company

Dixon Office
275 North First Street
Dixon, CA 95620
916/678-2317

December 11, 1992



Jim Louie
City of Dixon
600 East A Street
Dixon, CA 95620

Re: Draft Environmental Impact Report
Northeast Quadrant Area

Dear Jim:

We have reviewed the above Notice of Preparation and offer the following comments:

The increased energy demand that will accompany development within the Northeast Quadrant Area will have cumulative impacts on our gas and electric system. This may require expansion of PG&E's system inside and outside the development boundaries. Facilities such as a gas regulation station, electric substation and Gas & Electric distribution systems must be built, upgraded or expanded to meet the projects demands.

PG&E recently completed the purchase of a four acre parcel (APN 111-100-16) near the project area for a substation site. The new substation will meet the increasing demand for electricity within the Dixon service area.

As each project is proposed, developers should consult with PG&E regarding the availability of Gas and Electric Service, the use of New Construction Conservation Incentive Programs and extension rules for new gas and electric service extensions.

Anticipated expansion of gas and electric facilities should be identified in environmental reviews in the same manner as storm drains, sewer, water and other public/private utilities.

On-site utility easements are necessary along all street frontages and as necessary to utilize common facilities to serve more than one parcel. We request public utility easements be dedicated by map and reviewed as each project is submitted for plan review.

PG&E facilities serve existing structures and agricultural equipment within the project area. Relocation and/or removal of these facilities should be discussed with PG&E at the time of plan review.

Sincerely,


JAMES A. REDMAN
Manager



Department of
Environmental Management

601 TEXAS STREET
FAIRFIELD, CALIFORNIA • 94533

RECEIVED DEC 15 1992

December 11, 1992

Wade Associates
David Wade
2150 Douglas Boulevard, Suite 220
Roseville, CA 95661

Re: E. I. R. for Specific Plan for the N.E. Quadrant Area
of the City of Dixon

Dear Mr. Wade:

Thank you for permitting our agency to comment on the proposed project. Our major environmental concerns involve the fate of the existing water wells and septic tanks located within the project area.


In order to prevent potential degradation of the groundwater, all abandoned wells shall be properly destroyed in accordance with Solano County Code, Chapter 13.10 and permits secured from this office prior to site development.

Abandoned or discontinued cesspools, septic tank, or seepage pits shall be pumped by a licensed contractor and completely filled with sand or compacted soil.

Should you have any questions, please contact me at (707) 421-6770.

Sincerely,

Clifford K. Covey, REHS, CHMM
Program Manager, Environmental Health


Ronald F. Scheufler, REHS
Environmental Health Supervisor

RFS/dg

rswade

Northeast Quadrant Specific Plan
Mitigation Monitoring Program
Findings of Fact
and
Statement of Overriding Considerations

Pursuant to Sections 15091 and 15093 of the State CEQA
Guidelines and Section 21081.6 of the
Public Resources Codes

Related Environmental Documentation:

Draft and Final Environmental Impact Reports
(State Clearinghouse Number 92113073)

Date of Adoption by City of Dixon

Project Files May Be Reviewed at:

City of Dixon
Community Development Department
600 East A Street
Dixon, California 95620

May 1, 1995

Table of Contents

	Page
Section 1. Introduction and Purpose	1-1
Section 2. Findings on Project Alternatives Considered in the	
Environmental Impact Report	2-1
Alternative: Mixed Use Development Alternative	2-1
Alternative: Off-Site Location Alternative	2-2
Alternative: No-Project Alternative	2-3
Section 3. Findings on Significant Impacts of the Proposed Project	3-1
Existing Adjacent Land Uses	3-1
Geology and Seismicity.....	3-2
Surface and Water Quality	3-3
Air Quality.....	3-5
Biological Resources.....	3-9
Cultural Resources.....	3-11
Transportation, Circulation and Access	3-12
Noise.....	3-16
Public Services and Utilities.....	3-17
Visual Resources.....	3-20
Public Health and Safety	3-21
Section 4. Implementation Schedule and Checklist	4-1
Prior to Approval of a PUD	4-2
During Improvement Plan/Grading Plan Check: Prior to Construction	4-9
Building Permit Plan Check	4-11
On-Going During Construction.....	4-12
On-Going As the Specific Plan is Built Out	4-13
Section 5. Statement of Overriding Considerations.....	5-1
Land Use, Development and Public Services Considerations	5-1
Employment.....	5-2
Open Space and Drainageway	5-2
Transportation and Air Quality Considerations.....	5-3
Conclusion.....	5-3
Section 6. Citations	6-1
Printed Reference	6-1

List of Acronyms

DEIR	Draft Environmental Impact Report
EIR	environmental impact report
FEIR	Final Environmental Impact Report
MMP	Mitigation Monitoring Program
NQSP	Northeast Quadrant Specific Plan
PUD	Planned Unit Development

SECTION 1. INTRODUCTION AND PURPOSE

The Dixon Northeast Quadrant Specific Plan (NQSP) establishes a land use and circulation plan, policies and guidelines for the ultimate development of 643 acres to be annexed to the City of Dixon. The specific plan defines the land use and development concepts to be applied in the plan area upon annexation to the City. The plan is intended to implement the objectives and policies of the City of Dixon General Plan. The specific plan is a policy document that establishes general criteria for development standards to be implemented through a Planned Unit Development (PUD).

This document presents findings that must be made by the City prior to approval of the project pursuant to Sections 15091 and 15903 of the California Environmental Quality Act (CEQA) Guidelines and Section 21081 of the Public Resources Code. In addition, this document provides the Mitigation Monitoring Program (MMP) that describes the responsibility and timing of mitigation actions. The MMP is derived from the Draft MMP included as Appendix D in the Draft EIR (City of Dixon, 1994). Under CEQA the City is required to make written findings explaining how it has dealt with each alternative and each significant environmental impact identified in the Draft Environmental Impact Report (DEIR and Final Environmental Impact Report (FEIR) (City of Dixon 1994 and 1995). The City may find that:

- changes or alterations have been required in or incorporated into the project to avoid or substantially lessen the significant environmental effects identified in the DEIR/FEIR;
- such changes or alternations are within the purview and jurisdiction of another agency and have been or should be adopted by that agency; or
- specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the DEIR/FEIR and Mitigation Monitoring Program (MMP).

Each of these findings must be supported by substantial evidence in the administrative record. Evidence from the DEIR, FEIR, MMP, and City's General Plan is used to meet these criteria.

This document summarizes the significant environmental impacts of the project and project alternatives, and describes how these impacts are to be mitigated. All impacts should be assumed significant unless otherwise stated in the findings.

This document is divided into the following seven sections:

- Section 1, "Introduction and Purpose";
- Section 2, "Findings on the Project Alternatives Considered in the Environmental Impact Report";
- Section 3, "Findings on Significant Impacts of the Proposed Project Identified in the DEIR/FEIR";

- Section 4, "Implementation Schedule and Checklist";
- Section 5, "Statement of Overriding Considerations"; and
- Section 6, "Citations".

Section 2, "Findings on the Project Alternatives Considered in the Environmental Impact Report", presents alternatives to the project and evaluates them in relation to the findings set forth in Section 15091(a)(3) of the State CEQA Guidelines, which allows a public agency to approve a project that would result in one or more significant environmental effects if the project alternatives are found to be infeasible because of specific economic, social, or other considerations.

Section 3, "Findings on Significant Impacts of the Proposed Project Identified in the DEIR/FEIR", presents significant impacts of the proposed project that were identified in the FEIR, the mitigation measures identified in the MMP, the findings for the impacts, and the rationales for the findings.

Section 4, "Implementation Schedule and Checklist", presents the implementation schedule and checklist and describes mitigation timing, verification, and responsibilities for the project. This incorporates the key elements of the Mitigation Monitoring Program.

Section 5, "Statement of Overriding Considerations", presents the overriding considerations for significant impacts related to the project that cannot be or have not been mitigated or resolved. These considerations are required under Section 15093 of the State CEQA Guidelines, which require decision makers to balance the benefits of a proposed project against its unavoidable environmental risk in determining whether to approve the project.

Section 6, "Citations", identifies all references cited in this document.

Section 1

Supporting Information

Tables

None

Figures

None

Acronyms

Dixon Northeast Quadrant Specific Plan (NQSP)	1-1
Planned Unit Development (PUD)	1-1
California Environmental Quality Act (CEQA)	1-1
Draft Environmental Impact Report (DEIR)	1-1
Final Environmental Impact Report (FEIR)	1-1
Mitigation Monitoring Program (MMP)	1-1

References

SECTION 2. FINDINGS ON PROJECT ALTERNATIVES CONSIDERED IN THE ENVIRONMENTAL IMPACT REPORT

ALTERNATIVE: MIXED USE DEVELOPMENT ALTERNATIVE

The mixed use development alternative proposes the development of a commercial, business-professional, and industrial park with the inclusion of 1,208 single and multiple family residential units. Other land uses have been reduced in acres to accommodate the residential uses. Conceptually, these residential units represent approximately 20 percent of the project site and would be constructed on 147 acres .

The mixed use development alternative would be similar to the proposed project except that an increase of residential units is linked with a decrease in industrial uses. This alternative would have fewer impacts than the proposed project in regard to public health and safety only. This alternative would be expected to create similar impacts to land use, soils and geology, surface and water quality; biological resources; cultural resources and public services and utilities. This alternative would be expected to generate greater impacts related to air quality, traffic and circulation, and noise.

This alternative is not proposed by the project proponent or the city because of the residential uses located in close proximity to Interstate 80. Compared to the proposed project, the Mixed Use Alternative would result in the following types of impacts:

- Similar impacts to land use and agricultural resources because the same number of acres devoted to agriculture would be removed.
- Similar amounts of earth to be disturbed. This alternative would result in similar grading and erosion impacts although all identified impacts would be mitigated to a level below significant.
- Long-term drainage characteristics of this alternative would be similar to those from the proposed project because drainage improvements are required under all development scenarios.
- Based on an increase in traffic generated by this alternative, it would be expected that air quality impacts associated with this alternative would be slightly greater when compared to the proposed project.
- The mixed use development alternative would have similar impacts on biological resources within and adjacent to the proposed project because a similar amount of site disturbance would occur under this alternative.
- This alternative would result in similar impacts to cultural resources and similar impacts to paleontological resources when compared to the proposed project.

