FINAL

Environmental Impact Report

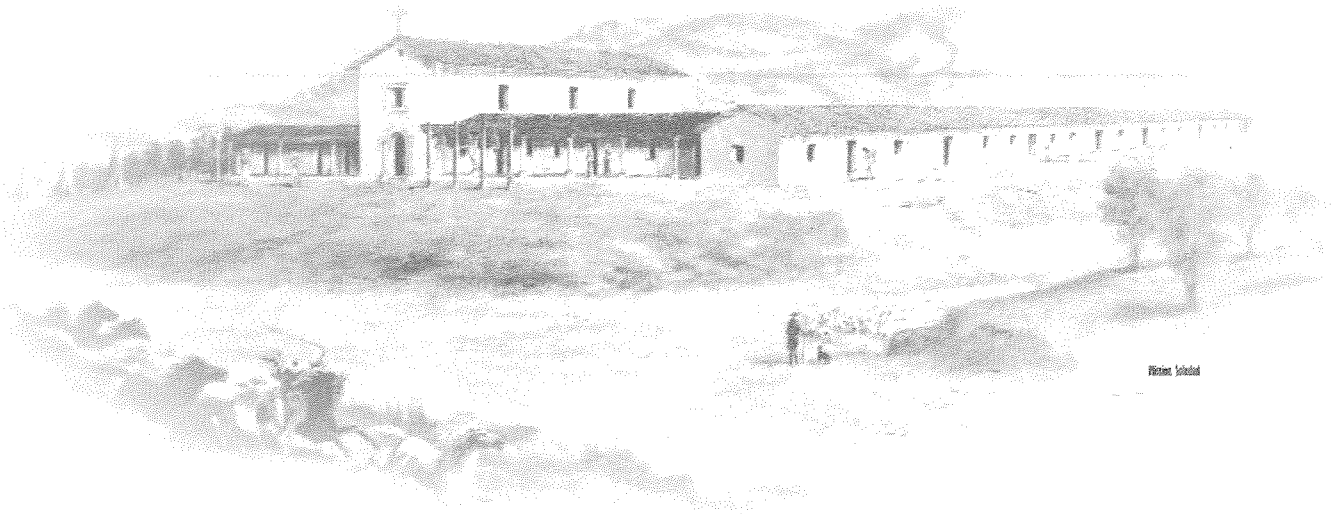
For The

City *of* Soledad 2005 General Plan

&

Wastewater Treatment and Disposal Master Plan

SCH#2005032722



Prepared by:

Crawford
Multari &
Clark
ASSOCIATES

City *of* Soledad General Plan
&
Wastewater Treatment and Disposal Master Plan

Final Environmental Impact Report

September 21, 2005

SCH # 2005032122

Prepared By:

Crawford
Multari &
Clark
ASSOCIATES

RESOLUTION NO. 3678

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLEDAD CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE 2004 GENERAL PLAN AND WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN PREPARED IN COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA), MAKING CERTAIN FINDINGS OF FACT REGARDING THE ENVIRONMENTAL IMPACTS OF THE GENERAL PLAN AND WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN, AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS

WHEREAS, the City Council of the City of Soledad, County of Monterey, State of California has prepared an Environmental Impact Report (EIR) for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan; and

WHEREAS, the Draft EIR has been prepared and circulated as required by the California Environmental Quality Act ("CEQA") and the State CEQA Guidelines; and

WHEREAS, written responses have been prepared for all comments received on the draft EIR during the public comment period and copies of such responses have been provided to all commenting agencies at least ten days prior to certification of the final EIR; and

WHEREAS, a duly noticed public hearing was held by the Planning Commission on August 11, and September 8, 2005, to consider the Draft and Final EIR at which all interested persons were given the opportunity to be heard; and

WHEREAS, a duly noticed public hearing was held by the City Council on September 21, 2005, to consider the Draft and Final EIR at which all interested persons were given the opportunity to be heard; and

WHEREAS, the Draft and Final EIR relating to the 2004 General Plan and Wastewater Treatment and Disposal Master Plan and responding to the concerns raised during the review period and at the public hearings, have been prepared pursuant to CEQA, the State Guidelines, and the City's rules and procedures for the implementation of CEQA; and

WHEREAS, the City Council of the City of Soledad has reviewed and considered the information contained in the Draft and Final EIR for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan.

NOW, THEREFORE BE IT RESOLVED by the members of the City Council of the City of Soledad, State of California as follows:

1. The City Council of the City of Soledad finds and certifies that the Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan, which is incorporated herein by this reference, has been prepared and completed in

compliance with CEQA, the State CEQA Guidelines, and the City's rules and procedures.

2. The City Council hereby further finds and certifies that the information contained in the Final EIR has been reviewed and considered by the City Council of the City of Soledad.

3. The City Council finds and certifies that the Final EIR reflects its independent judgment and analysis.

4. The City Council hereby finds and determines that implementation of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan may have a significant adverse effect on the environment.

5. The City Council hereby finds with respect to the adverse environmental impacts detailed in the Final EIR:

   a. That based on information set forth in the Final EIR, the Findings of Fact attached to this Resolution as Attachment "B", and the list of mitigation measures included in the mitigation monitoring program (section XI of Attachment "B"), incorporated herein by reference, the City Council finds and determines that changes or alterations have been required in or incorporated into the project which avoid or substantially lessen the adverse environmental effects identified in the Final EIR for:

Visual resources	Biological resources	Geologic hazards	Noise
Traffic	Agricultural resources	Cultural resources	Hazards
Population and housing	Air quality	Public services	Flooding

   b. That, based on information set forth in the Final EIR and in the Findings of Fact, the adverse environmental effects related to public services (water supply), energy and the demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources associated with the 2004 General Plan and Wastewater Treatment and Disposal Master Plan are significant effects which cannot be entirely mitigated or avoided if the project is approved and implemented;

   c. That no additional adverse impacts will have a significant effect or result in substantial or potentially substantial adverse changes in the environment as a result of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan.

6. The City Council of the City of Soledad hereby finds and determines that:

   a. All significant effects (except the adverse environmental effects related to public services (water supply), energy and demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources) that can be feasibly avoided have

been eliminated or substantially lessened as determined through the findings set forth in Attachment "B";

b. Based on the Final EIR and the Findings of Fact and other documents in the record, specific economic, social and other considerations make infeasible other project alternatives identified in the Final EIR;

c. Based on the Final EIR and the Findings of Fact, and other documents in the record, the remaining unavoidable significant environmental effect of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan (the adverse environmental effects related to public services (water supply), energy and demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources) are outweighed and overridden by the benefits of the project as described in the Statement of Overriding Considerations, (section V. of Attachment "B") attached to this Resolution and incorporated herein by reference, which Statement of Overriding Considerations is hereby approved and adopted.

7. The City Council of the City of Soledad hereby authorizes and directs that a Notice of Determination with respect to the Final EIR pertaining to the approval of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan and all other actions in furtherance thereof be filed.

PASSED AND ADOPTED, by the City Council of the City of Soledad at a regular meeting duly held on the 21st day of September 2005, by the following vote:

AYES, and in favor thereof, Councilmembers: Christopher Bourke, Stefanie De La Rosa, Patricia Stephens, Mayor Pro Tem Juan Saavedra, Mayor Richard Ortiz

NOES, Councilmembers: None

ABSTAIN, Councilmembers: None

ABSENT, Councilmembers: None

RICHARD V. ORTIZ, Mayor

ATTEST:

NOELIA F. CHAPA, City Clerk

Attachment "A"

Comments on the Draft EIR, Responses to Comments and Persons and Agencies Commenting on the Draft

Persons/Agencies Commenting on the Draft EIR

Comment Number	Author	Agency/Organization	Date Comments were Received
A	Jorge Z. Guzman, District Superintendent	Soledad Unified School District	July 13, 2005
B	Chris Fritz, Executive Director	Land Watch Monterey County	July 28, 2005
C	John J. Olejink, Associate Transportation Planner	Caltrans District 5	August 8, 2005
D	Wm. Rechmuth, PE	Transportation Agency of Monterey County	August 8, 2005
E	Jean Getchell, Supervising Planner	Monterey Bay Unified Air Pollution Control District	August 8, 2005
F	Dennis J. O'Bryant, Acting Assistant Director	State of California Department of Conservation	August 15, 2005

SOLEDAD UNIFIED SCHOOL DISTRICT

Jorge Z. Guzmán, District Superintendent

"Education for Life"

Soledad High School
425 Gabilan Drive
Soledad, CA 93960
(831) 678-6400

Community Education Center
690 Main Street
Soledad, CA 93960
(831) 678-6300

Main Street Middle School
441 Main Street
Soledad, CA 93960
(831) 678-6460

K-6
ELEMENTARY SCHOOLS

Gabilan School
330 N. Walker Drive
Soledad, CA 93960
(831) 678-6440

Rose Ferrero School
400 Entrada Drive
Soledad, CA 93960

Sa
1300 Metz Road
Soledad, CA 93960
(831) 678-6420

Frank Ledesma School
973 Vista de Soledad
Soledad, CA 93960
(831) 678-6320

DISTRICT OFFICE
1261 Metz Road
P.O. Box 186
Soledad, CA 93960
(831) 678-3987
Fax: (831) 678-2866

SUSD 1

RECEIVED
JUL 13 2005
CITY OF SOLEDAD

July 11, 2005

Noelia Chapa, City Manager
City of Soledad
P.O. Box 156
Soledad, CA 93960

Dear Ms. Chapa:

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF SOLEDAD 2004 GENERAL PLAN

I was pleased to receive a copy of the Draft Environmental Impact Report for the City of Soledad 2004 General Plan. It is very comprehensive in nature and clearly outlines the future growth for our community.

I want to express my appreciation for the thoughtful incorporation of the needs of our school district, mitigating the school facilities as related to the impact of the city's future growth.

At this time, I want to take this opportunity to respond to the report, particularly addressing the School Facilities Section V.1 – 44 – VI – 47 and offering some recommended corrections.

⇒ The Soledad Unified School District serves Preschool – 12th grade and Adult Education. The district went through a unification process in 1998.

⇒ The elementary schools were configured to K-6 elementary schools last year to include the new Frank Ledesma Elementary School that opened in August of 2004.

⇒ School facilities include:

- Frank Ledesma Elementary – grades K-6, current enrollment projection is 620 students.
- San Vicente Elementary – grades K-6, enrollment projection for 2005-2006 is 610 students.
- Gabilan School – grades K-6, enrollment projections for 2005-2006 is 505.
- Main Street Middle School – grades 7-8, enrollment projections for 2005-2006 is 590 students. The grade configuration change will allow for growth until we build our next middle school.
- Soledad High School – grades 9-12, projected enrollment for 2005-2006 is 950 students

- Community Education Center houses two continuation schools, the Pinnacles High School and Chalone High School.
- The new Jack Franscioni Elementary School is under construction and will open in August of 2006. Projected enrollment for the school after boundary adjustments will be 490 students.

SUSD 2

⇒ Considering the City's Moratorium, our generation factor for enrollment projections is a conservative 1.5% growth rate. The growth for the past five year history has been at 5.5% consistently.

SUSD 3

⇒ If the growth tread holds after the Moratorium is lifted, I concur that student growth may be between 3.9% to 5.5% at which time within six years; we'll need another middle and elementary school.

Thank you again for the copy of the draft report and for considering the changes mentioned above. I look forward to receiving a copy of the final version.

Please feel free to call me if you have any questions regarding the school district.

Respectfully,

Jorge Z. Guzman
District Superintendent

C: Board of Trustees
Vira Uldall, CBO

Responses to Comments from Soledad Unified School District

SUSD1 The comment is noted and incorporated into the Final EIR for consideration by the lead agency. Data relative to school capacities and enrollment do not change the conclusions of the draft EIR. Policies of the draft Plan require public services, including school facilities, to be sufficient to serve new development concurrently or in advance of such development.

SUSD 2 The comment is noted and incorporated into the Final EIR for consideration by the lead agency. In preparing the draft EIR, the authors relied on the most recent school facility impact fee justification study. The change in enrollment projection does not change the conclusions of the draft EIR. Policies of the draft Plan require public services, including school facilities, to be sufficient to serve new development concurrently or in advance of such development.

SUSD 3 The comment is noted and incorporated into the Final EIR for consideration by the lead agency. In preparing the draft EIR, the authors relied on the most recent school facility impact fee justification study. The change in enrollment projection does not change the conclusions of the draft EIR. Policies of the draft Plan require public services, including school facilities, to be sufficient to serve new development concurrently or in advance of such development.

LandWatch
monterey county
Post Office Box 1876
Salinas, CA 93902-1876
Salinas Phone: 831-422-9390
Monterey Phone: 831-375-3752
Website: www.landwatch.org
Email: landwatch@mclw.org
Fax: 831-422-9391

July 27, 2005

Dave Moran
City of Soledad
c/o Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

SUBJECT: DEIR FOR 2004 THE CITY OF SOLEDAD GENERAL PLAN AND WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

Dear Mr. Moran:

LandWatch Monterey County has had an opportunity to review the DEIR and would like to submit the following comments:

LW 1

1. P. V.1-5. The FEIR should respond to recent reports indicating the Salinas Valley Water Project may be delayed or not constructed due to requirements of the Federal Fish and Game.

LW 2

2. P. V.1-13. Total water demand will increase at buildout by 477 AFY. This estimate appears not to include returned water to the aquifer either through irrigation and/or rain. This information should be provided in the FEIR.

LW 3

3. P. V.1-14. The DEIR states, "Its (AMBAG) most recent forecasts were conducted in 1997 and address projected growth to the year 2020." AMBAG's most recent forecasts were prepared in 2004.

LW 4

4. P. V.1-16 The DEIR states, "The FEIR for the SVWP concedes that if future growth substantially exceeds the AMBAG projections, other sources of water beyond the SVWP would likely be needed in the Salinas Valley...The Forebay Sub-basin is currently in overdraft, even though water demand overall is decreasing; water demand at buildout of the City's General Plan will result in a net increase in water demand following conversion of existing agricultural lands to urban use...". The FEIR should indicate that AMBAG's population projections will be exceeded based on the recently adopted Greenfield General Plan and the proposed Preliminary Spheres of Influence for the City of King City in combination with the proposed project.

LW 5

5. P. V.2-13. "Thus it can be expected that the additional trips contributed by buildout of the City's draft Plan will result in a cumulative adverse impact to the regional roadway system that is unavoidable and adverse." The proposed General Plan policy 5.25 stated the City shall consider implementation of a regional traffic impact fee. This is an

inadequate response to the finding. The proposed policy should require the City to implement such a fee rather that to consider. Additionally, General Plan policies related to Public Transit should make a commitment to full use of LTF funds to support MST service to the City of Soledad similar to all cities on the Monterey Peninsula.

LW 6

6. P. V.1-16. The DEIR states the City's non-prison population is about 15,000. DOF January 1, 2005 estimates indicates a population of 27,316. Subtracting 11,271 for the prison leave a population of 16,045.

LW 7

7. P. V.3-10. Population for buildout of the General Plan is 57,000 persons. The DEIR states varying time-frames for buildout, i.e., p. III-1 - "next twenty or more years", p. III.11 between 155-240 new units per year for the next twenty years, p. IV-4, in about forty years and p. V.11- enough land to accommodate projected housing demand and population growth through 2020. The FEIR should clarify these discrepancies.

LW 8

8. P. V.7-13. The DEIR finds the Draft Plan would increase groundwater withdrawals with the potential to diminish in-stream flow along the Salinas River and that this impact is considered unavoidable and adverse. The FEIR should address how this significant impact relates to in-stream flow requirements to protect the endangered steelhead. The cumulative impact of similar withdrawals along the Salinas River should be addressed.

LW 9

9. P. V.8-3. Land within the buildout area includes 3,200 acres prime farmland with 300 acres of farmland of statewide importance, farmland of local importance and grazing land. The DEIR does not meet the CEQA criteria for addressing cumulative impacts. Section 15355 defines a cumulative impact as one which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. The loss of productive agricultural land from the following approved or pending projects totaling about 7,500 acres along with the 3,500 proposed for the Soledad General Plan would be cumulatively significant:

   (a) The City of Salinas is currently processing an annexation request for 3,500 acres of productive agricultural land.

   (b) The City of Greenfield has recently adopted a General Plan that shows the conversion of 1,380 acres of productive agricultural land.

   (c) The City of King City's Preliminary Sphere of Influence shows the loss of 1,000 acres of productive agricultural land.

   (d) The Rancho San Juan project would eliminate 1,530 acres of viable or productive agricultural land.

   (e) The Boronda Community Plan would eliminate 43 acres of productive agricultural land.

(f) The Castroville Community Plan would require 273 acres of prime agricultural land.

(g) Other important farmland will be required for development Chualar and Pajaro.

LW 10

10. P. VI-23. Alternatives. FEIR should describe why the Draft General Plan was chosen over the 20 year plan alternative which is identified as the environmentally superior general plan alternative.

LW 11

11. The FEIR should address a 20 year higher density alternative. AMBAG's 2025 forecast (interpolated) is 34,278 persons or 10,917 DUs at 3.14 pers/DU or 7,097 at 4.83 pers/DU. Using an overall density of 11.1 DUs/acre (assumes a residential density of 11.75 DUs/acre plus 30% for roads, commercial, industrial, etc.), 639 to 984 acres would be needed to meet the AMBAG forecasts, over 2,500 acres less than the Draft General Plan. The overall density for the Draft General Plan is about 5.8 units per acre with single family residential using 80% of the land (p. III-7).

Thank you for the opportunity to review the document.

Very truly yours,

Chris Fitz, Executive Director
LandWatch Monterey County

Responses to comments from LandWatch

LW1 The commentor recommends the Final EIR respond to reports indicating the Salinas Valley Water Project may be delayed or not constructed due to requirements of the US Fish and Wildlife Service. This information is noted and will be passed along to the lead agency for consideration. This does not appear to be a comment on the analysis provided in the draft EIR but acknowledgement that the Salinas Valley Water Project is a large, complex undertaking which is subject to the regulatory requirements of the federal State and local governments which in turn directly affects it implementation. It should be noted that the conclusions of the draft EIR are not affected by implementation of the Salinas Valley Water Project. Impacts to the groundwater basin are considered significant and adverse.

LW 2 The majority of water used by urban uses through buildout of the General Plan will pass through the wastewater treatment plant and be returned to the aquifer, or will be used for landscape irrigation and be returned to the aquifer.

LW 3 The comment is noted and will be passed along to the lead agency for consideration. The 2004 AMBAG population forecasts show a 2020 population for Soledad of 39,463 and a 2030 population of 51,634. It is unclear whether this figure includes the Soledad Valley State Prisons. If so, it is about 7,000 less than the projected non-prison buildout population of about 57,000 contained in the draft EIR. Moreover, although the 2004 AMBAG forecast is closer to the population holding capacity of the draft General Plan, the conclusions of the draft EIR remain unchanged.

LW 4 The comment is noted and will be passed along to the lead agency for consideration.

LW 5 It should be noted that the draft EIR concludes that the cumulative impact to the regional roadway system will be significant and adverse with or without the trips contributed by buildout of the Soledad General Plan. The commentor has expressed an opinion about the implementation of policies recommended by the draft EIR and the General Plan which will be forwarded to the lead agency for consideration.

LW 6 The comment is noted. The City's non-prison population at the time chapter V.1 of the draft EIR was prepared was 15,000.

LW 7 General Plan holding capacity is stated on Tables IV-3, IV-4 and IV-5. In addition, the draft EIR repeatedly states that the amount of land designated for urban development greatly exceeds what would be required to sustain the level of development experienced since 1999. Accurately predicting the timeframe of this buildout (if it is ever achieved) becomes less reliable the further into the future such predictions are made. What is clear, however, is that the draft Plan

designates sufficient land to accommodate development for the next twenty or more years, assuming this previous level of development is sustained.

LW 8 The level to which in-stream flows in the Salinas River will be diminished by withdrawals by the City and other users cannot be predicted accurately because of the number of users, differences among their use with respect to quantity and seasonality. Nonetheless, to the extent that in-stream flows are diminished, plant and animal species that depend on that flow – including special status plant and animal species – will be adversely affected. Hence, the draft EIR concludes that this impact is unavoidable and adverse.

LW 9 The draft EIR concludes that the permanent loss of agricultural land associated with buildout of the draft General Plan will "*...result in a net loss of productive farmland in the County.*" (page V.8-8). The quantities of farmland converted as a result of activities in Greenfield, King City, Rancho San Juan, Boronda, and Castroville is noted and will be passed along to the lead agency for consideration.

LW 10 As required by State law, findings provided for certification of the Final EIR will include specific findings regarding each alternative and why the preferred alternative was chosen, whichever that turns out to be. However, it should be noted that no final decision on a general plan for Soledad has occurred until the City Council takes a final action which muct be preceded by certification of a final EIR. As required by CEQA, the lead agency must weigh the information contained in the FEIR and other evidence in the record prior to approving a general plan.

LW 11 The range of alternatives provided in the draft EIR satisfies the requirements of CEQA in that they are aimed at achieving most of the basic objectives of the project while minimizing environmental effects. Nonetheless, the suggested 'higher density 20 year plan' will be passed along to the lead agency for consideration.

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3077
TDD (805) 549-3259

DOT 1

DOT 2

DOT 3

DOT 4

DOT 5

5. The Department is working on a Project Initiation Document (PID) to replace an overhead bridge on State Route (SR) 101 over the Union Pacific Railroad tracks and Front Street. Current proposed projects such as this one need to be included in the General Plan and their progress tracked by staff.

Specific Comments (By Page)

DOT 6

1. III-16 – Community Form and Design. Since the new Association of Monterey Bay Area Governments (AMBAG) model forecasts the year 2030, the General Plan should be modeling future needs at year 2030 as well (not 2020 as listed).

DOT 7

2. V.2-1 – Regulatory Setting. It is a misnomer to categorize agencies responsible for transportation planning as "regulatory."

DOT 8

3. V.2-1 – The Department should be included with a separate heading, in addition to noting its role as an ex-officio member of the TAMC Board. The State's role and responsibilities in interregional transportation planning should be described, including, but not limited to, preparation of long-range planning documents for state highways in proximity to Soledad (i.e., SR 101 and SR 146).

DOT 9

4. V.2-1 – Regional Transportation Plan. The Monterey County Regional Transportation Plan was updated and adopted in 2002, then again in May 2005. (Last sentence indicates plan is being revised.)

DOT 10

5. V.2-2 – Congestion Mitigation and Air Quality Program (CMAQ). It should be noted that the region is in attainment for all pollutants attached to CMAQ, and the funding is no longer available.

DOT 11

6. V.2-3 – Transit Services. This section discusses transit services countywide, but excludes the Monterey-Salinas Transit inter-city bus service that stops daily in Soledad as well (bus line 23—Monterey Street, East Street, and the Soledad Correctional Facility).

DOT 12

7. V.2-6 – Table V.2-4. This table incorrectly designates Metz Road (SR 146) as a Scenic Highway. Metz Road is not an eligible candidate for the scenic highway program in Monterey County.

DOT 13

8. V.2-8 – Capacity of Major Interchanges. This section does not include capacity analysis of major intersections on SR 101 in Soledad as requested in our March 22, 2005 letter. Further, cumulative conditions were not analyzed, other than to say "significant, adverse, and unavoidable…"

)OT 14

9. V.2-10 – Highway 101 Interchanges. The General Plan identifies the two interchanges on SR 101 as problem areas, and as opportunities for highway-oriented retail and industrial development. Measures listed under "General Plan Policy Response" should include provisions for acquiring right-of-way needs for improvements to the State highway system, and not just local roads related to the build-out.

)OT 15

10. V.2-12 – Table V.2-9. The table shows 135% increase in traffic on SR 101; the General Plan needs to identify the need for mitigation as part of the build-out scenario. In addition to interchange improvements, consideration should be given to mainline capacity. Furthermore, Impact T-1 should identify SR 101 as a route of inter-regional significance.

)OT 16

11. V.2-13 – City Participation. The City's role mitigating regional traffic impacts is understated as "limited to participation with other agencies…" While participation and partnerships are key, the City must acknowledge the essence of its role as lead agency in evaluating and approving development. The lead agency has the responsibility to require mitigation that offsets traffic impacts. Rather than describing this as a "limitation," the General Plan should acknowledge the interdependence and necessity of partnerships to maintain and achieve acceptable conditions of transportation throughout the build-out years.

)OT 17

12. V.2-17 – Regional Development Fees. We appreciate the General Plan including discussion of regional development impact fees.

)OT 18

13. V.2-22 – Impacts. Included in the list of impacts should be the provisions for right-of-way preservation for the State highway system, and the need for State transportation facilities to maintain a level of service of C/D.

)OT 19

14. V.2-23 – Impacts T-13 and T-14. Local measures to calm traffic cannot have a negative impact on state transportation facilities. Department standards need to be addressed, with special attention being given to local intersection proximity to the ramp intersection.

)OT 20

15. V.2-27 – Restriping and Bike Lanes 5-19(b). Design standards will be maintained or addressed on State facilities (SR 101 and SR 146-Metz Road).

)OT 21

16. V.12-1 – Thresholds of Significance. It should be noted in this section that approved development projects which overburden either SR 101 mainline or SR 146, and do not include sufficient mitigation for increased traffic levels, is considered "inconsistent."

The Department supports local plans that are consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel. We are happy to meet with city staff and consultants to share our perspective on how the needs of interregional transportation can be reflected in the General Plan.

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator

cc: David Murray
Aileen Loe
Claudia Espino
Tim Rochte
Mark McCumsey
Carl Hilbrants
Andy Cook (TAMC)
Kate McKenna (LAFCO)
Kathy Urlie (AMBAG)

Responses to comments from the Department of Transportation

DOT 1 Any future transportation improvements will by law be subject to project specific environmental review. If impacts or improvements to State highways are contemplated they will be subject to the Project Study report requirements of the Department of Transportation.

DOT 2 This appears to be a comment on the draft General Plan which is noted and will be forwarded to the lead agency for consideration. The traffic analysis contained in the draft EIR assesses project impacts on the City's two interchanges and on the regional highway system.

DOT 3 The comment is noted.

DOT 4 This appears to be a comment on the draft General Plan which is noted and will be forwarded to the lead agency for consideration.

DOT 5 The General Plan is a policy document used to guide decision making regarding land use, circulation, housing, natural resources and other issues. Improvements undertaken by Caltrans to the State highway system (such as the bridge project) change from year to year and are more appropriately tracked by the City's Public Works Department through the capital improvement program and development impact fees which are aimed at identifying and funding improvements to accommodate buildout.

DOT 6 The 2004 Draft General Plan provides sufficient land for urban development to accommodate the projected demand for more than thirty years, assuming the same level of development experienced over the past seven years continues unabated into the future.

DOT 7 Comment noted.

DOT 8 Comment noted. However the comment does not raise an issue related to the assessment of environmental impacts. Nonetheless, the following text will be forwarded to the lead agency for their consideration:

Regional transportation in Monterey County is managed by the Transportation Agency of Monterey County (TAMC), a joint powers agency, and CalTrans District 5. This arrangement has the unfortunate effect of de-coupling transportation management from land use policy. Although Caltrans and TAMC respond to land use projections based on the County and cities.land use plans, and County and city decision-makers sit on TAMC's board, there is no single decision-making body that implements both regional land use and transportation management policies concurrently. As an agency that deals solely with transportation issues, with no local land use authority, Caltrans works in a reactive mode. The planning that Caltrans is able to do is limited to advance

planning to expand infrastructure in response to the rising demand generated by land use policies.

As a consequence, demand management, which relies on the link between transportation planning and land use planning, and which is the more critical arm of transportation planning policy -- particularly in areas where capacity is exceeded or threatened -- is almost completely non-existent at the regional and county levels. This problem is reflected in the long lines of vehicles on regional highways at peak travel periods and in the long list of road-widening and building projects proposed by Caltrans and TAMC.

DOT 9 Comment noted.

DOT 10 The comment is noted and will be forwarded to the lead agency for consideration.

DOT 11 Comment noted. The Monterey-Salinas Transit system serves Soledad.

DOT 12 Comment noted. Metz Road (SR 146) is not a designated as a scenic highway.

DOT 13 The assessment of impacts to the interchanges is provided on pages V.2-15 and 16. Potential impacts to Highway 101 (a regional highway) from buildout is summarized in Table V.2-9.

DOT 14 The comment is noted. As stated in the response to comment DOT 1, above, future transportation improvements will by law be subject to project specific environmental review. If impacts or improvements to State highways are contemplated they will be subject to the Project Study report requirements of the Department of Transportation which may require right-of-way acquisition.

DOT 15 The assessment of impacts to regional highways concludes that cumulative impacts will be significant and unavoidable. The DEIR recommends participating in the cost of regional improvements aimed at mitigating these effects through the regional traffic impact fee program being pursued by the County.

DOT 16 This appears to be a comment on the General Plan rather than the draft EIR. With respect to State highways, the General Plan acknowledges the City's obligations to provide needed public services and facilities concurrently or in advance of new development (see Policy PS 1, T-2, T-3) . Moreover, the City has no authority to make improvements to State highways without the review and approval of Caltrans.

DOT 17 Comment noted. See Policy T-3.

DOT 18 Comment noted. Should traffic calming techniques be contemplated on streets serving as access to the State highway system, Caltrans will be notified through the CEQA review and comment process where these issues can be resolved.

DOT 19	Comment noted.
DOT 20	Comment noted.

TAMC
TRANSPORTATION AGENCY
FOR MONTEREY COUNTY

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

August 8, 2005

City of Soledad
C/O David Moran, Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

SUBJECT: TAMC Comments on the Draft Environmental Impact Report for the City of Soledad General Plan Update.

Dear Mr. Moran:

Transportation Agency for Monterey County (TAMC) staff has reviewed the Draft Environmental Impact Report (DEIR) for the proposed City of Soledad General Plan Update. TAMC is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County. Overall, we are pleased with the implied support of the TAMC Regional Development Impact Fee and encourage the City to adopt it as a cumulative mitigation for the plan. In general, TAMC commends the policies and programs identified in the Draft EIR that address planning for transportation infrastructure, including transit, bicycle, and pedestrian modes of transportation.

The project includes a comprehensive revision of the City of Soledad's 1994 General Plan. The plan establishes goals, policies, and programs for guiding the physical development of the City, which is expected to reach a population of 28,000 residents over the 20-year planning horizon. The plan will accommodate a development potential of 11,000 new residential units.

TAMC staff offers the following comments for your consideration:

Regional Traffic Impacts of the 2004 City of Soledad General Plan

TAMC 1

1. TAMC is pleased to see the discussion of impacts to regional infrastructure included in the plan, as well as the references to TAMC's regional plans and local funding program efforts, including the 14-year expenditure plan and regional impact fee, which is a component of that plan. TAMC staff would like to note that the RTP for Monterey County was updated most recently in May of 2005 (the discussion under "Regional Transportation Plan" on page V.2-1 refers to the 1994 document). TAMC staff also would note that the list of funded improvements identified on page V.2-13 excludes the South Monterey County interchange projects included in TAMC's 14-year plan and

55-B Plaza Circle, Salinas, CA 93901-2902 • Tel: (831) 775-0903 • Fax: (831) 775-0897 • Website: www.tamcmonterey.org

regional impact fee referenced later in the document. TAMC has assumed that these interchanges will be constructed within the timeframe of the 14-year plan, and they are included in the proposed regional fee program.

TAMC 2

2. TAMC supports the general policies listed beginning on page V.2-22 addressing the traffic impacts of new development in the City of Soledad. TAMC specifically supports policies T-1, T-8, and T-11 addressing LOS performance standards (TAMC supports use of an "LOS D" standard as a baseline roadway performance threshold), traffic impact mitigation, and traffic impact fees.

TAMC 3

3. TAMC supports programs listed in the plan addressing requirements for traffic impact fees and trip reduction measures to address traffic improvements needed to accommodate buildout of the 2004 General Plan (5.4 – 5.8).

TAMC 4

4. TAMC also supports program 5.25 to consider executing the Joint Exercise of Powers Agreement for establishing and administering the proposed Regional Development Impact Fee Program. *To fund and deliver the US 101 interchange improvements identified in the DEIR, TAMC further urges the City of Soledad to adopt TAMC's proposed regional fees.* This program provides an established mechanism for funding the City's interchange improvements, and for mitigating the cumulative regional traffic impacts identified in impact T-1 of the DEIR, and discussed in the section on cumulative impacts on page VII-1. TAMC considers the collection of these regional fees to be mitigation for the cumulative impacts of development according to general plans.

   TAMC commends the City for its past actions to adopt a local traffic impact fee program, and requests that the City collect regional fees on an ad-hoc basis to address regional impacts until a regional fee program is officially established. TAMC recommends that the City adopt the regional fee program to address the US 101 interchange improvements that would otherwise need to be included in the City's local fee program.

Bicycle and Pedestrian Transportation

TAMC 5

5. TAMC supports the City's efforts to address bicycle, and pedestrian transportation as local alternatives to automobile travel, and supports the planning of infrastructure around these modes in policies T-3, T-18, and T-20 - T-28. With respect to Policy T-19, TAMC strongly encourages the City to accommodate bicycle transportation through designated bicycle lanes as opposed to separated Class I paths consistent with policy 12 – Goal 1.2 of the 2005 Monterey County Regional Transportation Plan and Regional Bikeways Plan. This policy states:

   "In order to facilitate regional travel by bicycle, TAMC encourages its member agencies to construct bicycle facilities on new roadways as follows:

   - In coordination with regional and local bikeways plans;
   - According to the specifications in Chapter 1000 of the Caltrans Highway Design Manual;

- With consideration of bicycle lanes (Class 2 facilities) on all new major arterials and on new collectors with an Average Daily Traffic (ADT) greater than 3,000, or with a speed limit in excess of 30 miles per hour; and
- With special attention to safe design where bicycle paths intersect with streets.

Regional Transit Service

TAMC 6

6. TAMC supports the general policies addressing Transportation Demand Management and transit (T-29 – T37). TAMC staff would note that the discussion of existing transit services on page V.2 – 3 of the DEIR does not reference Monterey-Salinas Transit's (MST) Line 23 South County Service or Line 53 South County Express, which are very successful routes connecting the South County cities with Salinas and the Monterey Peninsula.

Land Use and Transportation

TAMC 7

7. TAMC supports the land use and trip reduction programs listed in the DEIR (5.9 – 5.24) to reduce the number of automobile trips generated by new development and orient land uses around transit, bicycle, and pedestrian transportation.

We would like to express our appreciation for the opportunity to review this document. TAMC will be meeting with the Soledad City Manager soon to discuss the proposed Regional Transportation Impact Fee program, and look forward to scheduling time on the City Council agenda to present the program. If you have any questions, please contact Andrew Cook of my staff at (831) 775-0903.

Sincerely,

Wm. Reichmuth, P.E., Executive Director

Cc: Dave Murray, California Department of Transportation (Caltrans) District 5
Ron Lundquist, Monterey County Department of Public Works
Hunter Harvath, Monterey-Salinas Transit
Nicholas Papadakis, AMBAG
Douglas Quetin, Monterey Bay Unified Air Pollution Control District

Responses to comments from the Transportation Agency of Monterey County.

TAMC 1	The comment is noted and will be forwarded to the lead agency for consideration.
TAMC 2	The comment is noted and will be forwarded to the lead agency for consideration.
TAMC 3	The comment is noted and will be forwarded to the lead agency for consideration.
TAMC 4	The comment is noted and will be forwarded to the lead agency for consideration.
TAMC 5	The comment is noted and will be forwarded to the lead agency for consideration.
TAMC 6	The comment is noted and will be forwarded to the lead agency for consideration. The Monterey-Salinas Transit line 23 serves Soledad as does the Line 53 South County Express.
TAMC 7	The comment is noted and will be forwarded to the lead agency for consideration.

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

DISTRICT BOARD MEMBERS

CHAIR:
Lou Calcagno
Monterey County

VICE CHAIR:
Tony Campos
Santa Cruz County

Anna Caballero
Salinas

Butch Lindley
Monterey County

Ila Mettee-McCulchon
Marina

John Myers
King City

Dennis Norton
Capitola

Ellen Pirie
Santa Cruz County

Jerry Smith
Monterey County

August 1, 2005

City of Soledad
c/o Mr. Dave Moran
Crawford, Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

SUBJECT: DEIR FOR THE SOLEDAD 2004 GENERAL PLAN AND WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

Dear Mr. Moran:

Staff has reviewed the referenced document and has the following comments:

MBAPCD 1

1. P. II-1. Summary Project Description, and Areas of Known Controversy
The Project Description states that "The Draft General Plan…would accommodate a non-prison population of 57,000 residents." The document also states "Areas of known controversy involve uncertainty over the projection of future population to be realized in Soledad over the next twenty years, and the magnitude, direction and extent of future development." Given these two statements, please clarify whether the Plan would allow development to 57,000 residents within the next twenty years. (This contrasts to the statement on page III-16, which specifies that "The General Plan should strive to accommodate a year 2020 population of between 27,000 – 30,000 residents and a population of 57,000 in forty years.")

MBAPCD 2

2. P. V.1-16. Table V.1-6: Population Projections Used by MCWRA…
The source of the population projects cites "AMBAG, 1997". Please note that the current population projections provided by AMBAG were prepared in 2004.

MBAPCD 3

3. P. V.3-6. Particulate Matter
Discussion of particulate matter should be updated to reference the State annual PM2.5 standard.

MBAPCD 4

4. P. V.3-7. Local and Regional Air Quality
Air quality data should be updated to include 2000-2003 in accord with the District's CEQA Air Quality Guidelines.

MBAPCD 5

5. P. V.3-7. Air Monitoring
The DEIR states that the District operates air monitoring stations to measure CO, NOx, SO2 and PM10. This should be revised to read: "Ozone, NO_2, NO_x, NO, PM_{10}, and $PM_{2.5}$ are monitored at the Salinas station. Ozone, PM_{10}, and $PM_{2.5}$ are monitored at several stations throughout the NCCAB.

MBAPCD 6

6. P. V.3-7. Table V.3-1: Attainment Status of the North Central Coast Air Basin [NCCAB]
The table should be revised to reflect the fact that the NCCAB is Nonattainment Transitional for the State 1-hour ozone standard and Attainment for the State $PM_{2.5}$ standard. Reference to the State $PM_{2.5}$ standard should be to the annual $PM_{2.5}$ standard, and the federal classification should be revised from "Unclassified" to "Attainment".

MBAPCD 7

7. P. V.3-7. Local and Regional Air Quality
Please note that the most recent update of the AQMP is 2004, not 1991.

MBAPCD 8

8. P. V.3-8. Bio-Mass Plant
The DEIR should evaluate the bio-mass plant as a source of air pollution and nuisance complaints, and assess its impact on proposed surrounding land uses.

MBAPCD 9

9. P. V.3-8. Local and Regional Air Quality
Please note that the permanent conversion of agricultural land to urban land uses contemplated by the draft General Plan may reduce the potential for PM_{10} emissions from fugitive dust, but would increase emissions associated with vehicular exhaust, disintegrating vehicular tires on roadways and entrained dust from vehicular traffic.

MBAPCD 10

10. P. V.3-10. Population Forecasts
The document cites a variety of population forecast figures, which should be clarified in the FEIR. In addition, the DEIR does not discuss the impact of revisions to other General Plans in the Salinas Valley or compare the impacts to AQMP forecasts. As requested in the District's comment letter in response to the Notice of Preparation, AMBAG should be asked to prepare a consistency determination.

MBAPCD 11

11. P. V.3-11. Impact AQ-2
The DEIR states, "While the AQMP is crafted to achieve and maintain the federal and State air quality standards based on the population projections provided in Table V.3-3, the overall emission of ozone precursors is expected to increase significantly." The increase is apparently projected based on using URBEMIS. Using URBEMIS to forecast trips at buildout overestimates emissions, and the approach is not valid.

The AQMP addresses only the State ozone standard, not the federal standard. As specified above, ozone precursor emissions for the NCCAB are projected to decline through 2020 (VOC from 114.27 in 1990 to 68.91 in 2020; and NOx from 135.17 in 1990 to 55.58 in 2020.[Tables 4-1 and 4-2, 2004 AQMP]).

MBAPCD 12

12. P. V.3-15. Air Quality
The District is developing a PM Plan in response to SB 656 with control measures that would complement C/Os-14.

TABLE I - PROSPECTIVE DISTRICT ACTIONS UNDER SB 656 (Partial)

No.	Measure Description	Measure Type
D-1	Agricultural PM Best Management Practices (BMPs)	Fugitive Dust
D-2	Agricultural Tilling	Fugitive Dust

MBAPCD 13

13. The DEIR should address the federal 8-hour ozone standard indicating that the NCCAB is "Attainment" for that standard and that a Maintenance Plan must be submitted to the USEPA in 2007.

MBAPCD 14

14. P. V.3-16. District Rule 216
While the DEIR describes provisions of District Rule 216, which requires that population forecasts remain consistent with those in the AQMP, the FEIR should indicate that based on General Plan buildout numbers, population growth could exceed the population forecast included in the AQMP and, therefore, become inconsistent with Rule 216 requirements. General Plan Program 8.2 described on page V.3-16 requires the City to work with the APCD in preparation of its required updates to the AQMP. This should be revised to require the City to work with AMBAG on updates to the population forecast because the District uses AMBAG forecasts to prepare emissions forecasts.

MBAPCD 15

15. P. V.12-11. Air Quality Planning
As stated previously, the current update of the AQMP was adopted in 2004.

MBAPCD 16

16. The DEIR references General Plan Program 8.3 to address air quality impacts from construction activities. The District recommends that the list include consultation with the District regarding diesel exhaust impacts.

Thank you for the opportunity to review the project. Please do not hesitate to call if you have questions.

Sincerely,

Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: AMBAG

Responses to comments from the Monterey Bay Air Pollution Control District

MBAPCD 1 General Plan holding capacity is presented on pages IV-4 through IV-7. As Table IV-3 indicates, the non-prison population holding capacity of the draft Plan is 57,000. Predicting the precise number of years to buildout becomes less accurate (or meaningful) the further into the future the projection is made. However, if the pace of residential development experienced since 1999 proceeds unabated into the future (see the Medium Range trend line on Figure IV-1 on page IV-5), then it will take about 50 or more years to achieve. Suffice to say, the draft General Plan represents a long-term vision for the future growth and development of the City.

MBAPCD 2 The comment is noted and will be passed along to the lead agency for consideration. The 2004 AMBAG population forecasts show a 2020 population for Soledad of 39,463 and a 2030 population of 51,634. It is unclear whether this figure includes the Soledad Valley State Prisons. If so, it is about 7,000 less than the non-prison buildout population of about 57,000 projected for the draft General Plan.

MBAPCD 3 The State annual standard for PM 2.5 is 12 micrograms per cubic meter.

MBAPCD 4 Table V.3-2 provides a summary of days i=on which the State and federal ozone standards were exceeded from 1999 to 2003. The following language will be recommended to the lead agency:

Based on monitoring data from ambient monitoring stations, ozone concentrations exceeded State AAQS on 4 days in 2000, 3 days in 2001, 11 days in 2002, and 3 days in 2003. The majority of these violations occurred at the Pinnacles monitoring station, where the State AAQS was exceeded on 13 days between 1999-2003. Ozone concentrations exceeded the federal 8-hour ozone standard on 1 day in 2000, 2 days in 2001, 4 days in 2002 and 1 day in 2003. All of these exceedances occurred at the Pinnacles monitoring station.

MBAPCD 5 The comment is noted and will be passed along to the lead agency for consideration.

MBAPCD 6 The following revisions to Table V.3-1 (in italics) will be recommended to the lead agency:

TABLE V.3-1: ATTAINMENT STATUS OF THE NORTH CENTRAL COAST AIR BASIN		
Pollutant	Federal	State
Ozone (O3) - 1 hour	Maintenance	Nonattainment *Transitional*
Ozone (O3) - 8 hour	Attainment	Not Applicable
Carbon Monoxide (CO)	Unclassified/ Attainment	Monterey-Attainment San Benito-Unclassified Santa Cruz-Unclassified
Nitrogen Dioxide (NO2	Unclassified/ Attainment	Attainment
Sulfur Dioxide (SO2)	Unclassified	Attainment
Inhalable Particulates (PM10)	Attainment	Non-Attainment
Inhalable Particulates (PM2.5)	*Attainment*	*Attainment (annual standard)*

Source: MBUAPCD 2004

MBAPCD 7 The comment is noted.

MBAPCD 8 The Draft EIR assesses the potential environmental effects of the project under consideration which is, namely, buildout of the City in accordance with the 2004 draft General Plan. The biomass plant is an existing source of air pollution under permit by the MBAPCD which requires compliance with applicable air quality regulations. The extent to which the plant complies with these regulations now or in the future is an enforcement issue and not an impact of the draft General Plan for which the draft EIR was prepared. With respect to land use compatibility, it should be noted that the draft General Plan does not recommend any changes to the allowable land uses in the vicinity of the biomass plant. The outward expansion of the City is recommended to the north and east. Changes to the operation of the plant that may be contemplated in the future will be subject to project specific environmental review under the California Environmental Quality Act (CEQA) and the permitting requirements of the MBAPCD.

MBAPCD 9 The comment regarding PM10 emissions is noted and will be passed along to the lead agency for consideration.

MBAPCD 10 Table V.3-3 compares population forecasts used by the MBAPCD to determine consistency with the Air Quality Management Plan with population estimates for the draft General Plan for the same time periods. As Table V.3-3 shows, the population accommodated by the draft Plan is less than the projections used by MBAPCD for 2010, 2020 and 2030. For this reason, the DEIR concludes that the draft General Plan is consistent with the AQMP. The extent to which plans for other cities in the area accommodate populations that exceed these forecasts does not change this conclusion. From a cumulative perspective, the DEIR concludes that regardless of AQMP consistency, the contribution of emissions from buildout of the draft General Plan will result in a significant and unavoidable cumulative impact to air quality.

MBAPCD 11 The June, 2004 MBAPCD CEQA Guidelines states the following:

"*Motor vehicle and area source emissions associated with indirect sources should be calculated for all projects. The District recommends using the latest version of the URBEMIS computer program. The most current version is URBEMIS2002. The program is available upon request from the District or on-line at* www.aqmd.gov/ceqa/urbemis.html."

The draft EIR calculates emissions from indirect sources accordingly and provides a conservative conclusion with regard to potential cumulative impacts. Moreover, if the resulting estimate overstates the emissions by 2.5 times, they would still increase threefold over 2004. Projections provided in the AQMP showing a decline in ozone precursor emissions through 2020 suggests the resulting impact may be less than the conclusion in the draft EIR.

MBAPCD 12 The comment is noted and will be passed along to the lead agency for consideration.

MBAPCD 13 The comment is noted and will be passed along to the lead agency for their consideration.

MBAPCD 14 As stated above, the 2004 draft General Plan is a long-term vision for the future growth of the City, where 'long-term' means that the Plan will accommodate population growth over 40 – 50 years if the previous growth rate is sustained. Since the buildout timeframe of the draft Plan may be longer than 2030 (the last year of population forecast by AMBAG for use in the AQMP) it will exceed the AQMP population forecast and may at some point in the future become inconsistent with those forecasts. The City will continue to work with AMBAG regarding population forecasts.

MBAPCD 15 The comment is noted and will be passed along to the lead agency for their consideration.

MBAPCD 16 The comment is noted. We will add item k. to program 8.3 which adds requires consultation with the District regarding diesel exhaust impacts and requirements.

MONTEREY COUNTY

DEPARTMENT OF PUBLIC WORKS
168 W. Alisal St., 2nd Floor, Salinas, CA 93901-2680 • (831) 755-4800 • FAX (831) 755-4958
Ronald J. Lundquist, P.E., Interim Public Works Director

AUGUST 8, 2005

DAVID MORAN
CITY OF SOLEDAD
C/O CRAWFORD MULTARI & CLARK ASSOCIATES
641 HIGUERA ST STE 302
SAN LUIS OBISPO CA 93402

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE CITY OF SOLEDAD 2004 GENERAL PLAN

Dear Mr. Moran:

Thank you for the opportunity to comment on the *Draft Environmental Impact Report (DEIR) for the City Of Soledad 2004 General Plan.* We have reviewed the draft EIR/Environmental Assessment, and as the Public Works Department for Monterey County, our main concerns pertain to the traffic and circulation within the vicinity of the General Plan area.

The 2004 Draft General Plan provides policies and programs to guide development of the City of Soledad within the 20-year plan. The plan evaluated by this DEIR identifies impacts associated with this proposed development and growth.

Based on our review of the DEIR, we offer the following comments:

PW 1

- The Soledad General Plan should be consistent with other regional planning documents, such as the Monterey County General Plan.

PW 2

- The proposed General Plan identifies improvements to roadways outside the current Soledad city limits. The County is interested in the phasing of the development and growth of the City, and how and when the recommended roadway improvements, and the improvements identified in Figure V.2-6, would be implemented within this plan.

PW 3

- The County requests being involved with projects that would impact County facilities around the Soledad vicinity. Similar to Item 5.7 on Page V.2-26, please indicate that the City shall work with the County of Monterey to implement improvements that would affect roadways and facilities in the neighboring County vicinities.

PW 3

- The City's capital improvement plan should be consistent with the City's traffic fee program in including projects that address impacts within the immediate vicinity surrounding the growth areas associated with the General Plan buildout. These projects may or may not be within Soledad's city limits, but may be directly affected by the City's growth. Such areas include, but are not limited to, Camphora-Gloria Road and Sillman Road.

PW 4

- Please provide additional information and clarification of projects developed to address impacts arising from the proposed plan. On Page V.2-28, the Mitigation Measures section does not identify any mitigation measures. However, it seems that projects identified on Page V.2-26, Item 5.8, address some of the impacts, and these projects appear to be incorporated into this General Plan.

PW 5

- On Table V.2-4 on page V.2-6, please modify the description of Metz Road. Only a portion of Metz Road is designated as Highway 146 and within Caltrans jurisdiction. The remainder of Metz Road is a County road.

Thank you for taking our comments into consideration. Should you have any further questions regarding this matter, please feel free to call me at (831) 755-4937.

Sincerely,

RONALD J. LUNDQUIST, P.E.
INTERIM PUBLIC WORKS DIRECTOR

By

Chad Alinio, P.E.
Transportation Engineer

CA:fn

C:\Documents and Settings\nunezfc\My Documents\T&D\soledad DEIR comments.doc

Responses to comments from Monterey County Department of Public Works.

PW 1 Consistency with other relevant plans and standards is discussed in Chapter V.12 of the draft EIR.

PW 2 The comment is noted. One of the first implementation measures following adoption of the draft General Plan will be the preparation of master plans for (among other things) traffic improvements, which will be accompanied by a capital improvement program. The City will coordinate with the County regarding the preparation of the CIP especially to the extent it involves impacts and improvements to regional roadways.

PW 3 (see response under PW 2, above).

PW 4 The draft EIR recommends the City adopt the regional traffic impact fee pursued by the Transportation Agency of Monterey County.

PW5 The comment is correct in concluding that the improvements recommended by Figure V.2-6 are intended to achieve and maintain the City's desired level of service for streets and intersections through buildout of the draft Plan. A capital improvement program will be prepared to identify specific projects, costs and timing.

PW 6 The comment is noted; however, the comment does not identify the location of jurisdictional boundary between Caltrans and the City.

Chris – taken the draft EIR to work through progress and there have been significant changes in the city page 59 and 60, things city of soledad should need, which we have done. Nice if did something downtown, they are already done. Nice to sit down with staff to update page 59 and 60. Miravale II expansion of cemetery. Things staff are aware of, but particulary those two pages, parks, safe routes to school, child care facility being built, RNC, street lighting, maintenance programs, cross walks, sidewalks, sit down with staff and public works and update section.

Consultant – take under advisement – general planning is slowest thing that occurs. Good news and will make sure it is continually updated.

Open and close
MR – questions – administrative matter, staff report seems to be missing documents, copy of staff report has page one of resolution. Reference in number of comment in sections that don't appear to be in final general plan, were numbers changed specific reference to policy from landwatch and could not find it. Don – circulation question? We could not find the exact reference either. It was a recommendation.
MR - general
Don – city will adopt impact fees on local level to satisy traffic needs, reference to TAMC impact fees recommending council not adopting, council would be adopting additional impact fees for local traffic issues and TAMC are regional.

MR – CHECK VIDEO – for whatever reason there was specific issue referened and concerned that we may be overlooking something.

Mitigation issue in EIR that refers to regional traffic fees??????

Recommendation for considering regional impact fee. Page 5.2/78. this is a program, not a policy, action item that forwards the policy or role. The action item in EIR is referenced

MR – concern was Council did not have opportunity to review impact fees and it does not look like general plan contains that language

Stef – had same item MR referenced,and on letter from Department of transporation only got second or third page (missing pages 12 and 13, part of 14). Comments on transportation agency had representative here talking about impact fees, page 21 second paragraph, suggest city collect fees, worried that was not wht council had agreed on.

C"hris – TAMC expressed concern on impact fees, but not attached to EIR.

MR – required to produce letter that was sent ot us and response. Not bound to do anything, most of the language in all letters that
One comment that appears response is yes city is going to adopt, with comment would not bind council in approving impact fees.

Chris – Debbie Hale came to talk about fees and felt they had more proejctes they wanted to spend money on and we are trying to increase affordable housing. More money for residents.

NC – TAMC will be on road again in November and December and south county manager and are asking to be on council agenda.

STATE OF CALIFORNIA, RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

August 15, 2005

RECEIVED

AUG 18 2005

PLANNING DEPARTMENT

Mr. Don Fleming, Planning Director
City of Soledad
248 Main Street
Soledad, CA 93960

Subject: City of Soledad 2004 General Plan & Wastewater Treatment and Disposal Master Plan Draft Environmental Impact Report (DEIR) - SCH# 2005032122, Monterey County

Dear Mr. Fleming:

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the DEIR for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. We offer the following comments and recommendations with respect to the project's impacts on agricultural land and resources.

Project Description

The project is a proposed General Plan (GP) for development of the City of Soledad (City) for the next twenty or more years. The project is also a Master Plan (MP) for improvements to the City's wastewater facilities to accommodate build-out of the City according to the GP. The City is located in southern Monterey County (County) in the heart of the fertile agricultural Salinas Valley. The GP respresents an expansion of the City's boundaries and Sphere of Influence.

Project Impacts on Agricultural Land

According to the DEIR, the GP designates an additional 3500 acres for development, of which approximately 3200 acres are classified Prime Farmland and 300 acres Farmland of Statewide Importance. Within this area, one property is enforceably restricted by Williamson Act contract. Other contracted properties are located nearby and may be considered for conversion under the MP.

Urban development under the GP will convert approximately 2750 acres of Prime and Farmland of Statewide Importance while development under the MP will convert about 469 acres. The conversion of agricultural land in each case is considered a significant project-specific and cumulative impact. However, it appears that no mitigation measures are proposed. On page V.8-9, last paragraph, the DEIR states that "any additional loss constitutes a significant cumulative adverse impact that cannot be feasible mitigated". The DEIR lists several policy responses to limit development to the GP area and limit development conflicts with adjacent agricultural areas, but these policies do not appear to be mitigation measures as defined under CEQA. There appears to be no discussion of the consideration of feasible mitigation for the conversion of agricultural land. The Department recommends that the Final EIR (FEIR) include such a discussion according to recommendations listed below.

The DEIR has determined that impacts regarding the termination of Williamson Act contracts under the GP and MP are not significant and that the inducement to terminate adjacent contracts is not significant. The explanation for this determination is not clear to the Department, though the DEIR notes that the loss of agricultural land is considered adverse and unavoidable. We recommend that the FEIR identify the amount of contracted acreage, and whether it is prime agricultural land, that will be converted and may be converted under the GP and MP. We also recommend that the FEIR specifically explain the rationale for determining that the premature termination of the land's publicly financed, enforceable protections against urban development is not significant.

Finally, the Department recommends that the FEIR explain why the GP does not meet the County requirement to provide for a permanent buffer between its planned development and adjacent agricultural land as required under policy 30.0.2 (V.12-7).

Williamson Act Lands

The Department recommends that the FEIR include the following information regarding Williamson Act land impacted by the project.

As a general rule, land can be withdrawn from Williamson Act contract only through the nine-year nonrenewal process. Immediate termination via cancellation is reserved for "extraordinary", unforeseen situations (See Sierra Club v. City of Hayward (1981) 28 Cal.3d 840, 852-855)). Furthermore, it has been held that "cancellation is inconsistent with the purposes of the (Williamson) act if the objectives to be served by cancellation should have been predicted and served by nonrenewal at an earlier time, or if such objectives can be served by nonrenewal now" (Sierra Club v. City of Hayward).

- If cancellation is proposed, notification must be submitted to the Department when the county or city accepts the application as complete (Government Code

§51284.1). The board or council must consider the Department's comments prior to approving a tentative cancellation. Required findings must be made by the board or council in order to approve tentative cancellation. Cancellation involving Farmland Security Zone (FSZ) contracts include additional requirements. We recommend that the FEIR include discussion of how cancellations involved in this project would meet required findings. However, notification must be submitted separately from the CEQA process and CEQA documentation. (The notice should be mailed to Debbie Sareeram, Interim Director, Department of Conservation, c/o Division of Land Resource Protection, 801 K Street MS 18-01, Sacramento, CA 95814-3528.)

- Pursuant to Government Code §51243, if a city annexes land under Williamson Act contract, the city must succeed to all rights, duties and powers of the county under the contract unless conditions in §51243.5 apply to give the city the option to not succeed to the contract. A Local Agency Formation Commission (LAFCO) must notify the Department within 10 days of a city's proposal to annex land under contract (Government Code §56753.5). A LAFCO must not approve a change to a sphere of influence or annexation of contracted land to a city unless specified conditions apply (Government Code §§51296.3, 56426, 56426.5, 56749 and 56856.5).
- Termination of a Williamson Act/FSZ contract by acquisition can only be accomplished by a public agency, having the power of eminent domain, for a public improvement. The Department must be notified well in advance of any proposed public acquisition (Government Code §51290 - 51292), and specific findings must be made. The property must be acquired in accordance with eminent domain law by eminent domain or in lieu of eminent domain in order to void the contract (§51295). The public agency must consider the Department's comments prior to taking action on the acquisition. School districts are precluded from acquiring land under FSZ contract. We recommend discussion in the FEIR of whether such action is envisioned by this project and how the acquisition will meet the required findings. However, notification must be submitted separately from the CEQA process and CEQA documentation to the address noted above.

Mitigation Measures

The Department believes that the most effective approach to farmland conservation and impact mitigation is one that is integrated with general plan policies. Mitigation specified within the general plan can then be applied in a uniform and comprehensive manner for specific projects toward the larger goal of sustaining agricultural resources. Within the context of a general plan mitigation strategy, alternative measures could be considered, such as the use of transfer of development credits, mitigation banking, and economic incentives for continuing agricultural uses.

The Department encourages the use of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural

land. If a Williamson Act contract is terminated, or if growth inducing or cumulative agricultural impacts are involved, we recommend that this ratio be increased. We highlight this measure because of its acceptance and use by lead agencies as mitigation under CEQA. It follows a rationale similar to that of wildlife habitat mitigation. The loss of agricultural land represents a permanent reduction in the State's agricultural land resources. Agricultural conservation easements will protect a portion of those remaining resources and lessen project impacts in accordance with CEQA Guideline §15370. Several agricultural conservation easements have been perfected in Monterey County with the help of the Division's California Farmland Conservancy Program (CFCP) and held by the Monterey County Agricultural & Historical Land Conservancy, Inc.

Mitigation using agricultural conservation easements can be implemented by at least two alternative approaches: the outright purchase of easements or the donation of mitigation fees to a local, regional or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. The conversion of agricultural land should be deemed an impact of at least regional significance, and the search for replacement lands conducted regionally or statewide, and not limited strictly to lands within the project's surrounding area.

Other forms of mitigation may be appropriate for this project, including the following:

- Protecting farmland in the project area or elsewhere in the County through the use of less than permanent long-term restrictions on use such as 20-year Farmland Security Zone contracts (Government Code §51296 et seq.) or 10-year Williamson Act contracts (Government Code §51200 et seq.).
- Directing a mitigation fee to invest in supporting the commercial viability of the remaining agricultural land in the project area, County or region through a mitigation bank that invests in agricultural infrastructure, water supplies, marketing, etc.

Although the direct conversion of agricultural land and other agricultural impacts are often deemed to be unavoidable by an agency's CEQA analysis, mitigation measures must nevertheless be considered. The adoption of a Statement of Overriding Consideration does not absolve the agency of the requirement to implement feasible mitigation that lessens a project's impacts. A principal purpose of an EIR is to present a discussion of mitigation measures in order to fully inform decision-makers and the public about ways to lessen a project's impacts. In some cases, the argument is made that mitigation cannot reduce impacts to below the level of significance because agricultural land will still be converted by the project, and, therefore, mitigation is not required. However, reduction to a level below significance is not a criterion for mitigation. Rather, the criterion is feasible mitigation that lessens a project's impacts. Pursuant to CEQA Guideline 15370, mitigation includes measures that "avoid, minimize, rectify, reduce or eliminate, or compensate" for the impact. For example, mitigation includes *"Minimizing*

impacts by limiting the degree or magnitude of the action and its implementation (§15370(b))" or *"Compensating for the impact by replacing or providing substitute resources or environments (§15370(e))."*

All measures ostensibly feasible should be considered. Each measure should be discussed, as well as the reasoning for selection or rejection. A measure brought to the attention of the Lead Agency should not be left out unless it is infeasible on its face.

Finally, when presenting mitigation measures, it is important to note that mitigation should be specific, measurable actions that allow monitoring to ensure their implementation and evaluation of success. A mitigation consisting only of a statement of intention or an unspecified future action may not be adequate pursuant to CEQA.

Information about agricultural conservation easements, the Williamson Act and provisions noted above is available on the Department's website or by contacting the Division at the address and phone number listed below. The Department's website address is:

http://www.conservation.ca.gov/dlrp/index.htm

Thank you for the opportunity to comment on this DEIR. Pursuant to Public Resources Code §21092.5(a), the Department looks forward to receiving your response and a copy of the FEIR. If you have questions on our comments or require technical assistance or information on agricultural land conservation, please contact Bob Blanford at 801 K Street, MS 18-01, Sacramento, California 95814; or, phone (916) 327-2145.

Sincerely,

Dennis J. O'Bryant
Acting Assistant Director

cc: Scott Morgan, Project Analyst
State Clearinghouse

Monterey County Resource Conservation District
744 La Guardia Bldg. A
Salinas, CA 93905

Ms. Kate McKenna, Executive Officer
Monterey County LAFCO
P.O. Box 1369
Salinas, CA 93902

Attachment "B"
Findings of Fact, Statement of Overriding Consideration & Mitigation Monitoring Program

I. The Final Environmental Impact Report

The City Council of the City of Soledad hereby certifies the Final Environmental Impact Report (State Clearinghouse Number 2005032122) for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan which consists of the Draft EIR, the responses to comments on the Draft EIR, a list of persons and agencies commenting on the Draft EIR, the Mitigation Monitoring Program, these findings of fact, the Staff Reports and any associated attachments (collectively referred to as the Final EIR), and finds that it has been completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq) (CEQA), and that the City Council has received, reviewed and considered the information contained in the Final EIR, all hearings and submissions of testimony from officials of the City of Soledad the public and other agencies and organizations. The City Council further finds that the Final EIR reflects the Lead Agency's independent judgment and analyses.

Having received, reviewed and considered the foregoing information, as well as any and all information in the record, the City Council hereby makes these Findings of Fact pursuant to, and in accordance with, Section 21081 of the Public Resources Code, as follows:

II. Project Description

The following summary description is excerpted from Chapter 3 of the draft EIR for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan, which is incorporated herein by this reference and available for review at the City Planning Department, 248 Main Street, Soledad.

Draft General Plan

The Soledad General Plan provides for the orderly growth and development of the City for the next twenty or more years. The Plan envisions substantial growth for the City during this timeframe. Complete buildout of the City and its plan area in accordance with this General Plan would accommodate about 57,000 (non-prison) residents. The Plan provides policies and programs to manage the location and pace of new development so that it may be accommodated without financial hardship to the community, and so that the quality of life enjoyed in Soledad is preserved and enhanced. The primary focus of the Plan is to foster a climate conducive for expanded economic development, including expanded opportunities for shopping and tourism, the provision of more and better paying jobs, and affordable housing.

The Draft General Plan is divided into the following chapters and sub-chapters, or elements.

Land Use. The Land Use Element describes the various uses to which land within the City may be committed, and designates areas where these uses may take place. In this sense, the Land Use Element is the most basic of the elements. It must be closely coordinated with the other elements to provide consistent policy guidance that results in orderly and logical development.

Housing. The Housing Element describes the manner in which safe, affordable housing will be provided to present and future City residents anticipated through the time frame of the General Plan. The Housing Element also provides incentives for the production and rehabilitation of affordable housing within the City.

Circulation (transportation). The Circulation Element describes how the transportation needs of the city will be met during the time frame of the General Plan. The Circulation Element identifies where new roadways will be constructed to support the land uses contained in the Land Use Element, and also contains provisions for the use of alternate modes of transportation, including bicycle and pedestrian circulation plans, and transit.

Conservation and Open Space. The Conservation and Open Space Elements are two separate elements required by state law but are often combined as one. These elements describe the diverse natural and human-made resources in and around Soledad, and how these resources will be preserved and protected during the time frame of the General Plan.

Safety. The Safety Element inventories seismic, geologic, flood, and fire hazards in Soledad, and discusses how the effect of these hazards can be minimized.

Noise. The Noise Element describes the existing and projected noise environments for the City and establishes land use compatibility guidelines for various noise levels. On the basis of expected population and traffic growth, the Noise Element establishes policies and standards to protect residents from exposure to excessive noise.

The Soledad General Plan also contains the following three optional elements:.

Parks and Recreation. The Parks and Recreation Element provides policies and standards for the development of additional parks and the expansion of recreation programs to meet the needs of Soledad residents.

Public Services and Facilities. This element summarizes the infrastructure and public facilities needs of the City through buildout of the General Plan.

Economic Development. This Element includes a generalized discussion of expected costs of operating the future city, and potential revenue sources likely to be available to cover those costs. Among other purposes, this element will assist the City in determining whether new development should be subject to different fees or exactions than are currently in place to better cover the costs of growth to the community.

Two other documents, while not part of the General Plan, provide important guidance with regard to development.

Downtown Specific Plan/ Front Street Improvement Plan. The Downtown Specific Plan/Front Street Improvement Plan (FSIP) provides specific goals, policies and programs for the revitalization of the City's traditional commercial center along Front Street. The main goal of the FSIP is to create an attractive and inviting place to gather and shop by providing street trees,

benches and other amenities, and by developing open plazas and walkways that provide protection from the heat and wind.

Community Design Guidelines. Another important component of the City's development regulations is a set of design guidelines for new development. The design guidelines are intended to supplement the policy and development guidance provided by the General Plan and Zoning Ordinance by describing the City's expectations for the quality and character desired of new development.

Each element of the General Plan contains goals, policies and programs that provide guidance to decision-makers and the public when questions arise about the appropriate use of individual parcels of land and other resources. A goal is a desirable future condition or state towards which the community will work to achieve. Policies are statements of the community's position regarding a particular issue that provides guidance for decision-making. A program is an action or series of actions, procedures or techniques that the City will employ or undertake to implement the policies contained in the General Plan. The implementation programs specify the agency, department or other party responsible for carrying out and monitoring the actions described, the funding source (when one can be identified) and a time frame for its accomplishment.

Quantified objectives are measurable milestones that can be used to judge the effectiveness of the implementation of the Plan. For example, the Housing Element provides quantified objectives for the number of dwelling units the City expects to be constructed over the next five years.

The General Plan must be a comprehensive, long-term document. The Soledad General Plan provides a framework for the orderly growth and development of the City for the next twenty or more years from our vantage of today. The General Plan, however, will certainly be amended from time to time to keep pace with the changing needs of the community.

Land Use Diagram

The recommended Land Use Diagram for the City of Soledad is shown on Figure II-9. The Land Use Diagram assigns a land use designation to all property within the City, both public and private, and properties within the City's sphere of influence.

Expansion Areas

The Land Use Diagram designates areas adjacent to the City where it will eventually grow and extend public services over the next twenty or more years. These areas are designated Expansion Area/Specific Plan Required and are primarily residential in nature, but will also provide the range of complementary land uses necessary to support liveable neighborhoods that are integrated with the fabric of the community.

A specific plan will be required in advance of annexation and development of each sub-area identified on the Land Use Diagram, which in turn will be subject to project-specific environmental review.

The Plan provides standards for the preparation of specific plans for new expansion areas in Appendix B on page XII-2. Standards are provided for the allowable mix of land uses and for the overall objectives to be achieved through the specific plan process.

The Plan provides a description of each specific plan sub-area along with a brief discussion of development constraints and opportunities, and the overall objectives to be achieved.

Development Assumptions and General Plan Holding Capacity

A general plan must be based on a thorough understanding of future population and the demand for land if the community's vision for the City is ever to be achieved. The 2004 General Plan is based on projected future population growth, which provides a Low, Medium and High range of growth over the next twenty years. The Plan assumes that the City's population will continue to grow as it has over the past five years, reaching about 28,000 residents in about twenty years and about 58,000 residents in forty years (excluding the prison population).

Table 1 provides a summary of the General Plan "holding capacity", which is the number of dwelling units, and the floor area of commercial and industrial development, that can be accommodated based on the amount of land designated for these uses. Due to market forces, the size and shape of parcels and other factors, the maximum development potential is rarely achieved. For this reason, holding capacity is expressed as 80 percent of the gross development potential (acres x building intensity). However, the actual buildout population achieved by the general plan will likely be much less because existing residential neighborhoods are developed at densities much less than 80% of their maximum allowable density, and the residential density of new expansion areas will likewise be constrained by slope, irregularly shaped lots and preferences reflected in the marketplace.

According to the 2000 Census, the City had about 2,472 dwelling units, not counting dwellings approved or under construction. Since then, about 1,375 additional units have been constructed, which brings the total in the City to about 3,847. This leaves a remaining development potential of about 11,000 units that could be constructed within the City's general plan area.

TABLE 1: SUMMARY GENERAL PLAN HOLDING CAPACITY	
Total Potential Dwelling Units At Buildout of Plan Area[1]:	14,273
Total Potential Commercial Floor Area At Buildout[1]:	3.3 million sq.ft.
Total Potential Industrial Floor Area At Buildout[1]:	9.5 million sq.ft.
Total Potential Non-Prison Population at Buildout:	57,000
2000 Prison Population:	11,200
Total Acres in Plan Area:	4,530

1. 80 percent of maximum potential.

TABLE 2: SUMMARY DWELLING UNIT AND POPULATION HOLDING CAPACITY			
Portion of Planning Area	Holding Capacity		
	Total Res. Acres	Dwelling Units (80% of Maximum)	Population[1]
City Limits[2]	736	3,847	15,571
Miravale II	186	1,146	4,582
San Vicente West	155	950	3,802
North Entry	39	267	1,069
Mirrasou	383	2,262	9,050
Northwest Expansion Area	950	5,800	23,200
Total At Buildout:	2,449	14,273	57,000[4]
Existing[3]:		3,192	15,000
Remaining To Buildout:		11,081	42,000

1. Excluding prison population of 11,200.
2. Source: City of Soledad, 2002
3. California Department of Finance, January 2004
4. Total dwelling units X 4.0 persons per dwelling.

Wastewater Treatment and Disposal Master Plan

Prior to 1995 the City of Soledad had a wastewater treatment plant with a capacity of 650,000 gallons per day. The City and the State entered into an agreement wherein the City's treatment plant was expanded to a capacity of 3.1 million gallons per day (MGD) with 2.1 MGD reserved for the California Department of Corrections Salinas State Prison and Correctional Training Facility (prisons) facilities in Soledad California. The net capacity gain for the City was 350,000 gallons per day.

The disposal rates of the ponds at the Wastewater Treatment Plant ('WWTP) have been monitored closely for disposal performance over the past several years. The average dry weather flow slowly increased from 2.5 MGD in 2001 to 2.7 MGD in 2003.

By August of 2004, the flow rate had reached 2.8 MGD, multiple ponds were full and it was evident that the ponds were not emptying fast enough between filling and emptying cycles. By September 2004, the flow was at 2.9 MGD and plant operators took a number of operational actions in an effort to dry out the empty ponds faster between fills.

At the request of the City, in June of 2003, Fugro West, Inc. prepared a report entitled "Hydro-geological Investigation Percolation Basin Capacity Analysis Soledad Wastewater Treatment Plant". Based on information in the report and other data combined with in-field observations that the disposal capacity of the existing ponds at the WWTP are at or very near capacity, Staff concluded in October 2004 that there was no alternative available other than to recommend additional inflow to the system be prohibited until additional disposal capacity could be achieved.

In response, on October 20, 2004 the City Council adopted Urgency Ordinance No. 612 "Establishing a Moratorium on the Issuance of Building Permits Requiring Sewer Connections and Making Findings Related Thereto" in order to minimize inflow to the WWTP. The Council also adopted Resolution No. 3557 "Declaring an Emergency Pursuant to Section 20168 of the Public Contract Code and Authorizing Contracting Without Compliance With Mandatory Contract Bidding Procedures" in order to expedite design and construction efforts necessary to resolve the treatment and disposal emergency created by the hydro-geologic conditions at the facility.

The Council subsequently authorized preparation of the Wastewater Treatment and Disposal Master Plan to provide a program for remedying existing deficiencies and providing capacity to serve the continued development of the City as envisioned by the draft General Plan. The Master Plan provides for the orderly expansion of the City's wastewater facilities to a capacity of 5.90 mgd which is sufficient to accommodate a population of 54,700, inclusive of the prisons. To accomplish this, the Master Recommends the following:

Immediate Actions to Be Taken To Avoid A Spill to the Salinas River

- Enforce Urgency Ordinance No. 612 that established a moratorium on the issuance of building permits requiring sewer connections.
- Raise road levies at wastewater treatment plant between basins 6 and 7, and between basins 4 and 5.
- Complete prison wastewater facility emergency discharge CEQA process.
- Obtain CDC approval to temporarily discharge at prison disposal site with commitment to negotiate long-term use.
- Obtain Regional Board interim approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site while a long term site use agreement can be negotiated between the City and the State so that a permanent request of wastewater discharge can then be processed.
- Rehabilitate the Prison WWTP treatment and disposal site.
- Divert part of prison wastewater flow to prison wastewater facility in order to be able to operate the existing City wastewater facility at an onsite disposal rate of approximately 2.5 MGD.

Actions to Be Taken Immediately to Remedy Existing Wastewater Disposal Deficiencies

- Adopt Wastewater Treatment and Disposal Master Plan.
- Provide the Regional Board a copy of the Master Plan and request approval to discharge temporarily at the prison abandoned wastewater treatment site.
- Request the California Department of Corrections (CDC) to enter into an agreement with the City to allow the City to temporarily discharge to the prison abandoned wastewater disposal site.
- Obtain RWQCB approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site on a temporary basis while a permanent request of wastewater discharge is being processed.
- Complete restoration maintenance at the prison abandoned disposal site.
- Connect aerators and install pond circulators.
- Divert 1.1 MGD of the prison flow to the prison abandoned disposal site.
- Operate the existing City facility site at a disposal rate of approximately 2.5 MGD.

- In summary, mitigation of existing disposal deficiency is accomplished by diverting up to 1.1 million gallons per day to abandoned prison disposal site and limiting flow to the existing City facility to no more than 2.5 million gallons per day.

Actions to Be Taken to Remedy Existing Treatment Plant Capacity Deficiencies

- Complete process to mitigate existing plant disposal deficiency.
- Install equipment that will enable plant operators to achieve Title 22 reclamation quality effluent at both WWTP sites:
- Phase 1: Install 12 Pond Circulators and Telemetry to modify Operation of Aerators
- Phase 2: Renovate the CDC wastewater facility and divert 1.1 mgd of the CDC wastewater flow to that facility, thus providing ability to provide maintenance for City disposal basins.
- Phase 3: Install 5.5 MGD Secondary Effluent Filter Pump Station, 5.5 MGD Continuous Backwash Filter System (Including influent channel, flash mix/flocculation, chemical feed, and compressed air systems if needed), and 5.0 MGD Concrete Channel Ultra-Violet Disinfection System.

The City desires to lease the Prison Abandoned WWTP, with option to renovate and purchase the facility. This would enable the City to reduce flow to the City's WWTP by diverting prison wastewater flow to the CDC wastewater facility. The results would be immediate availability of capacity at the City WWTP and ability to perform more effective maintenance of the disposal basins. The master plan envisions various alternatives described as phases. Costs of land acquisition and costs of constructing infrastructure on sites acquired have not been estimated.

Phase 1: Commence upgrading treatment at the City's WWTP to Title 22 Water Reuse Standard. The project consists of installation of pond circulators and completion of the final design for treatment upgrades to achieve reclamation quality effluent.

Phase 2: Renovate the CDC wastewater treatment facility for interim (4 — 6 years) secondary treatment and disposal use. It is anticipated this phase of the project will be completed by September of 2005 if the lease and tentative purchase agreements can be executed by the end of February 2005.

Phase 3: Complete Title 22 Water Reuse treatment upgrades to the City's WWTP. This project will provide treatment for up to the flow capacity of the existing head works. Additional disposal sites will increase future disposal capacity up to the flow capabilities of the existing head works.

Phase 4: Acquire land contiguous to the City's WWTP (Parcel A), install pump station and pipeline and other infrastructure in order to commence reclamation discharge to the parcel. The City has constructed segments of a reclamation line between the City WWTP and the freeway and at various locations within the City limits. The Phase 5 Parcel is an ideal site to use for reclaimed irrigation water purposes. The plan is to use the site for reclaimed water storage and for installation of a pump station. This site is considered a strategic component to be able to provide reclaimed water to a future golf course and to be able to provide reclaimed water for irrigation of freeway landscaping.

Phase 5: Provide reclaimed water for irrigation of freeway landscaping.

Phase 6: Upgrade treatment to reclamation quality at the prison WWTP by June of 2009.

Phase 7: Expand the City's WWTP head works.

Phase 8: Acquire additional disposal site (Parcel B) contiguous to and southeast of the City's WWTP and expand the City's WWTP facility onto that site.

Phase 9: Upgrade the City's WWTP to 7.0 MGD Reclamation Treatment Capacity. At an average growth rate of 250 dwelling units and related services, it is estimated this would provide sufficient treatment capacity through June of 2028 to serve a City population of 43,500.

Phases 10 and 11: Acquire and develop additional disposal sites (Parcels C and D) southeast of the City's WWTP. These disposal sites have also been identified as preferred sites to consider for reclamation disposal purposes.

Phases 12 through 17: Various alternative phases that increase treatment and disposal capacity to meet the service needs of the City. Various parcels of land have been identified as potential reclaimed wastewater disposal sites. These projects are beyond the scope of this master plan. Acquire land be used for tertiary disposal purposes. Identify, and make arrangements to connect to, various landscaping, crop and spray field groundwater recharge disposal and storage sites (Title 22 reclamation quality effluent).

Phases 12 through 16 are additional conceptual disposal sites. Various parcels of land have been identified as potential reclaimed wastewater disposal sites.

III. The Record

The California Code of Regulations, Title 14, Section 15091 (b) requires that the City Council's findings be supported by substantial evidence in the record. Accordingly, the Council's record consists of the following, which are located at the City Planning Department, 248 Main Street, Soledad California:

A. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the City Council during public hearings on the project.

B. Crawford Multari & Clark Associates (2005) Draft and Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan.

C. Andalucia Phase IV Subdivision Final Supplemental Environmental Impact Report, 1992, EMC Planning Group Inc.

D. Association of Monterey Bay Area Governments Regional Population and Employment Forecasts for Monterey, San Benito and Santa Cruz Counties, 1997

E. Brown-Buntin Asociates, Typical Construction Equipment Noise Levels

F. California Air Resources Board, URBEMIS 2002

G. California Code of Regulations, Title 22, Division 4, Chapter 15 " Domestic Water Quality Monitoring"

H. California Criminal profile, FBI Crime Index, 1998

I. California Department of Conservation, Farmland Mapping and Monitoring Program, Soil Survey of Monterey County

J. California Department of Finance City/County Population and Housing Estimates, 1996, 1997, 1998, 1999, 2000, 2004

K. California Department of Fish and Game, Natural Diversity Database for Monterey County

L. California Employment Development Department, Labor Market Information Division

M. California Department of Water Resources Bulletin 118, February 2004

N. California Department of Transportation, Sound 2000

O. California Energy Commission

P. California Integrated Waste Management Board

Q. California Mission History, Mission Nuestra Señora de la Soledad

R. City of Soledad Downtown Specific Plan and Front Street Rehabilitation Plan, May 1994

S. City of Soledad Economic Base Analysis, 1991, Applied Development Economics

T. City of Soledad General Plan, 1993

U. City of Soledad General Plan Update Final EIR, 1993, EMC Planning Group Inc.

V. City of Soledad Impact Fee Study for Wastewater System, 1999, Hanna & Brunetti

W. City of Soledad Storm Drain Impact Fee Study, 1999, Hanna & Brunetti

X. City of Soledad Traffic Fees Cost Estimate and Schedule, 1999, Hanna & Brunetti

Y. City of Soledad Water Impact Fee Study, 1999, Hanna & Brunetti

Z. City of Soledad Zoning Ordinance

AA. CMCA, 2004 Draft City of Soledad General Plan

BB. Common Ground – Stability and Change in Monterey County, 1998

CC. EDAW, Miravale Partnership – Hambey Property Draft Environmental Impact Report, 1999

DD. Federal Emergency Management Agency Flood Insurance Rate Maps

EE. Fort Ord Reuse Plan, 1999

FF. Fugro West, City of Soledad Wastewater Treatment and Disposal Master Plan, January 2005

GG. Growing the Economy: Solutions for Rural California 1998

HH. Minnesota Pollution Control Agency, 1987, An Introduction to Sound Basics

II. Monterey Bay Unified Air Pollution Control District CEQA Guidelines and Clean Air Plan

JJ. Monterey County Agricultural Commissioner's Crop Report, 1997, 1998, 1999, 2002

KK. Monterey County Integrated Waste Management Plan

LL. Monterey County General Plan, incorporating amendments through 1992

MM. Monterey County General Plan Update, Draft Existing Conditions Report, 1999

NN. Monterey County General Plan Update, Draft EIR, 2002

OO. Monterey County Overall Economic Development Program, 1998

PP. Monterey County Planning and Building Inspection Department/Jones and Stokes Draft EIR for the Pebble Beach Company Del Monte Forest Management Plan, 2004

QQ. Monterey County Regional Transportation Plan and Congestion Management Plan, 2000

RR. Monterey County Zoning Ordinance, Title 21 of the County Code4, 1991

SS. Monterey County Water Resources Agency

TT. Monterey County Water Resources Agency Salinas Valley Water Project and FEIR, 2002

UU. Monterey Regional waste Management District

VV. Public Resources Code s. 22000 et seq

WW. Report to the City Council on the Second Amendment of the Redevelopment Plan for the Soledad Redevelopment Project, 1998, Katz Hollis

XX. Regional water quality Control Board – Central Coast Region Order No. 95-25

YY. Salinas Valley Solid Waste Authority

ZZ. Soledad Union School District, School Facility Master Plan, 1994

AAA. State of Monterey County 1999, Land Watch of Monterey County

BBB. Transportation Agency for Monterey County

CCC. Transportation Agency for Monterey County Regional development Impact Fee Nexus Study, 2005

DDD. TJKM Transportation Engineers, Traffic Study for the Soledad General Plan Update, 2005

EEE. United States Bureau of the Census, 2000 Census of Population and Housing

FFF. United States Soil Conservation Service

GGG. United States Department of Agriculture, 1997 Census of Agriculture

HHH. United States Department of Commerce Bureau of Labor Statistics, 2000

III. United States Fish and Wildlife Service (USFWS), 1998. Recovery Plan for upland species of the San Joaquin Valley, California. Region 1, Portland OR.

JJJ. Vista Soledad Final Environmental Impact Report, 1994, EMC Planning Group, Inc.

KKK. Matters of common knowledge to the Board which it considers, such as:

- The City's 1994 General Plan, including land use maps and elements thereof;
- The text of the City's Zoning Ordinance;
- The California Environmental Quality Act (CEQA) and the State CEQA Guidelines implementing the Act;
- Other formally adopted policies of the City Council of the City of Soledad and County of Monterey;

IV. Certification of the Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan

The City Council of the City of Soledad makes the following findings with respect to the June, 2005 Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan:

A. The City Council of the City of Soledad has reviewed and considered the following documents:

1. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the City Council during public hearings on the project.

2. Crawford Multari & Clark Associates (2005) Draft and Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan.

3. Andalucia Phase IV Subdivision Final Supplemental Environmental Impact Report, 1992, EMC Planning Group Inc.

4. Association of Monterey Bay Area Governments Regional Population and Employment Forecasts for Monterey, San Benito and Santa Cruz Counties, 1997

5. Brown-Buntin Asociates, Typical Construction Equipment Noise Levels

6. California Air Resources Board, URBEMIS 2002

7. California Code of Regulations, Title 22, Division 4, Chapter 15 " Domestic Water Quality Monitoring"

8. California Criminal profile, FBI Crime Index, 1998

9. California Department of Conservation, Farmland Mapping and Monitoring Program, Soil Survey of Monterey County

10. California Department of Finance City/County Population and Housing Estimates, 1996, 1997, 1998, 1999, 2000, 2004

11. California Department of Fish and Game, Natural Diversity Database for Monterey County

12. California Employment Development Department, Labor Market Information Division

13. California Department of Water Resources Bulletin 118, February 2004

14. California Department of Transportation, Sound 2000

15. California Energy Commission

16. California Integrated Waste Management Board

17. California Mission History, Mission Nuestra Señora de la Soledad

18. City of Soledad Downtown Specific Plan and Front Street Rehabilitation Plan, May 1994

19. City of Soledad Economic Base Analysis, 1991, Applied Development Economics

20. City of Soledad General Plan, 1993

21. City of Soledad General Plan Update Final EIR, 1993, EMC Planning Group Inc.

22. City of Soledad Impact Fee Study for Wastewater System, 1999, Hanna & Brunetti

23. City of Soledad Storm Drain Impact Fee Study, 1999, Hanna & Brunetti

24. City of Soledad Traffic Fees Cost Estimate and Schedule, 1999, Hanna & Brunetti

25. City of Soledad Water Impact Fee Study, 1999, Hanna & Brunetti

26. City of Soledad Zoning Ordinance

27. CMCA, 2004 Draft City of Soledad General Plan

28. Common Ground – Stability and Change in Monterey County, 1998

29. EDAW, Miravale Partnership – Hambey Property Draft Environmental Impact Report, 1999

30. Federal Emergency Management Agency Flood Insurance Rate Maps

31. Fort Ord Reuse Plan, 1999

32. Fugro West, City of Soledad Wastewater Treatment and Disposal Master Plan, January 2005

33. Growing the Economy: Solutions for Rural California 1998

34. Minnesota Pollution Control Agency, 1987, An Introduction to Sound Basics

35. Monterey Bay Unified Air Pollution Control District CEQA Guidelines and Clean Air Plan

36. Monterey County Agricultural Commissioner's Crop Report, 1997, 1998, 1999, 2002

37. Monterey County Integrated Waste Management Plan

38. Monterey County General Plan, incorporating amendments through 1992

39. Monterey County General Plan Update, Draft Existing Conditions Report, 1999

40. Monterey County General Plan Update, Draft EIR, 2002

41. Monterey County Overall Economic Development Program, 1998

42. Monterey County Planning and Building Inspection Department/Jones and Stokes Draft EIR for the Pebble Beach Company Del Monte Forest Management Plan, 2004

43. Monterey County Regional Transportation Plan and Congestion Management Plan, 2000

44. Monterey County Zoning Ordinance, Title 21 of the County Code4, 1991

45. Monterey County Water Resources Agency

46. Monterey County Water Resources Agency Salinas Valley Water Project and FEIR, 2002

47. Monterey Regional waste Management District

48. Public Resources Code s. 22000 et seq

49. Report to the City Council on the Second Amendment of the Redevelopment Plan for the Soledad Redevelopment Project, 1998, Katz Hollis

50. Regional water quality Control Board – Central Coast Region Order No. 95-25

51. Salinas Valley Solid Waste Authority

52. Soledad Union School District, School Facility Master Plan, 1994

53. State of Monterey County 1999, Land Watch of Monterey County

54. Transportation Agency for Monterey County

55. Transportation Agency for Monterey County Regional development Impact Fee Nexus Study, 2005

56. TJKM Transportation Engineers, Traffic Study for the Soledad General Plan Update, 2005

57. United States Bureau of the Census, 2000 Census of Population and Housing

58. United States Soil Conservation Service

59. United States Department of Agriculture, 1997 Census of Agriculture

60. United States Department of Commerce Bureau of Labor Statistics, 2000

61. United States Fish and Wildlife Service (USFWS), 1998. Recovery Plan for upland species of the San Joaquin Valley, California. Region 1, Portland OR.