- Based on a slight increase in traffic generated by this alternative, it would be expected that noise contributed by traffic associated with this alternative would be slightly greater than noise contributed by the proposed project.
- This alternative would require extension of public services and utilities to the project site similar to the proposed project. An increased number of residential units would increase energy consumption and demands placed on these public services and utilities.
- Development under the mixed use development alternative would generate similar impacts associated with public health and safety because the residential component of the project would still require similar mitigation associated with cleaning the existing soil of potential agricultural pesticide residue.

Finding : Alternative Infeasible

The mixed use alternative is infeasible because the General Plan does not contemplate residential development in this area. Furthermore, residential development throughout the city is restricted by Measure B.

Under Measure "B", the residential growth to be permitted in the City in a given year is limited to a number of dwelling units equal to three percent or less of the total number of housing units existing in Dixon on December 31 of the previous year. This rate of residential development would result in a total of approximately 6,775 units in the Dixon area by 2010, or an estimated population of approximately 20,325, based on an average of three persons per household. This level of population growth would represent nearly a doubling in the number of people living in Dixon between 1990 and 2010.

The General Plan contains specific policies to ensure that Dixon maintains its "small town character" while accommodating growth and building strong economic base. This includes:

The City shall actively pursue a balanced community comprising industrial, commercial and residential development.

To achieve this goal, the General Plan has designated specific areas for future industrial and commercial development, including the Northeast Specific Plan area.

ALTERNATIVE: OFF-SITE LOCATION ALTERNATIVE

The alternative project site assumes development of the proposed project on an alternative site in Solano County. The project site is located north of I-80 between Curry and Pedrick Roads. This site is not located within the City of Dixon's Sphere of Influence and would not be annexed into the City of Dixon. In addition, the majority of this site is currently in agricultural production and the local roadways would not be able to accommodate future traffic without substantial improvements. Figure 8.3.1 in the DEIR shows the location of the alternative project site.

Land use associated with this alternative would not be consistent with the growth associated with the county's growth projections.

Based on this conceptual design, the alternative project site would be similar to the proposed project. This alternative would not have a fewer impact than the proposed project in regard to any environmental issues. This alternative would be expected to create similar impacts to all environmental resource issues except land use. Land use issues would be slightly greater because the project would be built in Solano County and would not be annexed into the city of Dixon.

Finding: Alternative Infeasible

The city finds that the off-site alternative is not feasible because it is not located within the sphere of influence of the City of Dixon. Urban services would have to be extended to this site, projecting growth to the north side of I-80.

ALTERNATIVE: NO-PROJECT ALTERNATIVE

No impacts are associated with the No-Project Alternative because the land uses in the plan area would remain unchanged.

Finding: Alternative Infeasible

The no-project alternative would not provide any employment opportunities, as directed by the Dixon General Plan, nor would it provide opportunities for creating and expanding the commercial and service retail base of the area as proposed by the project. Additionally, the no-project alternative would not provide short-term construction employment opportunities. This would create a greater dependency on residents commuting to other communities for employment opportunities.

The project is bordered on three sides by urban development (including I-80) which are constraints to the continuation of agricultural operations. With exception to the one 60-acre parcel east of Pedrick Road, the remainder of the project site is not subject to Williamson Act contracts. Maintaining the current agricultural uses therefore, will become increasingly difficult.

Section 2

Tables

None

Figures

Figure 8.3.1 Alternative Project Site City of Dixon 1994 p. 8-7

Acronyms

Draft Environmental Impact Report (DEIR) 2-1

References

Full citation of the DEIR

SECTION 3. FINDINGS ON SIGNIFICANT IMPACTS OF THE PROPOSED PROJECT IDENTIFIED IN THE DEIR/FEIR

This section identifies the findings on significant impacts of the project, as identified in the DEIR/FEIR by issue area.

EXISTING ADJACENT LAND USES

Impact: Prime agricultural land will be converted to nonagricultural use, including 60 acres regulated by Williamson Act Agricultural Preserve.

Mitigation Measure: No mitigation is available for this impact.

Finding: Impact Infeasible to Mitigate. The City finds that no feasible mitigation measures exist for the conversion of open space to urban/development uses other than adoption of the No-Project Alternative.

Impact: The project may impair the agricultural productivity of prime agricultural land adjacent to the NQSP area.

Mitigation Measure LU-A: Ensure that all future development within the NQSP strictly enforce the landscape medians and agricultural buffer zones established by the specific plan.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure LU-A is feasible and will reduce the impact to a less-than-significant level by providing an undeveloped space between the urban and agricultural uses. The buffer and landscape medians will be reviewed in each project PUD by the Planning Department.

Impact: This project may conflict with adopted community plans or goals established by LAFCo.

Mitigation Measure LU-B: The project will require review and approval by the Solano County LAFCo before it can be annexed to the City of Dixon or developed. The City of Dixon will annex the entire frontage of County roads abutting developments within their jurisdiction. This will include:

1. Pedrick Road from I-80 south including the Vaughn Road intersection.
2. Vaughn Road from North First Street east including the Pedrick Road intersection.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure LU-B is feasible and will reduce the impact to a less-than-significant level by providing an opportunity for review and evaluation of the proposal by LAFCo.

Impact: The project conflicts with adopted community plans and goals established by the Williamson Act Agricultural Preserve.

Mitigation Measure LU-C: The proposed NQSP shall be reviewed by the Dixon City Council and the Solano County Board of Supervisors and findings shall be made that the 60 acres of the project site currently under Williamson Act should be withdrawn from Agricultural Preserve.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure LU-C is feasible and will reduce the impact to a less-than-significant level through the procedures for canceling a Williamson Act Contract.

Impact: Growth inducement.

Mitigation Measure: No mitigation is available for this impact.

Finding: Impact Infeasible to Mitigate. The City finds that no feasible mitigation measures exist for the conversion of open space to urban/development uses other than adoption of the No-Project Alternative.

GEOLOGY AND SEISMICITY

Impact: Construction associated with project implementation may cause soil erosion, wind and water erosion, and siltation of local drainages.

Mitigation Measure G-A: An erosion control plan shall be prepared prior to construction. This plan shall include standards for permanent erosion control design, requirements for full establishment of vegetation, and emphasize drought-tolerant and climate-adapted vegetation.

Mitigation Measure G-B: Disturbed areas of the project site that are not actively under construction during the winter rainy season shall not be left exposed for more than one month.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures G-A and G-B are feasible and will reduce the impact to a less-than-significant level by ensuring that erosion control measures including planting exposed areas will be implemented in the development process. Such measures will be evaluated and monitored by the Planning Department and Public Works Department.

Impact: Damage to structures and infrastructure caused by soils prone to shrink/swell behavior.

Mitigation Measure G-C: Prior to development of any facility within the specific plan area, a detailed geotechnical investigation of on-site soils shall be conducted to identify the soils subject to shrink/swell behavior.

Mitigation Measure G-D: Hazards associated with shrink/swell soils shall be avoided through proper construction methods which include site drainage, and responsive grading, excavation and foundation design. Potential adverse affects due to soils with high shrink/swell are avoidable if these soils are identified prior to the design and construction, and appropriate design and construction methods are applied.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures G-C and G-D are feasible and will reduce the impact to a less-than-significant level by providing standard design and construction techniques. These will be evaluated in the building permit review process.

Impact: Ground-shaking and liquefaction could occur due to possible seismic event along active faults in the area.

Mitigation Measure G-E All structures and new buildings constructed within the project area shall conform to the latest seismic structural standards of the Uniform Building Code (UBC) as a minimum standard.

Mitigation Measure G-F: Plans for individual buildings subject to public occupancy shall be accompanied by an investigative report prepared by a geologist specialized in engineering. This report shall identify underlying geology including depth of water table, depth to bedrock, and presence and characteristics of sand lenses. Necessary structural measures to adequately respond to the degree of probable risk attributable to these underlying formations shall be recommended.

Mitigation Measure G-G: No public or private electrical, water, wastewater or gas lines shall be permitted to cross identified potential ground failure areas without sufficient precautionary emergency provisions for: rapid shut-off, minimum disruption of service, and any adverse impact on adjoining and surrounding uses in the event of seismic-induced ground failure.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures G-E, G-F and G-G are feasible and will reduce the impact to a less-than-significant level by ensuring standard precautionary measures against damage resulting from seismic events. This will be evaluated in the building permit review process.

SURFACE AND WATER QUALITY

Impact: Change in land use from agriculture to urban uses will result in potential increases to the quantity of surface water runoff.

Mitigation Measure WQ-A: Prior to commencement of on-site grading, the project shall demonstrate, via a detailed hydraulic analysis of post development topographic and drainage conditions, that the final project design would not substantially cause flooding to adjacent or downstream parcels or conveyance facilities. The project proponent shall

participate in city-wide drainage improvements in order to increase downstream flow capacities to accommodate this project. The project design shall consider and evaluate the feasibility of detaining all surface water drainage on-site.

Mitigation Measure WQ-B Final detention basin(s) design, conveyance facilities, and management of the proposed facilities on-site shall, as demonstrated by the hydraulic analysis of the project proponent and approved by the City of Dixon, adequately accommodate runoff from a 10-year and 100-year storm event. Ultimate development of the entire site must be considered, although drainage infrastructure construction could be phased as needed.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures WQ-A and WQ-B are feasible and will reduce the impact to a less-than-significant level by providing for 100 percent detention of stormwater on-site as one alternative. This will be evaluated by the Public Works Department in the review of each PUD application.

Impact: Change to the quality of runoff would result from the fundamental change in land uses from agriculture to urban uses.

Mitigation Measure WQ-C: Prior to commencement of on-site grading, the project sponsor shall develop a surface water quality control plan, to be implemented and approved by the City of Dixon. The plan shall include, but not necessarily be limited to reducing runoff contaminant concentrations by:

- installing sediment and grease traps at all catch basins or within storm drain lines;
- properly maintaining sediment and grease traps, with responsibility for maintenance assigned to site operations to be established by the project sponsors prior to completion of construction of the first phase of development;
- incorporating infiltration facilities (porous pavement or grass swales) within the project to reduce peak flow of runoff;
- reducing source pollution causes through practices such as minimal use of fertilizer, pesticides and herbicides, proper application of water for landscape irrigation, keeping roadways and parking lots free of litter and sediments, proper methods and locations for disposal of automobile hazardous wastes; and
- maximizing distances between inlets and outlets perhaps using elongated basin shapes.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure WQ-C is feasible and will reduce the impact to a less-than-significant level by providing standard water quality control design features. This will be evaluated by the Public Works Department in the review of each PUD application and individual grading permit.

AIR QUALITY

Impact: The NQSP will result in short-term construction impacts to air quality.

Measures to Reduce PM₁₀

Mitigation Measure AQ-A: The project construction site shall be watered at least two times per day. Emphasis shall be placed on the watering of unpaved roadways during periods of high vehicle movement.

Mitigation Measure AQ-B: Tarpaulins or other effective covers shall be used on haul trucks when transferring earth materials.

Mitigation Measure AQ-C: Where feasible, all inactive portions of the project construction site shall be seeded and watered until vegetation is grown.

Mitigation Measure AQ-D: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the YSAQMD.

Mitigation Measure AQ-E: Soils shall not be exposed nor grading occur during periods where wind speeds are greater than 20 mph averaged over one hour.

Mitigation Measure AQ-F: Vehicle speed shall not exceed a maximum of 15 mph on all unpaved roads.

Mitigation Measure AQ-G: All roadways, driveways, and sidewalks shall be paved as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures AQ-A, AQ-B, AQ-C, AQ-D, AQ-E, AQ-F, and AQ-G are feasible and will reduce the impact to a less-than-significant level by providing standard control measures for dust and other particulate materials. This will be monitored and evaluated by the Planning Department and Public Works Department in site visits as the project is under construction.

Measures to Reduce O₃ Precursors (ROG and NO_x)

Mitigation Measure AQ-H: Proper maintenance of equipment and engines shall be maintained at all times.

Mitigation Measure AQ-I: Vehicle idling shall be kept to an absolute minimum. As a general rule idling shall be kept below 10 minutes.

Mitigation Measure AQ-J: During smog season (April through October), the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

Mitigation Measure AQ-K: Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures AQ-H, AQ-I, AQ-J, and AQ-K are feasible and will reduce the impact to a less-than-significant level by ensuring the efficient operation of equipment. This will be monitored by the Planning Department and Public Works Department in site visits as the project is under construction.

Measures to Reduce Petroleum Contamination of Soils

Mitigation Measure AQ-L: A site assessment shall be conducted before construction activities begin. At locations where petroleum contamination has occurred, the soils shall be remediated using appropriate techniques (Section 4.10, Public Health and Safety). Removal of petroleum contamination will also eliminate the generation of hydrogen sulfide and its associated odor. If unforeseen areas of subsurface contamination are encountered during excavation activities, grading shall be curtailed in the contaminated area until the area is evaluated and remediated as appropriate.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure AQ-L is feasible and will reduce the impact to a less-than-significant level by removal of potentially contaminating substances and establishing procedures for responding to unforeseen conditions. The site will be monitored by the Public Works Department in site visits.

Impact: Existing Air Quality in the project area currently exceeds the YSAQMD's threshold of significant for O₃ and PM₁₀.

Mitigation Measure: No mitigation is available for this impact.

Finding: Impact Infeasible to Mitigate. The City finds that no feasible mitigation measures exist for the conversion of open space to urban/development uses other than adoption of the No-Project Alternative.

Impact: Long-term mobile sources of air pollution will result from implementation of the NQSP.

Mitigation Measure: No mitigation is available for this impact.

Finding: Impact Infeasible to Mitigate. The City finds that no feasible mitigation measures exist for the conversion of open space to urban/development uses other than adoption of the No-Project Alternative.

Impact: The project plus future (2010) generated emissions will result in violations of ambient CO standards and a net increase of the O₃ precursors.

Mitigation Measure AQ-M: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.

Mitigation Measure AQ-N: Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities. Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.

Mitigation Measure AQ-O: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.

Mitigation Measure AQ-P: Mixed land uses will reduce vehicle trips and vehicle miles traveled (VMT). Supportive land uses shall be sited within walking/biking distance of one another.

Mitigation Measure AQ-Q: Support facilities to encourage modes of transportation other than the automobile shall include pedestrian and bicycle pathways.

Mitigation Measure AQ-R: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.

Mitigation Measure AQ-S: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.

Mitigation Measure AQ-T: Street design standards, including landscape areas between the sidewalk and street, night lighting, safe islands in the center of major arterials, automatic street or pedestrian-activated "walk" signals, and adequate "walk" times, shall be enforced.

Mitigation Measure AQ-U: PM₁₀ emissions shall be reduced by curtailing fugitive dust through effective landscaping, and paving all vehicle roads and parking lots.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures AQ-M, AQ-N, AQ-O, AQ-P, AQ-Q, AQ-R, AQ-S, AQ-T, and AQ-U are feasible and will reduce the impact to a less-than-significant level by providing opportunities to reduce the reliance on automobiles for certain types of trips. The measures will be incorporated in PUD designs prepared by future project proponents and reviewed by the Planning Department.

Impact: Airborne PM₁₀ from adjacent agricultural operations.

Mitigation Measure AQ-V: An agricultural buffer is proposed on the east side of the project site.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure AQ-V is feasible and will reduce the impact to a less-than-significant level by providing a physical separation between commercial uses and agricultural operations.

Impact: Airborne PM₁₀ from adjacent agricultural burning.

Mitigation Measure AQ-W: Air pollution control districts regulate the timing and methods of field burning in order to reduce the impact on local and regional air quality.

Mitigation Measure AQ-X: An agricultural buffer is proposed on the east side of the project site.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures AQ-W and AQ-X are feasible and will reduce the impact to a less-than-significant level by reducing the concentration particulate material. The Yolo/Solano Air Quality Maintenance District is responsible for regulating agricultural burning.

Impact: Cumulative emissions of ozone (O₃) precursors.

Mitigation Measure AQ-Y:

- Establish a priority system favoring multi-rider vehicles.
- Establish parking pricing strategies.
- Maximize telecommunication, including appropriate network infrastructure.
- Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.)
- Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment.
- Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home.
- Employer-sponsored subscription buses to supplement or substitute for public transit service.
- Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants.
- Request minibus, jitney or other para-transit service within the project.
- Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development.
- Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance.
- Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules.
- Request convenient bus schedules to accommodate unusual schedules.
- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.
- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure AQ-Y is feasible and will reduce the impact to a less-than-significant level by encouraging individual drivers to use other methods of travel. The details of implementing such plans will be incorporated in the standards and conditions for each PUD and will be reviewed and monitored by the Planning Department.

BIOLOGICAL RESOURCES

Impact: Project will result in the alteration of a seasonal freshwater marsh.

Mitigation Measure B-A: Prior to the issuance of improvement or development approvals by the City, a detailed wetland delineation should be conducted to precisely define seasonal wetland boundaries and acreage. Habitat values should also be qualified by type and condition of vegetation.

Mitigation Measure B-B: Prior to the issuance of improvement or development approvals by the City, a chain link fence, or acceptable alternative, shall be installed around the seasonal wetland area. The fencing should not be removed until the completion of construction activities. Written release from the City Planning Department must be received prior to the removal of any fencing.

Mitigation Measure B-C: Where practicable, the wetlands area should be avoided through land use planning.

Mitigation Measure B-D: Preserved wetlands area should be protected from development by a 50-foot buffer or easement, so that the seasonal wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjacent proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.

In general, the following standards shall apply to the buffer and preserved wetlands area:

- All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetlands area.
- No mowing shall be allowed to occur in a wetland easement.
- Surface water runoff from any paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.

Mitigation Measure B-E: If the removal or total destruction of the marshland area is unavoidable as a result of the project, after examination of all feasible avoidance alternatives, it may be required that the impacted wetland be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures B-A, B-B, B-C, B-D, and B-E are feasible and will reduce the impact to a less-than-significant level. The mitigation approach is designed to accommodate on-site mitigation and/or off-site mitigation, but to result in no net loss of resource values. A specific mitigation plan will be part of each PUD application and will be reviewed and evaluated by DFG and the Planning Department.

Impact: Disturbance to Swainson's hawk habitat.

Mitigation Measure B-F: The following mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a breeding survey shall be conducted between April and July in order to:

- Determine if the species nest on the project site;
- To develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.

Mitigation Measure B-G: Project proponents shall participate in a County-wide Habitat Management Plan as appropriate. The Dixon General Plan Update EIR's mitigation measure for wildlife impact requires developer participation in a Habitat Mitigation Plan.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures B-F and B-G are feasible and will reduce the impact to a less-than-significant level by providing an alternative preservation site for Swainson's hawk habitat. A specific mitigation plan will be part of each PUD application and will be reviewed and evaluated by DFG and the Planning Department.

Impact: Project may cause a disturbance to California tiger salamander habitat.

Mitigation Measure B-H: No tiger salamanders were observed to occupy the wetland area of the project site during the field surveys. However, the following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented.

The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a field survey shall be conducted during the spring months in order to:

- Determine if the species occurs on the project site;
- To develop appropriate mitigation measures.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures B-F and B-G are feasible and will reduce the impact to a less-than-significant level by providing an alternative preservation site for tiger salamander habitat. A specific mitigation plan will be part of each PUD application and will be reviewed and evaluated by DFG and the Planning Department.

Impact: Project may result in a disturbance to habitat of the northern harrier, black-shouldered kite and tri-colored blackbird.

Mitigation Measure B-I: The following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, project proponents shall participate in a County-wide Habitat Management Plan addressing the loss of potential foraging habitat.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures B-F and B-G are feasible and will reduce the impact to a less-than-significant level by providing an alternative preservation site for northern harrier, black-shouldered kite and tri-colored blackbird habitat. A specific mitigation plan will be part of each PUD application and will be reviewed and evaluated by DFG and the Planning Department.