62. Vista Soledad Final Environmental Impact Report, 1994, EMC Planning Group, Inc.

63. Matters of common knowledge to the Board which it considers, such as:

- The City's 1994 General Plan, including land use maps and elements thereof;
- The text of the City's Zoning Ordinance;
- The California Environmental Quality Act (CEQA) and the State CEQA Guidelines implementing the Act;
- Other formally adopted policies of the City Council of the City of Soledad and County of Monterey;

B. The City Council of the City of Soledad finds and certifies that the June, 2005 *Draft Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan* has been prepared and circulated as required by the California Environmental Quality Act (CEQA), the State CEQA Guidelines and the rules governing environmental review of the City of Soledad.

C. The City Council of the City of Soledad finds and certifies that the *Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan*, which is incorporated herein by this reference has been prepared and completed in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines and the rules governing environmental review of the City of Soledad.

D. The City Council of the City of Soledad finds and certifies that the June, 2005 *Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plant* and all related public comments and responses have been presented to the City Council.

E. The City Council of the City of Soledad has considered the information contained in the June, 2005 *Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan*, the public comments and responses previously submitted, and the public comments and information presented at the public hearings.

F. All information was considered by the City Council of the City of Soledad before taking an action on the project.

G. The City Council of the City of Soledad finds and certifies that the June, 2005 *Final Environmental Impact Report for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan* reflects the independent judgment and analysis of the City Council acting as lead agency for the project.

H. The City Council of the City of Soledad hereby finds and determines that implementation of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan may have a significant adverse effect on the environment.

I. The City Council of the City of Soledad hereby finds with respect to the adverse environmental impacts detailed in the Final EIR:

a. That, based on information set forth in the Final EIR, the Findings of Fact, the list of mitigation measures included in the mitigation monitoring program (Section XI.), the City Council of the City of Soledad finds and determines that changes or alterations have been required in or incorporated into the project which avoid or substantially lessen the adverse environmental effects identified in the Final EIR for:

Visual resources	Biological resources	Geologic hazards	Noise
Traffic	Agricultural resources	Cultural resources	Hazards
Population and housing	Air quality	Public services	Flooding

b. That, based on information set forth in the Final EIR and in the Findings of Fact, the adverse environmental effects related to public services (water supply), energy and demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources are significant effects which cannot be entirely mitigated or avoided if the project is approved and implemented;

c. That no additional adverse impacts will have a significant effect or will result in substantial or potentially substantial adverse changes in the environment as a result of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan.

J. The City Council of the City of Soledad hereby finds and determines that:

1. All significant effects (except impacts to public services (water supply), energy and demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources) that can be feasibly avoided have been eliminated or substantially lessened as determined through the findings set forth in Section VII.;

2. Based on the Final EIR and the Findings of Fact and other documents in the record, specific economic, social and other considerations make infeasible other project alternatives identified in the Final EIR;

3. Based on the Final EIR, the Findings of Fact, and other documents in the record, the remaining unavoidable significant environmental effects of the 2004 General Plan and

Wastewater Treatment and Disposal Master Plan are outweighed and overridden by the benefits of the project as described in the Statement of Overriding Considerations.

4. Should the final design of projects anticipated by the 2004 General Plan and Wastewater Treatment and Disposal Master Plan have the potential to result in adverse environmental impacts that are not anticipated or addressed by the June, 2005 Final EIR, subsequent environmental review shall be required in accordance with CEQA Guidelines Section 15162(a).

V. Statement of Overriding Consideration

The Final EIR has identified and discussed significant effects which will occur as a result of buildout of the land uses and facilities contemplated by the 2004 General Plan and Wastewater Treatment and Disposal Master Plan. With implementation of the mitigation measures identified in the Final EIR, these effects can be mitigated to a level of insignificance except for impacts to public services (water supply), energy and demand for electricity, cumulative traffic impacts on regional highways, cumulative air quality, biological resources, the permanent loss of prime agricultural land, and visual resources.

Having reduced the effects of the proposed project by adopting the other mitigation measures and a program to monitor mitigation measures for certain project-related impacts, and having balanced the benefits of the project against the project's unavoidable adverse impacts, the City Council of the City of Soledad hereby determines that the benefits of the proposed project outweigh these potential unavoidable adverse impacts based on the following overriding considerations:

Project Objectives

General Plan

The City has established the following objectives for the Soledad General Plan.

In General

- Soledad's small size and character contribute to a strong sense of community shared by its residents. These characteristics should be protected and enhanced as the City's future is planned.

- Soledad's historical ties to the mission, to agriculture and the railroad should be acknowledged and reflected in plans for the City's future. Examples of how this might occur include the protection and upgrading of historical structures and the use of farming and railroad themes in redevelopment strategies for the downtown.

- The City's proximity to the Pinnacles National Monument, Monterey County's wine industry and the Monterey peninsula is viewed as an important asset. The General Plan should explore ways to capitalize on Soledad's strategic location to these amenities.

Community Form and Design

- The General Plan should strive to accommodate a year 2020 population of between 27,000 - 30,000 residents and a population of 57,000 in forty years. However, the Plan should be far-sighted and mindful of the possibility that factors at the regional, statewide and national levels may cause the City to grow beyond this population.

- The outward expansion of the City's planning area (the areas designated for urban development by the General Plan) should occur on less productive agricultural lands toward the hills rather than along the 101 freeway where the more productive soils are located. New development should be timed and located to maintain the City's compact form.

- The principal entrances to Soledad should be developed with "gateways" which announce that one has entered the City. The gateway feature constructed at the north entrance to the City should be repeated at the south entrance as well. Elements of such gateway treatments can include structures, special landscaping and signs, but should also include litter control to create a pleasing appearance. Improving the appearance of these corridors may involve a cooperative effort with the County. Gateways to the downtown should also be well marked.

- Housing development in Soledad over the past few years has accelerated considerably from previous trends. New residential neighborhoods should be designed to capture the best qualities of existing neighborhoods while providing a range of housing products that are affordable to all segments of the community. New neighborhoods contiguous to the older parts of town should build upon the existing grid pattern of streets and incorporate amenities such as parks, pedestrian and bicycle paths, and street trees.

- The City's climate is generally viewed as favorable, with warm dry summers and mild winters. However, wind blowing down the Salinas Valley is an unavoidable aspect of Soledad's weather pattern. The General Plan should acknowledge these environmental elements and consider them in its recommended policies and programs. For example, the Plan can encourage more shade trees and wind-rows, narrower streets in new residential areas, and the provision of outdoor shelter in new commercial projects.

- Recognizing that the General Plan will eventually become the basis for appropriate zoning to implement land use and design objectives, elements of the Plan should ensure that land uses near one other are compatible and that new buildings fit their context.

Agriculture

- Soledad is surrounded by productive agricultural soils. The farming environment, especially the row crops and vineyards, provide a beautiful rural context for the City that residents and visitors enjoy. Moreover, a good portion of the town's economic base is related to agriculture, both directly and indirectly. Thus, protection of agricultural activities around the City and in the region is an important consideration in planning for the City's future.

- Agricultural activities and residences can impact one another. For example, noise, dust or spraying associated with farming could adversely affect housing; in turn, complaints from residents can sometimes impede efficient cultivation practices. Therefore, the interface or boundary between agriculture and new development must be carefully considered.

Noise, Access, & Traffic

- Soledad has a quiet ambiance which should be protected in the future.

- The City's railroad right-of-way and existing street pattern limit access to land designated for commercial and industrial development at the south entrance to town. Greater access with good, clear connections to the rest of the City should be provided to these areas where possible.

- Truck routes (and truck parking) should be reviewed periodically to fit the changing dynamics of the community; to better control conflicts between trucks and other traffic and to minimize impacts on residential areas.

- In addition to automobile circulation, the General Plan must address other transportation modes such as a bicycle route system and additional transit opportunities to surrounding communities and to the prison.

- The freeway interchanges may need to be re-configured to provide more efficient access to the community.

Economic Development

- While it is important to think expansively about the town's future, the Plan should be practical. An important element of this practicality is the City's financial position. Therefore, the General Plan should strive toward enhancing Soledad's fiscal resources so that the public facilities and services desired by the community can be paid for.

- Efforts undertaken by the City to revitalize the downtown have had mixed success. As a result, additional work is needed to fully realize the downtown's potential and protect its historic character. In particular, it is important that the downtown cultivate a market niche that protects downtown businesses from competition with commercial development anticipated elsewhere in the City. Increased activities (such as a farmers market and other special events) and more activities in the evening (such as more restaurants and a movie theater) would help solidify the image of the downtown as a desirable place to shop, dine and visit.

- Encouraging a more diverse range of commercial uses in Soledad is important, especially increased retail opportunities for day-to-day items such as a grocery store and drug store. Large-scale, single tenant retail and/or smaller scale department stores are also desired, as well as greater variety in restaurants.

- A strong economy is important to the desirable quality of life in Soledad. Industries that provide good paying jobs and economic stability are especially valuable. The City should provide suitable locations for these types of businesses and should consider programs to actively recruit and retain such businesses. Soledad has historically accommodated the commerce and industrial needs of the surrounding agricultural area. These kinds of uses should continue to be encouraged.

- Overcrowding is an important issue facing Soledad residents. The General Plan should ensure that sufficient affordable housing is provided to meet the needs of all income groups.

Public Facilities and Services

- The cemetery is an important part of Soledad's heritage. The General Plan should encourage efforts to upgrade and beautify the cemetery.

- Property maintenance is a problem in parts of Soledad. Sometimes, old cars or other items are left in conspicuous places, marring the aesthetic environment and decreasing property values. Ways to encourage or require property upkeep should be considered in the General Plan; furthermore, the Plan should encourage -- not inhibit -- continued investment in the City's residential and commercial districts. The General Plan should be sensitive to providing adequate facilities and staffing for code enforcement.

- New schools must be provided concurrently or in advance of population growth, and should be incorporated into the design of new residential neighborhoods.

- The General Plan should provide guidance with regard to the appropriate locations for different types of public facilities. Locational criteria may include the relationship of the facility to the neighborhood or area being served, good public access to the buildings or facility, the interrelationship among different public uses or functions, and the ability of public facilities to stimulate associated private development or investment.

- Better street lighting, road maintenance, storm drainage, curbs, gutters, crosswalks, and sidewalks are needed in the older parts of town.

- Accessibility to public facilities is important. Accordingly, access for handicapped persons should be provided in all public facilities. In addition, the City should continue to require new development to meet accessibility standards when reviewing and approving projects and should monitor and enforce such requirements.

Recreation

- Soledad's population is diverse, and within that diversity there remains an atmosphere of friendliness and cooperation toward the common good. This is based on a number of important factors including good schools and recreational programs for youth, active service clubs and churches, and civic involvement. The General Plan should reinforce efforts to maintain this neighborliness in a true community.

- The City can also foster this valued sense of community by providing opportunities for social activities and interaction, through parks and recreational facilities, public open spaces and plazas, and by supporting community festivities and events.

- The quality of life for all residents is critically important, but enhancing the opportunities for the community's children is especially so. The General Plan should help address the needs of Soledad's youth. Examples can include coordinated City/school district planning for schools and related educational facilities; providing for adequate parks and recreational programs; encouraging a wider variety of activities for youths; planning for safe and efficient transit.

- Expanding the range of family oriented recreational facilities will be important; many people would like to see, for example, a golf course and bike trails.

Wastewater Treatment and Disposal Master Plan

- To remedy existing and long-term wastewater collection, treatment, and disposal deficiencies.

- To provide wastewater system capacity necessary to accommodate the continued development of the City as envisioned by the draft General Plan.

Achieving these long-term objectives will require additional land for urban development beyond that provided in the current (1994) General Plan, which in 2005 is 97% built out.

Regional Housing Needs

According to the State Department of Housing and Community Development, Monterey County is expected to accommodate 33,333 to 57, 740 dwelling units by the year 2020, an increase of about 15,000 units over 2005. Suitable land to accommodate these units is limited by a number of factors. For example, much of Monterey County has steep terrain, containing sensitive habitat and hazardous slopes. The valley areas are rich agricultural lands due to the deposit of alluvium from rivers. These same rivers occasionally flood into surrounding areas. These geographical features have and will continue to shape the County's land use.

Additionally, Monterey County has a large percentage of land in public ownership. When these geographic features and public lands are taken into account, only a small portion of the county remains as potentially developable areas. In order for the region to meet its regional housing need additional land for housing will be needed. Meeting the City's regional need for affordable housing is an objective of the General Plan that outweighs the significant and unavoidable effects.

Jobs/Housing Balance

Meeting the City's objectives for providing a greater measure of balance between jobs and housing will require additional land suitably located to serve the needs of industrial and other job-generating land uses. This objective cannot be accomplished without addition land for urban development because existing land designated for industrial development is insufficient in area and configuration to accommodate the type and scale of job-generating land uses necessary to balance jobs and housing in Soledad (exclusive of prison jobs). The benefits of balancing jobs with housing in Soledad include:

- Reduced motor vehicle trips and trip lengths associated with home-to-work trips;
- Reduced air quality impacts from fewer trips and shorter trips lengths;
- Improved economic conditions in Soledad from the investment in local businesses to serve employees, and from employee expenditures in local restaurants, banks, grocery stores, and services;

Additional land for expansion is needed to allow for the long-term growth and development of the City and to respond to the changing needs of the City over time.

The benefits of adding more land for urban development to balance jobs and housing and to help meet the regional housing need are factors that outweigh the significant and unavoidable effects associated with implementation of the 2004 General Plan.

Discussion of Environmental Effects

Four categories of impacts are identified in the FEIR:

Class I. Class I impacts are significant and unavoidable. To approve a project resulting in Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding consideration that "... specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...".

Class II. Class II impacts are significant but can be mitigated to a level of insignificance by measures identified in this EIR and the project description. When approving a project with Class II impacts, the decision-makers must make findings that changes or alternatives to the project have been incorporated that reduce the impacts to a less than significant level.

Class III. Class III impacts are adverse but not significant.

Class IV. Beneficial impacts.

VI. Potential Environmental Effects Which Are Not Significant

The City Council of the City of Soledad has concluded that the following effects are not considered significant.

Public Services

Impact PS-2: **The increased demand on groundwater resources required to serve buildout of the City's Plan area could potentially reduce water levels in wells serving agricultural operations in the vicinity of the City. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Buildout of the Plan area with urban land uses as contemplated by the draft Plan will result in a small net increase in water extracted from the Forebay Sub-basin as described above. Although the depth of wells on private properties in the vicinity of the City's Plan area is not known, the increased extraction of groundwater over time could lower the groundwater table in the vicinity of the City's production wells which in turn could affect water levels in surrounding wells. Although the increase in future demand within the Plan area is considered small, the slight lowering of the groundwater table could limit the viability of agricultural operations that depend on this water source for irrigation. Where wells are adversely affected, the solutions include extending the well deeper into the aquifer, reducing the amount of groundwater pumping, and/or water conservation measures. This assumes current crop patterns remain as they are in 2004. The trend toward the growing of wine grapes could further reduce water demand in the vicinity of the Plan area.

Impact PS-5: **Buildout of the draft Plan will significantly increase the amount of biosolids generated by the wastewater treatment plant which in turn will impact the capacity of licensed disposal facilities. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Sludge, also called biosolids, is produced by every wastewater treatment plant and the extent of sludge production varies with the type of plant. The City's treatment plant does not have permanent sludge handling facilities. According to the Operating Manual, sludge should be removed from the primary and secondary ponds when the aerated ponds accumulate one foot of sludge and the storage cells are full. This can be done by dredging the ponds while in service, or by taking a pond out of services and allowed to dry several months before the sludge is removed. Either way, the Manual recommends the sludge be removed once every 7 to 10 years. Since the current plant was put into operation in 1995 and the sludge has not been removed, it may be necessary in 2005 and will be necessary every 7 to ten years thereafter.

Four basic disposal methods for sludge are available to treatment plant operators: disposal by sanitary landfill; land application; composting; and incineration. Land application is the utilization of sludge as a soil amendment for agricultural land, parks or disturbed land. Composting refers to the decomposition of organic wastes in sludge until a nuisance-free product is created. Composted sludge is also used as a soil amendment. Incineration involves drying and burning sludge to produce ash.

The City's Wastewater Facilities Plan recommends contracting with a licensed biosolids disposal facility to accept present and future sludge. The Monterey Regional Waste Management District operates the Monterey Peninsula Landfill and Recycling Facility which currently accepts biosolids and has sufficient capacity to accept the City's waste in the time intervals described above. In addition, the City is required to provide ongoing monitoring and reporting to the Regional Water Quality Control Board to ensure proper disposal of sludge.

Impact PS-8: **The additional industrial development accommodated by the draft Plan may necessitate specialized fire fighting and hazardous materials equipment to maintain an acceptable level of fire protection. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: The draft Plan contemplates a significant amount of additional industrial development which could be occupied by a wide assortment of industrial enterprises. The type and quantity of such businesses is unknown at this time, but it can be assumed that some portion will engage in processes that use and

store hazardous materials or engage in other activities that necessitate specialized fire fighting or hazardous materials handling equipment.

The district, by way of written agreement, has contracted with the City of Soledad for the provision of fire protection services. The current agreement was entered on September 3, 1998 with a term of fifteen (15) years. Pursuant to an ordinance adopted on April 18, 1980 the district established a "Unit of Benefits Schedule" for fire protection and related services for real property. Subsequently a $1.25 charge for each unit of benefit was imposed. The number of units of benefit for each tax parcel bas been modified over the years to meet the increased costs of providing fire protection services.

Impact PS-11: **Buildout of the draft Plan will significantly increase the City's population and the demand for recreation programs. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Buildout the draft Plan will significantly increase the City's population with a corresponding increase in the demand for recreation programs and facilities. Policies and programs of the draft Plan require public facilities and services to be in place concurrently or in advance of such development, which includes recreation programs.

Impacts PS-15: **Development of the land uses contemplated by the draft Plan will increase motor vehicle use with a corresponding increase in the consumption of motor vehicle fuels. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Buildout of the area designated for urban development will increase the physical size of the City and the number of motor vehicle trips both within the City and within the region. However, the range and location of land uses designated by the Plan are intended to capture a significant number of home-work and home-shopping motor vehicle trips by working toward are balance of jobs and housing. The incorporation of a complementary range of land uses with areas for employment, housing and shopping are intended to facilitate the use of alternate forms of transportation and promote the efficient use of energy.

Traffic

Impact T-3: **Buildout of the land uses recommended by the Draft General Plan could result in traffic hazards on city streets and intersections. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Truck traffic through the downtown has been a continuing problem, especially from trucks serving the gravel operations east of the City on Metz Road.

Because of their greater weight and size, loaded trucks have much less maneuverability and much longer stopping distance which can pose a hazard to school children as they pass by San Vicente and Gabilan Schools when children are present. To resolve this issue, the Circulation Element recommends a bypass of Downtown connecting Metz Road with Los Coches Drive with Nestles Drive and the 101 freeway (see Figure V.2-4). This route will allow trucks and other traffic to avoid downtown and the schools along Metz Road.

Impact T-4: **Buildout of the land uses recommended by the Draft General Plan will significantly contribute to the demand for bicycle and pedestrian facilities in the City's planning area. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: The draft General Plan Circulation Element establishes routes for bicycle and pedestrian circulation incorporated into the design for new neighborhoods. These will be provided concurrently or in advance of such development to meet the needs of bicyclists. Bicycle use is relatively common in Soledad as a means to get around town and to school. As the population grows as anticipated by the draft General Plan, the demand for safe, secure bicycle facilities will increase.

Moreover, one of the main objectives of the draft General Plan is to work toward a better balance between housing and employment in Soledad by providing land to support job-generating land uses. One of the potential benefits of a better balance between jobs and housing is that it makes commuting to and from work more feasible for alternate modes of transportation, including bicycles.

Impact T-5: **Buildout of the land uses recommended by the Draft General Plan will contribute to the demand for public transit serving the City's planning area. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: As the City's population grows, transit ridership is expected to grow proportionately. As new areas develop, it will increase the demand for additional transit routes and transit facilities. When demand for services increases transit providers respond by increasing the number and frequency of transit trips to meet the increased demand.

Air Quality

Impact AQ-1: **The draft Plan accommodates a considerable increase in the City's population over the next twenty or more years which may hamper efforts to achieve and maintain federal and state air quality standards. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: A comparison of the forecasts provided in Table V.3-3 with the Medium Range of the population projections illustrated in Figure V.3-1 suggests that the draft General Plan is consistent with the projections used by the AQMP. Therefore, even though emissions will increase as a result of buildout of the various uses associated with the draft Plan, it is consistent with the AQMP and buildout is presumed to not result in a cumulative adverse impact to air quality.

Impact AQ-3: **Buildout of the draft Plan will degrade the operation of intersections within the City's Plan area which may lead to CO 'hotspots' where the state or federal standard may be violated. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Busy intersections and parking areas can concentrate CO emissions creating what are commonly known as CO hotspots. These localized areas of CO concentrations can result in health hazards if concentrations exceed the State thresholds (9 ppm 8-hour or 20 ppm 1-hour) where sensitive receptors are exposed. Land uses such as parks, hospitals, schools and convalescent homes are considered sensitive receptors.

CO Hotspots are rare, and becoming fewer as vehicle performance and fuels continue to be improved. In addition, CO computer models, because of a layering of conservative inputs, over predict CO concentrations. An investigation of carbon monoxide studies in Californiaa undertaken at UC Davis and sponsored by Caltrans concluded:

"The implications of these findings are significant for the transportation planning community and for the need to conduct transportation project-level CO analyses. California data indicate that in virtually all metropolitan areas outside Los Angeles and where the vehicle fleet meets existing and projected standards, no existing transportation facility is expected to cause a CO violation... Thus, for CO analysis purposes, any future transportation project reasonably can be compared to existing facilities in the vast majority of the state. If future transportation projects have similar sizes and characteristics as existing facilities, and the existing facilities do not cause a CO violation, it can be inferred that the planned projects, accounting for changes in background concentration, should not cause violations either. This would allow for the elimination of microscale modeling for most transportation projects. Modeling might still be necessary for projects that are larger than existing facilities or those with extraordinary characteristics, such as projects located in Calexico [where many vehicles do not meet California air standards]. These findings suggest that EPA should reevaluate the continued need for the conformity CO hot-spot analysis requirement and consider replacing the requirement for one that applies only under unusual circumstances, such as those evident at the Calexico border site. We recommend using the conformity interagency consultation process to

[a] http://aqp.engr.ucdavis.edu/Hotspot%20Modeling/CO%20Issues/COSept02AWMA.pdf

evaluate these unusual circumstances and requiring hot-spot analyses only on a case-by-case basis." [Emphasis added]b

Another study produced as part of the UC Davis – Caltrans Air Quality Project showed that "emissions models, such as the EMFAC7 series currently used by Caltrans and the California Air Resources Board, might be overestimating vehicular CO emissions from freeways under high speed conditions by up to 480%." Based on these findings, buildout of the City in accordance with the draft Plan is not expected to result in CO hotspots.

The recommended polices and programs of the draft Plan (see below) are intended to maintain an acceptable level of operation at all of the City's streets and intersections through buildout.

Impact AQ-4: **Expansion of the City's wastewater treatment and disposal capacity as contemplated by the draft Wastewater Treatment and Disposal Master Plan could result in the generation of nuisance odors. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Noise

Impact N-3: **Buildout of land uses accommodated by the draft Plan will increase the exposure of people to new and existing stationary sources of noise. This impact is considered adverse but not significant (Class III)**

Findings: Adverse but not significant.

Supporting Evidence: New development accommodated by the draft Plan could include industrial and other processes that generate stationary noise. The types of operations that might be developed in the City in the future is speculative at the point of general Plan adoption. However, the standards of the General Plan Noise Element would be applied at the time of site specific development to determine the significance of potential impacts and the range of appropriate mitigation.

Impact N-4: **Noise from ongoing agricultural operations could periodically exceed the City's noise standards for adjacent residences. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Ongoing agricultural operations adjacent to existing and new residences accommodated by the draft Plan could intermittently result in noise levels exceeding the City's goals for exposure from stationary sources. Agricultural noise impacts to the new residences would be periodic and seasonal. The

b Eisinger, D. et. al., "A Reevaluation of Carbon Monoxide: Past Trends, Future Concentrations, and Implications for Conformity 'Hot Spot' Policies" Journal of the Air & Waste Management Association. Vol. 52 page 1024. September 2002. (reproduced in Appendix B at page B-6)

agricultural operations are not anticipated to cause more than 60 Ldn on the adjacent residential neighborhoods.

Flooding, Drainage and Water Quality

Impact W-5 **The increase in impervious surfaces could adversely affect groundwater recharge. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: A substantial increase in impervious cover (e.g., structures, roads, and parking lots) could reduce the quantity of rainfall and/or irrigation water that infiltrates into the subsurface and recharges the shallow aquifer. Buildout of the area designated for urban development by the draft Plan would not be expected to result in a significant impact to groundwater recharge for two reasons: 1) the project area is small relative to the size of the groundwater basin, which is largely undeveloped; and 2) features included in the project design, including the conveyance of storm water to natural drainage courses, would to some degree offset the reduced infiltration that would occur in those areas covered by impervious surfaces.

The project area covers approximately 3,800 acres. The Forebay Aquifer Sub-basin of the Salinas Valley Groundwater Basin, which underlies the project area, covers an area of 94,000 acres. The entire project area represents approximately 4 percent of the surface area of the groundwater sub-basin.

Impact W-6 **Improvements contemplated by the draft Wastewater Treatment and Discharge Master Plan and resulting treatment plant expansions could impair groundwater beneficial uses or quality. This impact is considered adverse but not significant (Class III)**

Findings: Adverse but not significant.

Supporting Evidence: Beneficial uses of the groundwater aquifer in the Forebay Sub-basin are municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply. The most stringent water quality criteria for these beneficial uses are for drinking water sources. The primary contaminants of concern associated with effluent from wastewater treatment plants are coliform and nitrogen compounds.

Water quality monitoring and effluent sampling also show that treated effluent from the plant reduces the concentrations of salinity and nitrogen in the groundwater by dilution. The character of the treated effluent discharged from the expanded wastewater treatment facility is expected to be better than the existing effluent because of the introduction of tertiary treatment (see Chapter V.1, Public Services), and is therefore expected to meet coliform and nitrogen objectives, and to continue to dilute salinity concentrations in the groundwater.

Upon completion of the recommended improvements to the wastewater treatment plant recommended by the Wastewater Treatment and Disposal Master Plan, treated effluent is expected to meet Title 22 water quality standards as defined by Chapter 4 of the California Code of Regulations. Water meeting these standards may be used for irrigating landscaping, and can be applied to certain crops so long as the water is not applied directly to the edible portion but is allowed to be taken up into the plant through its roots. For example, irrigation of orchards, sod farms, golf course irrigation is allowable, but spraying on row crops is not allowed.

As discussed in Chapter V.1 – Wastewater Collection, Treatment and Disposal, the City obtained a revision to its Waste Discharge Requirements from the RWQCB. In doing so, the City was required to prepare and submit a Report of Waste Discharge as part of the application process to revise the WDRs. The Report describes the type and quantity of the proposed discharge, and includes a complete characterization of the constituents and the discharge concentration of each constituent. Because the City's expanded plant is required to comply with the revised WDRs, implementation of Wastewater Treatment and Discharge Master Plan is not expected to unreasonably impact the beneficial uses or quality of the groundwater.

Impact W-7 **The proposed change in land use at the project area could affect regional groundwater quality. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: It is possible that buildout of the land uses contemplated by the draft General Plan, while adequately mitigating project site-related water quality impacts, could contribute to regional groundwater quality degradation. In particular, urban land uses would contribute salt loading to the basin by allowing the application of irrigation water to residential and commercial landscaping (and other incidental uses). However, relative to existing salt and nitrate loading associated with agricultural production, it is estimated that buildout of the urban uses designated by the draft Plan would reduce total salt and nitrate loading.

It is expected that the rate of fertilizer use for residential and industrial landscape maintenance would be substantially less than for agriculture. In addition, it is likely that some pesticides and herbicides would be applied to the landscaped areas. However, relative to the existing conditions, in which substantial quantities of pesticides and herbicides are applied to the agricultural fields on a regular basis, the chemical use associated with urban development is expected to be reduced. Thus, the buildout of the Plan area with urban uses would likely result in a reduced impact to regional groundwater quality associated with pesticide and herbicide use.

Impact W-8 **Expanded rapid infiltration basins in the vicinity of the wastewater treatment plant as envisioned by the Wastewater Treatment and Disposal Master Plan will increase the potential for the degradation of surface water quality in the Salinas River resulting from a spill or failure of the basins. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: The Wastewater Treatment and Disposal Master Plan calls for the construction of up to 470 acres of additional rapid infiltration basins in the vicinity of the existing treatment plant and/or near the existing Salinas Valley Prison disposal basins. In the event of a failure or overflow of one or more basins, the treated wastewater could spill into the Salinas River temporarily degrading surface water quality.

It should be noted that implementation of the Wastewater Treatment and Disposal Master Plan will add tertiary treatment to the plant which is expected to result in effluent meeting Title 22 water quality standards set by the State Department of Health Services. Water treated to Title 22 standards is suitable in quality for use as landscape irrigation and may be used to irrigate crops, so long as the treated water is not applied directly to the crop but is allowed to be taken up by the plant roots. Accordingly, a spill of this quality water into the Salinas River will degrade the current water quality, it is not expected to adversely affect biological resources or other beneficial uses of the river.

Bilogical Resources

Impact BIO-5: **The conversion of agricultural land to urban uses within the Plan area may restrict the east-west movement of animals from the hills to the west across the Salinas Valley. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Major animal movement corridors in the vicinity of the planning area include the Salinas River, and its tributary waterways such as the Arroyo Seco. The Arroyo Seco has been identified as an important movement corridor for animals from the hills to the valley floor and from one side of the valley to the other. The Arroyo Seco waterway joins the Salinas River at Soledad; therefore, it is reasonable to assume that animals crossing the valley from this location are currently diverting north or south of the city along the River. Development accommodated by the draft Plan will not directly affect these movement corridors; however, the conversion of agricultural land to urban uses could further limit wildlife movement from east to west across the Valley.

Impact BIO-6: **Buildout of the Plan area with urban uses will result in long-term indirect impacts associated with increased urbanization, including light, noise, pets, traffic, and other effects of increased human presence. These impacts are considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: In addition to direct physical impacts on the environment, the presence of development and people has any number of indirect impacts, including light from housing, commercial buildings and streets, and predation from domestic animals.

This can be of particular concern as development approaches the eastern foothills. The General Plan includes standards for lighting and provision of open space for development in hillside areas. Moreover, the existing industrial agricultural operations in the area are currently a source of noise and traffic and have largely subdued the natural vegetation in the area. Impacts are considered significant, but mitigated by policies in the General Plan.

Agricultural Resources

Impact A-4: **Development of land designated for urban development by the draft Plan, including the potential Highway 146 bypass, may hasten the early cancellation of Land Conservation Act Contract 73-26, 71-40 and others in the area. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: The expansion of urban development onto agricultural lands surrounding those encumbered by Land Conservation Act contracts may hasten the removal of those properties from the contract. The City's Plan area includes one LCA property. To date (2004), the owners have not filed for non-renewal of the contract. However, as urban development expands outward from the City the pressure to cancel the contract or file for non-renewal will increase. It should be noted that the loss of productive agricultural land is considered an unavoidable and adverse impact (see above). Over time the draft Plan anticipates that all properties within the Plan area will be converted to an urban use, including the property governed by contract 73-26.

Impact A-5: **The acquisition of portions of agricultural parcels for infiltration basins may hasten the early cancellation of Land Conservation Act Contracts affecting properties in the vicinity of the wastewater treatment plant. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: As shown on Figure V.8-2, several properties on the west side of Highway 101 in the vicinity of the wastewater treatment plant are governed by active Land Conservation Act contracts. Should the City acquire portions of these properties for the development of rapid infiltration basins, it would remove the City's portion from the contract. However, the LCA contract would remain in effect on the balance of the property in private ownership.

Visual Resources

Impact V-2 **Grading and construction activities and the storage of construction materials may be visible from public vantage points. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: Short term impacts associated with construction activities associated with land uses accommodated by the draft Plan would include grading of sites and the storage of construction equipment and vehicles. These activities would temporarily affect the scenic variety, visual sensitivity, and visual condition of the City in specific locations. This impact is considered adverse but not significant.

Housing and Population

Impacts PH-1 **Continued development of the City as contemplated by the draft Plan will result in considerable additional housing and population growth which in turn could affect the supply of affordable housing and the relationship between jobs and housing. This impact is considered adverse but not significant (Class III).**

Findings: Adverse but not significant.

Supporting Evidence: The Draft General Plan provides land in a range of residential densities to accommodate projected housing demand and population growth through the year 2020. The Draft Plan is consistent with, and builds upon, the adopted Housing Element and provides opportunities for a better balance of jobs and housing. Among the indirect effects associated with housing and population growth are conversion of agricultural land for urban development, increased traffic with associated air quality impacts, and increased demand for public services and facilities. These indirect impacts are discussed and mitigated in the topical sections of the DEIR.

VII. Potential Significant Effects Which Have Been Mitigated to A Level of Insignificance

The City Council of the City of Soledad has concluded that the mitigation measures identified in the Mitigation Monitoring Program (Section XI.) will result in substantial mitigation of the following effects and that these effects are not considered significant or they have been mitigated to a level of insignificance.

Public Services

Impact PS-3: **Buildout of the area designated for urban development will require the expansion and extension of water storage and distribution infrastructure to accommodate the level of development anticipated. This impact is considered significant and adverse (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Buildout of the Plan area as contemplated by the draft Plan will require the expansion and extension of water supply infrastructure. Accordingly, policies and programs of the draft Plan recommend preparation of capital improvement plans to identify these improvements and funding, and require adequate capacity for services to be in place concurrently or in advance of such new development. Moreover, projects associated with the expansion of infrastructure capacity will in turn be subject to project-specific environmental review.

Impact PS-4: **The draft Plan designates some 2,750 acres for urban expansion beyond the area currently served by the City's wastewater collection and treatment systems. Serving this area will require considerable expansion of infrastructure capacity for collection, treatment and disposal. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Mitigation Provided by the Wastewater Treatment and Disposal Master Plan

Immediate Actions to Be Taken To Avoid A Spill to the Salinas River
Enforce Urgency Ordinance No. 612 that established a moratorium on the issuance of building permits requiring sewer connections.
Raise road levies at wastewater treatment plant between basins 6 and 7, and between basins 4 and 5.
Complete prison wastewater facility emergency discharge CEQA process.

Obtain CDC approval to temporarily discharge at prison disposal site with commitment to negotiate long-term use.
Obtain Regional Board interim approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site while a long term site use agreement can be negotiated between the City and the State so that a permanent request of wastewater discharge can then be processed.
Rehabilitate the Prison WWTP treatment and disposal site.
Divert part of prison wastewater flow to prison wastewater facility in order to be able to operate the existing City wastewater facility at an onsite disposal rate of approximately 2.5 MGD.

Actions to Be Taken Immediately to Remedy Existing Wastewater Disposal Deficiencies
Adopt Wastewater Treatment and Disposal Master Plan.
Provide the Regional Board a copy of the Master Plan and request approval to discharge temporarily at the prison abandoned wastewater treatment site.
Request the California Department of Corrections (CDC) to enter into an agreement with the City to allow the City to temporarily discharge to the prison abandoned wastewater disposal site.
Obtain RWQCB approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site on a temporary basis while a permanent request of wastewater discharge is being processed.
Complete restoration maintenance at the prison abandoned disposal site.
Connect aerators and install pond circulators.
Divert 1.1 MGD of the prison flow to the prison abandoned disposal site.
Operate the existing City facility site at a disposal rate of approximately 2.5 MGD.

In summary, mitigation of existing disposal deficiency is accomplished by diverting up to 1.1 million gallons per day to abandoned prison disposal site and limiting flow to the existing City facility to no more than 2.5 million gallons per day.

Actions to Be Taken to Remedy Existing Treatment Plant Capacity Deficiencies
Complete process to mitigate existing plant disposal deficiency.
Install equipment that will enable plant operators to achieve Title 22 reclamation quality effluent at both WWTP sites:
12 Pond Circulators and Telemetry to modify Operation of Aerators
Phase 2: Renovate the CDC wastewater facility and divert 1.1 mgd of the CDC wastewater flow to that facility, thus providing ability to provide maintenance for City disposal basins.
Phase 3: Install 5.5 MGD Secondary Effluent Filter Pump Station, 5.5 MGD Continuous Backwash Filter System (Including influent channel, flash mix/flocculation, chemical feed, and compressed air systems if needed), and 5.0 MGD Concrete Channel Ultra-Violet Disinfection System.

The Wastewater Facilities Master Plan includes expansion of the City's wastewater facilities to accommodate growth as outlined in the City General Plan.

The City desires to lease the Prison Abandoned WWTP, with option to renovate and purchase the facility. This would enable the City to reduce flow to the City's WWTP by diverting prison wastewater flow to the CDC wastewater facility. The results would be immediate availability of capacity at the City WWTP and ability to perform more effective maintenance of the disposal basins. The master plan envisions various alternatives described as phases. Costs of land acquisition and costs of constructing infrastructure on sites acquired have not been estimated.

Impact PS-6: **Buildout of the City as contemplated by the draft Plan will increase the need for fire fighting personnel and equipment. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence Assuming the same ratio of 1.6 fire fighters per 1,000 residents is maintained into the future, buildout of the draft Plan will generate the need for additional firefighters as follows:

46,000 additional residents X 1.6 per 1,000 residents = 8 total fire fighters

The above referenced policies of the draft General Plan require public facilities and services to be in place concurrently or in advance to new development, including facilities and personnel for fire protection.

Impacts PS-7: **Buildout of the draft Plan will require additional fire protection facilities and equipment to maintain an acceptable response time. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The above referenced policies of the draft General Plan require public facilities and services to be in place concurrently or in advance to new development, including facilities and personnel for fire protection.

Impact PS-9: **Buildout of the City as contemplated by the draft Plan will increase the need for police protection personnel and equipment. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The above referenced policies of the draft General Plan require public facilities and services to be in place concurrently or in advance to new development, including facilities and personnel for police protection.

Impact PS-10: **Buildout of the draft Plan will significantly increase the City's population and the demand for parkland. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence Assuming a buildout population of 57,000 non-prison residents, to achieve the desired ratio of four acres of parkland per 1,000 residents will require a total of:

57,000 X 4.0 acres per 1,000 = 228 acres of parkland at buildout

The City currently has 24.8 acres of useable parkland which means that buildout will require an additional 203 acres to achieve the desired ratio. The above referenced policies and programs of the draft General Plan seek to achieve a ratio of parkland to population of five acres per 1000 residents through buildout, which will mitigate the impact associated with parkland demand.

Impact PS-12: **Buildout of the draft Plan will accommodate about 11,539 additional dwelling units which in turn are expected to generate additional school aged children. The number of new households and associated students will significantly increase the demand for school facilities. This impact is considered significant and adverse (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Late in 1998, the governor signed into law Senate Bill 50, otherwise known as the Leroy R. Greene School Facilities Act of 1998 (Government Code Section 65995 et seq.). The intent of SB50 was to establish once and for all the obligations of developers and local governments with respect to the mitigation of school facilities impacts associated with new development. To that end, SB50 appears to greatly limit the responsibilities of local government when deciding land use matters by establishing a strict formula prescribing the financial obligations of developers of projects that may impact the demand for school facilities.

Previous case law (the Mira-Hart-Murrieta-Goleta cases) supported the notion that, under certain circumstances, local governments still had an obligation under the California Environmental Quality Act (CEQA) to exact additional mitigation from developers beyond the State-sanctioned school impact fees as a way to "fully mitigate" school impacts from new development. SB50 now appears to extinguish this line of reasoning by substituting more precise language in the school impact fee statute that says, in effect, that local governments may require the payment of the statutory fee, only. Unless and until the provisions of SB50 are litigated (almost all previous attempts to revise the school impact fee statute has been challenged in court) the City's responsibility ends where the developer is required to pay the fee to the school district.

The above referenced policies of the draft General Plan require public facilities and services to be in place concurrently or in advance to new development, including school facilities.

Impact PS-13 **Buildout of the draft Plan will result in the generation of additional solid waste which will adversely impact the capacity of landfills serving the City and surrounding cities. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Although the increase in the total amount of solid waste contributed to each facility by Soledad at buildout is significant, the percentage of remaining capacity consumed at each disposal facility remains small. However, this does not account for the cumulative contribution of the other jurisdictions using these facilities.

The Salinas Valley Solid Waste Authority is currently undertaking a program of capacity expansion for facilities serving the lower Salinas Valley, including Soledad. The Authority is examining four different scenarios to provide for the solid waste disposal needs of its member jurisdictions for approximately 70 years. Three different landfill sites (Crazy Horse Sanitary Landfill, Johnson Canyon Road Landfill, and Jolon Road Landfill) are included in these scenarios, as well as five potential transfer station/materials recovery facility (TS/MRF) sites in the Salinas area, and two potential transfer station/recyclable centers (TS/RC) in the King City area. The Lewis Road Landfill is not considered in any scenario for contribution to the Authority's long-term disposal capacity needs. The Lewis Road Landfill has a very limited site life, with no reasonable potential for significant expansion. Any one of the following four scenarios or subset thereof could be selected as the proposed Project:

Scenario 1: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion and Johnson Canyon Road Landfill Full Expansion;

Scenario 2: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion, Jolon Road Landfill Full Expansion and Johnson Canyon Road Landfill Tonnage Increase;

Scenario 3: Long Term Disposal Capacity Provision Through Johnson Canyon Road Landfill Reduced Expansion and Jolon Road Landfill Reduced Expansion; and

Scenario 4: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion, Johnson Canyon Road Landfill Reduced Expansion and Jolon Road Landfill Reduced Expansion.

An environmental impact report was prepared in 2002. As a result of this process, the Board of Directors adopted a program that provided for expansion of the available capacity at the Crazy Horse Landfill and good faith efforts to find a new landfill site, with assistance from an Ad Hoc Solid Waste Disposal Facility Task Force (Task Force) composed of Board Members and representatives of various concerned groups. The program also provided for expansions at Johnson Canyon and Jolon Landfills, which could be utilized until the supplemental landfill capacity was identified, acquired, permitted and constructed. The Task Force was directed to meet monthly and conduct an in-depth review of potential waste disposal sites to determine if any could be feasibly developed to supplement the capacity of the existing landfills in the Salinas Valley for at least 35 years. The City of Soledad is represented on the Task Force which consists of elected officials and members of the public.

A landfill siting study was completed in February 2004 which recommended the location of a new landfill disposal region south of King City and from Highway 101 to the eastern Monterey County line within which a future landfill disposal site is to be located.

By pursuing the expansion of existing facilities and the location of a new disposal site, the SVWA intends to meet the future demand for waste disposal for Salinas Valley cities, including Soledad.

Impact T-2: **Buildout of the land uses recommended by the Draft General Plan will adversely affect the operation and level of service of the two freeway interchanges serving the City. This impact is considered significant and adverse (Class II).**

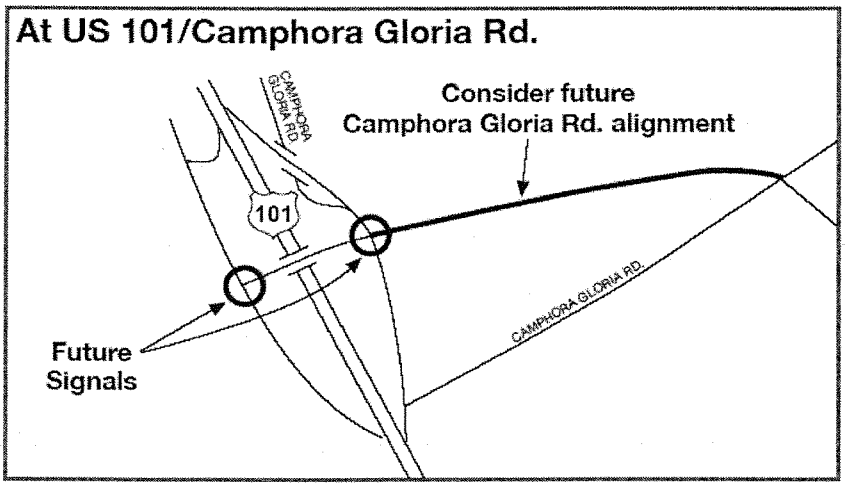
Mitigation Measures: Policies T-1 through T-37, Programs 5.1 through 5.24

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: One of the constraints to continued development of the City relates to the two freeway interchanges serving the City. The three interchanges that serve Soledad are operating fine for the low traffic volume that it currently serves. However, there are some inherent operational and access deficiencies. For example,

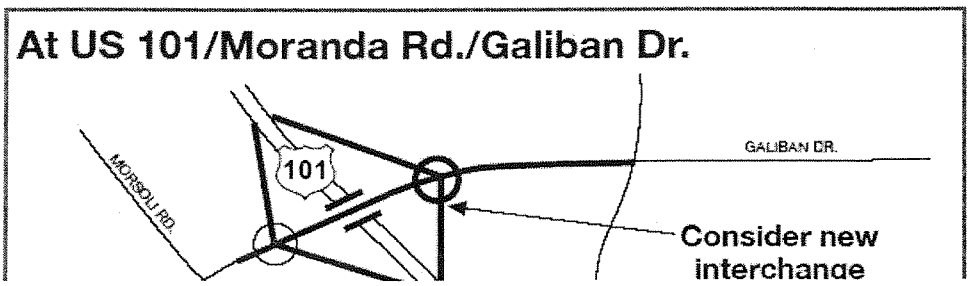
1. US 101/Camphora Gloria Road - The current interchange provides an overpass at US 101 and consists of a long northbound off-ramp that tees into Camphora Gloria Road. Going southbound, the interchange provides for a short "button hook" off-ramp that tees into Sillman Road. Sillman Road leads to the overpass and eventually becomes the southbound on-ramp to US 101.

It is anticipated that both of the overpass intersections would need signalization. In addition, realignment of Camphora Gloria Road with the overpass intersection should also be considered.

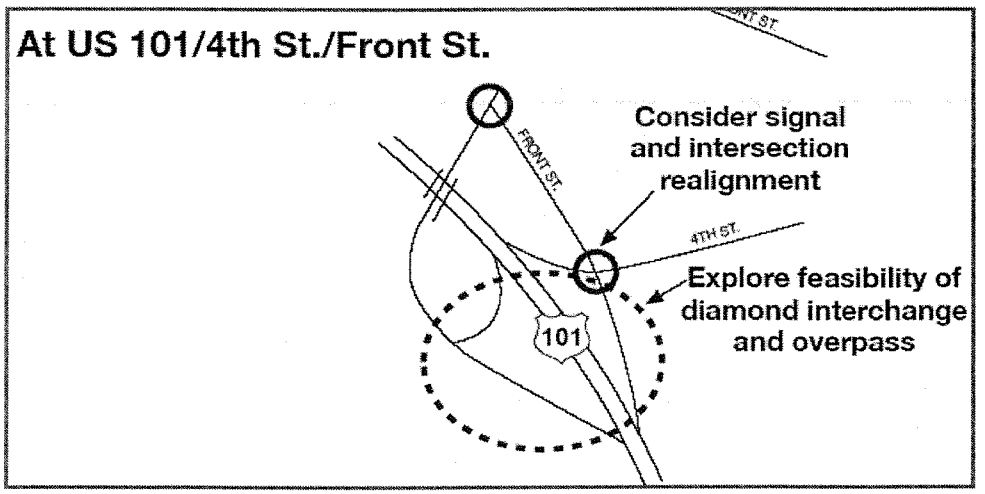


2. US 101/Moranda Road/Galiban Drive – currently the northbound and southbound ramps are split approximately a mile apart. The northbound on/off-ramps are short button hook ramps that tee onto Moranda Road. The southbound on/off-ramps is located approximately a mile to the north of the northbound ramp. To access this ramp, traffic needs to drive below an underpass and is therefore not very accessible.

TJKM proposed a future study that looks into the feasibility of consolidating the northbound and southbound on/off-ramps into a diamond interchange with an overpass that will be aligned with the future extensions of Galiban Drive. Such a reconfiguration will more directly serve future traffic on the north side of town and will vastly improve the traffic operations at the interchange.



3. US 101/Fourth Street interchange – there is no freeway overpass, so southbound off-ramp or northbound on-ramp traffic are required to take the long loop ramp to access the freeway. Operationally, southbound off-ramp traffic with a destination to the south of Front Street would be required to either traverse the entire length of Front Street or cut through one of the neighborhood arterials that parallel Front Street. Consequently, it is expected that a lot of this traffic would unnecessary clogged-up Front Street or cut-through some of the residential arterial streets in the future buildout scenario.



Future improvements such as signals will be required at the northbound off-ramp and for southbound traffic at Front Street. Due to the short distance between US 101 and Front Street, it is unclear if it is feasible to provide a diagonally angled freeway overpass so that a diamond interchange could be constructed. A study to explore this alternative would be useful.

Noise

Impact N-1: **Noise associated with construction activities may adversely impact nearby noise-sensitive uses. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies N-1 through N-5; Programs10.1 and 10.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Construction activities would temporarily increase the overall ambient noise levels within and surrounding the construction site. Onsite excavation and construction operations would require the use of track-type tractors, motor graders, wheeled loaders, haul trucks, scrapers, cranes, a backhoe loader, and excavators. Construction noise levels would fluctuate depending upon the construction phase, equipment type and duration, and the location of onsite operations in relation to existing structures.

Total estimated construction-related noise from all sources is summarized in Table V.4-4 for various reference distances from a construction site. An attenuation rate of 6 dBA is assumed for each doubling of distance from the source. The estimates represent a composite of total noise generated by a typical range of construction activities, accounting for deliveries, construction worker vehicle trips and other construction-related vehicles that travel to and from the site. Table V.4-3 suggests that sensitive receptors within 3200 feet of the source will be subjected to temporary and intermittent noise that exceeds the City standard of 60 dBA for outdoor activity areas.

Table V.4-4: Estimated Noise Levels From Construction

Construction Phase	Noise Levels Leq (dBA) without Noise Attenuation Controls				
	200	400 feet	800 feet	1600	3200 feet
Site Preparation	79	73	67	61	55
Foundation	89	83	77	71	65
Structure and Finish	82	76	70	64	58

Source: US EPA (1971) and CM Harris (1991)

Policies and programs of the draft General Plan cited above require mitigation of construction-related activities that may include the installation of noise barriers and the management of noise generating machinery.

Impact N-2: **Noise associated with motor vehicle traffic generated by the development of land uses accommodated by the draft Plan will increase, which may result in the exceedence of the standards described in Table V.4-1 adjacent to the roadway. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies N-1 through N-5; Programs10.1 and 10.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Buildout of the draft Plan will result in a substantial increase in traffic on existing and proposed roadways in the project vicinity. The new traffic throughout the area would be part of generally increased noise from increased activity eventually replacing the existing, rural noise environment with one that would seem more suburban. Existing residences would experience gradually increased traffic noise as the development proceeds.

The estimated increase in noise levels along selected roadways at buildout is provided in Table V.4-4. Compared with existing conditions, growth in traffic noise will occur regardless of development accommodated by the draft General Plan. Compared to future conditions that would occur without the project, the draft General Plan would cause substantial traffic noise increases (i.e., greater than a 3 dB change) on existing and planned roadways serving the planning area. Existing homes along these roadways would experience a recognizable increase in traffic noise.

Table V.4-4 provides a reasonable worst-case prediction of noise levels and the distances necessary to achieve the planning criteria of either 60 or 65 Ldn. Contour distances presented in Table V.4-4 do not account for obstructions that may interrupt the line-of-sight between a receptor and the passing traffic. Only attenuation by distance is considered in the predictions. Thus at locations where a building is between the receptor and the roadway, noise levels could be as much as 5 dBA less than shown in the table. The noise levels include assumptions about the vehicle mix based on information available in 2004. Distances to future noise contours in Table V.4-4 are from the centerline of the roadway.

TABLE V.4-5: EXISTING AND FUTURE NOISE LEVELS			
Source	Buildout Right of Way Width (feet)	Distance From Centerline to 65 dB In 2004 (feet)	Distance From Centerline to 65 dB At Buildout (feet)
Railroad	200	630	600
Highway 101	500	325	600
Camphora-Gloria Road	84	> 1000	200
Metz Road	84	250	110
Front Street	84	250	120
East Street	84	250	100
West Street	60	200	100
San Vicente Road	84	>200	110
Gabilan Drive	84	>200	76
Monterey Street	60	200	72

Source: Sound 2000, and CMCA

Notes:

1. Based on traffic volumes at buildout (see Chapter V.2-- Traffic and Circulation).
2. Assumes no physical barrier between noise source and receptor.

As Table V.4-4 shows, properties along several of the City's arterial and collector roadways will be exposed to noise levels that exceed the City's standards for residential yard areas, in the absence sound attenuation such as a sound wall or earthen berm.

Implementation of the policies and programs of the draft General Plan will achieve the recommended noise standards along roadways.

Geology and Geologic Hazards

Impacts GEO-1: **A major earthquake on the San Andreas faults could produce ground accelerations of 0.15g to 0.7g within the Plan area, resulting in damage to structures and a potential safety hazard to occupants of such structures. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The San Andreas Fault lies some thirteen miles east of the City and has produced some of the largest earthquakes in California history. A major seismic event associated with this fault could result in significant damage to structures and

public infrastructure within the Plan area. Earthquakes of such intensity have the potential to destroy unreinforced masonry structures and cause general damage to some well-built wooden structures and foundations.

Major seismic events cannot be predicted. Therefore, the approach favored by public safety officials is to plan for their eventuality through a combination of emergency preparedness and the application of earthquake-resistant building codes such as those provided in the Uniform Building Code.

Impact GEO-2: **Portions of the Plan area may be subject to landslides and/or slope failure. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The Plan area includes a portion of the foothills of the Gabilan Range which contain slopes of twenty percent and more. The Land Use Diagram of the draft Plan designates areas above 400 feet elevation as Open Space where urban development is not permitted. Nonetheless, areas below this elevation could be subject to landslide and/or slope failure.

The above referenced policies and programs of the draft General Plan, among things, prohibits development in areas subject to geologic hazards and requires implementation of the Uniform Building Code to address stability of slopes.

Impact GEO-3: **Development activities associated with the various land uses contemplated by the draft Plan have the potential to result in soil erosion. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Construction activities will involve grading, excavation, and fill, all of which will expose soils to wind, water and other eroding elements. Policies and programs of the draft General Plan require compliance with the National Pollutant Discharge Elimination System (NPDES), among others, which will reduce potential erosion and sedimentation impacts to a less than significant level.

Impact GEO-4: **Construction and renovation activities associated with the Wastewater Master plan could result in erosion and sedimentation. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Construction activities will involve grading, excavation, and fill, all of which will expose soils to wind, water and other eroding elements. Policies and programs of the draft General Plan require compliance with the National Pollutant Discharge Elimination System (NPDES), among others, which will reduce potential erosion and sedimentation impacts to a less than significant level.

Flooding, Drainage and Water Quality

Impact W-1 **Buildout of the land uses designated by the draft Plan will increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff, and the potential for erosion and sedimentation in the Salinas River and its tributaries. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Buildout of the draft Plan will involve the construction of streets, parking and driveways, sidewalks, and buildings. All of these impervious surfaces will increase the amount and velocity of runoff leaving the Plan area to surrounding drainage systems, which in turn could accelerate erosion of the soils at the project site. This is considered a significant adverse impact unless mitigated.

Degradation of water quality in the Salinas River could occur from increased sediment load caused by erosion and from heavy metals and other hazardous substances washed from streets and parking lots. Silt and sediment loads are deposited by storm water anywhere the water velocity slows. This might occur naturally in pools of the River or at culvert entrances or outlets. Silt and sediments accumulating at these points could adversely affect river habitat and the capacity of the river to carry runoff.

Policies and programs of the Draft General Plan cited above require the preparation of a storm drainage master plan and capital improvement plan concurrently or in advance of new development to address the potential impacts on storm drainage.

Impact W-2 **Heavy metals and other hazardous materials washed from the surface of parking lots and roadways constructed within the Plan area could enter natural drainage courses such as the Salinas River during a rainstorm. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: When the extent of development exceeds five acres, a Stormwater Pollution Prevention Plan (SWPPP) is required which will further reduce the significance of potential impacts associated with hazardous materials in surface runoff. In addition, policies and programs of the Draft General Plan cited above require the preparation of a storm drainage master plan and capital improvement plan concurrently or in advance of new development to address the potential impacts on storm drainage.

Impact W-3 **Construction activities could result in the release of oil, engine fuel and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Policies and programs of the Draft General Plan cited above require the preparation of a storm drainage master plan and capital improvement plan concurrently or in advance of new development to address the potential impacts on storm drainage.

Impact W-4 **Buildout of the land uses designated by the draft Plan may expose people and property to the periodic effects of flooding. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Portions of the Plan area may be subjected to the effects of flooding during severe storm events. Natural and human-made drainages serving the City (Figure V.6-2) have experienced flooding in recent years which has compelled the City to undertake a program of flood control and storm drain measures. Policies and programs of the Draft General Plan cited above require the preparation of a storm drainage master plan and capital improvement plan concurrently or in advance of new development to address the potential impacts on storm drainage.

Biological Resources

Impact BIO-1: **Buildout of the Plan area with urban uses could result in the permanent conversion of 3,500 acres of agricultural land to urban use. This land may**

provide suitable foraging habitat for certain special status animal species, and uncultivated areas could contain sensitive plant species. The permanent loss of this habitat is considered significant unless mitigated (Class II).

Mitigation Measures: Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence The plan proposes the conversion of actively farmed irrigated agricultural land to urban development, with housing, maintained landscape, and roads. Most of the land proposed for conversion is currently farmed in a conventional, large-scale, intensive manner; therefore, it does not provide intact natural habitat for plants or animals. However, the land and its fringes do provide foraging habitat for animals. Areas where land has not been worked in recent years or where vegetated areas or fringes are left in their natural state may provide suitable conditions for certain sensitive plants. Diminishment of available foraging area and habitat available for sensitive plants may adversely affect a number of sensitive species. Assessment of the presence/absence of sensitive plants and animals is required prior to development; significance of impact and levels of mitigation required are assessed by regulatory agencies such as the DFG and USFWS. Although implementation of the plan will result in the conversion of a large acreage of currently open land, the value of that land for wildlife and plant species is low overall, due to intensive agricultural practices throughout the area.

Impact BIO-2: **Construction activities could result in a number of temporary impacts, including, but not limited to, disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.), increased erosion potential, and noise, particularly along the Salinas River and its tributaries, and the foothills. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Construction activities within the Plan area have the potential to result in a number of temporary impacts to wildlife and plant species, both direct and indirect. These include removal of vegetation, grading, excavation, and noise from equipment. The severity of these potential impacts will be assessed as specific projects are proposed.

Impact BIO-3: **Urban development in the planning area could adversely impact riparian habitat by increasing impervious surfaces, accelerating erosion and input of sediments and pollutants. These impacts are considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Development of land uses accommodated by the draft Plan will not result in direct impacts to the Salinas River, the major riparian system in the area. The draft Plan continues to designate land within the River's floodplain as Open Space. However, development will substantially increase the percentage of impervious surfaces within the planning area, and may alter smaller hydrologic systems in the planning area. Impervious surfaces increase the volume and rate of runoff experienced at a given location. Increases in the volume and rate of runoff at a specific point can induce erosion of banks and channels, uprooting or smothering vegetation or riparian life. Particular attention must be paid to stormwater infiltration mechanisms as the community builds. Policies and programs of the Draft General Plan cited above require the preparation of a storm drainage master plan and capital improvement plan concurrently or in advance of new development to address the potential impacts on storm drainage.

Agricultural Resources

Impact A-3: **The expansion of urban uses contemplated by the draft Plan will increase the potential for incompatibility between urban uses and agricultural operations. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Agricultural operations generate noise, dust and odors that may be considered a nuisance to nearby land uses. Much of the area designated for urban expansion by the draft Plan is intended for residential development. Policies and programs of the draft General Plan cited above require implementation of the Right To Farm ordinance which will be a required condition for all new residential development.

Visual Resources

Impact V-3 **Development of the various land uses accommodated by the draft Plan will result in additional sources of light and glare. These new sources will be visible from adjoining areas and from the 101 Freeway. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The draft Plan will accommodate significant new urban development of all types, including residential neighborhoods, industrial parks and shopping centers. The amount of new development could adversely affect the character of the City. Policies and programs of the Draft General Plan cited above establish the City's expectations for the qualities required in new development which are aimed specifically at furthering and preserving the City's established character.

Impact V-4 **New urban development could adversely affect the historic character of the City. This impacts is considered significant and adverse (Class II).**

Mitigation Measures: Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: The draft Plan will accommodate significant new urban development of all types, including residential neighborhoods, industrial parks and shopping centers. The amount of new development could adversely affect the character of the City. Policies and programs of the Draft General Plan cited above establish the City's expectations for the qualities required in new development which are aimed specifically at furthering and preserving the City's established character.

Cultural and Archaeological Resources

Impact C-1: **Development of the land uses contemplated by the draft Plan could unearth or disturb previously undiscovered resources of cultural or historic significance. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies L-49, L-52, C/OS-23, C/OS-24, Programs 8.5, 8.9, 8.10

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.

Supporting Evidence: Although a records search of known archaeological sites within the City's Plan area did not reveal any previously discovered sites aside from Highway 101 and the Los Coches Adobe, development of land uses accommodated by the draft Plan could reveal previously undiscovered resources of significance. The above referenced policies and programs establish the procedures to be followed in the event previously undiscovered resources are unearthed during construction activities.

Impact C-2: **Development in accordance with the draft Plan could alter the historic character of the City. This impact is considered significant unless mitigated (Class II).**

Mitigation Measures: Policies L-49, L-52, C/OS-23, C/OS-24, Programs 8.5, 8.9, 8.10

Findings:	The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a less than significant level.
Supporting Evidence:	Policies and programs of the Draft General Plan cited above establish the City's expectations for the qualities required in new development which are aimed specifically at furthering and preserving the City's established character.

VIII. Unavoidable and Adverse (Class I)

Public Impact

Impact PS-1: **Water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin. This impact is considered unavoidable and adverse (Class I).**

Mitigation Measures: Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2

Findings: Significant and Adverse.

Supporting Evidence: About 3,500 acres of the City's general plan area is used for various agricultural operations, including irrigated row crops which are currently consuming about 5,600 AFY. Over time this land is expected to be permanently converted to urban uses through the outward expansion of the City as contemplated by the draft Plan, with a corresponding increase in the future demand for municipal water supply.

Total water demand from the City's Plan area will increase by about 477 AFY at buildout with the uses contemplated by the draft Plan. This will occur incrementally over time as more land is annexed to the City and converted from an agricultural to an urban use. It should be noted, however, that this estimate of future water demand makes no assumptions for savings associated with water conservation measures that will implemented in the future as required by State law. For example, new development will be required to incorporate water-conserving plumbing fixtures which will reduce future water use. Other more aggressive measures, such as the retrofitting of older toilets and showerheads with more water efficient fixtures, would reduce future demand to near or below current water demand for the Plan area. withdrawals from the Forebay sub-basin attributable to buildout of the draft Plan will increase by about 0.3 percent over present (2004) demand.

In projecting future water demand during the preparation of the SVWP, the MCWA relied on projections of future urban development and resulting population provided by the Association of Monterey Bay Area Governments (AMBAG). AMBAG is the Metropolitan Planning Organization for Monterey, Santa Cruz, and San Benito counties. In this role, AMBAG is the agency charged with the responsibility of providing regional population and employment forecasts. Its most recent forecasts were conducted in 1997 and address projected growth to the year 2020.

In devising their population forecasts, AMBAG considered whether potential resource and infrastructure constraints should be considered as such constraints

could profoundly affect the resulting level of development in the various jurisdictions. The forecasts used by AMBAG are generally unconstrained with respect to water supply or other resource or infrastructure factors. However, AMBAG did consider a number of other factors in devising their projections, as stated on pages 60 and 61 of the AMBAG forecast:

The major portion of the Salinas River groundwater basin, underlying what is commonly referred to as the Salinas Valley (a.k.a. Zone 2A)(sic), is currently in an overdraft situation ...This has been the cause of the well publicized seawater intrusion problem in the lower Salinas Valley ...

The planning effort to meet existing and future needs is now being carried out through MCWRA's Basin Management Plan (BMP) process. The BMP will identify structural and non-structural components to stop seawater intrusion, achieve a water balance in the Basin, and provide for the future through phased water distribution projects. If the efforts to complete and implement the BMP are not successful, it is likely that the State Water Resources Control Board (SWRCB) will move to adjudicate the Salinas Basin. This action would result in restrictions placed on urban and agricultural water use to alleviate the seawater intrusion problem. The implications of this action might include restrictions or prohibitions on new water uses in the future.

... Since the Salinas Valley groundwater basin is already in overdraft, any population growth will cause the sustainable pumping rate to be exceeded even further. However, if MCWRA's proposed Basin Management Plan is implemented, MCWRA anticipates that population growth can be accommodated in the MCWRA service area...

As discussed above, the SVWP is the proposed solution emanating from the BMP process. AMBAG does not address the potential future growth scenarios that may result in the event that the SVWP (or any other project that could solve the acknowledged water problems in the Salinas Valley) is not implemented. Nevertheless, with this acknowledgement of existing constraints, the AMBAG forecasts for the Salinas Valley are listed in Table V.1-6. These forecasts are for the years 1995 and 2020. The AMBAG forecast did not extend to the year 2030, which is the planning horizon year for the SVWP. The MCWRA extrapolated the population forecast for several (including Soledad) cities/communities outwards from 2020 to 2030 using growth rates through 2020 as provided by AMBAG, with adjustments based on discussions with local agencies and water purveyors.

As is the case with AMBAG, the MCWRA acknowledges that population numbers presented in Table V.1-6 are a forecast of future population, and a variety of economic, social, political, and environmental factors will influence whether this forecast will be accurate. However, this forecast was considered a reasonable basis for devising the SVWP. The FEIR for the SVWP concedes that if future growth substantially exceeds the AMBAG projections, other sources of water beyond SVWP water would likely be needed in the Salinas Valley.

There is considerable reason to suggest that AMBAG population forecasts for the City of Soledad and the Salinas Valley State prison as used to devise the SVWP are too low. Most notably, AMBAG projects a non-prison population for

Soledad in 2030 of 14,555, when according to the California Department of Finance, the City's 2004 non-prison population is about 15,000. AMBAG has since made corrections to its growth forecasts in response to the 2000 Census and based on discussions with local jurisdictions. The new projections have been revised upward for Soledad as well as other Salinas Valley cities. Nevertheless, the populations assumed in preparation of the SVWP appear to be inconsistent with (ie, considerably lower than) the population holding capacity of the draft General Plan.

The MCWRA has conducted detailed modeling and analyses to project future water needs to the year 2030 and assuming growth forecasts as listed above. A number of assumptions were made in conducting the analysis, and these assumptions are embodied in the Salinas Valley Integrated Ground and Surface Water Model (SVIGSM). In summary, the SVIGSM was developed as an analytical tool for use by the MCWRA and decision makers to evaluate the hydrologic and operational impacts of the Basin Management Plan and, subsequently, the Salinas Valley Water Project. The SVIGSM has the capacity to simulate a variety of detailed hydrologic and operational functions, and as a result requires a substantial amount of data. Input for the SVIGSM has been collected and reviewed at various times throughout its development.

The major assumptions used in the SVIGSM as they relate to future growth and development include:

AMBAG population forecasts, as extrapolated by MCWRA to the year 2030, would be used to estimate future urban totals.

Agricultural land uses would shift, with a large increase in relative acreage devoted to vineyards (a 25% increase between 1995 and 2030 was assumed), and a decrease to all other uses (truck crops, field crops, pasture, and orchards). Conversion of agricultural acreage to urban uses is also assumed to occur, but would be generally replaced by land not currently in agricultural use. Net agricultural acreage would remain effectively unchanged. Through cropping patterns, as well as conservation realized through incorporation of new technologies, a 5% increase in water conservation, compared to water use by the same crops, would be expected between 1995 and 2030. The shift in agricultural land uses coupled with water conservation and cropping patterns would result in a net reduction of 60,000 acre-feet per year (AFY) by 2030.

The current per capita water use was assumed to be relatively constant into the future, except that a 5% per capita reduction due to conservation was assumed. Total urban water use would increase by 40,000 AFY between 1995 and 2030 (from 45,000 AFY in 1995 to 85,000 in 2030).

Total water use in the Basin is expected to decrease by 20,000 AFY between 1995 and 2030 (from 463,000 AFY in 1995 to 443,000 AFY in 2030). This represents an estimated 4% reduction in total water use.

The implications of a higher population for Soledad than that assumed in preparation of the SVWP are unclear. However, the preceding analysis supports the following conclusions:

The Forebay Sub-basin is currently in overdraft, even though water demand overall is decreasing;

Water demand at buildout of the City's General Plan area will result in a net increase in water demand following conversion of existing agricultural lands to an urban use;

Lower population assumptions for Soledad and elsewhere in the Forebay Sub-Basin may hinder efforts of the SVWP to help alleviate the current overdraft condition, to the extent the SVWP is intended to help balance future supply and demand.

Impact PS-14: **Development accommodated by the draft will increase the demand for electricity within the Plan area and the need for distribution facilities. This impact is considered unavoidable and adverse (Class I).**

Mitigation Measures: Policy H-11, Program 5.11

Findings: Significant and Adverse.

Supporting Evidence: Development accommodated by the draft Plan would result in over 40,000 additional residents in the planning area, and over 12 million square feet of commercial and industrial space. Applying the per capita energy consumption factor of 7,178 kwh, the projected residential growth alone could increase power consumption by 2.8 million kwh. Depending on the types of commercial and industrial tenants, such development could significantly increase the demand for electricity and distribution infrastructure within the Plan area.

With regard to electrical distribution infrastructure, no projects are currently planned for Soledad other than those necessary to accommodate the incremental increase associated with new development. Deficiencies in larger infrastructure, such as high-voltage lines and power plants, will be remedied on a regional and statewide basis by implementing the improvements contemplated by the CPUC in the Energy Action Plan described above. To the extent that substantial increases in power demand in Soledad will contribute to the larger infrastructure deficiency, the impacts are considered significant and unavoidable.

Traffic

Impact T-1: **Buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways (Highway 101), streets and intersections serving the City. This impact is considered significant and unavoidable (Class I).**

Mitigation Measures: Policies T-1 through T-37, Programs 5.1 through 5.24

Findings: Significant and Adverse.

Supporting Evidence: At build-out conditions, the levels of service (LOS) of all the study intersections would deteriorate to unacceptable conditions. All study intersections (which are currently unsignalized) would operate at unacceptable level of service F conditions. Figure V.2-3 shows the estimated Average Daily Traffic (ADT) traffic volumes on all the major arterials at buildout. Table V-6 shows the projected level of service at build-out conditions. Roadway widening and signalization of all major intersections would be required to accommodate the projected traffic.

Motor vehicle trips attracted to, and leaving, the City's planning area through buildout will contribute traffic to the regional roadways serving Monterey County. The number of trips added to the regional system is expected to be partially mitigated by the complementary range of land uses designated by the draft Plan, and the ability of the City to achieve a greater measure of balance between housing and employment. Still, the City's ability to mitigate regional traffic impacts is limited to participation with other agencies in resolving regional impacts with the Transportation Agency of Monterey County (TAMC). The Transportation Agency of Monterey County, as the agency responsible for planning and funding transportation improvement projects for regional roadways, is currently seeking funding for several road improvement projects in the county. At the present time, only eight projects amongst those several others are reasonably expected to be funded and constructed during the nest 20 years. These projects are mostly either very localized improvements (e.g., freeway interchange) or design and safety improvements and are not anticipated to greatly improve over-capacity conditions on the affected roadways except at very localized points in the circulation system.

Road improvements expected to be funded and constructed within the 20 year time frame include:

- Completion of the Salinas Road interchange at Highway 1
- Operational improvements on Highway 1 in the Cannel area
- Completion of the Highway 101, Prunedale Improvement Project
- Completion of the Airport Blvd interchange at Highway 101
- Operational and safety improvements to Highway 68 in the Toro area and Monterey Airport area.
- Operational and safety improvements to Highway 68 at CHOMP
- Marina — Salinas Corridor - widening of Davis Road, Blanco Road, Reservation
- FORA improvements onsite within Fort Ord

As part of the County's general plan update in 2002, these road improvements were added to the County's traffic model to simulate the road network as it could exist in 2020. The model revealed that, with only a few exceptions, the Levels of Service on affected County roadways was not greatly improved. The road improvements reasonably expected to be funded and constructed during the 20-year lifetime of the County's general plan provide very little improvement to future traffic conditions. With expected improvements in place, a total of 59 road

links are projected to operate below Level of Service C. Forty-three of these will operate at E or F.

Thus it can be expected that the additional trips contributed by buildout of the City's draft Plan will result in a cumulative adverse impact to the regional roadway system that is unavoidable and adverse.

Air Quality

Impact AQ-2: **Motor vehicle trips associated with buildout of the draft Plan will contribute to a cumulative adverse impact on regional air quality. This impact is considered significant, adverse and unavoidable (Class I).**

Mitigation Measures: Policies T-1 through T-37, C/OS-13 through C/OS – 16 Programs 5.2 through 5.11, Programs 5.15, 8.1 through 8.4

Findings: Significant and Adverse.

Supporting Evidence: Although the population forecast contained in the AQMP accommodates the population of the City accommodated by the draft Plan, the additional vehicle trips associated with buildout will contribute to a degradation of air quality in the Salinas Valley and the region. While the draft Plan seeks to capture a greater proportion of these trips by achieving a greater measure of balance between employment and housing, the significant increase in motor vehicle use will result in a significant and unavoidable impact to regional air quality.

Biological Resources

Impact BIO-4: **Development accommodated by the draft Plan will increase groundwater withdrawals, which has the potential to diminish in-stream flow along the Salinas River. This impact is considered unavoidable and adverse (Class I).**

Mitigation Measures: Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8

Findings: Significant and Adverse.

Supporting Evidence: Increased groundwater withdrawals, especially in more porous hydrologic systems such as the Salinas River Basin can result in less water available for in-stream flow and for the animals and plants dependent on such flows. Continued drawdown of flows is considered detrimental to the recovery of species such as the steelhead. Since the Salinas groundwater basin is functionally in overdraft and demand will increase at buildout, the drawdown and its associated impact to plants and animals is considered unavoidable and adverse. Management of instream flows is being addressed on a regional scale through modifications in the outflow of reservoirs among other projects.

Impact BIO-7: **The permanent loss of 3,500 acres of foraging area for special status animal species would contribute to the cumulative loss of such areas within the**

Salinas Valley. This impact is considered significant and unavoidable (Class I).

Mitigation Measures: Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8

Findings: Significant and Adverse

Supporting Evidence: The Salinas Valley floor currently provides only limited habitat for plants and animals. The landscape is highly cultivated and controlled. However, as growth in Soledad and neighboring communities increases, and in particular, expands to the eastern foothills, the loss of foraging opportunities throughout the planning area is cumulatively significant.

Agricultural Resources

Impact A-1: **Development of land designated for urban development by the draft Plan will result in the permanent conversion of about 2,750 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).**

Mitigation Measures: Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8

Findings: Significant and Adverse

Supporting Evidence: The Plan area consists of agricultural land classified as either Prime or Farmland of Statewide Importance. Buildout of the Plan area will result in the permanent conversion of this land to a non-agricultural use and a net loss of productive agricultural land in the County. Although policies of the draft Plan seek to minimize the impact of this loss, it will remain significant and adverse.

Impact A-2: **Development of additional rapid infiltration basins as recommended by the draft Wastewater Treatment and Disposal Master Plan will result in the permanent conversion of about total 469 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).**

Mitigation Measures: Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8

Findings: Significant and Adverse

Supporting Evidence: The draft Wastewater Treatment and Disposal Master Plan recommends the development of rapid infiltration basins on properties near and/or adjacent to, the wastewater treatment plant to provide capacity for the continued growth and development of the City. Table V.8-5 provides a summary of the acreage needed; areas under consideration for construction of infiltration basins are illustrated by Figure III-7 in the Project Description.

Properties under consideration for infiltration basins are largely irrigated row crops along the floodplain of the Salinas River. Portions of these properties would be acquired by the City over time in accordance with the program outlined in Table V.8-5 and developed with infiltration basins to achieve the disposal capacity required for future development.

According to the 2002 Monterey County Crop report, there were about 1.4 million acres in crop production in 2002, producing crops with a value of about $1,954 per acre. A loss of 3,500 acres would constitute about 0.25 percent of the total agricultural acreage in the County. The value per year of products lost to the agricultural economy would be: $1,954/acre X 3,500 acres = $6.8 million per year (in 2002 dollars) or about 0.25 percent of the total value of crops produced Countywide.

Although the relative impact on the total value and acreage of agricultural production is small, so long as the long-term trend in the net change in the amount of prime agricultural land remains downward, any additional loss constitutes a significant cumulative adverse impact that cannot be feasibly mitigated.

Visual Resources

Impact V-1 **Development of the various land uses contemplated by the Draft Plan will alter the visual character and/or quality of the Plan area. This impact is considered significant and unavoidable (Class I).**

Mitigation Measures: Policies L-3, L-42 through L-52; Policies C/OS-7 through C/OS-9, C/OS-18 Programs 8.7 through 8.9

Findings: Significant and Adverse

Supporting Evidence Buildout of the areas designated for urban development by the draft Plan would result in the permanent conversion of about 3,500 acres of farmland to an urban use. The area considered for urban development would double the physical size of the City and the resulting visual prominence of urban development within its visual context. The resulting impact on the scenic variety, visual sensitivity, and visual condition of the area would be significant and unavoidable.

IX. Cumulative and Growth Inducing Impacts

Cumulative Impacts

State CEQA Guidelines Section 15355 defines cumulative impacts as

> *"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts". Further, "the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time".*

The Guidelines require the discussion of cumulative impacts to reflect the severity of the impacts and their likelihood of occurrence. However, the discussion need not be as detailed as the analysis of impacts associated with the project, and should be guided by the rule of reason.

Cumulative impacts associated with buildout of the City in accordance with the various land uses and facilities anticipated by the 2004 General Plan and Wastewater Treatment and Disposal Master Plant are discussed in the topical analysis sections provided in Section 5 of the Final EIR.

Findings:

Implementation of the policies and programs recommended by the draft General Plan will reduce cumulative impacts associated with buildout of the City will be reduced to a less than significant level except for the following:

- Cumulative impacts to groundwater water supplies associated with buildout of the City in accordance with the draft General Plan are considered significant and adverse.
- The cumulative demand for electricity associated with buildout of the City in accordance with the draft General Plan are considered significant and adverse.
- Buildout of the City in accordance with the draft General Plan will result in a cumulative impact to regional roadways that is considered significant and adverse.
- Emissions associated with additional motor vehicle trips generated by the various land uses contemplated by the draft General Plan will contribute to a cumulative impact to air quality that is significant and adverse.
- Increased groundwater withdrawals associated with buildout of the City in accordance with the draft General Plan will diminish in-stream flow along the Salinas River which in turn will have a significant and unavoidable impact on plant and animals species.
- The permanent loss of 3,500 acres of potentially suitable foraging area for animal species will result in a significant and unavoidable adverse impact.
- Development of land designated for urban development will result in the permanent loss of 3,500 acres of prime agricultural land which is a cumulative and significant adverse impact.

Growth-Inducing Impacts

Section 15126(g) of the State CEQA Guidelines requires that an EIR assess a project's potential to induce additional economic or population growth or the construction of additional infrastructure or housing beyond that anticipated for the project itself. The Guidelines state that a project will have a significant growth-inducing impact if:

> It directly or indirectly fosters economic or population growth or additional housing; or,
> It removes obstacles to growth; or,
> It taxes community services facilities; or,
> It encourages or facilitates other activities that cause significant environmental effects.

The Guidelines define a growth-inducing impact as:

> *"the way in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are [public works] projects which would remove obstacles to population growth. Growth is not assumed to be necessarily beneficial, detrimental, or of little significance to the environment."*

Findings:

The draft General Plan is by its nature growth inducing in that it sets forth a program for the orderly expansion of the City to a future population of about 57,000 residents (excluding the prisons) over the next forty ore more years. The Plan designates 3,500 acres for additional urban development which in turn will significantly increase the aerial extent and population of the City. Growth inducing impacts also include policies and programs aimed at increasing the infrastructure necessary to serve such increased development. Growth inducing and the impacts associated with buildout of the City in accordance with the draft Plan are addressed and fully mitigated by the policies and programs recommended by the draft Plan, except for the following:

- Cumulative impacts to groundwater water supplies associated with buildout of the City in accordance with the draft General Plan are considered significant and adverse.
- The cumulative demand for electricity associated with buildout of the City in accordance with the draft General Plan are considered significant and adverse.
- Buildout of the City in accordance with the draft General Plan will result in a cumulative impact to regional roadways that is considered significant and adverse.
- Emissions associated with additional motor vehicle trips generated by the various land uses contemplated by the draft General Plan will contribute to a cumulative impact to air quality that is significant and adverse.
- Increased groundwater withdrawals associated with buildout of the City in accordance with the draft General Plan will diminish in-stream flow along the Salinas River which in turn will have a significant and unavoidable impact on plant and animals species.
- The permanent loss of 3,500 acres of potentially suitable foraging area for animal species will result in a significant and unavoidable adverse impact.

- Development of land designated for urban development will result in the permanent loss of 3,500 acres of prime agricultural land which is a cumulative and significant adverse impact.

X. Findings Regarding Alternatives to the Proposed Project

The stated objectives of the 2004 General Plan and Wastewater Treatment and Disposal Master Plan are:

In General

- Soledad's small size and character contribute to a strong sense of community shared by its residents. These characteristics should be protected and enhanced as the City's future is planned.

- Soledad's historical ties to the mission, to agriculture and the railroad should be acknowledged and reflected in plans for the City's future. Examples of how this might occur include the protection and upgrading of historical structures and the use of farming and railroad themes in redevelopment strategies for the downtown.

- The City's proximity to the Pinnacles National Monument, Monterey County's wine industry and the Monterey peninsula is viewed as an important asset. The General Plan should explore ways to capitalize on Soledad's strategic location to these amenities.

Community Form and Design

- The General Plan should strive to accommodate a year 2020 population of between 27,000 - 30,000 residents and a population of 57,000 in forty years. However, the Plan should be far-sighted and mindful of the possibility that factors at the regional, statewide and national levels may cause the City to grow beyond this population.

- The outward expansion of the City's planning area (the areas designated for urban development by the General Plan) should occur on less productive agricultural lands toward the hills rather than along the 101 freeway where the more productive soils are located. New development should be timed and located to maintain the City's compact form.

- The principal entrances to Soledad should be developed with "gateways" which announce that one has entered the City. The gateway feature constructed at the north entrance to the City should be repeated at the south entrance as well. Elements of such gateway treatments can include structures, special landscaping and signs, but should also include litter control to create a pleasing appearance. Improving the appearance of these corridors may involve a cooperative effort with the County. Gateways to the downtown should also be well marked.

- Housing development in Soledad over the past few years has accelerated considerably from previous trends. New residential neighborhoods should be designed to capture the best qualities of existing neighborhoods while providing a range of housing products that are affordable to all segments of the community. New neighborhoods contiguous to the older parts of town should build upon the existing grid pattern of streets and incorporate amenities such as parks, pedestrian and bicycle paths, and street trees.

- The City's climate is generally viewed as favorable, with warm dry summers and mild winters. However, wind blowing down the Salinas Valley is an unavoidable aspect of Soledad's weather pattern. The General Plan should acknowledge these environmental elements and consider them in its recommended policies and programs. For example, the Plan can encourage more shade trees and wind-rows, narrower streets in new residential areas, and the provision of outdoor shelter in new commercial projects.

- Recognizing that the General Plan will eventually become the basis for appropriate zoning to implement land use and design objectives, elements of the Plan should ensure that land uses near one other are compatible and that new buildings fit their context.

Agriculture

- Soledad is surrounded by productive agricultural soils. The farming environment, especially the row crops and vineyards, provide a beautiful rural context for the City that residents and visitors enjoy. Moreover, a good portion of the town's economic base is related to agriculture, both directly and indirectly. Thus, protection of agricultural activities around the City and in the region is an important consideration in planning for the City's future.

- Agricultural activities and residences can impact one another. For example, noise, dust or spraying associated with farming could adversely affect housing; in turn, complaints from residents can sometimes impede efficient cultivation practices. Therefore, the interface or boundary between agriculture and new development must be carefully considered.

Noise, Access, & Traffic

- Soledad has a quiet ambiance which should be protected in the future.

- The City's railroad right-of-way and existing street pattern limit access to land designated for commercial and industrial development at the south entrance to town. Greater access with good, clear connections to the rest of the City should be provided to these areas where possible.

- Truck routes (and truck parking) should be reviewed periodically to fit the changing dynamics of the community; to better control conflicts between trucks and other traffic and to minimize impacts on residential areas.

- In addition to automobile circulation, the General Plan must address other transportation modes such as a bicycle route system and additional transit opportunities to surrounding communities and to the prison.

- The freeway interchanges may need to be re-configured to provide more efficient access to the community.

Economic Development

- While it is important to think expansively about the town's future, the Plan should be practical. An important element of this practicality is the City's financial position. Therefore, the General Plan should strive toward enhancing Soledad's fiscal resources so that the public facilities and services desired by the community can be paid for.

- Efforts undertaken by the City to revitalize the downtown have had mixed success. As a result, additional work is needed to fully realize the downtown's potential and protect its historic character. In particular, it is important that the downtown cultivate a market niche that protects downtown businesses from competition with commercial development anticipated elsewhere in the City. Increased activities (such as a farmers market and other special events) and more activities in the evening (such as more restaurants and a movie theater) would help solidify the image of the downtown as a desirable place to shop, dine and visit.