CULTURAL RESOURCES

Impact: Potential damage to undiscovered cultural resources.

Mitigation Measure C-A: Consult with a qualified archaeologist if buried archaeological deposits are discovered during construction.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure C-A is feasible and will reduce the impact to a less-than-significant level.
Impact: Construction of the project will result in destruction of Vaughn House.

Mitigation Measure C-B: Future development shall be required to preserve, avoid, or relocate the Vaughn House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Vaughn House, then the structure shall be fully recorded before demolition.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure C-B is feasible and will reduce the impact to a less-than-significant level by providing a record of the resource. A PUD application for any project on the property must include a method for mitigation to be evaluated by the Planning Department and included in the conditions of approval for the PUD.

Impact: Construction of the project will result in destruction of Dudley House.

Mitigation Measure C-C: Future development shall be required to preserve, avoid, or relocate the Dudley House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Dudley House, then the structure shall be fully recorded before demolition.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure C-B is feasible and will reduce the impact to a less-than-significant level by providing a record of the resource. A PUD application for any project on the property must include a method for mitigation to be evaluated by the Planning Department and included in the conditions of approval for the PUD.

TRANSPORTATION, CIRCULATION AND ACCESS

Impact: The NQSP establishes land use patterns and circulation concepts that must conform with the Dixon General Plan and the Solano County Congestion Management Plan.

Mitigation Measure T-A: Future development shall comply with the design guidelines included in the NQSP, ensuring that the project will comply with transportation congestion management and circulation policies in the General Plan and Solano County Plan.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure T-A is feasible and will reduce the impact to a less-than-significant level in accordance with the Dixon General Plan. The Planning Department will evaluate each PUD application for consistency with this Specific Plan and the General Plan.

Impact: The existing traffic conditions, plus the traffic generated by the NQSP will exceed the required LOS at four intersections. All intersections will warrant signalization.

Mitigation Measure T-B: All intersections identified in the EIR would warrant signalization. A specific analysis shall be prepared as part of any future development to determine the specific signalization required at the fair share contribution to funding such improvements.

Mitigation Measure T-C: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

Mitigation Measure T-D: Improve the North First Street interchange with Interstate 80. Separate studies such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

Mitigation Measure T-E: Construct additional turn lanes at the North First Street/Mistler Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Mistler Road. Double right turn lanes are also required for the westbound approach of Mistler Road.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures T-B, T-C, T-D, and T-E are feasible and will reduce the impact to a less-than-significant level by providing physical improvements to the road system. The improvements result from traffic patterns that are city-wide or sub-regional and require a coordinated effort between the City of Dixon, Solano County and Caltrans, where appropriate. The nature of the improvements requires that funding be allocated to an area of benefit beyond the proposed project. Consequently, the City must condition the approval of each PUD to participate in funding required improvements on a fair share basis.

Impact: The existing plus project conditions will result in unacceptable levels of service for various road segments.

Mitigation Measure T-F: Widen North First Street to six lanes between Interstate 80 and Mistler Road.

Mitigation Measure T-G: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

Mitigation Measure T-H: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures T-F, T-G and T-H are feasible and will reduce the impact to a less-than-significant level by providing physical improvements to the road system. The improvements result from traffic patterns that are city-wide or sub-regional and require a coordinated effort between the City of Dixon, Solano County and Caltrans, where appropriate. The nature of the improvements requires that funding be allocated to an area of benefit beyond the proposed project. Consequently, the City must condition the approval of each PUD to participate in funding required improvements on a fair share basis.

Impact: Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.

Mitigation Measure T-I: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

Mitigation Measure T-J: Implementation of the project includes a bikeway and pedestrian trail system for public use.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures T-I and T-J are feasible and will reduce the impact to a less-than-significant level by providing for physical improvements to accommodate bicycle use. The specific location and connections to a city-wide system will be evaluated by the Planning Department and Public Works Department in the review of each PUD application pursuant to this Specific Plan.

Impact: The cumulative traffic impact in the City of Dixon without the development of the NQSP will require significant improvement to the interchanges of I-80 and Pedrick Road and North First Street, and to sections of both North First Street and Pedrick Road.

Mitigation Measure T-K: The mitigation of traffic impacts associated with the cumulative - no project scenario would not be the responsibility of the proposed project. Therefore, no mitigation measures have been identified. However, it can be assumed that other projects that make up the cumulative scenario would be responsible for mitigating this impact, and that funding such improvements would be based on a "fair share" assessment based on all future development.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure T-K is feasible and will reduce the impact to a less-than-significant level by providing for physical improvements to accommodate bicycle use. The specific location and connections to a city-wide system will be evaluated by the Planning Department and Public Works Department in the review of each PUD application pursuant to this Specific Plan.

Impact: The cumulative traffic conditions would exceed LOS at six intersections.

Mitigation Measure T-L: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

Mitigation Measure T-M: Improve the North First Street interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

Mitigation Measure T-N: Construct additional turn lanes at the North First Street/Mistler Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Mistler Road. Double right turn lanes are also required for the westbound approach of Mistler Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

Mitigation Measure T-O: Construct additional turn lanes at the North First Street/Vaughn Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the eastbound approach of Vaughn Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures T-L, T-M, T-N, and T-O are feasible and will reduce the impact to a less-than-significant level by providing physical improvements to the street system. Improvements to interchanges at I-80 will require the cooperative effort of the City of Dixon, Solano County and Caltrans to develop a comprehensive improvement program including funding.

Impact: The cumulative traffic scenarios for 2010 will result in unacceptable levels of service for various road segments.

Mitigation Measure T-P: Widen North First Street to six lanes between Interstate 80 and Mistler Road.

Mitigation Measure T-Q: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

Mitigation Measure T-R: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

Mitigation Measure T-S: The Pedrick Road Overcrossing of the railroad tracks is mentioned in the General Plan as a possible location to be considered as a part of a separate study. The overcrossing, if implemented, would cross over the railroad tracks and would not affect the traffic forecasts. This shall be considered with all future cumulative development implementing this project.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures T-P, T-Q, T-R, and T-S are feasible and will reduce the impact to a less-than-significant level by providing physical improvements to the street system. Local road improvements will be addressed by the City of Dixon in determining a Capital Improvement Program and financing mechanism. Regional road improvements, including widening of I-80, require a regional coordinated effort involving at minimum Caltrans, the City of Dixon and Solano County.

Impact: Implementation of the project would increase traffic volumes on surrounding streets which are planned to be used by bicyclists and pedestrians.

Mitigation Measure T-T: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure T-T is feasible and will reduce the impact to a less-than-significant level by providing physical improvements. The Public Works Department and Planning Department will review the street improvement plans for each PUD to ensure compliance.

Impact: Project could contribute to a cumulative increase in average daily traffic on County roads adjacent to the site.

Mitigation Measure T-U: A master traffic improvement plan shall be prepared for the City and County roads around the City. The improvement plan will identify:

1. What additional facilities will be required to mitigate the increased traffic
2. Responsibility and time line for construction of these facilities.

3. Responsibility for the maintenance of these facilities.
4. Funding the costs of the facilities.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure T-U is feasible and will reduce the impact to a less-than-significant level by planning and identifying funding methods for required improvements. This will involve a coordinated effort between the City of Dixon and Solano County.

Impact: Project could impinge on the necessary right-of-way for future interchange improvements.

Mitigation Measure T-V: Prior to approval of a final location for the "Flying J" facility or any other development, right-of-way requirements for the Pedrick Road/I-80 interchange (as well as mainline I-80) must be determined in order to preserve the necessary right-of-way.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure T-V is feasible and will reduce the impact to a less-than-significant level. The evaluation of future right-of-way needs will be considered by the Planning Department and Public Works Department in the review of each PUD application and improvement plan for properties adjacent to I-80 interchanges.

NOISE

Impact: Short-term construction noise impacts associated within the NQSP.

Mitigation Measure N-A: All contractors shall comply with local, state and federal noise regulations, including fitting all equipment with mufflers according to the manufacturer's specifications.

Mitigation Measure N-B: Construction activities shall not take place between 7:00 p.m. and 7:00 a.m. on weekdays and Saturday, and shall not be permitted on Sunday or on federal holidays.

Impact: Long-term noise impacts associated with traffic.

Mitigation Measure N-C: Future development shall comply with the City of Dixon standards.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures N-A, N-B and N-C are feasible and will reduce the impact to a less-than-significant level by imposing operational standards on contractors during the construction period. Compliance with these measures will be monitored by the Planning Department.

Impact: On-Site Noise

Mitigation Measure N-D: Residential land uses are not proposed for this project. Commercial and office uses located within the proposed year 2010 70 CNEL noise contour, and industrial uses proposed within the 75 CNEL noise contour (Figure 4.8.1), shall be sited and designed to be sensitive to the adjacent I-80 noise source by incorporating appropriate building materials and design techniques to improve both the interior and exterior noise environment. In addition, the use of landscape barriers shall be explored to reduce noise levels adjacent to I-80.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure N-D is feasible and will reduce the impact to a less-than-significant level by appropriate site design and building design. The location and type of buildings will be evaluated by the Planning Department in the review of each PUD application.

PUBLIC SERVICES AND UTILITIES

Impact: Approximately half of the NQSP land area is currently not within the North First Street Assessment District or the Dixon Solano Municipal Water Service and does not have access to a municipal water system.

Mitigation Measure PS-A: Prior to development of any property in the NQSP the affected parcels would have to be annexed to the district in order to receive domestic water service from the DSMWS.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PS-A is feasible and will reduce the impact to a less-than-significant level. The Planning Department will review the availability of water and in consultation with the Public Works Department determine the need for municipal water for each PUD application.

Impact: Implementation of the NQSP would generate a substantial need for domestic water increasing current municipal water storage requirements.

Mitigation Measure PS-B: Prior to the issuance of a building permit, the project proponent shall obtain evidence that a water supply is available to meet the minimum demand (2.3 mgd) of the project and submit this evidence (will serve letter) to the City of Dixon.

Mitigation Measures PS-B(1): Prior to the issuance of a PUD for any project that will exceed ten percent (10%) of the total land area in the NQSP the "North Central Solano County Groundwater Resources Report" shall be completed to indicate whether a water supply is available to meet the minimum demand of the proposed project and submit this evidence (will serve letter) to the City of Dixon.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PS-B is feasible and will reduce the impact to a less-than-significant level. The Planning Department and Public Works Department will evaluate the availability of groundwater as identified in the cited study with regard to demand for the total use proposed in each PUD application.

Impact: Buildout of the proposed NQSP would generate an average flow of 694,320 gpd and a peak flow of approximately 1.7 mgd of wastewater. Existing wastewater collection infrastructure would need to be extended to serve the project site.

Mitigation Measure PS-C: Prior to the issuance of a building permit, evidence that the city's wastewater treatment plant has capacity to accommodate the proposed project shall be submitted to the City of Dixon.

Mitigation Measure PS-D: Prior to the issuance of a building permit, the 60 acres of the project site located east of Pedrick Road shall be annexed into the service district boundaries of the city's sewer service area.

Mitigation Measure PS-E: The project proponent shall be responsible for contributing to the appropriate hook-up fees to help offset the costs of necessary sewage treatment facility expansions. In addition, the project proponent shall be responsible for the construction of sewer lift stations, sewer mains and any other facility improvements deemed necessary to serve the proposed project.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures PS-C, PS-D and PS-E are feasible and will reduce the impact to a less-than-significant level by requiring adequate facilities prior to construction of proposed uses. The availability of facilities will be evaluated by the Planning Department and Public Works Department in each PUD application.

Impact: Implementation of construction activities would generate lumber, sheetrock, and other scrap materials during construction. In addition, implementation of the proposed project would generate approximately 138,992 pounds of solid waste per day.

Mitigation Measure PS-F: Prior to final map approval, the project proponent shall submit a construction waste; commercial and industrial; and an open space waste recycling program for long-term handling of recycled waste from the project site.

Mitigation Measure PS-G: The project proponent shall provide provisions for an on-site recycling center for commercial and industrial uses. In addition, adequate collection facilities for recyclable materials shall be located throughout the project site including outside storage and collection containers.

Mitigation Measure PS-H: Grass clippings, prunings and other organic waste resulting from open space maintenance are classified as clean waste and shall be made available for composting or recycling.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures PS-F, PS-G and PS-H are feasible and will reduce the impact to a less-than-significant level. The waste management program will be evaluated by the Planning Department and Public Works Department and made part of the standards and conditions of approval for each PUD application.

Impact: The substantial increases in employees and structures associated with implementing the NQSP would increase the demand for fire protection and emergency medical aid services provided by the Dixon Fire Department and Foothill Ambulance.

Mitigation Measure PS-I: Prior to recordation of a final map or issuance of a grading permit, the project proponent shall either dedicate land for a fire station and provide financial contributions toward equipment and/or personnel or shall participate in establishment of an assessment district in which all property owners in the area would dedicate funds towards establishment of adequate fire protection facilities.

Mitigation Measure PS-J: Prior to the issuance of building permits, the project proponent shall design and submit a plan to the Dixon Fire Department showing all required fire hydrant locations, detailed calculations to determine fire flow based on future structural design requirements, and access to all developed areas in accordance with city standards.

Mitigation Measure PS-K: Prior to the issuance of building permits, the project proponent shall prepare and submit a plan for emergency response including details of each proposed facility and the business conducted, an inventory of hazardous materials handled or stored on-site and a training program for employees.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures PS-I, PS-J and PS-K are feasible and will reduce the impact to a less-than-significant level by providing physical facilities and programs to meet fire safety needs. The Planning Department and Fire Department will review and evaluate the fire protection requirements for each PUD application.

Impact: Implementation of the proposed project would increase the daily population in the City of Dixon which would generate additional traffic on local roadways. Implementation of the project would also generate additional traffic accidents, vehicle thefts, office burglaries, vandalism, and personal disputes.

Mitigation Measure PS-L: Prior to final map approval or issuance of a building permit, the project proponent shall request the city to commit to increase funding for necessary police services and required equipment. The city shall also verify that funding can be increased during buildout of the proposed project, through either a combination of impact fees imposed on new development and/or an increase in general fund allocations. In any event, the project proponent shall be responsible for paying its fair share for additional staff and equipment to serve the project site. This shall be established prior to occupancy of any structure occupying the project site.

Mitigation Measure PS-M: The project proponent shall be responsible for providing an on-site private security staff to adequately serve the proposed project. This staff would be responsible for securing future structures and providing security in parking lots during and after normal business hours.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures PS-L and PS-M are feasible and will reduce the impact to a less-than-significant level. by providing sufficient police manpower and resources. The Police Department and Planning Department will evaluate each PUD application. Standards and conditions will be included as conditions of approval of the PUD to ensure compliance prior to occupancy of any building.

Impact: Implementation of the proposed project would increase the daily population in the City of Dixon, however, it would not directly increase student enrollment at any of the existing educational facilities.

Mitigation Measure PS-N: The project proponent shall be responsible for paying \$0.27 per square feet of commercial and industrial development consistent with Assembly Bill 2926, which requires the contribution of developer's fees to fund future educational facilities.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PS-N is feasible and will reduce the impact to a less-than-significant level.

VISUAL RESOURCES

Impact: Implementation of the proposed project would generate daytime glare and reflections off building finishes and vehicles in parking lots. In addition, the project would result in an increase in nighttime lighting from adjacent locations and scenic highways.

Mitigation Measure VR-A: Bare metallic surfaces such as pipes, vents, gutters, and flashings shall be painted or concealed from view in a manner harmonious to the structure. All flashing and sheet metal must be treated to match the adjacent materials.

Mitigation Measure VR-B: Primary roofing materials shall be non-reflective.

Mitigation Measure VR-C: Monolithic glass structures shall not be allowed unless used as a portion of a building to highlight an entry.

Mitigation Measure VR-D: Building mass colors shall be of varied hues that minimize glare with bright colors limited to use around doors, trims, awnings and other pedestrian-oriented features.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures VR-A, VR-B, VR-C, and VR-D are feasible and will reduce the impact to a less-than-significant level. The Planning Department will review the submittal of each building location and materials to ensure compliance.

PUBLIC HEALTH AND SAFETY

Impact: Pesticides and herbicides may have been used on the project site.

Mitigation Measure PH-B: Soil samples in areas identified in the Preliminary Site Assessment shall be taken. These areas include locations where pesticides were stored, mixed and applied.

Mitigation Measure PH-C: The entire site occupied by Mistler Trucking/Mistler Farm operations shall be excavated and surveyed for contaminants. A Level One Toxic's Analysis shall be prepared by a qualified geotechnical engineer to define the level of contamination and any required remediation techniques. This analysis shall be performed prior to grading or construction activities to reduce potential exposure of construction workers and the general public to hazardous materials.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measures PH-B and PH-C are feasible and will reduce the impact to a less-than-significant level by identifying any existing condition and providing a method for remediation. The Planning Department will review the required analysis for each PUD application.

Impact: Airborne pesticides and herbicides in the project vicinity could impact future development.

Mitigation Measure PH-D: The restrictions of the Solano County Agricultural Commissioner on pesticide and herbicide spraying shall be followed, especially conditions restricting the aerial spraying of specific chemicals in proximity to the project site. If regulations concerning pesticide and herbicide spraying are not being enforced effectively, the Cal-EPA's Department of Pesticide Regulation shall be notified and enforcement action requested.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PH-D is feasible and will reduce the impact to a less-than-significant level. The Planning Department will monitor the site and notify the County Agricultural Commissioner of violations reported.

Impact: Hazardous materials may be used and stored in association with future development.

Mitigation Measure PH-E: A hazardous waste reduction program shall be prepared prior to leasing a portion of the site to a business handling hazardous materials. The goal of the hazardous waste reduction program is to reduce the project site's contribution to hazardous waste generation and disposal. This program shall consider the wastes generated by the occupants of the site, except for occupants required by law to implement similar programs because they generate substantial quantities of hazardous waste greater than those triggering the legal requirements for waste minimization.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PH-E is feasible and will reduce the impact to a less-than-significant level by identifying potentially hazardous conditions and providing a method for mitigating future situations. The Planning Department will review each PUD application to identify potential conditions. Standards and conditions will be part of the conditions of approval for each PUD as appropriate.

Impact: The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote, but should none the less be considered.

Mitigation Measure PH-F: Diligent effort shall be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system shall be placed over the well.

Finding: Mitigation Measure Feasible and Required. The City finds that mitigation measure PH-F is feasible and will reduce the impact to a less-than-significant level. The Planning Department will review each PUD application to identify potential conditions. Standards and conditions will be part of the conditions of approval for each PUD as appropriate.

Impact: The project could cause growth-inducing effects on adjacent agricultural land.

Mitigation Measure: No mitigation is available for this impact.

Finding: Impact Infeasible to Mitigate. The City finds that no feasible mitigation measures exist for the conversion of open space to urban/development uses other than adoption of the No-Project Alternative.

SECTION 4. IMPLEMENTATION SCHEDULE AND CHECKLIST

This section contains an abbreviated description of each mitigation measure and is in tabular, checklist format. A complete description of each mitigation measure is contained in Section 3, "Findings on Significant Impacts of the Proposed Project Identified in the DEIR/FEIR", of this document.

The mitigation measures to be implemented by the project applicant or successors in interest are separated in the following phases:

- prior to approval of a PUD,
- during improvement plan/grading plan check: prior to construction
- building permit plan check,
- ongoing during construction, and
- ongoing as the specific plan is built out.

The city-implemented mitigation measures are contained at the end of the table.