- Encouraging a more diverse range of commercial uses in Soledad is important, especially increased retail opportunities for day-to-day items such as a grocery store and drug store. Large-scale, single tenant retail and/or smaller scale department stores are also desired, as well as greater variety in restaurants.

- A strong economy is important to the desirable quality of life in Soledad. Industries that provide good paying jobs and economic stability are especially valuable. The City should provide suitable locations for these types of businesses and should consider programs to actively recruit and retain such businesses. Soledad has historically accommodated the commerce and industrial needs of the surrounding agricultural area. These kinds of uses should continue to be encouraged.

- Overcrowding is an important issue facing Soledad residents. The General Plan should ensure that sufficient affordable housing is provided to meet the needs of all income groups.

Public Facilities and Services

- The cemetery is an important part of Soledad's heritage. The General Plan should encourage efforts to upgrade and beautify the cemetery.

- Property maintenance is a problem in parts of Soledad. Sometimes, old cars or other items are left in conspicuous places, marring the aesthetic environment and decreasing property values. Ways to encourage or require property upkeep should be considered in the General Plan; furthermore, the Plan should encourage -- not inhibit -- continued investment in the City's residential and commercial districts. The General Plan should be sensitive to providing adequate facilities and staffing for code enforcement.

- New schools must be provided concurrently or in advance of population growth, and should be incorporated into the design of new residential neighborhoods.

- The General Plan should provide guidance with regard to the appropriate locations for different types of public facilities. Locational criteria may include the relationship of the facility to the neighborhood or area being served, good public access to the buildings or

facility, the interrelationship among different public uses or functions, and the ability of public facilities to stimulate associated private development or investment.

- Better street lighting, road maintenance, storm drainage, curbs, gutters, crosswalks, and sidewalks are needed in the older parts of town.

- Accessibility to public facilities is important. Accordingly, access for handicapped persons should be provided in all public facilities. In addition, the City should continue to require new development to meet accessibility standards when reviewing and approving projects and should monitor and enforce such requirements.

Recreation

- Soledad's population is diverse, and within that diversity there remains an atmosphere of friendliness and cooperation toward the common good. This is based on a number of important factors including good schools and recreational programs for youth, active service clubs and churches, and civic involvement. The General Plan should reinforce efforts to maintain this neighborliness in a true community.

- The City can also foster this valued sense of community by providing opportunities for social activities and interaction, through parks and recreational facilities, public open spaces and plazas, and by supporting community festivities and events.

- The quality of life for all residents is critically important, but enhancing the opportunities for the community's children is especially so. The General Plan should help address the needs of Soledad's youth. Examples can include coordinated City/school district planning for schools and related educational facilities; providing for adequate parks and recreational programs; encouraging a wider variety of activities for youths; planning for safe and efficient transit.

- Expanding the range of family oriented recreational facilities will be important; many people would like to see, for example, a golf course and bike trails.

Wastewater Treatment and Disposal Master Plan

- To remedy existing and long-term wastewater collection, treatment, and disposal deficiencies.

- To provide wastewater system capacity necessary to accommodate the continued development of the City as envisioned by the draft General Plan.

General Plan Alternatives

Alternative A: No Project.

This alternative is required by CEQA and would constitute the continued growth and development of the City in accordance with the 1994 General Plan. All of the impacts associated with traffic, air quality, noise, public services, and other impacts would be considerably less under the No Project alternative.

Findings:

The certified final EIR for the 1994 General Plan provides an estimate of impacts associated with buildout of the City, as follows.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 2.68 MGD at buildout of the 1994 Plan, an increase of about 23 percent. To meet this increased demand, the City's well production will need to be expanded as described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. As stated above, the City's wastewater treatment system reached capacity temporarily in the spring of 2005. To accommodate existing and future flows, the City has prepared the Wastewater Treatment and Disposal Master Plan. Buildout of the City under the currently adopted General Plan would increase wastewater flows from about 2.9 MGD to 3.7 MGD (about23 percent). This will involve diverting about 1.1 MGD to disposal leach fields previously operated by the Soledad Valley State Prisons.

Traffic. Motor vehicle traffic is expected to increase at buildout of the remaining land designated for urban development by the 1994 General Plan. Total estimated average daily trips is expected to increase by about 46 percent to around 70,000 total ADT citywide. Recommended roadway improvements funded by development impact fees (see Chapter V.2: Traffic and Circulation) is expected to maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 107 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the 1994 General Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 27 percent from 2005 levels.

This alternative was rejected because:

- It fails to achieve most of the basic objectives of the draft General Plan such as meeting the regional need for affordable housing and achieving a greater measure of balance between jobs and housing that can only be obtained with the designation of more land for job-generating land uses.

Alternative B: The Foothill Plan

Under this alternative, urban development would be concentrated on the less productive agricultural land east of the City and sufficient land in the different land use categories and residential densities would be designated to approximate the amount realized under the draft Plan.. This alternative would preserve the productive agricultural lands to the north of the City limits while achieving a similar amount of housing, commercial, and industrial development. As with the draft Plan, buildout would occur over a 30 to 40 year timeframe.

Findings:

The Foothill Plan alternative preserves the productive agricultural lands to the north of the existing City while achieving most of the basic objectives for housing, commercial, and industrial development as the draft Plan. Development would be more compact but higher in density.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 6.2 MGD at buildout of the Foothill Plan, an increase of about 67 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Foothill Plan would increase wastewater flows from about 2.9 MGD to 8.7 MGD (about 67 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 54,700 by the year 2038, or about 6,000 less than the population accommodated at buildout of the Foothill Plan. To accommodate the added population beyond 2038, the capacity of the treatment system will need to be expanded by about 647,000 gallons per day (about 11 percent).

Traffic. Motor vehicle traffic is expected to increase significantly at buildout of the Foothill Plan. Total estimated average daily trips is expected to increase by about 72 percent to around 134,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 1,596 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Foothill Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 68 percent from 2005 levels.

This alternative was rejected because:

- The Foothill Plan would accommodate a level of development almost twice the population accommodated within the current City limits and the 1994 General Plan, but in a significantly smaller physical area. The resulting development would necessarily be of a form, character and scale completely distinct from the existing developed City which would conflict with City objectives aimed at preserving the historic character of the City.

Alternative C: The Camphora-Gloria Road Plan

This alternative accommodates a similar population and dwelling unit development holding capacity as the draft Plan but preserves more acreage of productive agricultural land by concentrating new development in a smaller area located closer to the existing urban area of the City.

This alternative extends urban development outward from the existing City to Camphora-Gloria Road to the north and toward the foothills to the east, but preserves the productive agricultural lands beyond. An area for an Industrial and service-commercial business park is provided in the area bounded by

Camphora-Gloria Road, Highway 101. As with the draft Plan, buildout would occur over a 30 to 40 year timeframe.

Findings:

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 7.2 MGD at buildout of the Camphora/Gloria Plan, an increase of about 72 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Camphora/Gloria Plan would increase wastewater flows from about 2.9 MGD to 10.2 MGD (about 72 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 54,700 by the year 2038, or about 13,000 less than the population accommodated at buildout of the Camphora-Gloria Plan. To accommodate the added population beyond 2038, the capacity of the treatment system will need to be expanded by about 1.4 million gallons per day (about 23 percent).

Traffic. Motor vehicle traffic is expected to increase significantly at buildout of the Camphora Gloria Plan. Total estimated average daily trips is expected to increase by about 79 percent to around 178,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 2,275 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Camphora-Gloria Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 79 percent from 2005 levels.

This alternative was rejected because:

- The Camphora-Gloria Road Plan would accommodate a level of development more than twice the population accommodated within the current City limits and the 1994 General Plan, but in a significantly smaller physical area. The resulting development would necessarily be of a form, character and scale completely distinct from the existing developed City which would conflict with City objectives aimed at preserving the historic character of the City.

Alternative D: The Twenty Year Plan

Under this alternative, urban development would be limited to the less productive agricultural land east of the City and to the amount of land necessary to serve the City's projected twenty year demand. This alternative would preserve the productive agricultural lands to the north of the City limits while meeting the expected twenty year demand for housing, commercial, and industrial development.

Findings:

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 3.8 MGD at buildout of the Twenty Year Plan, an increase of about 47 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Twenty Year Plan would increase wastewater flows from about 2.9 MGD to 5.5 MGD (about 47 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 34,500 by the year 2025, or about 3,500 more than the population accommodated at buildout of the Twenty Year Plan.

Traffic. Motor vehicle traffic is expected to increase under the Twenty Year Plan. Total estimated average daily trips is expected to increase by about 61 percent to around 95,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about1,000 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Twenty Year Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 50 percent from 2005 levels.

This alternative was rejected because it fails to achieve the following basic objective:

- The General Plan should strive to accommodate a year 2020 population of between 27,000 - 30,000 residents and a population of 57,000 in forty years. However, the 2020 Plan does not meet the objective of the draft Plan in that it not does not provide a long term vision for the future growth of the City and does not afford a sufficient choice to respond to the changing demand for future urban development.

Wastewater Treatment and Disposal Master Plan Alternatives

Alternative F: No Project.

This alternative is required by CEQA and would constitute maintaining the status quo with regard to wastewater treatment and disposal. The No Project alternative would result in the City continuing to exceed the capacity of the wastewater treatment plant with its corresponding impacts to water quality.

Findings:

The capacity of the wastewater treatment system was exceeded in the fall of 2004, leading the City to take a number of emergency measures to correct the problem. The purpose of the Master Plan is to set forth a program of improvements to remedy these existing limitations and to meet the future demand for wastewater treatment associated with buildout of the draft Genera Plan. In the absence of the improvements recommended by the Master Plan, treatment plant disposal capacity will continue to be

exceeded with the resulting jeopardy to surface and groundwater quality and the continuation of a building moratorium.

This alternative was rejected because:

- It fails to achieve the basic objectives of the project by remedying existing and projected deficiencies in the wastewater treatment and would continue to result in a building moratorium.

Alternative G: Disposal of Treated Wastewater Through the Irrigation of Farmland

This alternative would dispose of the treated wastewater through the irrigation of farmland surrounding the treatment plant. In accordance with Section 60304(a) of the California Code of Regulations, the level of treatment afforded by the upgraded treatment plant will meet Title 22, or tertiary treatment standards. This type of wastewater can be used to irrigate a wider variety of crops than secondary treated wastewater; in addition to parks and playgrounds; schoolyards; residential landscaping; and unrestricted access golf courses. Assuming 200 acres of irrigated land per million gallons per day of treated wastewater, it would take up to 1,654 acres of irrigation land to dispose of the treated wastewater at General Plan buildout. However, land application can only occur when the soil and crop conditions are favorable, so treated wastewater must be stored in ponds until it can be used for irrigation. Assuming storage of 50 acres per million gallons per day of treated wastewater, approximately 413 acres of storage ponds would be required for the 8.27 mgd needed for General Plan buildout.

Soledad has approximately 24 acres of irrigated parks and will require as much as 228 acres to provide for the buildout population. Therefore, parks could accept a portion of the treated effluent generated by the expanded wastewater treatment facility. The remaining effluent would need to be used to irrigate farmland. Because Title 22 of the California Code of Regulations restricts irrigation of certain food crops with tertiary treated wastewater, farmers electing to contract with the City to accept treated wastewater for irrigation might need to select other types of crops than they would otherwise choose to grow. Farming of a less economically productive crop could impair the agricultural productivity (i.e., economic productivity) of the farmland. However, because agricultural operations would be allowed to continue, this impact would be considered less than significant.

Most of the land surrounding Soledad (where urban development has not occurred) is comprised of farmland. Those areas not in farmland or urbanization are located within the floodplain and riparian habitat of the Salinas River, or on the hillsides that form the Salinas Valley. Consequently, the construction of new storage ponds would either adversely affect farmland or natural habitat. The total acreage of land conversion for storage ponds (413 acres) would be somewhat less than the amount of land conversion needed for the proposed infiltration basins (about 469 acres). Therefore, this alternative would reduce the amount of groundwater pumped for irrigation, but would still be expected to result in significant impacts related to farmland conversion (unavoidable impacts), loss of foraging habitat, construction noise, short-term construction-related emissions, and odors. These impacts would be somewhat less than with the exclusive use of infiltration basins.

This alternative was rejected as infeasible because it would only be viable during times when soil and crop conditions were favorable (eg, during the non-rainy season and when crops were sufficiently in need of watering).

Alternative H: Disposal of Treated Wastewater Through Direct Discharge to the Salinas River

This alternative would result in the disposal of treated wastewater through direct discharge to the Salinas River. The Waste Discharge Requirements (WDRs; Order No. R3-2005-0074; adopted May 13, 2005) for the City's wastewater treatment facility does not authorize river discharge. The City's wastewater treatment plant, therefore, relies on rapid infiltration ponds. Ponds require large surface areas to provide optimal interface with the atmosphere (for evaporation) and the earth (for percolation). No storage ponds would be required if all effluent is discharged to surface water. A hybrid approach might also include evaporation/ percolation ponds for disposal when river flows are low, and dilution of effluent is reduced.

Approximately 469 acres of additional land for infiltration ponds would be needed for General Plan buildout. Construction of the ponds would result in significant impacts related to farmland conversion (unavoidable impacts), loss of foraging habitat, short-term construction-related emissions, and odors. No new storage ponds would be required if all of the treated effluent were discharged to the river, but they would be required if river disposal occurs seasonally. River disposal would require discharge pipes (i.e., outfalls) to the river. It is conceivable that new outfalls could be constructed in a manner that would minimize or avoid impacts to the floodplain and to riparian habitat supported by the Salinas River, such as using a jack-and-bore construction method. It is also conceivable, that mitigation measures could reduce potentially significant impacts related to outfall construction (e.g., vegetation removal, erosion/sedimentation, loss of foraging habitat) to a less-than-significant level.

Because this type of system would discharge effluent directly into the Salinas River, under the current regulatory environment for new discharges, it is likely the City's wastewater treatment facility would require upgrading to tertiary treatment. Pursuant to the federal Clean Water Act, the State of California has placed the portion of the Salinas River from its mouth to the Gonzales Road crossing on the 303(d) list as a waterbody whose beneficial uses are impaired by certain pollutants (e.g., fecal coliform and nutrients). Tertiary-treated wastewat'er generally has very low concentrations of these pollutants. Thus, in some instances, river discharge of high-quality tertiary effluent can result in a localized improvement in certain water quality parameters through dilution. In other instances, river discharge can reduce the quality of fish habitat by increasing water temperatures and slightly decreasing dissolved oxygen concentrations. Wastewater treatment facilities can likely include treatment features to reduce water quality impacts from discharged effluent to a less-than-significant level.

This alternative was rejected as infeasible because, although technology is expected to be available to reduce the impacts of river discharge to a less-than-significant level, the Regional Water Quality Control Board (RWQCB) is currently developing Total Maximum Daily Load (TMDL) limitations for several pollutants in the Salinas River. Obtaining NPDES permit for river discharge during RWQCB's development of the TMDL plan would infeasible.

Alternative I: Provide Disposal Capacity for Twenty Year Development

The draft 2004 General Plan represents a long-term vision for the growth and development of the City of Soledad, as discussed in the Project Description. The impacts of providing disposal capacity for the full buildout of the City as contemplated by the draft Plan are discussed in the topical sections of this DEIR.

One way to reduce the magnitude of potential impacts associated with the development of disposal capacity is to provide capacity for a twenty year development horizon. The wastewater disposal capacity needed to serve the twenty year population/development would be about 179 additional acres of rapid infiltration basins, versus 469 additional acres for full buildout. This alternative would reduce the near-term impacts relating to the permanent conversion of productive farmland, but would still result in significant and unavoidable impacts. In addition, construction related impacts associated with noise,

erosion, air quality and the loss of potential foraging habitat would remain but would be less than for full buildout.

This alternative was rejected because it fails to provide sufficient wastewater treatment capacity to accommodate buildout of the draft General Plan.

Environmentally Superior Alternative

General Plan Alternative

The No Project alternative is considered the environmentally superior alternative.

The State CEQA Guidelines state that when the No Project alternative is found to be environmentally superior, the next most environmentally superior alternative is determined to be the Environmentally Superior alternative for CEQA purposes. The next most environmentally superior alternative is Alternative D, The Twenty Year Plan.

Wastewater Treatment and Disposal Master Plan Alternative

The River Disposal alternative is considered the environmentally superior alternative. However, given the regulatory constraints associated with disposing Title 22 wastewater to the Salinas River, this alternative is considered infeasible at present.

The next most environmentally superior alternative is the Twenty Year Plan, which is considered the Environmentally Superior alternative for CEQA purposes.

XI. Mitigation Monitoring And Reporting Program

Section 21081.6 of the Public Resources Code requires that when a public agency is making findings required by State CEQA Guidelines Section 15091(a)(1), codified as Section 21081(a) of the Public Resources Code, the public agency shall adopt a reporting or monitoring program for the changes to the proposed project which it has adopted or made a condition of approval, in order to mitigate or avoid significant effects on the environment.

The City Council of the City of Soledad hereby finds and accepts that the Mitigation Monitoring Program for the 2004 General Plan and Wastewater Treatment and Disposal Master Plan FEIR which follows, meets the requirements of Section 21081.6 of the Public Resources Code by providing for the implementation and monitoring of mitigation measures intended to mitigate potential environmental effects.

The Environmental Impact Report (EIR) for the 2004 Soledad General Plan indicates that the "project" may have significant adverse impacts on the environment. Mitigation measures in the form of policies and implementation programs have been provided which reduce or avoid these significant impacts. The California Environmental Quality Act (public Resources Code 21081.6) requires that for mitigation measures proposed within an EIR, a system of ensuring implementation of these measures must be instated. Mitigation measures have been identified under each topic where significant impacts have been found. In the case of the General Plan, the identified mitigation measures for this "project" are the Plan's policies and implementing measures, which were designed to avoid the need for additional mitigation measures. Taken together as an interlocking, interdependent program, the implementation measures outline specific actions that the City shall undertake within the next 20 or more years and constitute those actions that , when fully applied, will lead to implementation of the General Plan while, at the same time, helping to mitigate significant impacts on the environment.

The requirement for a mitigation monitoring or reporting program complements the longstanding requirement that each planning agency provide "an annual report to the legislative body on the status of the plan and progress in its implementation" (Government Code 65400). Thus, the monitoring and reporting requirement may be fulfilled by the City's preparation of its annual report. The annual report should note the status of implementation actions that must be initiated by the City, as a part of the General Plan. For example, the Plan may call for a study to be prepared, an action considered, a program initiated, or an ordinance administered. The annual report must review and examine whether these activities have occurred and should document their progress. Inclusion of a schedule and budget for those activities as a part of the annual report would be useful in ensuring their full implementation.

The annual report shall serve as the primary monitoring program for ensuring that policies and programs of the General Plan are being executed. In this way, the annual report will assist the City in monitoring the progress on the implementation of the General Plan through buildout. The Implementation Programs excerpted from each element of the General Plan and herein made a part of this Mitigation Monitoring Program will serve as a primary basis for review and reporting within the Annual Report. The annual report is also an appropriate arena for considering cumulative development, and determining whether the General Plan holding capacity needs revision as a result of project approvals that significantly affect the citywide or land use designation totals. This DEIR (Draft Environmental Impact Report) was formulated based on the land use totals presented in the project description and alterations of those figures could out-date the analysis contained herein.

Other actions that may not be included in the annual report are more general in nature but are also considered mitigation measures. These actions may include current policies already being implemented

which do not require the designation, updating, preparation, identification, establishment of, or amendments to certain issues listed in the General Plan Implementation Measures.

It should be noted that as new developments are proposed within the Planning Area, the City can use the policies adopted in the General Plan to mitigate significant impacts on the environment caused by those projects. If the City feels that additional studies are needed for individual projects, then such studies can be required at the developer's cost. The City can also use the information in these additional studies to expand the database of information contained in the EIR.

Project approvals and site specific environmental studies may also serve as useful information in preparing the annual report on the implementation of the General Plan.

City *of* Soledad General Plan

&

Wastewater Treatment and Disposal Master Plan

Draft Environmental Impact Report

June 22, 2005

SCH # 2005032122

Prepared By:

Crawford
Multari &
Clark
ASSOCIATES

Table Of Contents

Chapter	Page
I. Introduction	I-1
II. Summary of DEIR Findings and Recommendations	II-1
III. Project Description	III-1
IV. Assumptions and Development Estimates	IV-1
V. Environmental Impacts and Mitigation Measures	IV-1
V.1 Public Services	V.1-1
V.2 Traffic and Circulation	V.2-1
V.3 Air Quality	V.3-1
V.4 Noise	V.4-1
V.5 Geologic Hazards	V.5-1
V.6 Flooding, Drainage and Water Quality	V.6-1
V.7 Biological Resources	V.7-1
V.8 Agricultural Resources	V.8-1
V.9 Visual Resources	V.9-1
V.10 Cultural and Archaeological Resources	V.10-1
V.11 Housing and Population	V.11-1
V.12 Consistency With Adopted Plans and Policies	V.12-1
VI. Alternatives	VI-1
VII. Mandatory CEQA Sections	VII-1
VIII. Document Preparation and Sources	VIII-1
IX. Appendix	IX-1

Tables

Table **Page**

Table II-1: Summary Of Impacts II-6
Table III-1: General Plan Land Use Designations III-7
Table III-2: Summary of Wastewater Disposal Capacity Program III-12
Table IV-1: Building Intensity Standards IV-2
Table IV-2: Existing Land Use Within The Soledad City Limits IV-3
Table IV-3: Summary General Plan Holding Capacity IV-6
Table IV-4: Summary Dwelling Unit Holding Capacity IV-6
Table IV-5: Summary Non-Residential Holding Capacity IV-7
Table V.1-1: Water Budget Salinas Valley Groundwater Basin – Forebay Sub-basin V.1-8
Table V.1-2: Water Use for the City of Soledad V.1-9
Table V.1-3: Water Production Wells and Capacities V.1-10
Table V.1-4: Future Water Demand At Buildout of the Draft Plan V.1-13
Table V.1-5: Comparison of Present and Future Water Demand V.1-14
Table V.1-6: Population Projections Used By MCWRA V.1-16
Table V.1-7: Wastewater Capital Improvements and Costs V.1-27
Table V.1-8: Projection of Future Wastewater Generation V.1-29
Table V.1-9: Reported Crimes in Soledad V.1-38
Table V.1-10: Existing Park and Recreation Facilities Serving Soledad V.1-40
Table V.1-11: Park and Recreation Facilities Recommended By the 1993 General Plan V.1-42
Table V.1-12: Factors for Determining Number of School-Age Children V.1-46
Table V.1-13: Estimate of School-Aged Children At Buildout V.1-47
Table V.1-14: Projected Student Population vs. Existing School Capacity V.1-47
Table V.1-15: Summary of Landfill Capacities V.1-50
Table V.1-16: Residential Solid Waste Generation in Other Monterey County Communities V.151
Table V.1-17: Waste Reduction and Reuse Programs in Soledad (1999) V.1-51
Table V.1-18: Solid Waste Diversion Rate – Soledad V.1-53
Table V.1-19: Estimate of Future Employment Accommodated By General Plan V.1-54
Table V.1-20: Projected Solid Waste Generation At Buildout V.1-54
Table V.1-21: Impacts to Specified Solid Waste Facilities V.1-55
Table V.1-22: Percent of Remaining Solid Waste Capacity V.1-55
Table V.2-1: Roadway Standards and Capacities V.2-4
Table V.2-2: Summary of Levels of Service V.2-4
Table V.2-3: Summary of LOS for Intersections Controlled by Stop Signs V.2-5
Table V.2-4: Existing Roadway Classifications in Soledad V.2-6
Table V.2-5: Existing Level of Service V.2-8
Table V.2-6: Roadway Improvements Funded By Traffic Impact Fees V.2-10
Table V.2-7: Trip Generation: Draft 2004 General Plan V.2-11
Table V.2-8: Buildout Levels of Service V.2-12
Table V.2-9: Buildout Levels of Service on Highway 101 ..... V.2-12
Table V.2:10: Draft Regional Traffic Impact Fees V.2-18
Table V.3-1: Attainment Status Of The North Central Coast Air Basin V.3-7
Table V.3-2: Exceedances Of State 1-Hour Ozone And Federal 8-Hour Ozone Standards V.3-8
Table V.3-3: Population Forecasts For The North Central Coast Air Basin V.3-10
Table V.3-4: Comparison of Total Organic Compounds Emitted in 2004 and At Buildout V.3-11
Table V.4-1: Interior And Exterior Noise Standards V.4-1

Tables (cont'd)

Table **Page**

Table V.4-2: Addition Of Noise Source Sound Levels V.4-5
Table V.4-3: Typical Construction Equipment Noise Levels V.4-9
Table V.4-4: Estimated Noise Levels From Construction V.4-10
Table V.4-5: Existing And Future Noise Levels V.4-11
Table V.6-1: Recommended Drainage Improvements V.6-12
Table V.6-2: Priority Storm Drainage Improvements V.6-13
Table V.7 -1: Classification Schemes for Sensitive Plant and Animal Species V.7-3
Table V.8-1: Soil Classifications In The Soledad General Plan Study Area V.8-2
Table V.8-2:: State Important Farmland Mapping Classifications V.8-3
Table V.8-3: Change In The Acreage Of Prime Agricultural Land 1994-2000 ..... V.8-7
Table V.8-4: Crops Valued At One Hundred Million Dollars In Monterey County, 2002 ..... V.8-8
Table V.8-5: Summary Disposal Capacity Program V.8-9
Table V.9-1: Scenic Variety Classes V.9-2
Table V.9-2: Criteria For Rating Sensitivity Levels V.9-3
Table V.11-1 Adjusted City Of Soledad Fair Share Housing Allocation V.11-3
Table VI-1: The No Project Alternative VI-9
Table VI-2: The Foothill Plan VI-14
Table VI-3: The Camphora-Gloria Plan VI-18
Table VI-4: The Twenty Year Plan VI-20
Table VI-5: The Mitigated Project VI-22
Table VI-6: Comparison Of Alternatives VI-23
Table VI-7: Comparison Of Selected Impacts Of General Plan Alternatives VI-24
Table VI-8: Comparison of Wastewater Treatment and Disposal Alternatives VI-29

Figures

Figure	Page
Figure III-1: Project Location	III-2
Figure III-2: General Plan Area	III-3
Figure III-4: Land Use Diagram	III-6
Figure III-5: Wastewater Master Plan Components	III-13
Figure III-6: Soledad Valley State Prisons Disposal Basins	III-134
Figure III-7: Potential Disposal Sites	III-15
Figure IV-1: Future Population Trends	IV-5
Figure V.1-1: Existing and Planned Public facilities	V.1-2
Figure V.1-2: Groundwater Sub-Basins	V.1-7
Figure V.1-3: Existing Water System Components	V.1-11
Figure V.1-4: Wastewater Treatment Plant	V.1-20
Figure V.1-5: Existing Wastewater Collection System	V.1-24
Figure V.1-6: Existing Wastewater Collection System	V.1-25
Figure V.1-7: Potential Locations for Rapid Infiltration Basins	V.1-34
Figure V.2-1:Road Ssystem Serving Soledad	V.2-7
Figure V.2-2: Study Intersections	V.2-9
Figure V.2-3: Buildout Average Daily Traffic	V.2-14
Figure V.2-4: Recommended Truck Route and Truck By-pass	V.2-19
Figure V.2-5: Recommended Lane Improvements	V.2-20
Figure V.2-6: Recommended Roadway Improvements To Serve Buildout	V.2-21
Figure V.3-1: Population Projections	V.3-9
Figure V.4-1: Common Noises and Their Corresponding Decibel Levels	V.4-3
Figure V.4-2: Acceptable Noise Levels	V.4-4
Figure V.4-3: Noise Contours At Buildout	V.4-12
Figure V.5-1: Major faults in the Soledad Region	V.5-5
Figure V.6-1: Flood Hazard Areas	V.6-3
Figure V.6-2: March 1995 Flooding	V.6-4
Figure V.6-3: Drainage Basins	V.6-5
Figure V.6-4: Existing Storm Drains	V.6-6
FigureV.7-1: Habitat/Vegetation Types	V.7-7
Figure V.8-1: Soil Types	V.8-4
Figure V.8-2: Properties Subject to Williamson Act Contracts	V.8-5
FigureV.9-1: Visual Setting	V.9-5
Figure V.9-2:Visual Setting	V.9-6
Figure V.9-3: Form and Character of Existing Development	V.9-7
Figure V.12-1: Monterey County General Plan Land Use Designations	V.12-8
Figure VI-1: Urban Fabric Diagram	VI-3
Figure VI-2: The Braga/Silva Properties	VI-4
Figure VI-3: Urban Expansion to the South	VI-6
Figure VI-4: Urban Expansion on West Side of the 101 Freeway	VI-7
Figure VI-5: No Project Alternative	VI-10
Figure VI-6: The Foothill Plan	VI-13
Figure VI-7: The Highway 101/Camphora-Gloria Alternative	VI-17
Figure VI-8: The Twenty Year Plan	VI-21
Figure VI-9: Disposal basins of the Soledad Valley State Prisons	VI-28

I. Introduction

Purpose and Legal Authority

This EIR has been prepared in accordance with Section 21000 et seq. of the Public Resources Code (the California Environmental Quality Act, or CEQA) to assess the potential environmental consequences of adoption and implementation of the City of Soledad General Plan and Wastewater Treatment and Disposal Master Plan (Wastewater Master Plan). Adoption of the General Plan and Wastewater Master Plan is considered a "project", and subject to the environmental review requirements specified by the statute because 1) it requires the discretionary approval of the City and 2) it has the potential to result in one or more adverse changes to the physical environment. In such cases CEQA requires that an environmental impact report (EIR) be prepared.

According to Section 15121(a) of the State CEQA Guidelines, the purpose of an EIR is to serve as an informational document that:

> *" . . . will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project . . . "*

To determine if adoption and implementation of the Soledad General Plan and Wastewater Master Plan could adversely affect the environment, an Initial Study was prepared. The Initial Study concluded that the project could result in significant adverse impacts in the following topical areas:

Visual resources	Biological resources	Geologic hazards	Noise	Traffic
Agricultural resources	Cultural resources	Hazards	Population and housing	
Air quality	Public services	Flooding, drainage and water quality		

To better gauge the scope of issues to be evaluated by this EIR, a Notice Of Preparation (NOP) was circulated among agencies and other interested parties asking that they comment on the range of topics to be assessed. The Notice of Preparation and responses to the Notice are attached as Appendix A.

This EIR addresses all topical sections required by CEQA and the CEQA Guidelines. Specific impact topics are analyzed in detail in Chapter V. Each topical analysis includes the following:

- A statement outlining the relevant potential environmental impact issue(s);
- The threshold(s) used to gauge the significance of the impacts identified;
- A description of the environmental and regulatory setting;
- An analysis of potential impacts, and a discussion of the significance of the impact(s);
- The response of the General Plan and Wastewater Treatment and Disposal Master Plan;
- Recommended additional mitigation measures to lessen or avoid the significant impacts identified. And,
- The significance of the impacts after application of the relevant policies, programs and standards;

Alternatives to the project are discussed in Chapter VI, including the "no project" alternative as required by CEQA. Cumulative impacts are assessed in the individual topical analyses provided in Chapter V.

Program EIR

The State CEQA Guidelines provide for a number of different types of EIRs to suit the range of projects and activities that may be considered by the lead agency. This EIR has been prepared as a program EIR which, according to Section 15168, is appropriate when the project consists of:

> *"...a series of actions that can be characterized as one large project and are related in one or more of the following ways:*

- *Geographically,*
- *As logical parts 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."*

A general plan and wastewater treatment and disposal master plan are consistent with these descriptive criteria. The Soledad General Plan is intended to guide land use decisions over the next twenty or more years and will be implemented by a series of programs (actions) taken by the City and others. Likewise, the draft Wastewater Treatment and Disposal Master Plan set forth a series of actions to be implemented over time to remedy existing deficiencies and provide for future development.

Lead, Responsible & Trustee Agencies

The State CEQA Guidelines distinguishes among "Lead, Responsible and Trustee" agencies on the basis of their responsibilities for approving or carrying out certain aspects of a project. The City of Soledad is the Lead Agency and has the primary responsibility for approving and implementing the General Plan and Wastewater Master Plan.

A "Responsible Agency" is an agency other than the Lead Agency withs discretionary approval over the project (or certain aspects of the project). The Monterey County Local Agency Formation Commission (LAFCo) has discretionary approval authority over changes to the City's sphere of influence and will act as a responsible agency pursuant to Section 15381.

Pursuant to Section 15386, trustee agencies for a project include all state agencies having jurisdiction over natural resources affected by project implementation, including the California Department of Fish and Game and the State Water Resources Control Board.

Discretionary Approvals Required

The Soledad General Plan and Wastewater Master Plan will require approvals from the following agencies:

City of Soledad. The City is the agency with primary responsibility for approving and carrying out the project.

Monterey County Local Agency Formation Commission. The outward expansion of the City as contemplated by the draft General Plan will require amendments to the City's sphere of influence. Spheres of influence are adopted and amended by the Local Agency Formation Commission (LAFCo).

Monterey County. To achieve the overall land use objectives articulated in the Draft General Plan, certain agreements will be required among the City, LAFCo and Monterey County.

Regional Water Quality Control Board. The Regional Water Quality Control Board is the regulatory agency charged with the enforcement of laws pertaining to water quality, including the regulation and permitting of wastewater treatment and disposal facilities. Accordingly, improvements to the City's wastewater system as contemplated by the Wastewater Master Plan will require the approval of the Regional Board.

Forecasting, Degree of Specificity and Speculation

The preparation of an EIR on a project such as a general plan necessarily involves some degree of forecasting and speculation. The Guidelines speaks to these issues as follows:

> *15144. Forecasting. Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.*
>
> *15145. Speculation. If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.*
>
> *15146. Degree of Specificity. 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 project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.*
>
> *An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.*

The EIR Process

The steps in the environmental review process for this project, as mandated by CEQA, are summarized below.

Step 1: Notice of Preparation

Immediately after deciding that an EIR is required, the lead agency must distribute a Notice of Preparation (NOP) soliciting input on the scope and content of the EIR. The NOP is sent to all responsible and trustee agencies, and to the State Clearinghouse if more than one State agency is a responsible or trustee agency. The NOP is also sent to any other parties who previously requested such notice in writing. The Notice of Preparation was distributed on March 15, 2005.

Step 2: Draft Environmental Impact Report

The next step is the preparation of a Draft Environmental Impact Report (DEIR). The DEIR provides the public and decision-makers with the initial evaluation of potential environmental impacts of the proposed project. The DEIR must contain at least the following:

Table of contents
Summary
Project description
Environmental setting
Environmental impact analysis
Mitigation measures to reduce significant impacts
An assessment of any irreversible environmental changes
An assessment of growth-inducing impacts
An evaluation of cumulative impacts
A description of effects found not to be significant
A discussion of alternatives, and
References and authors

Step 3: Public Notice and Review of DEIR

The lead agency must notify the public of the availability of the DEIR. The Notice must be posted in the office of the County Clerk for not less than 30 days and must be otherwise noticed in one or more of the following ways:

- Publication in a newspaper of general circulation
- Posting on and off the project site, or
- Direct mailing to owners and occupants of contiguous properties

The Notice must also be sent to any parties who previously requested such notice in writing. The lead agency must also consult with and request comments on the DEIR from responsible and trustee agencies and adjacent cities and counties. When a DEIR is sent to the State Clearinghouse for review and distribution, the public review period for the DEIR shall be not less than 45 days, unless the Clearinghouse approves a shorter

review period (but in no case less than 30 days). A public hearing is not required to consider the DEIR, although in practice most agencies conduct such hearings.

Step 4: Notice of Completion

A Notice of Completion (NOC) states than an EIR has been prepared for a particular project, and states where the DEIR can be reviewed. The lead agency must file a NOC with the State Clearinghouse as soon as it completes the DEIR.

Step 5: Final EIR

A Final EIR (FEIR) contains 1) the Draft EIR, 2) copies of comments received during the public review period, 3) a list of persons and entities commenting and 4) written responses to the comments.

Step 6: Certification of the Final EIR

To approve a project for which an EIR has been prepared, the lead agency must make certain specific findings that 1) the EIR was prepared in accordance with CEQA, 2) that it was presented to the decision-makers, 3) that the decision-makers considered the information contained in the FEIR prior to approving the project 4) that the conclusions of the FEIR represent the independent judgment and analysis of the lead agency and 5) that the FEIR provides factual evidence that links the significant impacts identified with the conclusions reached regarding their significance after mitigation.

For each significant impact identified in the FEIR, the lead agency (and responsible agency) must find, based on substantial evidence in the record, that either 1) the project has been changed to avoid or substantially reduce the magnitude of the impact, 2) changes to the project are within another agency's jurisdiction and such changes have or should be adopted, or 3) specific legal, technological, economic, social, or other considerations make the mitigation measures or project alternatives infeasible. The lead agency may approve a project for which significant and unavoidable adverse impacts have been identified in the FEIR. In such cases findings of overriding considerations must be made by the lead agency which state that the benefits of the project outweigh the significant unavoidable effects.

Step 7: Lead Agency Decision on the Project

Following certification of the FEIR, a lead agency may 1) disapprove a project because of its significant environmental effects, 2) require changes to the project which lessen or avoid the significant effects, or 3) approve the project in spite of its significant environmental effects.

Step 8: Mitigation Monitoring and Reporting Program

When an agency makes findings on significant effects identified in the FEIR, it must adopt a reporting and monitoring program for mitigation measures that were adopted or made conditions of project approval.

Step 9: Notice of Determination

An agency must file a Notice of Determination after deciding to approve a project for which an EIR was prepared. Such a Notice must be filed with the County Clerk and must be posted for 30 days and sent to anyone previously requesting such notice.

Posting of the Notice starts a 30-day statute of limitations on CEQA challenges relating to the adequacy of the FEIR.

II. Summary of DEIR Findings and Recommendations

To aid the public and decision makers in understanding the findings and recommendations of an EIR, Section 15123 of the State CEQA Guidelines requires that a summary be provided which discusses the significant environmental effects and mitigation measures; areas of controversy, and issues to be resolved (if any). Issues left unresolved by an EIR may include such things as choosing among a range of alternatives and/or whether or how to mitigate the significant effects.

The summary that follows is divided into two parts. The first provides a brief synopsis of the project and any areas of controversy known to the Lead Agency (the City of Soledad). The second summarizes the individual and cumulative environmental effects associated with the project along with a summary table listing the impacts and recommended mitigation measures.

Project Synopsis

Project Proponent

City of Soledad
248 Main Street
Soledad, CA

Project Contact:

Don Fleming, Community Development Director

Summary Project Description

The project analyzed by this DEIR is adoption of a comprehensive update of the City of Soledad General Plan and adoption of the Wastewater Treatment and Disposal Master Plan. The Draft General Plan provides for development of additional residential, commercial, industrial and public-quasi-public land uses that would accommodate a non-prison population of 57,000 residents. The Wastewater Treatment and Disposal Master Plan sets forth a program of phased improvements to the City's wastewater collection, treatment and disposal system aimed at remedying existing deficiencies and providing capacity to accommodate buildout of the City as envisioned by the draft General Plan.

Areas of Known Controversy

Areas of known controversy involve uncertainty over the projection of future population to be realized in Soledad over the next twenty years, and the magnitude, direction and extent of future urban development.

Summary of Environmental Impacts and Mitigation Measures

Table II-1 provides a summary of potential environmental impacts that could result from the adoption and implementation of the Soledad General Plan and Wastewater Master Plan. Throughout this DEIR, impacts are categorized according to their level of significance after mitigation measures are implemented. Four categories of impacts are identified:

Class I. Class I impacts are significant and unavoidable. To approve a project with Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding considerations that "...specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...".

Class II. Class II impacts are significant but can be mitigated with measures identified in this EIR or the project description. When approving a project with Class II impacts, the decision makers must make findings that changes or alternatives to the project have been incorporated that lessen the impacts to a less than significant level.

Class III. Class III impacts are adverse but not significant.

Class IV. Beneficial impacts.

Impacts Found to be Less Than Significant

Based on the evidence provided in the project description and initial study, the following impacts were found to be less than significant.

Fire protection for industrial development
Energy consumption related to motor vehicle fuel
Traffic hazards
Demand for public transit
Increase of population in relation to consistency with the Clean Air Plan
Air quality impacts relative to CO hotspots
Impacts related to stationary noise sources and agricultural operations
Impacts to groundwater recharge
Impacts to the beneficial use of groundwater resources
Groundwater quality
Impacts relating to the movement of animal species across the Valley floor
Urbanization impacts (light, glare, and noise) on animal populations
The potential for urban development to hasten the cancellation of Land Conservation Act contracts
Visual impacts of construction storage
Jobs housing balance

Summary of Significant Adverse Impacts

Table II-1 summarizes the environmental impacts that may result from the project.

Summary of Alternatives

The following alternatives are evaluated in Section VI of this EIR:

General Plan Alternatives

Alternative A: No Project.

This alternative is required by CEQA and would constitute the continued growth and development of the City in accordance with the 1994 General Plan. All of the impacts associated with traffic, air quality, noise, public services, and other impacts would be considerably less under the No Project alternative. Conversely, none of the objectives of the project would be realized.

Alternative B: The Foothill Plan

Under this alternative, urban development would be concentrated on the less productive agricultural land east of the City and sufficient land in the different land use categories and residential densities would be designated to approximate the amount realized under the draft Plan.. This alternative would preserve the productive agricultural lands to the north of the City limits while achieving a similar amount of housing, commercial, and industrial development. As with the draft Plan, buildout would occur over a 30 to 40 year timeframe.

Alternative C: The Camphora-Gloria Road Plan

This alternative accommodates a similar population and dwelling unit development holding capacity as the draft Plan but preserves more acreage of productive agricultural land by concentrating new development in a smaller area located closer to the existing urban area of the City.

This alternative extends urban development outward from the existing City to Camphora-Gloria Road to the north and toward the foothills to the east, but preserves the productive agricultural lands beyond. An area for an Industrial and service-commercial business park is provided in the area bounded by Camphora-Gloria Road, Highway 101. As with the draft Plan, buildout would occur over a 30 to 40 year timeframe.

Alternative D: The Twenty Year Plan

Under this alternative, urban development would be limited to the less productive agricultural land east of the City and to the amount of land necessary to serve the City's projected twenty year demand. This alternative would preserve the productive agricultural lands to the north of the City limits while meeting the expected twenty year demand for housing, commercial, and industrial development.

Alternative E: Mitigated Project

The term "mitigated project" means the project as modified by the mitigation measures described in this EIR. As discussed in this program EIR, the project could result in significant and unavoidable adverse impacts relating to the permanent loss of agricultural land, cumulative air quality impacts, visual resources, biological resources, traffic, and water supply.

Wastewater Treatment and Disposal Master Plan Alternatives

Alternative F: No Project.

This alternative is required by CEQA and would constitute maintaining the status quo with regard to wastewater treatment and disposal. The No Project alternative would result in the City continuing to exceed the capacity of the wastewater treatment plant with its corresponding impacts to water quality.

Alternative G: Disposal of Treated Wastewater Through the irrigation of Farmland

This alternative would dispose of the treated wastewater through the irrigation of farmland surrounding the treatment plant. In accordance with Section 60304(a) of the California Code of Regulations, the level of treatment afforded by the upgraded treatment plant will meet Title 22, or tertiary treatment standards. This type of wastewater can be used to irrigate a wider variety of crops than secondary treated wastewater; in addition to parks and playgrounds; schoolyards; residential landscaping; and unrestricted access golf courses. Assuming 200 acres of irrigated land per million gallons per day of treated wastewater, it would take up to 1,654 acres of irrigation land to dispose of the treated wastewater at General Plan buildout. However, land application can only occur when the soil and crop conditions are favorable, so treated wastewater must be stored in ponds until it can be used for irrigation. Assuming storage of 50 acres per million gallons per day of treated wastewater, approximately 413 acres of storage ponds would be required for the 8.27 mgd needed for General Plan buildout.

Alternative H: Disposal of Treated Wastewater Through Direct Discharge to the Salinas River

This alternative would result in the disposal of treated wastewater through direct discharge to the Salinas River. The Waste Discharge Requirements (WDRs; Order No. R3-2005-0074; adopted May 13, 2005) for the City's wastewater treatment facility does not authorize river discharge. The City's wastewater treatment plant, therefore, relies on rapid infiltration ponds. Ponds require large surface areas to provide optimal interface with the atmosphere (for evaporation) and the earth (for percolation). No storage ponds would be required if all effluent is discharged to surface water. A hybrid approach might also include evaporation/ percolation ponds for disposal when river flows are low, and dilution of effluent is reduced.

Alternative I: Provide Disposal Capacity for Twenty Year Development

The draft 2004 General Plan represents a long-term vision for the growth and development of the City of Soledad, as discussed in the Project Description. The impacts of providing disposal capacity for the full buildout of the City as contemplated by the draft Plan are discussed in the topical sections of this DEIR.

One way to reduce the magnitude of potential impacts associated with the development of disposal capacity is to provide capacity for a twenty year development horizon. The wastewater disposal capacity needed to serve the twenty year population/development would be about 179 additional acres of rapid infiltration basins, versus 469 additional acres for full buildout. This alternative would reduce the near-term impacts relating to the permanent conversion of productive farmland, but would still result in significant

and unavoidable impacts. In addition, construction related impacts associated with noise, erosion, air quality and the loss of potential foraging habitat would remain but would be less than for full buildout.

Cumulative Impacts

Each topical section of this DEIR assesses the cumulative impacts associated with reasonably foreseeable projects in the vicinity, recognizing that development activities may be individually limited but cumulatively significant.

Mitigation Monitoring Program

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish mitigation monitoring or reporting programs whenever approval of a project relies upon a mitigated negative declaration or an environmental impact report. The monitoring or reporting program must ensure implementation of the measures being imposed to mitigate or avoid the significant environmental impacts identified in the mitigated negative declaration or EIR.

A mitigation monitoring and reporting program will be prepared at the time the Final EIR is certified which summarizes the recommended mitigation measures, the parties responsible for mitigation implementation by resource topic, the method of monitoring the mitigation and the timeframe for monitoring.

Environmentally Superior Alternative

General Plan Alternative

The discussion in Section VI shows the No Project alternative to be environmentally superior. The Guidelines state that when the No Project alternative is shown to be environmentally superior, the next most environmentally superior alternative is determined to be the environmentally superior alternative for CEQA purposes. The next most environmentally superior alternative is the Twenty Year Plan.

Wastewater Treatment and Disposal Master Plan Alternative

The discussion in Section VI shows the Twenty Year Disposal Plan alternative to be the environmentally superior alternative.

TABLE II-1: SUMMARY OF IMPACTS			
ENVIRONMENTAL ISSUE	**IMPACT**	**POLICY RESPONSE/ MITIGATION MEASURES**	**RESIDUAL EFFECT**
Class I Impacts -- Significant and unavoidable impacts.			
Public Services	Impact PS-1: Water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2	Significant and adverse.
Energy	Impact PS-12: Development accommodated by the draft will increase the demand for electricity within the Plan area and the need for distribution facilities.	Policy H-11, Program 5.11	Significant and adverse.
Traffic and Circulation	Impact T-1: Buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways, streets and intersections serving the City.	Policies T-1 through T-37, Programs 5.1 through 5.24	Significant and adverse.
Air Quality	Impact AQ-2: Motor vehicle trips associated with buildout of the draft Plan will contribute to a cumulative adverse impact on regional air quality.	Policies T-1 through T-37, C/OS-13 through C/OS – 16 Programs 5.2 through 5.11, Programs 5.15, 8.1 through 8.4	Significant and adverse.
Biological Resources	Impact BIO-4: Development accommodated by the draft Plan will increase groundwater withdrawals, which has the potential to diminish in-stream flow along the Salinas River.	Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8	Significant and adverse.
	Impact BIO-7: The permanent loss of 3,500 acres of foraging area for special status animal species would contribute to the cumulative loss of such areas within the Salinas Valley.		Significant and adverse.
Agricultural Resources	Impact A-1: Development of land designated for urban development by the draft Plan, and the development of additional disposal ponds for the wastewater treatment plant, will result in the permanent conversion of about 3,500 acres of land classified Prime and Farmland of Statewide Importance.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Significant and adverse.

TABLE II-1: SUMMARY OF IMPACTS

ENVIRONMENTAL ISSUE	IMPACT	POLICY RESPONSE/ MITIGATION MEASURES	RESIDUAL EFFECT
	Impact A-2:Development of additional rapid infiltration basins as recommended by the draft Wastewater Treatment and Disposal Master Plan will result in the permanent conversion of about 469 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Significant and adverse.
Visual Resources	Impact V-1 Development of the various land uses contemplated by the Draft Plan will alter the visual character and/or quality of the Plan area.	Policies L-3, L-42 through L-52; Policies C/OS-7 through C/OS-9, C/OS-18 Programs 8.7 through 8.9	Significant and adverse.
Class II Impacts -- Significant impacts that can be mitigated to a less than significant level by recommended mitigation measures.			
Public Services	Impact PS-2: Buildout of the area designated for urban development will require the expansion and extension of water storage and distribution infrastructure to accommodate the level of development anticipated.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2	Not significant
	Impact PS-3: The draft Plan designates some 3,500 acres for urban expansion beyond the area currently served by the City's wastewater collection and treatment systems. Serving this area will require considerable expansion of infrastructure capacity for collection, treatment and disposal.		Not significant.
	Impact PS-4: Buildout of the draft Plan will significantly increase the amount of biosolids generated by the wastewater treatment plant which in turn will impact the capacity of licensed disposal facilities. This impact is considered adverse but not significant (Class III).		
	Impact PS-5: Buildout of the City as contemplated by the draft Plan will increase the need for fire fighting personnel and equipment.		Not significant
	Impacts PS-6: Buildout of the draft Plan will require additional fire protection facilities and equipment to maintain an acceptable response time.		Not significant
	Impact PS-8: Buildout of the City as contemplated by the draft Plan will increase the need for police protection personnel and equipment.		Not significant

TABLE II-1: SUMMARY OF IMPACTS			
ENVIRONMENTAL ISSUE	IMPACT	POLICY RESPONSE/ MITIGATION MEASURES	RESIDUAL EFFECT
	Impact PS-9: Buildout of the draft Plan will significantly increase the City's population and the demand for parkland.		Not significant
	Impact PS-11: Buildout of the draft Plan will accommodate about 11,539 additional dwelling units which in turn are expected to generate additional school aged children. The number of new households and associated students will significantly increase the demand for school facilities.		Not significant
	Impact PS-12: Buildout of the draft Plan will result in the generation of additional solid waste which will adversely impact the capacity of landfills serving the City and surrounding cities.		Not significant
Traffic	Impact T-2: Buildout of the land uses recommended by the Draft General Plan will adversely affect the operation and level of service of the two freeway interchanges serving the City.	Policies T-1 through T-37, Programs 5.1 through 5.24	Not significant
Noise	Impact N-1: Noise associated with construction activities may adversely impact nearby noise-sensitive uses.	Policies N-1 through N-5; Programs10.1 and 10.2	Not significant
	Impact N-2: Noise associated with motor vehicle traffic generated by the development of land uses accommodated by the draft Plan will increase, which may result in the exceedence of the standards described in Table V.4-1 adjacent to the roadway.		Not significant
Geologic Hazards	Impacts GEO-1: A major earthquake on the San Andreas faults could produce ground accelerations of 0.15g to 0.7g within the Plan area, resulting in damage to structures and a potential safety hazard to occupants of such structures.	Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2	Not significant
	Impact GEO-2: Portions of the Plan area may be subject to landslides and/or slope failure.		Not significant
	Impact GEO-3: Development activities associated with the various land uses contemplated by the draft Plan have the potential to result in soil erosion.		Not significant
	Impact GEO-4: Construction and renovation activities associated with the Wastewater Master plan could result in erosion and sedimentation.		Not significant

TABLE II-1: SUMMARY OF IMPACTS

ENVIRONMENTAL ISSUE	IMPACT	POLICY RESPONSE/ MITIGATION MEASURES	RESIDUAL EFFECT
Flooding, Drainage and Water Quality	Impact W-1 Buildout of the land uses designated by the draft Plan will increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff, and the potential for erosion and sedimentation in the Salinas River and its tributaries.	Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2	Not significant
	Impact W-2: Heavy metals and other hazardous materials washed from the surface of parking lots and roadways constructed within the Plan area could enter natural drainage courses such as the Salinas River during a rainstorm.		Not significant
	Impact W-3: Construction activities could result in the release of oil, engine fuel and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality.		Not significant
	Impact W-4: Buildout of the land uses designated by the draft Plan may expose people and property to the periodic effects of flooding.		Not significant
Biological Resources	Impact BIO-1: Buildout of the Plan area with urban uses could result in the permanent conversion of 3,500 acres of agricultural land to urban use. This land may provide suitable foraging habitat for certain special status animal species, and uncultivated areas could contain sensitive plant species.	Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8	Not significant
	Impact BIO-2: Construction activities could result in a number of temporary impacts, including, but not limited to, disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.), increased erosion potential, and noise, particularly along the Salinas River and its tributaries, and the foothills.		Not significant
	Impact BIO-3: Urban development in the planning area could adversely impact riparian habitat by increasing impervious surfaces, accelerating erosion and input of sediments and pollutants.		Not significant
Agricultural Resources	Impact A-3: The expansion of urban uses contemplated by the draft Plan will increase the potential for incompatibility between urban uses and agricultural operations.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
Visual Resources	Impact V-3: Development of the various land uses accommodated by the draft Plan will result in additional sources of light and glare. These new sources will be visible from adjoining areas and from the 101 Freeway.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant

TABLE II-1: SUMMARY OF IMPACTS			
ENVIRONMENTAL ISSUE	**IMPACT**	**POLICY RESPONSE/ MITIGATION MEASURES**	**RESIDUAL EFFECT**
	Impact V-4: New urban development could adversely affect the historic character of the City.		Not significant
Cultural Resources	Impact C-1: Development of the land uses contemplated by the draft Plan could unearth or disturb previously undiscovered resources of cultural or historic significance.	Policies L-49, L-52, C/OS-23, C/OS-24, Programs 8.5, 8.9, 8.10	Not significant
	Impact C-2: Development in accordance with the draft Plan could alter the historic character of the City.		Not significant
Class III Impacts -- Impacts that are adverse but not significant.			
Public Services	Impact PS-6: The additional industrial development accommodated by the draft Plan may necessitate specialized fire fighting and hazardous materials equipment to maintain an acceptable level of fire protection.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2	Not significant
	Impact PS-9: Buildout of the draft Plan will significantly increase the City's population and the demand for recreation programs.		Not significant
	Impacts PS-13: Development of the land uses contemplated by the draft Plan will increase motor vehicle use with a corresponding increase in the consumption of motor vehicle fuels.		Not significant
Traffic	Impact T-3: Buildout of the land uses recommended by the Draft General Plan could result in traffic hazards on city streets and intersections.	Policies T-1 through T-37, Programs 5.1 through 5.24	Not significant
	Impact T-4: Buildout of the land uses recommended by the Draft General Plan will significantly contribute to the demand for bicycle and pedestrian facilities in the City's planning area.		Not significant
	Impact T-5: Buildout of the land uses recommended by the Draft General Plan will contribute to the demand for public transit serving the City's planning area.		Not significant
Air Quality	Impact AQ-1: The draft Plan accommodates a considerable increase in the City's population over the next twenty or more years which may hamper efforts to achieve and maintain federal and state air quality standards.	Policies T-1 through T-37, C/OS-13 through C/OS – 16 Programs 5.2 through 5.11, Programs 5.15, 8.1	Not significant

TABLE II-1: SUMMARY OF IMPACTS

ENVIRONMENTAL ISSUE	IMPACT	POLICY RESPONSE/ MITIGATION MEASURES	RESIDUAL EFFECT
	Impact AQ-3: Buildout of the draft Plan will degrade the operation of intersections within the City's Plan area which may lead to CO 'hotspots' where the state or federal standard may be violated.	through 8.4	Not significant
	Impact AQ-4: Expansion of the City's wastewater treatment and disposal capacity as contemplated by the draft Wastewater Treatment and Disposal Master Plan could result in the generation of nuisance odors.		Not significant
Noise	Impact N-3: Buildout of land uses accommodated by the draft Plan will increase the exposure of people to new and existing stationary sources of noise.	Policies N-1 through N-5; Programs10.1 and 10.2	Not significant
	Impact N-4: Noise from ongoing agricultural operations could periodically exceed the City's noise standards for adjacent residences.		Not significant
Flooding, Drainage and Water Quality	Impact W-5: The increase in impervious surfaces could adversely affect groundwater recharge.	Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2	Not significant
	Impact W-6: Improvements contemplated by the draft Wastewater Treatment and Discharge Master Plan and resulting treatment plant expansions could impair groundwater beneficial uses or quality.		Not significant
	Impact W-7: The proposed change in land use at the project area could affect regional groundwater quality.		Not significant
Biological Resources	Impact BIO-5: The conversion of agricultural land to urban uses within the Plan area may restrict the east-west movement of animals from the hills to the west across the Salinas Valley.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
	Impact BIO-6: Buildout of the Plan area with urban uses will result in long-term indirect impacts associated with increased urbanization, including light, noise, pets, traffic, and other effects of increased human presence.		Not significant
Agricultural Resources	Impact A-4: Development of land designated for urban development by the draft Plan may hasten the early cancellation of Land Conservation Act Contract 73-26 and others in the area.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
Visual Resources	Impact V-2: Grading and construction activities and the storage of construction materials may be visible from public vantage points.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant

TABLE II-1: SUMMARY OF IMPACTS			
ENVIRONMENTAL ISSUE	**IMPACT**	**POLICY RESPONSE/ MITIGATION MEASURES**	**RESIDUAL EFFECT**
Housing and Population	Impacts PH-1: Continued development of the City as contemplated by the draft Plan will result in considerable additional housing and population growth which in turn could affect the supply of affordable housing and the relationship between jobs and housing.	Policies L-1 through L-20, L-43, H-1 through H-12, Programs 2.1 through 2.7; 4.1 through 4.23	Not significant

III. Project Description

Project Location

The City of Soledad is located in southern Monterey County about 25 miles south of the City of Salinas in the heart of the fertile Salinas Valley, an agricultural region of Statewide and even national importance. To the east is the Gabilan Range and Pinnacles National Monument. To the west is the Coast Range and the Los Padres National Forest; beyond lies the rugged Big Sur Coast (see Figures III-1, III-2 and III-3).

As of April 2002, the City encompassed approximately 1,200 acres of incorporated territory. A more detailed description of the City's environmental setting is contained in the General Plan Background Report which is incorporated by reference.

Summary of the Draft General Plan, Wastewater Master Plan and Supporting Documents

Draft General Plan

The Soledad General Plan provides for the orderly growth and development of the City for the next twenty or more years. The Plan envisions substantial growth for the City during this timeframe. Complete buildout of the City and its plan area in accordance with this General Plan would accommodate about 57,000 (non-prison) residents. The Plan provides policies and programs to manage the location and pace of new development so that it may be accommodated without financial hardship to the community, and so that the quality of life enjoyed in Soledad is preserved and enhanced. The primary focus of the Plan is to foster a climate conducive for expanded economic development in Soledad, including expanded opportunities for shopping and tourism, the provision of more and better paying jobs, and affordable housing.

The Draft General Plan is divided into the following chapters and sub-chapters, or elements.

Chapter I – Introduction

Chapter II – Community Development

- Land Use Element
- Economic Development Element
- Housing Element
- Circulation Element
- Parks and Recreation Element
- Public Services and Facilities Element

Chapter IV – Natural Resources

- Conservation and Open Space Elements (combined elements)

Chapter V – Hazards

Safety Element

Noise Element

Chapter VI – Implementation

Figure III-1: Project Location

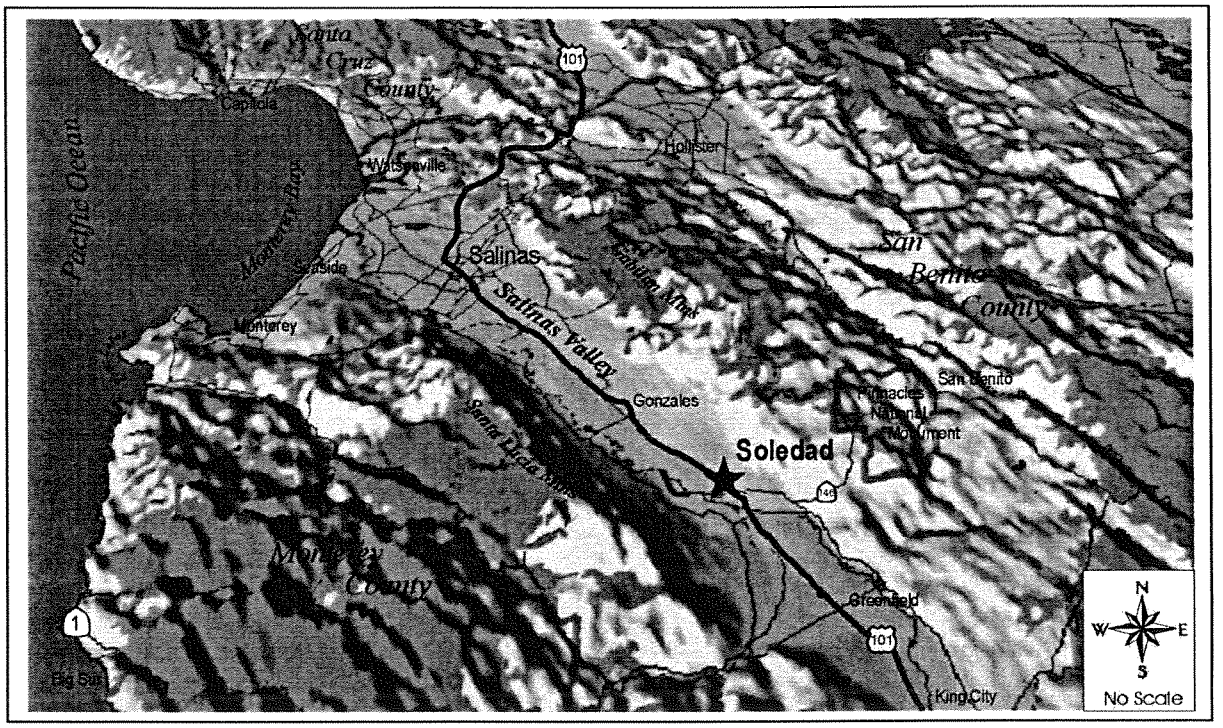


Figure III-2: Soledad General Plan Area

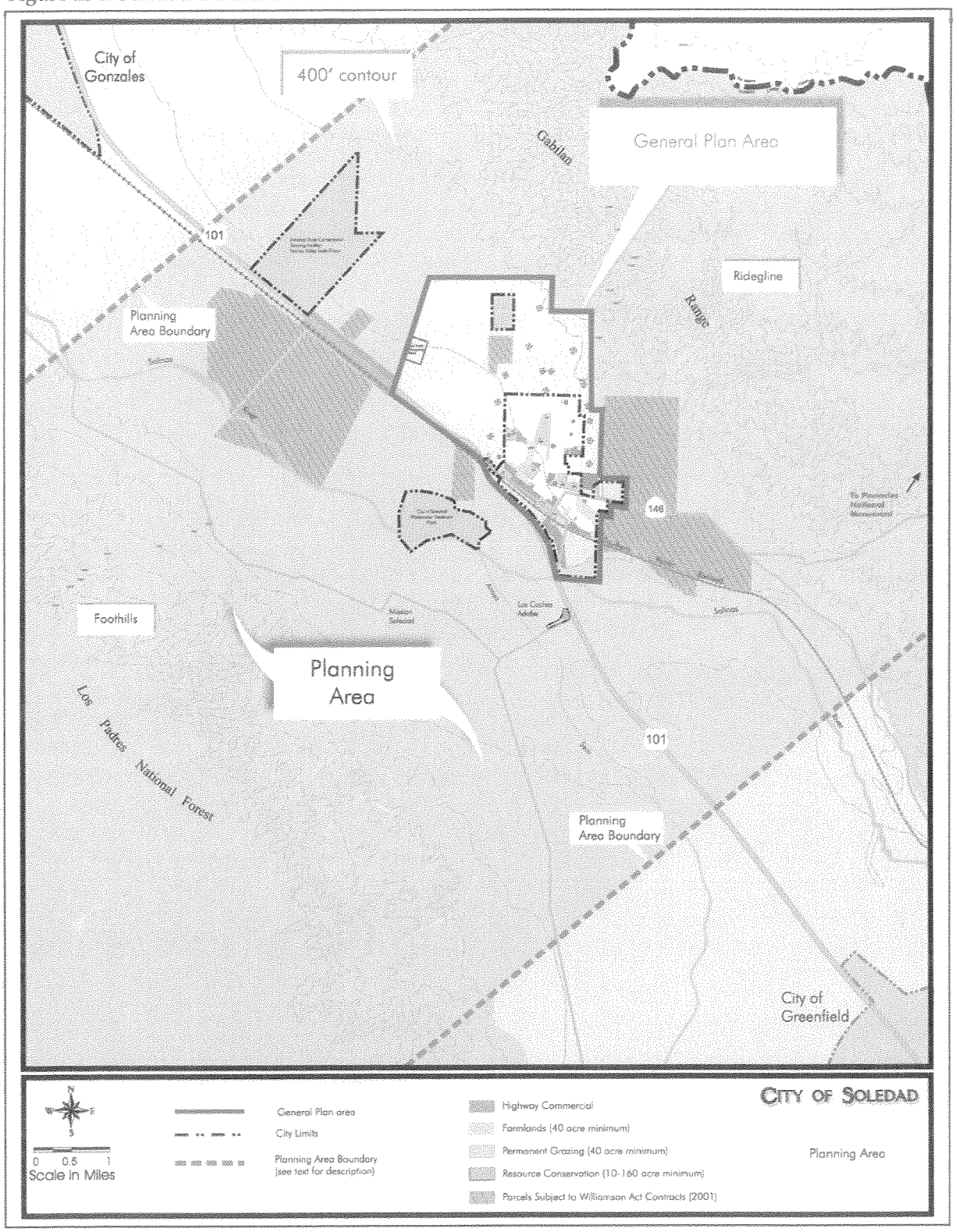
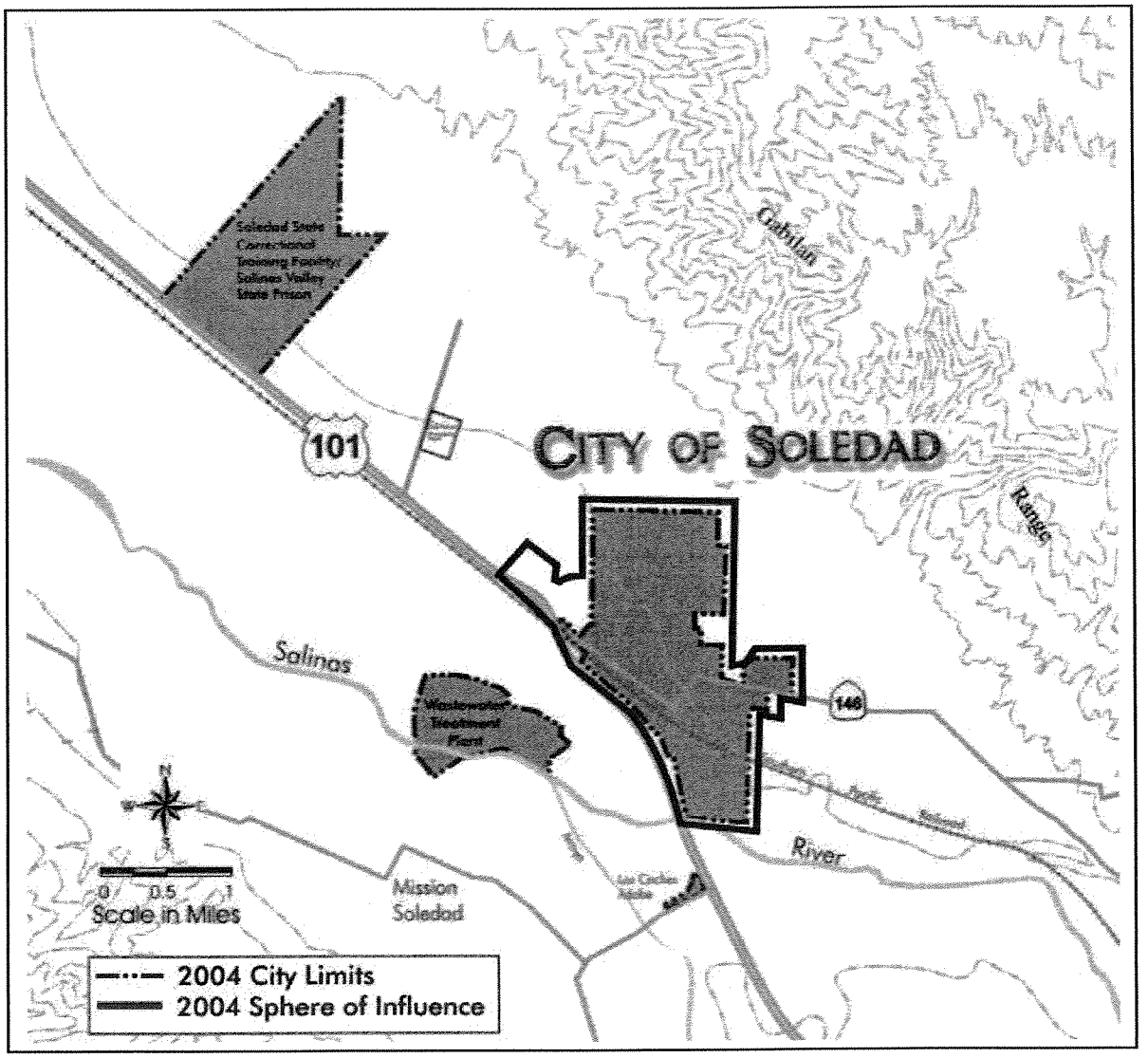


Figure III-3: Adopted Sphere of Influence and Current City Limits



Each element of the Draft Plan sets forth several goal statements relating to different issues or topics to be addressed. The goal statements are followed by a range of policies that amplify the goal statement and present the City's position for decision-making for a particular topic. At the end of the element are several implementation programs that describe briefly the proposed action, the agency or department with primary responsibility for carrying out the program, the time frame for implementation, and a tentative source of funding. The Land Use Element provided in Chapter I contains the Land Use Diagram along a description of the various designations depicted on the diagram, and outlines the standards of population density and building intensity for these designations. The Circulation Element contains the Circulation Diagram along with a description of the roadway classifications applied to the various streets and roads within the planning area.

The following definitions describe the nature of the statements of goals, policies, and programs:

> A **goal** is a desirable future condition or state towards which the community will work to achieve.
>
> **Policies** are statements of the community's position regarding a particular issue that provide guidance for decision-making.
>
> A **program** is an action or series of actions, procedures or techniques that the City will employ or undertake to implement the policies contained in the General Plan.

The following is a brief summary of the individual elements of the Draft General Plan.

Land Use Element

The Land Use Element describes the various uses to which land within the City may be committed, and designates areas where these uses may take place. In this sense, the Land Use Element is the most basic of the elements. It must be closely coordinated with the other elements to provide consistent policy guidance that results in orderly and logical development.

The Land Use Element also contains the Land Use Diagram which prescribes uses for all the land within the City's planning area, as well as standards for development under each designation. The goals, policies and programs contained in the Land Use Element are designed to govern decisions concerning land use, development and environmental protection in Soledad.

The Land Use Diagram (Figure III-4) contains 13 land use designations falling within five general categories as summarized on Table III-1. A complete discussion of the implications of buildout under the Draft General Plan is provided in Chapter V of this DEIR.

Figure III-4: Land Use Diagram

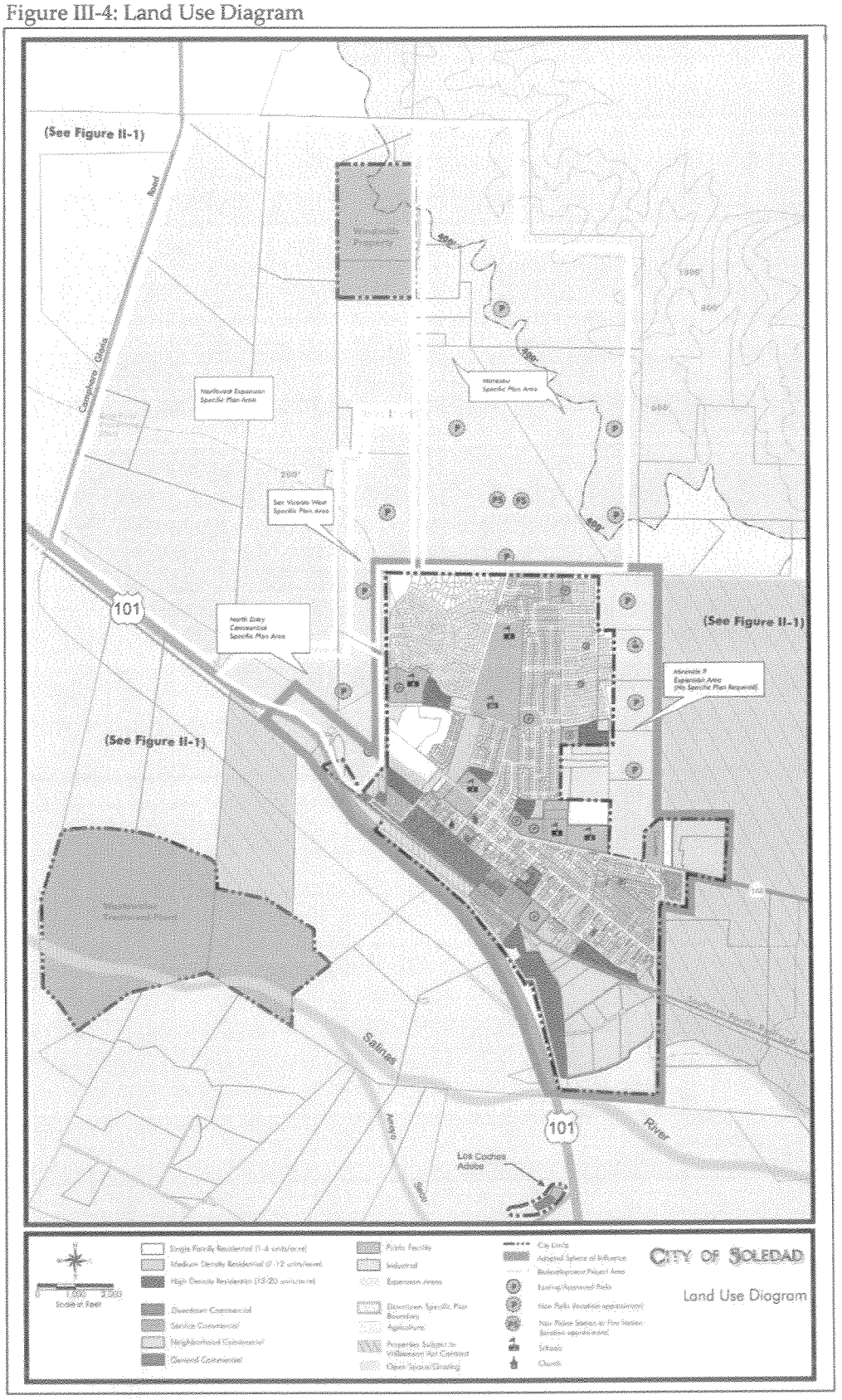


TABLE III-1: GENERAL PLAN LAND USE DESIGNATIONS		
Category	Designations	Acres[2]
Residential	Single Family Residential	1,963
	Medium Density Residential	367
	High Family Residential	119
Sub-Total:		2,449
Commercial	General Commercial	209
	Neighborhood Commercial	36
	Service Commercial	10
	Downtown Commercial	20
Sub-Total:		275
Industrial	Industrial	546
Public[3]	Public Facilities/Parks	707
Resource Protection	Open Space	+/- 500
TOTAL:		4,500

Source: 2004 Draft Soledad General Plan

Notes:

1. CMCA, 2004 Draft General Plan
2. Includes current City limits and areas designated Expansion Area
3. Includes golf course

Its is important that users of the Draft General Plan understand that the goals, policies and programs are as important, if not more so, than the Land Use Diagram in representing the City's land use and development policy. Accordingly, any development proposals or review must consider the policies as whole, rather than focusing on the Land Use Diagram or on particular policies and programs.

The Expansion Area designation is applied to future growth areas which are generally to the east and north of the existing City. Standards contained in General Plan Appendix B are intended to guide the preparation of specific plans so that an appropriate range of land uses, residential densities and product types, and other support uses such as parks and public facilities, are incorporated into new neighborhoods.

Economic Development Element

Policies and programs of the Economic Element are aimed at providing higher waged jobs, expanded business and shopping opportunities, and labor enhancement and training. Although the City continues to pursue a variety of economic development strategies, these efforts have had mixed success to date.

The goals and policies of the Economic Development Element recognize that land use policies and economic vitality are closely linked. Accordingly, encouraging commercial and industrial development is at the root of the General Plan's economic development program.

Housing Element

The Housing Element is subject to specific statutory requirements for periodic review and updates. The City completed its last mandatory update in 1997, and it will be updated again following adoption of the Draft General Plan.

Circulation Element

The General Plan addresses several circulation issues critical to continued development of the City. The Circulation Diagram depicts the circulation system proposed to support development as envisioned by the Land Use Diagram. This circulation system is represented on the diagram as a set of roadway classifications that have been developed to guide Soledad's long range planning and programming.

The Circulation Element provides for the development of improved freeway interchanges at the north and south entrances to the City, and for improved freeway access to the Los Coches Industrial Park. The recommended roadway system favors the use of multiple collector streets over single arterials and promotes neighborhood design that facilitates pedestrian and bicycle modes of travel.

Parks and Recreation Element

As the City continues to grow, the demand for parks and recreation activities will grow accordingly. To meet the open space and recreational needs of the growing population as envisioned by the Draft General Plan, an additional 114 acres of parks will be needed. The Parks and Recreation Element recommends a variety of strategies for the acquisition and development of parkland and the provision of recreation programs and activities to achieve this goal.

Public Services and Facilities Element

As the City continues to grow in accordance with the Draft General Plan, services will need to be increased to accommodate the additional population. The Public Services and Facilities Element establishes goals, policies and programs to insure that the provision of public services and facilities keeps pace with new development, and that present infrastructure inadequacies are remedied. This element also identifies public facilities desired by the residents of Soledad, and discusses strategies to help pay for needed improvements over the time frame of the plan.

Conservation and Open Space Elements (combined)

The natural resources in and around Soledad, including productive agricultural lands; water; vegetation; wildlife; and open space, contribute to the City's economy and are important elements in the quality of Soledad residents. These resources exist in limited quantity and are at risk of destruction or loss through continued urban development. The Draft General Plan seeks to balance the need for growth with the conservation and enhancement of the area's natural resources. The Conservation and Open Space Element addresses preservation of the area's agricultural and other natural resources.

Safety Element and Noise Element

The Safety and Noise Elements contain goals, policies and programs designed to minimize the harmful effects of natural and human-caused hazards. The subjects addressed include seismic and geologic hazards; flood hazards; fires; and emergency response. The Noise Element addresses future noise concerns in Soledad and sets noise standards for new development.

Implementation

This final chapter contains goals, policies and programs designed to ensure that the City of Soledad maintains a high level of attention to the General Plan by providing for routine review and update of the Plan itself and the Background Report and by ensuring that other City regulations and ordinances are consistent with the General Plan.

The General Plan includes four supporting appendices. General Plan Appendix A is the General Plan Background Report (described below) which is incorporated by reference and published separately. Appendix B provides standards for specific plans that may be adopted in advance of the outward expansion of the City. Appendices C and D contain standards for roadways and bicycle paths, respectively.

The Soledad Planning Area

The area covered by the General Plan is often referred to as the City's planning area which includes the incorporated limits as well as "...any land outside its boundaries which in the planning agency's judgment bears a relation to its planning" (Government Code Section 65300) The City's planning area is shown on Figure III-2 and covers an area generally defined by the ridegline of the Gabilan Range to the east and the foothills of the coast range to the west, extending north past the Soledad prison, and to the south about mid-way between Soledad and Greenfield. In addition to identifying areas into which the City plans to eventually grow and provide services, the City's planning area makes an important statement to other jurisdictions -- most notably the County -- regarding the City's expectations for land use surrounding its borders.

The Draft General Plan does not recommend a sphere of influence of urban service area. The Cortese-Knox Act defines a sphere of influence as a "...plan for the probable ultimate physical boundaries and service area of a local agency..." (Government Code Section 56076). In practice "ultimate" is often defined as twenty years. Under Section 56080, a sphere of influence may include an urban service area which identifies portions of a city's sphere of influence where urban services are provided, or where services are expected to be provided during the first five years of an adopted capital improvement program.

General Plan Background Report

The General Plan must be based on a thorough and accurate understanding of the existing conditions in Soledad if the goals of the Plan are ever to be achieved. To provide this basic information, a General Plan Background Report was prepared which covers such diverse topics as the physical characteristics of the City, relating to both the natural and built environments, social and economic characteristics, the type and responsibilities of other government agencies and districts, and the nature of existing government policies, such as those in the previous General Plan. The Background Report is incorporated herein by reference and available for review at the City Planning Department. The Background Report provided critical information about the issues to be addressed by the General Plan, and also provided environmental baseline information for preparation of the General Plan and Wastewater Master Plan Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA).

The information contained in the Background Report, when considered within the context of the planning principles derived from public participation, raised a number of important issues to be resolved by the General Plan. These issues were summarized in a series of Issues and Options Reports which identified the most critical land use issues confronting the City and provided a range of possible General Plan strategies to address them. The Issues and Options Reports were

considered by the Planning Commission and City Council at joint study sessions held in February and May, 2001. The study sessions were also an opportunity to review previous land use decisions and reaffirm the direction the City wanted to take with the General Plan.

By the summer of 2001, a draft General Plan was completed and reviewed by the Planning Commission, which considered various alternatives for the outward expansion of the City. Recommendations from the Planning Commission were forwarded to the City Council for their consideration before adopting the Plan.

Issues Addressed by the General Plan

Among the issues addressed by the General Plan are:

❖ **Managing the Outward Expansion of the City**

By far the greatest amount of time and effort spent in crafting the updated General Plan had to do with how big the City should grow and how to manage this outward expansion in a manner that preserves Soledad's small town character, protects valuable agricultural resources and enables economic expansion and stability.

Defining the future size of the City, both spatially and in population, was the focus of the initial community outreach efforts in preparing the Draft General Plan. Three alternatives were presented to workshop attendees to conceptually illustrate a range of possibilities for the future growth and development of the City. The alternative preferred by workshop participants – which served as the basis for the Draft General Plan – shows future urban expansion to the north and east on less productive agricultural lands and supporting a buildout population of about 27,000 residents (excluding the prisons).

While the preferred land use concept provides an elegant vision for the future growth and development of the City, it raises a number of important questions that must be addressed by the general plan in order for that vision to be realized. For example, how will the competing goals of agricultural preservation and economic development be resolved? The Draft Plan contains policies and programs aimed specifically at these issues.

❖ **Economic Development and Fiscal Stability**

Economic development in Soledad has been studied extensively in recent years as the City has wrestled with ways to maintain an acceptable level of public services in the face of rising costs. To provide some measure of stability in an uncertain economic future, the City needs to diversify and expand its economic base.

Studies have shown that the City could support a retail center of 100,000 square feet or more which would capture a sizeable portion of the "leaked" expenditures. Developers have expressed interest in sites near the two freeway interchanges, and plans for a center have been submitted for property near the southerly interchange on the east side of Front Street. The interest expressed by the development community is encouraging and suggests that Soledad has reached the population threshold where such a center would be viable.

Another area of concern is the generally low pay of existing jobs in town, and the lack of interest in the Los Coches Industrial Park which remains largely vacant. A recent study completed by Applied Development Economics recommends a number of strategies to help revitalize the business park, including re-configuring the size and shape of the lots, adding landscaping along

street frontages and continuing the City's marketing efforts. The City has begun implementing several of the study's recommendations.

The Draft General Plan contains an Economic Development element to provide policies and programs aimed specifically at addressing these concerns.

❖ Affordable Housing

Although the City has experienced unprecedented residential development over the past three years, housing affordable to lower income households -- especially rental housing -- remains scarce. Moreover, the housing that is being constructed may still be unaffordable to single-income households. Data from the State Department of Finance shows that the number of dwelling units in Soledad has risen steadily but the average household size remains high. This may suggest multiple households are pooling their resources to buy housing rather than new families moving to town. As the City continues to grow it is essential that sound, affordable housing be provided to meet the needs of all income groups.

The General Plan Background Report provides an overview of housing conditions in Soledad, including the number and type of dwelling units and the relative "affordability" of for-sale and rental housing. The analysis leads to the following findings:

- There are currently about 2,600 dwelling units in Soledad, including about 1,890 single family detached units, 597 multi-family units and 180 mobile homes. To house a future population of 57,000, the City will need to build between 10,000 – 12,000 additional dwelling units, or between 155 - 240 new units per year for the next twenty years.

- Overcrowding continues to be a major problem. According to the Department of Finance, average household size is about 4.83 persons per dwelling and appears to be growing.

The Government Code requires that the Housing Element be updated every five years. The updated Housing Element, completed in 2003, has been incorporated into the draft Plan and provides additional policy guidance for the development of sound, affordable housing.

Wastewater Treatment and Disposal Master Plan

The Wastewater Treatment and Disposal Master Plan (Wastewater Master Plan) sets forth a phased program for improvements to the City's wastewater collection, treatment and disposal facilities aimed at remedying existing deficiencies and providing for buildout of the City as envisioned by the draft General Plan. The Wastewater Master Plan was prepared in response to investigations into the capacity of the wastewater system conducted in the summer and fall of 2004 which revealed that the system was operating at or near capacity, a condition largely associated with limitations to the capacity of percolation ponds at the wastewater treatment plant.

To remedy these concerns, the City established a temporary building moratorium and immediately authorized preparation of the Wastewater Master Plan to devise near-term and long-term solutions to the City's wastewater capacity problems. The Master Plan is included in its entirety as Appendix C and incorporated herein by reference. The Master Plan recommends a phased approach over the next 5 -7 years to increase treatment capacity to serve continued

development as envisioned by the draft General Plan. These improvements are summarized below:

- Execute an agreement with the State of California and obtain approval from the Regional Water Quality Control Board to rehabilitate the disposal ponds and allow temporary discharge of up to 1.1 million gallons per day at the abandoned wastewater treatment facility for Soledad Valley State Prison;
- Divert part of the prison wastewater flow currently treated by the City to the renovated prison treatment plant to relieve capacity at the City's wastewater treatment plant;
- Implement phased improvements to the City's wastewater treatment plant to improve capacity, including the installation of new or modified aerators, the installation of 5.5 million gallon per day tertiary treatment to meet State Title 22 reclamation standards, acquire additional land adjacent to the treatment plant for use as disposal percolation basins, installation of a system for the use of reclaimed water as landscape irrigation.

In addition to making upgrades to the treatment capacity and quality of resulting effluent from the wastewater treatment plant, the main capacity limitation remedied by the Wastewater Treatment and Disposal Master Plan lies in the disposal of treated effluent. Table III-2 provides a summary of potential disposal capacity associated with the parcels shown on Figure III-7.