A checklist summary is presented below:

Timing of Verification	Mitigation Measures
prior to approval of a PUD	LU-B, LU-C, B-F, B-G, B-H, B-I, T-A, T-B, T-C, T-D, T-E, T-F, T-G, T-H, T-I, T-J, T-L, T-M, T-N, T-O, T-P, T-Q, T-R, T-S, T-T, T-U, T-V, N-A, N-B, N-C, N-D, PS-A, PS-B, PS-B(1), PS-C, PS-D, PS-E, PS-F, PS-G, PS-H, PS-I, PS-J, PS-K, PS-L, PS-M, VR-A, VR-B, VR-C, VR-D, PH-A, PH-B, PH-C, PH-D, PH-E, PH-F, C-B, C-C
during improvement plan/grading plan check: prior to construction	G-A, G-B, G-C, G-D, WQ-A, WQ-B, WQ-C, AQ-L,
building permit plan check	G-E, G-F, G-G, MS-N
ongoing during construction	AQ-A, AQ-B, AQ-C, AQ-D, AQ-E, AQ-F, AQ-G, AQ-H, AQ-I, AQ-J, AQ-K
ongoing as the specific plan is built out	LU-A, AQ-M, AQ-N, AQ-O, AQ-P, AQ-Q, AQ-R, AQ-S, AQ-T, AQ-U, AQ-V, AQ-W, AQ-X, AQ-Y, B-A, B-B, B-C, B-D, B-E, C-A

PRIOR TO APPROVAL OF A PUD

Mitigation Measure LU-B: The project will require review and approval by the Solano County LAFCo before it can be annexed to the City of Dixon or developed. The City of Dixon will annex the entire frontage of County roads abutting developments within their jurisdiction. This will include:

1. Pedrick Road from I-80 south including the Vaughn Road intersection.
2. Vaughn Road from North First Street east including the Pedrick Road intersection.

Implementation: Solano County LAFCo/City of Dixon
Monitoring: LAFCo/City of Dixon

Mitigation Measure LU-C: The proposed NQSP shall be reviewed by the Dixon City Council and the Solano County Board of Supervisors and findings shall be made that the 60 acres of the project site currently under Williamson Act should be withdrawn from Agricultural Preserve.

Implementation: Dixon City Council/Solano County Board of Supervisors
Monitoring: City of Dixon/Solano County

Mitigation Measure B-F: The following mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a breeding survey shall be conducted between April and July in order to:

- Determine if the species nest on the project site;
- To develop appropriate mitigation measures, which may include a 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.

Mitigation Measure B-G: Project proponents shall participate in a County-wide Habitat Management Plan as appropriate. Also, the Dixon General Plan Update EIR's mitigation measure for wildlife impact requires developer participation in a Habitat Mitigation Plan.

Implementation: City of Dixon Planning Department/Department of Fish and Game
Monitoring: City of Dixon Planning Department/Department of Fish and Game

Mitigation Measure B-H: No tiger salamanders were observed to occupy the wetland area of the project site during the field surveys. However, the following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented.

The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a field survey shall be conducted during the spring months in order to:

- Determine if the species occurs on the project site;
- To develop appropriate mitigation measures.

_____ Mitigation Measure B-I: The following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, project proponents shall participate in a County-wide Habitat Management Plan addressing the loss of potential foraging habitat.

Implementation: City of Dixon Planning Department/Department of Fish and Game

Monitoring: City of Dixon Planning Department/Department of Fish and Game

_____ Mitigation Measure T-A: Future development shall comply with the design guidelines included in the NQSP, ensuring that the project will comply with transportation congestion management and circulation policies in the General Plan and Solano County Plan.

_____ Mitigation Measure T-B: All intersections identified in the EIR would warrant signalization. A specific analysis shall be prepared as part of any future development to determine the specific signalization required at the fair share contribution to funding such improvements.

_____ Mitigation Measure T-C: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80.

_____ Mitigation Measure T-D: Improve the North First Street interchange with Interstate 80. Separate studies such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange and mainline I-80. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

_____ Mitigation Measure T-E: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B.

_____ Mitigation Measure T-F: Widen North First Street to six lanes between Interstate 80 and Arterial B.

_____ Mitigation Measure T-G: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

— Mitigation Measure T-H: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

— Mitigation Measure T-I: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

— Mitigation Measure T-I: Implementation of the project includes a bikeway and pedestrian trail system for public use.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

— Mitigation Measure T-L: Improve the Pedrick Road interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans, to determine the ultimate improvements to the interchange and mainline I-80.

— Mitigation Measure T-M: Improve the North First Street interchange with Interstate 80. Separate studies, such as Route Concept Approval Studies and Project Study Reports, should be performed in cooperation with Caltrans to determine the ultimate improvements to the interchange. Direct access should be provided from the interchange ramps into the project site to avoid additional travel on the local street system.

— Mitigation Measure T-N: Construct additional turn lanes at the North First Street/Arterial B intersection. Double left turn lanes are required for the southbound approach of North First Street and the westbound approach of Arterial B. Double right turn lanes are also required for the westbound approach of Arterial B. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

— Mitigation Measure T-O: Construct additional turn lanes at the North First Street/Vaughn Road intersection. Double left turn lanes are required for the southbound approach of North First Street and the eastbound approach of Vaughn Road. These improvements, along with the provision of direct site access from the I-80 interchange will improve the operations of the intersection.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

— Mitigation Measure T-P: Widen North First Street to six lanes between Interstate 80 and Arterial B.

— Mitigation Measure T-Q: Widen Pedrick Road to six lanes between Interstate 80 and Professional Drive.

— Mitigation Measure T-R: Contribute to improvements on Interstate 80 adjacent to the project site. A Route Concept Approval Study should be performed in cooperation with Caltrans to determine the ultimate improvements to Interstate 80. The project proponent shall contribute a fair share amount toward these improvements.

— Mitigation Measure T-S: The Pedrick Road Overcrossing of the railroad tracks is mentioned in the General Plan as a possible location to be considered as a part of a separate study. The overcrossing, if implemented, would cross over the railroad tracks and would not affect the traffic forecasts. This shall be considered with all future cumulative development implementing this project.

— Mitigation Measure T-T: Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.

— Mitigation Measure T-U: A master traffic improvement plan shall be prepared for the City and County roads around the City. The improvement plan will identify:

1. What additional facilities will be required to mitigate the increased traffic
2. Responsibility and time line for construction of these facilities.
3. Responsibility for the maintenance of these facilities.
4. Funding the costs of the facilities.

— Mitigation Measure T-V: Prior to approval of a final location for the "Flying J" facility or any other development, right-of-way requirements for the Pedrick Road/I-80 interchange (as well as mainline I-80) must be determined in order to preserve the necessary right-of-way.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

— Mitigation Measure N-A: All contractors shall comply with local, state and federal noise regulations, including fitting all equipment with mufflers according to the manufacturer's specifications.

— Mitigation Measure N-B: Construction activities shall not take place between 7:00 p.m. and 7:00 a.m. on weekdays and Saturday, and shall not be permitted on Sunday or on federal holidays.

— Mitigation Measure N-C: Future development shall comply with the City of Dixon. Development criteria in the NQSP shall be required to demonstrate conformance with the City's noise standard or site specific mitigation measures to ensure that noise thresholds are not exceeded.

Mitigation Measure N-D: Residential land uses are not proposed for this project. Commercial and office uses located within the proposed year 2010 70 CNEL noise contour, and industrial uses proposed within the 75 CNEL noise contour (Figure 4.8.1), shall be sited and designed to be sensitive to the adjacent I-80 noise source by incorporating appropriate building materials and design techniques to improve both the interior and exterior noise environment. In addition, the use of landscape barriers shall be explored to reduce noise levels adjacent to I-80.

Implementation: City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

Mitigation Measure PS-A: Prior to development of any property in the NQSP the affected parcels would have to be annexed to the district in order to receive domestic water service from the DSMWS.

Mitigation Measure PS-B: Prior to the issuance of a building permit, the project proponent shall obtain evidence that a water supply is available to meet the minimum demand (2.3 mgd) of the project and submit this evidence (will serve letter) to the City of Dixon.

Mitigation Measures PS-B(1): Prior to the issuance of a PUD for any project that will exceed ten percent (10%) of the total land area in the NQSP the "North Central Solano County Groundwater Resources Report" shall be completed to indicate whether a water supply is available to meet the minimum demand of the proposed project and submit this evidence (will serve letter) to the City of Dixon.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

Mitigation Measure PS-C: Prior to the issuance of a building permit, evidence that the city's wastewater treatment plant has capacity to accommodate the proposed project shall be submitted to the City of Dixon.

Mitigation Measure PS-D: Prior to the issuance of a building permit, the 60 acres of the project site located east of Pedrick Road shall be annexed into the service district boundaries of the city's sewer service area.

Mitigation Measure PS-E: The project proponent shall be responsible for contributing to the appropriate hook-up fees to help offset the costs of necessary sewage treatment facility expansions. In addition, the project proponent shall be responsible for the construction of sewer lift stations, sewer mains and any other facility improvements deemed necessary to serve the proposed project.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

— Mitigation Measure PS-F: Prior to final map approval, the project proponent shall submit a construction waste; commercial and industrial; and an open space waste recycling program for long-term handling of recycled waste from the project site.

— Mitigation Measure PS-G: The project proponent shall provide provisions for an on-site recycling center for commercial and industrial uses. In addition, adequate collection facilities for recyclable materials shall be located throughout the project site including outside storage and collection containers.

— Mitigation Measure PS-H: Grass clippings, prunings and other organic waste resulting from open space maintenance are classified as clean waste and shall be made available for composting or recycling.

Implementation: City of Dixon Planning Department/City of Dixon Public Works
Monitoring: City of Dixon Planning Department/City of Dixon Public Works

— Mitigation Measure PS-I: Prior to recordation of a final map or issuance of a grading permit, the project proponent shall either dedicate land for a fire station and provide financial contributions toward equipment and/or personnel or shall participate in establishment of an assessment district in which all property owners in the area would dedicate funds towards establishment of adequate fire protection facilities.

— Mitigation Measure PS-J: Prior to the issuance of building permits, the project proponent shall design and submit a plan to the Dixon Fire Department showing all required fire hydrant locations, detailed calculations to determine fire flow based on future structural design requirements, and access to all developed areas in accordance with city standards.