TABLE III-2

SUMMARY OF WATEWATER DISPOSAL CAPACITY PROGRAM

Site (see Figure III-7)	Acres	Disposal Capacity (mgd)	Year Completed
City WWTP	104	2.50	2005
Prison Disposal Basins	27	1.00	2005
Parcel A	10	0.20	2006
Highway 101 Landscape Irrigation	2	0.05	2007
Parcel B	100	1.25	2009
Parcel C	40	0.50	2024
Parcel D	35	0.40	2028
Parcel E	50	1.25	2049
Los Coches Adobe Landscaping	5	0.12	2050
Parcel F	50	1.25	>2050
Golf Course	100	0.50	>2050
Prison	50	0.50	>2050
TOTAL:	573	8.27	

Source: Wastewater Treatment and Disposal Master Plan, 2005, Fugro West

Chapter V.1 of this DEIR provides a more comprehensive discussion of the Wastewater Master Plan and its environmental implications.

Figure III-5: Wastewater Master Plan Components

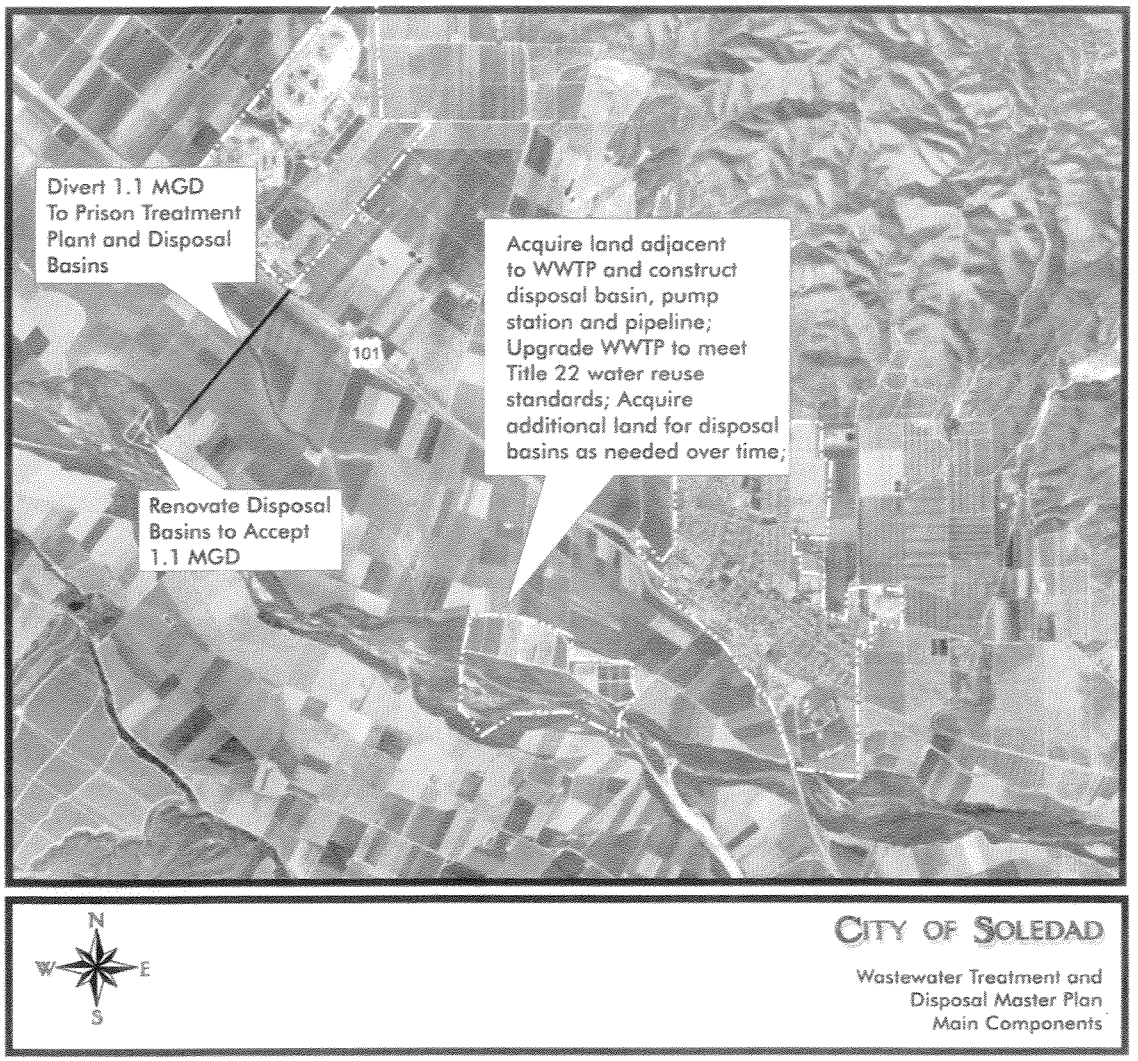


Figure III-6: Soledad Valley State Prisons Disposal Basins

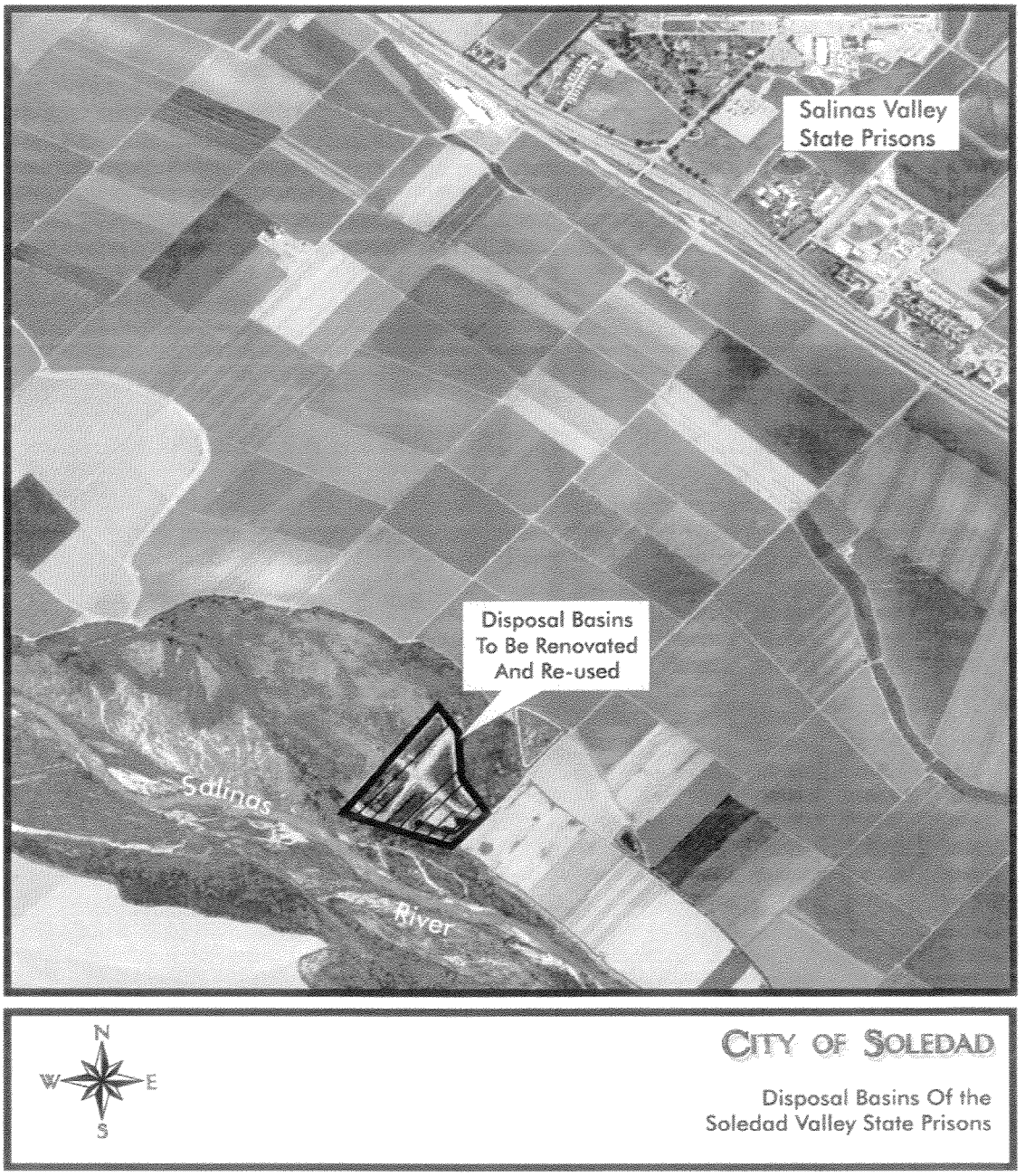
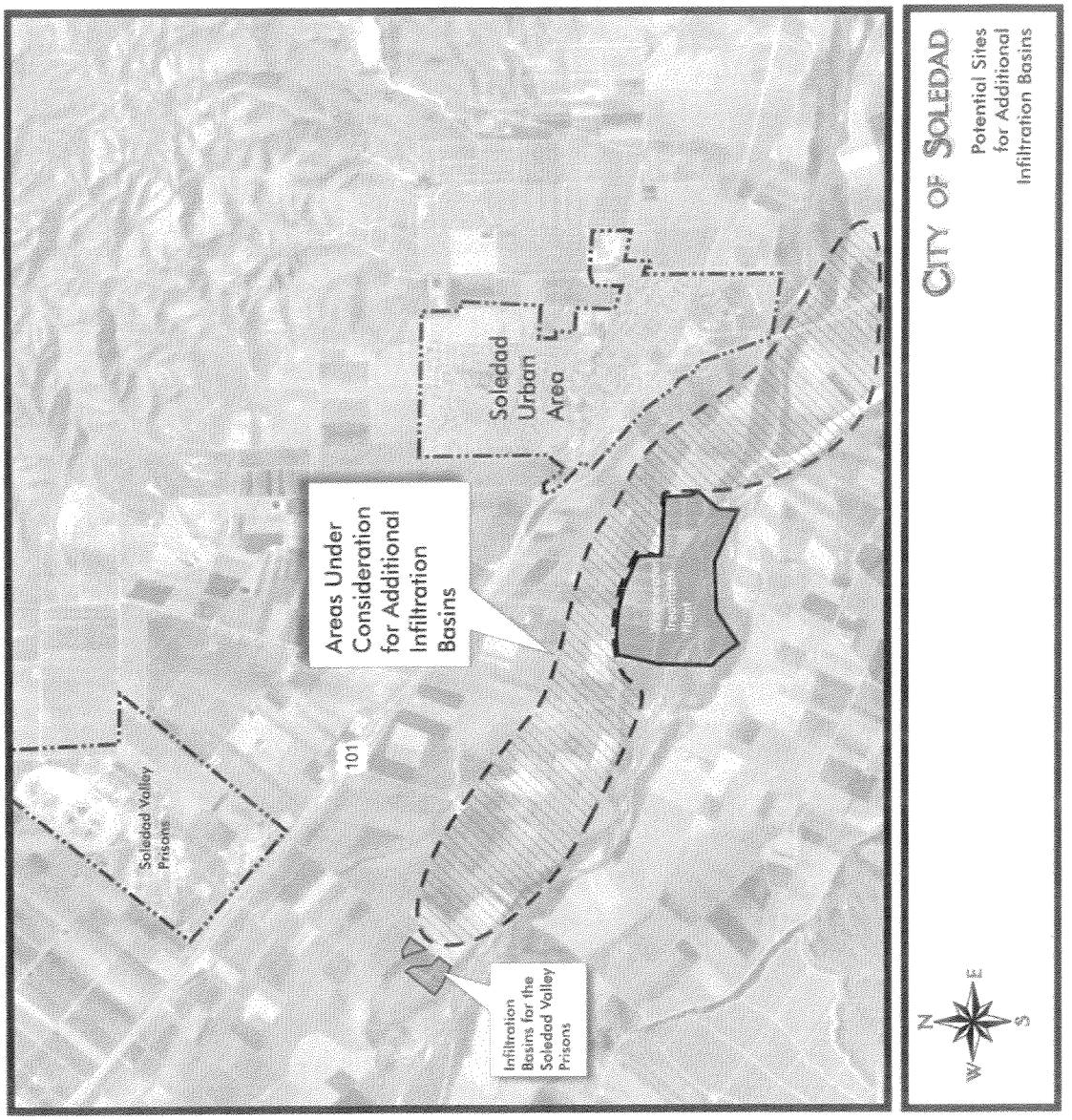


Figure III-7: Potential Disposal Sites



Project Objectives

General Plan

The City has established the following objectives for the Soledad General Plan.

In General

- Soledad's small size and character contribute to a strong sense of community shared by its residents. These characteristics should be protected and enhanced as the City's future is planned.

- Soledad's historical ties to the mission, to agriculture and the railroad should be acknowledged and reflected in plans for the City's future. Examples of how this might occur include the protection and upgrading of historical structures and the use of farming and railroad themes in redevelopment strategies for the downtown.

- The City's proximity to the Pinnacles National Monument, Monterey County's wine industry and the Monterey peninsula is viewed as an important asset. The General Plan should explore ways to capitalize on Soledad's strategic location to these amenities.

Community Form and Design

- The General Plan should strive to accommodate a year 2020 population of between 27,000 - 30,000 residents and a population of 57,000 in forty years. However, the Plan should be far-sighted and mindful of the possibility that factors at the regional, statewide and national levels may cause the City to grow beyond this population.

- The outward expansion of the City's planning area (the areas designated for urban development by the General Plan) should occur on less productive agricultural lands toward the hills rather than along the 101 freeway where the more productive soils are located. New development should be timed and located to maintain the City's compact form.

- The principal entrances to Soledad should be developed with "gateways" which announce that one has entered the City. The gateway feature constructed at the north entrance to the City should be repeated at the south entrance as well. Elements of such gateway treatments can include structures, special landscaping and signs, but should also include litter control to create a pleasing appearance. Improving the appearance of these corridors may involve a cooperative effort with the County. Gateways to the downtown should also be well marked.

- Housing development in Soledad over the past few years has accelerated considerably from previous trends. New residential neighborhoods should be designed to capture the best qualities of existing neighborhoods while providing a range of housing products that are affordable to all segments of the community. New neighborhoods contiguous to the older parts of town should build upon the existing grid pattern of streets and incorporate amenities such as parks, pedestrian and bicycle paths, and street trees.

- The City's climate is generally viewed as favorable, with warm dry summers and mild winters. However, wind blowing down the Salinas Valley is an unavoidable aspect of Soledad's weather pattern. The General Plan should acknowledge these environmental elements and consider them in its recommended policies and programs. For example, the Plan can encourage more shade trees and wind-rows, narrower streets in new residential areas, and the provision of outdoor shelter in new commercial projects.

- Recognizing that the General Plan will eventually become the basis for appropriate zoning to implement land use and design objectives, elements of the Plan should ensure that land uses near one other are compatible and that new buildings fit their context.

Agriculture

- Soledad is surrounded by productive agricultural soils. The farming environment, especially the row crops and vineyards, provide a beautiful rural context for the City that residents and visitors enjoy. Moreover, a good portion of the town's economic base is related to agriculture, both directly and indirectly. Thus, protection of agricultural activities around the City and in the region is an important consideration in planning for the City's future.

- Agricultural activities and residences can impact one another. For example, noise, dust or spraying associated with farming could adversely affect housing; in turn, complaints from residents can sometimes impede efficient cultivation practices. Therefore, the interface or boundary between agriculture and new development must be carefully considered.

Noise, Access, & Traffic

- Soledad has a quiet ambiance which should be protected in the future.

- The City's railroad right-of-way and existing street pattern limit access to land designated for commercial and industrial development at the south entrance to town. Greater access with good, clear connections to the rest of the City should be provided to these areas where possible.

- Truck routes (and truck parking) should be reviewed periodically to fit the changing dynamics of the community; to better control conflicts between trucks and other traffic and to minimize impacts on residential areas.

- In addition to automobile circulation, the General Plan must address other transportation modes such as a bicycle route system and additional transit opportunities to surrounding communities and to the prison.

- The freeway interchanges may need to be re-configured to provide more efficient access to the community.

Economic Development

- While it is important to think expansively about the town's future, the Plan should be practical. An important element of this practicality is the City's financial position.

Therefore, the General Plan should strive toward enhancing Soledad's fiscal resources so that the public facilities and services desired by the community can be paid for.

- Efforts undertaken by the City to revitalize the downtown have had mixed success. As a result, additional work is needed to fully realize the downtown's potential and protect its historic character. In particular, it is important that the downtown cultivate a market niche that protects downtown businesses from competition with commercial development anticipated elsewhere in the City. Increased activities (such as a farmers market and other special events) and more activities in the evening (such as more restaurants and a movie theater) would help solidify the image of the downtown as a desirable place to shop, dine and visit.

- Encouraging a more diverse range of commercial uses in Soledad is important, especially increased retail opportunities for day-to-day items such as a grocery store and drug store. Large-scale, single tenant retail and/or smaller scale department stores are also desired, as well as greater variety in restaurants.

- A strong economy is important to the desirable quality of life in Soledad. Industries that provide good paying jobs and economic stability are especially valuable. The City should provide suitable locations for these types of businesses and should consider programs to actively recruit and retain such businesses. Soledad has historically accommodated the commerce and industrial needs of the surrounding agricultural area. These kinds of uses should continue to be encouraged.

- Overcrowding is an important issue facing Soledad residents. The General Plan should ensure that sufficient affordable housing is provided to meet the needs of all income groups.

Public Facilities and Services

- The cemetery is an important part of Soledad's heritage. The General Plan should encourage efforts to upgrade and beautify the cemetery.

- Property maintenance is a problem in parts of Soledad. Sometimes, old cars or other items are left in conspicuous places, marring the aesthetic environment and decreasing property values. Ways to encourage or require property upkeep should be considered in the General Plan; furthermore, the Plan should encourage -- not inhibit -- continued investment in the City's residential and commercial districts. The General Plan should be sensitive to providing adequate facilities and staffing for code enforcement.

- New schools must be provided concurrently or in advance of population growth, and should be incorporated into the design of new residential neighborhoods.

- The General Plan should provide guidance with regard to the appropriate locations for different types of public facilities. Locational criteria may include the relationship of the facility to the neighborhood or area being served, good public access to the buildings or facility, the interrelationship among different public uses or functions, and the ability of public facilities to stimulate associated private development or investment.

- Better street lighting, road maintenance, storm drainage, curbs, gutters, crosswalks, and sidewalks are needed in the older parts of town.

- Accessibility to public facilities is important. Accordingly, access for handicapped persons should be provided in all public facilities. In addition, the City should continue to require new development to meet accessibility standards when reviewing and approving projects and should monitor and enforce such requirements.

Recreation

- Soledad's population is diverse, and within that diversity there remains an atmosphere of friendliness and cooperation toward the common good. This is based on a number of important factors including good schools and recreational programs for youth, active service clubs and churches, and civic involvement. The General Plan should reinforce efforts to maintain this neighborliness in a true community.

- The City can also foster this valued sense of community by providing opportunities for social activities and interaction, through parks and recreational facilities, public open spaces and plazas, and by supporting community festivities and events.

- The quality of life for all residents is critically important, but enhancing the opportunities for the community's children is especially so. The General Plan should help address the needs of Soledad's youth. Examples can include coordinated City/school district planning for schools and related educational facilities; providing for adequate parks and recreational programs; encouraging a wider variety of activities for youths; planning for safe and efficient transit.

- Expanding the range of family oriented recreational facilities will be important; many people would like to see, for example, a golf course and bike trails.

Wastewater Treatment and Disposal Master Plan

- To remedy existing and long-term wastewater collection, treatment, and disposal deficiencies.

- To provide wastewater system capacity necessary to accommodate the continued development of the City as envisioned by the draft General Plan.

Relation to Other Plans and Policies

Adoption of Implementing Zoning

Subsequent to adopting the new General Plan, the City will revise its zoning district map and ordinance to ensure consistency with new General Plan land use designations.

Sphere of Influence Amendment

Subsequent to adoption pf the draft General Plan, and to carry out its objectives, the City will apply to the Monterey County Local Agency Formation Commission (LAFCo) for a revision to its sphere of influence to denote areas into which the City will extend public services for urban development.

Community Design Guidelines

Another important component of the City's development regulations is a set of design guidelines for new development. The design guidelines are intended to supplement the policy and development guidance provided by the General Plan by describing the City's expectations for the quality and character desired of new development.

Monterey County General Plan

Monterey County is responsible for land use planning outside the City limits. The City and County have agreed to allow the city to review and comment on proposed development within its currently adopted sphere of influence and surrounding areas. The Monterey County General Plan designates the land within the City's planning area primarily for agricultural production. There is also a strip of Highway Commercial land along the 101 freeway north of Camphora Gloria Road to the prisons.

The County General Plan is currently (2005) undergoing a comprehensive revision and is expected to be adopted before the end of 2005. The policy implications of the County General Plan update are discussed in greater detail in Chapter V.12 of this DEIR.

IV. Assumptions and Development Estimates

Geographic Basis for Analysis

As described in Chapter III of this DEIR, the Land Use Diagram designates land uses for the entire Planning Area. The Planning Area is shown on Figure III-2 and covers an area generally defined by the ridgeline of the Gabilan Range to the east and the foothills of the coast range to the west, extending north past the Soledad prison, and to the south about mid-way between Soledad and Greenfield. This area includes the existing city boundaries and sphere of influence, in addition to areas that are recommended to remain in agricultural production as designated by the Monterey County General Plan.

This chapter of the DEIR quantifies existing and projected growth and development that would be accommodated by the Draft General Plan in terms of housing, population, commercial and industrial development, and employment. Projections of future development are based on the application of development assumptions to the land use designations as shown on the Land Use Diagram. Total acreage for each generalized land use category is shown on Table IV-2.

The assumptions used for assessing impacts within the recommended sphere of influence are described below.

Density and Intensity of New Urban Development

In accordance with State law, the Draft General Plan provides standards for the development of residential and non-residential development. Standards for building intensity for residential designations are stated in terms of the maximum number of dwelling units allowed per gross acre and the allowable range of dwelling units per gross acre. Standards for population density for residential land uses are derived by multiplying the maximum number of dwellings allowed per gross acre by the average number of persons per dwelling unit, which for purposes of this General Plan is assumed to be 3.8 based on the 2000 US Census. For example, the maximum population standard for Low Density Residential development is about 6 X 3.8 = 22.8 persons per acre.

For non-residential land uses, building intensity standards are expressed in terms of maximum allowable floor-area ratios (FARs). A floor-area ratio is the ratio of building size to lot area:

$$\text{Floor Area Ratio} = \frac{\text{Maximum Building Area Allowed}}{\text{Net Area of Lot}}$$

The FAR is most often used to determine the maximum allowable building size for a particular lot, as follows:

$$\text{Maximum Building Area Allowed} = \text{Net Area of Lot} \times \text{Floor Area Ratio}$$

For example, a 5,000 square foot lot with a FAR of 1.00 will allow a building of 5,000 gross square feet, regardless of the number of stories in the building (e.g., 2,500 square feet on two floors, or 5,000 square feet on one floor). The same lot with a FAR of 0.50 would allow a 2,500 square foot building, or a 10,000 square foot building with a FAR of 2.00. The illustration below shows how buildings of one, two and four stories could be developed on a lot with a FAR of 1.00.

Table IV-1 lists the standards for the allowable range of dwelling units per gross acre, and the maximum allowable floor-area ratio for non-residential land uses.

TABLE IV-1: BUILDING INTENSITY STANDARDS

Land Use Category	Building Intensity	Assumed Ave. Sq.Ft. Per Employee/ Population Per Acre
Residential		
Single Family	6 units/acre	23 residents/acre
Multi-family	20 units/acre	77 residents/acre
Commercial	FAR* of 0.2	500 Employees/ Acre
Industrial	FAR of 0.3	800 Employees/ Acres
Public/Institutional	FAR of 0.2	

Source: 2004 Draft Soledad General Plan

* Floor Area Ratio (FAR), is the ratio of building area to the area of the lot. For example, a floor area ratio of one on a one acre lot results in a building floor area of 43,560 square feet.

Existing Land Use

Land uses in the City of Soledad fall into five general categories: residential, commercial (including offices), industrial, open space (including agriculture), and public facilities. Table IV-2 details the acreage breakdown for each land use in the City of Soledad.

TABLE IV-2: EXISTING LAND USE WITHIN THE SOLEDAD CITY LIMITS

Land Use Category	Total Acres Within City Limits[3]	Developed Acres[3]	Vacant Acres[3]	Percent Vacant
Residential	736	589	147	20%
Commercial	78	50	28	36%
Industrial	147	50	97	66%
Public and Other	313	313	0	0%
TOTAL:	1,274	1,002	272	21%

Source: City of Soledad and Crawford Multari Clark, 2002.

Notes:

1. The residential land use category includes 16 acres developed with offices.
2. Public facilities include schools, parks, wells and water tanks, churches, post office, and other public/quasi-public uses.
3. Includes rights-of-way.

Residential Land Use

Residential land uses make up the largest single land use category in the City. Existing developed residential acreage is about 589 acres, or approximately 58% of the total developed acreage within the City limits. According to the Housing Element prepared in 2003 there were 142 acres of vacant or underutilized residentially zoned land within the City. Based on allowable densities within each residential zoning district, residential land within the City limits can accommodate about 1,100 additional dwelling units. According to the California Department of Finance, the City had 3,192 dwelling units in January 2004.

Commercial Land Use

Commercial land uses consist primarily of businesses engaged in the sale of goods and services as well as professional and business offices. Commercial uses in Soledad are concentrated in the area bounded by Front Street and Monterey Street and from West Street to Park Street on the south (the downtown). There is additional commercial land along Front Street adjacent to the southerly interchange with Highway 101 that consists of motels and restaurants. Also, the 9.25 acres containing the Los Coches Adobe on Arroyo Seco Road is designated for commercial use.

Existing developed commercial land consist of about 50 total acres. Vacant commercial land totals about 28 acres, of which about twenty acres comprise the Union Pacific Railroad right-of-way property west of Front Street.

Industrial

Industrial land within the City is currently largely vacant and/or underutilized. Two main industrial areas have been designated by the draft Plan. One located north of Metz Road (State Route 146) immediately south and east of the Soledad cemetery is occupied by two wineries. Another, the Los Coches Industrial Park, consists of about 66 acres surrounding Los Coches Road at the south end of the City. Of the 147 or so acres designated for industrial development, about 97 acres remain vacant and available for development. About 50 acres are developed.

Open Space/Wildlife Habitat

A small area within the floodplain of the Salinas River at the south end of the City is designated open space. In addition to being subjected to periodic floods, this area contains valuable riparian habitat for plants and animals.

Public/Institutional/Recreational

Land designated for Public/Institutional and Recreational uses include schools, parks, government offices and facilities and uses associated with public utilities such as the Pacific Gas and Electric Company substation at the corner of Front Street and San Vicente Road.

Agriculture

Recognizing the importance of agriculture to the local and regional economy, the General Plan provides a land use designation for agriculture. Within the City's currently adopted sphere of influence and general plan planning area are lands currently engaged in productive agricultural operations.

Rights-of-Way

The Union Pacific Railroad right-of-way runs through the City of Soledad in a north-south direction that generally parallels Highway 101. To the south of the City, the rail line bends eastward along the east bank of the Salinas River. Through the City the right-of-way varies in width from about 150 feet to as wide as 400 feet along Front Street.

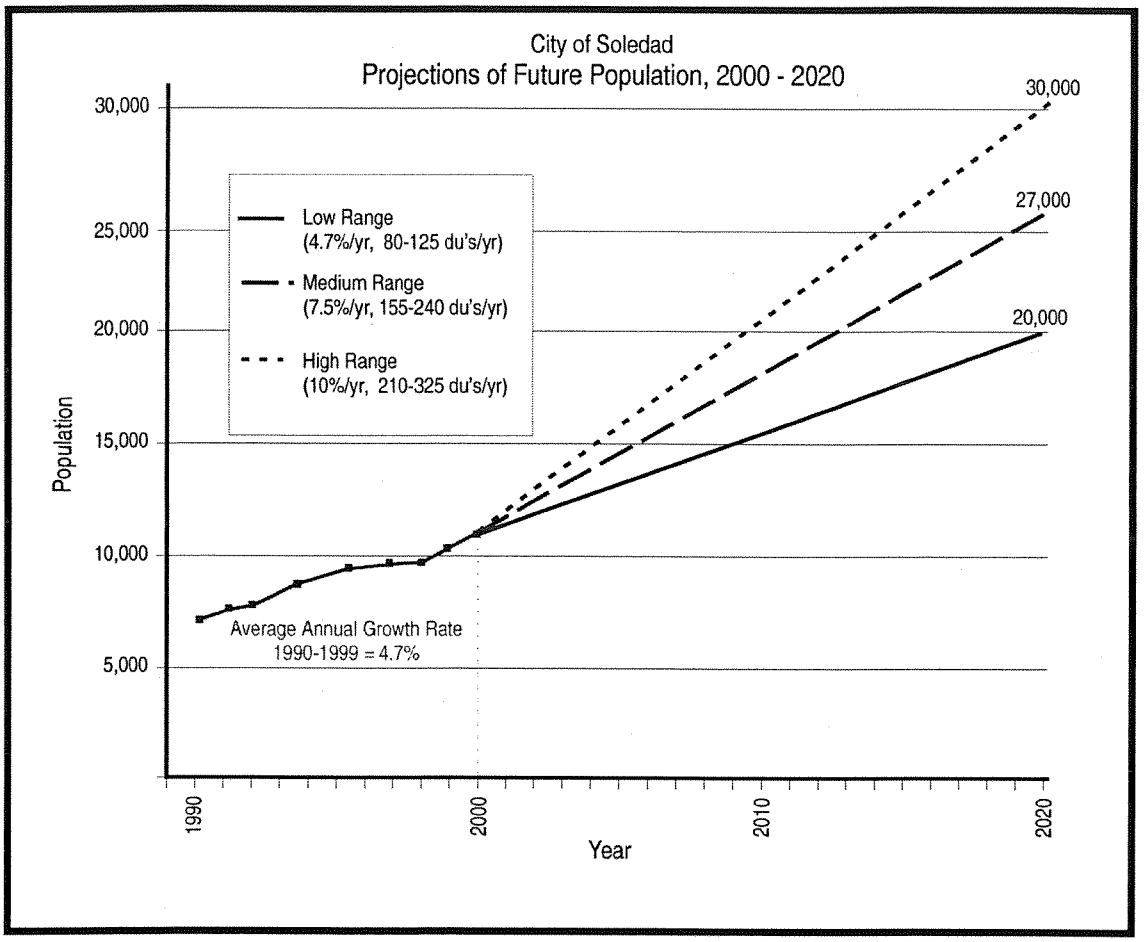
The US Highway 101 right-of-way forms the southerly/westerly boundary of the City north of the Salinas River. The Highway consists of two lanes in each direction, and an interchange with Moranda Road on the north and Front Street on the south.

Development Assumptions and General Plan Holding Capacity

Future Population and the Demand for Land

A general plan must be based on a thorough understanding of future population and the demand for land if the community's vision for the City is ever to be achieved. The 2004 General Plan is based on future population growth as illustrated in Figure IV-1, which provides a Low, Medium and High projection of population growth over the next twenty years. The Plan assumes that the City's population will continue to grow as it has over the past five years, reaching about 28,000 residents in 2020 and eventually growing to 57,000 residents (excluding prison population) in about forty years. Accordingly, the Plan represents a long term vision for the future growth and development of the City.

Figure IV-1: Future Population Trends



General Plan Holding Capacity

Tables IV-3 and IV-4 provide summaries of the residential/population and non-residential General Plan "holding capacities", respectively, which are the number of dwelling units, commercial and industrial floor space, etc., that can be accommodated by applying the building intensity standards provided in Table IV-1 to the acreage designated for these uses. Due to market forces, the size and shape of parcels and other factors, the maximum development potential is rarely achieved. For this reason, holding capacity is expressed as 80 percent of the gross development potential (acres x building intensity). However, the actual buildout population achieved by the general plan will likely be much less because existing residential neighborhoods are developed at densities much less than 80% of their maximum allowable density, and the residential density of new expansion areas will likewise be constrained by slope, irregularly shaped lots and preferences reflected in the marketplace.

TABLE IV-3: SUMMARY GENERAL PLAN HOLDING CAPACITY			
	Existing (2004)	Buildout[1]	Remaining To Buildout
Development			
Dwelling Units	3,192	14,273	11,081
Commercial Floor Area	610,000 sq.ft.	3.3 million sq.ft.	2.7 million sq.ft.
Industrial Floor Area	600,000 sq.ft.	9.5 million sq.ft.	8.9 million sq.ft.
Ratio of Jobs to Housing[2]	1.0	1.8	--
Population			
Non-Prison Population	15,000	57,000	42,000
2000 Prison Population	11,200	11,200	--
Total Population	27,000	68,200	--

Sources: City of Soledad, California Department of Finance and 2004 Draft General Plan

1. 80 percent of maximum potential.
2. Based on one job per 500 square feet of non-residential development

TABLE IV-4: SUMMARY DWELLING UNIT AND POPULATION HOLDING CAPACITY OF 2004 GENERAL PLAN BY EXPANSION AREA			
Portion of Planning Area	Holding Capacity		
	Total Res. Acres	Dwelling Units (80% of Maximum)	Population[1]
City Limits[2]	736	3,847	15,571
Miravale II	186	1,146	4,582
San Vicente West	155	950	3,802
North Entry	39	267	1,069
Mirrasou	383	2,262	9,050
Northwest Expansion Area	950	5,800	23,200
Total At Buildout:	2,449	14,273	57,000[4]
Existing[3]:		3,192	15,000
Remaining To Buildout:		11,081	42,000

Notes

1. Excluding prison population of 11,200.
2. Source: City of Soledad, 2002
3. California Department of Finance, January 2004
4. Total dwelling units X 4.0 persons per dwelling.

TABLE IV-5: SUMMARY NON-RESIDENTIAL HOLDING CAPACITY

Planning Area	Industrial		General Commercial		Neighborhood Commercial		Service Commercial		Downtown Commercial		Public Facilities/Parks	
	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area
City Limits	147	2,543,904	41	500,069	7	85,378	10	121,968	20	243,936	313	N/A
Miravale II					5	60,984					26	N/A
San Vicente West					5	60,984					19	N/A
North Entry			100	1,219,680							7	N/A
Mirrasou					10	121,968					53	N/A
Northwest Expansion Area	400	6,969,600	68	829,382	9	109,771					124	N/A
Total At Buildout:	547	9,513,504	209	2,549,131	36	439,085	10	121,968	20	243,936	542	

V. Environmental Impacts and Mitigation Measures

Issues

Predicting the environmental effects of future development in accordance with the 2004 draft Plan necessarily involves some degree of speculation. This is due in part to the programmatic nature of the project description at the time of preparation of this DEIR. Section 15004 (b) of the CEQA Guidelines states:

> *"Choosing the precise time for CEQA compliance involves a balancing of competing factors. EIRs and Negative Declarations should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment.*
>
> *With public projects, at the earliest feasible time, project sponsors shall incorporate environmental considerations into project conceptualization, design, and planning. CEQA compliance should be completed prior to acquisition of a site for a public project".*

Moreover, Section 15146 of the State CEQA Guidelines states:

> *"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 project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.*
>
> *An EIR on a project such as the adoption of a comprehensive zoning ordinance or a local general plan [such as a Port Master Plan] should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow."*

And lastly, Section 15151 of the CEQA Guidelines states:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

The following topical sections provide analyses of the potential environmental consequences of buildout of the City's general plan area in accordance with the draft Plan based on the level of detail currently available regarding the description of the program for development. Given that a precise description of specific project components and their arrangement are not known at present, the analysis of potential impacts will necessarily be general and focus on the potential range of direct, indirect and cumulative environmental effects.

Throughout the sections that follow, impacts are categorized according to their level of significance after mitigation has been applied. Four categories of impacts are identified:

Class I. Class I impacts are significant and unavoidable. To approve a project resulting in Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding consideration that "... specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...".

Class II. Class II impacts are significant but can be mitigated to a level of insignificance by measures identified in this EIR and the project description. When approving a project with Class II impacts, the decision-makers must make findings that changes or alternatives to the project have been incorporated that reduce the impacts to a less than significant level.

Class III. Class III impacts are adverse but not significant.

Class IV. Beneficial impacts.

V.1 Public Services

Issues

Buildout of the land designated for urban development by the draft Plan will increase the demand for services provided directly by the City, or through contractual arrangements with service providers. These services include libraries, parks, police and fire protection, water supply, wastewater collection and treatment, and solid waste disposal. Development will also increase demand for various sources of energy, including electrical power, natural gas, and motor vehicle fuel. Where services and resources are already insufficient to accommodate demand or where services and resources may become insufficient in the future, impacts of development may be significant.

Implementation of the Wastewater Master Plan is necessary to accommodate the continued development of the City with or without adoption of the draft General Plan. Provisions of the Master Plan will increase treatment capacity which in turn will accommodate additional urban development.

Environmental and Regulatory Setting

The environmental and regulatory settings are provided in each specific topical discussion.

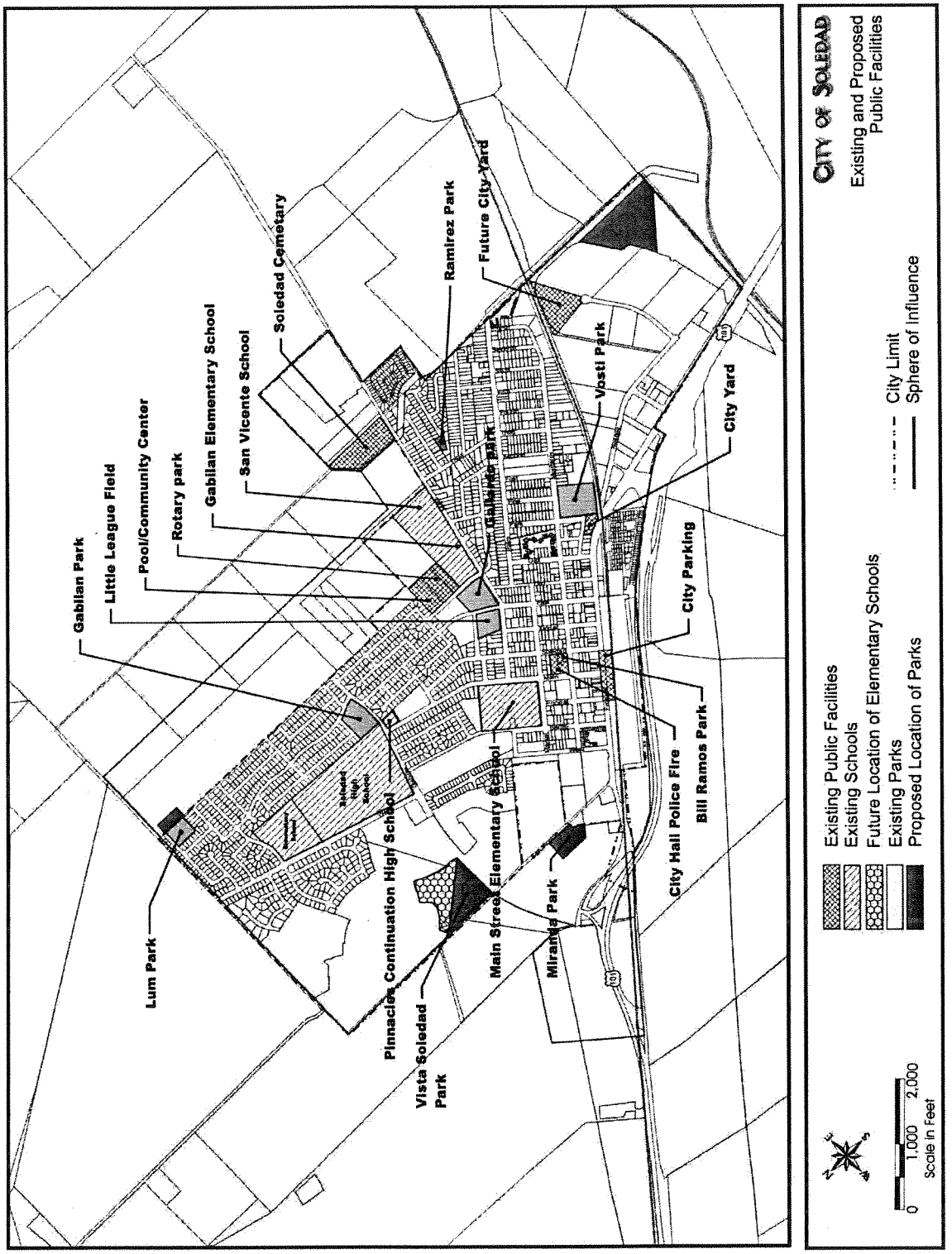
Figure V.1-1 shows the location of existing and proposed public facilities including police, fire, parks and schools.

Thresholds of Significance

The significance criteria for the various topical analyses are provided below. However, the general threshold of significance for public services is as follows:

> *Impacts are considered significant if the demand on any public service exceeds the existing capacity of that service, and therefore requires new or expanded infrastructure, the construction of which may have significant effect on the environment.*

Figure V.1-1: Existing and Planned Public facilities



Water Supply

Issue

Buildout as contemplated by the draft Plan will increase the demand for water provided by the City and require the considerable expansion of water supply and distribution infrastructure.

Thresholds of Significance

The draft Plan could result in a significant adverse impact to water supply if it results in:

- Water usage that exceeds the City's production capacity or that contributes to the overdraft of groundwater resources;
- Water usage that results in inadequate water pressures for fire suppression.

Regulatory Setting

State Regulations

Distribution and Water Rights. Extraction and distribution of groundwater resources is governed by common law and the California constitution rather than a particular agency such as the State Water Resources Control Board, which exercises control over surface water. Rights to extract water from groundwater sources exist in two forms: overlying and appropriative. Overlying rights are those rights held by a property owner to extract and use water within the property boundaries. Appropriative rights are those held by a public entity to extract "surplus" water not used by overlying properties for distribution to customers. Therefore, public agencies, such as cities, that operate their own water systems and pump groundwater, do not exercise overlying rights as their customers do, except for groundwater used on public lands like parks. Public water suppliers depending on groundwater are technically limited to "surplus" water and are subordinate to the needs of overlying users (for example, irrigation needs for private agricultural operations). However, in overdrafted basins, unchallenged pumping by public agencies may establish prescriptive rights against private pumpers in the basin. In that situation, the prescriptive rights of such public agencies supercede the overlying rights of private pumpers. Thus, as land is annexed to the City, the City assumes responsibility for water supply.

Water Quality. The State of California Department of Health Services enforces safe drinking water standards as provided in the California Code of Regulations, Title 22, Division 4, Chapter 15 "Domestic Water Quality and Monitoring." Primary standards are those established to protect public health, while secondary standards are based on consumer acceptability, as the secondary constituents may adversely affect taste, odor or appearance of drinking water.

Water Supply Assessment. Public Resources Code section 21151.9 and Guidelines section 15083.5 establish provisions for the evaluation of the impacts of certain sized projects on public water systems. These provisions apply to residential projects of 500 or more dwellings and/or projects involving commercial development employing 1,000 or more or those that have more than 500,000 square feet. In such cases, the Lead Agency must notify the water agency of the project (usually through the Notice of Preparation for an EIR) and the water agency must prepare and submit an assessment of their ability to meet the projected water demand from the project, in addition to other anticipated future demand. Although development accommodated by the General Plan will exceed these thresholds, a general plan update is not listed as a "project" subject to these analysis requirements. Jurisdictions are, however, encouraged to prepare Urban Water Management Plans to address the impacts of continued development in a community.

In 1983, the California Legislature enacted the *Urban Water Management Planning Act* (Water Code Sections 10610 - 10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act describes the contents of the Urban Water Management Plans as well as how urban water suppliers should adopt and implement the plans. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

Prior to action by a legislative body to adopt or substantially amend a general plan, the planning agency must send a copy of the proposed plan or amendment to any public water system, as defined in Health and Safety Code §4010.1, with 3,000 or more service connections and that serves water to customers within the area covered by the proposal. The public water system has at least 45 days to comment on the proposed plan in accordance with §4010.1(b) and to provide the planning agency with the information set forth in §65958.1. Additionally, upon adoption or amendment of the general plan, the same referral must be made (§65357(a)). The notification requirements were satisfied by the distribution of the Notice of Preparation for this DEIR. The City of Soledad is the water supplier and has fewer than 3,000 metered water services.

According to the Department of Water Resources (Bulletin 118), the Monterey County Water Resources Agency (MCWRA) "requires annual extraction reports from all agricultural and municipal well operators, and have researched, developed, and/or constructed projects to reduce seawater intrusion, manage nitrate contamination in the groundwater, provide adequate water supplies to meet current and future needs, and to hydrologically balance the groundwater basin in the Salinas Valley."

Previous and Ongoing Groundwater Management Efforts

All water users in and around the City of Soledad, including domestic, business and agricultural users, derive their water from the Salinas Valley Groundwater Basin, which underlies the entire Salinas Valley in east-central Monterey County. The Salinas River is the most prominent drainage feature in the Valley. The Salinas flows northward from San Luis Obispo County to Monterey Bay and drains a watershed of over 5,000 square miles. The flow of the Salinas River is managed to address significant water quality problems that were identified as early as the 1940's. The two major concerns were (and remain) seawater intrusion in coastal areas, and nitrates. In 1946, the State Department of Water Resources (DWR) published a Bulletin reporting the problem of seawater intrusion. In response, DWR recommended a system of surface storage and managed ground water storage as a means of maximizing recharge while alleviating the problems of seawater intrusion and nitrate loading. The surface storage component was achieved through the construction of the San Antonio and Nacimiento dams in the upper Salinas River watershed. Operation of the reservoirs benefits nearby sub-basins by raising the level of groundwater and increasing the amount of water in storage, but provides little benefit to subbasins experiencing saltwater intrusion.

The second component of the program, groundwater storage, was not implemented. The Department of Water Resources had envisioned this program as a number of transfer facilities that would move groundwater from areas with excess supply to areas where saltwater intrusion is worsening. However, because the water transfer facilities were not constructed, the extent of detectable seawater intrusion has continued inland over the years, prompting the State to list the

basin as a candidate for adjudication in 1977. Adjudication would have resulted in the State assuming control of the management and distribution of water and water rights within the basin.

The Monterey County Water Resources Agency (MCWRA) began work in the early 1980's to develop a solution to the seawater intrusion problem. By the mid-1990's, the Agency, in partnership with the Monterey Regional Water Pollution Control Agency, had developed the Monterey County Water Recycling Projects (MCWRP). The MCWRP proposed to use recycled water to augment agricultural irrigation needs in the coastal community of Castroville, reducing the reliance on groundwater sources thereby helping to alleviate seawater intrusion. The recycled water program began deliveries in 1998.

In 1996, the State reaffirmed its concern over the problem of saltwater intrusion by beginning adjudication procedures. The State indicated in 1996 that it would only stop adjudication if a solution to the problem of seawater intrusion was developed and implemented, and if a nitrate management plan was developed. The MCWRA responded by initiating a number of actions, including community outreach and investigation into options for seawater and nitrate control.

One of the major outcomes of the efforts in the late 1990s was the Salinas Valley Integrated Ground and Surface Water Model (SVIGSM) and a Historic Benefits Analysis (HBA). The model allowed for detailed analysis of ground and surface water in the basin under various scenarios, while the HBA assessed water use and distribution over time, as well as patterns of contamination. These two tools were used to develop viable alternatives for dealing with the seawater and nitrate problems, eventually resulting in the development of the Salinas Valley Water Project (SVWP), which proposed the following actions (SVWP FEIR, 2002):

- Modify the Nacimiento Spillway
- Alter the operation of the reservoir
- Recharge the Salinas Valley Basin through the altered reservoir operation
- Divert a portion of the Salinas River flow via a surface facility
- Delivery of blended recycled water to agricultural users

An assessment approved by voters in 2003 will fund the proposed improvements. In 2004, implementation of the SVWP is proceeding with design of the spillway modifications and the diversion structure near Monterey Bay, which will be followed by the State and federal permit process. In the mean time, the State has suspended adjudication proceedings.

Environmental Setting

Characteristics of the Groundwater Basin

Geology. The geology underlying the Salinas Valley consists primarily of unconsolidated continental deposits, with groundwater occurring in unconsolidated sediments bound by consolidated rock. Movement along the King City Fault, located along the western side of the Valley, resulted in the deposition of alluvium that thickens towards the west. Over time, the granitic basement rocks in the Valley filled with 10,000 to 15,000 feet of Tertiary and Quaternary marine and terrestrial sediments. The base rock is generally non-water bearing, however, above the consolidated rock formations, water bearing Miocene age Monterey Formations and Pliocene age Purisima Formations are found within the alluvium. A series of historical floods resulted in the deposition of silts along the valley floor, which now support one of the prime agricultural production areas in the nation.

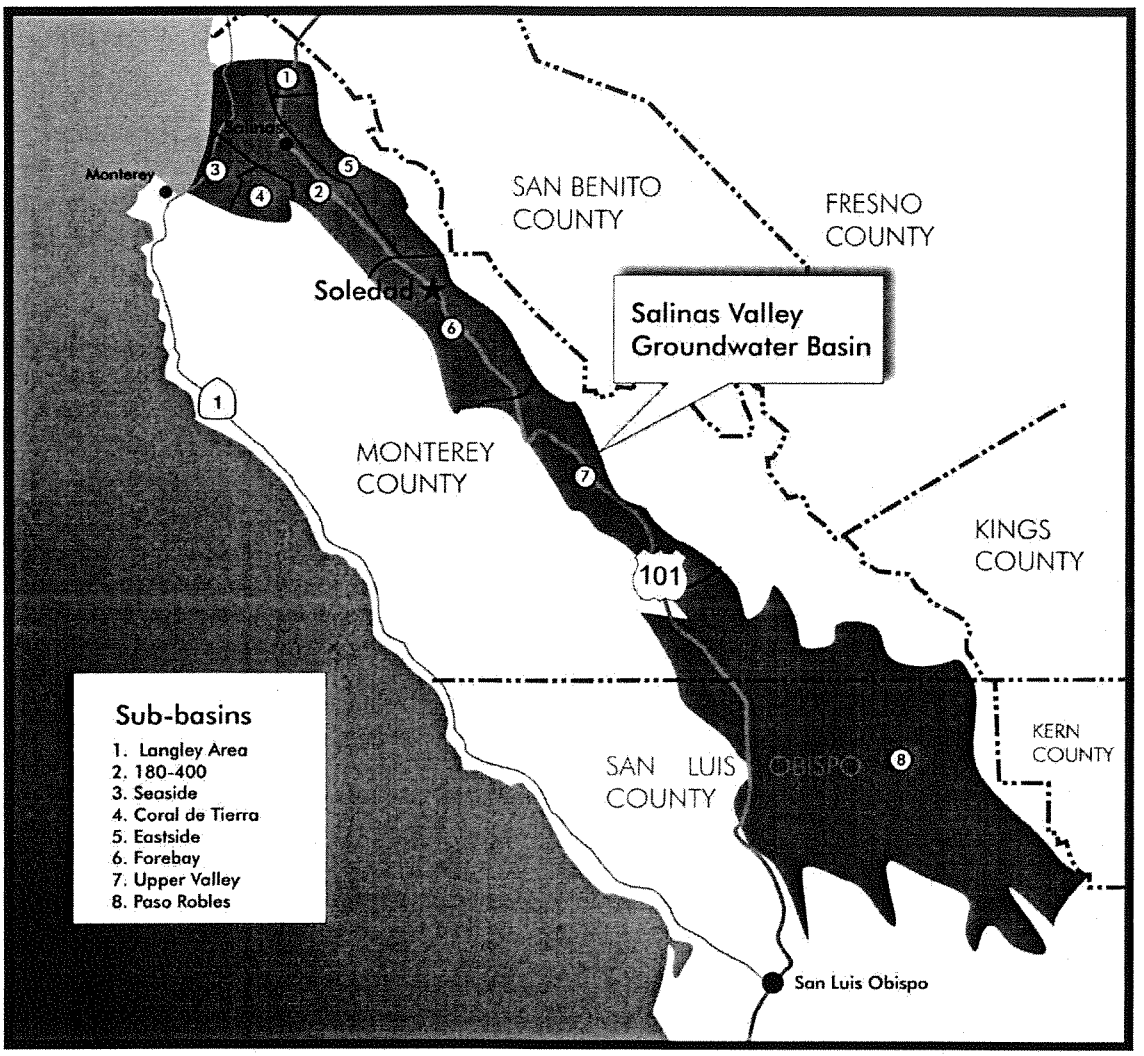
Unlike other portions of the Salinas Groundwater Basin, shallow groundwater in the vicinity of Soledad is not confined by an aquitard. Rather, water is more dispersed in sediments and above unconsolidated clay lenses. However, as with the rest of the basin, Soledad is underlain by a deep aquifer that has not been developed as a water source to date, except to attempt to remedy the saltwater intrusion problem in coastal areas.

The relative paucity of annual rainfall means that precipitation plays only a minor role in the local recharge of the basin, which depends primarily on the surface infiltration of irrigation water, and recharge from the major surface waterways in the area, which include the Salinas and Arroyo Seco Rivers.

Groundwater Sub-basins. The Department of Water Resources describes eight distinct sub-basins within the Salinas Valley Groundwater Basin. According to DWR, the City of Soledad derives its water from the Forebay Aquifer Sub-basin, which underlies an area of some 94,000 acres from Gonzales to just north of Greenfield. Along the southern edge of the sub-basin, the Pancho Rico Formation is water-bearing. Within the Forebay sub-basin, groundwater typically begins at –200 to –2,200 feet.

According to DWR, water agencies with interest in the sub-basin include the Monterey County Water Resources Agency, the City of Soledad, the City of Greenfield, and the Soledad Prison. In addition to public agencies, some 15 or more private small water systems, largely agricultural, are in production.

Figure V.1-2: Groundwater Sub-Basins



CITY OF SOLEDAD

Figure V.1-2:
Groundwater Sub-Basins

Water Supply and Demand

An accurate assessment of current water supply and demand in the Soledad area and the larger Salinas Valley is complicated by the changing pattern of agricultural operations and associated water demand and usage, and by the ongoing management efforts associated with the SVWP.

As discussed above, the City of Soledad derives its water supply from the Forebay Sub-basin of the Salinas Valley Ground Water Basin (see Figure V.1-2). According to DWR, the Sub-basin is functionally in overdraft, with withdrawals exceeding recharge by some 30,000 to 50,000 Acre Feet Per Year[1] (AFY) as summarized in Table V.1-1. It should be noted, however, that groundwater withdrawals basin-wide have declined since the 1970's, in part due to improvements in irrigation practices, and the conversion of irrigated agriculture to urban uses. Crop changes from irrigated row crops to vineyards and grapes have also reduced water demand. The MCWRA projections for 2030 show a 297,000 AFY decrease in ground water withdrawals, factoring in projected increases in urban demand.

TABLE V.1-1: WATER BUDGET (IN AFY)[1]
SALINAS VALLEY GROUNDWATER BASIN – FOREBAY SUB-BASIN

Total Storage Capacity	5,720,000
Estimated 1994 Storage	4,530,000
Natural and Applied Water Recharge	154,000
Subsurface inflow	31,000
Annual Extractions (Urban and Ag)	160,000
Subsurface outflow	20,000

Source: DWR Bulletin 118, February 2004.

Although the Sub-basin is considered functionally in overdraft, the Monterey County General Plan DEIR (2004) cites numerous studies that state there is sufficient water to serve current and future demand throughout the basin. The problem is considered one of distribution. For example, localized problems such as seawater intrusion are not an indication of a supply deficiency but the result of excessive groundwater pumping in the area from Salinas to the Bay. In the Forebay Sub-basin, from which Soledad derives its water supply, water levels and total water in storage have been increasing over time.

In 1999 the City's engineering consultants (Hanna & Brunetti) prepared a Water Impact Fee Study which provides a summary of water use for the City as summarized in Table V.1-2, below.

[1] An acre-foot is about 325,851 gallons

TABLE V.1-2
WATER USE FOR THE CITY OF SOLEDAD
(1999)

Factor	Demand
Average Daily Flow (ADF)	1.37 MGD1
Minimum Monthly Flow	0.75 MGD
Maximum Monthly Flow	1.90 MGD
Average Yearly Per Capita Use	128 gpcpd
Minimum Monthly Per Capita Use	83 gpcpd
Maximum Day Demand	3.4 MGD
Peak Hour Rate of Maximum Day	3,542 gpm2

Source: Hanna and Brunetti, Draft Water Impact Fee Study 1999
1. Million gallons per day.
2. Gallons per minute
3. Does not include water use associated with Salinas Valley State Prisons.

Assuming the per capita water demand has remained constant since 1999, current (2004) water demand by the City can be estimated as follows:

15,000 (non-prison) residents X 128 gallons per day per resident = 2,156 acre-feet per year.

In 2004 about 3,500 acres of the City's General Plan area is used for various agricultural operations, including irrigated row crops. According to the DWR, irrigated pasture, field and truck crops use an average of 1.6 acre-feet per year per acre. Applying this figure to the 3,500 acres of land used for cultivation yields a total annual water demand of about: 3,500 X 1.6 = 5,600 acre-feet per year. Thus, total water use within the City's General Plan area is estimated to be 2,156 + 5,600 = 7,756 AFY.

The estimated 7,756 AFY of groundwater currently extracted from the Forebay Sub-Basin amounts to about 4.8 percent of the total annual withdrawals from the sub-basin for urban and agricultural uses, according to DWR.

City Water Supply and Delivery System

The City of Soledad operates a water supply, storage and distribution system that serves an area of approximately 3.25 square miles. The system serves all water users within the city limits, including residences, commercial and industrial users, as well as fire protection and other public services. Agricultural properties outside of the current City limits rely on private wells and reservoir systems for water supplies. The City does not serve the prison or the Dole processing plant at this time.

The existing water system consists of water production wells, water storage tanks, a water booster pump station, and over 10 miles of water distribution pipelines serving about 2,300 metered water services (see Figure V.1-3). The water system is operated under a permit from the State of California Department of Health Services (DOHS), System Number 2710011 and is considered to be a large water system.

The City's wells utilize line-shaft vertical turbine pumps to remove groundwater and deliver it to the water system. Chlorine solution is injected into the pumped water at each well to provide for residual disinfection. Of the six wells serving the City, two are emergency backup/standby production wells. Water from these two wells has been high in nitrates and has shown very low levels of bromobenzene, an unregulated organic chemical. These two wells have not been used to supply water for over four years and will be retired when additional wells are added to the system.

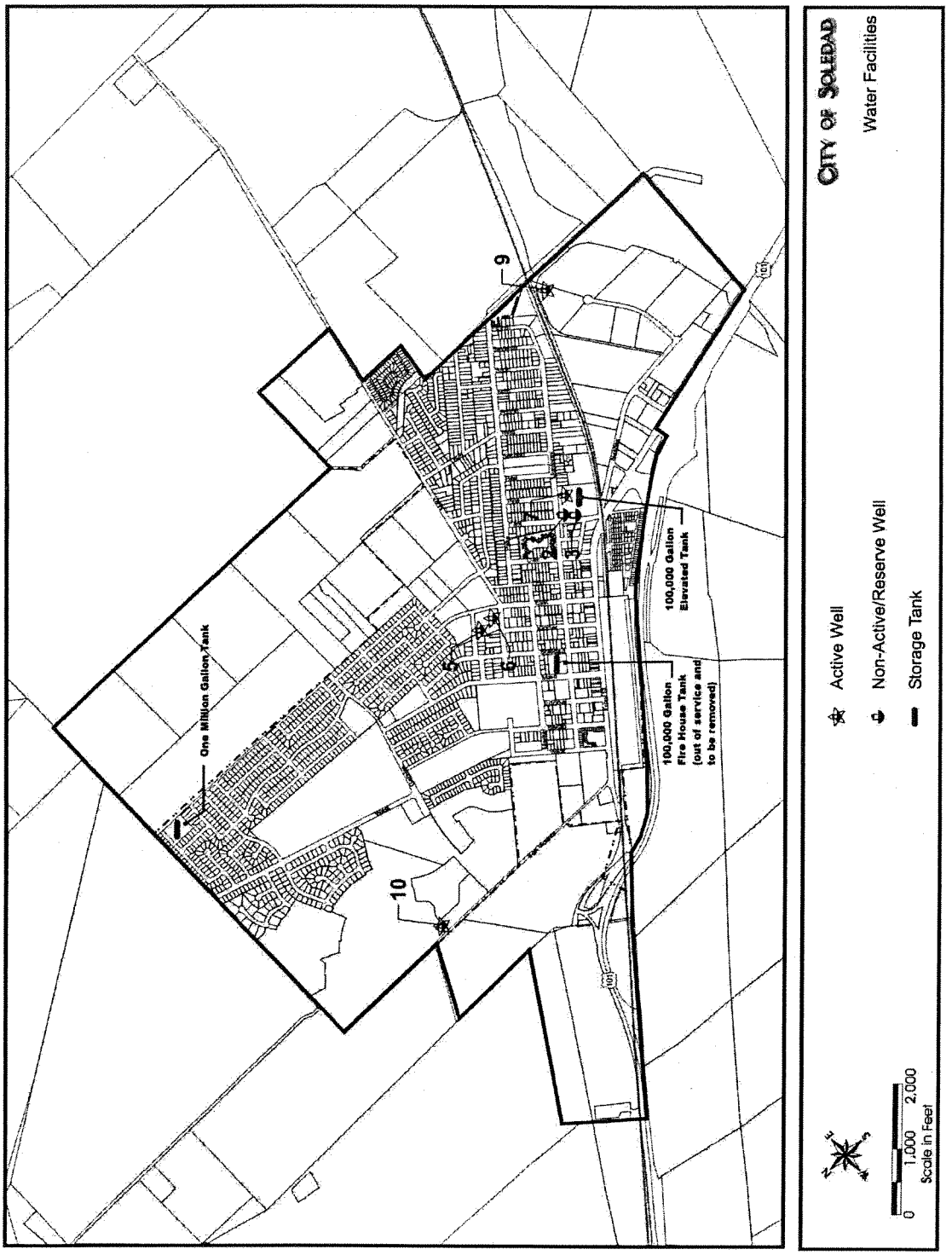
TABLE V.1-3: WATER PRODUCTION WELLS AND CAPACITIES

Well No.	Capacity (gpm)	Capacity (mgd)
2	N/A	N/A
3	N/A	N/A
5	750	1.1
6	550	0.8
7	1,400	2.0
9	1,100	1.6
TOTAL	3,800	5.5

Source: Hanna and Brunetti, Water Impact Fee Study 1999

The city operates the wells to meet system demands based on the water level in the 100,000 gallon elevated storage tank at Vosti Park. When the tank requires filling, the control system starts two paired wells simultaneously. If the water level continues to drop, additional wells are started individually until all four primary production wells are running. Water that is not used to meet demand is used to fill reservoirs. The primary wells are located far enough apart so that they do not influence each other when pumping simultaneously.

Figure V.1-3: Existing Water System Components



Water Quality

The City routinely tests all wells to ensure that water quality meets EPA and DOHS drinking water standards. As mentioned previously, wells #2 and #3 have elevated nitrate concentrations and detectable levels of bromobenzene and are only used in emergency situations. Should an emergency arise requiring the use of these wells, water from them would need to be blended with well No.7 and reported immediately to DHS.

While seawater intrusion is the main problem for sub-basins bordering the coast, the major water quality concerns in the Soledad area are nitrates, salts, and inorganic compound contamination. According to the USGS, the area of the basin from Soledad to Salinas is of particular concern for these contaminants, which are reported to be a product of agricultural and industrial operations in the area. Other than the listed constituents, the Forebay aquifer is generally described as having good quality water, with values of all other constituents within acceptable levels.

Nitrates. Nitrates are largely a product of agricultural operations, specifically fertilizers and livestock operations. Control of nitrates can be achieved through better management of farmlands, including the implementation of conservation practices in the application of fertilizers. MCWRA is currently working to implement a nitrate management program for the basin. The National Resources Conservation Service and the Resources Conservation District are both working with private landowners to improve management practices.

Salts. Salts are a natural by-product of the breakdown of certain fertilizers and other agricultural chemicals. Overdraft of the basin has resulted in near elimination of the subsurface outflow from the basin, which is essential to removing salts and other dissolved solids from the system. Long-term buildup of salt may lead to the emergence of unusable agricultural land, along with the abandonment of wells.

Inorganic Compounds. Inorganic compounds from industrial applications can be persistent and difficult to remove from the water supply, leading to the abandonment of wells.

Other Water Quality Issues. Depletion of groundwater in and around the Salinas River and its tributaries, along with increasing pollutant levels, is reducing the available habitat for common and sensitive species alike. Impacts associated with biological resources are addressed in Chapter V.7 of this DEIR.

Impacts

Implications of the Land Use Diagram

The draft Plan designates considerable additional land for urban development that is currently in agricultural production. Conversion of this land to an urban use will change the water demand and recharge characteristics of the Plan area.

With regard to the prisons, it is assumed in the following analysis that the inmate population and staffing remain as they are in 2004 and that the associated water demand continues to be met by on-site wells separate from the City water system.

Impact PS-1: Water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin. This impact is considered unavoidable and adverse (Class I).

As discussed earlier, about 3,500 acres of the City's general plan area is used for various agricultural operations, including irrigated row crops which are currently consuming about 5,600 AFY. Over time this land is expected to be permanently converted to urban uses through the outward expansion of the City as contemplated by the draft Plan, with a corresponding increase in the future demand for municipal water supply.

For purposes of estimating future water demand, it is assumed that future water demand remains constant at 128 gallons per day expressed as a per capita equivalent for all land uses as estimated by Hanna and Brunetti in the 1999 Water Impact Fee Study. Applying this demand factors to buildout yields the following estimate of future demand:

TABLE V.1-4: FUTURE WATER DEMAND AT BUILDOUT OF THE DRAFT PLAN

Future Non-Prison Population	Water Demand Factor	Water Demand At Buildout (AFY)[2]
57,273	128 gallons per day per capita[1]	8,233
Current Demand (Urban plus Ag.)		7,756
INCREASED DEMAND AT BUILDOUT		477

1. Water demand from all land uses expressed as a per capita equivalent (Hanna and Brunetti *Water Impact Fee Study*, December, 1999);
2. Based on average daily demand

As Table V.1-4 suggests, total water demand from the City's Plan area will increase by about 477 AFY at buildout with the uses contemplated by the draft Plan. This will occur incrementally over time as more land is annexed to the City and converted from an agricultural to an urban use. It should be noted, however, that this estimate of future water demand makes no assumptions for savings associated with water conservation measures that will implemented in the future as

required by State law. For example, new development will be required to incorporate water-conserving plumbing fixtures which will reduce future water use. Other more aggressive measures, such as the retrofitting of older toilets and showerheads with more water efficient fixtures, would reduce future demand to near or below current water demand for the Plan area.

Table V.1-5 compares present and future water demand with current (2004) withdrawals from the Forebay Sub-basin.

TABLE V.1-5: COMPARISON OF PRESENT AND FUTURE WATER DEMAND IN RELATION TO 2004 GROUNDWATER WITHDRAWALS FROM THE FOREBAY SUB-BASIN

	AFY	Expressed as a Percentage of Total Withdrawals from Forebay Sub-Basin[2]
Current (2004) Demand[1]	7,756	4.8 %
Buildout Demand	8,233	5.1%
Increase	477	0.34%

Sources: CMCA and DWR Bulletin 118, February, 2004

Notes

1. Urban and agricultural uses within the City's Plan area.
2. February, 2004 withdrawals are estimated at 160,000 AFY by DWR Bulletin 118.

As Table V.1-5 suggests, withdrawals from the Forebay sub-basin attributable to buildout of the draft Plan will increase by about 0.3 percent over present (2004) demand.

In projecting future water demand during the preparation of the SVWP, the MCWA relied on projections of future urban development and resulting population provided by the Association of Monterey Bay Area Governments (AMBAG). AMBAG is the Metropolitan Planning Organization for Monterey, Santa Cruz, and San Benito counties. In this role, AMBAG is the agency charged with the responsibility of providing regional population and employment forecasts. Its most recent forecasts were conducted in 1997 and address projected growth to the year 2020.

In devising their population forecasts, AMBAG considered whether potential resource and infrastructure constraints should be considered as such constraints could profoundly affect the resulting level of development in the various jurisdictions. The forecasts used by AMBAG are generally unconstrained with respect to water supply or other resource or infrastructure factors. However, AMBAG did consider a number of other factors in devising their projections, as stated on pages 60 and 61 of the AMBAG forecast:

> *The major portion of the Salinas River groundwater basin, underlying what is commonly referred to as the Salinas Valley (a.k.a. Zone 2A)(sic), is currently in an overdraft situation ...This has been the cause of the well publicized seawater intrusion problem in the lower Salinas Valley ...*
>
> *The planning effort to meet existing and future needs is now being carried out through MCWRA's Basin Management Plan (BMP) process. The BMP will identify structural and non-structural components to stop seawater intrusion, achieve a water balance in the*

> *Basin, and provide for the future through phased water distribution projects. If the efforts to complete and implement the BMP are not successful, it is likely that the State Water Resources Control Board (SWRCB) will move to adjudicate the Salinas Basin. This action would result in restrictions placed on urban and agricultural water use to alleviate the seawater intrusion problem. The implications of this action might include restrictions or prohibitions on new water uses in the future.*
>
> *... Since the Salinas Valley groundwater basin is already in overdraft, any population growth will cause the sustainable pumping rate to be exceeded even further. However, if MCWRA's proposed Basin Management Plan is implemented, MCWRA anticipates that population growth can be accommodated in the MCWRA service area...*

As discussed above, the SVWP is the proposed solution emanating from the BMP process. AMBAG does not address the potential future growth scenarios that may result in the event that the SVWP (or any other project that could solve the acknowledged water problems in the Salinas Valley) is not implemented. Nevertheless, with this acknowledgement of existing constraints, the AMBAG forecasts for the Salinas Valley are listed in Table V.1-6. These forecasts are for the years 1995 and 2020. The AMBAG forecast did not extend to the year 2030, which is the planning horizon year for the SVWP. The MCWRA extrapolated the population forecast for several (including Soledad) cities/communities outwards from 2020 to 2030 using growth rates through 2020 as provided by AMBAG, with adjustments based on discussions with local agencies and water purveyors.

TABLE V.1-6: POPULATION PROJECTIONS USED BY MCWRA IN PREPARING THE SALINAS VALLEY WATER PROJECT

City/Community	1995	2020	2030	Percent Change: 1997-2030 (average annual % change)
Salinas	119,643	170,059	194,407	63% (1.8%)
King City	9,479	25,389	29,024	206% (5.9%)
Greenfield	8,951	13,145	15,027	68% (1.9%)
Castroville	5,700	6,200	7,088	24% (0.6%)
Soledad (does not include prisons)	**9,018**	**14,555**[1]	**16,639**	**83% (2.4%)**
California State Prisons near Soledad	6,433	17,000	17,000	164% (4.7%)
Gonzales	5,972	12,562	14,361	140% (4%)
Fort Ord	6,225	37,370	37,370 [6]	600% (17%)
Marina	17,528	24,913	24,913 [8]	42% (1.2%)
Total	188,949	321,193 [9]	355,829	88% (2.5%)

Source: AMBAG, 1997; MCWRA, 1998.

1. 2004 population for the City estimated by the California Department of Finance is 15,000 non-prison residents.

As is the case with AMBAG, the MCWRA acknowledges that population numbers presented in Table V.1-6 are a forecast of future population, and a variety of economic, social, political, and environmental factors will influence whether this forecast will be accurate. However, this forecast was considered a reasonable basis for devising the SVWP. The FEIR for the SVWP concedes that if future growth substantially exceeds the AMBAG projections, other sources of water beyond SVWP water would likely be needed in the Salinas Valley.

There is considerable reason to suggest that AMBAG population forecasts for the City of Soledad and the Salinas Valley State prison as used to devise the SVWP are too low. Most notably, AMBAG projects a non-prison population for Soledad in 2030 of 14,555, when according to the California Department of Finance, the City's 2004 non-prison population is about 15,000. AMBAG has since made corrections to its growth forecasts in response to the 2000 Census and based on discussions with local jurisdictions. The new projections have been revised upward for Soledad as well as other Salinas Valley cities. Nevertheless, the populations assumed in preparation of the SVWP appear to be inconsistent with (ie, considerably lower than) the population holding capacity of the draft General Plan.

The MCWRA has conducted detailed modeling and analyses to project future water needs to the year 2030 and assuming growth forecasts as listed above. A number of assumptions were made in conducting the analysis, and these assumptions are embodied in the Salinas Valley Integrated Ground and Surface Water Model (SVIGSM). In summary, the SVIGSM was developed as an analytical tool for use by the MCWRA and decision makers to evaluate the hydrologic and operational impacts of the Basin Management Plan and, subsequently, the Salinas Valley Water Project. The SVIGSM has the capacity to simulate a variety of detailed hydrologic and operational functions, and as a result requires a substantial amount of data. Input for the SVIGSM has been collected and reviewed at various times throughout its development.

The major assumptions used in the SVIGSM as they relate to future growth and development include:

- AMBAG population forecasts, as extrapolated by MCWRA to the year 2030, would be used to estimate future urban totals.

- Agricultural land uses would shift, with a large increase in relative acreage devoted to vineyards (a 25% increase between 1995 and 2030 was assumed), and a decrease to all other uses (truck crops, field crops, pasture, and orchards). Conversion of agricultural acreage to urban uses is also assumed to occur, but would be generally replaced by land not currently in agricultural use. Net agricultural acreage would remain effectively unchanged. Through cropping patterns, as well as conservation realized through incorporation of new technologies, a 5% increase in water conservation, compared to water use by the same crops, would be expected between 1995 and 2030. The shift in agricultural land uses coupled with water conservation and cropping patterns would result in a net reduction of 60,000 acre-feet per year (AFY) by 2030.

- The current per capita water use was assumed to be relatively constant into the future, except that a 5% per capita reduction due to conservation was assumed. Total urban water use would increase by 40,000 AFY between 1995 and 2030 (from 45,000 AFY in 1995 to 85,000 in 2030).

- Total water use in the Basin is expected to decrease by 20,000 AFY between 1995 and 2030 (from 463,000 AFY in 1995 to 443,000 AFY in 2030). This represents an estimated 4% reduction in total water use.

The implications of a higher population for Soledad than that assumed in preparation of the SVWP are unclear. However, the preceding analysis supports the following conclusions:

- The Forebay Sub-basin is currently in overdraft, even though water demand overall is decreasing;

- Water demand at buildout of the City's General Plan area will result in a net increase in water demand following conversion of existing agricultural lands to an urban use;

- Lower population assumptions for Soledad and elsewhere in the Forebay Sub-Basin may hinder efforts of the SVWP to help alleviate the current overdraft condition, to the extent the SVWP is intended to help balance future supply and demand.

Impact PS-2: The increased demand on groundwater resources required to serve buildout of the City's Plan area could potentially reduce water levels in wells serving agricultural operations in the vicinity of the City. This impact is considered adverse but not significant (Class III).

Buildout of the Plan area with urban land uses as contemplated by the draft Plan will result in a small net increase in water extracted from the Forebay Sub-basin as described above.

Although the depth of wells on private properties in the vicinity of the City's Plan area is not known, the increased extraction of groundwater over time could lower the groundwater table in

the vicinity of the City's production wells which in turn could affect water levels in surrounding wells. Although the increase in future demand within the Plan area is considered small, the slight lowering of the groundwater table could limit the viability of agricultural operations that depend on this water source for irrigation. Where wells are adversely affected, the solutions include extending the well deeper into the aquifer, reducing the amount of groundwater pumping, and/or water conservation measures. This assumes current crop patterns remain as they are in 2004. The trend toward the growing of wine grapes could further reduce water demand in the vicinity of the Plan area.

As discussed above in the Regulatory Setting, public water suppliers depending on groundwater are technically limited to "surplus" water and are subordinate to the needs of overlying users (for example, irrigation needs for private agricultural operations). However, in overdrafted basins, unchallenged pumping by public agencies may establish prescriptive rights against private pumpers in the basin. In that situation, the prescriptive rights of such public agencies supercede the overlying rights of private pumpers.

Impact PS-3: Buildout of the area designated for urban development will require the expansion and extension of water storage and distribution infrastructure to accommodate the level of development anticipated. This impact is considered significant and adverse (Class II).

Buildout of the Plan area as contemplated by the draft Plan will require the expansion and extension of water supply infrastructure. Accordingly, policies and programs of the draft Plan recommend preparation of capital improvement plans to identify these improvements and funding, and require adequate capacity for services to be in place concurrently or in advance of such new development.

Wastewater Collection, Treatment and Disposal

Issues

Buildout of the City's Plan area will require additional wastewater treatment plant capacity as well as improvements to the collection, treatment and disposal systems.

Thresholds of Significance

Buildout of the draft Plan could result in a significant impact on wastewater infrastructure if wastewater generation exceeds treatment, collection or disposal capacity.

Environmental and Regulatory Setting

Environmental Setting

The City of Soledad operates a wastewater collection system that serves all properties within the City limits, as well as the Dole Fresh Vegetable Food Processing Plant on Camphora-Gloria Road, and the Soledad State Correctional Training Facility north of town. Wastewater generally flows from north to south, where will be collected into a single 27" main trunk sewer that will run under the freeway and out to the wastewater treatment facility.

Wastewater Collection. The City portion of the wastewater collection system includes more than 100,000 feet of gravity wastewater pipelines, ranging in diameter from 6 to 15 inches and one small temporary sewage pump station. The Dole Fresh Vegetable Food Procession Plant on

Camphora-Gloria Road is served by a City owned and maintained sewage pump station and about 14,000 feet of 4-inch force main. The Soledad State Correctional Training Facility is served by a state owned and operated sewage pump station and about 19,000 feet of 18-inch force main.

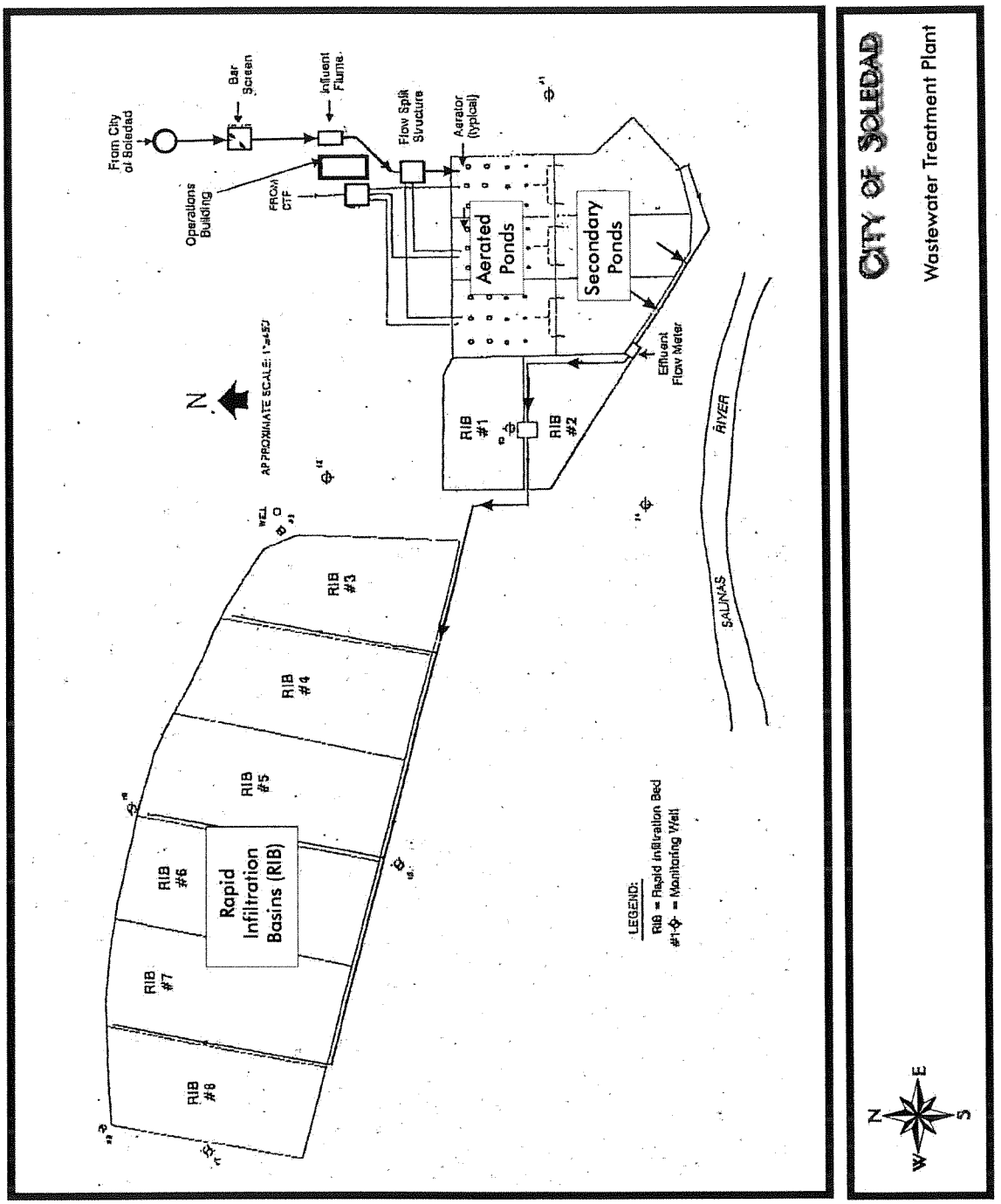
The original downtown area is predominately 6-inch diameter clay pipe, generally located in alleys and easements. The newer development to the north uses predominantly 8-inch diameter polyvinyl chloride (PVC) pipe and are generally aligned in streets and cul-de-sacs. There is a network of trunk sewers 12-inches or greater that flows east to west and discharge into the Soledad Wastewater Treatment Plant. See Figures V.1-4 and V.1-5 for existing wastewater collection system.

Wastewater Treatment Plant. The City's wastewater treatment plant receives effluent from the State prisons, the Dole Processing Plant and from the City. Treatment consists of four components (see Figure V.1-4):

Headworks. The headworks provide preliminary treatment of effluent from the State prisons by way of screens.

Aeration ponds. Three parallel mechanically aerated partially mixed oxidations ponds are the first stage in stabilizing the waste. The ponds are each about 10. 5 acres and 6 to 7 feet deep. The aeration system is designed to maintain dissolved oxygen levels in the ponds.

Figure V.1-4: Wastewater Treatment Plant



Settling Ponds. Waste is then conveyed to three parallel facultative settling ponds (secondary ponds) that provide additional oxidation, solids settling, and solids storage. The settling ponds cover about 19 total acres.

Effluent Disposal. Treated wastewater is discharged to rapid infiltration basins (RIB). The purpose of the basins is to percolate the treated effluent to the groundwater and to serve as emergency storage for pond overflows. The total RIB area is about 108 acres

Wastewater Treatment Plant Capacity. There are many variables that can limit the capacity of a wastewater treatment plant. The capacity of the City's wastewater treatment plant (WWTP) is not constant. It varies in direct relationship to the maximum flow that is permissible as a result of the most restrictive regulatory requirement in effect at any given time. The variables that affect treatment plant capacity include, but are not limited to:

- Capacity Limited by Discharge Permit Conditions
- Capacity Limited by Volume that can be Discharged to Wastewater Disposal Areas
- Capacity Limited by Minimum Effluent Water Quality
- Capacity Limited by Maximum Daily Average Flow During Dry Weather Months
- Capacity Limited by Physical Disposal Limitations.

Capacity of the City's WWTP is limited primarily by the discharge conditions stipulated in the discharge permit (Waste Discharge Requirements Order No. 95-25) that is issued by the State Regional Water Quality Control Board (RWQCB). The discharge permit stipulates the manner in which the City's disposal basins must be operated, the minimum effluent water quality that may be discharged, the maximum daily average flow that can be discharged from the facility during dry weather months, and the specific locations where discharge is allowed. These discharge requirements limit the capacity of the City WWTP to no greater than the maximum flow that can be maintained while remaining in compliance with the most limiting flow condition stipulated in the Discharge Permit.

Due to high ground water beneath disposal basins, in order to assure proper treatment, the Regional Water Quality Control Board has imposed operating procedures that, if followed, limit disposal. The Discharge Permit stipulates both the manner in which the City's disposal basins must be operated and when discharge to disposal basins may occur by stipulating "when depth to ground water beneath the disposal areas is less than three feet... discharge to disposal areas shall be no more than one foot of wastewater, then allowing the pond to dry to field moisture conditions before reapplying more wastewater." The permit also stipulates "discharge to wastewater disposal areas shall occur only when there is some measurable separation between pond bottoms and ground water." In addition, "no discharge to wastewater disposal areas shall occur when it is raining or the wastewater irrigation area is flooded." Disposal capacity is therefore limited by the requisite operational parameters.

As a result of the hydro-geological testing performed in 2003, City consultant Fugro West has concluded the disposal capacity of the City WWTP "range(s) from 3.0 to 3.5 MGD. However, based upon field observations and other data, Staff has concluded a prudent rate for discharge to the disposal basins is approximately 2.5 MGD..

The Discharge Permit issued to the City by the RWQCB stipulates that effluent discharged to disposal shall not exceed:

- 990 mg/l Total Dissolved Solids (TDS);
- 175 mg/i Sodium;
- 170 mg/i Chloride;
- 205 mg/i Sulfate; and
- 5 mg/L Nitrate.

Further, TDS discharged to disposal may not exceed a 4-month flow weighted average of the water supply TDS by more than 400 mg/L, and effluent may not have a pH of less than 6.5 or be greater than 8.4. Among other things, discharge is prohibited that would cause downstream nitrate nitrogen concentrations greater than 8 mg/i. WWTP effluent presently exceeds 170 mg/L Chloride, and nitrate treatment is not effective due to inability to dry out disposal basins adequately under present operating conditions.

Reclamation and groundwater standards are also addressed in the current Discharge Permit. However, the reclamation and groundwater standards stipulated in the current Discharge Permit are less stringent than the new Discharge Permit standards will be. Because the Discharge Permit stipulates the minimum effluent quality that can be discharged to the disposal site, capacity is limited to no more than the maximum flow rate the City can allow wastewater to travel through the facility and still maintain the minimum level of treatment required to meet the discharge water quality. It is possible to move wastewater through a plant at a rate so fast that proper treatment is not achieved. Treatment capacity, the maximum rate the wastewater can be moved through the facility without compromising required treatment, is one limitation on plant capacity.

The Discharge Permit allows "effluent discharge of up to a monthly average dry weather flow of 3.1 MGD (mg/day)." An additional, temporary dry weather average flow allowance of .5 MGD has also been granted to the City in order to allow time to prepare a WWTP expansion plan to be submitted to the RWQCB.

Dry weather average monthly flow was approximately 2.8 million gallons per day (mgd) in 2004. Based upon both observation and a report prepared by Fugro West, Inc., the WWTP is at or near disposal capacity. The Discharge Permit restricts discharge to the existing rapid infiltration disposal basins at the WWTP. Discharge, overflow or spill to any other area, including the Salinas River, is prohibited. City Consultant, Fugro West, Inc. is reluctant to quantify the flow rate at which the plant will eventually overflow the facility banks and spill into the Salinas River, but has concluded the capacity of the facility is in a range of 3.0 to 3.5 MGD. Staff does not have the luxury of waiting until a spill occurs to recognize the problem and is of the opinion the plant cannot be operated in compliance with its Discharge Permit at flows in excess of 2.5 MGD. Further, based upon field observation and pond data, staff concluded in October of 2004 that additional flow to the WWTP should be restricted until such time as additional disposal area can be acquired.

In sum, the present plant flow of approximately 2.9 — 3.0 million gallons per day is approximately 400,000 to 500,000 gallons more per day than the flow rate the WWTP can be operated in compliance with its Discharge Permit.

Treatment and Disposal Capacity for City Build Out. The draft General Plan summarizes non-prison City full build out population to be about 57,000 in addition to about 10 — 12 million square feet of commercial and industrial development. The Wastewater Treatment and Disposal Master Plan was prepared based on the following assumptions:

- 250 dwelling units per year, with 4 people per dwelling (used for population forecasting);
- 400 gallons wastewater flow per day to WWTP from each dwelling unit which provides sufficient allocation of wastewater flow per day for commercial and light industrial support services

The reasoning behind the 250 dwelling units per year is because this is the approximate maximum annual level of development that has occurred to date.

This Master Plan sets forth an orderly and process to serve a City population of approximately 39,500 by December of 2029. If the decision is made to accelerate growth and development to more than 250 residential units per year, the planning, public works, building and central administration departments will all have to be expanded significantly and infrastructure funding and completion will have to be greatly accelerated beyond levels accomplished to date.

Treatment and Disposal Capacity for Prisons. The City is under contractual obligation to provide on-going wastewater capacity of 2.1 million gallons per day for the two nearby state prison facilities.

Combined Treatment and Disposal Capacity. The Master Plan provides for the orderly expansion of the City's wastewater facilities to a capacity of 5.90 mgd which is sufficient to accommodate a population of 54,700, inclusive of the prisons, but less than the holding capacity of the draft General Plan.

This conclusion is premised upon obtaining required approvals for relevant treatment and disposal sites after permanently reactivating the prison wastewater treatment and disposal site. However, sites illustrated subsequent to reactivation of the prison site can be considered in different order than illustrated in this document, or replaced by more appropriate sites in the future and dates can become more aggressive or more leisurely depending upon circumstances. Through the years treatment methodologies selected for the incremental elements of the plan can be varied based upon improvements in technology. Disposal alternatives are the most flexible possible due to the decision to commit to treating the City's wastewater to Title 22 Reclamation quality standards prior to discharge.

Figure V.1-5: Existing Wastewater Collection System

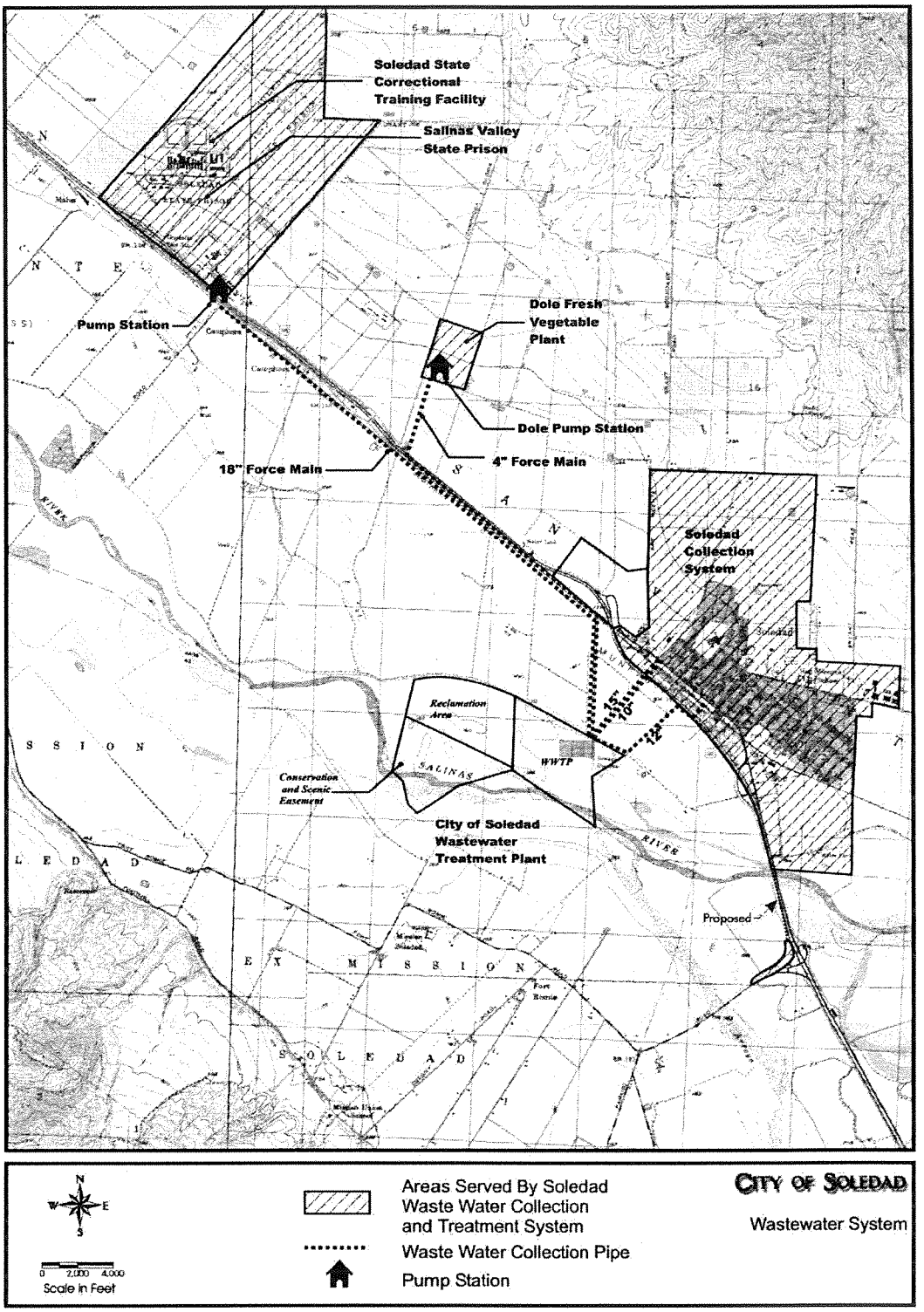
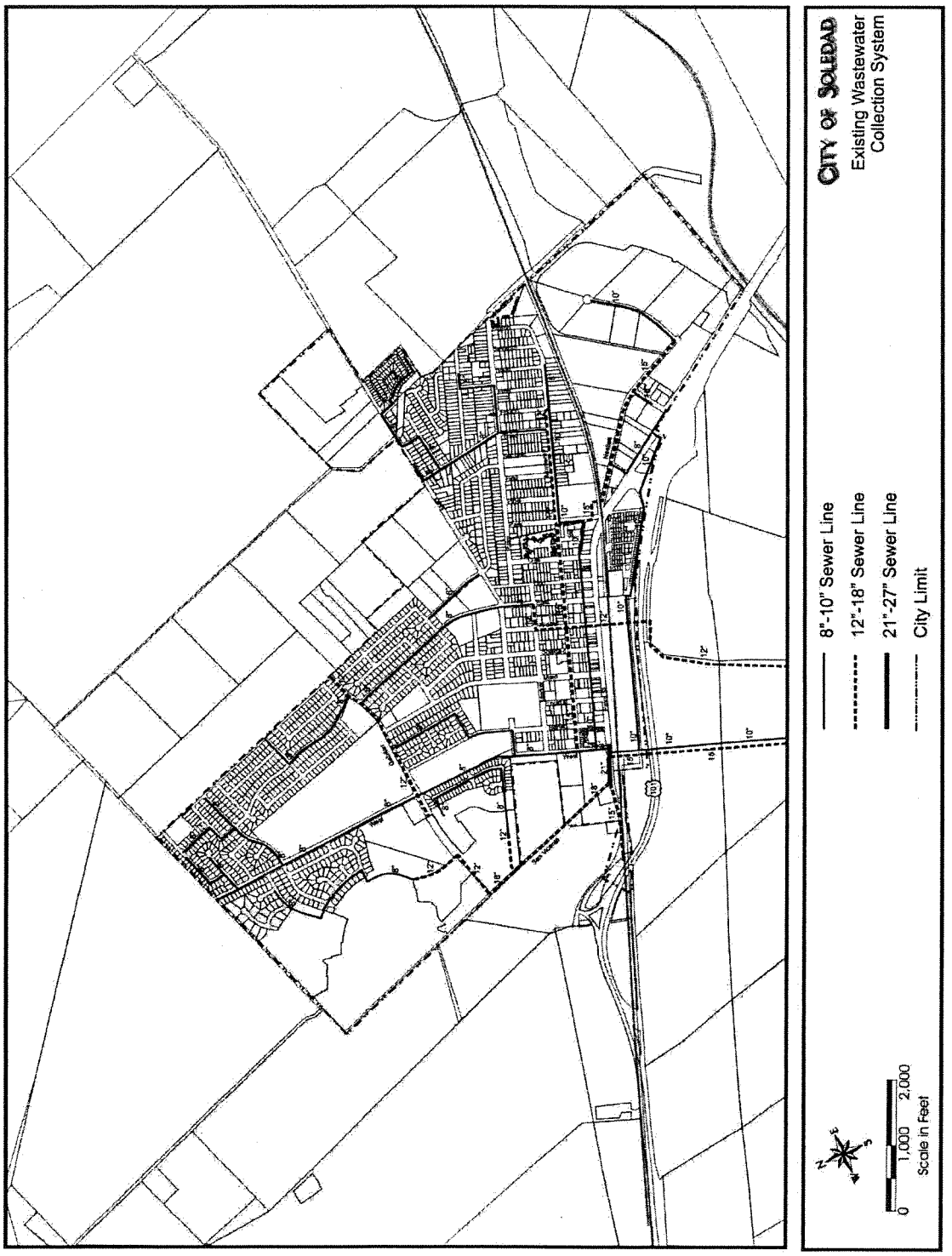


Figure V.1-6: Existing Wastewater Collection System



Previous and Ongoing Wastewater System Improvements

A wastewater impact fee study completed in December 1999 by Hanna & Brunetti, identified capacity deficiencies in the wastewater collection and treatment system necessary to serve future development and improvements to correct these deficiencies. Sewer extensions to serve presently undeveloped areas were identified and their general sizing requirements determined.

The Hanna & Brunetti report approximated wastewater flow by using three components, each of which is estimated separately and then combined to determine the total flow. The three flow components are defined below:

- Base Wastewater Flow (BFW) is the flow contributed by residential, commercial, industrial and institutional users. BFW is directly related to land use and varies throughout the day and between weekdays and weekends.

- Groundwater Infiltration (GWI) is groundwater that enters the wastewater system through defects in the pipe, pipe joints and sewer collection structures. The amount of GWI entering the collection system depends on the physical condition of the system, the depth of the pipes and the elevation of the groundwater relative to the pipes. GWI tends to be low year around due to the mostly granular, cohesionless, highly permeable sands in which the sewer system exists.

- Rainfall-Dependent Infiltration/Inflow (RDI/I) is storm water that enters the wastewater collection system in direct response to the intensity and duration of individual rainfall events. In addition to being dependant on rainfall events, RDI/I is sensitive to soil moisture, increasing throughout the wet weather season as the soil moisture increases.

TABLE V.1-7:
WASTEWATER CAPITAL IMPROVEMENTS AND COSTS

Project No.	Project	Size	Length (feet)	Unit Cost (1999 dollars)	Estimated Construction Cost
	Pipelines				
1	Outfall-front to WWTP	27"	3,165	$115	$363,975
2	Diversion-New 27" Outfall to 12" Freeway Crossing	18"	2,000	$100	$200,000
3	Kidder-Monterey to Freeway	18"	560	$115	$64,400
4	Monterey-Kidder to Park	18"	1,600	$115	$184,000
5	West-Monterey to Front	18"	600	$115	$69,000
6	West-North to Monterey	10"	1,300	$70	$91,000
7	Gabilan-West to San Vicente	12"	265	$80	$52,000
8	San Vicente-Gabilan to Section 16	15"	3,100	$90	$279,000
	Subtotal				$1,303,375
	Pump Stations				
9	Mew PS & force main for W7 Zone	0.2MGD	LS	$300,000	$300,000
10	New PS & force main for Los Coches Adobe	0.1MGD	LS	$200,000	$200,000
	Subtotal				$500,000
	SCADA				
11	Install System at pump stations and WWTP facilities			$100,000	$100,000
	Subtotal				$100,000
	Wastewater Treatment Plant				
12	Treatment Plant Expansion	2.5MGD			
12a	Property Acquisition in acres	140	acre	$50,000	$700,000
12b	Aerated Lagoons		LS	$3,500,000	$3,500,000
12c	Influent Pump Station		LS	$200,000	$200,000
12d	Site Piping and Appurtenances		LS	$200,000	$200,000
12e	Spray Irrigation Pump Station		LS	$200,000	$200,000
12f	Spray Irrigation Distribution Station		LS	$600,000	$600,000
12g	1,000 Amp Electrical Service		LS	$150,000	$150,000
12h	Electrical & Control		LS	$250,000	$250,000
12i	Sludge Drying Beds		LS	$200,000	$200,000
12j	Wastewater Reclamation Treatment Facility		LS	$3,300,000	$3,300,000
	Subtotal				$15,600,000
	Total Construction Cost				$17,503,375
13	Administration, Engineering & Contingencies @ 50%				$8,751,688
	Total Capital Improvement Cost				$25,333,350
	Vista Soledad V.T.M. Agreement				($1,426,672)
	Adjusted Total Capital Improvement Cost				$24,828,391

Source: Hanna and Brunetti, wastewater impact fee study 1999

More recent efforts have focused on upgrades to the WWTP to meet Title 24 treatment standards and to improve capacity for new development. In April, 2004, the City approved a conceptual WWTP Upgrade Plan (Incorporated herein by reference and available for review at the City Public Works Department, 248 Main Street. Soledad) and selected A team of consultants to provide a design/build service to upgrade the treatment plant. The conceptual plan is aimed at providing treatment of up to 5.0 mgd of tertiary treatment at an estimated cost of about $6.5 million (2002 dollars). The upgrades would consist of installing solar-powered pond circulators at the primary and secondary ponds; filters and ultraviolet disinfection facilities; and construction of a pump station for pumping flows from the secondary ponds to the filters and UV disinfection system.

The conceptual design is intended to improve pond circulation and mixing action which will accelerate the biological and chemical processes in the primary and secondary ponds, thereby reducing biochemical oxygen demand, total suspended solids and nitrate. The goal is to produce effluent that exceeds Title 22, Chapter 4 of the California Code of Regulations which is the water quality standard for water reuse and reclamation. Upon completion, up to 3.5 mgd will be disposed of at the rapid infiltration ponds.

Impacts

Assumptions

Quantifying future wastewater generation is based on the following assumptions:

- Prison inmate population remains 11,200;
- No increase in waste generation from the Dole processing plant;
- Wastewater generation for future land uses are as follows:

  -- 250 additional dwelling units per year

  -- 400 gallons per day per dwelling unit equivalent, which includes waste generated by non-residential land uses

Implications of the Land Use Diagram

Impact PS-4: **The draft Plan designates some 2,750 acres for urban expansion beyond the area currently served by the City's wastewater collection and treatment systems. Serving this area will require considerable expansion of infrastructure capacity for collection, treatment and disposal. This impact is considered significant unless mitigated (Class II).**

Wastewater generation at buildout of the draft Plan is summarized in Table V.1-8, below.

TABLE V.1-8: PROJECTION OF FUTURE WASTEWATER GENERATION

Date/Milestone	Treatment Plant Capacity Needed To Serve City (million gallons per day)	Projected Population	Additional Dwelling Units At Each Milestone Date
September 2010	3.50	19,500[1]	1,250
September 2012	3.70	21,500	500
March 2013	3.75	22,000	125
August 2025	5.00	34,000	3,125
December 2029	5.50	39,500	1,250
June 2038	5.90	43,500	1,000
TOTAL:	5.90	54,700[2]	7,250

Source: City of Soledad Draft Wastewater Treatment and Disposal Master Plan, January 2005

Notes

1. Exclusive of prison population
2. Inclusive of prison population of 11,200.

As Table V.1-8 shows, in the absence of improvements to the wastewater treatment system wastewater generation will exceed the capacity of the treatment plant.

In addition to exceeding the capacity of the treatment plant, the infrastructure that conveys effluent to the plant will need to be expanded to accommodate the increase in upstream flows associated with new development in the expansion areas.

Mitigation Provided by the Wastewater Treatment and Disposal Master Plan

Immediate Actions to Be Taken To Avoid A Spill to the Salinas River

1. Enforce Urgency Ordinance No. 612 that established a moratorium on the issuance of building permits requiring sewer connections.
2. Raise road levies at wastewater treatment plant between basins 6 and 7, and between basins 4 and 5.
3. Complete prison wastewater facility emergency discharge CEQA process.
4. Obtain CDC approval to temporarily discharge at prison disposal site with commitment to negotiate long-term use.
5. Obtain Regional Board interim approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site while a long term site use agreement can be negotiated between the City and the State so that a permanent request of wastewater discharge can then be processed.
6. Rehabilitate the Prison WWTP treatment and disposal site.

7. Divert part of prison wastewater flow to prison wastewater facility in order to be able to operate the existing City wastewater facility at an onsite disposal rate of approximately 2.5 MGD.

Actions to Be Taken Immediately to Remedy Existing Wastewater Disposal Deficiencies

1. Adopt Wastewater Treatment and Disposal Master Plan.
2. Provide the Regional Board a copy of the Master Plan and request approval to discharge temporarily at the prison abandoned wastewater treatment site.
3. Request the California Department of Corrections (CDC) to enter into an agreement with the City to allow the City to temporarily discharge to the prison abandoned wastewater disposal site.
4. Obtain RWQCB approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site on a temporary basis while a permanent request of wastewater discharge is being processed.
5. Complete restoration maintenance at the prison abandoned disposal site.
6. Connect aerators and install pond circulators.
7. Divert 1.1 MGD of the prison flow to the prison abandoned disposal site.
8. Operate the existing City facility site at a disposal rate of approximately 2.5 MGD.

In summary, mitigation of existing disposal deficiency is accomplished by diverting up to 1.1 million gallons per day to abandoned prison disposal site and limiting flow to the existing City facility to no more than 2.5 million gallons per day.

Actions to Be Taken to Remedy Existing Treatment Plant Capacity Deficiencies

1. Complete process to mitigate existing plant disposal deficiency.
2. Install equipment that will enable plant operators to achieve Title 22 reclamation quality effluent at both WWTP sites:
    a. Phase 1: Install 12 Pond Circulators and Telemetry to modify Operation of Aerators
    b. Phase 2: Renovate the CDC wastewater facility and divert 1.1 mgd of the CDC wastewater flow to that facility, thus providing ability to provide maintenance for City disposal basins.
    c. Phase 3: Install 5.5 MGD Secondary Effluent Filter Pump Station, 5.5 MGD Continuous Backwash Filter System (Including influent channel, flash mix/flocculation, chemical feed, and compressed air systems if needed), and 5.0 MGD Concrete Channel Ultra-Violet Disinfection System.

The Wastewater Facilities Master Plan includes expansion of the City's wastewater facilities to accommodate growth as outlined in the City General Plan.

The City desires to lease the Prison Abandoned WWTP, with option to renovate and purchase the facility. This would enable the City to reduce flow to the City's WWTP by diverting prison wastewater flow to the CDC wastewater facility. The results would be immediate availability of capacity at the City WWTP and ability to perform more effective maintenance of the disposal basins. The master plan envisions various alternatives described as phases. Costs of land acquisition and costs of constructing infrastructure on sites acquired have not been estimated.

Phase 1: Commence upgrading treatment at the City's WWTP to Title 22 Water Reuse Standard. The project consists of installation of pond circulators and completion of the final design for treatment upgrades to achieve reclamation quality effluent.

Phase 2: Renovate the CDC wastewater treatment facility for interim (4 — 6 years) secondary treatment and disposal use. It is anticipated this phase of the project will be completed by September of 2005 if the lease and tentative purchase agreements can be executed by the end of February 2005.

Phase 3: Complete Title 22 Water Reuse treatment upgrades to the City's WWTP. This project will provide treatment for up to the flow capacity of the existing head works. Additional disposal sites will increase future disposal capacity up to the flow capabilities of the existing head works.

Phase 4: Acquire land contiguous to the City's WWTP (Parcel A), install pump station and pipeline and other infrastructure in order to commence reclamation discharge to the parcel. The City has constructed segments of a reclamation line between the City WWTP and the freeway and at various locations within the City limits. The Phase 5 Parcel is an ideal site to use for reclaimed irrigation water purposes. The plan is to use the site for reclaimed water storage and for installation of a pump station. This site is considered a strategic component to be able to provide reclaimed water to a future golf course and to be able to provide reclaimed water for irrigation of freeway landscaping.

Phase 5: Provide reclaimed water for irrigation of freeway landscaping.

Phase 6: Upgrade treatment to reclamation quality at the prison WWTP by June of 2009.

Phase 7: Expand the City's WWTP head works.

Phase 8: Acquire additional disposal site (Parcel B) contiguous to and southeast of the City's WWTP and expand the City's WWTP facility onto that site.

Phase 9 Upgrade the City's WWTP to 7.0 MGD Reclamation Treatment Capacity. At an average growth rate of 250 dwelling units and related services, it is estimated this would provide sufficient treatment capacity through June of 2028 to serve a City population of 43,500.

Phases 10 and 11: Acquire and develop additional disposal sites (Parcels C and D) southeast of the City's WWTP. These disposal sites have also been identified as preferred sites to consider for reclamation disposal purposes.

Phases 12 through 17: Various alternative phases that increase treatment and disposal capacity to meet the service needs of the City. Various parcels of land have been identified as potential reclaimed wastewater disposal sites. These projects are beyond the scope of this master plan. Acquire land be used for tertiary disposal purposes. Identify, and make arrangements to connect to, various landscaping, crop and spray field groundwater recharge disposal and storage sites (Title 22 reclamation quality effluent).

Phases 12 through 16 are additional conceptual disposal sites. Various parcels of land have been identified as potential reclaimed wastewater disposal sites.

Figure V.1-7 shows potential sites for additional rapid infiltration basins.

Impact PS-5: Buildout of the draft Plan will significantly increase the amount of biosolids generated by the wastewater treatment plant which in turn will impact the capacity of licensed disposal facilities. This impact is considered adverse but not significant (Class III).

Sludge, also called biosolids, is produced by every wastewater treatment plant and the extent of sludge production varies with the type of plant. The City's treatment plant does not have permanent sludge handling facilities. According to the Operating Manual, sludge should be removed from the primary and secondary ponds when the aerated ponds accumulate one foot of sludge and the storage cells are full. This can be done by dredging the ponds while in service, or by taking a pond out of services and all wed to dry several months before the sludge is removed. Either way, the Manual recommends the sludge be removed once every 7 to 10 years. Since the current plant was put into operation in 1995 and the sludge has not been removed, it may be necessary in 2005 and will be necessary every 7 to ten years thereafter.

Four basic disposal methods for sludge are available to treatment plant operators: disposal by sanitary landfill; land application; composting; and incineration. Land application is the utilization of sludge as a soil amendment for agricultural land, parks or disturbed land. Composting refers to the decomposition of organic wastes in sludge until a nuisance-free product is created. Composted sludge is also used as a soil amendment. Incineration involves drying and burning sludge to produce ash.

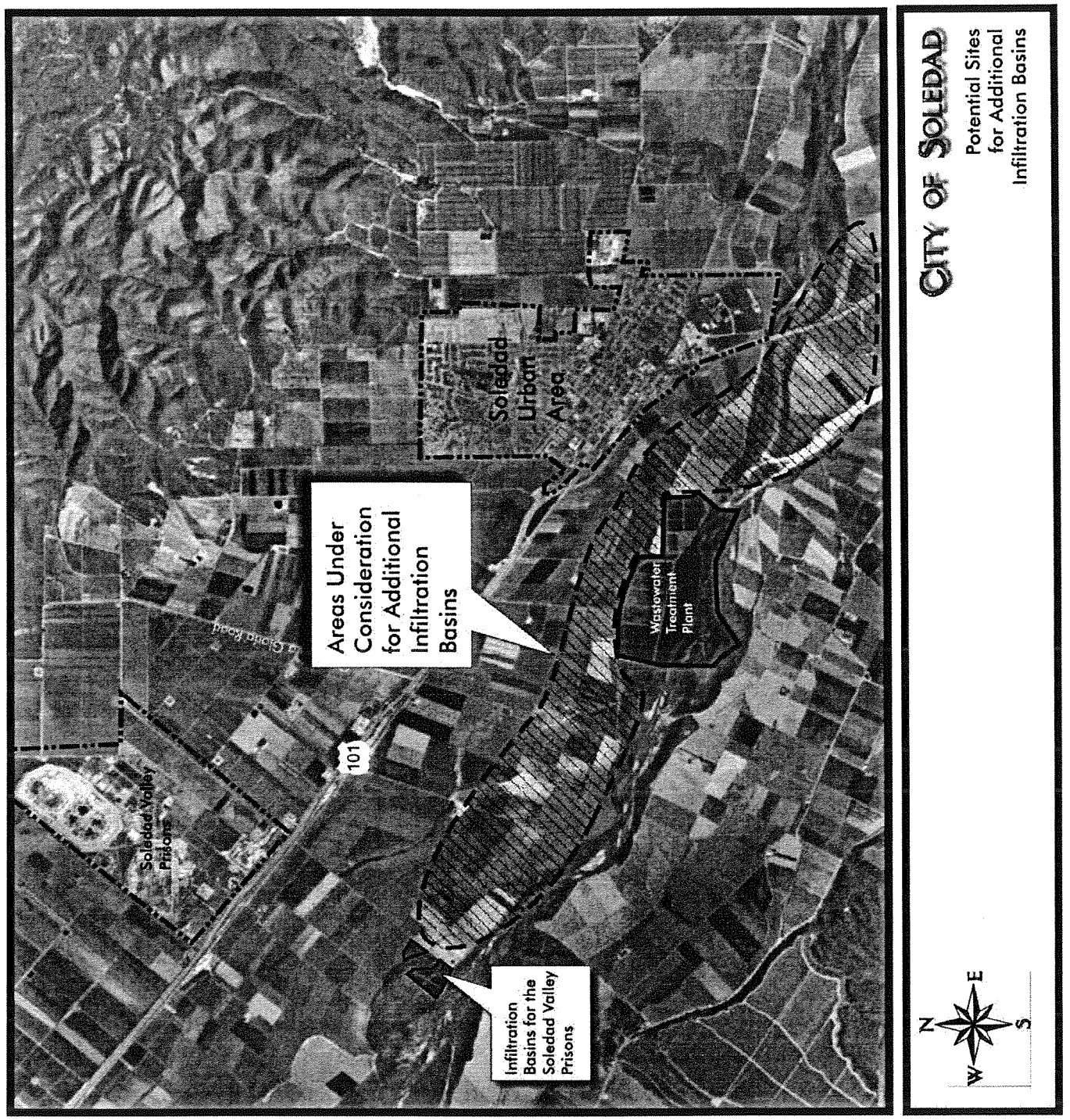
The City's Wastewater Facilities Plan recommends contracting with a licensed biosolids disposal facility to accept present and future sludge. The Monterey Regional Waste Management District operates the Monterey Peninsula Landfill and Recycling Facility which currently accepts biosolids and has sufficient capacity to accept the City's waste in the time intervals described above. In addition, the City is required to provide ongoing monitoring and reporting to the Regional Water Quality Control Board to ensure proper disposal of sludge. The reporting requirements are as follows:

1. The following information shall be submitted with the Annual Report required by Standard Provision C.16:
    a. Annual depth measurements (with a map) and the average depth of solids in the first two ponds of each facility with an estimate of the total volume of solids within each pond.
    b. Annual biosolids removed in dry tons and percent solids.
    c. If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
    d. A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual biosolids production disposed by each method.

i. For landfill disposal include: 1) the Regional Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.

ii. For land application include: 1) the location of the site(s), 2) the Regional Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.

Figure V.1-7: Potential Locations for Rapid Infiltration Basins



Fire Protection

Issue

Buildout of the City as contemplated by the draft Plan will increase the demand for fire protection services, including fire fighting personnel and equipment and facilities.

Thresholds of Significance

New development that requires additional fire fighting personnel and equipment necessary to achieve and maintain an acceptable level of fire protection is considered to have a significant impact.

Environmental and Regulatory Setting

The Mission Soledad Rural Fire Protection District was formed in 1951 and is located at 236 Main Street in Soledad. It is governed by a three-member Board of Directors that is appointed by the Monterey County Board of Supervisors and serves a four-year term. The District contracts with the City of Soledad to provide equipment and personnel and has mutual aid agreements with surrounding fire agencies, effectively extending their response area to 97 square miles. The Soledad district is roughly 42,000 acres and is bounded by the foothills of the Gabilan Range and the Santa Lucia Mountains. The fire department is a combination Paid / Volunteer Fire Department comprised of 1 career Fire Chief, 1 career Fire Captain, 1 career Fire Engineer and 25 Volunteer Firefighters, protecting approximately 17,000 people within a 97 square mile response area. Services are delivered 24 hours a day, 7 days a week with 3 Fire Engines, 1 Ladder Truck, and 1 Command vehicle.

In 2002, the fire department responded to 843 alarms. In 2003, the number increased to 883 calls. Excluding medical and rescue incidents, the current fire related workload in the city is approximately 200 alarms per year. Current response averages are 6.3 firefighters per alarm or an equivalent of .5 firefighters on duty per 1,000 residents. State and Federal law require a minimum of 4 personnel to initiate an attack on a structural fire with most texts and national standards recommending between 10 and 12 firefighters manning 2 engines and 1 ladder truck company for structure fire operations.

Impacts

Assumptions

The analysis assumes that the current ratio of 1.6 firefighters (career and volunteers) per 1,000 residents is acceptable and is maintained into the future

Implications of the Land Use Diagram

Buildout pursuant to the proposed General Plan will increase the population within the Fire Department's service area by approximately 46,000 over 2004 levels. In addition, an additional 12 million square feet of non-residential development is anticipated, including 9.5 million of industrial floor space. Lastly, the area contemplated for development will add about 3,500 acres to the area currently served within the City.

Impact PS-6: Buildout of the City as contemplated by the draft Plan will increase the need for fire fighting personnel and equipment. This impact is considered significant unless mitigated (Class II).

Assuming the same ratio of 1.6 fire fighters per 1,000 residents is maintained into the future, buildout of the draft Plan will generate the need for additional firefighters as follows:

46,000 additional residents X 1.6 per 1,000 residents = 8 total fire fighters

Impacts PS-7: Buildout of the draft Plan will require additional fire protection facilities and equipment to maintain an acceptable response time. This impact is considered significant unless mitigated (Class II).

The area designated for urban development by the draft Plan includes about 3,500 acres to the east and north of the existing City limits. The City has one fire station adjacent to City Hall. Response times within the City are generally within five minutes. Serving the areas contemplated for urban development may necessitate a second fire station more centrally located to serve the expanded urban area.

Impact PS-8: The additional industrial development accommodated by the draft Plan may necessitate specialized fire fighting and hazardous materials equipment to maintain an acceptable level of fire protection. This impact is considered adverse but not significant (Class III).

As discussed above, the draft Plan contemplates a significant amount of additional industrial development which could be occupied by a wide assortment of industrial enterprises. The type and quantity of such businesses is unknown at this time, but it can be assumed that some portion will engage in processes that use and store hazardous materials or engage in other activities that necessitate specialized fire fighting or hazardous materials handling equipment.

The district, by way of written agreement, has contracted with the City of Soledad for the provision of fire protection services. The current agreement was entered on September 3, 1998 with a term of fifteen (15) years. Pursuant to an ordinance adopted on April 18, 1980 the district established a "Unit of Benefits Schedule" for fire protection and related services for real property. Subsequently a $1.25 charge for each unit of benefit was imposed. The number of units of benefit for each tax parcel bas been modified over the years to meet the increased costs of providing fire protection services.

Police Protection

Issue

Buildout of the City as contemplated by the draft Plan will increase the demand for police protection services.

Thresholds of Significance

New development that requires additional police protection personnel and equipment necessary to achieve and maintain an acceptable level of service is considered to have a significant impact.

Environmental and Regulatory Setting

The Soledad Police Department is located at 236 Main Street and provides general law enforcement duties including the enforcement of federal, state and local laws. The Police Department has one Chief, one Lieutenant, two sergeants, thirteen full-time officers, and one part-time animal control officer and support staff. Services include animal control, parking enforcement, vehicle abatement, traffic control and criminal investigations. The Soledad Police department also provides D.A.R.E. Program, community awareness and training workshops.

The City currently has 17 full time police officers and two reserve officers. To augment its services the police department has mutual aid agreements with the cities of Greenfield and Gonzales and the Monterey County Sheriff's Department.

The Police Department strives to provide a minimum service standard of 1 officer for every 1,000 citizens. Not counting the prison population, there are 1.47 officers for every 1,000 residents of Soledad.

Crimes reported in Soledad for 1996 to 1998 are shown below in Table V.1-9. Crime rates were calculated by dividing the number of reported crimes by the total population and then multiplying the result by 1,000.

TABLE V.1-9: REPORTED CRIMES IN SOLEDAD

Violent Crime	1996	1997	1998	% Change
Homicide	0	0	0	0.0
Rape	0	1	2	0.0
Robbery	7	14	17	21.4
Aggravated Assault	39	29	32	10.3
Total Violent Crime	46	44	51	15.9
Property Crime	1996	1997	1997	% Change
Burglary	72	96	90	-6.3
Larceny	163	136	152	11.8
Motor Vehicle Theft	14	18	18	0.0
Arson	0	4	2	-50.0
Total Property Crimes	249	254	262	3.1
Total Reported Crimes	295	298	313	5.0
Total Population	15,600	20,000	21,950	9.8
Crime Rate	18.91	14.90	14.26	-4.3
Crime Rate Monterey County	46.99	43.62	38.57	-11.6

Source: California Criminal Profile, FBI Crime Index, 1998. Population figures from the Department of Finance, 1998.

Impacts

Assumptions

The analysis assumes that the current ratio of 1.47 police officers per 1,000 residents is acceptable and is maintained into the future

Implications of the Land Use Diagram

Buildout in accordance with the draft Plan will increase the population within the Police Department's service area by approximately 46,000 over 2004 levels. In addition, 12 million square feet of non-residential development is anticipated, including 9.5 million of industrial floor space. Lastly, the area contemplated for development will add about 3,500 acres to the area currently served within the City.

Impact PS-9: Buildout of the City as contemplated by the draft Plan will increase the need for police protection personnel and equipment. This impact is considered significant unless mitigated (Class II).

Assuming the current standard of 1.47 officers per 1,000 residents is maintained into the future, buildout of the draft Plan will generate the need for additional police as follows:

46,000 additional residents X 1.47 per 1,000 residents = 68 additional officers

Parks and Recreation

Issue

Buildout of the draft Plan will increase the demand for parks and recreation services and facilities as well as parks maintenance.

Thresholds of Significance

Buildout of the draft Plan could have a significant impact on parks and recreation if it generates a demand for new parks and recreation that would hinder efforts to achieve and maintain the desired ratio of facilities to population.

Environmental Setting

Soledad has over 61 acres of land dedicated to open space and recreational uses. There are four existing public parks, an indoor swimming pool facility, community center and 36 acres of land located next to the Salinas River designated as open space.

Existing Park Facilities

The City's 10 existing recreation facilities, shown above in Table V.1-10, total more than 60 acres of recreational space. Figure V.1-1 illustrates the location of existing park facilities. There are 6 medium sized neighborhood parks distributed throughout the community many containing playgrounds, picnic tables, barbeque pits, and large grassy areas. Parks and recreation facilities standards described in the paragraphs below reflect general planning standards, as Soledad does not have an adopted set of parks standards.

A standard community park ranges from eight to 25 acres, contains facilities to serve a significant portion of the City, and is most desirably located adjacent to major streets for easy accessibility.

The standard neighborhood park is usually less than eight acres and is intended to provide recreational facilities as determined appropriate for a given neighborhood's characteristics. A cooperative arrangement with school facilities reduces development costs and eliminates duplication of efforts.

A total of 24.8 usable acres of existing park space are located throughout the City to serve the current estimated population of 12,700, or about 1.95 acres per 1,000 residents. Applying the National Park and Recreation Association standard of 5 acres of developed parkland per thousand population; the City would need approximately 61 acres of usable parks and open space land. By this standard, the City is currently deficient by over 36 acres of parkland.

Community & Recreation Programs Community & Recreation Programs

The Soledad YMCA is located off Metz Road and maintains a large, 25-meter indoor pool open to the public March through September each year. Lessons, open swim and many other activities are provided. The YMCA, together with the City of Soledad, provides a variety of organized sports and activities including aerobics, youth and adult sports, and senior citizen activities.

TABLE V.1-10:
EXISTING PARK AND RECREATION FACILITIES SERVING SOLEDAD

Facility	Size in Acres	Location	Facilities Provided
City of Soledad			
Vosti Park	6.4	Park and Monterey Streets	Play fields; volleyball; horseshoes
Ramirez Park	1.25	End of Munras Street	Children's play equipment and lawn
Bill Ramos Park	1.25	Monterey and Soledad Streets	Walking path and picnic areas
Front Street Park	0.1	Front Street	Acquired from Southern Pacific Railroad; open space
Little League Field	2.8	East and North Streets	Baseball diamond; announcer's booth; snack bar; tennis courts; play equipment; barbecue pits and restrooms
Indoor Swimming Pool	4	Walker Drive	Maintained by Mission Soledad Recreation District
Lum Park (Water Tank Park Phase I)	5.85	Adjacent to the La Cuesta Views subdivision and north of the city-owned one million gallon water storage tank.	Neighborhood park with bar-b-cue areas, play fields and child play area
Rotary Park (Community Center Park)	2.5	North of Gabilan Elementary School along Walker Drive	This facility offers a wide variety of activities including sports, bingo and theatrical productions.
Gallardo Park (Soledad Redevelopment Agency Park)	4	Bounded by Andalucia Drive, Metz Road and Walker Drive.	Neighborhood park with bar-b-cue areas and child play area
Los Coches Adobe	--	One mile south of the City, but within the City limits	Richardson Adobe, 1843
Salinas River open space	35	Southern portion of the City within the 100-year floodplain.	Open space in the river bed (private)
Regional Parks			
Pinnacles National Monument	--	State Highway 146 east of the City	Hiking; rock climbing and camping
Mission Nuestra Senora de la Soledad	--	2.5 miles west of Soledad	Soledad Mission, historical displays, Catholic church
TOTAL:	+/- 63.2		

Source: Hanna and Brunetti, 1999; Phone interview Public Works, 6/16/2000

Regulatory Setting

The Quimby Act

The City has adopted an ordinance to fund parks and recreation in accordance with Section 66477 of the Subdivision Map Act (the Quimby Act). The City's Quimby Ordinance allows the City to require the payment of a fee or the dedication of an equivalent area of parkland when new residential subdivisions are proposed. The law states that *"the dedication of land or the payment of*

fees, or both, shall not exceed the proportionate amount necessary to provide three acres of park area per 1,000 persons residing within a subdivision subject to this section, unless the amount of existing neighborhood and community park area, as calculated pursuant to this subdivision, exceeds that limit, in which case the legislative body may adopt the calculated amount as a higher standard not to exceed five acres per 1,000 persons residing in a subdivision subject to this section." In addition to Quimby fees, facilities can be provided by grants, donations, user fees, community fund raising events, joint ventures, and joint use agreements.

Previous and Ongoing Parks and Recreation Efforts

The 1993 General Plan Recreation Element provides a set of goals and policies for the acquisition and development of City parkland. The policies of the Recreation Element create a system of varied neighborhood and community parks and encourage cooperation with the Soledad unified School District to jointly plan open space facilities, and coordinate with private business in the development of public recreational activities. Recreation policies also support the acquisition of land for a trail system and protection of riparian habitat along the Salinas River.

Lack of an adequate amount of locally accessible open space to serve the passive and active recreational needs of community residents is an ongoing issue within the City. Most of the larger open spaces and recreational trails are located within the County of Monterey and necessitate a car trip to reach them.

There are six new parks recommended by the Parks and Recreation Element of the 1993 General Plan. Together, they total about 18.3 acres and will provide active recreational opportunities for the residents of Soledad. They are described below along with their status in 2004.

TABLE V.1-11
PARK AND RECREATION FACILITIES RECOMMENDED BY THE 1993 GENERAL PLAN

Park	Description	Status in 2000
Lum Park	Proposed as two-phase project. Phase 1 has been constructed and is called Lum Park. Phase 2 is also a neighborhood park and will be located in the northeast corner of the existing city limits on the Hamby property. Phase 2 measures 4 acres.	Awaiting funding
Gabilan Park	Will serve as a neighborhood park. It will be located at the corner of Gabilan and Prado Drive on approximately 4 acres and is included as part of the Andalucia IV subdivision.	50% completed
Vista Soledad Park	Will be a neighborhood park measuring 5.3 acres and will be located at the northeast corner of the proposed Gabilan Drive/San Vicente Road intersection. This park will serve both as a school playground and as a neighborhood park.	Planned completion in 12-18 months.
Orchard Lane Park	Will also serve as both a school playground and as a neighborhood park. This park will be located on the Hamby property north of Gabilan Drive and west of Orchard Lane adjacent to a proposed elementary school and will measure 5 acres.	Awaiting development of Hamby property
Metz Road	Proposed as a community park located on North Metz Road between San Vicente Elementary School and Bryant Canyon Channel. This park will also be located on the Hamby property and measures 10 acres.	Awaiting development of Hamby property
Miranda Park	Proposed as a community park located off San Vicente Road north of Front Street. This park is proposed to be 5 acres.	Awaiting funding
Miravale Project	Nine acres of parkland in four locations.	Approved but not developed.

Source: City of Soledad

Impacts

Assumptions

For purposes of assessing potential impacts to park and recreation facilities, the goals stated in the draft Plan of four acres per 1,000 residents will be used.

Implications of the Land Use Diagram

Buildout in accordance with the draft Plan will increase the City's non-prison population to 57,000.

Impact PS-10: Buildout of the draft Plan will significantly increase the City's population and the demand for parkland. This impact is considered significant unless mitigated (Class II).

Assuming a buildout population of 57,000 non-prison residents, to achieve the desired ratio of four acres of parkland per 1,000 residents will require a total of:

57,000 X 4.0 acres per 1,000 = 228 acres of parkland at buildout

The City currently has 24.8 acres of useable parkland which means that buildout will require an additional 203 acres to achieve the desired ratio.

Impact PS-11: Buildout of the draft Plan will significantly increase the City's population and the demand for recreation programs. This impact is considered adverse but not significant (Class III).

As stated above, buildout the draft Plan will significantly increase the City's population with a corresponding increase in the demand for recreation programs and facilities.

School Facilities

Issue

Buildout of the draft Plan will add 42,000 more residents including school-aged children which will significantly increase the need for new and/or expanded school facilities.

Thresholds of Significance

A project could have a significant impact on school facilities if it generates additional school aged children that exceed the present or planned capacity of school facilities serving the community.

Environmental Setting

The Soledad Union School District (SUSD) is responsible for serving the educational needs of the City's youth. The district has three elementary schools serving grades K through 5, one middle school serving grades 6-8 and one High School for grades 9 through 12.

School Facilities

San Vicente School. San Vicente School offers kindergarten through fifth grade, as well as a state preschool facility and a Monterey County Office of Education Special Day Class. Total enrollment in fall of 2004 was 673. Reported capacity in 2000 was 888 students (Soledad General Plan Background Report). Based on this information, the school is at 76 percent capacity.

Gabilan School. Gabilan Elementary provides education to 573 students in grades K-5. The reported capacity in 2000 was 788 students. The school is at 73% capacity.

Rose Ferrero Elementary. Rose Ferrero Elementary is the newest school in the Soledad School District. Built in 2001, the school began accepting students in the 2002 school year. Rose Ferrero educates students in grades K-5, with an emphasis on mathematics and technology. The facilities include twenty-eight classrooms, one computer lab, a Discovery Art/Science room, a 2,000 square foot library, a multi-purpose room, administrative offices and conference rooms, and outdoor play facilities. For the 2002-2003 school year, Rose Ferrero's enrollment totaled 628 students. The school's capacity is approximately 750 students, and is therefore at 84% capacity.

Main Street School. Main Street Middle School is the only middle school serving the community. In Summer 2004, Main Street Middle School began renovations. During the year 2002-2003, total enrollment was 838 students, 281 of which were sixth graders.

The school has 34 classrooms, five of which are portables. Other school facilities include a multi-purpose room, administrative office, office of student services, library, and computer and science lab. The reported capacity of the school in the year 2000 was 652 students. Based on these assumptions, the enrollment is at 128% capacity.

Soledad High School. Soledad High School was constructed in 1999. The High School has a planned capacity of 1,250 students. Current enrollment is 505 students, or 40 percent of the total capacity.

Community Education Center. There are two continuation schools in Soledad where students can get their GED and high school diplomas. They are Shalom High School, which had 505 students enrolled in 2000, and Pinnacles High School, which had 31 students. These two schools provide for two different age groups in Soledad. Many students utilize the on-site child/day-care facilities.

Students who attend Shalom typically arrive by appointment and complete between 20 and 30 hours of study a week at home. They then bring in their homework for grading and tutoring. Programs offered include the Mission Trails Regional Occupation Program (ROP) where students who are 16 years or over learn skills necessary for specific occupations such as clerical and mechanical skills. There is also a course providing a Certified Nurses Aid certificate. Shalom also provides a Work Program where students are assigned an employer who gives them valuable work experience. This program is both regional and local and positions are both volunteer and paid. Adults can obtain training to get their GED and many people attend Shalom for the English as a Second Language (ESL) program. Citizenship classes and beginner computer classes are also available.

Community College. There are no community colleges located in the City of Soledad. The nearest community college, Hartnell, is located in Salinas. Prospective students may also attend Gavilan College in Gilroy, and Monterey Peninsula College in Monterey.

Hartnell College presently serves approximately 9,316 students from the surrounding communities of Bradley, Castroville, Chualar, Greenfield, Jolon, King City, Lockwood, Moss Landing, San Ardo, San Lucas, Soledad and adjacent rural areas. Hartnell College was granted funding through Measure H, a 131 million dollar bond measure passed locally in 2002, to construct a new library and three-story parking garage on campus. Both projects are underway. More information about construction on campus can be obtained at http://www.hartnell.edu/h.

Planning for New School Facilities

There are three proposed elementary schools that will be located throughout the community. One is planned at the intersection of Gabilan Dr. and San Vicente Rd. Another is planned off of Gabilan in the Hamby Property and another will be at the end of Vista North next to Lum Park. These facilities are dependent on future development and will be constructed as the surrounding property is developed.

Regulatory Setting

Late in 1998, the governor signed into law Senate Bill 50, otherwise known as the Leroy R. Greene School Facilities Act of 1998 (Government Code Section 65995 et seq.). The intent of SB50 was to establish once and for all the obligations of developers and local governments with respect to the mitigation of school facilities impacts associated with new development. To that end, SB50 appears to greatly limit the responsibilities of local government when deciding land use matters by establishing a strict formula prescribing the financial obligations of developers of projects that may impact the demand for school facilities.

Previous case law (the Mira-Hart-Murrieta-Goleta cases) supported the notion that, under certain circumstances, local governments still had an obligation under the California Environmental Quality Act (CEQA) to exact additional mitigation from developers beyond the State-sanctioned school impact fees as a way to "fully mitigate" school impacts from new development. SB50 now appears to extinguish this line of reasoning by substituting more precise language in the school impact fee statute that says, in effect, that local governments may require the payment of the

statutory fee, only. Unless and until the provisions of SB50 are litigated (almost all previous attempts to revise the school impact fee statute has been challenged in court) the City's responsibility seems to end where the developer is required to pay the fee to the school district.

On the other hand, nothing in SB50 prohibits a developer and school district from entering into an agreement that sets forth specific provisions for how the obligations of the law will be satisfied for a given project. Future developers in Soledad may pursue such agreements with the school district. The City of Soledad is a strong advocate of fully mitigating the impacts of new development on the demand for school facilities.

Impacts

Assumptions

The number of school-aged children expected under buildout of the proposed General Plan was determined based on the application of student generation factors to the number of dwelling units anticipated, as shown in Table V.1-12.

TABLE V.1-12: FACTORS FOR DETERMINING NUMBER OF SCHOOL-AGE CHILDREN

School Age	Student Generation Factor Per Dwelling Unit
Elementary School	0.47
Middle School	0.14
High School	0.203
Community College	0.05

Source: Soledad Union School District

The analysis assumes no major changes in the available methods of mitigation for impacts to schools.

Implications of the Land Use Diagram

Impact PS-12: Buildout of the draft Plan will accommodate about 11,539 additional dwelling units which in turn are expected to generate additional school aged children. The number of new households and associated students will significantly increase the demand for school facilities. This impact is considered significant and adverse (Class II).

The number of students generated by projected development is calculated in Table V.1-13.

TABLE V.1-13: ESTIMATE OF SCHOOL-AGED CHILDREN AT BUILDOUT		
Age of Students	Student Generation Factor Per Dwelling Unit	Students By Age Group
Elementary	0.47	5,208
Middle	0.14	1,551
High School	0.203	2,249
Community College	0.05	554

Comparison of the projected number of students to the existing facility capacity follows in Table V.1-14.

TABLE V.1-14: PROJECTED STUDENT POPULATION VS. EXISTING SCHOOL CAPACITY					
Age	Existing Total Capacity	Existing Enrollment	Remaining Capacity	Total Projected	Surplus/(Deficit) in Spaces
Elementary	2,426	1,874	552	5,208	(2,782)
Middle	652	838	(186)	1,551	(1,737)
High School	1250	505	745	2,249	(1,504)
Community College1	NA	9,316	NA	554	NA

Source: Soledad Union School District and CMCA, 2004

1. A significant portion of the students at community colleges attend part-time. Therefore, quantification of both capacity and any surplus or deficit in space is not feasible.

As Table V.1-14 shows, the projected population of students will exceed the existing capacity for schools throughout the school district.

Three elementary schools are planned as part of the development of new residential areas as mentioned previously. The existing average capacity of elementary schools in the district is 808. Assuming the new facilities are built to substantially the same capacity, the three new schools will not be sufficient to serve the projected population. Assuming student population increases keep pace with overall projected population increases, at a rate of 3.9%, it will be six years until a new school is required.

The middle school is currently undergoing renovations to increase capacity. Upon completion of renovations, the school will still have insufficient capacity to serve the projected middle school population. At least one additional middle school will be required prior to buildout.

The existing high school will not be sufficient to serve the projected student population. Substantial renovations or an additional high school of substantially the same size will be required prior to buildout of the Plan. Assuming student population increases keep pace with overall projected population increases, at a rate of 3.9%, it will be twenty-three years until a new school is required.

As mentioned in Table V.1-14, potential impacts to the capacity of community colleges is infeasible to calculate because of the widely varying attendance pattern of community college students. Two new buildings, a library and parking structure, are under construction at Hartnell College.

Recall that mitigation for impacts to schools is limited to the imposition of fees in accordance with existing regulations described earlier in this section.

Solid Waste

Issue

Buildout of the land uses contemplated by the draft Plan will increase the generation of solid waste and could impact local and regional solid waste disposal sites.

Thresholds of Significance

An increase of 5 percent or more of the expected average annual waste stream for a given municipal waste facility is considered significant; 1 percent or more is considered adverse but not significant.

Environmental Setting

The Salinas Valley Solid Waste Authority (Authority) was created on January 1, 1997 to assume the responsibility for the solid waste facilities and disposal needs of the cities of Salinas, Gonzales, King City, Greenfield, and Soledad, and the unincorporated areas of Monterey County in the Salinas Valley region. The Authority is an autonomous governmental organization funded by landfill and transfer station tipping fees, and is controlled by a board of directors composed of representatives from each of the five cities and unincorporated areas. In October 1997, the Authority assumed ownership of the Lewis Road Landfill, the Crazy Horse Sanitary Landfill, and the Johnson Canyon Road Landfill, and assumed the lease agreement for the Jolon Road Landfill and Transfer Station.

The Authority is examining four different scenarios to provide for the solid waste disposal needs of its member jurisdictions for approximately 70 years. Three different landfill sites (Crazy Horse Sanitary Landfill, Johnson Canyon Road Landfill, and Jolon Road Landfill) are included in these scenarios, as well as five potential transfer station/materials recovery facility (TS/MRF) sites in the Salinas area, and two potential transfer station/recyclable centers (TS/RC) in the King City area. The Lewis Road Landfill is not considered in any scenario for contribution to the Authority's long-term disposal capacity needs. The Lewis Road Landfill has a very limited site life, with no reasonable potential for significant expansion.

The Authority also disposes of waste at Foothill Sanitary Landfill (in San Joaquin County), and Monterey Regional Waste Management District Marina Landfill. The following information regarding each of the landfills was derived from the California Integrated Waste Management Board (CIWMB) website: http://www.ciwmb.ca.gov/Profiles/Facility/, accessed November 1, 2004. All of the facility statistics quoted are for the year 2000, the most recent year reported on the website and summarized below and in Table V.1-15.

Johnson Canyon Landfill. Johnson Canyon Landfill is located in Gonzales, just north of the City of Soledad. The total estimated permitted capacity is 6,601,000 cubic yards. Approximately 10% of the estimated capacity had been used, or 664,850 cubic yards. The facility is permitted to receive 300 tons of solid waste per day. In addition to regular municipal waste, the facility receives sludge, agricultural waste, tires, and construction materials. In the year 2000, Soledad sent 7,563 tons of waste to this landfill. A total of 48,151 tons of waste were sent in 2000 by six jurisdictions; Soledad's tonnage accounted for approximately 16% of this total.

Foothill Sanitary Landfill. Foothill Sanitary Landfill is located in Linden. The facility covers 800 acres, 750 of which are permitted for disposal. The facility is permitted to accept 1,500 tons of waste per day. In 2000, the total permitted capacity was 102,000,000 cubic yards. 7,030,534 cubic

yards, 6.9% of the estimated capacity, had been used; 93.1% of the capacity remained (94,969,466 cubic yards). Soledad sent one (1) ton of waste to this landfill in 2000.

The Marina Landfill. The Marina Landfill is located in the City of Marina. The landfill covers 470 acres, 315 of which are currently permitted for use as disposal areas. The landfill has a total permitted capacity of 49,700,000 cubic yards, approximately 17,036,000 of which (34%) has been used. The estimated remaining capacity is 32,664,000 cubic yards, or approximately 66% of the permitted disposal area. The maximum daily disposal rate is 1,200 tons. In the year 2000, 23 jurisdictions sent waste to this facility. Of the 207,393 tons sent in that year, Soledad's waste accounted for 0.07% of the total (159 tons).

TABLE V.1-15: SUMMARY OF LANDFILL CAPACITIES SERVING SOLEDAD

Facility	Remaining Capacity		Class/Waste Type
	Cubic Yards	Years	
Johnson Canyon[1]	4,140,000	40 Years	Class 3: Mixed Municipal
Marina	32,664,000	87 Years	Agricultural, Mixed Municipal, Construction, Demolition, Sludge
Foothill Sanitary	95,000,000	50 Years	

Sources: Monterey Regional Waste Management District, Salinas Valley Solid Waste Authority

1. Expansion currently under review would extend remaining life 70 years.

Based on information provided by the CIWMB, the City of Soledad has one of the lowest per capita waste generation rates among other cities its size. In 2000, the rate was approximately 0.4 pounds per capita per resident per day. The total residential waste generation was 938 tons per year. The remainder of the waste generated (88%, or 6,875 tons per year) is attributed to businesses. A comparison of residential waste generation among cities of similar size in and around Monterey County is provided in Table V.1-16.

TABLE V.1-16: RESIDENTIAL SOLID WASTE GENERATION IN MONTEREY COUNTY COMMUNITIES	
City	Pounds/Resident/Day
Greenfield	0.94
King City	1.8
Marina	0.8
Pacific Grove	1.5
Scotts Valley	0.9
Soledad	**0.4**

Source: http://www.ciwmb.ca.gov/profiles accessed November 1, 2004

The City of Soledad promotes reuse of solid waste by providing programs for source reduction, recycling, composting and environmentally safe transformation of wastes. Soledad provides residential curbside greenwaste and recycling service, as well as commercial recyclable pickup. In 1999, Soledad provided an above-average number of programs supporting waste reduction, as outlined in Table V.1-17.

TABLE V.1-17: WASTE REDUCTION AND REUSE PROGRAMS IN SOLEDAD (1999)		
Program	Number of Programs	Average Jurisdiction
Composting	4	2
Facility Recovery	2	2
Household Hazardous Waste	3	3
Policy Incentives	2	1
Public Education	4	3
Recycling	8	5
Source Reduction	4	4
Special Waste Materials	7	4
Transformation (Waste to Energy)	0	0

Source: http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=500&JUR=Soledad accessed November 1, 2004.

Regulatory Setting

Monterey County Integrated Waste Management Plan

In September 1989, the Governor signed into law the Integrated Waste Management Act. This Act establishes mandates for local agencies to achieve a 25 percent per year reduction in solid waste disposed by 1995 and a 50 percent reduction by 2000, relative to the waste generated in 1989. The Act superceded the California Waste Management Board and created the State Integrated Waste Management and Recycling Board. The Board's duties are to review county and city source reduction and recycling elements and to make recommendations concerning state actions needed to maintain an efficient and environmentally safe solid waste management infrastructure.

Each city is required to prepare, adopt and submit to the County a source reduction and recycling element that includes the following:

- Waste characteristics
- Source reduction
- Recycling
- Composting
- Solid waste facility capacity
- Education and public information
- Funding
- Special waste
- Household hazardous waste

In response to the requirements of the Act, the County of Monterey and cities within Monterey County teamed up to prepare an Integrated Waste Management Plan. A local Integrated Waste Management Board was also formed; the City of Soledad is represented on that board. The City requires that all new development comply with the Monterey County Integrated Waste Management Plan.

Under the IWMP the City was required by State law to divert 50% of its waste by January 1, 2000. Table V.1-18 outlines the diversion rates recorded for Soledad over the period from 1995-2002.

TABLE V.1-18: SOLID WASTE DIVERSION RATE – SOLEDAD	
Year	Percent Diversion
1995	53
1996	64
1997	48
1998	49
2000	67
2001	53
2002	47

Source: http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=500&JUR=Soledad Accessed 10/18/04

As Table V.1-18 suggests, Soledad has achieved the mandated 50% diversion rate in four of the seven years for which data are available.

Impacts

Impact PS-13 Buildout of the draft Plan will result in the generation of additional solid waste which will adversely impact the capacity of landfills serving the City and surrounding cities. This impact is considered significant unless mitigated (Class II).

Based on information provided by the CIWMB, in the year 2000, residential household waste is generated at a rate of 0.4 pounds per person per day. For purposes of this analysis, it is assumed that this rate continues into the future.

Commercial/business waste is more difficult to quantify because the volume of waste depends on the type of business. The CIWMB website notes a disposal rate for Soledad businesses of 22.7 pounds per employee per day. For purposes of the following analysis this rate is assumed to remain constant into the future and is applied to the number of employees expected under buildout of the draft Plan. Future employment is assumed to be 1 employee per 500 square feet of new industrial or commercial floor space. The employee projections do not include institutions such as schools, fire stations, etcetera, that may be needed as the Plan is implemented because the number of facilities and the associated employment has not yet been determined.

TABLE V.1-19: ESTIMATE OF FUTURE EMPLOYMENT ACCOMMODATED BY GENERAL PLAN		
Land Use	Floor Area Accommodated by the Draft Plan (sq.ft.)	Employees
Commercial	3,354,120	6,708[1]
Industrial	9,513,504	19,027[1]
Total:		25,735
Existing Non-Prison Employment:		700
Total Non-Prison Employment At Buildout:		26,435

Source: CMCA, 2004

1. At one employee per 500 square feet of floor area.

The analysis assumes that waste composition will not change substantially, and that existing waste diversion programs will continue at current levels. The analysis also assumes that the prison population will remain static.

TABLE V.1-20: PROJECTED SOLID WASTE GENERATION AT BUILDOUT			
Land Use Type	Existing Volume (tons per year)	Volume Attributable to New Development (tons per year)	Buildout Total (tons per year)
Residential	938	3,369[1]	4,307
Non-Residential	6,875	109,514[2]	116,389
Total:	7,813	112,883	120,696

Source: www.ciwmb.ca.gov and CMCA

1. Based on 0.4 tons per day per person and 46,154 remaining population.

2. Based on 22.7 pounds per day per employee and 26,435 remaining non-prison employees.

Buildout of the land uses contemplated by the draft Plan will increase the solid waste generation by 112,883 tons per year, a several-fold increase over existing volumes. For purposes of this analysis impacts to solid waste disposal capacity are considered significant if project-related waste generation results in a 5% increase in the total annual waste stream to any of the facilities currently accepting waste from Soledad. A 1% increase is considered adverse but not significant. The following table distributes the projected future waste stream to the three landfills currently accepting waste from Soledad in the same proportions as in 2004.

TABLE V.1-21: IMPACTS TO SPECIFIED SOLID WASTE FACILITIES RESULTING FROM BUILDOUT

Facility	Total Waste Stream To Each Facility In 2000 From All Sources (tpy)	% of Soledad's Waste Stream To Each Facility	Soledad Waste Stream To Each Facility At Buildout (tpy)	% Increase	Significant?
Johnson Canyon	48,151	96%	115,869	240%	YES
Foothill Sanitary	253,030	3% (est)	3,620	1.07%	NO
Marina	207,393	1% (est)	1,206	0.7%	NO

Source: California Integrated Waste Management Board and CMCA

As Table V.1-21 suggests, if the distribution of City waste among the available landfills remains as it is in 2004, buildout of the General Plan would result in a significant impact to the Johnson Canyon Landfill. Table V.1-22 compares the buildout waste stream from Soledad with the remaining capacity of each disposal facility.

TABLE V.1-22: PERCENT OF REMAINING SOLID WASTE CAPACITY CONSUMED BY SOLEDAD

Facility	Total Waste Stream To Each Facility In 2000 From All Sources (tpy)	Remaining Capacity (tpy)	Soledad Waste Stream To Each Facility At Buildout (tpy)	Percent of Remaining Capacity Consumed By Soledad
Johnson Canyon	48,151	481,510	115,869	24%
Foothill Sanitary	253,030	5,116,667	3,620	0.07%
Marina	207,393	609,979	1,206	0.2%

Source: California Integrated Waste Management Board and CMCA

Although the increase in the total amount of solid waste contributed to each facility by Soledad at buildout is significant, the percentage of remaining capacity consumed at each disposal facility

remains small. However, this does not account for the cumulative contribution of the other jurisdictions using these facilities.

As mentioned earlier, the Salinas Valley Solid Waste Authority is currently undertaking a program of capacity expansion for facilities serving the lower Salinas Valley, including Soledad. The Authority is examining four different scenarios to provide for the solid waste disposal needs of its member jurisdictions for approximately 70 years. Three different landfill sites (Crazy Horse Sanitary Landfill, Johnson Canyon Road Landfill, and Jolon Road Landfill) are included in these scenarios, as well as five potential transfer station/materials recovery facility (TS/MRF) sites in the Salinas area, and two potential transfer station/recyclable centers (TS/RC) in the King City area. The Lewis Road Landfill is not considered in any scenario for contribution to the Authority's long-term disposal capacity needs. The Lewis Road Landfill has a very limited site life, with no reasonable potential for significant expansion. Any one of the following four scenarios or subset thereof could be selected as the proposed Project:

Scenario 1: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion and Johnson Canyon Road Landfill Full Expansion;

Scenario 2: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion, Jolon Road Landfill Full Expansion and Johnson Canyon Road Landfill Tonnage Increase;

Scenario 3: Long Term Disposal Capacity Provision Through Johnson Canyon Road Landfill Reduced Expansion and Jolon Road Landfill Reduced Expansion; and

Scenario 4: Long Term Disposal Capacity Provision Through Crazy Horse Sanitary Landfill Vertical Expansion, Johnson Canyon Road Landfill Reduced Expansion and Jolon Road Landfill Reduced Expansion.

An environmental impact report was prepared in 2002. As a result of this process, the Board of Directors adopted a program that provided for expansion of the available capacity at the Crazy Horse Landfill and good faith efforts to find a new landfill site, with assistance from an Ad Hoc Solid Waste Disposal Facility Task Force (Task Force) composed of Board Members and representatives of various concerned groups. The program also provided for expansions at Johnson Canyon and Jolon Landfills, which could be utilized until the supplemental landfill capacity was identified, acquired, permitted and constructed. The Task Force was directed to meet monthly and conduct an in-depth review of potential waste disposal sites to determine if any could be feasibly developed to supplement the capacity of the existing landfills in the Salinas Valley for at least 35 years. The City of Soledad is represented on the Task Force which consists of elected officials and members of the public.

A landfill siting study was completed in February 2004 which recommended the location of a new landfill disposal region south of King City and from Highway 101 to the eastern Monterey County line within which a future landfill disposal site is to be located.

By pursuing the expansion of existing facilities and the location of a new disposal site, the SVWA intends to meet the future demand for waste disposal for Salinas Valley cities, including Soledad.

Energy

Issue

Buildout of the draft Plan with urban land uses will significantly increase the demand for energy from the City which will contribute to the cumulative demand for energy. CEQA Guidelines, Appendix F, Energy Conservation, "CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy."

Thresholds of Significance

A project would result in a significant adverse impact on energy resources if it would result in the wasteful and inefficient use of energy, significantly increase the use of energy, and/or result in the need for expanded energy production or distribution infrastructure.

Environmental and Regulatory Setting

Regulatory Setting

The Uniform Building Code includes energy efficiency requirements for new construction such as requirements for minimum insulating standards for walls and windows. Other standards have additional indirect benefits in terms of energy efficiency.

Deregulation of the utilities industry in 1996 resulted in a dysfunctional energy market and rising wholesale energy prices in California. On January 17, 2001, Governor Davis proclaimed a State of Emergency in California due to an electrical energy shortage. The State is attempting to stabilize the utilities industry by allowing increased production and encouraging conservation. The state offers a wide variety of rebates and incentives to help businesses, agricultural users and consumers reduce their electricity use.

The Energy Resources Conservation and Development Commission (usually called the California Energy Commission), the Public Utilities Commission (CPUC), and the Consumer Power and Conservation Financing Authority (called the CPA - which is now defunct), approved the final State of California Energy Action Plan in 2003, proposed by a subcommittee of the three agencies. The Draft Plan establishes shared goals and specific actions to ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. The plan was adopted May 8, 2003, by a three-to-two vote of the CPUC.

More recently, in November 2004, the CPUC considered an update on the Action Plan which recommends focusing efforts on three areas:

- Aging power plants operation and retirements;
- Upgrading California's electric transmission system; and
- Accelerated renewable energy development;

Efforts are currently underway in each of these areas, but most of the current effort is concentrated on upgrading the electrical transmission system.

Environmental Setting

Electricity. Pacific Gas and Electric (PG&E) provides electrical power to the residents and businesses in and around the City of Soledad. PG&E offers rebates for energy-efficient appliance purchases and operates a number of outreach and education programs aimed at conservation. At the local level, PG&E encourages energy conservation and efficiency in new and existing structures through rebates on insulation, and weatherization.

PG&E is currently working on infrastructure improvement projects throughout California in accordance with the Action Plan discussed above.

According to the California Energy Commission, the annual per capita consumption of energy in California is 7,178 kwh. California ranks 49 out 50 states in per capita consumption. This figure includes electricity, natural gas, LPG, fuel oil and kerosene.

Natural Gas. PG&E also provides natural gas to the planning area. Natural gas is used in homes and businesses as an alternative to electrical power.

Vehicle Usage. Vehicle miles traveled and hence, use of gasoline and related products, have increased dramatically in recent years, as more people commute longer distances for employment and daily errands. Regulations at the state and federal level mandate certain emissions and fuel-efficiency requirements for vehicles.

Impacts

Assumptions

Impacts of the General Plan in regards to energy are best addressed through programmatic analysis and mitigation. The impacts of particular projects will be assessed on a project-specific basis as applications for entitlements are made. This analysis assumes that per capita energy consumption will remain the same.

Implications of the Land Use Diagram

Impact PS-14: Development accommodated by the draft will increase the demand for electricity within the Plan area and the need for distribution facilities. This impact is considered unavoidable and adverse (Class I).

Development accommodated by the draft Plan would result in over 40,000 additional residents in the planning area, and over 12 million square feet of commercial and industrial space. Applying the per capita energy consumption factor of 7,178 kwh, the projected residential growth alone could increase power consumption by 2.8 million kwh. Depending on the types of commercial and industrial tenants, such development could significantly increase the demand for electricity and distribution infrastructure within the Plan area.

With regard to electrical distribution infrastructure, no projects are currently planned for Soledad other than those necessary to accommodate the incremental increase associated with new development. Deficiencies in larger infrastructure, such as high-voltage lines and power plants, will be remedied on a regional and statewide basis by implementing the improvements contemplated by the CPUC in the Energy Action Plan described above. To the extent that

substantial increases in power demand in Soledad will contribute to the larger infrastructure deficiency, the impacts are considered significant and unavoidable.

Impacts PS-15: Development of the land uses contemplated by the draft Plan will increase motor vehicle use with a corresponding increase in the consumption of motor vehicle fuels. This impact is considered adverse but not significant (Class III).

Buildout of the area designated for urban development will increase the physical size of the City and the number of motor vehicle trips both within the City and within the region. However, the range and location of land uses designated by the Plan are intended to capture a significant number of home-work and home-shopping motor vehicle trips by working toward are balance of jobs and housing. The incorporation of a complementary range of land uses with areas for employment, housing and shopping are intended to facilitate the use of alternate forms of transportation and promote the efficient use of energy.

General Plan Policy Response

Services and Facilities

S-1 The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met:

a. The developer and/or City can demonstrate that all necessary public facilities will be adequately financed and installed in time (through fees or other means); and

b. The facilities improvements are consistent with applicable facility plans approved by the City or other agencies in which the City is a participant.

S-2 The City shall plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of water production, storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion.

S-3 Public facilities, such as wells, pumps, tanks, and yards shall be located and designed so that noise, light, odors, and appearances do not adversely affect nearby land uses.

Funding

S-4 Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities.

S-5 The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.

S-6 When adopting, amending and imposing fees and developer exactions, the City shall consider the effects of such fees and exactions on project economics and the City's development goals.

S-7 User fees will be charged to recover the costs of City-provided services, except when administration of such fees makes them not cost effective, or when fees are waived or reduced to explicitly promote some other public benefit, or other long-term sources of funding have been established.

Water

S-8 The City shall promote the efficient use of water and reduced water demand by:

a. Requiring water-conserving design and equipment in new construction;
b. Encouraging water-conserving landscaping and other conservation measures;
c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures;

S-9 The City will explore the potential for use of reclaimed water for landscape irrigation or other appropriate use.

S-10 The City will manage the increase in water demand from new development to help insure groundwater resources are not overdrafted. The City will work with Monterey County and public and private water entities to plan for the efficient, long term management of groundwater resources.

S-11 Gravity flow for sewer and water service shall be employed wherever feasible.

Drainage

S-12 The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.

S-13 The City shall support efforts to acquire land or obtain easements for drainage and other public uses of flood channels where it is desirable to maintain channels in a natural state.

S-14 The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.

S-15 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.

S-16 The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.

S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

S-18 The City shall coordinate mitigation measures with responsible agencies (including California Regional Water Quality Control Board, Monterey County Environmental Health Department, and Monterey County Water Resources Department) for the control of storm drains, the monitoring of discharges and the implementation of measures to control pollutant loads in urban storm water runoff.

S-19 Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.

Schools

S-20 The City will work cooperatively with the Soledad Unified School District to monitor housing, population and school enrollment trends and in planning for future school facility needs. The City shall assist the District in locating new school sites.

S-21 The siting of new schools shall be coordinated with the City's Circulation Element to ensure that traffic conflicts are avoided, the safety of students is addressed and roadway function is not reduced, including provisions for off street student drop-off/pick up.

S-22 The City will work closely with the school district to secure adequate funding for new school facilities, and where legally feasible, shall provide a mechanism which requires development projects to mitigate the cost of providing school facilities needed to serve such development, consistent with relevant provisions of State law.

S-23 The City, to the extent feasible, shall ensure that new school facilities are constructed and operating prior to the occupation of residences, which the schools are intended to serve.

S-24 The City shall support legislation to finance the construction of new schools and shall support the modification of State laws and regulations to improve the funding of new school sites and facilities provided such support is not in conflict with City policies and does not expose the City to liability.

S-25 The City and school district shall work together in using existing school facilities for non-school-related and child-care activities.

Solid Waste

S-26 The City shall promote maximum use of solid waste source reduction, recycling, composting and environmentally safe transformation of wastes.

S-27 The City shall require that all new development comply with applicable provisions of the Monterey County Integrated Waste Management Plan.

Hazardous Waste

S-28 The City, to the extent feasible, will enforce the applicable provisions of the Monterey County Hazardous Waste Management Plan and all other applicable State, federal and local regulations dealing with the use, storage, disposal and transportation of hazardous materials.

Police Protection

S-29 The City shall strive to achieve and maintain a ratio of a minimum of 1 police officer per 1,000 residents.

S-30 The City shall strive to achieve and maintain emergency response time to a maximum of 5 minutes for police emergencies.

S-31 Within the City's overall budgetary constraints, the City shall work to provide police facilities (including substation space, patrol and other vehicles, necessary equipment, and support personnel) to maintain the standards identified in Policies S-29 and S-30, and to develop programs to discourage substance abuse and crime among the City's youth.

S-32 The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the above police protection standards.

S-33 The City shall consider public safety issues in all aspects of commercial and residential project design, including crime prevention through design.

S-34 The City shall continue to encourage the Neighborhood Watch program.

Fire Protection

S-35 The City shall strive to achieve and maintain an Insurance Service Organization (ISO) rating of 4 or better.

S-36 The City shall strive to achieve and maintain an emergency response time of 5 minutes or less for fire emergencies over 90% of the City.

S-37 The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the fire protection standards identified in Policies S-35 and S-36.

S-38 The City shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the Uniform Fire Code and other City standards and ordinances.

S-39 New non-residential development and non-residential additions of over 100 square feet of habitable space shall provide fire sprinklers in accordance with City standards, and as determined by the Fire Marshal. New residential development shall be provided with fire sprinklers unless the developer provides studies that prove the standard identified in Policy S-35 is not negatively affected.

Library Services

S-40 The City will support efforts to expand library services within Soledad.

Emergency Preparedness

HZ-9 New development shall provide fire flow, emergency access and hydrants consistent with Fire Department requirements.

HZ-10 The City will continue to participate in the State Emergency Preparedness Program.

HZ-11 The City shall maintain mutual aid agreements with Monterey County and other jurisdictions for assistance in emergencies.

HZ-12 The City will encourage site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.

Energy Conservation

H-11 The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.

Air Quality

5.11 The City shall work with APCD to reduce mobile source emissions from new development. The City shall require new commercial and industrial development to (as applicable):

a. Submit detailed plans for an APCD approved trip reduction plan. Such a plan shall include targets for an increase in average vehicle ridership for employees, and incentives for carpooling, transit ridership for employees, and incentives for carpooling, transit ridership, and bicycling.
b. Provide worker/customer transit incentives. Such incentives may include reduced work hours to coincide with transit schedules, employer-provided bus passes, and direct monetary compensation for transit ridership.
c. Accommodate local shuttle and regional transit systems.
d. Provide transit shelters.
e. Provide secure storage lockers for bicycles at a ratio of one locker per ten employees.
f. Install energy-efficient heating and cooling systems.
g. Install energy-efficient lighting and signage.
h. Establish a park-and-ride lot consisting of twenty spaces, consistent with the requirements of Caltrans.
i. Include landscaping in parking lots which incorporates canopy trees to shade parked cars and reduce fuel evaporation from parked cars.
j. Provide showers for employees.

Parks

PR-1. The City will acquire future park and recreation land and facilities by:

a. Requiring park dedications from future residential subdivisions at the rate of one acre per 1,000 population anticipated in the project;

2. Requiring payment of a park impact fee, or requiring the dedication of land and improvements in-lieu of fees, from all new development;

3. Cooperating with Monterey County to acquire land for a new regional park in the Soledad planning area;

4. Acquiring parkland near existing or potential public park or recreation sites, or near quasi- public or private sites that have a good opportunity for a joint use agreement. Acquired parkland should be contiguous to proposed or existing park and recreation facilities or provide a logical connection.

e. Pursuing joint use agreements with public and private schools, other public government agencies, private park and recreation providers, and institutions with potential parkland to make existing or proposed park and recreation facilities available to the community on an extended basis.

PR-2. The City will pursue the development of parks, open space and trails in areas subject to natural or human caused hazards such as natural or developed flood channels, hillsides and sensitive resource areas.

PR-3 The City will support the development of a regional park within its planning area. One potential location is south of the City in the vicinity of the confluence of the Salinas River and Arroyo Seco near the Los Coches Adobe. Such a location would also afford opportunities for preservation of the adobe through its incorporation into the park. Another potential regional park location lies within the foothills of the Gabilan Range where the General Plan designates areas of open space and trails.

Recreation

PR-4. The City will work with the YMCA, the Soledad Mission Recreation District, the Soledad Unified School District, Monterey County and other agencies (public and private) to expand Soledad's recreation facilities and programs. The City should provide youth, adult and senior programs for City residents, with special emphasis on youth programs.

PR-5. The City will encourage the development of private recreation facilities, including a Boys and Girl's Club or similar youth oriented facility.

PR-6. The City will strive to develop a balanced recreation program that provides activities for all age groups.

PR-7. The City will pursue joint use agreements to augment its park and recreation facilities and programs.

PR-8. The City will develop a program for the participation of private enterprise in the development and maintenance of parks and recreation facilities.

PR-9. As recreation facilities become available, the City will develop a community recreation program. The recreation program shall include youth/teen, adult and senior programs. Generally programs for which there is a large demand should be provided; however, the more specialized a recreation program, the more financially self-supporting it should become.

Trails

PR-10. The City should provide a pedestrian network within the City Limits. The system should:

a. Accommodate pedestrians and bicycles.

b. Connect residential neighborhoods with: 1) Soledad's downtown, 2) schools, 3) City park and recreation facilities, and 4) regional trails.

PR-11. The City will work with other Salinas Valley communities, the Association of Governments, the Soledad Union School District, and Monterey County to provide regional trail connections throughout the Salinas Valley.

Acquisition and Development

PR-12. The City will:

a. Provide parkland that can accommodate needed recreation.

b. Adequately plan for park and recreation acquisitions/dedications. Some land may be acquired and left undeveloped (as open space) or leased to a private agency for an interim period until park or recreation funds become available.

c. Accept park and/or recreation donations or dedications (in fee or easement) if said action will provide viable park and/or recreation resources. Donations and dedications should be consistent with the guidelines in Table VI-1.

d. Acquire park and/or recreation lands or facilities (including trails) when money and resources (such as land) are available. City acquisitions should be consistent with the guidelines in Table VI-1. Trail corridors may also be obtained 1) when negotiating new or improved public works easements (such as road, sewer or water easements), and 2) with new public or private development.

e. Generally obtain fee ownership for land: 1) that may require or have frequent public access to the site or through the site, 2) for which buying the development rights is almost as expensive as obtaining the land in fee, 3) which contains sensitive habitat requiring monitoring and enforcement, or 4) on which enforcing an easement will be difficult or costly.

f. Obtain an easement or development rights: 1) for lands on which continuation of the underlying private use is compatible with its designation in this General Plan and direct management by the City is not required, 2) to protect viewsheds or scenic resources that involve little or no public access, or 3) where the cost of development rights is substantially less than fee ownership.

Programs

7.1 The City will develop master plans for sewer, water service, and storm drainage.

7.2 The City will adopt, and update in accordance with state law, a capital improvement program for water, wastewater, drainage, fire, police and other facilities. Such CIP shall indicate capital projects, estimated costs, time frames, responsible agencies or departments, and possible funding sources.

7.3 The City shall require that capital improvement plans, or area facility plans, are prepared in conjunction with new specific plans.

7.4 The City shall maintain, and update as necessary, police and fire protection service standards to help ensure that adequate service levels are maintained.

7.5 The City will adopt development impact fees to generally offset the cost of needed public facilities and services generated by new development and shall update such fees on an annual basis.

7.6 The City will work with the Salinas Valley Solid Waste Authority to expand solid waste disposal capacity.

7.7 The City shall continue to maintain and implement the Source Reduction and Recycling Program.

7.8 The City shall require all new development to establish benefit assessment districts to fund maintenance of storm drains and appurtenances, street lights and other components which result in an increase in City staffing, equipment or funding requirements.

7.9 The City shall require all new development to provide a plan for services that outlines increased demands on public services and methods for mitigating the increased demand.

9.4 The City shall work with Mission Soledad Rural Fire Protection District to periodically evaluate fire protection services to determine if resources are being effectively and efficiently used.

9.5 The City shall adopt and maintain agreements with other local, state and federal agencies to ensure coordinated disaster response.

9.6 The City shall conduct an evaluation of City-owned safety and emergency management facilities and utility systems for susceptibility to damage from flood inundation, fire hazard, or seismic hazards, and shall analyze the extent of acceptable risk of the effects of such fire, flooding or groundshaking.

9.7 The City will review and update the Subdivision Ordinance to reflect the policies of the General Plan.

9.8 The City shall prepare an Urban Water Management Plan as required by relevant provisions of the California Water Code.

Housing Element

4.1 The City shall amend its subdivision ordinance to implement provisions of the Subdivision Map Act related to subdivision orientation for solar access. The City shall also amend its public improvement standards to require the planting of large-canopy deciduous trees in new subdivisions in formations that will create shade for streets and homes during hot summer months. The City shall seek ways to subsidize the cost of such landscaping.

4.2 The City shall encourage existing residents to participate in energy efficiency retrofit programs offered by the California Energy Commission, the California Public Utilities Commission, Pacific Gas and Electric, and The U.S. Department of Energy.

Analysis of Significance After Mitigation

Water. Impacts associated with increased water demand are considered significant and unavoidable (Class I) after application of the policies and programs recommended by the General

Plan. The basin supporting the community is in overdraft; any substantial increase in withdrawals from the basin will therefore contribute to the deficiency of the water supply.

Wastewater. Impacts associated with increased wastewater generation are considered significant and unavoidable after application of the policies and programs recommended by the General Plan.

Parks and Recreation. Impacts are considered less than significant after application of the policies and programs recommended by the General Plan..

Solid Waste. Impacts are considered less than significant after application of the policies and programs recommended by the General Plan.

Police and Fire. Impacts are considered less than significant after application of the policies and programs recommended by the General Plan.

Schools. Impacts are considered less than significant after application of the policies and programs recommended by the General Plan..

Energy. Impacts are considered significant and unavoidable (Class I) after application of the policies and programs recommended by the General Plan.

V.2 Traffic and Circulation

Issues

Development of the land uses designated by the Land Use Diagram will increase the volume of traffic on City streets and roadways above current levels, which may adversely affect the level of service of such roadways.

Thresholds of Significance

The Circulation Element of the Soledad General Plan establishes a Level of Service "D" as the standard for acceptable service on streets and roadways. Level of Service is a quantitative measure of the operating conditions of a roadway where Level of Service "A" refers to free-flow conditions and "F" denotes maximum congestion and gridlock. A project will have a significant adverse impact on traffic if it would cause a street or intersection to degrade in the Level of Service below this threshold.

Setting

Regulatory Setting

Association of Monterey Bay Area Governments (AMBAG)

AMBAG is a confederation of representatives of City and County governments which provides regional planning for Monterey, Santa Cruz and San Benito Counties. AMBAG is charged with coordinating regional transportation planning efforts in conjunction with the County and the Transportation Agency for Monterey County (TAMC). They administer the commute/rideshare program for the region, take traffic counts, and draft transportation plans for the metropolitan portions of the tri-county area.

Transportation Agency for Monterey County (TAMC)

The Transportation Agency for Monterey County (TAMC) is a twenty-two member agency which consists of local officials from each of its twelve incorporated cities and five county supervisorial districts, and ex-officio members from six public agencies, including the Association of Monterey Bay Area Governments (AMBAG), Monterey-Salinas Transit (MST), the Monterey Bay Unified Air Pollution Control District (MBUAPCD), the California Department of Transportation (Caltrans), the City of Watsonville, and the Monterey Peninsula Airport District (MPAD). TAMC is Monterey County's state-designated Regional Transportation Planning Agency (RTPA), Congestion Management Agency (CMA), Local Transportation Commission (LTC), and Service Authority for Freeways and Expressways (SAFE).1

Regional Transportation Plan (RTP)

The California Transportation Commission (CTC) requires that an RTP be developed which provides policy guidance, plans and programs to attain a balanced comprehensive multimodal transportation system for the region. The RTP must contain a policy element with a long term horizon (20 years or more), a short term improvement plan (10 years or less), and action element, a financial element, and reference to environmental and air quality documentation. The existing Regional Transportation Plan was prepared by TAMC and adopted in 1994; TAMC staff are currently working on an update for the year 2000.

---

[1] Transportation Agency for Monterey County, web page text

Congestion Management Program (CMP)

TAMC is also required to develop a Congestion Management Program, pursuant to the Traffic Congestion Relief and Spending Limit Act of 1991 (Proposition 111). The CMP includes a traffic volume monitoring program and plans to relieve congestion. Cities' and counties' eligibility for some gas tax revenues may be contingent upon their participation. The existing CMP was adopted in 1994; the 1999 public draft update has been completed and is available for review.

The year 2000 Monterey County Regional Transportation Improvement Program (RTIP) has also been adopted. The RTIP identifies projects which will receive funding from the State Transportation Improvement Program (STIP). Funded projects which are applicable to Soledad include the following:

AMBAG - Commute Alternatives/Ridesharing Program
TAMC - Planning, Programming, and Monitoring funds (PPM)

TAMC provides other funding under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) for transportation projects. The Congestion Mitigation and Air Quality Program (CMAQ) provides funding for projects which will contribute to attainment of air quality standards through trip reduction or other means. The Regional Surface Transportation Program (RSTP) funds general improvement projects. Regional Transportation Enhancement Activities (TEA) programs fund environmental and alternative transportation projects that enhance the transportation system.

TAMC also oversees a Bicycle and Pedestrian Facilities Advisory Committee (BPS) which plans and discusses bike circulation improvements needed in the region. The BPS also has limited grant funding capabilities for bicycle and pedestrian-related projects.

Federal Regulations

Caltrans operates and maintains Highway 146 within the City (consisting of Metz Road, East Street, and Front Street)Highway 101 which is the principal highway connecting Soledad with destinations to the north and south. Highway 146 terminates in Pinnacles National Monument to the east of the City. Caltrans has jurisdiction over all improvements to its roadways and within State-owned rights-of-way. Caltrans is a division of the Federal Department of Transportation (DOT) and is governed by the California Vehicle Code and the California Streets and Highways Code. The Vehicle Code includes requirements for signs, signals, markings, and lights. The Streets and Highways Code outlines regulations for DOT administration, maintenance, funding, and DOT policies for scenic areas.