— Mitigation Measure PS-K: Prior to the issuance of building permits, the project proponent shall prepare and submit a plan for emergency response including details of each proposed facility and the business conducted, an inventory of hazardous materials handled or stored on-site and a training program for employees.

Implementation: City of Dixon Planning Department/City of Dixon Fire Department
Monitoring: City of Dixon Planning Department/City of Dixon Fire Department

— Mitigation Measure PS-L: Prior to final map approval or issuance of a building permit, the project proponent shall request the city to commit to increase funding for necessary police services and required equipment. The city shall also verify that funding can be increased during buildout of the proposed project, through either a combination of impact fees imposed on new development and/or an increase in general fund allocations. In any event, the project proponent shall be responsible for paying its fair share for additional staff and equipment to serve the project site. This shall be established prior to occupancy of any structure occupying the project site.

— Mitigation Measure PS-M: The project proponent shall be responsible for providing an on-site private security staff to adequately serve the proposed project. This staff would be responsible for securing future structures and providing security in parking lots during and after normal business hours.

Implementation: City of Dixon Planning Department/City of Dixon Police Department
Monitoring: City of Dixon Planning Department/City of Dixon Police Department

— Mitigation Measure VR-A: Bare metallic surfaces such as pipes, vents, gutters, and flashings shall be painted or concealed from view in a manner harmonious to the structure. All flashing and sheet metal must be treated to match the adjacent materials.

— Mitigation Measure VR-B: Primary roofing materials shall be non-reflective.

— Mitigation Measure VR-C: Monolithic glass structures shall not be allowed unless used as a portion of a building to highlight an entry.

— Mitigation Measure VR-D: Building mass colors shall be of varied hues that minimize glare with bright colors limited to use around doors, trims, awnings and other pedestrian-oriented features.

Implementation: City of Dixon Public Works/City of Dixon Planning Department
Monitoring: City of Dixon Public Works/City of Dixon Planning Department

— Mitigation Measure PH-A: A qualified geotechnical engineer shall excavate existing tanks and inspect the areas where tanks have been previously removed. Soil samples shall be taken from the base of the excavations and analyzed for contamination. If contaminants are found, additional sampling shall be required to determine the extent of the contamination and how it will be remediated (excavation, removal and/or venting). If groundwater is found in the base of the excavation or in bore holes, the CRWQCB may require the installation and sampling of one or more monitoring wells. If groundwater contamination is identified and the levels of contaminants do not appear to decrease over time, remediation of the groundwater may also be required.

— Mitigation Measure PH-B: Soil samples in areas identified in the Preliminary Site Assessment shall be taken. These areas include locations where pesticides were stored, mixed and applied.

— Mitigation Measure PH-C: The entire site occupied by Mistler Trucking/Mistler Farm operations shall be excavated and surveyed for contaminants. A Level One Toxic's Analysis shall be prepared by a qualified geotechnical engineer to define the level of contamination and any required remediation techniques. This analysis shall be performed prior to grading or construction activities to reduce potential exposure of construction workers and the general public to hazardous materials.

Implementation: City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

Mitigation Measure PH-D: The restrictions of the Solano County Agricultural Commissioner on pesticide and herbicide spraying shall be followed, especially conditions restricting the aerial spraying of specific chemicals in proximity to the project site. If regulations concerning pesticide and herbicide spraying are not being enforced effectively, the Cal-EPAs Department of Pesticide Regulation shall be notified and enforcement action requested.

Implementation: City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

Mitigation Measure PH-E: A hazardous waste reduction program shall be prepared prior to leasing a portion of the site to a business handling hazardous materials. The goal of the hazardous waste reduction program is to reduce the project site's contribution to hazardous waste generation and disposal. This program shall consider the wastes generated by the occupants of the site, except for occupants required by law to implement similar programs because they generate substantial quantities of hazardous waste greater than those triggering the legal requirements for waste minimization.

Mitigation Measure PH-F: Diligent effort shall be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system shall be placed over the well.

Implementation: City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

Mitigation Measure C-B: Future development shall be required to preserve, avoid, or relocate the Vaughn House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Vaughn House, then the structure shall be fully recorded before demolition.

Mitigation Measure C-C: Future development shall be required to preserve, avoid, or relocate the Dudley House to a new location. If neither avoidance nor moving the structure is ultimately feasible for the Dudley House, then the structure shall be fully recorded before demolition.

Implementation: City of Dixon Planning Department/City of Dixon Building Department
Monitoring: City of Dixon Planning Department/City of Dixon Building Department

DURING IMPROVEMENT PLAN/GRADING PLAN CHECK: PRIOR TO CONSTRUCTION

Mitigation Measure G-A: An erosion control plan shall be prepared prior to construction. This plan shall include standards for permanent erosion control design, requirements for full establishment of vegetation, and emphasize drought-tolerant and climate-adapted vegetation.

— Mitigation Measure G-B: Disturbed areas of the project site that are not actively under construction during the winter rainy season shall not be left exposed for more than one month.

— Mitigation Measure G-C: Prior to development of any facility within the specific plan area, a detailed geotechnical investigation of on-site soils shall be conducted to identify the soils subject to shrink/swell behavior.

— Mitigation Measure G-D: Hazards associated with shrink/swell soils shall be avoided through proper construction methods which include site drainage, and responsive grading, excavation and foundation design. Potential adverse affects due to soils with high shrink/swell are avoidable if these soils are identified prior to the design and construction, and appropriate design and construction methods are applied.

Implementation: City of Dixon Building Department/City of Dixon Public Works

Monitoring: City of Dixon Building Department/City of Dixon Public Works

— Mitigation Measure WO-A: Prior to commencement of on-site grading, the project shall demonstrate, via a detailed hydraulic analysis of post development topographic and drainage conditions, that the final project design would not substantially cause flooding to adjacent or downstream parcels or conveyance facilities. The project proponent shall participate in city-wide drainage improvements in order to increase downstream flow capacities to accommodate this project. The project design shall consider and evaluate the feasibility of detaining all surface water drainage on-site.

— Mitigation Measure WO-B: Final detention basin(s) design, conveyance facilities, and management of the proposed facilities on-site shall, as demonstrated by the hydraulic analysis of the project proponent and approved by the City of Dixon, adequately accommodate runoff from a 10-year and 100-year storm event. Ultimate development of the entire site must be considered, although drainage infrastructure construction could be phased as needed.

— Mitigation Measure WO-C: Prior to commencement of on-site grading, the project sponsor shall develop a surface water quality control plan, to be implemented and approved by the City of Dixon. The plan shall include, but not necessarily be limited to reducing runoff contaminant concentrations by:

- installing sediment and grease traps at all catch basins or within storm drain lines;
- properly maintaining sediment and grease traps, with responsibility for maintenance assigned to site operations to be established by the project sponsors prior to completion of construction of the first phase of development;
- incorporating infiltration facilities (porous pavement or grass swales) within the project to reduce peak flow of runoff;
- reducing source pollution causes through practices such as minimal use of fertilizer, pesticides and herbicides, proper application of water for landscape irrigation, keeping roadways and parking lots free of litter and sediments, proper methods and locations for disposal of automobile hazardous wastes; and

- maximizing distances between inlets and outlets perhaps using elongated basin shapes.

Implementation: City of Dixon Public Works
Monitoring: City of Dixon Public Works

— **Mitigation Measure AQ-L:** A site assessment shall be conducted before construction activities begin. At locations where petroleum contamination has occurred, the soils shall be remediated using appropriate techniques (Section 4.10, Public Health and Safety). Removal of petroleum contamination will also eliminate the generation of hydrogen sulfide and its associated odor. If unforeseen areas of subsurface contamination are encountered during excavation activities, grading shall be curtailed in the contaminated area until the area is evaluated and remediated as appropriate.

Implementation: City of Dixon Building Department/City of Dixon Public Works
Monitoring: City of Dixon Building Department/City of Dixon Public Works Department

BUILDING PERMIT PLAN CHECK

— **Mitigation Measure G-E:** All structures and new buildings constructed within the project area shall conform to the latest seismic structural standards of the Uniform Building Code (UBC) as a minimum standard.

— **Mitigation Measure G-F:** Plans for individual buildings subject to public occupancy shall be accompanied by an investigative report prepared by a geologist specialized in engineering. This report shall identify underlying geology including depth of water table, depth to bedrock, and presence and characteristics of sand lenses. Necessary structural measures to adequately respond to the degree of probable risk attributable to these underlying formations shall be recommended.

— **Mitigation Measure G-G:** No public or private electrical, water, wastewater or gas lines shall be permitted to cross identified potential ground failure areas without sufficient precautionary emergency provisions for: rapid shut-off, minimum disruption of service, and any adverse impact on adjoining and surrounding uses in the event of seismic-induced ground failure.

Implementation: City of Dixon Building Department/City of Dixon Public Works
Monitoring: City of Dixon Building Department/City of Dixon Public Works

— **Mitigation Measure MS-N:** The project proponent shall be responsible for paying \$0.27 per square feet of commercial and industrial development consistent with Assembly Bill 2926, which requires the contribution of developer's fees to fund future educational facilities.

Implementation: City of Dixon Planning Department/City of Dixon School District
Monitoring: City of Dixon Planning Department/City of Dixon School District

ON-GOING DURING CONSTRUCTION

— Mitigation Measure AQ-A: The project construction site shall be watered at least two times per day. Emphasis shall be placed on the watering of unpaved roadways during periods of high vehicle movement.

— Mitigation Measure AQ-B: Tarpaulins or other effective covers shall be used on haul trucks when transferring earth materials.

— Mitigation Measure AQ-C: Where feasible, all inactive portions of the project construction site shall be seeded and watered until vegetation is grown.

— Mitigation Measure AQ-D: All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the YSAQMD.

— Mitigation Measure AQ-E: Soils shall not be exposed nor grading occur during periods where wind speeds are greater than 20 mph averaged over one hour.

— Mitigation Measure AQ-F: Vehicle speed shall not exceed a maximum of 15 mph on all unpaved roads.