State of California

The California Government Code provides General Plan guidelines to assist governments and planners in the development of required elements. The General Plan Guidelines require that every general plan include a Circulation Element which:

- Includes the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities;
- Correlates with the Land Use Element, which provides an assessment of the adequacy of utilities (water, sewer, drainage, etc.) to serve necessary improvements and will provide policies and programs governing such facilities;
- Serves the needs of the existing and future population of the City

The Element should consider regional traffic patterns and needs in its assessment of needed improvements and existing problems.

Rail Service

Railway transportation has historically played a key role in developing and supporting the land uses and major industries in Monterey Cotmty. Several of the major cities and towns of the Salinas Valley (e.g., King City, Gonzales, Chualar, Soledad, San Ardo, San Lucas, Bradley) owe their existence and early vitality to the development and economic benefits associated with the Southern Pacific Railroad. The agricultural industry of the valley flourished in partnership with the transport of produce by rail to the national market. The tourism industry - which has been the basis of Monterey Peninsula's economy for more than a century - was spurred originally by construction of Southern Pacific's new line in 1879 from Castroville to Monterey, with a special stop at Southern Pacific's own Del Monte Hotel.

Rail service today is limited to four to six freight trains running between Los Angeles and the San Francisco Bay Area, and the sole passenger line, Amtrak's *Coast Starlight,* which stops at Salinas twice daily in both directions on its run between Seattle and Los Angeles.

Transit Services

Monterey- Salinas Transit (MST) is an inter-city and inter-city bus service. MST serves a 110 square-mile area of Northern Monterey County and Southern Santa Cruz County providing intercity. bus service between Monterey and Salinas, Marina and Watsonville, Salinas and Watsonville, and south from Salinas as far as Gonzales (Exhibit 5.13-2). Inter-city service is provided in Gonzales, Marina, Monterey, Pacific Grove, Salinas and Seaside. MST lines connect with Santa Cruz Metropolitan Transit District from routes originating at the Watsonville Transit Center. Rural service is provided to Carmel Valley and seasonally to Big Sur. The Waterfront Area Visitor Express (WAVE) offers locals and tourists service to popular tourist destinations within the City of Monterey.

MST offers 29 routes that serve an estimated 270,000 people residing within 1/4 mile of established routes. In the unincorporated areas of the county, MST service is available to 37 percent of the population (40,000) residing within ½ mile of a service line.

Roadway Classifications and Service Standards

The draft General Plan Circulation Element classifies streets and roadways as follows:

> *Principal arterials* consist of freeways, expressways or other principal roads that connect major population centers and other points of traffic generation. Access to principal arterials is strictly controlled; they are not intended for local trips. Highway 101 is the principal arterial serving the City, connecting Soledad with destinations to the north and South in the Salinas Valley.
>
> *Arterials* carry traffic between principal arterials and between population centers, or they may carry large volumes of traffic within urban areas. They are not intended to provide primary access to residences and are best used for controlled access to areas of retail and service commercial uses, industrial facilities and major community facilities. Examples of arterials in Soledad include Front Street, Metz Road (Highway 146), and East Street.
>
> *Collector roads* enable traffic to move to and from local roads, arterial roads and activity centers. They are principal roads serving residential areas and carry relatively high volumes of traffic. Residential driveway access from collector roads should be limited according to traffic volumes, parcel sizes and sight distances.
>
> *Local roads* are used primarily for access to adjacent properties.

The following table summarizes the City's existing road standards and capacity criteria.

TABLE V.2-1 -- ROADWAY STANDARDS AND CAPACITIES

Street Type	Typical Curb to Curb Width (in feet)	Total Right of Way Width (in feet)	Estimated Capacity in Average Daily Traffic (ADT)
Divided Four Lane (Principal Arterial)	32 (width of two lanes)	100	30,000
Arterial	64	84	24,000
Collector	40	60	12,000
Local	27-34	54	2,400

Source: Soledad General Plan Circulation Element

The efficiency and adequacy of a roadway or intersection is often described in terms of Level of Service, or LOS. LOS is a measure of the ratio of motor vehicle traffic volumes to the capacity of the roadway or average delay at an intersection. Motor vehicle traffic volumes are most often expressed in terms of Average Daily Traffic, or ADT, which is the number of vehicle trips passing a given point in each travel direction. The capacity of a street segment or intersection is based largely on the design or functional classification as described above. Based on the volume to capacity ratio, or the delay at an intersection, LOS A through F are applied, with LOS A indicating very good operating conditions and LOS F indicating poor conditions. LOS C has been established as the minimum acceptable level of service for roadway segments and intersections in the City of Soledad.

The following tables provide the City standard definitions of LOS for intersections and roadway segments.

TABLE V.2-2 -- SUMMARY OF LEVELS OF SERVICE FOR SIGNALIZED ROADWAY SEGMENTS AND INTERSECTIONS

LOS	Flow	Volume to Capacity (V/C) Ratio	Definition
A	Stable flow	0.00-0.60	EXCELLENT. No vehicle waits longer that one red light and no approach phase is fully utilized
B	Stable flow	0.61-0.70	VERY GOOD. An occasional approach phase is fully utilized; drives may begin to feel somewhat restricted within groups of vehicles
C	Stable flow	0.71-0.80	GOOD. Occasionally drivers may have to wait through more than one red light; back-ups may develop behind turning vehicles
D	Nearing Unstable flow	0.81-0.90	FAIR. Delays may be substantial during portions of the rush hour, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups
E	Unstable flow	0.91-1.00	POOR. Represents the most vehicles and intersection approach can accommodate; may be long lines of waiting vehicles through signal cycles
F	Forced flow	Varies	FAILURE. Gridlock at intersection approaches. Tremendous delays with continuously increasing queue lengths

Source: Soledad General Plan Circulation Element

TABLE V.2-3 -- SUMMARY OF LOS FOR INTERSECTIONS CONTROLLED BY STOP SIGNS		
LOS	Available Reserve Capacity	Expected Traffic Delay
A	400 or more	Little or no delay
B	300 to 399	Short traffic delay
C	200 to 299	Average traffic delay
D	100 to 199	Long traffic delay
E	0 to 99	Very long traffic delays
F	Less than 0	Failure - extreme congestion
FF	Any Value	Intersection blocked by external forces

Source: Soledad General Plan Circulation Element

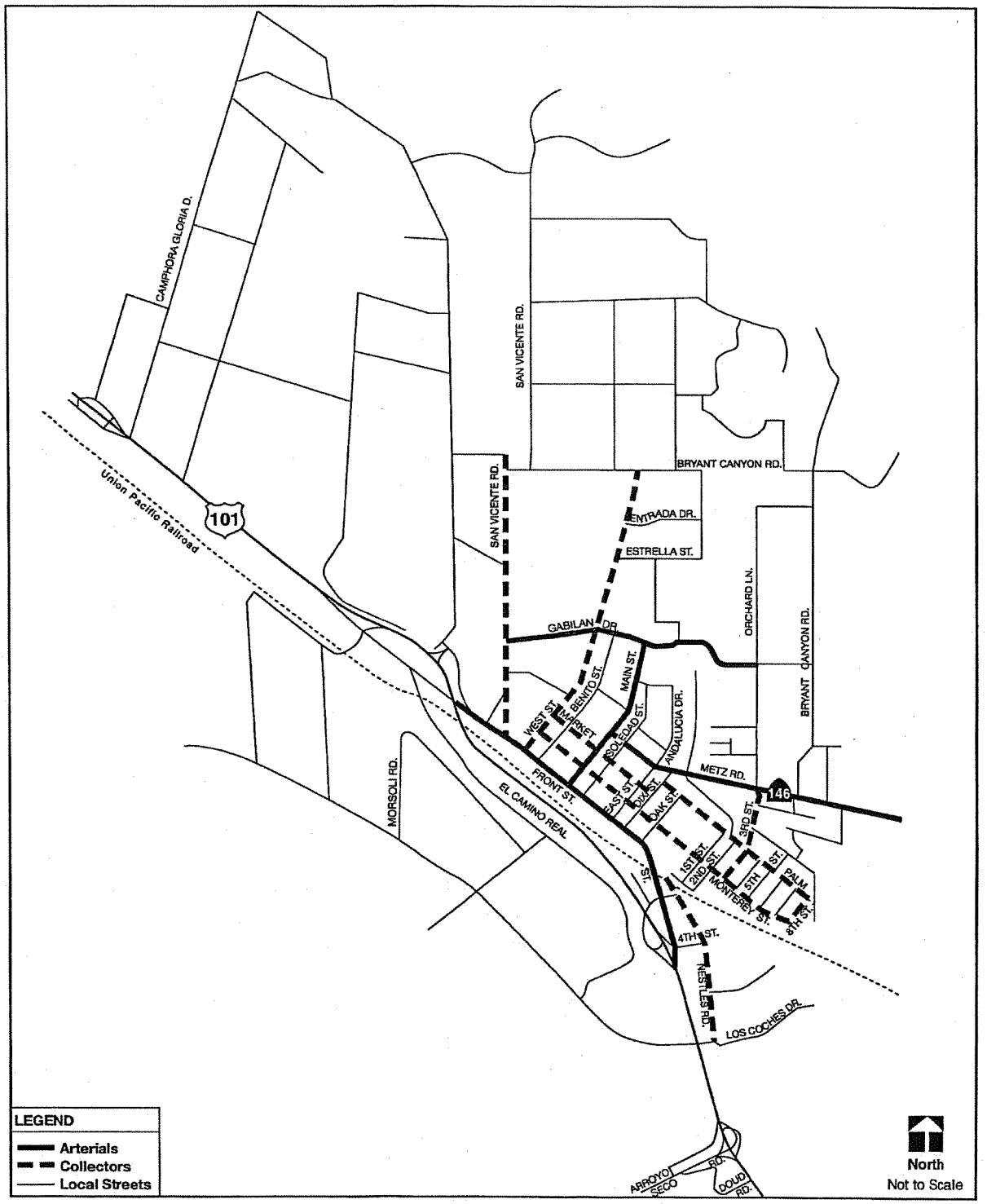
Existing Street Network

Table V.2-4 provides a description of the major roadways in the City of Soledad, which are illustrated by Figure V.2-1.

TABLE V.2-4 -- EXISTING ROADWAY CLASSIFICATIONS IN SOLEDAD

Roadways and Classifications	Location/Description
Principle Arterials	
US Highway 101	Divided, four-lane freeway which runs north-south along the coastal portion of California. Highway 101 runs adjacent to Soledad in an north-south direction.
Arterials	
Metz Road	Otherwise known as Highway 146 and is operated and maintained by Caltrans. Metz is a two-lane roadway which runs east to Pinnacles National Monument and south to King City. Metz Road/Highway 146 is a State designated scenic highway.
Front Street	Two-lane arterial which runs from Fourth Street to Moranda Road, paralleling Highway 101. Front Street is actually the old alignment of Highway 101.
East Street	Sized as a collector but functions as a two-lane arterial. East Street is operated by Caltrans because it is a portion of Highway 146.
North Street	Runs from Main east to the East Street/Andalucia Drive-Metz Road/East Street intersection.
Main Street	Runs from Front Street to Gabilan Drive three blocks west of East Street/Andalucia Drive.
Gabilan Drive	A four-lane arterial which extends from Granada Street to West Street. Gabilan is proposed for expansion through to Highway 101.
Collectors (all two lanes)	
Market Street	West Street to Dixi.
Entrada Drive	East of West Street
San Vicente Road	Runs parallel and west of West Street from Front Street to Vista Soledad.
West Street	Runs north from Front Street to the La Cuesta Views Subdivision.
Third Street	Runs from Monterey Street north to Metz Road.
Palm Street	Dixi Street to eastern boundary of the City at Eighth Street.
Nestle Road	Front Street to Los Coches Drive and serves the industrial sector.
Monterey Street	West Street to Eighth Street.
Benito Street	a local road which functions as a residential collector from Front Street north to Gabilan Drive.
Andalucia Drive	north from the East Street/Andalucia-Metz Road/North Street intersection to Gabilan Drive.
Oak Street	Front Street north to Palm Avenue. It is the primary access to the central business district for eastern residences.
Local Roads	Numerous local roads serve individual homes in residential areas of the city.

Figure V.2-1:Roadway System



Capacity of Major Intersections in Soledad

Because intersections play a key role in the flow of traffic, the LOS of roadways in the City is determined largely through analysis of intersection operation. Existing ADT volumes and LOS for the major intersections serving the City were obtained from counts and from the California State Department of Transportation (Caltrans)2. Figure V.2-2 shows the intersections for which counts were taken in December, 2004. The majority of the intersections currently operate at acceptable levels of service (LOS B or better).

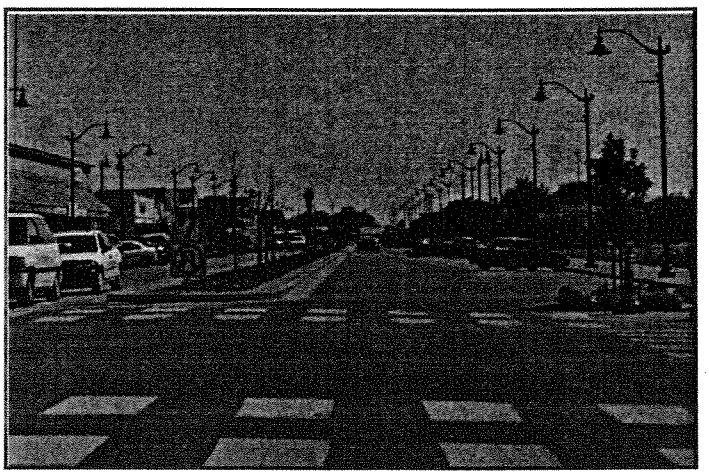
Table V.2-5 shows the existing levels of service of several major intersections. Currently all intersections are operating at LOS C or better, which is an acceptable levels of service. Figure V.2-2 shows the major intersections selected for levels of service analysis.

TABLE V.2-5: EXISTING LEVEL OF SERVICE

No.	Intersection Name	Intersection Type	a.m.		p.m.	
			Average Delay (sec)	LOS	Average Delay (sec)	LOS
1.	Front Street/East Street	Four –Way Stop	9.7	A	11.6	B
2.	Front Street/Dixie Street	Two-Way Stop	2.2(12.4)	A(B)	2.6(15.5)	A(C)
3.	Front Street/Oak Street	Two –Way Stop	4.6(15.5)	A(C)	4.0(19.4)	A(C)
4.	Front Street/Nestles Road	Two-Way Stop	3.7(14.2)	A(B)	5.1(17.3)	A(C)
5.	Mobile Home Park Drwy./SB 101 Ramps	Two-Way Stop	2.1(10.3)	A(B)	1.8(11.2)	A(B)
6.	Front Street/Fourth Street	Two-Way Stop	1.9(10.4)	A(B)	2.2(11.2)	A(B)
7.	Nestles Rd./Fourth Street	Two-Way Stop	7.7(9.2)	A(A)	7.7(9.20	A(A)

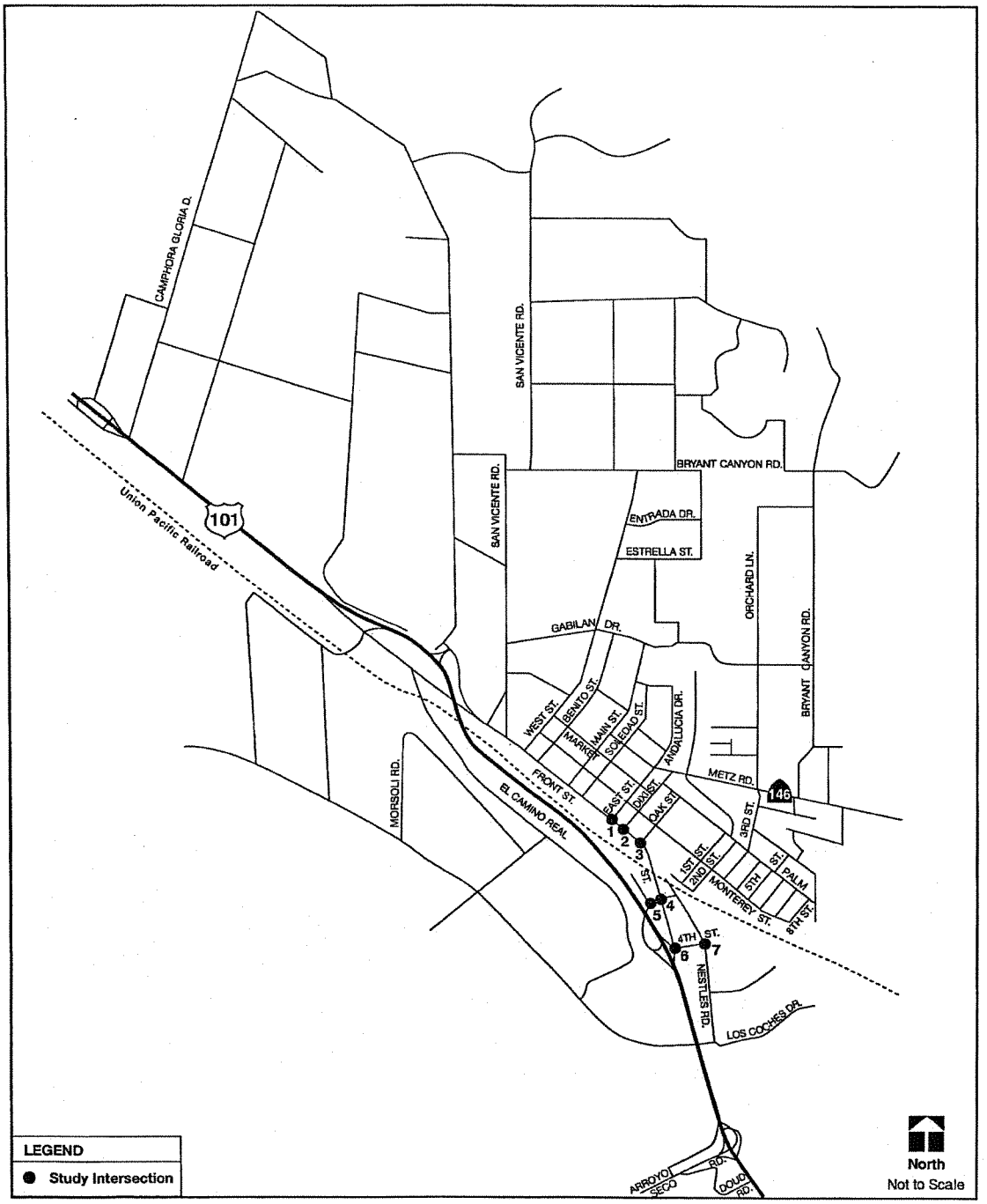
Source: TJKM Transportation Engineers, 2005

Most of these intersections are located on Front Street. Currently Front Street is two-lane arterial that leads from the Moranda Avenue interchange in the north to the 4th Street interchange in the south. Angled parking currently lines both sides of the street. Pedestrian crosswalk exists at all intersections, which are currently unsignalized. The street is bike and pedestrian friendly and walkable.



2. *1997 Traffic Volumes on California State Highways;* Caltrans, June 1998.

Figure V.2-2: Study Intersections



Improvements Funded by Traffic Impact Fees

The Circulation Element includes a provision for imposing traffic impact fees to help fund improvements to the street system. The City has established a Traffic Impact Fee in accordance with this policy. Fee and trip generation rates are outlined in a Traffic Fee Study prepared in 1999. The study outlines the basis for the fee rates and the improvements which will be funded, including the following:

TABLE V.2-6: ROADWAY IMPROVEMENTS FUNDED BY TRAFFIC IMPACT FEES

Roadway	Segment to Be Improved
Front Street	Moranda Road to Gabilan Drive West Street to Oak Street
Gabilan Drive	City Limits to Bryant Canyon Road San Vicente Road to Highway 101 Ramp Bryant Canyon Road to Metz Road Metz Road to Railroad Crossing Railroad Crossing to Channel Crossing Channel Crossing Structure Channel Crossing to Nestles Road Railroad Crossing Structure
Market Street	West Street to Front Street
San Vicente Road	Front Street to Market Street Market Street to Gabilan Drive Gabilan Drive to the City Limits
South Soledad Interchange	

Source: Traffic Fee Study, 1999, Hanna and Brunetti

In general, improvement consist of realignments or extensions of existing roadways to improve traffic flows.

Circulation Problem Areas

Soledad currently (May, 2005) experiences few traffic related problems. However, there are at least three issues that should be addressed through buildout of the General Plan.

Highway 101 Interchanges

Soledad is served by two interchanges with US Highway 101 at the north and south entrances to the City. In addition to providing vehicular access from the freeway, the lands surrounding the interchanges create ideal opportunities for highway oriented retail and industrial development. Consequently, the 1993 General Plan designates lands surrounding the interchanges for commercial and industrial development. The interchanges were constructed years ago when Soledad was a small (2,800 residents) service center for the surrounding agricultural operations. Consequently, the interchanges were not designed to efficiently accommodate traffic volumes associated with the types of urban development anticipated by the draft General Plan.

For example, southbound traffic using the northerly interchange must travel under the overpass and make a sharp left turn to reach the land designated for commercial development at the northerly terminus of Moranda Road. The overpass configuration creates an isolated piece of commercial land

(Bragga Islet) between Front Street and the freeway. The southerly interchange is more isolated from the remainder of the City, making the adjoining

Truck Traffic

Truck traffic through the downtown has been a continuing problem, especially from trucks serving the gravel operations east of the City on Metz Road. Because of their greater weight and size, loaded trucks have much less maneuverability and much longer stopping distance which can pose a hazard to school children as they pass by San Vicente and Gabilan Schools when children are present. A truck route that diverts these trips around the downtown to the freeway should be considered.

Railroad Crossings

At-grade railroad crossings are needed to access the property west of the Front Street along the railroad tracks. It is unclear whether such crossings can be designed to provide an adequate margin of safety.

Impacts

Methodology

To assess potential traffic impacts associated with buildout of the draft Plan, a traffic study was conducted by TJKM Transportation Engineers and attached as Appendix D. The study used a trip distribution model ([name]) to assign future trips to the City's existing and recommended circulation system to determine future levels of service and recommended roadway improvements to achieve and maintain an acceptable level of service.

Trip Generation

The draft General Plan holding capacity and corresponding trip generation is summarized in Table V.2-7. The total potential trip generation is approximately 11,846 a.m. peak hour and 19,532 p.m. peak hour trips.

TABLE V.2-7: TRIP GENERATION: DRAFT 2004 GENERAL PLAN

						A.M. Peak Hour						P.M. Peak Hour					
Use	ITE Code	Size	Units	Daily rate	Daily Trips	Rate	In %	Out %	In	Out	Total	Rate	In %	Out %	In	Out	Total
SFR	210	9,065	du	9.57	86,779	0.75	0.3	0.75	1,700	5,099	6,799	1.01	0.6	0.37	5,768	3,388	9,156
MDR	220	3,424	du	6.05	20,729	0.49	0.2	0.8	336	1,345	1,681	0.56	0.7	0.35	1,236	665	1,901
HDR	220	1,784	du	6.09	10,872	0.49	0.2	0.8	176	702	878	0.56	0.7	0.35	649	350	999
GC/NC	820	3,354	ksf	19.86	66,614	0.38	0.6	0.39	786	502	1,288	1.90	0.5	0.52	3,053	3,307	6,360
Ind	130	218	acres	50.67	11,051	5.50	0.8	0.17	996	204	1,200	5.12	0.2	0.79	234	882	1,116
Total					**196,045**				3,993	7,853	**11,846**				10,940	8,591	**19,532**

Source: TJKM Transportation Engineers, 2005

The estimated General Plan buildout land use trip generation was assigned to traffic analysis zones and distributed over the City's street network to determine the resulting level of service.

Impact T-1: **Buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways (Highway 101), streets and intersections serving the City. This impact is considered significant and unavoidable (Class I).**

At build-out conditions, the levels of service (LOS) of all the study intersections would deteriorate to unacceptable conditions. All study intersections (which are currently unsignalized) would operate at unacceptable level of service F conditions. Figure V.2-3 shows the estimated Average Daily Traffic (ADT) traffic volumes on all the major arterials at buildout. Table V-6 shows the projected level of service at build-out conditions. Roadway widening and signalization of all major intersections would be required to accommodate the projected traffic.

TABLE V.2-8: BUILDOUT LEVELS OF SERVICE

No.	Intersection Name	Intersection Type	a.m.		p.m.	
			Average Delay (sec)	LOS	Average Delay (sec)	LOS
1.	Front Street/East Street	Four –Way Stop	>120	F	>120	F
2.	Front Street/Dixie Street	Two-Way Stop	>120(>120)	F(F)	>120	F
3.	Front Street/Oak Street	Two –Way Stop	>120(>120)	F(F)	>120(>120)	F (F)
4.	Front Street/Nestles Road	Two-Way Stop	>120(>120)	F(F)	>120(>120)	F (F)
5.	Mobile Home Park Drwy./SB 101 Ramps	Two-Way Stop	10.8(>120)	B(F)	62.7(>120)	F(F)
6.	Front Street/Fourth Street	Two-Way Stop	3.9(64.0)	A(F)	>120(>120)	F (F)
7.	Nestles Rd./Fourth Street	Two-Way Stop	8.5(14.3)	A(B)	>120(>120)	F(F)

Source: TJKM Transportation Engineers, 2005

TABLE V.2-9: BUILDOUT TRAFFIC VOLUMES ON HIGHWAY 101

	Peak Hour	Average Daily Traffic
Current HWY 101 Volumes[1]	3,350	30,000
Future Volumes With Buildout Traffic	7,065	70,651
Increase	3,715	40,651
Increase (percent)	110%	135%

Source: Caltrans, TJKM Transportation Rngineers, and CMCA

Notes
1. Counts taken from Highway 101 at the northerly freeway interchange.

Motor vehicle trips attracted to, and leaving, the City's planning area through buildout will contribute traffic to the regional roadways serving Monterey County. The number of trips added to the regional system is expected to be partially mitigated by the complementary range of land uses designated by the draft Plan, and the ability of the City to achieve a greater measure of balance between housing and employment. Still, the City's ability to mitigate regional traffic impacts is limited to participation with other agencies in resolving regional impacts with the Transportation Agency of Monterey County (TAMC). The Transportation Agency of Monterey County, as the agency responsible for planning and funding transportation improvement projects for regional roadways, is currently seeking funding for several road improvement projects in the county. At the present time, only eight projects amongst those several others are reasonably expected to be funded and constructed during the nest 20 years. These projects are mostly either very localized improvements (e.g., freeway interchange) or design and safety improvements and are not anticipated to greatly improve over-capacity conditions on the affected roadways except at very localized points in the circulation system.

Road improvements expected to be funded and constructed within the 20 year time frame include:

- Completion of the Salinas Road interchange at Highway 1
- Operational improvements on Highway 1 in the Cannel area
- Completion of the Highway 101, Prunedale Improvement Project
- Completion of the Airport Blvd interchange at Highway 101
- Operational and safety improvements to Highway 68 in the Toro area and Monterey Airport area.
- Operational and safety improvements to Highway 68 at CHOMP
- Marina — Salinas Corridor - widening of Davis Road, Blanco Road, Reservation
- FORA improvements onsite within Fort Ord

As part of the County's general plan update in 2002, these road improvements were added to the County's traffic model to simulate the road network as it could exist in 2020. The model revealed that, with only a few exceptions, the Levels of Service on affected County roadways was not greatly improved. The road improvements reasonably expected to be funded and constructed during the 20-year lifetime of the County's general plan provide very little improvement to future traffic conditions. With expected improvements in place, a total of 59 road links are projected to operate below Level of Service C. Forty-three of these will operate at E or F.

Thus it can be expected that the additional trips contributed by buildout of the City's draft Plan will result in a cumulative adverse impact to the regional roadway system that is unavoidable and adverse.

Figure V.2 -3: Buildout Average Daily Traffic

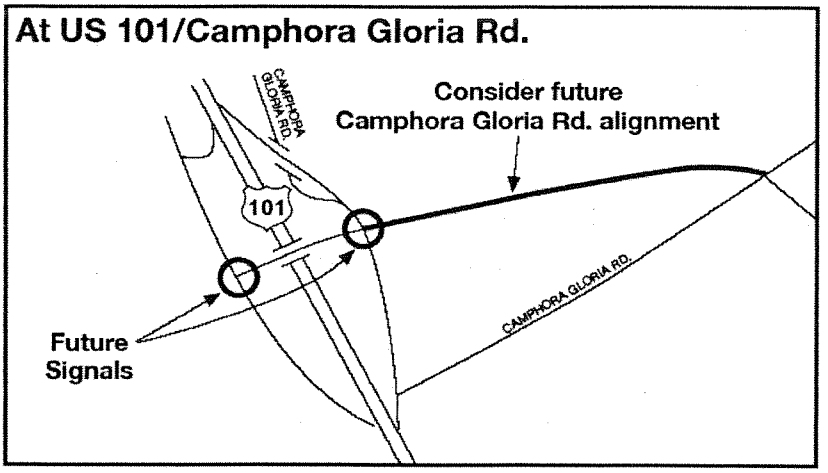
Impact T-2: **Buildout of the land uses recommended by the Draft General Plan will adversely affect the operation and level of service of the two freeway interchanges serving the City. This impact is considered significant and adverse (Class II).**

As stated above, one of the constraints to continued development of the City relates to the two freeway interchanges serving the City.

The three interchanges that serve Soledad are operating fine for the low traffic volume that it currently serves. However, there are some inherent operational and access deficiencies. For example,

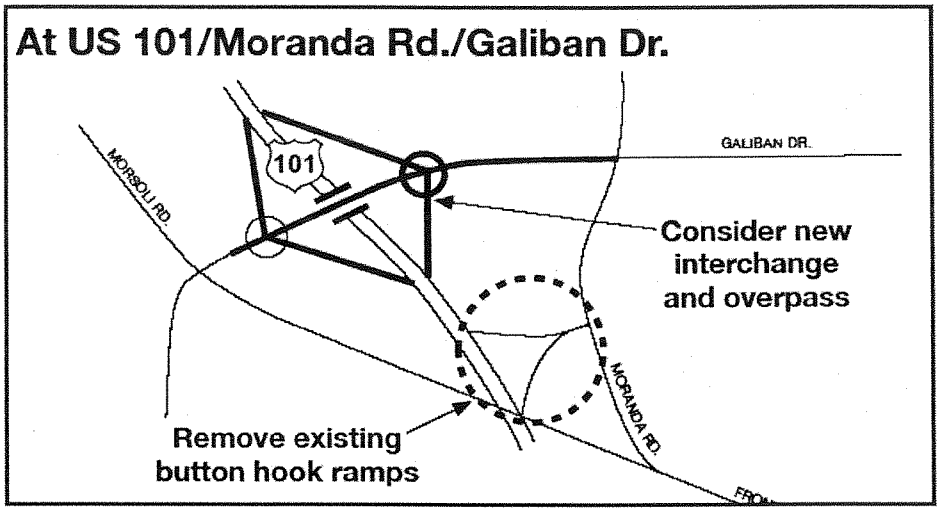
1. US 101/Camphora Gloria Road - The current interchange provides an overpass at US 101 and consists of a long northbound off-ramp that tees into Camphora Gloria Road. Going southbound, the interchange provides for a short "button hook" off-ramp that tees into Sillman Road. Sillman Road leads to the overpass and eventually becomes the southbound on-ramp to US 101.

It is anticipated that both of the overpass intersections would need signalization. In addition, realignment of Camphora Gloria Road with the overpass intersection should also be considered.

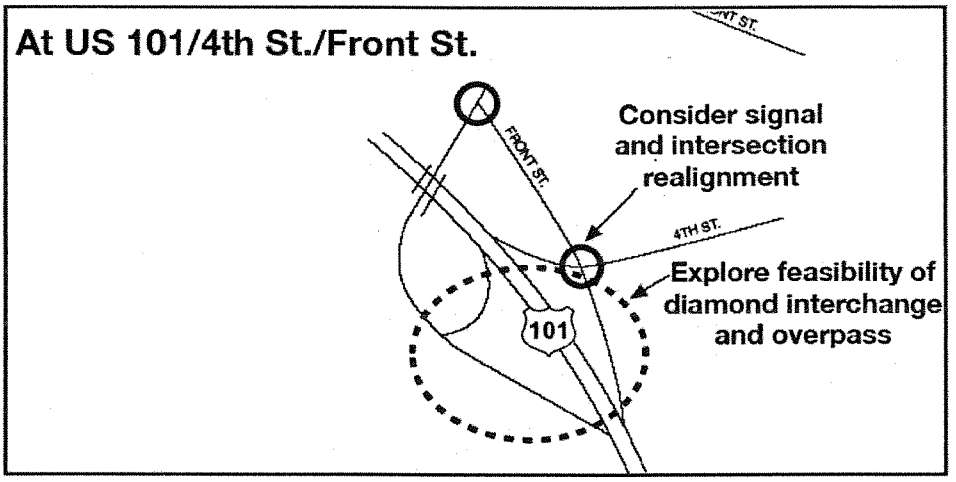


2. US 101/Moranda Road/Galiban Drive – currently the northbound and southbound ramps are split approximately a mile apart. The northbound on/off-ramps are short button hook ramps that tee onto Moranda Road. The southbound on/off-ramps is located approximately a mile to the north of the northbound ramp. To access this ramp, traffic needs to drive below an underpass and is therefore not very accessible.

TJKM proposed a future study that looks into the feasibility of consolidating the northbound and southbound on/off-ramps into a diamond interchange with an overpass that will be aligned with the future extensions of Galiban Drive. Such a reconfiguration will more directly serve future traffic on the north side of town and will vastly improve the traffic operations at the interchange.



3. US 101/Fourth Street interchange – there is no freeway overpass, so southbound off-ramp or northbound on-ramp traffic are required to take the long loop ramp to access the freeway. Operationally, southbound off-ramp traffic with a destination to the south of Front Street would be required to either traverse the entire length of Front Street or cut through one of the neighborhood arterials that parallel Front Street. Consequently, it is expected that a lot of this traffic would unnecessary clogged-up Front Street or cut-through some of the residential arterial streets in the future buildout scenario.



Future improvements such as signals will be required at the northbound off-ramp and for southbound traffic at Front Street. Due to the short distance between US 101 and Front Street, it is unclear if it is feasible to provide a diagonally angled freeway overpass so that a diamond interchange could be constructed. A study to explore this alternative would be useful.

Impact T-3: Buildout of the land uses recommended by the Draft General Plan could result in traffic hazards on city streets and intersections. This impact is considered adverse but not significant (Class III).

As stated above, truck traffic through the downtown has been a continuing problem, especially from trucks serving the gravel operations east of the City on Metz Road. Because of their greater weight and size, loaded trucks have much less maneuverability and much longer stopping distance which can pose a hazard to school children as they pass by San Vicente and Gabilan Schools when children are present. To resolve this issue, the Circulation Element recommends a bypass of Downtown connecting Metz Road with Los Coches Drive with Nestles Drive and the 101 freeway (see Figure V.2-4). This route will allow trucks and other traffic to avoid downtown and the schools along Metz Road.

Impact T-4: Buildout of the land uses recommended by the Draft General Plan will significantly contribute to the demand for bicycle and pedestrian facilities in the City's planning area. This impact is considered adverse but not significant (Class III).

Bicycle use is relatively common in Soledad as a means to get around town and to school. As the population grows as anticipated by the draft General Plan, the demand for safe, secure bicycle facilities will increase.

Moreover, one of the main objectives of the draft General Plan is to work toward a better balance between housing and employment in Soledad by providing land to support job-generating land uses. One of the potential benefits of a better balance between jobs and housing is that it makes commuting to and from work more feasible for alternate modes of transportation, including bicycles.

Impact T-5: Buildout of the land uses recommended by the Draft General Plan will contribute to the demand for public transit serving the City's planning area. This impact is considered adverse but not significant (Class III).

As the City's population grows, transit ridership is expected to grow proportionately. As new areas develop, it will increase the demand for additional transit routes and transit facilities.

General Plan Policy Response

The Circulation Element of the draft Plan identifies roadway improvements to be implemented over time to accommodate buildout of the draft Plan while achieving and maintain an acceptable level of service. The recommended improvements are illustrated by Figure V.2-6. These improvements reflect a significant capital outlay over time which would be funded through a capital improvement program as required by Programs 5.2 and 5.8 (see below).

With respect to regional impacts, TAMS is formulating a regional traffic impact fee to be applied by member agencies (such as Soledad). TAMC describes the process as follows:

To maximize safety and minimize congestion for Monterey County's travelers, adequate transportation infrastructure must be available to serve population growth and land use development identified in adopted general plans across the county. The proposed Regional Development Impact Fee program is being developed to provide a mechanism through which "growth pays for growth" and the county's projected transportation needs can be met.

Transportation impacts of new development are currently analyzed and addressed on a piecemeal, project-by-project basis through the CEQA process. Projects are analyzed individually by each of the county's 13 land use jurisdictions and regional traffic mitigations assessed on an ad hoc basis, making this process time consuming, expensive, and inconsistent.

The TAMC Regional Development Impact Fee program would streamline the existing ad hoc environmental review system. Regional transportation impacts of planned development across the county will be analyzed through the program, eliminating the need for expensive traffic analyses from each new development project, and the current lengthy negotiations over appropriate mitigations. In instances where a local traffic impact fee is already assessed, the local and cumulative traffic impacts of development would be accounted for through payment of fees. No additional analysis is required aside from that which is needed to address the localized, project-specific impacts of new development on surrounding transportation infrastructure. It is important to note that the impact of Fort Ord area redevelopment is accounted-for through the infrastructure development fee program managed by the Fort Ord Reuse Authority (*FORA*), which TAMC is working to update in parallel with its work to establish the Regional Development Impact Fee program.

The Regional Development Impact Fee program is one element of TAMC's *14-Year Investment Plan*, which is designed to place Monterey County in a stronger position for meeting its transportation needs through local funding mechanisms outside of the state's control. Under this plan, Regional Development Impact Fees would be combined with a countywide half-cent sales tax and available state and federal funds to construct regional transportation projects to satisfy the needs of all users of Monterey County's transportation system.

The Draft Nexus Study for a Regional Development Impact Fee provides more detail on how the regional fee program was developed, as well as the proposed countywide fee schedule. The draft fee schedule is as follows:

TABLE V.2 – 10: DRAFT REGIONAL TRAFFIC IMPACT FEES

Land Use Category	Fee Per Job or Dwelling Unit	Fee Per 1,000 Sq. Ft. Of Building Floor Area
Residential		
Market Rate Units (ave.)	$7,083/du	
Single Family	$8,192/du	
Condo/Townhouse	$4,176/du	
Apartment	$5,381/du	
Non-Residential		
Commercial (ave.)	$2,929/job	$5,326
Specialty Retail	$2,117/job	$3,848
Shopping Center	$2,929/job	$5,325
Public/Office (ave.)	$949/job	$3,162
Government	$1,396/job	$4,654
General Office	$790/job	$2,633
Industrial (ave.)	$868/job	$1,302
Light Industrial	$1,086/job	$1,628
Heavy Industrial	$684/job	$1,025
Warehouse	$613/job	$920
Other	$64/job	$64

Source: DKS,, May 2004

The fee calculation is based on a range of regional transportation improvements aimed at maintaining an acceptable level of service. Included in the list of projects are improvements to roadways in the Central Salinas Valley planning area which includes Soledad. The draft Study allocates about $11 million for these improvements which include (among others)about $9.6 million for the southerly US 101 freeway interchange in Soledad.

Figure V.2-4: Recommended Truck Route and Truck By-pass

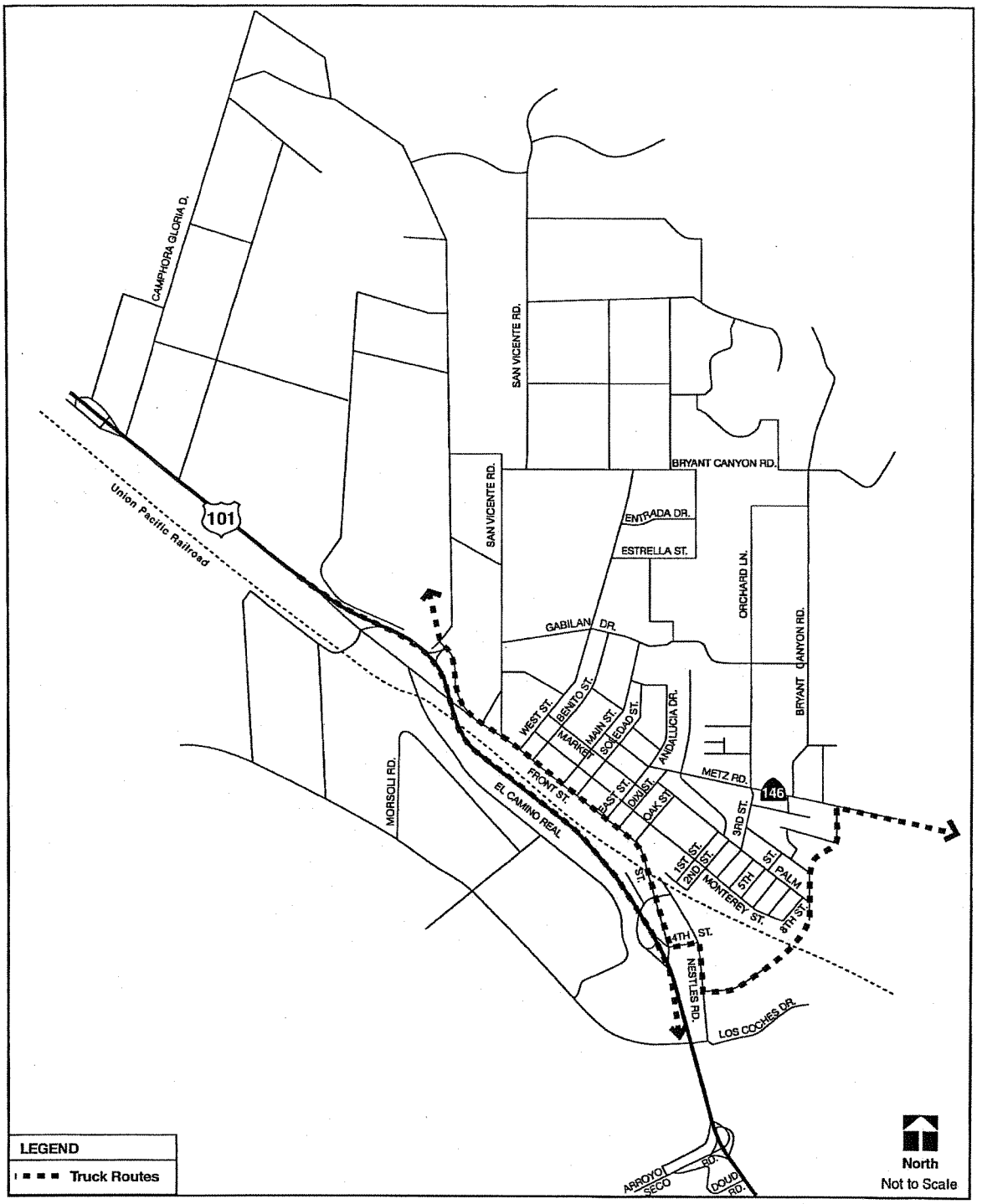


Figure V.2-5: Recommended Lane Improvements

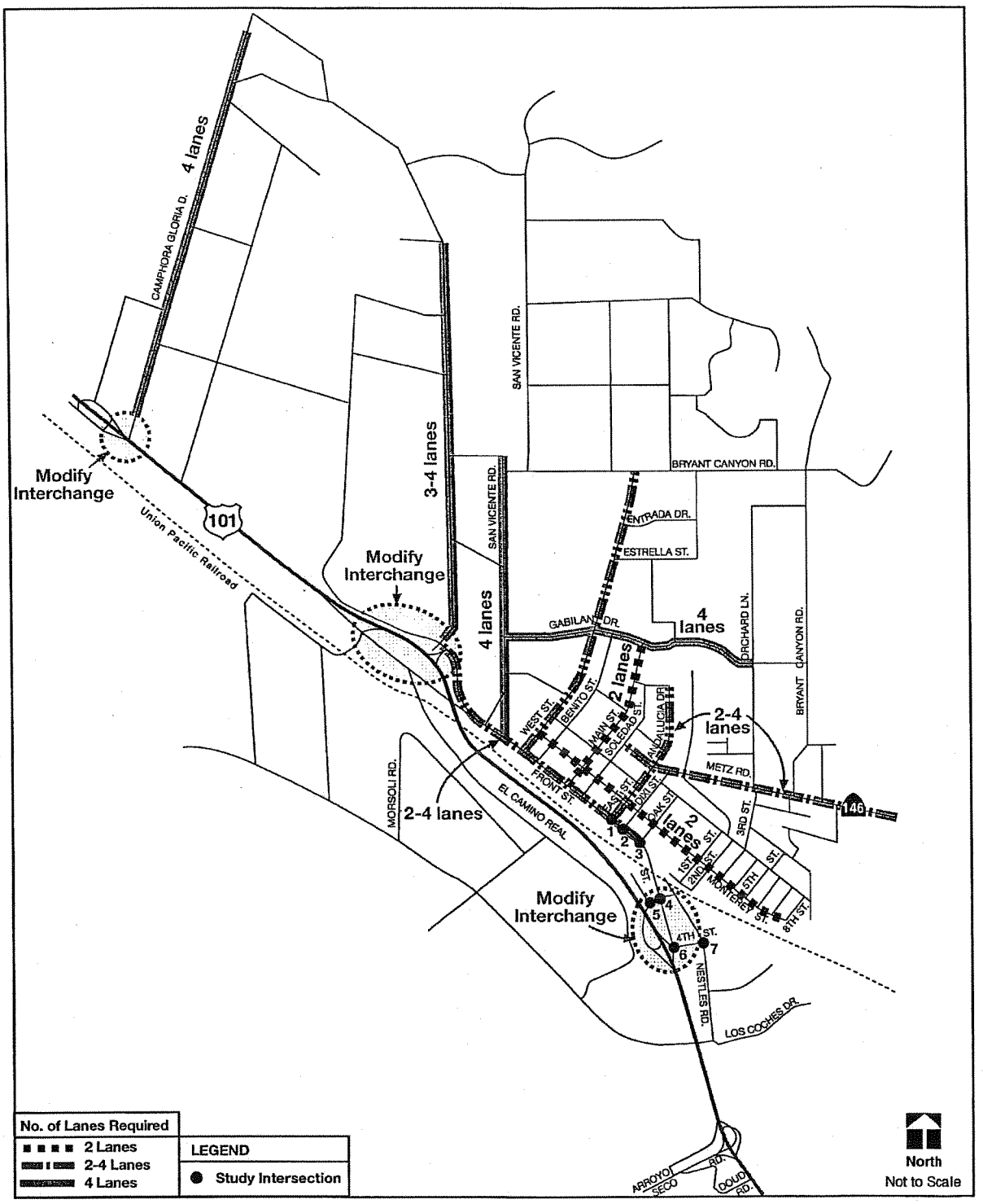
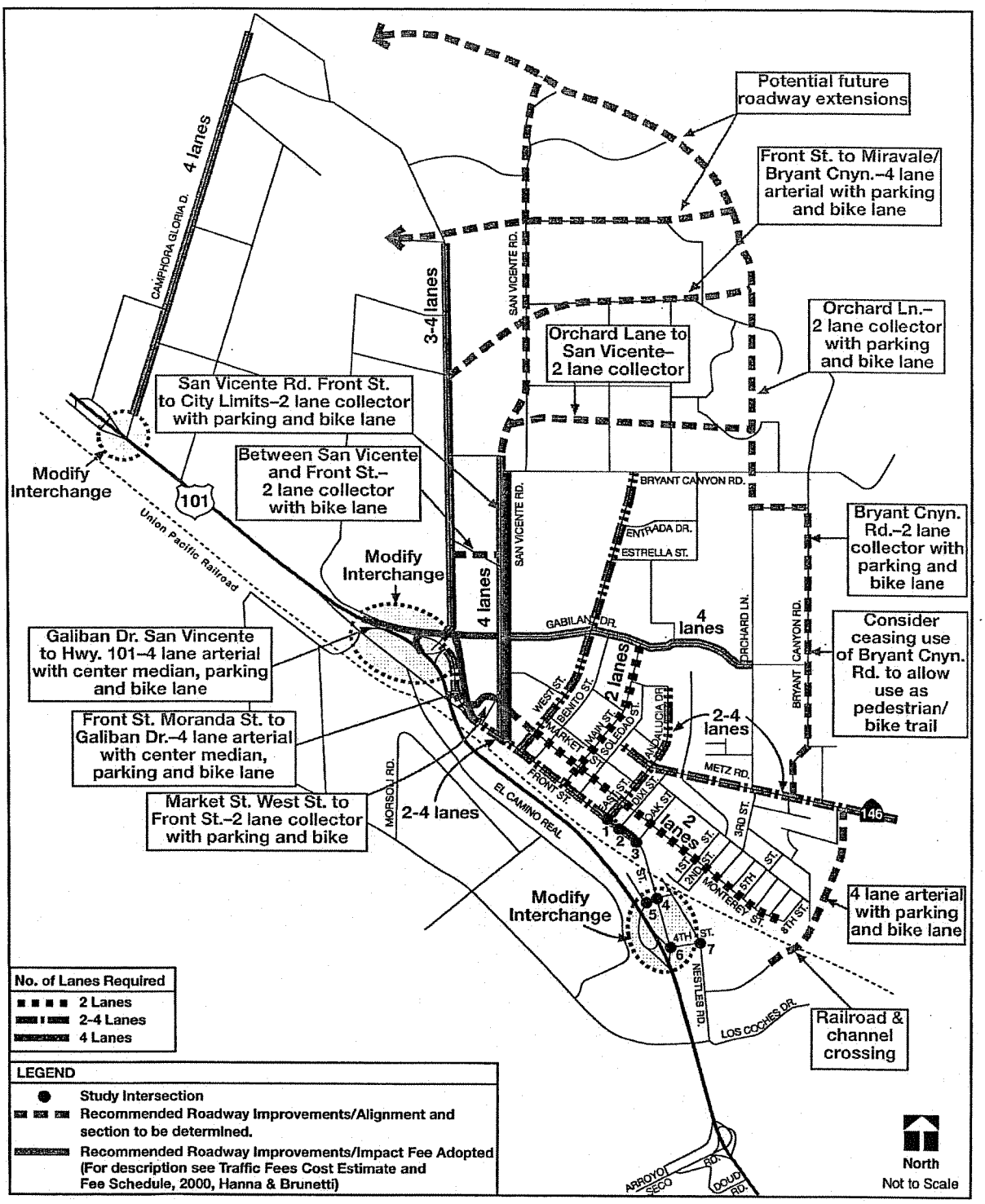


Figure V.2-6: Recommended Roadway Improvements To Serve Buildout



General

T-1 Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.

T-2 Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.

T-3 The City shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes, as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.

T-4 On arterial roadways, intersection spacing shall be maximized. New driveways along major collector and arterial roadways shall be minimized or prohibited completely.

T-5 The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.

T-6 The City shall not approve new commercial or industrial development that will result in customers, employees or deliveries required to use residential streets. The circulation system shall be designed so that non-residential traffic (especially truck traffic) is confined to non-residential areas.

T-7 Development on commercial land west of the railroad tracks shall be chosen to minimize the volume of traffic utilizing at-grade vehicular railroad crossings.

T-8 The City shall manage the street network so that the adopted LOS standards are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable.

T-9 The City will continue to support the policies and programs of the Monterey County Congestion Management Plan.

T-10 The following standards apply to the streets shown on Figure V-2. These standards may be interpreted with flexibility where necessary to achieve the overall objectives of the policies of the General Plan.

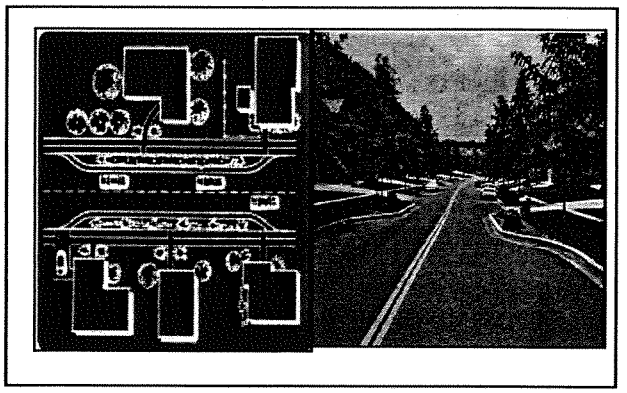
ROADWAY STANDARDS		
Type of Street	Land Use Served	Example
Local Residential	Adjoining residential uses.	Regina Street Granada Street
Residential Collector	Sub-city residential areas.	Andalucia Drive
Commercial Collector	Sub-city commercial and industrial areas.	Monterey Street
Arterials	City wide and regional land uses.	Front Street Metz Road East Street
Principal arterials	Regional and State lands.	Highway 101

T-11 The City shall ensure through a combination of traffic impact fees and other funding mechanisms that new development pays its fair share of the costs of circulation improvements required by such development.

T-12 The City shall prohibit the development of private streets in new residential projects, unless approved on a project specific basis where circumstances support such a use and the streets are privately maintained.

T-13 Implement traffic calming measures to slow traffic on local and collector residential streets and prioritize these measures over congestion management. Include traffic circles, chokers, chikanes and other traffic calming devices among these measures.

T-14 Roundabouts will be considered as an alternative to traditional intersection controls.



Parking

T-15 The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically evaluated.

T-16 Parking and storage for recreational vehicles and boats should be provided so that required off-street parking is available for passenger vehicles. However, RV and boat parking spaces shall not be developed in residential areas.

T-17 On-street truck parking shall be prohibited where such parking restricts adequate sight distances or otherwise poses a potentially hazardous situation.

Bicycle Circulation

T-18 The City shall establish a safe and convenient network of identified bicycle routes connecting residential areas by the shortest possible routes with recreation, shopping, employment areas and schools. The City shall cooperate with surrounding jurisdictions in designing and implementing an regional bicycle system.

T-19 Bicycle routes shall emphasize paths separate from vehicle traffic (Class I Bike Path) to the maximum extent feasible, but shall also include bicycle lanes within public streets.

T-20 Bike lanes and paths shall be designed and maintained to improve bicycling safety, and convenience, and encourage people to use bicycles to commute to work or school.

T-21 Bike lanes and paths shall be established when:

a. The street section is re-paved, re-striped, or changes are made to its cross-sectional design.
b. The street section is being changed as part of a development project.
c. The construction of bike lanes or paths is called for by the City's Capital Improvement Plan.

T-22 Stop signs shall be minimized along Class I bicycle paths so long as safety for bicyclists, pedestrians and motorists is maintained.

T-23 New development shall provide bike lanes and paths, secure bicycle storage and bike parking facilities.

T-24 The City shall encourage that bike racks be installed on regional transit vehicles.

Walkable circulation

T-25 The City shall complete a continuous network of sidewalks and separated pedestrian paths connecting housing areas with major activity centers and with trails leading into City and county open space areas.

T-26 Pedestrian crossings at heavily traveled intersections near parks, schools and public buildings shall be made as safe as possible, utilizing neckdowns/bulb-outs where feasible. Pedestrian crossing controls shall be installed when warranted, including lighted crosswalks.

T-27 The City will consider ceasing the use of portions of Bryant Canyon Road for vehicular access and to utilize Orchard Lane as the primary arterial road in the eastern portion of the City. This could reduce development and maintenance costs and enable the use of Bryant Canyon Road right of way as a pedestrian trail.

T-28 Create connecting paths for pedestrians and bicycles where dead-end streets prevent through circulation in new developments and in existing neighborhoods.

Transportation Demand Management

T-29 Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in existing development.

T-30 The City may reduce required parking for projects that employ transit demand management strategies that reduce vehicle trips to the site.

T-31 The City shall support regional and local trip reduction programs to reduce vehicle trips associated with employment, school and shopping centers.

T-32 A ridesharing program shall be established in Soledad to encourage carpooling and vanpooling for trips to other communities.

Transit

T-33 The City shall work with transit providers to plan and implement additional local and regional transit services that are timely, cost-effective, and responsive to growth patterns and existing and future demand.

T-34 The City shall consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act (ADA).

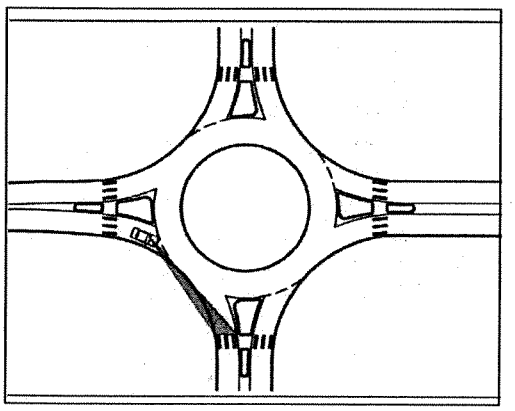
T-35 The City will work with the appropriate agencies to establish a train station in Soledad.

T-36 The City will establish a location for an inter-modal transfer station

T-37 Encourage amenities such as seating, lighting, and signage at bus stops to increase rider comfort and safety.

Programs

5.1 The City shall prepare roadway design standards for new and existing streets, roads and roundabouts in Soledad. Such standards should include right-of-way width, roadway section design, and dedication requirements for new development to accommodate traffic levels expected at buildout of the General Plan. The roadway design standards should be interpreted with flexibility so that the roadways provided are no wider than required to maintain safe and efficient circulation and access.



5.2 The City shall prepare a Capital Improvement Plan and associated funding mechanisms for circulation improvements consistent with this Element.

5.3 The city shall implement any City adopted trip reduction measures.

5.4 The City shall adopt traffic impact fees for new development to help provide roadway improvements necessitated by such development.

5.5 The City shall work to reduce mobile source emissions from new development. The City shall require new commercial and industrial development to (as applicable):

a. Submit detailed plans for approved trip reduction plan. Such a plan shall include targets for an increase in average vehicle ridership for employees, and incentives for carpooling, transit ridership for employees, and incentives for carpooling, transit ridership, and bicycling.

b. Provide worker/customer transit incentives. Such incentives may include reduced work hours to coincide with transit schedules, employer-provided bus passes, and direct monetary compensation for transit ridership.
c. Accommodate local shuttle and regional transit systems.
d. Provide transit shelters.
e. Provide secure storage lockers for bicycles at a ratio of one locker per ten employees.
h. Establish a park-and-ride lot consisting of twenty spaces, consistent with the requirements of Caltrans.
i. Include landscaping in parking lots which incorporates canopy trees to shade parked cars and reduce fuel evaporation from parked cars.

5.6 The City shall prepare and adopt criteria for the preparation of traffic impact analyses. Such criteria shall include, but not be limited to, development size thresholds above which such analyses will be required, a discussion of the scope of such analyses, preferred methodology, and mitigation measures to be included.

5.7 The City will work with Caltrans to implement improvements to the freeway interchanges to improve the access capacities and achieve a greater degree of efficiency and safety.

5.8 The City will implement the roadway and intersection improvements shown on Figure V-6 (Circulation Diagram) as well as those listed on the following table which are currently (2004) funded by traffic impact fees:

ROADWAY IMPROVEMENTS FUNDED BY TRAFFIC IMPACT FEES

ROADWAY	SEGMENT TO BE IMPROVED
Front Street	Moranda Road to Gabilan Drive West Street to Oak Street
Gabilan Drive	City Limits to Bryant Canyon Road San Vicente Road to Highway 101 Ramp and freeway ramps Metz Road to Railroad Crossing Railroad Crossing to Channel Crossing Channel Crossing Structure Channel Crossing to Nestles Road Railroad Crossing Structure
Market Street	West Street to Front Street
San Vicente Road	Front Street to Market Street Market Street to Gabilan Drive Gabilan Drive to the City Limits
South Soledad HWY 101 Interchange	Re-configure ramps and signalize ramps, or similar improvements

Source: Traffic Fee Study, 1999, Hanna and Brunetti

In general, improvement consist of realignments or extensions of existing roadways to improve traffic flows.

5.9 Promote mixed use development to provide housing and commercial services near employment centers, thereby reducing the necessity of driving.

5.10 The City shall consider establishing a downtown parking assessment district to fund parking improvements in the Downtown.

5.11 The City may use park in-lieu fees among other sources for designing and installing walking/bicycle paths around the City.

5.12 Develop and periodically update a comprehensive bicycle plan.

5.13 Develop, periodically update, and implement a, bicycle facilities improvement program and a pedestrian facilities improvement program that identify and prioritize critical pedestrian and bicycle links to parks, schools, retail centers, and civic facilities.

5.14 New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and standards.

5.15 The City shall work with AMBAG, Caltrans, Monterey County and other agencies to develop and implement regional ridesharing programs and facilities.

5.16 The City shall work with transit planning agencies and transit providers in assessing transit demand and the adequacy of existing services.

5.17 The City shall work with the regional public transit authority, AMBAG and other interested parties to improve public transit between Soledad and surrounding communities.

5.18 The City will work with AMBAG, the APCD and other interested parties t o establish a rideshare program for Soledad

5.19 To maintain the established LOS standards, the City shall:

a. Institute programs that encourage the use of alternate forms of transportation.
b. Make changes within existing roadways to improve safety and traffic flow, including:
- Selectively removing on-street parking.
- Restriping a street including the addition of bike lanes.
- Synchronizing traffic signals.
- Installing turn pockets at intersections.
- Constructing center turn lanes or median islands.

c. Provide neckdowns/bulb-outs at intersections and where appropriate
d. Consider the selective widening of streets to improve safety and efficiency.

5.20 The City will work with the Union Pacific Railroad to establish a train stop in Soledad.

5.21 Work with private interests, such as the Chamber of Commerce and major institutions, to develop and coordinate trip reduction strategies.

5.22 Create a long-term education program to change the travel habits of residents, and workers by informing them about transportation alternatives, incentives and impacts.

5.23 Work with the School District and with private interests, such as the Chamber of Commerce, to develop and implement a program. A decrease in automobile use can occur very quickly if people consciously plan to make fewer vehicle trips each week. Public education has proved successful in changing peoples' habits and ways of thinking; for example, environmental education has helped increase the rate of recycling. In conjunction with improved transportation

options, transportation education can help reduce individual vehicle trips and increase the demand for transit options.

5.24 Expand the range of City services that can be received via computers or through the mail.

5.25 The City shall consider executing a Joint Exercise Of Powers Agreement pursuant to Government Code section 6502 with the Transportation Agency for Monterey County ("TAMC") to implement a regional traffic impact fee.

Mitigation Measures

None are recommended.

Analysis of Significance

Implementation of the roadway and intersection improvements described in the General Plan will achieve and maintain level of service "D" or above on all of the City's roadways. However, regional traffic impacts will continue to be significant and adverse (Class I).

V.3 Air Quality

Issues

This section of the Draft EIR provides an analysis of the impacts associated with buildout of the City in accordance with the 2004 draft General Plan upon local and regional air quality. Impacts related to emissions from construction activities, motor vehicle use and energy consumption are assessed.

Construction and operation of facilities would result in air emissions from heavy equipment and motor vehicles. In addition, dust generated by construction-related soil disturbance may cause localized exceedances of the State particulate matter standard. Vehicle trips associated with the various uses allowed by the General Plan would also generate emissions. These emissions may result in higher regional ozone concentrations and exacerbate existing exceedances of the State 1-hour ozone standard.

Standards of Significance

In June, 2004, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) adopted revised *CEQA Air Quality Guidelines* (CEQA Guidelines) to guide the preparation of environmental documents in accordance with the California Environmental Quality Act. For program EIRs that assess the potential impacts associated with a planning document, such as the draft Plan, the CEQA Guidelines recommend focusing the analysis on cumulative impacts to regional ozone and localized impacts on carbon monoxide levels. Cumulative ozone impacts are assessed on the basis of whether or not the Plan will accommodate future population growth within the projections assumed by the Monterey Region Air Quality Management Plan (AQMP). Carbon monoxide impacts are assessed by identifying whether buildout in accordance with the draft Plan will result in carbon monoxide 'hotspots' where federal or state standards are exceeded.

Environmental and Regulatory Setting

The City of Soledad is located within the North Central Coast Air Basin (NCCAB). This basin includes Monterey, Santa Cruz, and San Benito Counties. The basin is generally bounded by the Diablo Range to the northeast, the southern portion of the Santa Cruz Mountains and the Santa Clara Valley which extends into the northeastern tip of the NCCAB. Farther south, the Santa Clara Valley transitions into the San Benito Valley which has the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley that extends from Monterey Bay at the northwest end just past King City at the southeast end.

The climate of the NCCAB is dominated by a semi-permanent high-pressure cell over the Pacific Ocean. In the summer, persistent west and northwest winds blow across the majority of coastal California. As air descends in the Pacific high-pressure cell, a stable temperature inversion is formed. As temperature increase, the warmer air aloft expands, forcing the coastal layer of air to move onshore producing a moderate sea breeze over the coastal plains and valleys. Temperature inversions inhibit vertical air movement and often result in increased transport of air pollutants to inland receptor areas.

In the winter, when the high-pressure cell is weakest and farthest south, the inversion associated with the Pacific high-pressure cell is typically absent in the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito valleys in the NCCAB. The

predominant offshore flow during this time of year tends to aid in pollutant dispersal producing relatively healthful to moderate air quality throughout the majority of the region. Conditions during this time are often characterized by afternoon and evening land breezes and occasional rainstorms. Local inversions caused by the cooling of air close to the ground can form in some areas during the evening and early morning hours.

Winter daytime temperatures in the NCCAB average in the mid 50s (°F) during the day, with nighttime temperatures averaging in the low 40s. In the summer months average daytime temperatures are in 60s and nighttime temperatures are in the 50s. Precipitation varies within the region, but in general, annual rainfall is lowest in the coastal plain and inland valley, higher in the foothills, and highest in the mountains.

Regulatory Setting

Federal, State, and regional control authorities regulate air quality in the NCCAB. EPA is involved in local air quality planning through the Federal Clean Air Act (CAA), as amended by the Clean Air Act Amendments of 1990. At the State level, the Lewis-Presley Air Quality Management Act (originally adopted in 1976 and substantially amended in 1987) and the California Clean Air Act of 1988 set air quality planning and regulatory responsibilities for the NCCAB. California Air Resources Board (ARB) is charged with the responsibility for coordinating efforts to attain and maintain ambient air quality standards and conducting research into the causes of, and solutions to, air pollution problems.

Federal Clean Air Act

The goal of the Clean Air Act of 1970 was "to protect and enhance the quality of the Nation's air resources". In 1990, the U.S. Congress adopted the federal Clean Air Act Amendments (CAAA), which updated the nation's air pollution control program. The CAAA established a number of requirements, including new deadlines for achieving federal clean air standards. The Environmental Protection Agency (EPA) is the federal agency charged with administering the CAAA and other air quality-related legislation. As a regulatory agency, EPA's principal functions include setting national ambient air quality standards (AAQS); establishing minimum national emission limits for major sources of pollution; and promulgating regulations. The CAAA require EPA to approve state implementation plans (SIPs) to meet and/or maintain the national AAQS. California's SIP is comprised of plans developed at the regional or local level. The approved SIP for the North Central Coast Air Basin (NCCAB) consists of the 1994 Maintenance Plan and Contingency Control Measures for the Monterey Bay Region and adopted rules and regulations.

The Clean Air Act Amendments of 1990 are extremely broad. The major titles of the 1990 Amendments address attainment of air quality standards, mobile source emissions, air toxins, acid rain, a new federal permit program, enforcement, and protection of stratospheric ozone. The titles that most substantially affect the air quality analysis for the Soledad General Plan update are Title I (attainment and maintenance provisions) and Title II (mobile source provisions).

<u>Title I of the Clan Air Act Amendments of 1990</u>

The goal of Title I is to attain federal air quality standards for six criteria pollutants. These six are Ozone (O3), carbon monoxide (CO), fine particulates (PM10), nitrogen dioxide (NO2), sulfur dioxide (SO2), and lead (Pb). The 1990 Amendments divided the nation into five categories of planning regions, depending on the severity to their pollution, and set new timetables for attaining set air quality standards. The categories range from "marginal" to "extreme". Attainment deadlines are from 3 to 20 years depending on the category.

Title I also requires each non-attainment area to submit a comprehensive inventory of actual emissions as part of a State Implementation Plan (SIP) revision to demonstrate the means for achieving federal compliance by the established deadlines. Each non-attainment area must achieve a 15 percent reduction from its actual 1990 emissions inventory within 6 years. Thereafter, each area must achieve a 3 percent annual reduction.

Title II of the Clean Air Act Amendments of 1990

Title II of the 1990 Amendments, which contains provisions to control emissions from mobile sources, includes the following measures to reduce pollutants from mobile sources: (1) mandatory use of cleaner, reformulated gasoline in those cities with the most severe ozone problem, (2) use of cleaner fuels, such as methanol and natural gas, to meet particulate standards, and (3) requirements on auto manufacturers to reduce tailpipe emissions of hydrocarbons (HC) and oxides of nitrogen. Section 177 of Title II permits California to adopt stricter vehicle emission standards and allow other states to adopt California's stricter standards.

The California Clean Air Act

In 1988, the California Clean Air Act (CAA) was signed into law and amended in 1992. The CAA requires that local Air Pollution Control Districts prepare and adopt an Air Quality Management Plan which demonstrates how the state air quality standards will be attained and maintained. The Plan must, therefore, discuss the sources of emissions, how the amount of these emissions is expected to change in the future, and emission control strategies. The Air Resources Board (ARB) is the State agency responsible for coordinating both State and federal air pollution control programs in California. The ARB approves local air quality management plans (AQMPs) which address attainment and maintenance of State AAQS as mandated by the CCAA. The ARB also coordinates and approves local plans which eventually become part of the SIP for submittal to the EPA.

Regional Air Quality Management/Monterey Bay Region 1997 Air Quality Management Plan

The MBUAPCD shares responsibility with the ARB for ensuring that State and national AAQS are achieved and maintained within the NCCAB. State law assigns local air districts the primary responsibility for control of air pollution from stationary sources while reserving to the ARB an oversight function. The District is responsible for developing regulations governing the emission of air pollution, permitting and inspecting stationary sources of air pollution, monitoring of ambient air quality, and air quality planning activities, including implementation of transportation control measures.

As required by the CCAA, the District adopted the 1991 AQMP for the Monterey Bay Region. The AQMP addressed attainment of the State AAQS for ozone. The AQMP recommended adoption of 20 measures to control emissions of VOC from stationary sources, 5 measures for stationary sources of NO_x, and eight transportation control measures. Since the 1991 AQMP was adopted, control requirements have been reduced, and the plan was updated in 1994, 1997 and 2000 to reflect this change. The 1997 AQMP showed that the District could achieve the required 20 percent reduction in both VOC and NO_x emissions in the near term without adopting any additional regulations. The 1997 AQMP also included updated Transportation Control Measures. The 2000 AQMP concludes the North Central Coast Air Basin remains on the borderline between attainment and nonattainment in part due to variable meteorological conditions occurring from year to year, transport of air pollution from the San Francisco Bay Area, and locally generated emissions.

In 1994, the District began the process of requesting redesignation from a federal ozone nonattainment area to an attainment area when it submitted a redesignation request and NO_x Exemption Request to the EPA. In conjunction with this request, the District, AMBAG, and San Benito County COG adopted a Maintenance Plan in May 1994 and amended it in October 1994. The District was redesignated to a maintenance area for the federal one hour ozone standard in March 1997.

The District regulates new and modified stationary sources through Rule 207, which incorporates State and federal requirements for new and modified stationary sources as well as District-specific regulations. When net emissions from a new or modified facility exceed State offset thresholds, the increase must be offset. The rule also requires application of Best Available Control Technology when a source would emit 25 lb/day or more of VOC or NO_x emissions.

The Association of Monterey Bay Area Governments (AMBAG) is the designated Metropolitan Planning Organization for Monterey, Santa Cruz, and San Benito counties and their respective cities. While AMBAG does not regulate air pollution, it prepares various transportation control measures and employment and population forecasts which are used in the AQMP. AMBAG is also responsible for ensuring that transportation plans, programs, and projects conform with the applicable SIP under the federal transportation conformity rule. AMBAG also develops planning assumptions that are used to determine conformity of general federal projects with the applicable SIP.

Because State and Federal planning requirements differ, separate plans have been prepared to meet each of the mandates. Although the 1997 Air Quality Management Plan (AQMP) for the NCCAB does not contain specific planning requirements to address attainment of the PM10 standard, MBUAPCD determined in its 1995 Report on Attainment of the California Fine Particulate Standard in the Monterey Bay Region (December 1995) that existing controls on sources of Nox emissions, which serve as precursors to PM10, may lead to attainment and maintenance of the State PM10 standard through 2010 (MBUAPCD 1997).

The MBUAPCD has adopted Rule 216 regarding the permit requirements for wastewater treatment plants. Rule 216 requires the following:

3.1 Permit

A governmental agency or district, including joint powers agencies or organizations shall not initiate, modify, construct or operate any wastewater or sewage treatment facility or conveyance mechanism or pipeline which will directly or indirectly through population or industrial growth inducement cause the emission of any anthropogenic air pollutant for which there is a State or national ambient air quality standard without first obtaining an Authority to Construct or a Permit to Operate from the Air Pollution Control Officer.

3.2 Application Content

Before granting or denying an Authority to Construct or a Permit to Operate for any new facility or modification thereto subject to the requirements of this rule, the Air Pollution Control Officer shall:

> *3.2.1 Require the applicant to submit information sufficient to specifically describe the nature and amounts of emissions, location, design, construction and operation of the facility, emitted directly or indirectly through population, industrial growth and/or the induced expansion of existing emission sources;*

3.2.2 Require the applicant to submit the projected expansion plans for the facility for the ten-year period subsequent to the date of the application for the permit;

3.2.3 Require an analysis of the new facility or modification on air quality. Such analysis shall consider expected air contaminant emissions and the impact on air quality in the vicinity of the facility, or modification as well as within the total Air Basin; and

3.2.4 Require that the projected served population of the facility, or modification, related indirect growth of industry and induced growth external to the service area to be fully consistent with the Population Projections.

Changes to the wastewater treatment and disposal system contemplated by the draft Wastewater Treatment and Disposal Master Plan may require a permit under Rule 216. In addition, the District has adopted Rule 402 relating to nuisances. Part 3 of Rule 402 states:

PART 3 REQUIREMENTS AND STANDARDS

No person shall discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property.

Ambient Air Quality Standards

Ambient air quality standards (AAQS) represent the levels of air pollutant concentration considered safe to protect the public health and welfare. The standards are designed to protect people who are most sensitive to respiratory ailments. These people include the elderly, asthmatics, very young children, people already weakened by other disease or illness and people who engage in strenuous work or exercise. National AAQS were established by the U.S. Environmental Protection Agency (EPA) in 1971 for six air pollution constituents often referred to as "criteria pollutants". States have the option to add other pollutants to the list, require more stringent compliance, or they include different exposure periods. The National and California AAQS are presented in Table V.3-1.

Attainment Status

The California Air Resources Board (ARB) is required to designate areas of the State as attainment, non-attainment, or unclassified for any State standard. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for the pollutant in that area. A non-attainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation(s) was caused by an exceptional event, as denied in the criteria. Attainment/non-attainment designations for some pollutants, such as ozone, are determined based on three years of representative data.

Criteria pollutants are described in the following paragraphs, and the attainment status for the NCCAB is summarized in Table V.3-1.

Ozone. On a regional basis, ozone is the pollutant of most concern. Ozone is a form of oxygen formed in the atmosphere by complex photochemical reactions involving precursor pollutants and sunlight. Precursors include reactive organic gases (ROG), also known as reactive hydrocarbons (RHC), and oxides of nitrogen (NOx). NOx emissions result from the combustion of fuels, including the so-called "fossil fuels" (oil, natural gas, coal, etc.). Sources of ROG emissions include the incomplete combustion of fossil fuels and the evaporation of petroleum products.

Carbon Monoxide. Carbon monoxide is a colorless, odorless gas that forms from the incomplete combustion of organic-based materials; motor vehicles are the principal source. This gas interferes with the transfer of oxygen to the brain. CO is directly emitted into the atmosphere and peak levels occur in winter when there is less wind and more intense ground-level temperature inversions that serve to concentrate pollutants. Higher levels of CO are detected where there is heavy traffic. Cold engines emit higher levels of this gas than warm or hot engines. As the pollutant is transported away from the emission source, it disperses in the air and its concentration diminishes.

Nitrogen Dioxide. Nitrogen dioxide (NO2) is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of nitrogen dioxide occur in areas that have a high concentration of combustion sources such as motor vehicle engines, power plants, refineries, and other industrial facilities operating in the area. Warmer engines produce more NO2 than cooler ones.

Particulate Matter. Particulate matter or PM10 (particulate matter 10 microns or less in diameter) are primarily associated with wind borne soils and diesel engines. The NCCAB is designated non-attainment for State PM10 standards (ARB 1999) and as unclassifiable/attainment for federal standards (EPA 1999). In July 1997, EPA adopted a new federal ambient air quality standard for finer particulate matter, particulate matter of 2.5 microns or less in diameter (PM2.5), to be used in conjunction with the federal PM 10 standard (EPA 1999).

Sulfur Dioxide and Lead. Sulfur dioxide and lead levels in all areas of the NCCAB are below national and State standards. The NCCAB is in attainment for these pollutants.

Other Pollutants. Other pollutants of concern in the NCCAB include toxic air contaminants (TACs) and odors. Odors represent objectionable emissions of one or more pollutants that are a nuisance to healthy persons and may trigger asthma episodes in people with sensitive airways. Pollutants associated with objectionable odors include sulfur compounds and methane. Typical sources of odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries. Odors are a complex problem that can be caused by minute quantities of substances. Because people have mixed reactions to odors, the nuisance level of an odor varies.

TABLE V.3-1:
ATTAINMENT STATUS OF THE NORTH CENTRAL COAST AIR BASIN

Pollutant	Federal	State
Ozone (O3) - 1 hour	Maintenance	Moderate Nonattainment
Ozone (O3) - 8 hour	Attainment	Not Applicable
Carbon Monoxide (CO)	Unclassified/ Attainment	Monterey-Attainment San Benito-Unclassified Santa Cruz-Unclassified
Nitrogen Dioxide (NO2	Unclassified/ Attainment	Attainment
Sulfur Dioxide (SO2)	Unclassified	Attainment
Inhalable Particulates (PM10)	Attainment	Non-Attainment
Inhalable Particulate (PM2.5)	Unclassified	Not Applicable

Source: MBUAPCD 2004

Local and Regional Air Quality

Baseline air quality conditions for the City of Soledad can be inferred from ambient air quality measurements taken at the King City and Salinas monitoring stations. Ambient air quality within the Salinas Valley has exceeded the State PM10 standard at both locations on several occasions during the past five years of available data. From 1994 to 1997 the State ozone standard was exceeded on 37 days for a total of 69 hours. The Air Resources Board's analysis of the contribution of air pollution from other areas concluded that for 1994 and 1995, 50 percent of exceedances were the result of "overwhelming" transport from the San Francisco Bay Area meaning that the exceedances would have occurred even without emissions contributions from the NCCAB. Thirty percent of the exceedances days were classified as "significant" meaning the upwind emissions contributed measurably to the violations of the standard with local emissions contributing to the violations as well.

The MBUAPCD operates monitoring stations to measure concentrations of carbon monoxide (CO), nitrous oxide (NOx), sulfur dioxide (SO2), and PM10. Although the General Plan area is technically located within a moderate non-attainment area for O3 and non-attainment for PM10, as stated above, air quality in the vicinity is generally good. The City of Soledad has not experienced violations of ozone standards since 1989. Monitoring data for Soledad indicates possible violations of state standards for PM10. The primary source of these particulates is the exposed agricultural soil of the Salinas Valley. In the event that population growth estimations for the City of Soledad exceed those projected in the 1991 AQMP, the ability of the MBUAPCD to maintain air quality standards, particularly ozone and PM10, may be compromised. However, with regard to PM10 emissions specifically, the permanent conversion of agricultural lands to

urban land uses contemplated by the draft General Plan will reduce the potential for PM10 emissions in the Soledad area.

Table V.3-2 provides a summary of days on which the state and federal ozone standards were violated for the years 1999 through 2003. Table V.3-2 indicates both the state and federal standards have been exceeded at the Pinnacles National Monument monitoring station which is just east of Soledad.

TABLE V.3-2: EXCEEDANCES OF STATE 1-HOUR OZONE AND FEDERAL 8-HOUR OZONE AAQS IN NORTH CENTRAL COAST AIR BASIN 1999-2003

Year Federal	Monitoring Station	Federal (Station Days)	State (Station Days)
1999	Pinnacles	1	2
	Santa Cruz	0	1
2000	Pinnacles	0	2
	Scotts Valley	0	1
	Monterey	0	1
2001	Pinnacles	2	2
	Hollister	0	1
2002	Pinnacles	4	7
	Hollister	0	1
2003	Pinnacles	1	2
	Scotts Valley	0	1

Source: MBUAPCD

Note: The data d o not equal the number of separate days the State ozone AAQ S was violated, as violations at two or more monitoring stations on the same day are considered to be one violation day.

Air Pollutant Sources in Soledad

Ground-level ozone and PM10 are the primary air pollutants of concern in Soledad. Transport of ozone, or ozone precursor pollutants, from the urban areas to the north is the major cause of the high ozone levels that are occasionally experienced in the City. Agricultural activities can be a local source of odors and PM10 pollutants.

Automobile uses are a significant source of air pollution in Soledad. The combustion of fuel for space and water heating is another source of air pollutant emissions. Wood burning and other outdoor burning are also major sources of air pollutants (primarily particulates and carbon monoxide) during late fall and winter.

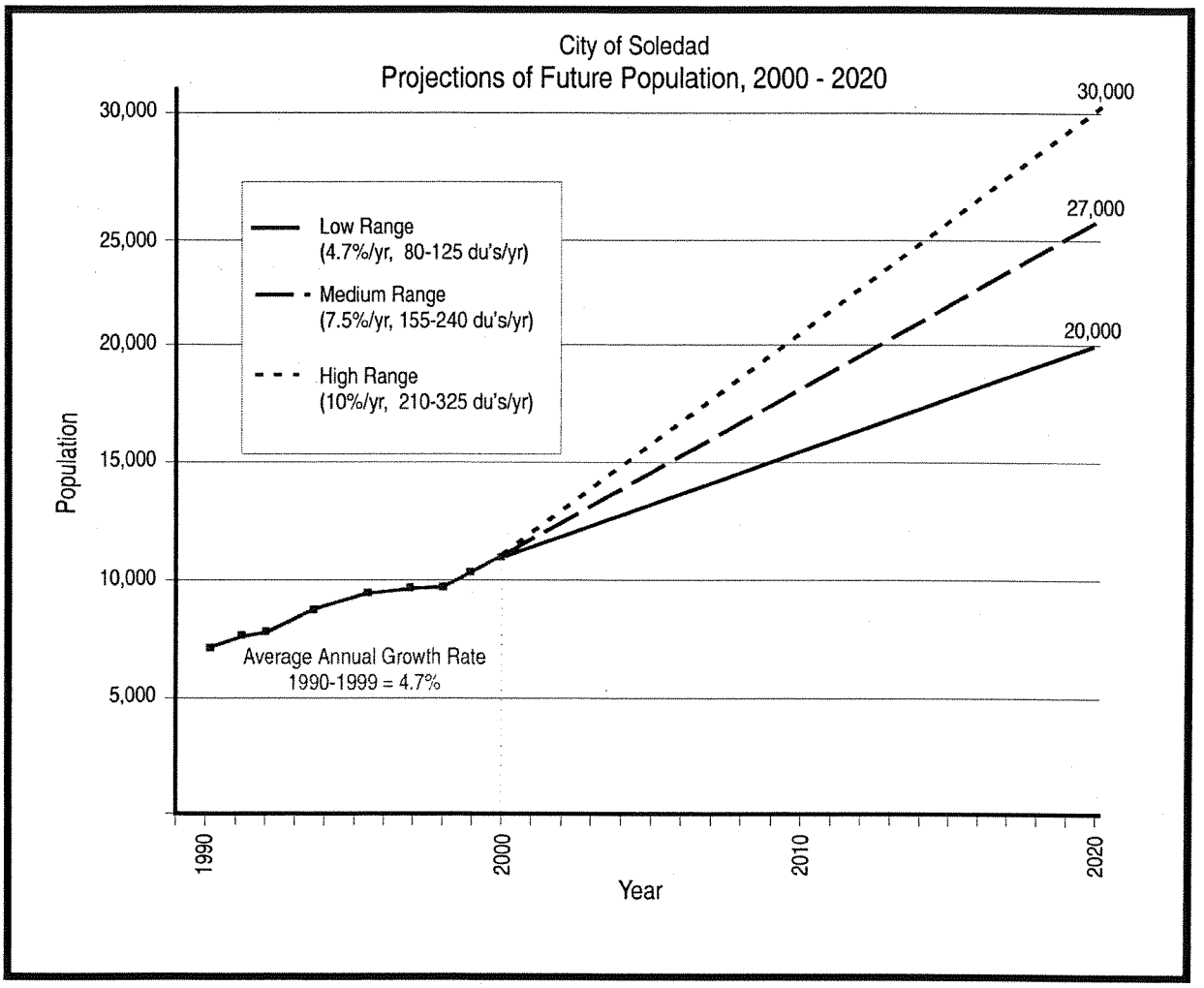
Although not regulated by federal or state air quality standards, temporary and intermittent odors generated by the City's wastewater treatment plant are another potential source of pollution.

Impacts

Assumptions

For purposes of assessing cumulative air quality impacts of buildout of the draft Plan, this DEIR assumes population growth over the next twenty years will proceed as depicted by the Medium Range in FigureV.3-1. This projection assumes population growth in Soledad will increase from about 15,000 in 2004 to about 28,000 in 2020 and continue at more or less the same rate into the future.

Figure V.3-1: Population Projections



Impact AQ-1: The draft Plan accommodates a considerable increase in the City's population over the next twenty or more years which may hamper efforts to achieve and maintain federal and state air quality standards. This impact is considered adverse but not significant (Class III).

In accordance with the District's CEQA Air Quality Guidelines, a program EIR prepared for a plan (such as the 2004 draft Soledad General Plan) should assess cumulative impacts on the basis of whether or not the Plan is consistent with population forecasts incorporated into the District's Air Quality Management Plan. Table V.3-3 of the District's Guidelines provides a summary table of population projections assumed by the AQMP in formulating strategies to achieve and maintain federal and state ozone standards for the air basin. A plan accommodating population growth that exceeds these assumptions would be inconsistent with the AQMP and would presumably have a cumulative and adverse impact on air quality.

The population projections for Soledad and the Soledad Prisons assumed by the AQMP are provided in the following table.

TABLE V.3-3: POPULATION FORECASTS FOR THE NORTH CENTRAL COAST AIR BASIN

	2005	2010	2020	2030
City of Soledad (non prison pop.)	18,376	21,142	28,192	40,363
Draft General Plan (non prison)	16,000	19,000	28,000	40,000

Source: MBUAPCD CEQA Air Quality Guidelines, Table 5-6: Population Forecasts for North Central Coast Air Basin

A comparison of the forecasts provided in Table V.3-3 with the Medium Range of the population projections illustrated in Figure V.3-1 suggests that the draft Plan is consistent with the projections used by the AQMP. Therefore, even though emissions will increase as a result of buildout of the various uses associated with the draft Plan, it is consistent with the AQMP and buildout is presumed to not result in a cumulative adverse impact to air quality.

Impact AQ-2: Motor vehicle trips associated with buildout of the draft Plan will contribute to a cumulative adverse impact on regional air quality. This impact is considered significant, adverse and unavoidable (Class I).

Although the population forecast contained in the AQMP accommodates the population of the City accommodated by the draft Plan, the additional vehicle trips associated with buildout will contribute to a degradation of air quality in the Salinas Valley and the region. While the draft Plan seeks to capture a greater proportion of these trips by achieving a greater measure of balance between employment and housing, the significant increase in motor vehicle use will result in a significant and unavoidable impact to regional air quality.

Table V.3-4 compares the emission of total organic compounds (a precursor to the formation of ozone) generated by existing (2004) total vehicle trips generated by land uses within the City, with emission generated by buildout. Table V.3-4 suggests that the emission of ozone-forming precursors will increase significantly over the timeframe of the draft Plan, when compared to existing levels. While the AQMP is crafted to achieve and maintain the federal and State air quality standards based on the population projections provided in Table V.3-3, the overall emission of ozone precursors is expected to increase significantly.

TABLE V.3-4 – COMPARISON OF TOTAL ORGANIC COMPOUNDS EMITTED IN 2004 AND AT BUILDOUT

	Total Average Daily Traffic	Total Organic Compounds (Lbs/Day)
Existing (2004)	37,331	821
Buildout	175,742	4,371

Notes:

1. TJKM, 2005
2. Vehicle trips X 0.11 lbs/day per trip

Impact AQ-3: Buildout of the draft Plan will degrade the operation of intersections within the City's Plan area which may lead to CO 'hotspots' where the state or federal standard may be violated. This impact is considered adverse but not significant (Class III).

Busy intersections and parking areas can concentrate CO emissions creating what are commonly known as CO hotspots. These localized areas of CO concentrations can result in health hazards if concentrations exceed the State thresholds (9 ppm 8-hour or 20 ppm 1-hour) where sensitive receptors are exposed. Land uses such as parks, hospitals, schools and convalescent homes are considered sensitive receptors.

CO Hotspots are rare, and becoming fewer as vehicle performance and fuels continue to be improved. In addition, CO computer models, because of a layering of conservative inputs, over predict CO concentrations. An investigation of carbon monoxide studies in Californiaa undertaken at UC Davis and sponsored by Caltrans concluded:

> *The implications of these findings are significant for the transportation planning community and for the need to conduct transportation project-level CO analyses. California data indicate that in virtually all metropolitan areas outside Los Angeles and where the vehicle fleet meets existing and projected standards, no existing transportation facility is expected to cause a CO violation... Thus, for CO analysis purposes, any future transportation project reasonably can be compared to existing facilities in the vast majority of the state. If future transportation projects have similar sizes and characteristics as existing facilities, and the existing facilities do not cause a CO violation, it can be inferred that the planned projects, accounting for changes in background concentration, should not cause violations either. This would allow for the*

a http://aqp.engr.ucdavis.edu/Hotspot%20Modeling/CO%20Issues/COSept02AWMA.pdf

> *elimination of microscale modeling for most transportation projects. Modeling might still be necessary for projects that are larger than existing facilities or those with extraordinary characteristics, such as projects located in Calexico [where many vehicles do not meet California air standards]. These findings suggest that EPA should reevaluate the continued need for the conformity CO hot-spot analysis requirement and consider replacing the requirement for one that applies only under unusual circumstances, such as those evident at the Calexico border site. We recommend using the conformity interagency consultation process to evaluate these unusual circumstances and requiring hot-spot analyses only on a case-by-case basis. [Emphasis added]b*

Another study produced as part of the UC Davis – Caltrans Air Quality Project showed that "emissions models, such as the EMFAC7 series currently used by Caltrans and the California Air Resources Board, might be overestimating vehicular CO emissions from freeways under high speed conditions by up to 480%." Based on these findings, buildout of the City in accordance with the draft Plan is not expected to result in CO hotspots.

The recommended polices and programs of the draft Plan (see below) are intended to maintain an acceptable level of operation at all of the City's streets and intersections through buildout.

Impact AQ-4: Expansion of the City's wastewater treatment and disposal capacity as contemplated by the draft Wastewater Treatment and Disposal Master Plan could result in the generation of nuisance odors. This impact is considered adverse but not significant (Class III).

Individuals have greatly varying sensitivity to odors, and continual exposure to an odor tends to decrease sensitivity. Therefore, quantifying odor impacts is difficult. Although odor measurement methods have been established to determine detectable threshold odor concentrations on a dilution basis, the application of this test and its use for the assessment of odor impacts is purely subjective. Therefore, modeling of odor concentrations associated with the Wastewater Treatment and Disposal Master Plan was not conducted. Instead, the potential for impact has been assessed based on the meteorological conditions and proposed treatment process, and by comparing the experience of conventional treatment facilities elsewhere.

The existing treatment plant site is located west of the City about one mile and is surrounded by ongoing agricultural operations. Prevailing winds are generally from the north and blow down the Salinas Valley during the day (from north to south) and would be expected to carry odors downwind and elsewhere should odors emanate from the plant. The disposal facilities at the Soledad Valley State Prison are similarly located along the banks of the Salinas River and about one mile west of the prison.

Odors generated at wastewater treatment facilities are typically associated with specific components of the treatment train that deal with organic solids or provide the opportunity for septic conditions. Sources of odor commonly generated at wastewater treatment plant facilities include hydrogen sulfide gas and ammonia which are by-products of the treatment process. Under adverse circumstances, accidents or malfunctions can occur which, if left uncorrected, could result in adverse odors being emitted. During light wind conditions when the dissipation of odors generated onsite is reduced, the potential exists for increased odor concentrations to

---

b Eisinger, D. et. al., "A Reevaluation of Carbon Monoxide: Past Trends, Future Concentrations, and Implications for Conformity 'Hot Spot' Policies" Journal of the Air & Waste Management Association. Vol. 52 page 1024. September 2002. (reproduced in Appendix B at page B-6)

occur. These concentrated odors can then be transported, without breaking up, offsite to adjacent land uses. Prevailing wind conditions in the Salinas Valley are characterized by wind speeds of 10 - 20 mph, with prevailing winds associated with southtward onshore flow from the Pacific Ocean. Under typical prevailing conditions, windspeed is anticipated to be adequate such that odors generated onsite are reduced to adequate concentrations.

General Plan Policy Response

Traffic Management

C-1 Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.

C-2 Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.

C-3 The City shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes, as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.

C-5 The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.

C-8 The City shall manage the street network so that the standards presented in policies C-1 and C-12. are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable.

C-9 New local streets shall be developed consistent with the goals, policies and programs of the Land Use Element of the General Plan.

C-10 Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in existing development.

C-11 The City will continue to support the policies and programs of the Monterey County Congestion Management Plan.

Bicycle Circulation

C-20 The City shall establish a safe and convenient network of identified bicycle routes connecting residential areas by the shortest possible routes with recreation, shopping,

employment areas and schools. The City shall cooperate with surrounding jurisdictions in designing and implementing an area-wide bicycle system.

C-21 Bicycle routes shall emphasize paths separate from vehicle traffic to the maximum extent feasible, but shall also include bicycle lanes within public streets.

C-22 Bike lanes and paths shall be designed and maintained to improve bicycling safety, and convenience, and encourage people to use bicycles to commute to work or school.

C-23 Bike lanes and paths shall be established when:

a. The street section is re-paved, re-striped, or changes are made to its cross-sectional design.
b. The street section is being changed as part of a development project.
c. The construction of bike lanes or paths is called for by the City's Capital Improvement Plan.

C-24 Stop signs shall be minimized along Class I bicycle paths so long as safety for bicyclists, pedestrians and motorists is maintained.

C-25 New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.

C-26 The City shall encourage that bike racks be installed on regional transit vehicles.

Pedestrian Circulation

C-27 The City shall complete a continuous network of sidewalks and separated pedestrian paths connecting housing areas with major activity centers and with trails leading into City and county open space areas.

C-28 New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and standards.

Transit

C-31 The City shall work with transit providers to plan and implement additional transit services within and to the City that are timely, cost-effective, and responsive to growth patterns and existing and future demand.

C-32 The City shall consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act.

C-33 The City will work with the appropriate agencies to establish a train station in Soledad.

Transportation Demand Management

C-34 The City may reduce required parking for projects that employ transit demand management strategies that reduce vehicle trips to the site.

C-35 The City shall support region-wide and local programs to reduce the number of vehicle trips associated with employment, school attendance and shopping.

C-36 Public transit to surrounding communities shall be improved.

C-37 A ridesharing program shall be established in Soledad to encourage carpooling for trips to other communities.

Air Quality

C/OS-13 The City will encourage the improvement of air quality in Soledad and in the region by implementing the measures described in the Monterey County Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycles and walking.

C/OS-14 The City shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.

C/OS-15 The City shall submit development proposals to the APCD for review and comment in compliance with CEQA prior to consideration by the decision-making body.

C/OS-16 The City shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Programs

5.2 The City will prepare a Capital Improvement Plan and associated funding mechanisms for circulation improvements consistent with this Element.

5.3 The City shall work with Monterey County, AMBAG and other jurisdictions to implement the Monterey County Congestion Management Plan, and to monitor and update the level of service standards as appropriate.

5.4 The city shall implement the trip reduction measures contained in the Air Quality Management Plan.

5.5 The City shall work with AMBAG, Caltrans, Monterey County and other agencies to develop and implement regional ridesharing programs and facilities.

5.6 The City shall work with transit planning agencies and transit providers in assessing transit demand and the adequacy of existing services.

5.7 The City shall work with the regional public transit authority, AMBAG and other interested parties to improve public transit between Soledad and surrounding communities.

5.8 The City will work with AMBAG, the APCD and other interested parties to establish a rideshare program for Soledad.

5.9 The City may use park in-lieu fees among other sources for designing and installing walking/bicycle paths around the City.

5.11 The City shall work with APCD to reduce mobile source emissions from new development. The City shall require new commercial and industrial development to (as applicable):

a. Submit detailed plans for an APCD approved trip reduction plan. Such a plan shall include targets for an increase in average vehicle ridership for employees, and incentives for carpooling, transit ridership for employees, and incentives for carpooling, transit ridership, and bicycling.
b. Provide worker/customer transit incentives. Such incentives may include reduced work hours to coincide with transit schedules, employer-provided bus passes, and direct monetary compensation for transit ridership.
c. Accommodate local shuttle and regional transit systems.
d. Provide transit shelters.
e. Provide secure storage lockers for bicycles at a ratio of one locker per ten employees.
f. Install energy-efficient heating and cooling systems.
g. Install energy-efficient lighting and signage.
h. Establish a park-and-ride lot consisting of twenty spaces, consistent with the requirements of Caltrans.
i. Include landscaping in parking lots which incorporates canopy trees to shade parked cars and reduce fuel evaporation from parked cars.
j. Provide showers for employees.

5.15 The City will work with the Southern Pacific Railroad to establish a train stop in Soledad.

8.1 Consistent with APCD standards, the City shall require new development to utilize the Best Available Control Technology (BACT) for all new emission sources. Implementation of these control technologies shall be applied through the review of new development projects and through the Air Pollution Control District's permitting and environmental review process.

8.2 The City should ensure that APCD, in preparation of its required updates to the AQMP, use revised population and vehicle trip data consistent with this General Plan.

8.3 To reduce air quality impacts associated with construction activities, the City shall revise its zoning and/or grading ordinance to require the following conditions for project approval:

a. Water the site and the equipment in the morning and afternoon.
b. Spread soil binders on the site, unpaved roads and parking areas.
c. Re-establish ground-cover on the construction site.
d. Wash trucks leaving the site.
e. Properly tune and maintain all equipment.
f. Use low-sulfur fuel for equipment.
g. Provide rideshare and transit incentives to construction workers.
h. Configure construction parking to minimize conflicts with street traffic.
I. Minimize obstruction of through-traffic lanes.
j. Schedule operations affecting major roadways for off-peak hours.

8.4 The City shall utilize the CEQA process to identify, avoid and/or reduce the potentially significant adverse air quality impacts of new development.

Mitigation Measures

None are recommended.

Analysis of Significance After Mitigation

Cumulative air quality impacts are considered significant and adverse (Class I).

V.4 Noise

Issues

Construction activities associated with land uses accommodated by the Draft Plan could adversely impact nearby noise-sensitive uses. Development of urban uses as contemplated by the draft Plan could expose additional people to the adverse impacts of existing noise sources and noise associated with new urban development.

Standards of Significance

The Noise Element of the draft 2004 General Plan establishes the following standards for interior and exterior noise exposure. Activities that could result in exceeding these standards would normally result in a significant adverse impact unless mitigated.

TABLE V.4-1: INTERIOR AND EXTERIOR NOISE STANDARDS

Land Use Categories		Energy Average CNEL	
Categories	Uses	Interior[1]	Exterior[2]
Residential	Single Family, Duplex, Multi Family	45[3]	65
	Mobile Home	---	65[4]
Commercial, Industrial and Institutional	Motel, Hotel, Transient Lodging	45	65[5]
	Commercial Retail, Bank, Restaurant	55	---
	Office Building, Research and Development, Professional Office, Government Office	50	---
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	---
	Gymnasium	50	---
	Sports Club	55	---
	Manufacturing, Warehousing, Wholesale, Utilities	65	---
	Movie Theaters	45	---
Institutional	Hospitals, Schools	45	65
	Church, Library	45	---
Open Space	Parks	---	65

Source: 2004 Draft Soledad General Plan Noise Element

Notes:

1. Indoor environment excluding bathrooms, closets and corridors.
2. Outdoor environment limited to private yards of single family residences, multi-family private patio or balcony served by a means of exit from inside, mobile home parks, hospital patio, park picnic area, school playground, hotel/motel recreation area.
3. Noise level requirements with closed windows. Mechanical ventilation system or other means of natural ventilation shall be provided per Chapter 12 Section 1205 of the Uniform Building Code.
4. Exterior noise level should be such that interior level will not exceed 45 CNEL.
5. Except areas affected by aircraft noise.

Environmental and Regulatory Setting

Characteristics and Measurement of Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound can be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Loudness is the intensity of sound waves combined with the reception characteristics of the ear.

Noise is typically expressed in decibels (dB). Noise levels are generally reported in terms of the "A" weighted decibel scale, which modifies actual sound power levels to correspond to the human perception. The symbol dBA indicates a noise measurement incorporating this weighting scale. Noise levels diminish (or attenuate) as distance from the source increases based on an inverse square rule, but the rate constant varies with the type of sound source. Sound from point sources, such as industrial facilities, attenuates at a rate of 6 dBA per doubling of distance. Heavily-traveled roads with few gaps in traffic behave as continuous line sources with an attenuation rate of 3 dBA per doubling of distance. Otherwise, roads typically have an attenuation rate of 4.5 dBA. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a similar relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Under this system, sound may be further characterized through the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Various noises, their corresponding decibel levels and common human responses are shown in Figure V.4-1.

Certain types of noise descriptors account for other aspects of noise measurement. Often, a method for describing the average sound level is utilized, because sound levels can vary markedly over a short period of time. There are time-weighted average values based on the equivalent sound level (Leq), which is a constant sound level that equals the same amount of acoustic energy as actual time-varying sound over a particular time period. The most common averaging period is hourly, but Leq can describe any series of noise events and any duration.

Sensitivity to noise increases during the evening and at night, therefore, twenty-four hour descriptors have been developed that incorporate artificial noise penalties for quiet-time noise events. The Community Noise Equivalent Level, CNEL, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nighttime (10:00 pm - 7:00 am) noise levels.

Another method of accounting for nighttime noise levels is the day/night average level. The day/night average level, or Ldn, is an energy average sound level that occurs between the hours of 10:00 p.m. and 7:00 a.m. Levels during these hours are treated as though they are 10 dBA higher than they actually are because sensitivity to noise is greater during nighttime hours. The State of California requires the Ldn to be used in the development of noise elements for general plans. The Ldn has also been adopted by the Environmental Protection Agency (EPA) and is used by the County of Monterey.

Figure V.4-1: Common Noises and Their Corresponding Decibel Levels

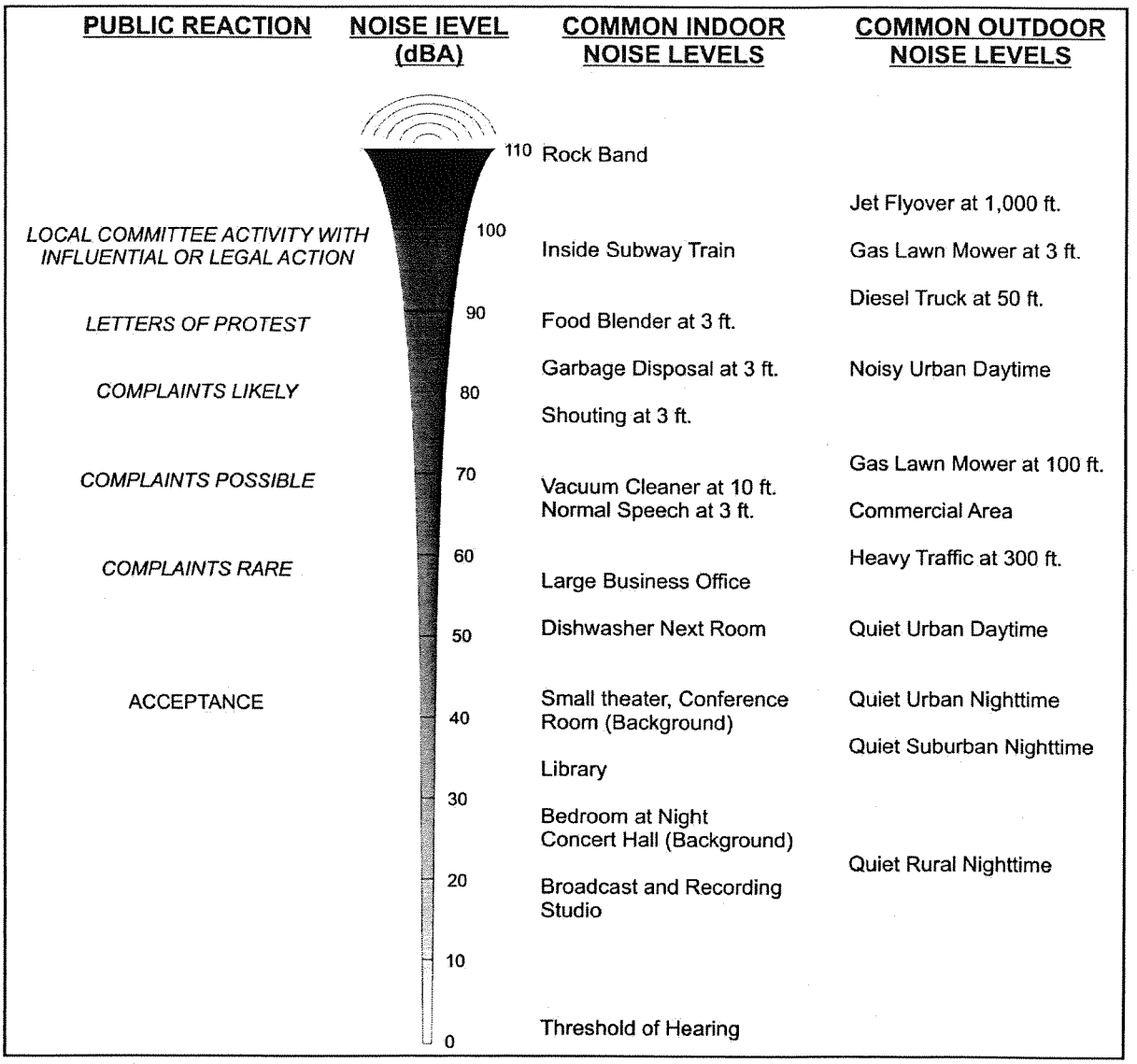
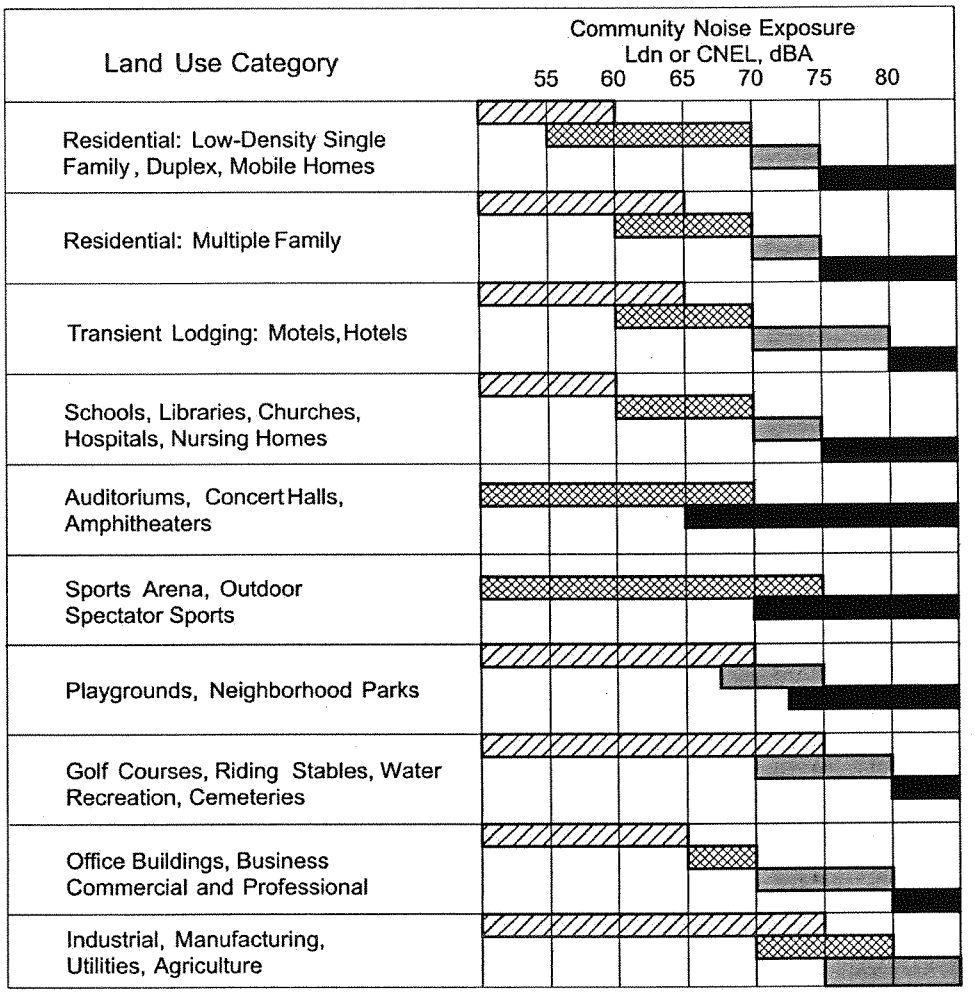


Figure V.4-2 Acceptable Noise Levels



INTERPRETATION

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.

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 features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE

New construction or development should generally 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.

CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

Adapted from: Office of Planning and Research, State of California General Plan Guidelines, Appendix A: Guidelines for the Preparation and Content of the Noise Element of the General Plan, 1990.

Effects of Noise

The difficulty in relating noise exposure to public health and welfare is one of the major obstacles in determining appropriate maximum noise levels. Although there has been some dispute in the scientific community regarding the detrimental effects of noise, a number of general conclusions have been reached:

- Noise of sufficient intensity can cause irreversible hearing damage;
- Noise can produce physiological changes in humans and other animals;
- Noise can interfere with speech and other communication; and
- Noise can be a major source of annoyance by disturbing sleep, rest, and relaxation.

People are subject to a multitude of sounds in the urban environment. The amount of annoyance or damage caused by noise depends primarily upon three factors: the amount and nature of the noise, the amount of ambient noise present before the intruding noise, and the activity of the person working or living in the noise source area.

The amount and nature of the noise being introduced is crucial in determining the potential for adverse effects. The amount of noise can be described by any of the methods explained above, and directly impacts the human ear. The nature of the noise is also important. Noise of higher pitch, for example, is perceived as louder than sounds of a low pitch, and therefore would pose more of an annoyance.

The ambient, or background noise present before the introduction of noise is also an important determinant of effect. In noisy urban areas, ambient noise levels may exceed 65 dBA, and additional noise sources are usually less noticeable than in quieter rural settings. One might assume that the addition of new noise sources would result in a correspondingly higher noise level (for example, 70 dBA + 70 dBA = 140 dBA). However, because noise increases logarithmically, this is not the case. The following table depicts how the addition of noise sources functions. Each time the number of (identical) noise sources is doubled, the sound pressure level is increased by 3 dBA. Three dBA is the minimum change audible to the human ear.

TABLE V.4-2: ADDITION OF NOISE SOURCE SOUND LEVELS

Difference between levels – dB(A)	Number of dB(A) to be added to or subtracted from the higher level
0	3.0
1	2.5
2	2.1
3	1.8
4	1.5
5	1.2
6	1.0

Source: Minnesota Pollution Control Agency. 1987. An Introduction to Sound Basics

Some land uses and activities are more sensitive to increased noise levels. Such land uses generally include residences, office/professional space, libraries, health care facilities, and similar activities which require some level of quiet to function. Allowable noise levels in areas containing such uses are generally diminished.

Regulatory Setting

To protect against the adverse effects described above, and to address special needs of more noise sensitive land uses, governments at many levels have established noise standards and guidelines. Regulations applicable to the City of Soledad are described below.

The Zoning Ordinance addresses "noise pollution" in Section 17.38.240(A), and outlines performance standards for noise exposure. According to the ordinance, noise levels from any facility or use (other than transportation and temporary construction) measured at the lot line will not exceed 55 dBA for residential property, 65 dBA for commercial property, and 68 dBA for industrial property.

Federal Regulations

There are no Federal regulations directly applicable to noise impact assessment. There are, however, Federal noise regulations which the City may encounter when considering individual projects, or which may be relevant to the City decision-making process with respect to federally-funded projects.

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 65 dBA Ldn as a desirable maximum exterior standard for residential units developed with HUD funding. The intent of the standard is to achieve an interior Ldn of 45 dBA or lower inside HUD-subsidized housing projects.

The Federal Highway Administration (FHWA) has adopted regulations addressing the effects of highway noise resulting from federally-funded roadway improvement projects. These regulations are implemented by Caltrans and establish noise levels at which the federal government and Caltrans will consider funding noise mitigation measures such as sound walls. These guidelines are based on the noisiest average noise level (Leq) hour. If the Noise Abatement Criteria established by the FHWA are approached or exceeded at a land use within the project limits of a federally-funded roadway improvement project, then Caltrans considers mitigation for that land use. Mitigation usually consists of sound walls.

State of California

CEQA provides thresholds at which a project is normally considered to have a significant effect on the environment. According to the CEQA Guidelines, a project will normally have a significant effect on the environment if it will:

- Expose persons to noise levels exceeding established standards
- Expose persons to excessive groundbourne vibration
- Substantially increase ambient noise temporarily, periodically, or permanently
- Expose people to excessive noise near a public-use airport or private airstrip

The State Building Code (Title 24, Part 2) establishes maximum acceptable interior noise levels for new multi-family residential development, including hotels and motels. The State Building Code

is enforced by local building officials. The maximum acceptable interior noise level for new multi-family housing subject to the requirements of the State Building Code is an Ldn of 45 dBA, consistent with the requirements of the Department of Housing and Urban Development. Projects subject to the State Building Code requirements and exposed to exterior noise levels exceeding an Ldn of 60 dBA must have an acoustical analysis which documents the noise control treatments incorporated into the building's design that will achieve the 45 dBA Ldn interior noise limit.

The California Department of Health, Office of Noise Control, also provides guidance for the acceptability of designated land uses within specific CNEL contours. Residential uses are normally unacceptable in areas exceeding 70 dBA CNEL and conditionally acceptable within 60 to 70 dBA CNEL. Commercial and professional office land uses are normally acceptable in areas up to 70 dBA CNEL and normally unacceptable in areas exceeding 75 dBA CNEL. These guidelines can be modified to reflect communities' sensitivities to noise (EDAW, 1999).

Existing Noise Environment

Noise Sources

The major noise source in Soledad, as in most other communities, is traffic. Railroads, aircraft, farming activities, quarry activities, and industrial and food packaging facilities also contribute to local ambient noise levels.

Freeway Traffic Noise

US Highway 101, by far, is the loudest noise source in the City of Soledad. Noise-sensitive land uses in close proximity to the freeway include residential and commercial areas. Sensitive land uses within 350 feet of the centerline of the roadway are exposed to noise levels between 70 and 75 dBA, well in excess of accepted standards.

Arterial Roadway Traffic Noise

Traffic along Front Street, Metz Road (Highway 146), and East Street, greatly increases noise in the vicinity of Soledad. Noise-sensitive land uses in the vicinity of these roadways include residences, commercial buildings, and schools.

Front Street is the primary arterial servicing the central business district, and it also serves residences in the northern portion of the City as the primary access to Highway 101. Noise levels within 250 of the centerline of the roadway exceed 65 dBA; noise levels within 150 feet are between 70 and 75 dBA.

Metz Road (Highway 146) is operated by Caltrans as the primary access to Pinnacles National Monument. The roadway also serves as an alternate southern route to the cities of Greenfield and King City. Gabilan Elementary and San Vicente Elementary front the roadway. Noise levels along Metz Road have been measured at about 68 Ldn/CNEL (EDAW, 1999).

East Street serves as an extension to Highway 146 and functions as an arterial. Noise levels along this road have been measured at 69.8 Ldn/CNEL which is above the standard expressed in the Noise Element for residential properties.

Local Roadway Traffic Noise

Traffic along local roadways is generally not sufficient to produce noise exceeding applicable standards.

Train Noise

An average of 12 trains pass through Soledad per day without stopping in the City limits. Trains pass infrequently, therefore noise generated by the trains may be treated as a point source, which attenuates at a rate of 6 dBA per doubling of distance. Train noise (without horns) is dependent largely on the speed at which the train is traveling. Assuming no intervening structures are present, noise from trains would exceed 65 dBA within 630 feet of the tracks. It would take approximately 1,890 feet for noise levels to reach acceptable levels for residences. The presence of barriers (e.g., houses, other structures) reduces this distance considerably.

Aircraft Noise

There are no general aviation facilities present near Soledad. Occasional overhead aircraft generate sporadic noise events at levels less than 80 dBA, but do not pose significant impacts to area residents.

Stationary Noise Sources

Blasting activities at the rock quarry in the Gabilan Mountains northeast of the City generate noise during regular business hours. The quarry is outside of the jurisdiction of the City and the Noise Ordinance.

Industrial operations are limited in the Soledad city limits, and do not regularly generate noise in excess of applicable standards.

Impacts

Impact N-1: Noise associated with construction activities may adversely impact nearby noise-sensitive uses. This impact is considered significant unless mitigated (Class II).

Although a precise analysis of the potential noise impacts that may result from construction activities associated with projects accommodated by the draft General Plan, an estimate of potential noise resulting from 'typical' construction activities can be obtained by applying a noise generation factor (Table V.4-3) to a typical range of construction equipment for a typical range of activities. These activities include site preparation (primarily grading), foundation construction (which includes the construction of wooden forms; placement of reinforcing bars, and the pouring of concrete) and structural and finish work (framing of buildings, installation of plumbing, electrical, gas and other utilities; roofing; installation of irrigation and landscaping). Onsite construction operations were assumed to occur for a maximum of 8 hours per day.

Site Preparation

Noise impacts associated with construction activities would typically occur in several distinct phases each with distinguishing noise characteristics. The first and noisiest is site preparation and grading, but this phase generally is the shortest duration. Site preparation activities may include earthmoving, digging into the bedrock and compaction of soils. High noise levels are created during this phase because of the operation of rock drills; heavy-duty trucks; backhoe;

diggers and front-end loaders. Noise levels typically range from 73 to 98 dBA fifty feet from individual pieces of equipment. The highest noise levels would be generated by rock drills.

Foundation Phase

During the next phase, foundation forms are constructed and concrete foundations are poured. Primary noise sources during this phase are heavy concrete trucks and mixers and other trucks with noise levels typically in the 70- to 90-dBA range at 50 feet.

Structural and Finish Work

The third phase consists of constructing the structure itself. Noise levels typical during this phase are in the 60 to 80-dBA range at 50 feet and are associated with hammering, diesel generators, compressors, and light truck traffic. The final construction phase involves site clean up and landscaping. Primary noise sources include trucks, landscape rollers, and compactors. General noise levels are in the 65- to 75-dBA range at 50 feet.

TABLE V.4-3: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Maximum Level, dB (50 Ft.)
Scrapers	88
Bulldozers	87
Backhoe	85
Pneumatic Tools	85

Source: Brown-Buntin Associates, Inc.

Construction activities would temporarily increase the overall ambient noise levels within and surrounding the construction site. Onsite excavation and construction operations would require the use of track-type tractors, motor graders, wheeled loaders, haul trucks, scrapers, cranes, a backhoe loader, and excavators. Construction noise levels would fluctuate depending upon the construction phase, equipment type and duration, and the location of onsite operations in relation to existing structures.

Total estimated construction-related noise from all sources is summarized in Table V.4-4 for various reference distances from a construction site. An attenuation rate of 6 dBA is assumed for each doubling of distance from the source. The estimates represent a composite of total noise generated by a typical range of construction activities, accounting for deliveries, construction worker vehicle trips and other construction-related vehicles that travel to and from the site. Table V.4-3 suggests that sensitive receptors within 3200 feet of the source will be subjected to temporary and intermittent noise that exceeds the City standard of 60 dBA for outdoor activity areas.

TABLE V.4-4: ESTIMATED NOISE LEVELS FROM CONSTRUCTION

Construction Phase	Noise Levels Leq (dBA) without Noise Attenuation Controls				
	200 feet	400 feet	800 feet	1600 feet	3200 feet
Site Preparation	79	73	67	61	55
Foundation	89	83	77	71	65
Structure and Finish	82	76	70	64	58

Source: US EPA (1971) and CM Harris (1991)

Impact N-2: Noise associated with motor vehicle traffic generated by the development of land uses accommodated by the draft Plan will increase, which may result in the exceedence of the standards described in Table V.4-1 adjacent to the roadway. This impact is considered significant unless mitigated (Class II).

Buildout of the draft Plan will result in a substantial increase in traffic on existing and proposed roadways in the project vicinity. The new traffic throughout the area would be part of generally increased noise from increased activity eventually replacing the existing, rural noise environment with one that would seem more suburban. Existing residences would experience gradually increased traffic noise as the development proceeds.

The estimated increase in noise levels along selected roadways at buildout is provided in Table V.4-4. Compared with existing conditions, growth in traffic noise will occur regardless of development accommodated by the draft General Plan. Compared to future conditions that would occur without the project, the draft General Plan would cause substantial traffic noise increases (i.e., greater than a 3 dB change) on existing and planned roadways serving the planning area. Existing homes along these roadways would experience a recognizable increase in traffic noise.

Table V.4-4 provides a reasonable worst-case prediction of noise levels and the distances necessary to achieve the planning criteria of either 60 or 65 Ldn. Contour distances presented in Table V.4-4 do not account for obstructions that may interrupt the line-of-sight between a receptor and the passing traffic. Only attenuation by distance is considered in the predictions. Thus at locations where a building is between the receptor and the roadway, noise levels could be as much as 5 dBA less than shown in the table. The noise levels include assumptions about the vehicle mix based on information available in 2004. Distances to future noise contours in Table V.4-4 are from the centerline of the roadway.

TABLE V.4-5: EXISTING AND FUTURE NOISE LEVELS

Source	Buildout Right of Way Width (feet)	Distance From Centerline to 65 dB In 2004 (feet)	Distance From Centerline to 65 dB At Buildout (feet)
Railroad	200	630	600
Highway 101	500	325	600
Camphora-Gloria Road	84	> 1000	200
Metz Road	84	250	110
Front Street	84	250	120
East Street	84	250	100
West Street	60	200	100
San Vicente Road	84	>200	110
Gabilan Drive	84	>200	76
Monterey Street	60	200	72

Source: Sound 2000, and CMCA

Notes:

1. Based on traffic volumes at buildout (see Chapter V.2-- Traffic and Circulation).
2. Assumes no physical barrier between noise source and receptor.

As Table V.4-4 shows, properties along several of the City's arterial and collector roadways will be exposed to noise levels that exceed the City's standards for residential yard areas, in the absence sound attenuation such as a sound wall or earthen berm.

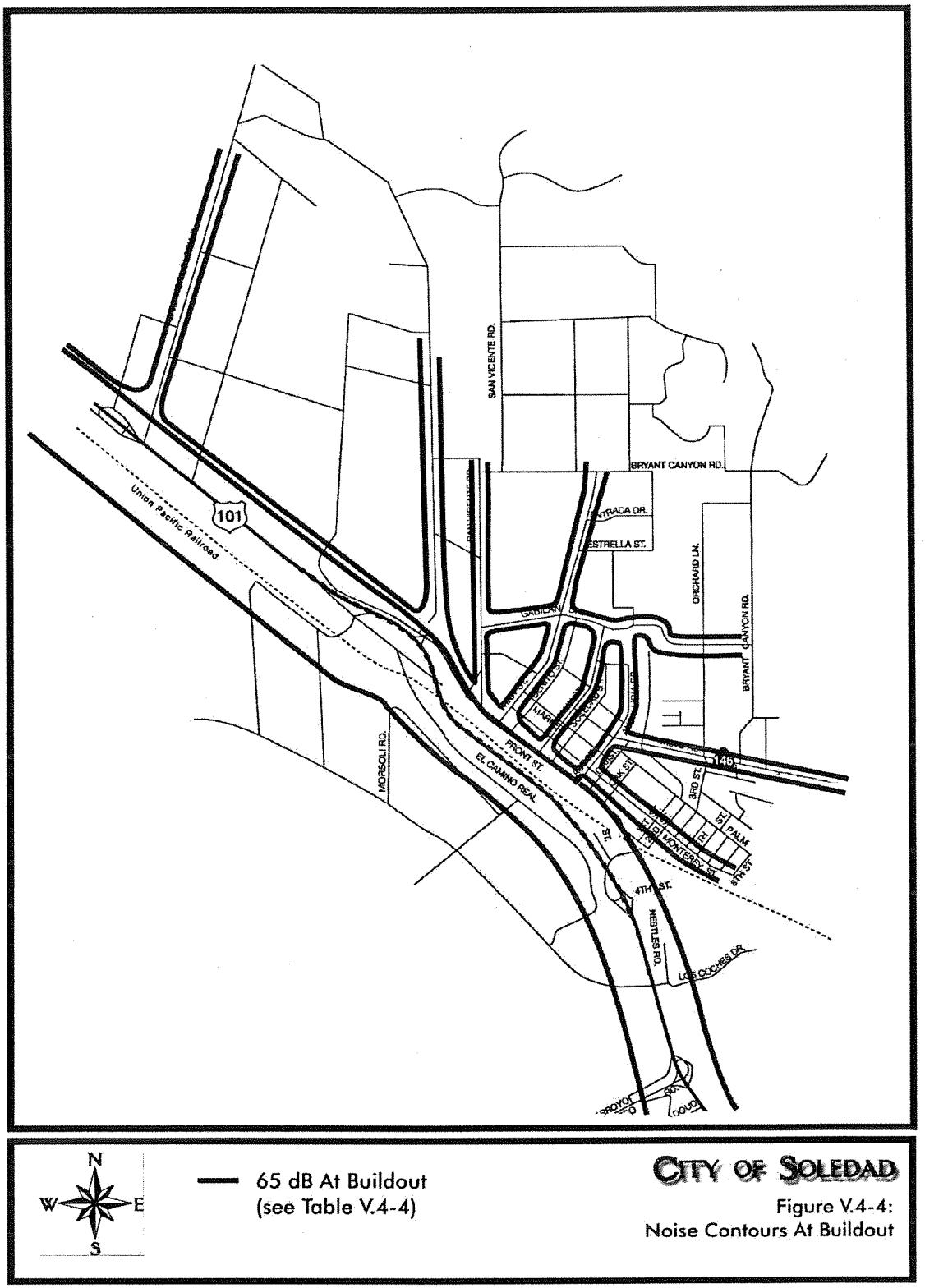
Impact N-3: Buildout of land uses accommodated by the draft Plan will increase the exposure of people to new and existing stationary sources of noise. This impact is considered adverse but not significant (Class III).

New development accommodated by the draft Plan could include industrial and other processes that generate stationary noise. The types of operations that might be developed in the City in the future is speculative at the point of general Plan adoption. However, the standards of the General Plan Noise Element would be applied at the time of site specific development to determine the significance of potential impacts and the range of appropriate mitigation.

Impact N-4: Noise from ongoing agricultural operations could periodically exceed the City's noise standards for adjacent residences. This impact is considered adverse but not significant (Class III).

Ongoing agricultural operations adjacent to existing and new residences accommodated by the draft Plan could intermittently result in noise levels exceeding the City's goals for exposure from stationary sources. Agricultural noise impacts to the new residences would be periodic and seasonal. The agricultural operations are not anticipated to cause more than 60 Ldn on the adjacent residential neighborhoods.

Figure V.4-3: Noise Contours At Buildout



General Plan Policy Response

Policies

N-1 The City shall not allow development of new noise-sensitive land uses where existing or ambient noise levels exceed those shown on Figure V.4-2, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards set by Figure V.4-2.

N-2 Where non-residential land uses are likely to generate noise levels exceeding those shown on Figure V.4-2 on adjacent or nearby existing or planned noise-sensitive uses, the City shall require preparation of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

N-3 New residential development shall comply with State Noise Insulation Standards.

N-4 New commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby.

N-5 Where noise mitigation measures are required to achieve the standards described in Figure V.4-2, the emphasis of such measures shall be placed on site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related mitigation measures have been integrated into the project.

Programs

10.1 The City will enforce the standards contained in the Noise Element through the development review process and other means.

10.2 The City will adopt development guidelines and setback requirements as part of the zoning ordinance that include design standards for sound mitigation.

Mitigation Measures

None are recommended.

Analysis of Significance After Mitigation

By applying the policies and programs recommended by the draft Noise Element, noise impacts will be reduced to less than significant.

V.5 Geologic Hazards

Issues

This section identifies potential area-wide geologic hazards and regional seismic characteristics and evaluates the potential effects of geologic hazards related to the development of properties and facilities in accordance with the draft Plan. These potential hazards include earthquakes, ground rupture, ground shaking, settlement, liquefaction, and landslides.

Standards of Significance

The CEQA Guidelines state that a project will have a significant impact if it would result in one or more of the following:

- Expose people or structures to potential hazards which may result in an increased risk of loss, injury or death involving:
- Rupture of known a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- Strong seismic ground shaking;
- Landslides;
- Substantial soil erosion or the loss of topsoil;
- Being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Being located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Environmental and Regulatory Setting

Environmental Setting

The City of Soledad is located on the eastern side of the Salinas Valley, the largest valley within the Coast Ranges. The Valley is bordered by the rugged Santa Lucia mountain range to the west, and the Gabilan range to the east. The Valley varies in width from approximately three miles at its southern end near San Ardo, to approximately 15 miles wide at its northern end, where the Salinas River enters Monterey Bay. The valley is approximately 120 miles long.

The Salinas Valley is underlain by alluvial fill to an estimated depth of between 800 and 1,000 feet. The composition of the fill is mainly unconsolidated or loosely consolidated sediments. These sediments were derived through weathering and subsequent movement of this material from upland areas to the valley floor. Most of the City of Soledad overlies recent alluvium.

The valley is also underlain by a complex series of stratigraphic units. Alluvial fan deposits have built up on both sides on the Valley. Due to varying stream velocities and changing patterns of the Salinas River and its tributaries over time, alternating layers of silt, sand, gravel, cobble, and occasional boulders have been deposited over the fans and in the valley. Clay layers occur at irregular intervals and depths throughout the area. Therefore, underlying geologic structure can vary considerably (Soledad General Plan, 1993).

Potential Geologic and Seismic Hazards in the Soledad General Plan Area

The following is a discussion of the hazards potentially affecting the Soledad study area.

Seismicity

The City of Soledad is located in a seismically active region. The alluvial Salinas Valley is bordered both to the east and west by active or potentially active fault zones. Faults are caused by movement of the earth's crust, which forces bedrock units located on opposite sides of a fault line to slide past each other. These lines are not discretely defined, so movement of the ground surface can occur throughout a fairly wide area that overlies a fault zone. An active fault is defined as a fault that has a historic seismic record (activity in the last 100 years) or displaces Holocene (11,000 years and younger) deposits. Faults that exhibit signs of geologically recent (active within the past 11,000 years) movement are considered the most likely to experience movement in the near future. Therefore, active faults are generally thought to have the greatest fault rupture potential. Most agencies, however, will consider potentially active faults (active within the past two million years) as being capable of generating future earthquakes. Faults classified as inactive are not considered to present a significant fault rupture hazard or seismic source.

Earthquakes along faults are described in terms of Moment Magnitude (M), which is the measure of total energy released. Moment magnitude is the measurement and term generally preferred by scientists to the Richter scale because moment magnitude is more precise. Moment Magnitude is not based on instrumental recordings of a quake, but on the area of the fault that ruptured in the quake. This means that the moment magnitude describes something physical about an earthquake. Moment Magnitude is calculated in part by multiplying the area of the fault's rupture surface by the distance the earth moves along the fault.

The San Andreas fault, considered dangerous to areas which lie within 50 to 100 miles of its trace, lies about 13 miles to the northeast of Soledad. This fault has generated earthquakes in excess of 7.0 M at many points along its 600-mile length; the largest being the 1906 San Francisco earthquake (7.7M) and the 1857 Fort Tejon quake in Southern California. The locations of active faults in the vicinity of the Soledad planning area are illustrated in Figure V.5-1. No active faults are located within the Soledad planning area.

Ground Shaking (Earthquakes)

Small to moderate earthquakes (magnitudes less than 5.0 on the Richter Scale) are common in Monterey County. The most significant quakes affecting the County during the last century have included the 1906 San Francisco earthquake and the 1989 Loma Prieta quake.

Research has shown that areas underlain by layers of unconsolidated, recent alluvium and unconsolidated soil material with high ground water have an increased risk of experiencing the damaging effects of groundshaking (Ziony and Yerkes, 1985). Due to its proximity to a number of major earthquake faults, it is reasonable to assume that all improvements in the City will experience intense groundshaking at least once within their useful life (60 years), and that unstable hillsides will be subjected to destabilizing landslide forces.

Ground Rupture

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely to occur along active faults. However, the potential for ground rupture also exists along potentially active faults.

Therefore, development in areas overlying fault zones, whether active or potentially active, should be avoided. Any development that does take place within these areas perform a fault hazard study to assess the potential for damage associated with fault rupture and to establish setbacks to mitigate the potential for such damage.

Lurch Cracking or Ground Lurching

"Lurch cracking" is another type of ground failure that could potentially occur in parts of the Soledad planning area during a large earthquake. This phenomenon is characterized by irregular cracks, fissures, and fractures of lengths varying from a few inches to many feet. It is caused by the shaking, settling, and sliding of soil and can be accompanied by lateral spreading, which is the horizontal movement of soil towards the open face of an embankment (Soledad General Plan EIR, 1993).

Liquefaction

Liquefaction is a phenomenon where near surface soils lose cohesion and are converted to a fluid state as a result of severe vibration. Structures built in and on soils respond differently to liquefaction. Underground structures that are less dense than the liquefied soil, such as utility mains, tend to rise to the surface; structures more dense tend to subside. Loose, granular soils are most susceptible to these effects, while more stable silty clay and clay materials are generally somewhat less affected. In general, liquefaction potential varies according to soil type, with Recent, unconsolidated alluvial soils having the highest potential. Much of the study area is underlain with such soils, and liquefaction occurred in the Salinas Valley during at least two of the three major earthquakes which have occurred along the San Andreas fault in the past 200 years.

Landslides

The occurrence of landslides is influenced by a number of factors, including slope angle, soil moisture content, vegetative cover and the physical nature of the underlying strata. Landslides can be triggered by one or more specific events including development-related construction; seismic activity; soil saturation; and fires. The primary factor in determining landslide potential is an unstable slope condition. In general, the portions of the planning area adjacent to steeper slopes are subject to the greatest landslide potential.

Erosion and Sedimentation

Erosion is a natural process that occurs over time and can be caused by either wind or water moving over soils. The natural erosion process is an important factor in building up fertile valley soils. However, soil erosion can become a problem when human activities accelerate the rate at which soils are being displaced. Non-point sources including impervious surfaces, unsound farming practices, over-grazing, construction activities, and road construction (particularly unpaved roads) can all accelerate the rate at which soils are removed from hillsides. Point sources such as industrial wastewater discharges, mining activities, wastewater treatment plants, commercial and residential land uses, and agricultural operations can affect erosion rates through increased storm water velocity, disturbance of natural drainage patterns, and water discharges. Soil erosion can leave silt-choked streams, gullied hillsides, and damaged farmland.

Subsidence

One of the consequences of excessive ground water withdrawal from an aquifer that lacks a rigid framework is compaction. The water itself supports part of the load of the overlying materials and also keeps the grains of the aquifer loosely packed. When the water is removed from the intergranular spaces, the weight of the overlying rocks packs the grains together more closely. This can not only permanently reduce the capacity of the aquifer, but may also cause serious lowering, or subsidence, of the ground overlying the aquifer. Areas most vulnerable to subsidence are those underlain by loose, compressible clay-rich soils, in an area with excessive ground water withdrawal and general lowering of the water table.

Expansive Soils

Expansive soils tend to swell with seasonal increases in soil moisture and shrink during the dry season as soil moisture decreases. The changes in volume that the soils undergo in this cyclical process can stress and damage slabs and foundations if precautionary measures are not taken. Methods commonly used for slab protection include placement of non-expansive material beneath the slab or moistening of subsurface materials prior to construction.

Regulatory Setting

Government Code Section 65302.1 requires a Safety Element to be included in every general plan which establishes policies and programs for the protection of the community from fires, flooding, geologic and other natural and human caused hazards. The draft Safety Element of the 2004 General Plan contains policies and implementation programs designed to guide future development away from areas of seismic and geologic hazards. Implementation programs include requirements for the preparation of soils reports, building inspection program, and development of an affordable seismic retrofit program.

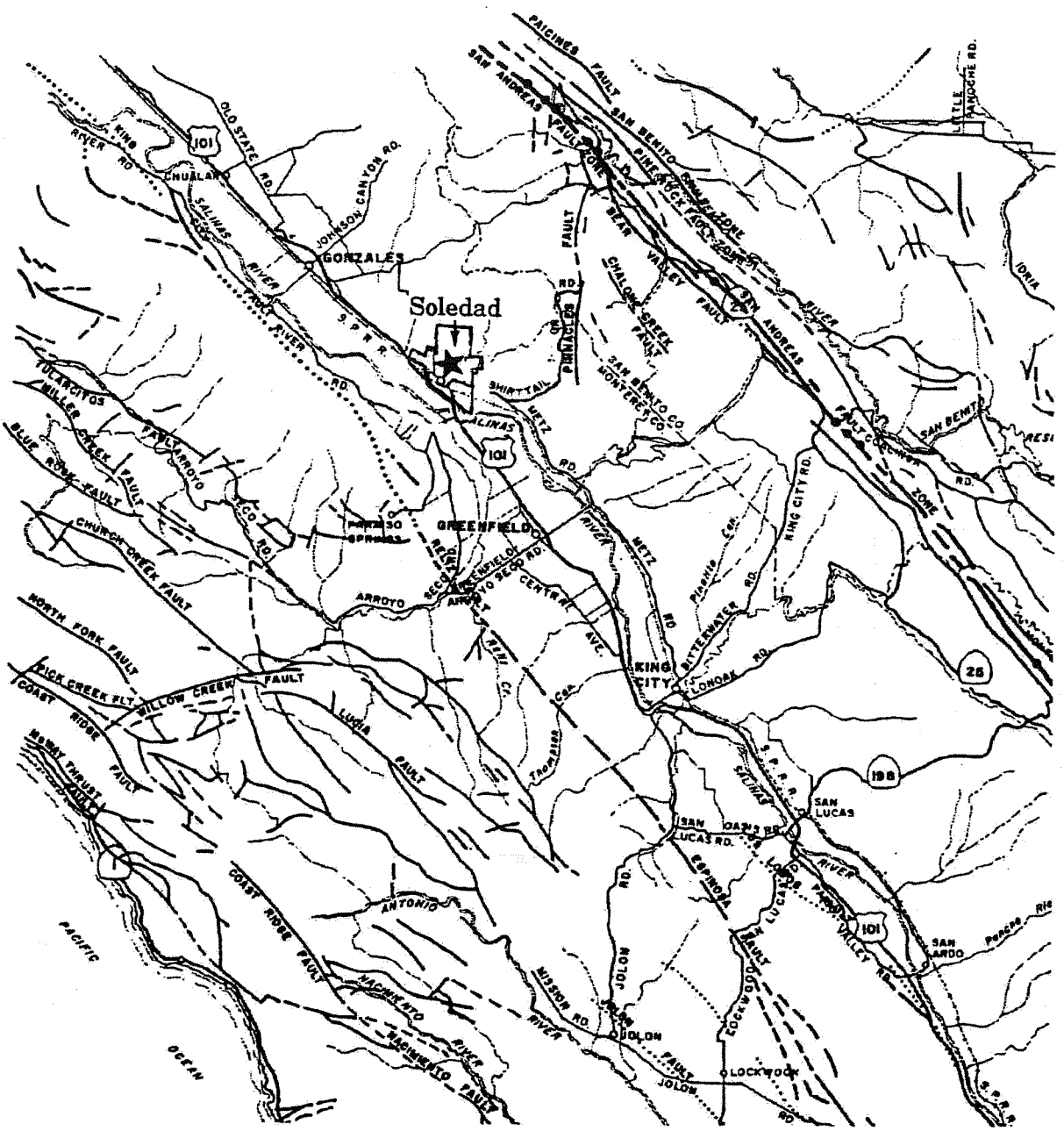
Public Resources Code, Section 2621, et seq. (Alquist-Priolo Earthquake Fault Zoning Act of 1994)

The State of California enacted the Alquist-Priolo Act in 1972 (amended 1974, 1975, 1976, 1979, 1994) to assist cities and counties in the regulation of land uses adjacent to active earthquake faults. The State Mining and Geology Board has established Special Study Zones in which land uses are regulated under this act. The act requires preparation of a geological investigation before approving development within a Special Study Zone, which are typically less than one-quarter mile in width. For purposes of implementing the Act, it is assumed that the area within 50 feet of an active fault is underlain by active branches of the fault, until proven otherwise by an appropriate geologic investigation.

Other Regulatory Requirements

Sections 17922 and 17951-17958.7 of the State Government Code requires cities and counties to adopt and enforce the Uniform Building Code, including a grading section (Chapter 70) providing minimum protection against some geologic hazards.

FigureV.5-1: Major faults in the Soledad Region



Source: Hahn, Wise and Associates

Impacts

Impacts GEO-1: A major earthquake on the San Andreas faults could produce ground accelerations of 0.15g to 0.7g within the Plan area, resulting in damage to structures and a potential safety hazard to occupants of such structures. This impact is considered significant unless mitigated (Class II).

As discussed above, the San Andreas Fault lies some thirteen miles east of the City and has produced some of the largest earthquakes in California history. A major seismic event associated with this fault could result in significant damage to structures and public infrastructure within the Plan area. Earthquakes of such intensity have the potential to destroy unreinforced masonry structures and cause general damage to some well-built wooden structures and foundations.

Major seismic events cannot be predicted. Therefore, the approach favored by public safety officials is to plan for their eventuality through a combination of emergency preparedness and the application of earthquake-resistant building codes such as those provided in the Uniform Building Code.

Impact GEO-2: Portions of the Plan area may be subject to landslides and/or slope failure. This impact is considered significant unless mitigated (Class II).

The Plan area includes a portion of the foothills of the Gabilan Range which contain slopes of twenty percent and more. The Land Use Diagram of the draft Plan designates areas above 400 feet elevation as Open Space where urban development is not permitted. Nonetheless, areas below this elevation could be subject to landslide and/or slope failure.

Impact GEO-3: Development activities associated with the various land uses contemplated by the draft Plan have the potential to result in soil erosion. This impact is considered significant unless mitigated (Class II).

Construction activities will involve grading, excavation, and fill, all of which will expose soils to wind, water and other eroding elements.

Impact GEO-4: Construction and renovation activities associated with the Wastewater Master plan could result in erosion and sedimentation. This impact is considered significant unless mitigated (Class II).

Construction and renovation activities associated with the Wastewater Master Plan will involve excavation of overlying soils within the disposal ponds at the Soledad State Prison Wastewater Treatment Plant as well as construction of a pump station to convey treated wastewater to these ponds from the City's treatment plant. These activities could result in erosion and sedimentation within the Salinas River floodplain which could adversely affect water quality in the River.

General Plan Policy Response

C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;
c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected;
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;
e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and
f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.

Hillside Protection

C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety.
c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside.
d. Incorporate recreation and public access on or near hillsides consistent with this Element.

C/OS-9 The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.

Seismic Safety

HZ-5 All new development shall satisfy the applicable requirements of the Uniform Building Code.

HZ-6 The City shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geologic or seismic hazards (ie, groundshaking, landslides, liquefaction, expansive soils).

HZ-7 The City shall limit development in areas of steep or unstable slopes to minimize hazards by landslides or liquefaction.

HZ-8 In landslide hazard areas, the City shall prohibit alteration of land in a manner that could increase the hazard, including concentration of water through drainage or irrigation systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.

Drainage

S-12 The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.

S-13 The City shall support efforts to acquire land or obtain easements for drainage and other public uses of flood channels where it is desirable to maintain channels in a natural state.

S-14 The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.

S-15 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.

S-16 The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.

S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

S-18 The City shall coordinate mitigation measures with responsible agencies (including California Regional Water Quality Control Board, Monterey County Environmental Health Department, and Monterey County Water Resources Department) for the control of storm drains, the monitoring of discharges and the implementation of measures to control pollutant loads in urban storm water runoff.

S-19 Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.

Programs

9.2 The City will continue to enforce the Uniform Building Code which address seismic safety in building location, design and construction.

Additional Recommended Mitigation Measures

No additional mitigation measures are recommended.

Analysis of Significance After Mitigation

Implementation of the policies and programs contained in the draft Plan will reduce the potentially significant impacts to a less than significant level.

V.6 Flooding, Drainage and Water Quality

Issues

Buildout of the City's Plan area with urban uses as contemplated by the draft Plan will increase the potential for flooding, sedimentation and the degradation of surface water quality.

Standards of Significance

The State CEQA Guidelines state that a project will have a significant impact if it will:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; or,
- Substantially alter the existing drainage pattern of the site or area, through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or,
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or,
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within such a zone structures which would impede or redirect flows; or,
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Violate any water quality standards or waste discharge requirements; or,
- Substantially degrade water quality (e.g., through runoff).

Impacts to water quality were determined to be significant if project implementation would not comply with surface water quality objectives established by the Regional Water Quality Control Board (RWQCB) in Chapter 3 of the Water Quality Control Plan, Central Coast Region.

Environmental and Regulatory Setting

Soledad is located on gently sloping terrain, which gives way to rolling foothills toward the north and east. The principal watercourses in the City are the Bryant Canyon Channel, a Caltrans maintained channel along U.S. 101 and the Salinas River. These waterways generally flow to the north to join Monterey Bay near the town of Castroville, 35 miles to the north. Hanna & Brunetti recently completed a Storm Drain Impact Fee Study in November 1999. This study examined the

existing storm drain system in detail and identified capacity deficiencies. The report also recommended improvements, along with costs for the improvements and funding sources.

Regional Drainage Patterns and Areas of Potential Flooding

Stream flow volumes associated with flooding are generally discussed in terms of recurrence interval, which defines the frequency at which a given size flow is likely to occur. Therefore, a 100 year flood is the flow volume that is statistically expected to occur on the average of once every 100 years. The 100 year flood plain, as calculated using HEC-2 cross-sectional modeling accepted by the Federal Emergency Management Agency (FEMA), is generally used as a threshold to assess flood hazard for planning and insurance purposes.

The primary surface drainage feature affecting the Plan area is the Salinas River, which drains the entire Salinas Valley. The 100 year floodplain for the Salinas River is shown on Figure V.6-1. The limits of the flood zone generally correspond to areas of the Salinas River; however flooding in the City of Soledad is not limited to the River. Areas of the community affected by flooding include many of the downtown streets which received overflow from the Bryant Canyon Channel in the March 1995 flooding (Figure V.6-2). Other areas that flooded in this storm include the Gabilan and San Vicente elementary schools and in the northern subdivisions where water overflowed drainage ditches and onto lots.

Local Watersheds

There are nine distinct drainage basins which affect the City of Soledad. Of these, five lie entirely within the current (2000) City limits, three are partially inside the City, and one is entirely outside the City limits. See Figure V.6-3 below for the location of drainage basins.

Figure V.6-1: Flood Hazard Areas

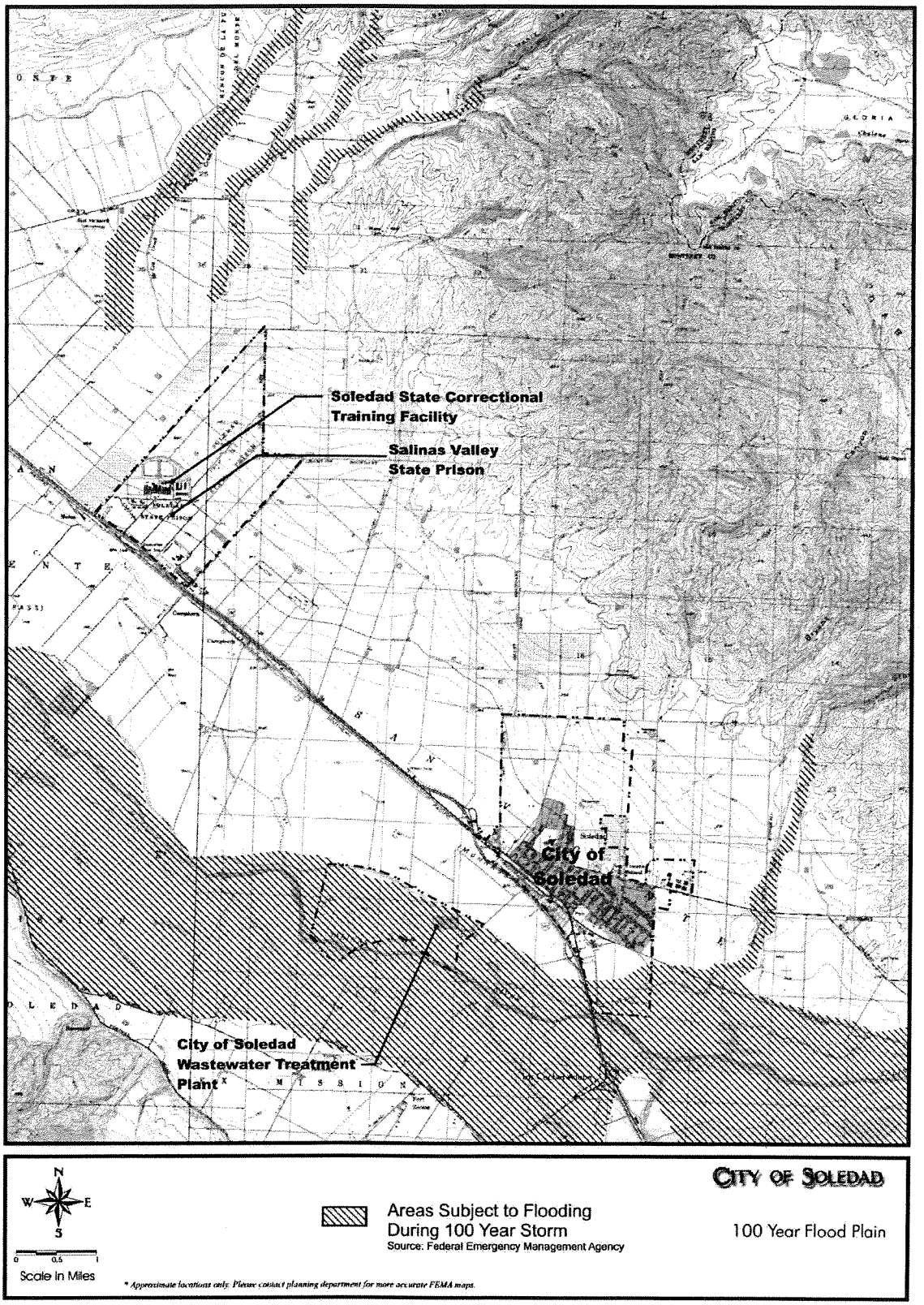


Figure V.6-2: March 1995 Flooding

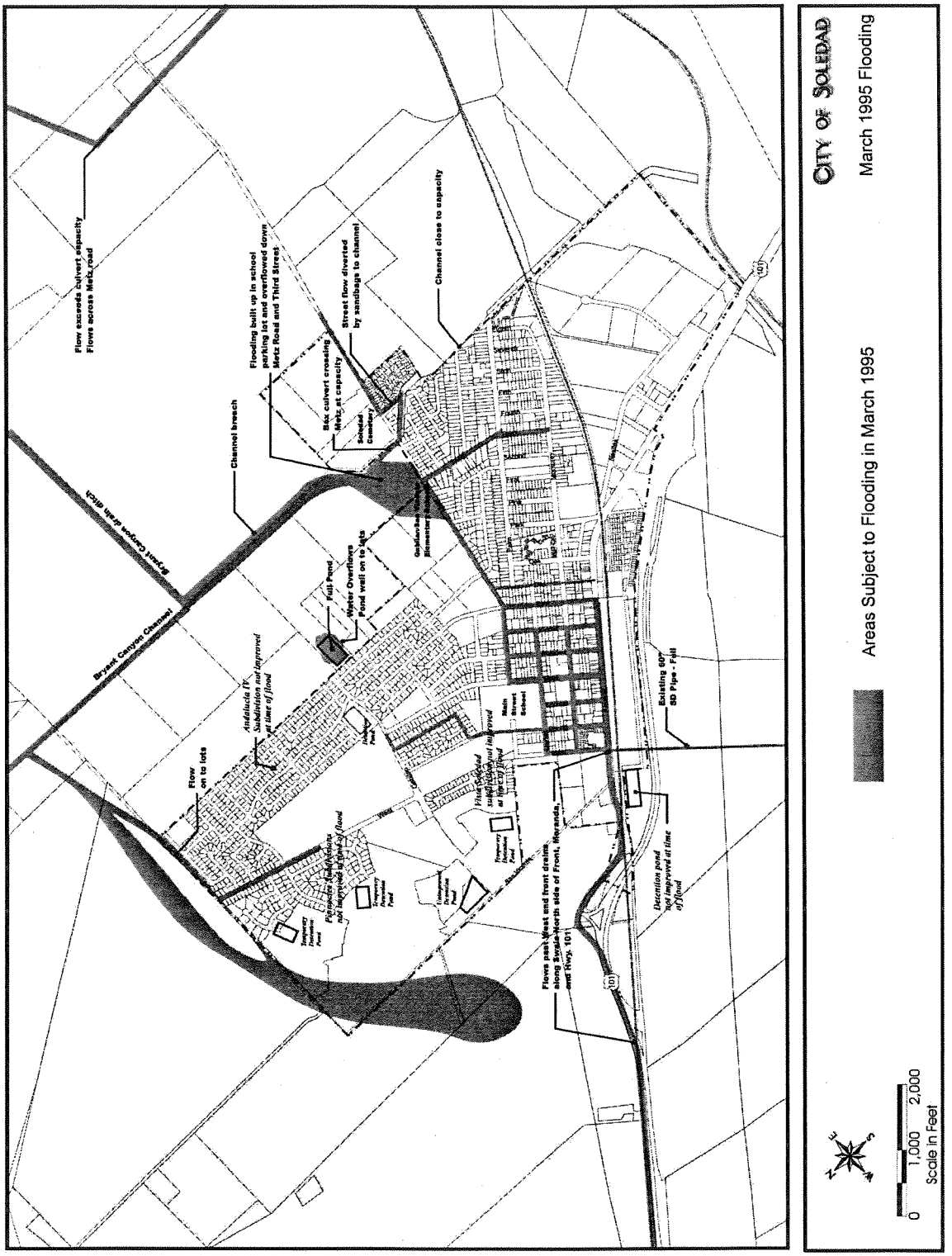


Figure V.6-3: Drainage Basins

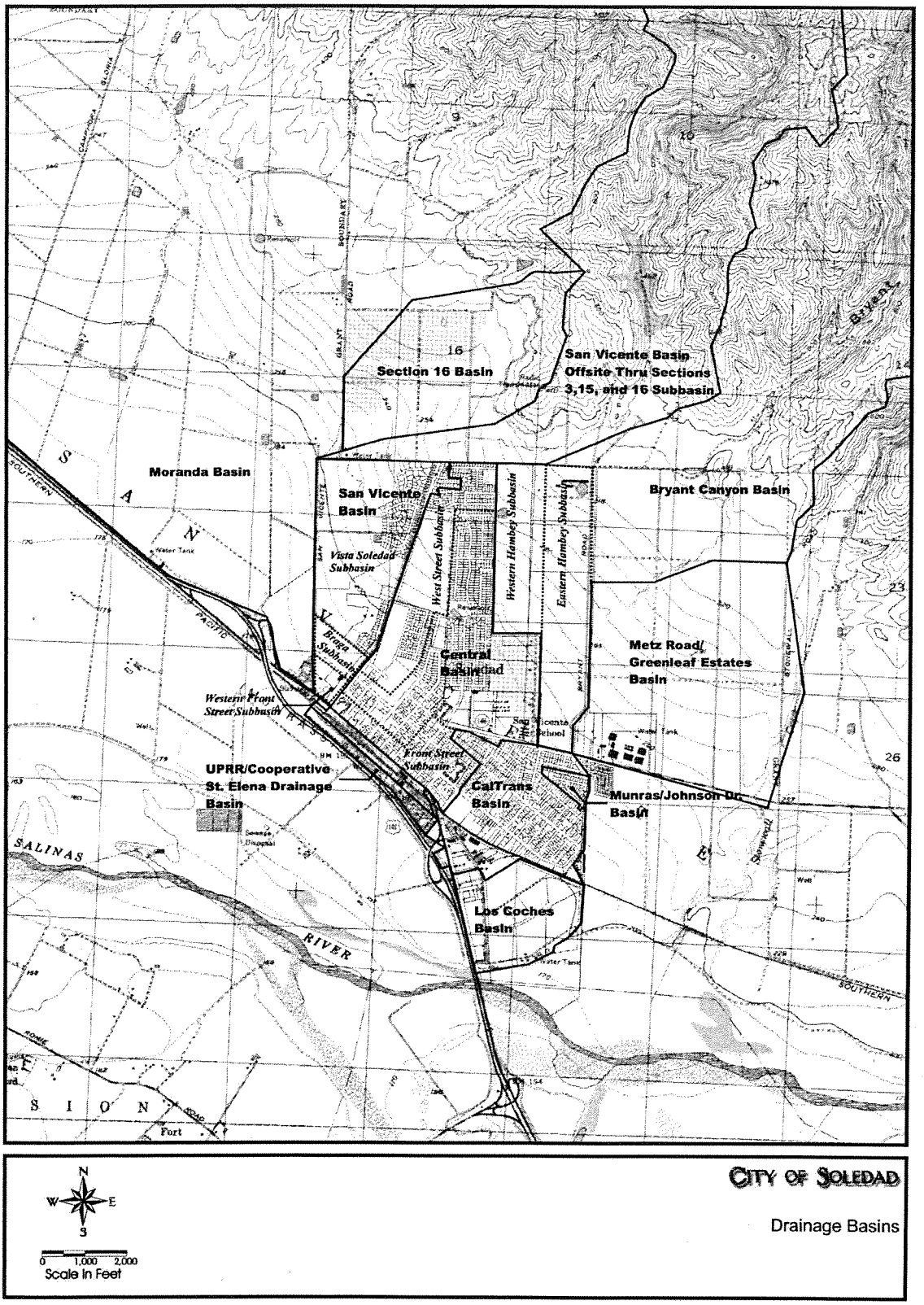
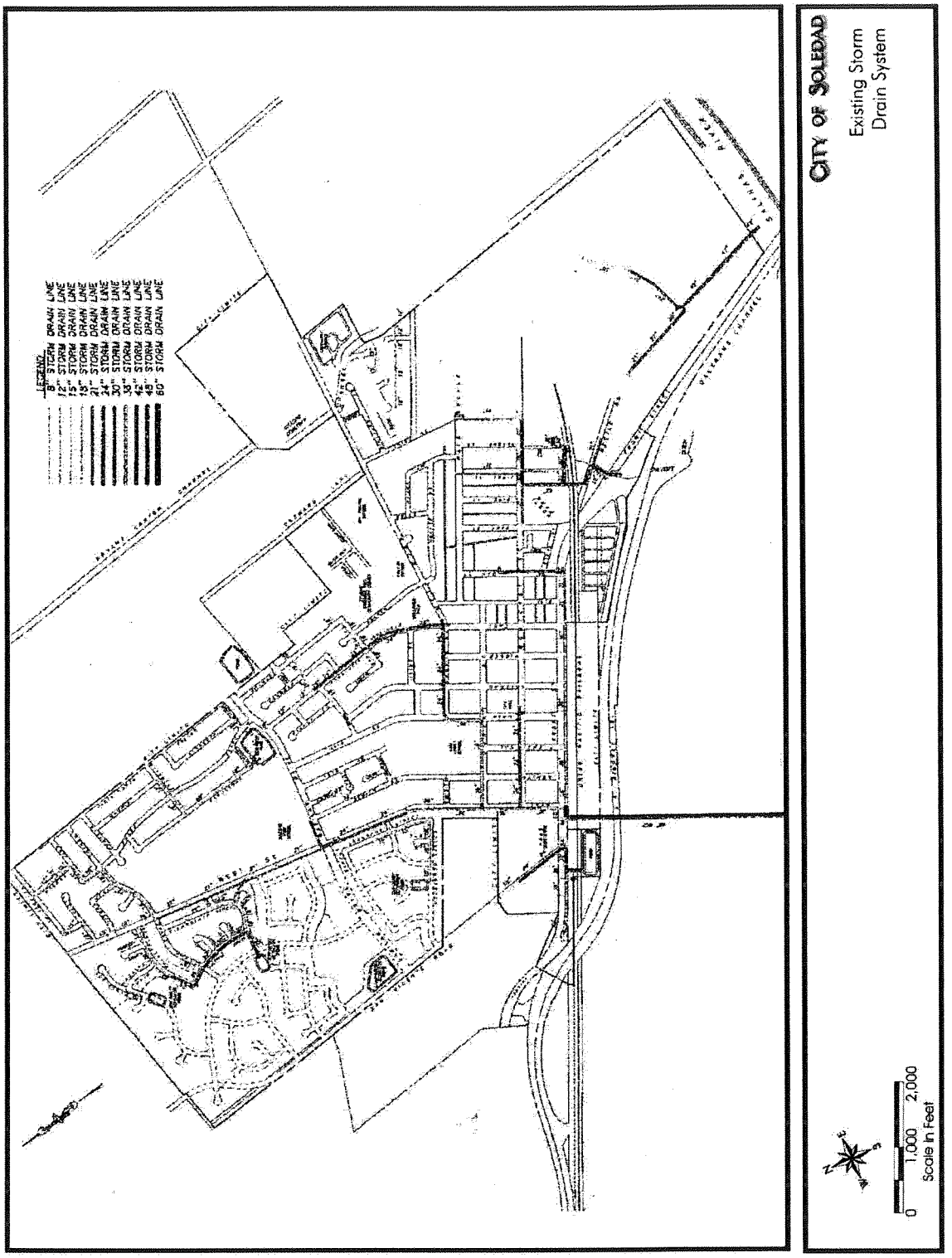


Figure V.6-4 – Existing Storm Drains



Factors that Affect Surface Water Quality

Existing Surface Water Quality

Surface water quality has been monitored in the Salinas River at several locations. The River has been monitored for water temperature, dissolved oxygen (DO), pH, turbidity, biochemical oxygen demand (BOD), and other constituents. The creek water quality data meets water quality criteria specified in the City's National Pollutant Discharge Elimination System (NPDES) permit (Fugro, 1995).

Existing drainage improvements within the City are shown on Figure V.6-4.

Geology and Soils

The geologic setting and soils associated with the City and its environs are described in Section 5.1 of this DEIR.

Other Pollution Sources and Potential Hazards

Nonpoint sources of erosion and sedimentation can also degrade water quality by contributing excessive levels of organic nutrients and inorganic chemicals. These introduced materials can muddy water, and rob light and oxygen from plants and animals.

Regulatory Setting

Watersheds are protected by a number of federal, state and local laws and regulations, including, but not limited to:

- Federal Water Quality Control Act
- Porter-Cologne Water Quality Control Act
- Regional Water Quality Basin Plans (Central Coast Basin – Region 3)
- Rivers and Harbors Act

Under the authority of the Federal Clean Water Act and Porter-Cologne Act, the Central Coast Regional Water Quality Control Board (RWQCB) acts as the regional agency for the regulation of water quality on behalf of the State Water Resources Control Board. The RWQCB is responsible for the regional enforcement of water quality laws and coordination of water quality control activities. The Central Coast Basin Plan, prepared by the RWQCB, establishes water quality standards and outlines a program for the control of nonpoint source pollution including erosion and sedimentation. Water quality standards and objectives relating to surface water include: color, taste and odor, floating/suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, temperature, toxicity, pesticides, chemical constituents, other organics and radioactivity.

Runoff water quality is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Nonpoint Source Program (established through the Federal Clean Water Act). The NPDES Nonpoint Source Program objective is to control and reduce nonpoint discharges of pollutants to water bodies. The Program is administered by the California Regional Water Quality Control Boards. The following NPDES stormwater permits are relevant to the City of Soledad and development proposed by the Draft General Plan:

General Construction Permit

Projects disturbing more than five acres of land during construction are required to file a Notice of Intent (NOI) with the RWQCB to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity. A developer must propose control measures that are consistent with the State General Permit. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the general permit. A SWPPP should include Best Management Practices (BMPs) designed to reduce potential impacts to surface water quality through the construction and life of the project. Projects that exceed five acres would be required to comply with the General Permit.

General Industrial Permit

The control of nonpoint source runoff from industrial sources and associated pollutants is regulated in California by the State Water Resources Control Board under the statewide General Permit for Stormwater Discharges Associated with Industrial Activities. The General Permit presents the requirements for compliance of certain industries with the NPDES. A wide range of industries is covered under the General Permit, including mining operations, lumber and wood products facilities, petroleum refining, metal industries, and some agricultural product facilities such as dairies. Industrial activities accommodated by the draft Plan may be required to comply with the General Permit for Industrial Activities.

Municipal Separate Storm Sewer System Program

The Storm Water Phase II Final Rule applies to operators of regulated small municipal separate storm sewer systems (MS4s). Under the NPDES storm water program, operators of large, medium, and regulated small MS4s require authorization to discharge pollutants under an NPDES permit. Medium and large operators are required to submit comprehensive permit applications and are issued individual permits. Regulated small MS4 operators have the option of choosing to be covered by an individual permit, a general permit, or a modification of an existing Phase I MS4's individual permit. It does not appear the City of Soledad (which would be considered a small MS4) will be required to participate in this program in the near future. Only a select subset of small MS4's, referred to as "regulated small MS4's," is covered by the Phase II Final Rule, either through automatic nationwide designation or designation on a case-by-case basis by the NPDES permitting authority (the RWQCB).

Impacts

Impact W-1 **Buildout of the land uses designated by the draft Plan will increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff, and the potential for erosion and sedimentation in the Salinas River and its tributaries. This impact is considered significant unless mitigated (Class II).**

Buildout of the draft Plan will involve the construction of streets, parking and driveways, sidewalks, and buildings. All of these impervious surfaces will increase the amount and velocity of runoff leaving the Plan area to surrounding drainage systems, which in turn could accelerate erosion of the soils at the project site. This is considered a significant adverse impact unless mitigated.

Degradation of water quality in the Salinas River could occur from increased sediment load caused by erosion and from heavy metals and other hazardous substances washed from streets

and parking lots. Silt and sediment loads are deposited by storm water anywhere the water velocity slows. This might occur naturally in pools of the River or at culvert entrances or outlets. Silt and sediments accumulating at these points could adversely affect river habitat and the capacity of the river to carry runoff.

Impact W-2 **Heavy metals and other hazardous materials washed from the surface of parking lots and roadways constructed within the Plan area could enter natural drainage courses such as the Salinas River during a rainstorm. This impact is considered significant unless mitigated (Class II).**

Motor vehicle use results in oil-based products being deposited on area roadways. Rainfall washes these products off the streets where they are conveyed to area storm drains and eventually to natural waterways where they can degrade surface water quality. In the Soledad area the main concern relates to pollutants entering the Salinas River. According to *Controlling Urban Runoff*, published by the Metropolitan Washington Council of Governments, storm water sampled in the study area contained between 2 and 10 milligrams of pollutants per liter. The pollutant load generated at the project site will likely vary (be lower than) these factors because:

- The test sites used in the study were from highly urbanized areas with a higher potential for hydrocarbon pollution; and
- Vehicles utilizing the project's parking lots will be parked, thereby reducing pollutants emitted by the vehicle's exhaust.

When the extent of development exceeds five acres, a Stormwater Pollution Prevention Plan (SWPPP) is required which will further reduce the significance of these potential impacts. Nonetheless, the potential for hazardous materials entering the River is considered a significant adverse impact unless mitigated.

Impact W-3 **Construction activities could result in the release of oil, engine fuel and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality. This impact is considered significant unless mitigated (Class II).**

Oil, fuel and other toxic substances have the potential to enter surface waters if construction equipment is improperly maintained and leaks occur at the site. Accidental spills may also result in the release of these substances. This impact is considered significant and adverse unless mitigated (Class II).

Impact W-4 **Buildout of the land uses designated by the draft Plan may expose people and property to the periodic effects of flooding. This impact is considered significant unless mitigated (Class II).**

As shown on Figures V.6-1 and V.6-2, portions of the Plan area may be subjected to the effects of flooding during severe storm events. Natural and human-made drainages serving the City (Figure V.6-2) have experienced flooding in recent years which has compelled the City to undertake a program of flood control and storm drain measures as summarized below.

Impact W-5 The increase in impervious surfaces could adversely affect groundwater recharge. This impact is considered adverse but not significant (Class III).

A substantial increase in impervious cover (e.g., structures, roads, and parking lots) could reduce the quantity of rainfall and/or irrigation water that infiltrates into the subsurface and recharges the shallow aquifer. Buildout of the area designated for urban development by the draft Plan would not be expected to result in a significant impact to groundwater recharge for two reasons: 1) the project area is small relative to the size of the groundwater basin, which is largely undeveloped; and 2) features included in the project design, including the conveyance of storm water to natural drainage courses, would to some degree offset the reduced infiltration that would occur in those areas covered by impervious surfaces.

The project area covers approximately 3,800 acres. The Forebay Aquifer Sub-basin of the Salinas Valley Groundwater Basin, which underlies the project area, covers an area of 94,000 acres. The entire project area represents approximately 4 percent of the surface area of the groundwater sub-basin.

Impact W-6 Improvements contemplated by the draft Wastewater Treatment and Discharge Master Plan and resulting treatment plant expansions could impair groundwater beneficial uses or quality. This impact is considered adverse but not significant (Class III)

Beneficial uses of the groundwater aquifer in the Forebay Sub-basin are municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply. The most stringent water quality criteria for these beneficial uses are for drinking water sources. The primary contaminants of concern associated with effluent from wastewater treatment plants are coliform and nitrogen compounds.

Water quality monitoring and effluent sampling also show that treated effluent from the plant reduces the concentrations of salinity and nitrogen in the groundwater by dilution. The character of the treated effluent discharged from the expanded wastewater treatment facility is expected to be better than the existing effluent because of the introduction of tertiary treatment (see Chapter V.1, Public Services), and is therefore expected to meet coliform and nitrogen objectives, and to continue to dilute salinity concentrations in the groundwater. Upon completion of the recommended improvements to the wastewater treatment plant recommended by the Wastewater Treatment and Disposal Master Plan, treated effluent is expected to meet Title 22 water quality standards as defined by Chapter 4 of the California Code of Regulations. Water meeting these standards may be used for irrigating landscaping, and can be applied to certain crops so long as the water is not applied directly to the edible portion but is allowed to be taken up into the plant through its roots. For example, irrigation of orchards, sod farms, golf course irrigation is allowable, but spraying on row crops is not allowed.

As discussed in Chapter V.1 – Wastewater Collection, Treatment and Disposal, the City obtained a revision to its Waste Discharge Requirements from the RWQCB. In doing so, the City was required to prepare and submit a Report of Waste Discharge as part of the application process to revise the WDRs. The Report describes the type and quantity of the proposed discharge, and includes a complete characterization of the constituents and the discharge concentration of each constituent. Because the City's expanded plant is required to comply with the revised WDRs,

implementation of Wastewater Treatment and Discharge Master Plan is not expected to unreasonably impact the beneficial uses or quality of the groundwater.

Impact W-7 **The proposed change in land use at the project area could affect regional groundwater quality. This impact is considered adverse but not significant (Class III).**

It is possible that buildout of the land uses contemplated by the draft General Plan, while adequately mitigating project site-related water quality impacts, could contribute to regional groundwater quality degradation. In particular, urban land uses would contribute salt loading to the basin by allowing the application of irrigation water to residential and commercial landscaping (and other incidental uses). However, relative to existing salt and nitrate loading associated with agricultural production, it is estimated that buildout of the urban uses designated by the draft Plan would reduce total salt and nitrate loading.

It is expected that the rate of fertilizer use for residential and industrial landscape maintenance would be substantially less than for agriculture. In addition, it is likely that some pesticides and herbicides would be applied to the landscaped areas. However, relative to the existing conditions, in which substantial quantities of pesticides and herbicides are applied to the agricultural fields on a regular basis, the chemical use associated with urban development is expected to be reduced. Thus, the buildout of the Plan area with urban uses would likely result in a reduced impact to regional groundwater quality associated with pesticide and herbicide use.

Impact W-8 **Expanded rapid infiltration basins in the vicinity of the wastewater treatment plant as envisioned by the Wastewater Treatment and Disposal Master Plan will increase the potential for the degradation of surface water quality in the Salinas River resulting from a spill or failure of the basins. This impact is considered adverse but not significant (Class III).**

The Wastewater Treatment and Disposal Master Plan calls for the construction of up to 470 acres of additional rapid infiltration basins in the vicinity of the existing treatment plant and/or near the existing Salinas Valley Prison disposal basins. In the event of a failure or overflow of one or more basins, the treated wastewater could spill into the Salinas River temporarily degrading surface water quality.

It should be noted that implementation of the Wastewater Treatment and Disposal Master Plan will add tertiary treatment to the plant which is expected to result in effluent meeting Title 22 water quality standards set by the State Department of Health Services. Water treated to Title 22 standards is suitable in quality for use as landscape irrigation and may be used to irrigate crops, so long as the treated water is not applied directly to the crop but is allowed to be taken up by the plant roots. Accordingly, a spill of this quality water into the Salinas River will degrade the current water quality, it is not expected to adversely affect biological resources or other beneficial uses of the river.

Recommended Drainage Improvements

The Hanna & Brunetti report recommended capital improvements be made to the City storm drainage system. These improvements were based on several assumptions which are detailed in the report. The specific improvements and costs are also highly detailed in the report. What follows is a summary of recommended improvements and cost by drainage subarea.