— Mitigation Measure AQ-G: All roadways, driveways, and sidewalks shall be paved as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Implementation: City of Dixon Building Department/City of Dixon Public Works
Monitoring: City of Dixon Building Department/City of Dixon Public Works Department

Measures to Reduce O₃ Precursors (ROG and NO_x)

— Mitigation Measure AQ-H: Proper maintenance of equipment and engines shall be maintained at all times.

— Mitigation Measure AQ-I: Vehicle idling shall be kept to an absolute minimum. As a general rule idling shall be kept below 10 minutes.

— Mitigation Measure AQ-J: During smog season (April through October), the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

— Mitigation Measure AQ-K: Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible.

Implementation: City of Dixon Building Department/City of Dixon Public Works
Monitoring: City of Dixon Building Department/City of Dixon Public Works Department

ONGOING AS THE SPECIFIC PLAN IS BUILT OUT

— Mitigation Measure LU-A: Ensure that all future development within the NQSP strictly enforce the landscape medians and agricultural buffer zones established by the specific plan.

Implementation: Applicant/City Planning Department
Monitoring: City Planning Department

— Mitigation Measure AQ-M: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.

— Mitigation Measure AQ-N: Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities. Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.

— Mitigation Measure AQ-O: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.

Implementation: Applicants/City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

— Mitigation Measure AQ-P: Mixed land uses will reduce vehicle trips and vehicle miles traveled (VMT). Supportive land uses shall be sited within walking/biking distance of one another.

— Mitigation Measure AQ-Q: Support facilities to encourage modes of transportation other than the automobile shall include pedestrian and bicycle pathways.

— Mitigation Measure AQ-R: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.

— Mitigation Measure AQ-S: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.

____ Mitigation Measure AO-T: Street design standards, including landscape areas between the sidewalk and street, night lighting, safe islands in the center of major arterials, automatic street or pedestrian-activated "walk" signals, and adequate "walk" times, shall be enforced.

____ Mitigation Measure AO-U: PM₁₀ emissions shall be reduced by curtailing fugitive dust through effective landscaping, and paving all vehicle roads and parking lots.

____ Mitigation Measure AO-V: An agricultural buffer is proposed on the east side of the project site.

____ Mitigation Measure AO-W: Air pollution control districts regulate the timing and methods of field burning in order to reduce the impact on local and regional air quality.

____ Mitigation Measure AO-X: An agricultural buffer is proposed on the east side of the project site.

Implementation: Applicants/City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

____ Mitigation Measure AQ-Y:

- Establish a priority system favoring multi-rider vehicles.
- Establish parking pricing strategies.

- Maximize telecommunication, including appropriate network infrastructure.
- Establish satellite offices when appropriate. (Applicable to office/industrial and educational institutions.)
- Offer low-cost financing to employees for the purchase of telecommuting equipment or lend company-owned equipment.
- Provide home-computer link to mainframe computer (via modem) so that employees may complete programming tasks or use computers at home.
- Employer-sponsored subscription buses to supplement or substitute for public transit service.
- Provision of shuttle bus service from an employment center to main transit lines, or during lunch hours to provide employees with access to shopping and restaurants.
- Request minibus, jitney or other para-transit service within the project.
- Request improvement and possible relocation of an existing transit stop or station to serve both new and existing surrounding development.
- Request dedication of bus turnouts or other street designs to accommodate bus travel under the subdivision ordinance.
- Request amenities to increase the convenience and attractiveness of transit stops; i.e., waiting shelters, benches, secure bike parking, public telephone, and posted bus schedules.
- Request convenient bus schedules to accommodate unusual schedules.
- Request free or reduced transit fares for midday central business district trips.
- Provide free bus transfers, free or low-cost bus fares, and bus transit passes.

- Request construction of a transit center that will serve the future project and the community.
- Request development of a park-and-ride lot.

Implementation: Applicants/City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

____ Mitigation Measure B-A: Prior to the issuance of improvement or development approvals by the City, a detailed wetland delineation should be conducted to precisely define seasonal wetland boundaries and acreage. Habitat values should also be qualified by type and condition of vegetation.

____ Mitigation Measure B-B: Prior to the issuance of improvement or development approvals by the City, a chain link fence, or acceptable alternative, shall be installed around the seasonal wetland area. The fencing should not be removed until the completion of construction activities. Written release from the City Planning Department must be received prior to the removal of any fencing.

____ Mitigation Measure B-C: Where practicable, the wetlands area should be avoided through land use planning.

____ Mitigation Measure B-D: Preserved wetlands area should be protected from development by a 50-foot buffer or easement, so that the seasonal wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjacent proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.

In general, the following standards shall apply to the buffer and preserved wetlands area:

- All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetlands area.
- No mowing shall be allowed to occur in a wetland easement.
- Surface water runoff from any paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.

____ Mitigation Measure B-E: If the removal or total destruction of the marshland area is unavoidable as a result of the project, after examination of all feasible avoidance alternatives, it may be required that the impacted wetland be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.

Implementation: City of Dixon Planning Department/Department of Fish and Game
Monitoring: City of Dixon Planning Department/Department of Fish and Game

— **Mitigation Measure C-A:** Consultant with qualified archaeologist if buried archaeological deposits are discovered during construction.

Implementation: City of Dixon Planning Department
Monitoring: City of Dixon Planning Department

SECTION 5. STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the decision maker to balance the benefits of the project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse effects, those effects may be considered "acceptable" (State CEQA Guidelines Section 15093[a]). However, CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are infeasible to mitigate. Such reasons must be based on substantial evidence in the FEIR or elsewhere in the administrative record (State CEQA Guidelines Section 15093 [b]). The agency's statement is referred to as a "Statement of Overriding Considerations".

The City of Dixon is proposing to approve the Northeast Quadrant Specific Plan and has prepared and certified an FEIR that satisfies the requirements of CEQA. The following adverse impacts of the project and of cumulative development in the Dixon area are considered significant and unavoidable, both individually and cumulatively, based on the DEIR, FEIR, MMP, and the findings discussed previously in Sections 2 and 3 of this document:

- prime agricultural land will be converted to non-agricultural use;
- emissions from mobile sources of reactive organic gases and nitrogen oxide and increased carbon monoxide concentrations at the receptors in the project area;
- growth-inducing effects on adjacent agricultural land.

The City finds that the economic, social, and other considerations of the Northeast Quadrant Specific Plan outweigh the unavoidable environmental impacts identified above; these considerations are described below by issue area. In making this finding, the City has balanced the benefits of the proposed project against its unavoidable environmental impacts and has indicated its willingness to accept those risks.

LAND USE, DEVELOPMENT AND PUBLIC SERVICE CONSIDERATIONS

Development of this area would, as a whole, be consistent with the City's objectives that provide for expanded urban growth.

The Northeast Quadrant Specific Plan (NQSP) is the second step in the entitlement process involved in converting raw land outside the Dixon city limits to urban development. The first step, the designation of the 643-acre area from agriculture to Employment Center (E) and Highway Commercial (HC) use, was implemented by the updated Dixon General Plan. This action by the City clearly designates planning for this area to be developed. It was, therefore, concluded that the timing was appropriate for developing specific planning standards to direct the future development of this area.

The purpose of the NQSP is to implement the goals, policies and objectives defined by the General Plan and to further develop the specific land use classifications and development guidelines for the plan area. Specifically, this involves defining future land use categories for highway commercial, light industrial, professional/administrative office, and community

commercial development. It also involves defining the specific development requirements to establish a scenic gateway to the community; provide for efficient vehicular and pedestrian circulation; facilitate alternative transportation choices; establish an open space system for habitat management, drainage and agricultural buffer; and to ensure that all development in the plan area is integrated with the City's provision of infrastructure and service.

The General Plan contains specific policies to ensure that Dixon maintains its "small town character" while accommodating growth and building strong economic base. This includes:

The City shall actively pursue a balanced community comprising industrial, commercial and residential development.

To achieve this goal, the General Plan has designated specific areas for future industrial and commercial development, including the Northeast Specific Plan area. This area contains the following two land use designations:

Employment Center (E) - This designation is applicable only in those areas for which a specific plan is to be prepared for future adoption by the City, and represents an 'umbrella' designation pending the submission of more detailed patterns of specific land uses. Includes only non-residential uses consistent with the types included under the Planned Business/Industrial (PI), the Professional/Administrative Office (O), and the Highway Commercial (HC).

Highway Commercial (HC) - These uses cater primarily to the traffic passing Dixon on I-80. Examples of establishments which provide services to tourists and travelers include motels, fast food and other restaurants, and gas stations. The areas indicated for Highway Commercial uses lie in proximity to (and primarily on the east side of) I-80 and its access ramps where they are easily accessible by car and highly visible from the roadway.

The Northeast Quadrant Specific Plan project exhibits these characteristics and others consistent with the General Plan. The project will provide 1,314,000 square feet of office space, 2,495,000 square feet of industrial space and approximately 2,100,000 square feet of commercial space.

Employment

The project would also be a source of employment in the Dixon area, generating an estimated 4,901 commercial jobs and 6,194 office and light industrial jobs at buildout, based on the projected gross leasable space.

Open Space and Drainageway

The project would provide for the creation of approximately 60 acres of open space drainage facilities.

TRANSPORTATION AND AIR QUALITY CONSIDERATIONS

The Northeast Quadrant Specific Plan project would contribute to existing transportation and air quality problems. The projected buildout of Dixon, of which this project is part, anticipates that roadway and interchange improvements will be necessary to handle additional traffic.

Traffic mitigation fees or other financing mechanisms proportional to the magnitude of the impact will be used to provide required improvements that will directly benefit the City and regional circulation network.

CONCLUSION

The Northeast Quadrant Specific Plan provides a beneficial mix of office employment, local-serving commercial, highway commercial, light industrial employment, and open space uses, which outweighs the unavoidable environmental impacts. Therefore, the City has adopted this Statement of Overriding Considerations.

SECTION 6. Citations

PRINTED REFERENCES

Dixon Northeast Quadrant Specific Plan, prepared by Wade Associates, April 3, 1994

Draft Environmental Impact Report, prepared by Wade Associates, August, 1994

Final Environmental Impact Report, prepared by Wade Associates, March 1995