TABLE V.6-1: RECOMMENDED DRAINAGE IMPROVEMENTS

Basin	Improvements	Cost (Millions, 1999 dollars)
Central Drainage Basin	Storm drain piping along Front, Monterey, Dixi, Metz and Schools.	$1.6
	Storm drain piping from above - along Soledad to North Street.	$0.24
	Storm drain piping along Soledad north to Regina/Andalucia.	$0.33
Caltrans Drainage Basin	Storm drain piping from Palm/1st to Palm/Major.	$46,575
	Storm drain piping along north side of SPRR then north to Monterey/4th.	$0.323
Los Coshes Basin	Storm drain and lot drainage	$0.303
San Vicente Drainage Basin	Storm drain piping along San Vicente north of Gabilan Drive.	$0.77
	Storm drain piping along Gabilan Dr. between West St. and Hambey NW Quadrant.	$0.71
	Storm drain piping along Gabilan Dr. between San Vicente and West St.	$0.526
	Storm drain piping along San Vicente from Front St. to Gabilan Dr.	$0.566
	Storm drain piping along Front St. across UPRR, Hwy. 101 and Ag. Fields to Outfall.	$3.15
Bryant Canyon Drainage Basin	Storm drain channel and improvements from Bryant Canyon Channel above Metz Rd.	$1.47
	Storm drain diversion at Metz Road Greenleaf Estates Diversion	$0.3
Central/Caltrans Drainage Basin	Storm drain catch basins	$0.236
TOTAL:		$48584.524

Source: Hanna and Brunetti, Storm Drain Impact Fee Study 1999

Project Priorities

Priorities of identified projects are dependent on funding and development. The following table sets priorities for the improvements needed to the storm drainage system serving the City, beginning at the outfall at the Salinas River and proceeding upstream. The list is based on a reasonable projection of the timing of future development. Any priority could be changed as development proposals change or as other conditions change.

The number one priority is the installation of the larger outfall pipe from the Salinas River to the Front Street/San Vicente Road area. This pipe serves numerous development projects that ultimately outfall at the Salinas River.

TABLE V.6-2: PRIORITY STORM DRAINAGE IMPROVEMENTS

Drainage Basin	Project Type	Location
Impact Fee Projects		
San Vicente	Trunk SD Pipe	Salinas River Outfall to and along Front St.
San Vicente	SD Pipe	Along Front ST. San Vicente to Gabilan Dr.
San Vicente	SD Pipe	Gabilan Pkwy. From San Vicente to West St.
San Vicente	SD Pipe	Gabilan Pkwy. From West St. to Hambey property
Bryant Canyon	Channel Improvements	Bryant Canyon channel above Metz Rd.
San Vicente	SD Pipe	San Vicente Rd. from Gabilan Pkwy. To Section 16
Bryant Canyon	Channel Improvements	Continuation of channel north to Section 15
Bryant Canyon Channel/Metz Rd./Greenleaf Estates	SD Pipe	Across Metz Rd. around Greenleaf Estates to Bryant Canyon Channel
Los Coches	SD Pipe	Across Lot to 42-inch outfall pipe
Caltrans	SD Pipe	Along north side UPRR tracks from Vosti Park to 4th/Monterey Streets
Caltrans	SD Pipe	Along Palm Avenue from First to Major Streets
Non-Impact Fee Projects		
Central/Caltrans	Catch Basin Improvements	Various intersections
Central	SD Pipe	Along Soledad from Monterey to North St.
Central	SD Pipe	Along Soledad St. from North to Regina St./Andalucia Dr.
Central	SD Pipe	Front, Soledad, Monterey, Dixi St., Metz Rd., School, Community Center

Source: Hanna and Brunetti, Storm Drain Impact Fee Study 1999

Mitigation Provided by Existing Regulations

City regulations require all new development to pay all applicable development impact fees and to comply with relevant provisions of the NPDES. Discharges from the wastewater treatment plant are required to comply with the discharge requirements set forth by the Regional water Quality Control Board.

General Plan Policy Response

Drainage

S-12 The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.

S-13 The City shall support efforts to acquire land or obtain easements for drainage and other public uses of flood channels where it is desirable to maintain channels in a natural state.

S-14 The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but

not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.

S-15 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.

S-16 The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.

S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

S-18 The City shall coordinate mitigation measures with responsible agencies (including California Regional Water Quality Control Board, Monterey County Environmental Health Department, and Monterey County Water Resources Department) for the control of storm drains, the monitoring of discharges and the implementation of measures to control pollutant loads in urban storm water runoff.

S-19 Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.

Flood Hazards

HZ-1 The City shall promote flood control measures that maintain the drainage courses in their natural conditions within the 100-year floodplain.

HZ-2 The City shall prohibit the construction of facilities essential for emergencies and large public assembly in the 100-year floodplain, unless the structure and access to the structure are free from flood inundation.

HZ-3 The City shall require flood control structures, facilities, and improvements to be designed to conserve resources, incorporate and preserve scenic values, and to incorporate opportunities for recreation, where appropriate.

HZ-4 The City shall manage flood prone areas consistent with the requirements of the Federal Emergency Management Agency (FEMA) and the Monterey County Water Resources Agency.

Programs

9.1 The City will continue to participate in the National Flood Insurance Program.

9.3 The City shall continue to maintain flood hazard maps and other relevant data relating to potential flood hazards, and shall revise and update such information as new information becomes available.

Additional Recommended Mitigation Measures

No additional mitigation is recommended.

Analysis of Significance After Mitigation

The recommended policies and programs will reduce potential impacts associated with flooding and drainage to a less than significant level.

V.7 Biological Resources

Issues

Buildout of the City's Plan area will result in the permanent conversion of non-urban land (including agricultural land and open space) to urban development, which may adversely affect the habitat or range of plant and animal species.

Standards of Significance

Impacts to biological resources are considered significant if implementation of the draft Plan would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS).
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors[a], or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. No HCPs or NCCPs have been prepared for the planning area.

Environmental and Regulatory Setting

Methodology

Identification of the biological resources occurring in the study area involved a literature review, and interpretation of existing mapping and aerial photographs. Available literature and resource mapping were reviewed to provide general information on plant communities in the area, known wetland resources, distribution of special-status species and sensitive natural communities in the vicinity of Soledad. Other sources referenced include the Open Space and Conservation element of the City's 1993 General Plan; the 2004 General Plan Background Report; environmental documentation for specific projects in the planning area; the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants (CNPS, 2001); the California Natural Diversity Database (CNDDB); and aerial photography of the planning area (March 2003). The color aerial photography was used to determine the extent of existing development, agricultural

[a] Movement corridors defined as: a linear feature that allows movement of animals and plants between isolated sites (typically a linear woodland, river, or stream)

operations, and important vegetation types such as woodlands, chaparral, and riparian corridors in the planning area.

Biological resources in the planning area are described below, together with a summary of the regulations that provide for the protection and conservation of important resources.

Special-Status Species & Sensitive Natural Communities

Special-status species are those protected under the state and/or federal Endangered Species Acts or other regulations as described in Table V.7-1, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration. This pertains to the protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The presence of species subject to the protections afforded by the Endangered Species Act can be a major constraints to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species or their habitat.[b]

The primary information source on the distribution of special-status species in California is the California Natural Diversity DataBase (CNDDB) inventory, which is maintained by the Natural Heritage Division of the CDFG. Occurrence data is obtained from a variety of scientific, academic, and professional organizations, private consulting firms, and knowledgeable individuals, and entered into the inventory as expeditiously as possible. The occurrence of a species of concern in a particular region is an indication that an additional population may occur at another location if habitat conditions are suitable. However, the absence of a documented occurrence in a particular location does not necessarily mean that special-status species are absent from the area in question, only that no data have been entered into the CNDDB inventory. Detailed field surveys are generally required for a conclusive determination of the presence or absence of sensitive resources at a particular location.

In addition to recordation of individual or population occurrences, the CNDDB has a classification system for "natural communities" based on the Manual of California Vegetation (1995). These various community types are identified in the List of California Terrestrial Natural Communities recognized by the Natural Diversity Data Base (CDFG, 2003). The CDFG maintains occurrence information in the CNDDB inventory on those natural communities that are considered particularly rare or threatened. The sensitive communities comprise about one third of the various communities listed as occurring in the state. Although these natural communities have no legal protective status under the state or federal Endangered Species Acts, they are provided some level of protection under CEQA. As defined in Appendix G of the State CEQA Guidelines, a project would normally have a significant effect on the environment if it would "substantially diminish habitat for fish, wildlife or plants." Further loss of a sensitive natural community is generally interpreted as substantially diminishing habitat for plants, depending on its relative abundance, quality and degree of past disturbance, and the anticipated impacts to the specific community type.

[b] "...to harass, harm, hunt, wound, shoot, kill, trap, capture, or collect, or attempt to engage in any such conduct." [50 CFR 17.3]

TABLE V.7 -1: CLASSIFICATION SCHEMES FOR SENSITIVE PLANT AND ANIMAL SPECIES

Enabling Legislation	Enforcement Agency	Classification of Species	Classification Code
Federal Endangered Species Act, 1973	US Department of Interior (USFWS)	Endangered - Any species in danger of extinction throughout all or a significant portion of its range.	E-Federally listed, Endangered
		Threatened - Any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.	T-Federally listed, Threatened
		Candidate - Taxa for the which the USFWS currently has sufficient information on biological vulnerability and threats on hand to support the issuance of a rule to list, but issuance of the proposed rule has been precluded.	FC-Candidate for listing.
		Species of Concern (C1) - Former Category 1 Candidate, now considered a species of concern. Taxa should be given consideration during planning for projects.	C1- Species of special concern.
		Species of Concern (C2) - Former Category 2 Candidate, now considered a species of concern. Taxa should be given consideration during planning for projects.	C2- Species of special concern.
		Proposed - Taxa for which a general notice has been published in the local newspaper and a proposed rule for listing has been published in the Federal Register.	P- Proposed for listing.
		Federal Sensitive Species -Taxa otherwise designated by the BLM or the US Forest Service as sensitive species.	FSS - Federal sensitive species.
California Endangered Species Act, 1970 California Native Plant Protection Act, 1977 California Species Preservation Act, 1980	California Department of Fish and Game	Endangered - A native species or subspecies of bird, mammal, amphibian, reptile, or plant which is in 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, over-exploitation, predation, competition or disease.	E - State listed, Endangered
		Threatened - A native species or subspecies of bird, mammal, amphibian, reptile, or plant presently threatened with extinction is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.	T- State listed, Threatened
		Rare - A species, subspecies, or variety is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens.	R - State listed, Rare
		Candidate - A native species or subspecies of bird, mammal, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add to the species list.	CE - Endangered candidate
		Species of Special Concern - Native species or subspecies that have become vulnerable to extinction because of declining population levels, limited ranges, or rarity. The goal is to prevent these animals from becoming endangered by addressing the issues of concern early enough to secure long-term viability for these species.	CSC - California species of special concern.
		Fully Protected – Birds, mammals, reptiles and amphibians protected from harm or take unless for scientific research	FP – Fully Protected

TABLE V.7 -1: CLASSIFICATION SCHEMES FOR SENSITIVE PLANT AND ANIMAL SPECIES

None	California Native Plant Society	List 1A - Plants assumed to be extinct in California. List 1B - Plants that are rare, threatened or endangered in California and elsewhere. List 2 – Rare or endangered in California, more common elsewhere List 3 – Need more information List 4 - Plants of limited distribution that may need monitoring	–
Migratory Bird Treaty Act	USFWS	Migratory birds and birds of prey protected from take or harm or sale (See full text below)	–
California Native Plant Protection Act	CDFG	Enacting legislation for CESA and threatened and endangered species listing – also protects rare native plants – mitigation for impacts to plants not formally listed requires agreement to be made between DFG and property owner	CNPPA
CEQA	Lead Agency	Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range	

Migratory Bird Treaty Act

Enacted in 1918, the Migratory Bird Treaty Act (MBTA) establishes a federal prohibition, unless permitted by regulations, to *"pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention…for the protection of migratory birds…or any part, nest, or egg of such a bird."* [16 U.S.C. 703].

The Salinas River is one of the major water systems in California in the Pacific Flyway and as such, acts as an important stopover for birds on their migration route from feeding areas in the north to breeding areas in the south. The River complex includes a National Wildlife Refuge where it enters Monterey Bay. Throughout its reach, especially where water is more persistent throughout the year, there is the potential for year-round populations of nesting and feeding birds.

In practice, the MBTA has been the basis for a number of subsequent federal regulations, and provides protection for otherwise unprotected birds such as cliff and barn swallows, and birds of prey, including golden eagles. The USFWS is the enforcement agency for MBTA.

Wetlands

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water and that support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, for their use as storage areas for storm and floodwaters, and for water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the U.S. Army Corps of

Engineers and the USFWS, which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation. The Corps and the California Department of Fish and Game regulate activities in wetlands.

Biological Resources of the Study Area

Vegetation

Vegetation in the Soledad study area is dominated by a cover of agricultural crops, non-native grassland, and suburban landscape, bordered by woodlands and grasslands in the hills to the west and east (Figure V.7-1).

The various vegetative cover types and natural communities found in the study area are summarized below. With the exception of the description of developed areas, each of the descriptions conforms to the classification system developed by the CDFG (1997).

Agricultural Fields and Developed Areas

Most of the study area supports a cover of agricultural crops and ornamental landscaping. Ruderal grassland species occupy vacant lots and the perimeters of heavily disturbed areas. Non-native weedy species include wild oat (*Avena fatua*), foxtail barley (*Hordeum murinum*), prickly lettuce (*Lactuca serriola*) and field mustard (*Brassica campestris*). A variety of introduced landscapes exist in yards and recreational areas. Most species used in landscaping are non-native ornamentals, consisting of a wide variety of tree, shrub, groundcover, and turf species.

Annual Grassland

Non-native grasslands form a transition between the developed areas of the valley floor and the woodlands of the hillsides to the east and west. Intensive grazing, dryland farming, and other disturbance have eliminated most of the native grasslands throughout California over the past 100 years. With the exception of portions of land around the Wastewater Treatment Plant and the Soledad Prisons where native grasslands are present, most of the native grasslands have been replaced or dominated by introduced, non-native species. Common species in the grasslands today include wild oat (*Avena*), field mustard (*Brassica*), foxtail barley (*Hordeum murinum*) and prickly lettuce (*Lactuca serriola*). Drainage facilities that border some of the City streets may contain species including cocklebur (*Xanthium strumarium*), annual beard grass (*Polypogon monspeliensis*), Bermuda grass (*Cynodon dactylon*), Johnsongrass (*Sorghum halepense*) and barnyard grass (*Echinochloa crus-galli*).

Riparian

Riparian vegetation occurs along the Salinas River with trees and shrubs forming stands characteristic of riparian habitat and natural communities. Elm (*Ulnus americana*) and willow (*Salix lasiolepis*) form the dominant riparian species, with several other tree and shrub species contributing to the riparian vegetation.

Wetlands

As mentioned previously, much of the natural form of the land in and around Soledad has been disturbed by agricultural activity. However, depressions and small waterways and impoundments are visible on the 2003 aerial. These structures, along with areas along the Salinas River, may constitute freshwater wetlands. It is not apparent from the aerial whether such

structures are human-made or natural; therefore, site-specific surveys would be required to determine presence/absence of wetlands for any particular project or site.

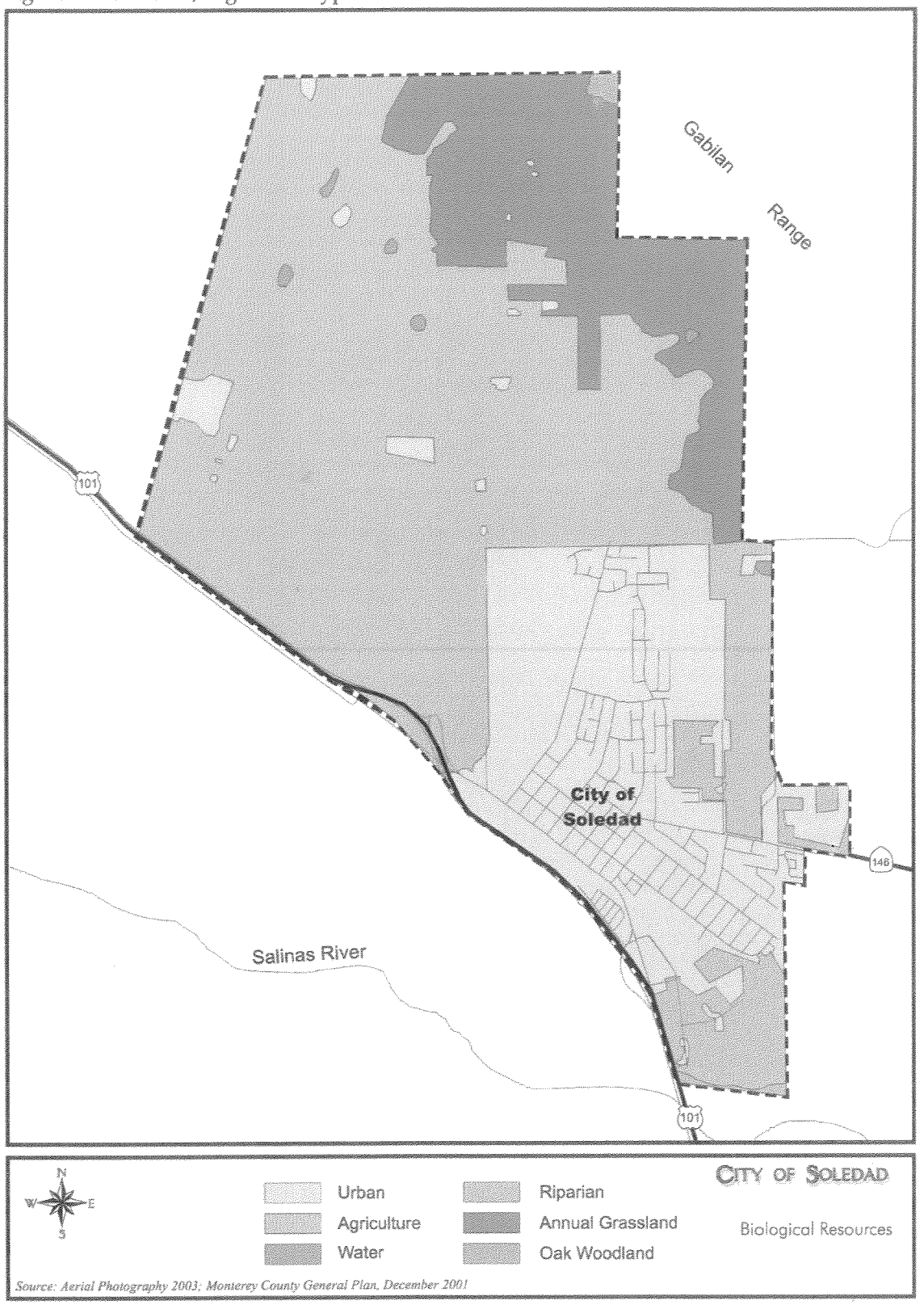
Chaparral/Oak Savannah

Chaparral is a brush-dominated community type that occurs on the dry slopes of the foothills to the northeast and West of the City. Characteristic species tend to be tough, drought-tolerant plants, including chamise (*Artemisia fasiculatum*), coffeeberry (*Rhamnus californica*), manzanita (*Arctostaphylos spp.*), leather oak (*Quercus durata*), toyon, and coyote brush (*Baccharis pilularis*).

Oak Woodland

Canyons east of Soledad in the Gabilan Range contain small pockets of more dense oak woodland vegetation. The vegetation mix in oak woodland areas is similar to chaparral/savannah, except that the canopy of oaks is more closed, and understory is limited to grasses and other forbs, as opposed to shrubs.

FigureV.7-1: Habitat/Vegetation Types



Source: Aerial Photography 2003; Monterey County General Plan, December 2001

Wildlife

Although native vegetation on the valley floor has been substantially altered, the extent of agricultural fields and the presence of large tracts of undeveloped land in and around the City support a diverse assemblage of resident and migrant wildlife species. Habitat types of particular importance to wildlife include grassland and vegetated areas along the Salinas River. Depending on the crop type and management practices, the agricultural fields can provide foraging opportunities for some species of wildlife. Remnant native trees and areas of dense landscaping in urbanized areas can also support a variety of wildlife species. The relative value of these habitats and associated wildlife species typically associated with each of these habitat types is summarized below.

Agricultural and Urbanized Habitat

In general, heavily managed fields and urbanized areas in the region and surrounding the city have low to poor wildlife habitat value due to the loss of natural structure, fragmentation of remaining open space areas and parks, and intensive, ongoing disturbance. The diversity of wildlife depends on the extent and type of cover, management practices and frequency of disturbance, as well as the proximity to natural habitat. Field margins, remnant native trees, and even ornamental trees and shrubs used for landscaping provide nest sites and cover for wildlife adapted to agricultural fields and developed areas. Typical native bird species that utilize these habitats include mourning dove, American crow and house finch. These areas also provide habitat for several species of common native mammals such as California ground squirrel, raccoon, and striped skunk. Introduced species found in agricultural and urban habitats include rock dove, European starling, and house sparrow, and pest species such as Norway rat, house mouse, and opossum.

Grassland Habitat

The native and nonnative grasslands in the region and surrounding the city support a variety of mammals, birds, and reptiles, and provide foraging habitat for raptors. Many species use the grassland for only part of their requirements, foraging in the grassland and seeking cover in the adjacent tree and scrub cover. Grassland cover provides foraging, nesting, and denning opportunities for resident species such as western fence lizard, northern alligator lizard, gopher snake, western meadowlark, goldfinch, ring-necked pheasant, red-winged blackbird, California ground squirrel, California vole, Botta pocket gopher, black-tailed jackrabbit, and occasionally black-tailed deer. The rodent, bird, and reptile populations offer foraging opportunities for avian predators such as white-tailed kite, northern harrier, American kestrel, red-tailed hawk, golden eagle, barn owl, and great horned owl. Mammalian predators that utilize the grasslands include gray fox, long-tailed weasel, bobcat, and mountain lion. Foraging activity of these predatory species, which tend to require relatively undisturbed habitat, is generally limited to the undeveloped fringe of the study area where habitat fragmentation has not occurred and human activity is limited.

Freshwater Marsh and Riparian Habitat

Freshwater aquatic habitats and the associated riparian and marsh vegetation are of high value to wildlife, providing a source of drinking water, protective cover, and serving as movement corridors. Riparian forest and scrub provides nesting and roosting substrate for numerous species of resident birds, and stopovers for migrant songbirds. The creeks, smaller drainages, and scattered stock ponds provide aquatic habitat for amphibians, such as Pacific tree frog, California newt, western toad, and California slender salamander, several species of fish, and large populations of invertebrates. Dense riparian growth provides essential cover for larger mammals, such as striped skunk, raccoon, opossum, black-tailed deer and predatory species as

they forage throughout their range. Mammals and birds typically found in adjacent grassland use these areas as protective cover and refuge from summer heat and drought.

Woodland and Savannah Habitat

The trees of the woodlands and savannah also provide important cover, and the complex vertical distribution of canopy and understory vegetation provides for a greater diversity of wildlife than often found in the adjacent grasslands. Wildlife commonly associated with woodland habitat includes: dusky-footed woodrat, deer mouse, western flycatcher, plain titmouse, bushtit, ringneck snake, California newt, and California slender salamander. Dead limbs and cavities in older trees are often used for nesting or denning. The abundant acorn crops are an important food source for black-tailed deer, scrub jay, woodpeckers, and other species of wildlife. Larger predatory species known from the area most likely utilize the woodlands to the west and north of the study area for cover and denning locations.

Chaparral Habitat

The dense brush of the chaparral also provides cover for wildlife. Species associated with this habitat type include California thrasher, scrub jay, wren-tit, western fence lizard, gopher snake, and striped racer. Several species that forage in the adjacent grasslands rely on the chaparral for refuge, such as brush rabbit, jackrabbit, and California quail.

Special-Status Species & Sensitive Natural Communities in the Study Area

A list of potentially occurring special-status species was developed through a review of the CDFG California Natural Diversity Database and previously completed studies that addressed biological resources in the Soledad area.

Plant Species

Four special-status plants have been recorded in the vicinity of the City: Monterey spineflower (*Chorizanthe pungens pungens*), hooked popcorn flower (*Plagiobothrys uncinatus*), Indian Valley bush mallow (*Malacothamnus aboriginum*) and Pinnacles buckwheat (*Eriogonum nortonii*). The Monterey spineflower, a federally listed Threatened species, is the only listed plant (i.e., threatened and/or Endangered) recorded in the vicinity of the developed portions of the City. All four plants are on the California Native Plant Society's 1B List (i.e., considered rare or endangered in California and elsewhere). List 1B plants do not receive legal protection under the endangered species act, but impacts to these species may be considered significant under CEQA and by the Department of Fish and Game under the CNPPA. All four plants are restricted to natural plant communities, including chaparral, woodland, grasslands, and coastal scrub.

Existing development and intensive agricultural practices generally limit the likelihood of occurrence of most plant species of concern in the study area.

Animal Species

A total of ten special-status wildlife species are known to occur in the vicinity. There are two State and/or Federally listed species that could potentially occur in and around the City: San Joaquin kit fox (*Vulpes macrotis mutica*) and California red-legged frog (*Rana aurora draytonii*). The tricolored blackbird (*Agelaius tricolor*), a Species of Special Concern, has been observed in the Soledad area. The California tiger salamander (*Ambystoma californiense*), is now listed throughout California, and is found in ephemeral vernal pools and other predator-free temporary waterbodies. The remaining six species are: western pond turtle (*Clemmys marmorata*), golden

eagle (*Aquila chrysaetos*), northern harrier (*Circus cyanus*), burrowing owl (*Speotyto cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and San Joaquin pocket mouse (*Perognathus inornatus inornatus*). The Salinas River is known to provide some habitat for steelhead (*Oncorhynchus mykiss*), a federally threatened species, as well as migratory birds, which are protected by the MBTA.

San Joaquin Kit Fox. San Joaquin kit fox (*Vulpes macrotis mutica*); Federally Endangered; California Threatened. The San Joaquin kit fox occurs in the open grasslands and sparsely vegetated shrub lands of the San Joaquin Valley floor. The current range of the kit fox also includes portions of the foothills and valleys of the Coast Range in central and northern California. The historic range of the kit fox has been greatly reduced by agriculture, oil development, and urbanization. However, under certain conditions, the kit fox has been able to adapt to some habitats that have been extensively modified by humans. These include row crops, irrigated pasture, orchards, and vineyards. The San Joaquin kit fox has also been adversely affected by the use of rodenticides, disease, competition with larger canids, and vehicular mortality (USFWS 1998).

The nearest known San Joaquin kit fox population is at the Camp Roberts California Army National Guard Training Site near the Monterey County-San Luis Obispo County line. The kit fox population at Camp Roberts has been intensively studied over the last decade. During this time, biologists have documented a sharp decline in the kit fox population. In 1988, 103 San Joaquin kit fox were known to inhabit Camp Roberts. By 1997, the kit fox population at Camp Roberts had been reduced to just three individuals. A number of factors may be attributed to this decline, including an outbreak of rabies virus, as well as competition by coyotes. Other factors contributing to this drastic reduction in the kit fox population include increased motor vehicle use and the subdivision of surrounding land. When land is subdivided, people erect fences that can limit the kit fox's ability to roam freely.

California Red-legged Frog. California Red-legged Frog (*Rana aurora draytonii*); Federally Threatened. The California red-legged frog was once common throughout most of lowland California. Loss of habitat and the introduction of aquatic predators, including the bullfrog and non-native fish, have drastically reduced populations of this species throughout its range. Habitat for the California red-legged frog is characterized by dense, shrubby, riparian vegetation associated with deep, slow moving water (Jennings and Hayes 1994). Although individual California red-legged frogs can occur in seasonal streams and ponds, reproducing populations probably cannot be maintained if surface water disappears entirely anytime during the breeding season.

Tricolored Blackbird. Tricolored blackbird (*Agelaius tricolor*); California Species of Special Concern. Mostly a resident species in California, the tricolored blackbird is common locally throughout the Central Valley and in coastal areas south of Sonoma County. Preferred nesting habitat is dense cattails or tules. Thickets of willows, blackberry, and wild rose may also be suitable nesting habitat. The tricolored blackbird is a colonial and highly gregarious species. Breeding colony size highly variable but tends to be large. The main causes of decline of the tricolored blackbird are loss of native wetland habitat for nest building, loss of associated foraging habitat, disturbance and mortality by predators and humans, destruction of colonies by agricultural practices, direct poisoning, and poisoning by selenium (Beedy et al. 1991).

California Tiger Salamander. Recently, the listed range of the California Tiger Salamander (CTS) was expanded from Sonoma and Santa Barbara Counties to suitable habitat throughout

California. Suitable habitat for CTS is limited to vernal pools, stock ponds, or other ephemeral water bodies, and adjacent upland areas. CTS potential use of stock ponds is a consideration in agricultural areas where urban development is proposed. However, the potential for occurrence in the floor of the Salinas Valley is diminished; adjacent areas are often too intensively farmed to support CTS.

Western Pond Turtle. Western pond turtle do not occupy ponds; rather, they prefer slow moving riverine systems with snags or rocks for sunning. Suitable habitat in the planning area, therefore, is limited to the Salinas River and its tributaries.

Golden Eagle. The planning area provides foraging area for the golden eagle, which typically nests in oak savannah. Fringes of the projected buildout area may provide suitable nesting habitat in oak trees. Agricultural fields may provide substantial amounts of prey for the eagle, which typically diets on mice and other small rodents.

Northern Harrier. Harriers nest on the ground near swamps or in shrubby areas, and forage over grasslands. The planning area provides limited nesting areas, mainly at the foothills, and foraging opportunities in agricultural fields.

Burrowing Owl. The margins of agricultural land can provide suitable habitat for the burrowing owl, which nests in burrows in the ground, often vacated by mammals. The owl prefers grassy cover in its nesting areas, and forages in open grassland or agricultural fields.

Loggerhead Shrike. In agricultural areas, shrikes nest on fencelines or scattered trees, and forage over fields and grasslands. Their populations are reduced in cropland, when compared to pastureland.

San Joaquin Pocket Mouse. The pocket mouse prefers arid habitats, with grassy or shrubby cover for foraging. The pocket mouse is typically associated with the San Joaquin Valley and is unlikely to occur in the planning area.

Steelhead. The Salinas River provides impaired habitat for the steelhead, a federally threatened fish. The steelhead needs sufficient water flow for movement, a fairly unobstructed access, and suitable spawning grounds. The Salinas River system is considered impaired for steelhead in that it contains a number of obstructions, including low water flow in sections.

Migratory Birds. As mentioned previously, the Salinas River and Valley provide suitable locations for migratory birds to rest, feed, and nest. This large and diverse group of birds uses the Pacific Flyway, a chain of coastal estuaries and inland lakes and rivers, to rest and feed as they travel from feeding areas in the north to breeding areas in the south.

Natural Communities

Some natural communities are considered to have a high inventory priority with the CNDDB. These communities have been designated as sensitive due to rarity and continuing loss as a result of development, flood control improvements, and other factors. Sensitive natural communities in the study area include riparian communities and native grasslands. Since native grasslands are limited to land within the State Prison, the following discussion is limited to riparian communities.

Riparian communities in the study area are generally limited to the Salinas River, creeks, drainages and scattered stock ponds. The Corps and CDFG generally exercise authority over these various wetland habitat types, although a detailed delineation and jurisdictional determination would be required to determine jurisdiction where modifications are proposed. Some of the palustrine wetlands associated with creeks and drainages in upland areas may not meet all three technical criteria used by the Corps in determining jurisdiction. Riparian wetland areas are generally defined by the "ordinary high water mark" rather than the band of adjacent riparian vegetation, limiting Corps jurisdiction where dense willow riparian scrub and forest extends a considerable distance from the channel top. Similarly, authority of the CDFG under the Streambed Alteration Agreement process is technically limited to the confines of a channel bank and bed, but the CDFG typically requests that a minimum 100-foot setback be established to protect the wildlife habitat provided by riparian corridors as part of environmental review for specific development plans.

Impacts

Impact BIO-1: Buildout of the Plan area with urban uses could result in the permanent conversion of 3,500 acres of agricultural land to urban use. This land may provide suitable foraging habitat for certain special status animal species, and uncultivated areas could contain sensitive plant species. The permanent loss of this habitat is considered significant unless mitigated (Class II).

The plan proposes the conversion of actively farmed irrigated agricultural land to urban development, with housing, maintained landscape, and roads. Most of the land proposed for conversion is currently farmed in a conventional, large-scale, intensive manner; therefore, it does not provide intact natural habitat for plants or animals. However, the land and its fringes do provide foraging habitat for animals. Areas where land has not been worked in recent years or where vegetated areas or fringes are left in their natural state may provide suitable conditions for certain sensitive plants. Diminishment of available foraging area and habitat available for sensitive plants may adversely affect a number of sensitive species. Assessment of the presence/absence of sensitive plants and animals is required prior to development; significance of impact and levels of mitigation required are assessed by regulatory agencies such as the DFG and USFWS. Although implementation of the plan will result in the conversion of a large acreage of currently open land, the value of that land for wildlife and plant species is low overall, due to intensive agricultural practices throughout the area.

Impact BIO-2: Construction activities could result in a number of temporary impacts, including, but not limited to, disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.), increased erosion potential, and noise, particularly along the Salinas River and its tributaries, and the foothills. This impact is considered significant unless mitigated (Class II).

Construction activities within the Plan area have the potential to result in a number of temporary impacts to wildlife and plant species, both direct and indirect. These include removal of vegetation, grading, excavation, and noise from equipment. The severity of these potential impacts will be assessed as specific projects are proposed.

Impact BIO-3: Urban development in the planning area could adversely impact riparian habitat by increasing impervious surfaces, accelerating erosion and input of sediments and pollutants. These impacts are considered significant unless mitigated (Class II).

Development of land uses accommodated by the draft Plan will not result in direct impacts to the Salinas River, the major riparian system in the area. The draft Plan continues to designate land within the River's floodplain as Open Space. However, development will substantially increase the percentage of impervious surfaces within the planning area, and may alter smaller hydrologic systems in the planning area. Impervious surfaces increase the volume and rate of runoff experienced at a given location. Increases in the volume and rate of runoff at a specific point can induce erosion of banks and channels, uprooting or smothering vegetation or riparian life. Particular attention must be paid to stormwater infiltration mechanisms as the community builds.

Impact BIO-4: Development accommodated by the draft Plan will increase groundwater withdrawals, which has the potential to diminish in-stream flow along the Salinas River. This impact is considered unavoidable and adverse (Class I).

Increased groundwater withdrawals, especially in more porous hydrologic systems such as the Salinas River Basin can result in less water available for in-stream flow and for the animals and plants dependent on such flows. Continued drawdown of flows is considered detrimental to the recovery of species such as the steelhead. Since the Salinas groundwater basin is functionally in overdraft and demand will increase at buildout, the drawdown and its associated impact to plants and animals is considered unavoidable and adverse. Management of instream flows is being addressed on a regional scale through modifications in the outflow of reservoirs among other projects.

Impact BIO-5: The conversion of agricultural land to urban uses within the Plan area may restrict the east-west movement of animals from the hills to the west across the Salinas Valley. This impact is considered adverse but not significant (Class III).

Major animal movement corridors in the vicinity of the planning area include the Salinas River, and its tributary waterways such as the Arroyo Seco. The Arroyo Seco has been identified as an important movement corridor for animals from the hills to the valley floor and from one side of the valley to the other. The Arroyo Seco waterway joins the Salinas River at Soledad; therefore, it is reasonable to assume that animals crossing the valley from this location are currently diverting north or south of the city along the River. Development accommodated by the draft Plan will not directly affect these movement corridors; however, the conversion of agricultural land to urban uses could further limit wildlife movement from east to west across the Valley.

Impact BIO-6: Buildout of the Plan area with urban uses will result in long-term indirect impacts associated with increased urbanization, including light, noise, pets, traffic, and other effects of increased human presence. These impacts are considered adverse but not significant (Class III).

In addition to direct physical impacts on the environment, the presence of development and people has any number of indirect impacts, including light from housing, commercial buildings

and streets, and predation from domestic animals. This can be of particular concern as development approaches the eastern foothills. The General Plan includes standards for lighting and provision of open space for development in hillside areas. Moreover, the existing industrial agricultural operations in the area are currently a source of noise and traffic and have largely subdued the natural vegetation in the area. Impacts are considered significant, but mitigated by policies in the General Plan.

Impact BIO-7: The permanent loss of 3,500 acres of foraging area for special status animal species would contribute to the cumulative loss of such areas within the Salinas Valley. This impact is considered significant and unavoidable (Class I).

The Salinas Valley floor currently provides only limited habitat for plants and animals. The landscape is highly cultivated and controlled. However, as growth in Soledad and neighboring communities increases, and in particular, expands to the eastern foothills, the loss of foraging opportunities throughout the planning area may be cumulatively significant.

General Plan Policy Response

Scenic Resources

C/OS-7 The shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour)...
c. Requiring landscaping which provides a transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected.
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur.

Hillside Protection

C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400-foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope)...
c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development new or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including

temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding...

C/OS-9 The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.

Plant, Animal and Related Habitat Protection

C/OS-10 The City shall support State and federal laws and policies to preserve populations of rare, threatened, and endangered species by ensuring development does not adversely affect such species in a significant way or by fully mitigating adverse effects.

C/OS-11 The City shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design to the extent feasible.

C/OS-12 The City shall require developers to use native and compatible non-native species, especially drought-tolerant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of project approvals or project mitigations.

Tree Preservation/Landscaping

C/OS-17 When considering the approval of activities that result in the removal of mature trees, the following factors shall be considered:

a. The size, age, health and species of tree(s) to be removed.
b. Whether or not the removal of the tree(s) is necessary for the reasonable development and use of the site.
c. Whether the tree(s) to be removed is (are) a native or introduced species.

C/OS-19 Where mature trees are removed to accommodate new development, they shall be replaced at a ratio of at least two new trees for every one tree removed, or such additional number and size of trees as considered appropriate by the reviewing body of the time of approval of such development.

C/OS-21 Landscaping plans for new development incorporate water conservation methods and shall employ native varieties of plants that are drought tolerant.

Programs

8.7 The City shall work toward the public acquisition as open space of areas with significant ecological resources where such resources cannot be effectively preserved through the regulatory process. Public protection may take the form of fee acquisition and/or open space easements and may be carried out in cooperation with other local, State and federal agencies, and private entities.

8.8 The City shall develop and adopt an ordinance requiring the dedication of open space lands, or the payment of open space mitigation fees, to provide and maintain open space. The ordinance shall further define geographic areas of benefit.

Mitigation Measures

No additional measures are recommended.

Analysis of Significance After Mitigation

Due to the relatively low biological value of land within the Soledad area, impacts are considered less than significant. Cumulative and in-stream flow impacts, however, are considered significant and unavoidable (Class I).

V.8 Agricultural Resources

Issues

Perhaps the most important resource in the Plan area is the soil upon which the city and its surroundings are located. Prime agricultural land is one of the economic strongholds for the State and for Monterey County and should be considered when contemplating future development.

Standards of Significance

General guidance is provided by Appendix G of the State CEQA Guidelines which state that "...a project will normally have a significant impact on the environment if it will convert prime agricultural land to non-agricultural land, or impair the agricultural productivity of prime agricultural land." In addition to these general criteria, Monterey County relies on the Agricultural Commissioner to assess the potential for development activities to impact the agricultural productivity of a given site. Among the criteria used by the Commissioner are:

- The soil type(s), and its suitability for agriculture as defined by the USDA Natural Resources Conservation Service (NRCS);
- Present and past agricultural use of the site;
- The size, shape and slope of the site in question;
- The availability and use of irrigation;
- Agricultural practices on surrounding properties;

In 1993, Senate Bill 850 directed the State Resources Agency, in consultation with the Governor's Office of Planning and Research, to "...develop an amendment to Appendix G to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process. " The result was the formulation of the California Agricultural Land Evaluation and Site Assessment Model (LESA). LESA is a point-based approach to assessing the relative value of agricultural land resources which relies on two separate sets of factors: land evaluation, which are primarily soil-based qualities of land, and site assessment factors that are intended to measure social, economic, and geographic attributes. Although the LESA model is used widely throughout California and has been adopted by other states, it has not been employed widely by Monterey County.

Environmental and Regulatory Setting

Overall, there are three separate land classification systems which determine an area's suitability of agriculture:

- The U.S. Natural Resources Conservation Service (NRCS) (formerly the Soil Conservation Service) Land Capability Class System;
- The State Farmland Mapping and Monitoring Program's Important Farmlands designations; and
- The Cortese-Knox Local Government Reorganization Act of 1985 criteria.

The application of these systems to the lands surrounding the City of Soledad is described below.

U.S. Natural Resources Conservation Service (NRCS) Land Capability Class System

Land Capability Classes, or Units, classify soils according to their characteristics and slopes. These classifications range from a 'high' of I-1 to a 'low' of VIIIs-1. The soils within the City's Study Area range from a soil classification of I to VII, as detailed in Table V.8-1. Classes I and II are generally considered to be of prime agricultural significance.

The NRCS also assigns a Storie Index Rating to soils which is based exclusively on soil characteristics only. Lands which qualify for a Storie Index Rating of 80 to 100 are generally considered agriculturally significant. As presented in Table V.8-1, there are several soil types in the Study Area with a Storie Index Rating above 80. Figure V.8-1 shows the location of these soils types around the City.

TABLE V.8-1:
SOIL CLASSIFICATIONS IN THE SOLEDAD GENERAL PLAN STUDY AREA

Symbol	Mapping Unit (Soil Name)	Capability Unit	Storie Index Rating
AsB	Arroyo Seco gravelly sandy loam, 2 to 5 percent slopes	IIIe-4(14)	60
AvB	Arroyo Seco gravelly loam, 2 to 5 percent slopes	IIe-4(14)	72
CbA	Chualar loam, 0 to 2 percent slopes	I(14), IIIc-1(15)	85
CbB	Chualar loam, 2 to 5 percent slopes	IIs-5(14)	81
CnA	Cropley silty clay, 0 to 2 percent slopes	IIs-3(14)	51
DaA	Danville sandy clay loam, 0 to 2 percent slopes	IIs-4(14)	72
EaA	Elder sandy loam, 0 to 2 percent slopes	IIs-4(14)	95
GhC	Gloria sandy loam, 2 to 9 percent slopes	IIIe-3(14)	27
SbA	Salinas clay loam, 0 to 2 percent slopes	I(14)	85
PnA	Placentia sandy loam, 0 to 2 percent slopes	IIIs-3(14)	45
Xb	Xerorthents, sandy	VIIe-1(15)	<10

Source: US Soil Conservation Service

State Farmland Mapping & Monitoring Program

The State of California's Farmland Mapping and Monitoring Program (FMMP) monitors land use change affecting California's agricultural land. The program, administered by the California Department of Conservation, Office of Land Conservation, produces maps and statistical data to be used for assessing the importance of agricultural lands, which is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland; other classifications, in descending order according to their suitability, include Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Lands.

The Prime Farmland category includes land that has the best combination of physical and chemical characteristics for the production of crops. Farmlands of Statewide Importance include

land that is similar in characteristics to Prime Farmland, except that it contains greater slopes or a lesser ability to store moisture. Grazing land was defined in cooperation with the California Cattlemen's Association and other groups interested in grazing as an agricultural enterprise. The physical and chemical features of Grazing Land are not considered important for the production of agricultural crops. Urban and built-up land, as the name implies, is used for residential, industrial, commercial, construction, institutional, public purposes, railroads, and other development purposes. Other lands are those that are not included in any of the other farmland mapping categories.

Land within the City of Soledad's Study Area includes land that is categorized as Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land, Urban and Built-up Land and Other Land, as shown on Figure V.8-1.

TABLE V.8-2:

STATE IMPORTANT FARMLAND MAPPING CLASSIFICATIONS

Category	Description
Prime	Land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.
Farmland of Statewide Importance	Land similar to Prime Farmland that has a good combination of physical and chemical characteristics for the production of agricultural crops. This land has minor shortcomings, such as greater slopes or less ability to store soil moisture than Prime Farmland. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.
Unique Farmland	Lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the two update cycles prior to the mapping date.
Farmland of Local Importance	Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
Farmland of Local Potential	In San Luis Obispo County, farmland of Local Potential is land meeting all of the characteristics of Prime and Statewide Importance, but is not presently cultivated.
Grazing Land	Land on which the existing vegetation is suited to the grazing of livestock. This category is used only in California and was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

Source: California Department of Conservation

Figure V.8-1: Soil Types
Source: California Department of Conservation

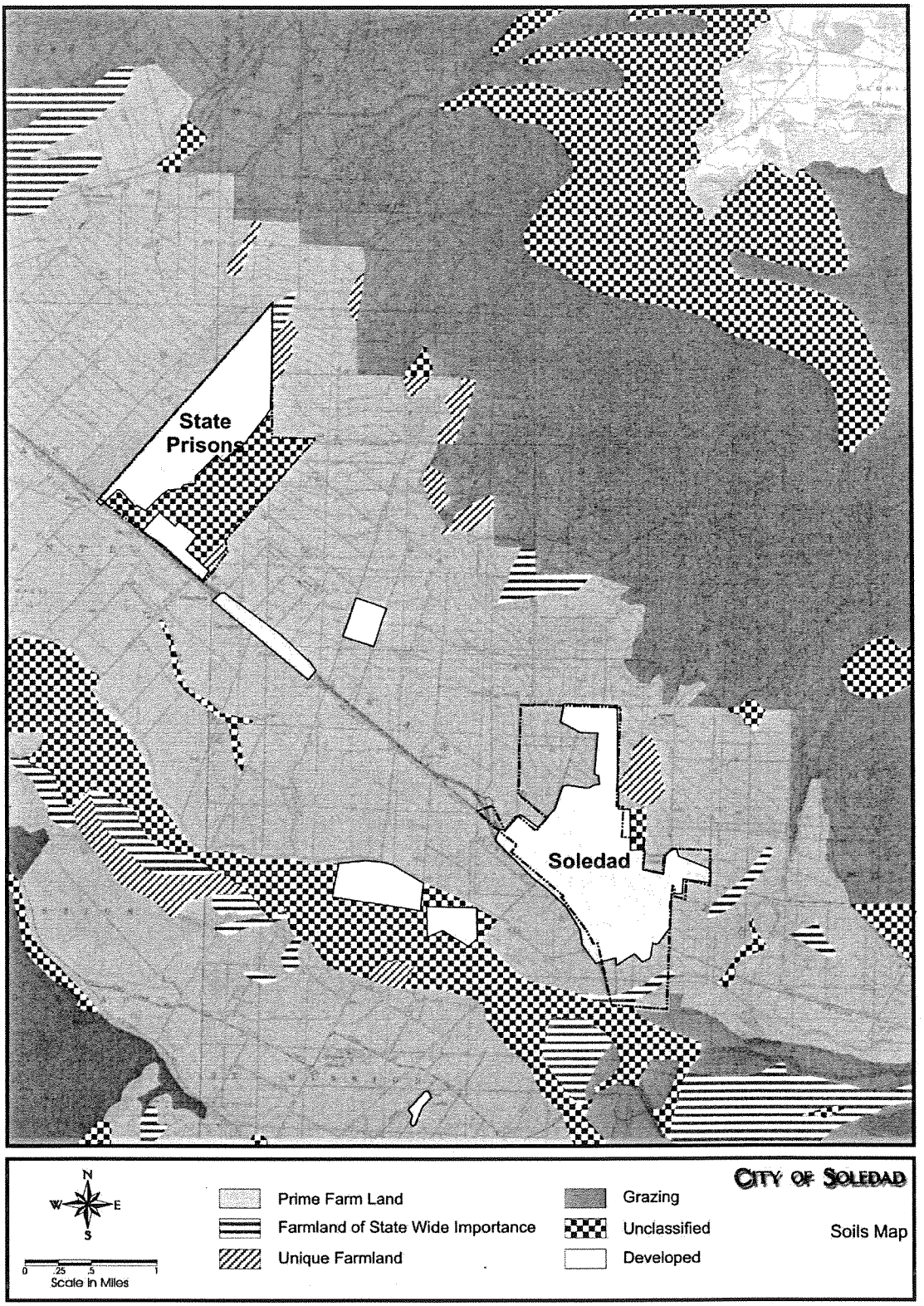
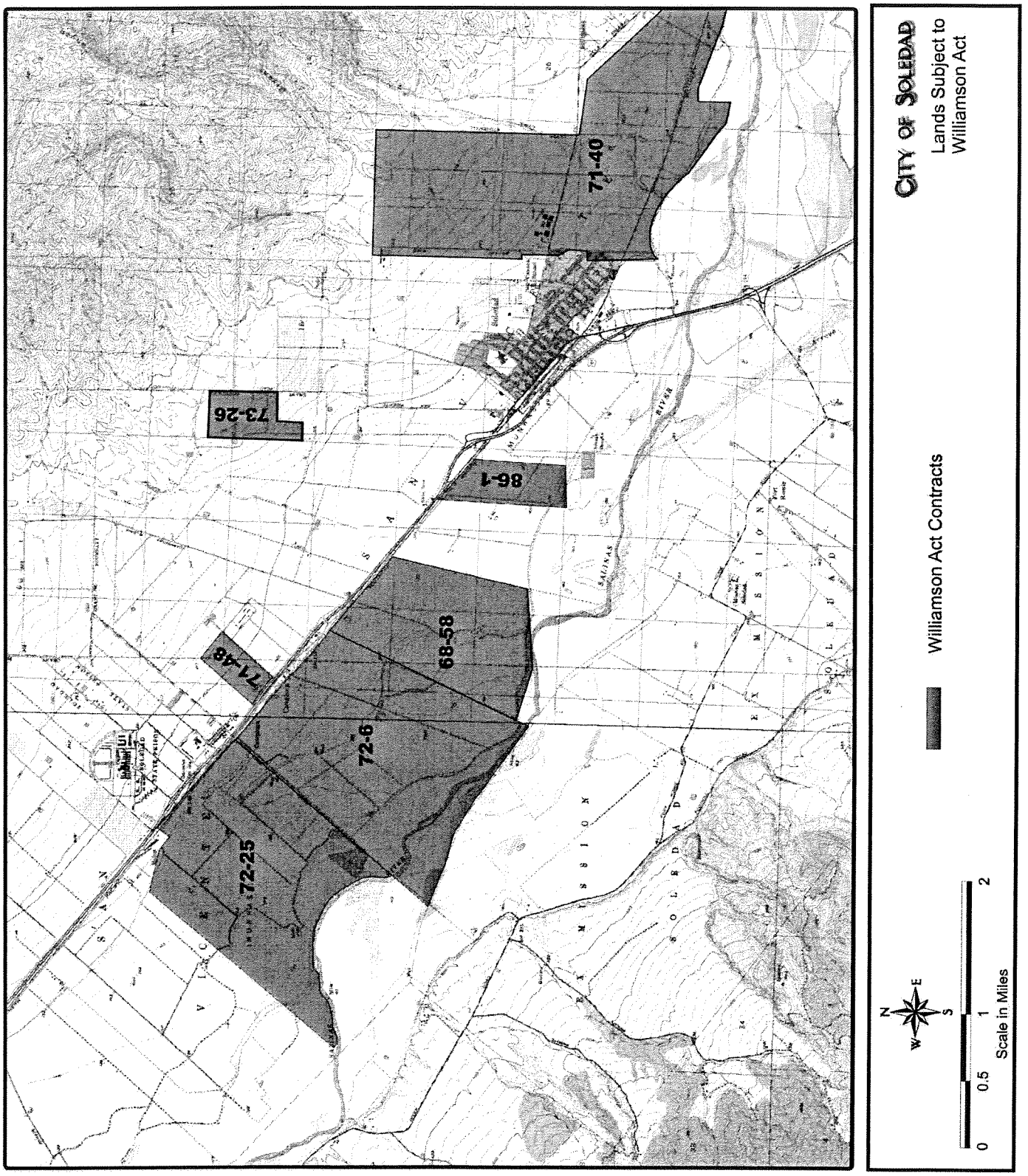


Figure V.8-2: Properties Subject to Williamson Act Contracts



The Farmland Mapping and Monitoring Program classifies all lands within the study area and extending north past the prisons as being prime farmland. The only exceptions are any developed areas and a 78 acre site northwest of the city.

It should be noted that non-prime land constitutes an important agricultural resource which may support certain types of valuable crops such as wine grapes. Throughout Monterey County and the State in general, lower quality soils historically used for grazing have been converted to wine grapes generating considerable income.

Cortese-Knox Local Government Reorganization Act of 1985

The Cortese-Knox Act, defines "prime agricultural land" as an area of land, whether a single parcel or contiguous parcels, which has not been developed for a use other than agriculture and which meets any of the following qualifications:

- Land which qualifies for rating as class I or class II in the Soil Conservation Service land use capability classification.
- Land which qualifies for rating 80 through 100 Storie Index Rating.
- Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing lands, July, 1967, developed pursuant to Public Law 46, December 1935.
- Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will return during the commercial bearing period on an annual basis for the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre.
- Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200) per acre for three of the previous five calendar years.
- Land which is used to maintain livestock for commercial purposes.

Virtually all land in and around Soledad meets at least one of these qualifications and therefore can be considered prime agricultural land with the exceptions of GhC (Gloria sandy loam 2 to 9 percent slopes) and Xb (Xerorthents, sandy).

Agricultural Protection Policies and Programs

The California Land Conservation Act (Williamson Act), California Government Code Section 51290 et seq., encourages conservation of agricultural lands by providing a tax incentive to land owners who contract with the County to restrict land uses to agriculture and compatible uses. Several properties within the Study Area are currently restricted to agricultural use under Williamson Act Contracts (Figure V.8-2).

The Agricultural Economy of Monterey County

Monterey County is one of the primary agricultural regions in the State of California. The total value of agricultural products produced in Monterey County in 2002 was nearly $2.8 billion; the total value has been increasing steadily in real dollars (accounting for inflation) since 1989. Leaf lettuce is currently the number one cash crop, with gross production totaling over $429 million (M) in 2002, and $423M in 1999. Monterey County is also a leading producer of broccoli ($65M), head lettuce ($309M), strawberries ($226M), grapes ($147M), nursery crops ($218M), cauliflower ($93M), celery ($90M), spinach ($129M) and mushrooms ($64M).

Monterey County is also experiencing growth in its cities and residential communities, which places pressure on agricultural lands. Over recent years, agricultural land in desirable areas has been converted to residential and other non-agricultural uses. To help illustrate this trend, data from the Farmland Mapping and Monitoring Program (FMMP) for the years 1994-2000 are compared on Table V.8-3 for the conversion of prime agricultural land to developed land.

TABLE V.8-3: CHANGE IN THE ACREAGE OF PRIME AGRICULTURAL LAND 1994-2000

Category	1994-1996	1996-1998	1998-2000
Total Prime Acreage	173,238	170,766	174,151
Acreage of Prime Land Gained	1,735	3,283	9,032
Acreage Lost to other Uses	3,178	5,755	5,655
Total Net Change	(1,443)	(2,472)	3,377

Source: California Department of Conservation Farmland Mapping and Monitoring Program, 1994-2000

Between 1994 and 2000, total prime agricultural acreage actually increased slightly by 913 acres. The additional prime land is attributable to a number of factors, such as:

- The application of irrigation to lands previously not irrigated or farmed;
- The conversion of grazing land to wine grape vineyards;
- The re-classification of soils previously thought to be of lesser suitability.

Of the three factors listed above, almost certainly the growth in prime agricultural lands in Monterey County can be attributable to the proliferation of wine grapes. The acreage devoted to wine grapes has grown steadily since the 1990s and continues today as the market for premium wines continues to expand. The acreage devoted to wine grapes has risen steadily from 36,000 acres in 1997 to 41,400 acres in 1999. According to the 2002 Monterey County Crop Report, grapes are the sixth most valuable crop harvested ($147 million).

As smaller communities within Monterey County plan for their future, it is important to keep in mind the overall reduction in agricultural land that is occurring. The cumulative effects of each city's general plan and their seemingly minimal contribution to agricultural conversion must be considered.

Monterey County ranked third in the state in the value of crops produced in 2002. Table V.8-4 lists the crops with one-hundred million dollars or more value for 2002 in Monterey County as determined by the 2002 Monterey County Crop Report. The value of crops produced in Monterey County is about 10.7% of the value of all agricultural and forest crops produced Statewide (about $26.1 billion in 2002), according to the California Statistical Service.

TABLE V.8-4:

CROPS VALUED AT ONE HUNDRED MILLION DOLLARS IN MONTEREY COUNTY, 2002

Crop	Value in 1999 Dollars
Leaf lettuce	$429,360,000
Head lettuce	$309,148,000
Broccoli	$265,867,000
Strawberries	$226,849,000
Nursery	$218,679,000
Grapes	$147,065,000
Spinach	$49,103,000
Spring Mix	$119,317,000

Source: Monterey County Crop Report, 2002

Impacts

Implications of the Land Use Diagram

The draft Plan designates an additional 3,500 acres for urban development to the north and east of the City. Of this acreage, about 3,200 are classified Prime Farm Land, with the remaining 300 acres classified Farmland of Statewide Importance by the State Farmland Mapping and Monitoring Program. One property is subject to a Land Conservation Act contract (Contract no. 73-26, as shown on Figure V.8-2).

Impact A-1: Development of land designated for urban development by the draft Plan will result in the permanent conversion of about 2,750 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).

As discussed above, the Plan area consists of agricultural land classified as either Prime or Farmland of Statewide Importance. Buildout of the Plan area will result in the permanent conversion of this land to a non-agricultural use and a net loss of productive agricultural land in the County. Although policies of the draft Plan seek to minimize the impact of this loss, it will remain significant and adverse (Class I).

Impact A-2: Development of additional rapid infiltration basins as recommended by the draft Wastewater Treatment and Disposal Master Plan will result in the permanent conversion of about total 469 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).

The draft Wastewater Treatment and Disposal Master Plan recommends the development of rapid infiltration basins on properties near and/or adjacent to, the wastewater treatment plant to provide capacity for the continued growth and development of the City. Table V.8-5 provides a

summary of the acreage needed; areas under consideration for construction of infiltration basins are illustrated by Figure III-7 in the Project Description.

TABLE V.8-5:
SUMMARY OF DISPOSAL CAPACITY PROGRAM

Site (see Figure III-7)	Acres	Disposal Capacity (mgd)	Year Completed
City WWTP (existing)	104	2.50	2005
Prison Disposal Basins	27	1.00	2005
Basin 1	10	0.20	2006
Highway 101 Landscape Irrigation	2	0.05	2007
Basin 2	100	1.25	2009
Basin 3	40	0.50	2024
Basin 4	35	0.40	2028
Basin 5E	50	1.25	2049
Los Coches Adobe Landscaping	5	0.12	2050
Basin 6	50	1.25	>2050
Golf Course	100	0.50	>2050
Prison	50	0.50	>2050
TOTAL:	573	8.27	

Source: Wastewater Treatment and Disposal Master Plan, 2005, Fugro West

Properties under consideration for infiltration basins are largely irrigated row crops along the floodplain of the Salinas River. Portions of these properties would be acquired by the City over time in accordance with the program outlined in Table V.8-5 and developed with infiltration basins to achieve the disposal capacity required for future development.

According to the 2002 Monterey County Crop report, there were about 1.4 million acres in crop production in 2002, producing crops with a value of about $1,954 per acre. A loss of 3,500 acres would constitute about 0.25 percent of the total agricultural acreage in the County. The value per year of products lost to the agricultural economy would be: $1,954/acre X 3,500 acres = $6.8 million per year (in 2002 dollars) or about 0.25 percent of the total value of crops produced Countywide.

Although the relative impact on the total value and acreage of agricultural production is small, so long as the long-term trend in the net change in the amount of prime agricultural land remains downward, any additional loss constitutes a significant cumulative adverse impact that cannot be feasibly mitigated.

Impact A-3: The expansion of urban uses contemplated by the draft Plan will increase the potential for incompatibility between urban uses and agricultural operations. This impact is considered significant unless mitigated (Class II).

Agricultural operations generate noise, dust and odors that may be considered a nuisance to nearby land uses. Much of the area designated for urban expansion by the draft Plan is intended for residential development.

Impact A-4: Development of land designated for urban development by the draft Plan, including the potential Highway 146 bypass, may hasten the early cancellation of Land Conservation Act Contract 73-26, 71-40 and others in the area. This impact is considered adverse but not significant (Class III).

The expansion of urban development onto agricultural lands surrounding those encumbered by Land Conservation Act contracts may hasten the removal of those properties from the contract. The City's Plan area includes one LCA property. To date (2004), the owners have not filed for non-renewal of the contract. However, as urban development expands outward from the City the pressure to cancel the contract or file for non-renewal will increase. It should be noted that the loss of productive agricultural land is considered an unavoidable and adverse impact (see above). Over time the draft Plan anticipates that all properties within the Plan area will be converted to an urban use, including the property governed by contract 73-26.

Impact A-5: The acquisition of portions of agricultural parcels for infiltration basins may hasten the early cancellation of Land Conservation Act Contracts affecting properties in the vicinity of the wastewater treatment plant. This impact is considered adverse but not significant (Class III).

As shown on Figure V.8-2, several properties on the west side of Highway 101 in the vicinity of the wastewater treatment plant are governed by active Land Conservation Act contracts. Should the City acquire portions of these properties for the development of rapid infiltration basins, it would remove the City's portion from the contract. However, the LCA contract would remain in effect on the balance of the property in private ownership.

General Plan Policy Response

C/OS-1 The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.

C/OS-2 The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.

C/OS-3 The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated Agriculture by the Monterey County General Plan.

C/OS-4 The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.

C/OS-5 The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.

C/OS-6 The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.

Scenic Resources

C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;
c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected;
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;
e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and
f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.

Hillside Protection

C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety.

c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside.

d. Incorporate recreation and public access on or near hillsides consistent with this Element.

Programs

8.7 The City shall work toward the public acquisition as open space of areas with significant ecological resources where such resources cannot be effectively preserved through the regulatory process. Public protection may take the form of fee acquisition and/or open space easements and may be carried out in cooperation with other local, State and federal agencies, and private entities.

8.8 The City shall develop and adopt an ordinance requiring the dedication of open space lands, or the payment of open space mitigation fees, to provide and maintain open space. The ordinance shall further define geographic areas of benefit.

Additional Recommended Mitigation Measures

None are recommended.

Analysis of Significance After Mitigation

The permanent loss of an additional 3,500 acres of important farmland is considered a significant and unavoidable adverse impact.

V.9 Visual Resources

Issues

Buildout of the City's Plan area as envisioned by the draft Plan will significantly alter the visual character and qualities of the City and its surroundings.

Standards of Significance

The State CEQA Guidelines states that a project will have a significant impact if it will:

- Have a substantial adverse effect on a scenic vista; or,
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or,
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create an additional source of light and glare

Environmental and Regulatory Setting

Views of the surrounding vineyards and the Valley floor are impressive from the foothills of the Gabilan Range and the higher elevations within the developed city. The higher vantage points afford nearly unobstructed panoramas of the Salinas Valley and the Sierra de Salinas Range to the west.

When approaching the City from either the north or south on Highway 101, the most prominent view of the City is the commercial businesses along the east side of Front Street which form a nearly solid facade when viewed from the west. The freeway interchanges serving the City are important visual gateways that provide visitors with their first impressions of the form and character of the community and its largely-agricultural setting.

Impacts

Methodology

A visual resource is the aggregate of characteristic features imparting visually aesthetic qualities to the environment. The setting for the visual resource may be natural (i.e., formed by nature with no apparent human intervention), rural, or urban. In describing the visual quality of an area or region, three attributes are relevant: scenic variety, visual sensitivity, and visual condition.

The scenic variety of an area is a descriptive inventory of the distinguishing features of the landscape. Visual sensitivity indicates where adverse visual effects would be expected to generate the greatest controversy. Relevant factors include public concern, and the frequency with which the resource is viewed. Visual condition is the overall attractiveness of the resource and is a function not only of the appeal of inherent characteristics, but also of the effects of features that have been introduced and which appear incongruous.

Visual Context

The City is located in an agricultural valley surrounded by productive and ongoing agricultural operations. Accordingly, the visual foreground consists largely of farming operations and row

crops; the backdrop consists of mountain ranges to the east and west. The outward expansion of the City has established a firm visual edge between urban and rural. However, commercial and industrial businesses located along the Highway 101 right-of-way north of the City interrupt this established boundary.

Scenic Variety

Scenic variety is evaluated based on relative variations in natural characteristics such as landscape character, landforms, vegetation, drainage, and urban components, if applicable. In general, areas of steeper topography, with a wide variety of vegetation types, are considered "distinctive" and therefore more valuable aesthetically, while areas of relatively low relief and more homogenous vegetation are considered "common" or of "minimal" value.

The scenic variety of the City's Plan area could hardly be considered 'distinctive' within the context of the Salinas Valley. The fairly uniform rows of crops with the mountain ranges behind is the predominant visual experience when traveling through the Salinas Valley.

TABLE V.9-1: SCENIC VARIETY CLASSES

Area	Distinctive	Common	Minimal
Landform	>60 % slope w/exposed ridges; steep, highly dissected canyons	20-60% slope, small ridges, knolls, canyons	<20% slope; level to rolling terrain
Vegetation/ Drainages	High variation in vegetative types; such as mixture of trees, shrubs, and grassland forming edges	Some variation in vegetative types, height, and density	Graded areas, bare soils
Shorelines/ Rivers (where applicable)	Perennial streams, pools, falls, vegetated shorelines	Intermittent streams, diversified shoreline	Gullies
General Landscape Character	Variety in detail, with many unique boundaries between different units	Some variation, with indistinct boundaries	No variety boundaries
Urban design character	Powerful sense of unity and proportion with design variation. Strong design linkages provided by: Building silhouette Spacing between buildings Setbacks from street property line Proportion of windows, bays, doorways and other features Massing of building form Location and treatment of entryways Surface material, finish and texture Shadow patterns Building scale Style of architecture and Landscaping, if any	Some sense of unity and proportion. Moderate design linkages	No sense of unity and proportion. Design linkages absent, or strong unity with no design variation (monotonous).

Visual Sensitivity

Visual sensitivity is the relative degree of public interest in the visual resource and concern over changes in the quality of that resource. The degree of interest and concern has not only to do with public attitudes, but also the frequency of viewing. Factors that affect visual sensitivity reflect the viewer's awareness of the scenic resources of the site, including the level of public concern, and frequency and level of detail at which the resource is viewed. Table V.9-2 provides the criteria for sensitivity levels from 1 to 3 with a rating of 1 being the most sensitive with assumed frequent viewing by a highly concerned public. Greater concern over visual quality is assumed to be felt by those driving for pleasure or those engaged in recreational activities. Conversely, less concern is assumed for those driving to and from work or during work.

TABLE V.9-2: CRITERIA FOR RATING SENSITIVITY LEVELS

Travel Route or Use Area	Sensitivity Level		
	1	2	3
Primary Travel Route and Use Area	At least 25% of users have major concern for visual quality	Less than 25% of users have major concern for visual quality	N/A
Secondary Travel Routes and Use Areas	At least 75% of users have major concern for visual quality	Between 25 and 75% of users have major concern for visual quality	Less than 25% of users have major concern for visual quality

Note: The proportion of users indicated is approximate. These user ratios indicate a relationship between the number of travelers and their appreciation for aesthetics while en route to a destination. In accordance with the U.S. Forest Service methodology, a greater sensitivity is assumed to be felt by those driving, walking and bicycling for pleasure and those engaged in recreation activities than those commuting for work-related purposes.

Definitions of Sensitivity:
- Level 1 – highly sensitive
- Level 2 – moderately sensitive
- Level 3 – low sensitivity

Highway 101 is the primary coastal route between the Los Angeles and the San Francisco Bay metropolitan areas. Therefore the sensitivity for the visual quality of the City's plan area when viewed from Highway 101 is considered moderately to highly sensitive, based on these criteria.

Visual Condition

The overall visual attractiveness of a region is defined as the visual condition. This determination is based on the inherent characteristic variety of the resources and the degree to which introduced features appear uncharacteristic or incongruous with their surroundings, thereby disrupting the continuity of the scene.

Visual condition is characterized as high, moderate or low. Areas with high visual condition may have some incongruities, but they would be overlooked by the casual observer. Areas with moderate visual condition have incongruities that would compete with the inherent features of the site and may obscure such features to some degree. Areas with low visual condition have

substantial incongruities that obscure natural features such that the inherent qualities of the area cannot be determined.

Based on these criteria, the City's Plan area would be considered to have a moderate to high degree of visual condition.

Urban Form and Architectural Character

Soledad consists of two towns: the historic city center east of Front Street and the conventional residential subdivisions extending outward from the city center to the east toward the foothills of the Gabilan Range.

The neighborhoods east of Front Street consist of a grid system of streets forming rectangular blocks roughly 280 feet by 300 feet. Parcel sizes vary in size, but are mostly small, narrow lots of 3,000 - 7,000 square feet, reflecting the historical pattern of development. As a result, most downtown commercial buildings cover more than one legal lot.

The more conventional subdivisions constructed in the outlying areas depart from this grid system of streets with wider, more curvilinear streets, monolithic sidewalks and lots of 6,000 square feet.

Architecture

Existing commercial buildings in the downtown tend to be older (35 years or more) and display a wide range of architectural styles and materials; most are wood frame or masonry block with plaster or stucco exterior and flat roofs. Colors are generally muted earth-tones (light brown, tan and beige).

Store-fronts consist of standard fixed-pane display windows with aluminum store-front systems and a narrow (three feet or less) bulkhead underneath. Many of the stores have awnings that extend over the sidewalk. Two-story corner buildings typically have little or no architectural detailing on the side street, often appearing as a tall, blank face.

Most of the two-story buildings along Front Street have retail businesses on the ground floor and are mostly vacant on the upper floors, although a few have offices or residences. As a result, the upper floors have smaller windows and more window openings.

The residential neighborhoods surrounding the downtown recall turn-of-the century "Victorian" style architecture. Many of the dwellings are small bungalows with wood siding, porches and double-hung windows. Multi-family residential development reflects a similarly eclectic mix of age, architectural styles and materials.

The newer residential subdivisions consist of single- and two-story dwellings with stucco exterior and two-car garages facing the street.

FigureV.9-1: Visual Setting

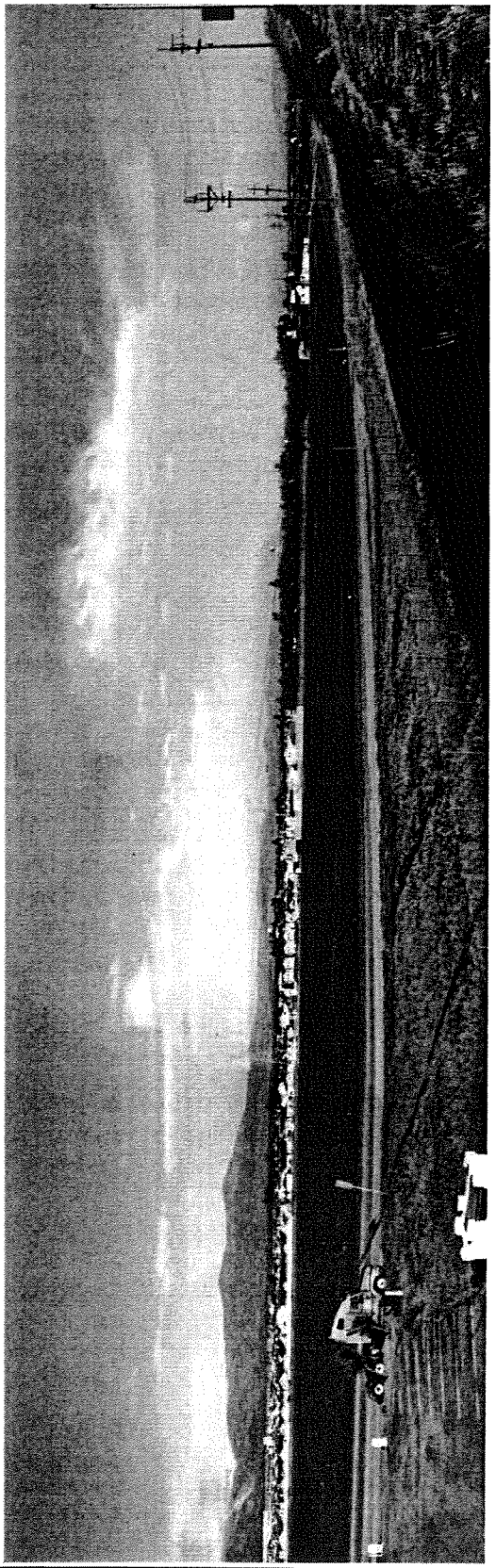


Figure V.9-2:Visual Setting

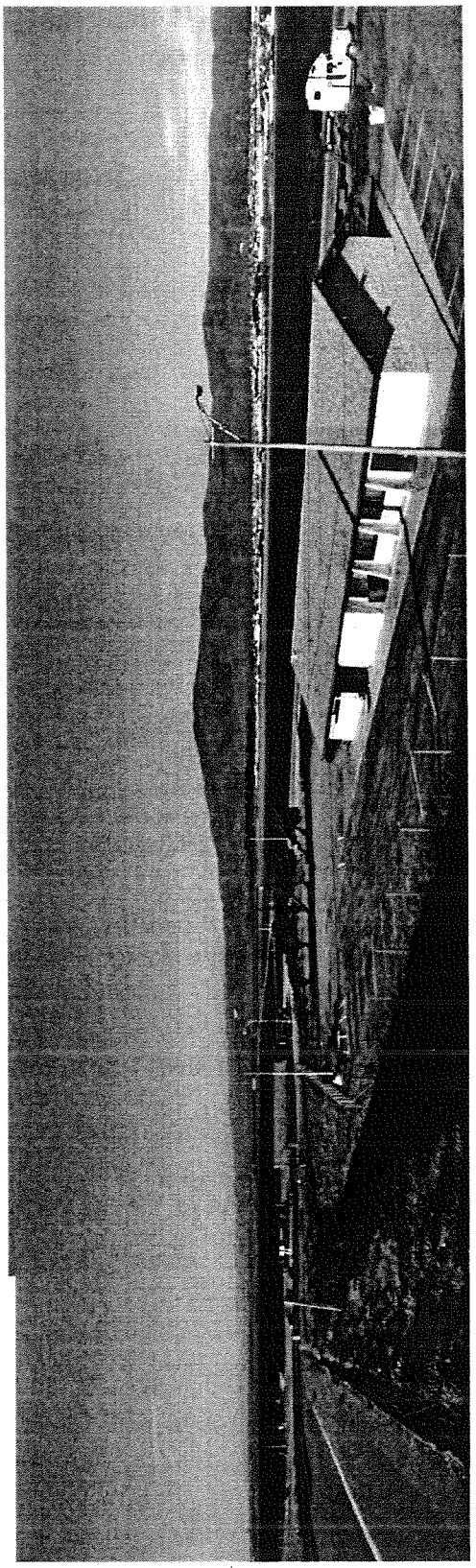
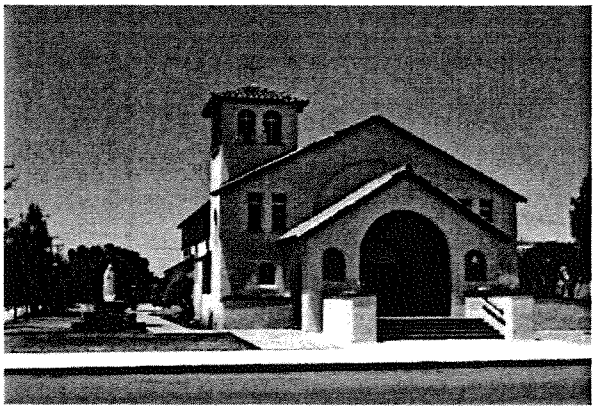
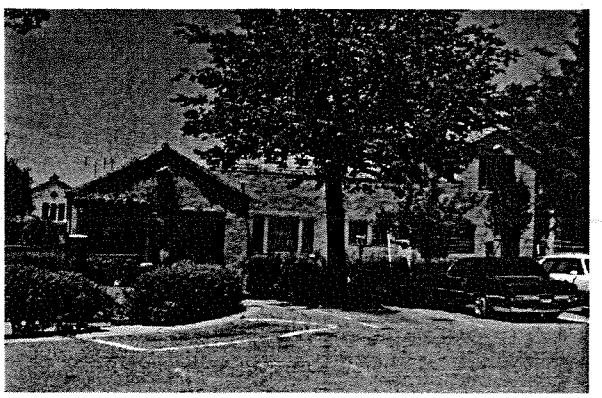


Figure V.9-3 -- Form and Character of Existing Development





Impact V-1 **Development of the various land uses contemplated by the Draft Plan will alter the visual character and/or quality of the Plan area. This impact is considered significant and unavoidable (Class I).**

Buildout of the areas designated for urban development by the draft Plan would result in the permanent conversion of about 3,500 acres of farmland to an urban use. The area considered for urban development would double the physical size of the City and the resulting visual prominence of urban development within its visual context. The resulting impact on the scenic variety, visual sensitivity, and visual condition of the area would be significant andunavoidable.

Impact V-2 **Grading and construction activities and the storage of construction materials may be visible from public vantage points. This impact is considered adverse but not significant (Class III).**

Short term impacts associated with construction activities associated with land uses accommodated by the draft Plan would include grading of sites and the storage of construction equipment and vehicles. These activities would temporarily affect the scenic variety, visual sensitivity, and visual condition of the City in specific locations. This impact is considered adverse but not significant.

Impact V-3 **Development of the various land uses accommodated by the draft Plan will result in additional sources of light and glare. These new sources will be visible from adjoining areas and from the 101 Freeway. This impact is considered significant unless mitigated (Class II).**

Glare is produced when sunlight is reflected from surface materials of buildings and other structures associated with a developed site. Examples of sources of glare include asphalt parking lots, glazed surfaces (windows) and metallic roofing materials. Large expanses of flat building surfaces with lighter building colors would also produce glare. Impacts associated with glare resulting from the project are considered potentially significant.

Impact V-4 **New urban development could adversely affect the historic character of the City. This impacts is considered significant and adverse (Class II).**

The draft Plan will accommodate significant new urban development of all types, including residential neighborhoods, industrial parks and shopping centers. The amount of new development could adversely affect the character of the City.

General Plan Policy Response

L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area.* Specific plans shall be prepared in accordance with the standards provided in Appendix B (of the draft General Plan).

L-42 The City shall use *Community Design Guidelines* as a decision-making tool to ensure that new development incorporates the qualities and character desired by Soledad residents.

L-43 Specific plans prepared for major expansion areas shall incorporate the standards described in Appendix B – Standards for Specific Plans. In general:

a. New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves.
b. Subdivision design should emphasize pedestrian connectivity within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low-speed travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees.
c. Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan.
d. Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.

L-44 The City shall require that all new development be designed to complement the scale and character of existing development. Views of the surrounding hills and mountains shall be preserved through such means as design review, sign control, undergrounding of utilities, grading and tree removal standards.

L-45 The City shall require all new development to be planned and designed in a manner which employs design, construction and maintenance techniques that:

a. Avoids locating structures along ridgelines and steep slopes.
b. Incorporates design and screening measures to minimize the visibility of structures and graded areas.
c. Maintains the character and visual quality of the area.

L-46 New development on hillsides shall employ design, construction and maintenance techniques that:

a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, or fire hazards.
b. Minimize risk to life and property from slope failure, landslides and flooding.
c. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas.
d. Maintain the character and visual quality of the hillside.

L-47 The City may, where appropriate, require new development to provide pedestrian amenities along public sidewalks, such as seating and 'pocket parks'.

L-48 The entrances to Soledad from the north and south by way of Highway 101 are the community's "gateways". New public and private development in these locations shall include elements such as signage, landscaping and landscaped center medians, and appropriate architectural detailing that announce that one has arrived in Soledad.

L-49 The form, scale and character of new residential development shall emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks.

L-50 Multi-family development shall include usable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood.

L-51 All exterior lighting in new development shall be located and designed so as to avoid shining directly onto nearby residential properties, and shall minimize offsite glare. Proponents of commercial or industrial projects on property adjacent to residential areas shall submit a lighting plan to the City for review and approval; said plan shall incorporate features such low level, downward-directed exterior lights to achieve the intent of this policy.

L-52 Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.

C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;
c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected;
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;
e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and
f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain,

and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.

Hillside Protection

C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as *Open Space/Grazing, Public Facility* (parkland) or *Agriculture*.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety.
c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside.
d. Incorporate recreation and public access on or near hillsides consistent with this Element.

C/OS-9 The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.

C/OS-18 The City shall institute and promote a vigorous program of tree planting in new development areas and in older portions of the City to increase the number and density of tree cover.

Programs

8.7 The City shall work toward the public acquisition as open space of areas with significant ecological resources where such resources cannot be effectively preserved through the regulatory process. Public protection may take the form of fee acquisition and/or open space easements and may be carried out in cooperation with other local, State and federal agencies, and private entities.

8.8 The City shall develop and adopt an ordinance requiring the dedication of open space lands, or the payment of open space mitigation fees, to provide and maintain open space. The ordinance shall further define geographic areas of benefit.

8.9 The City shall undertake a survey and documentation of potentially historic buildings and structures with the City of Soledad and the Planning Commission and shall establish policies for the preservation and restoration of such buildings and structures.

Mitigation Measures

No additional measure are recommended.

Analysis of Significance After Mitigation

Impacts to visual resources are considered significant and adverse (Class I) after application of the recommended policies and programs of the draft Plan.

V.10 Cultural and Archaeological Resources

Issues

This section of the DEIR assesses the potential impacts to cultural and historic resources that could result from development of properties as contemplated by the draft Plan.

Standards of Significance

The State of California has formulated laws for the protection and preservation of historic and archaeological resources. Generally, a cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

In addition, if a project may cause damage to a significant archaeological resource, the project may have a significant effect on the environment. Section 15064.5 of CEQA pertains to the determination of the significance of impacts to archaeological and historic resources, and provides guidelines for administering to archaeological resources that may be adversely affected by project development in Section 151226.4. Achieving CEQA compliance with regard to treatment of impacts to significant cultural resources requires that a mitigation plan be developed for the resource(s). Preservation in place is the preferred manner of mitigating impacts to archaeological resources.

Environmental and Regulatory Setting

Historical Overview

The Mission Era

The first settlements at Soledad took place when small tribes of Native Americans settled in the Salinas Valley. These people roamed the land leaving little physical traces of their existence and were most likely members of the Costanoan tribe. This tribe extended from Monterey County to

San Mateo County and inland covering portions San Benito and Santa Clara Counties as well. Many centuries passed before the first European explorers came to California to build a presidio in Monterey and missions in Carmel, Soledad, San Juan Bautista and the San Antonio Valley.

Life for the Natives around the Soledad area changed dramatically in 1791 when Father Fermin Lasuen founded the thirteenth California Mission, the Mission Nuestra Señora Dolorosíísima de la Soledad at the site of an Indian village recorded by Pedro Font as Chuttusgelis. The climate of the Soledad Mission was considered harsh and windy with hot dry summers and cold wet winters, and was a very difficult assignment for the padres. Those sent there soon complained of rheumatism and poor health. After a year, many padres asked to be reassigned to a more hospitable location. In the short span of this mission's existence, almost thirty different padres were assigned there.

Due to the inhospitable climate and land, there were very few Native Americans living in the area. Hence building and conversions were slow. It was six years before a large church was finally built. And since the desolate plain offered no protection against the floods of the Salinas river, the church was twice destroyed by the overflowing river banks. The neophyte population was never large and an epidemic in 1802 caused the death of many Indians and the loss of many others who fled.

During a reconstruction in 1832, a third flood hit that was later seen as the beginning of the end for the Mission Soledad. The last Franciscan at Soledad was Father Vicente Francisco de Sarria. He struggled alone to keep the buildings habitable and minister to the few remaining Indians. One morning in 1835 his body was found at the foot of the altar. The little band of loyal followers carried his remains over the hills to Mission San Antonio. Although the site of the mission buildings eventually was returned to the Church by the United States, nothing remained but stubs of adobe walls.

In spite of all the difficulties, the mission did prosper for a brief period. Eventually the padres performed more than 2,000 baptisms and 700 marriages. The crops were bountiful and large herds of horses, cattle and sheep grazed the plains. The friars even managed to plant and cultivate the first crops of wine grapes the Salinas Valley ever saw near the Soledad Mission.

After secularization, the mission site was soon abandoned and left to decay for over a hundred years. Finally, in 1954, the Native Daughters of the Golden West began restoring what little was left of the Mission Soledad. Today a small wing of seven rooms and a small chapel can be visited. Although the original quadrangle is gone, the lines of it can be traced in the mounds of the adobe ruins.

When restoration of the mission was begun, the floor of the mission church was found intact under layers of silt from floodwaters. It is still there, being preserved under the same silt. A storeroom had been used as a chapel for the tiny congregation after the loss of the church. Due in part to its isolation, this mission, more than any other, looks just as it did in early Spanish times. Recent rebuilding projects have recreated one side of the quadrangle, as well as the old chapel. Location of the church, which washed away in a flood, has been found, the tile floor intact. A museum is housed in the rebuilt rooms. The stubs of adobe walls still mark the exact locations of the remainder of the old quadrangle. Irrigation water has turned the area into a garden.

Post Mission Era Settlement

During the time of Spanish rule, settlements developed around the missions here on the Central Coast, but the area remained largely undeveloped until after Mexico overthrew their Spanish rulers and began granting lands in Alta California to its people. One of these land grants was the Los Coches Rancho consisting of just less than 9,000 acres, granted to Maria Josefa Soberanes de Richardson by the Mexican government in 1841. Her husband, William Brunner Richardson, a native of Baltimore, Maryland, built the adobe house on Arroyo Seco Road, one and a half miles south of Soledad in 1843, and planted the nearby locust trees in 1846. This was the site of Captain John C. Fremont's encampment in 1846 and 1847. The adobe was used later as a stage station and post office. It was donated to the state of California in 1958 by Margaret Jacks and is registered as historic site number 494.

During the Mexican American war, combined American forces under Captains Charles D. Burrass (or Burroughs) and Bluford K. Thompson clashed with Commandante Manuel de Jesus Castro's Californians on November 16, 1846. Casualties on each side consisted of several men killed and wounded. The Americans saved a large herd of horses for Lt. Col. John C. Fremont, who then later proceeded south to participate in the armistice at Cahuenga in January 1847. This battle was known as The Battle of Natividad and historic plaque number 651 is located on Crazy Horse Canyon Road, five miles northeast of Salinas.

From the 1860s to After World War I

In the early 1860's the Salinas Valley economy was based on ranching. Ironically, the Valley was deemed worthless for farming. Between 1861 and 1865 the Valley experienced years of extreme drought, followed by unprecedented flooding and cold weather, killing off 90 percent of the county's tens of thousands of black Spanish cattle. What proved to be a disaster to the ranchers became a blessing to the farmers. The floods washed rich topsoil from the hills and deposited them on the valley floor. The periodic flooding of river silt further enriched the land and from 1862 to 1875, and cultivated acreage more than tripled as wheat became the dominant crop.

Around this time, some significant changes began occurring in the Valley's agricultural patterns. Sugar beets had been planted on over 23,000 acres and dry beans and peas occupied another 18,000 acres. The year 1919 brought even more changes. With the fading of World War I, so did the demand for dry beans and sugar. Sugar beet acreage increased at the time only to be met by a decrease in demand due to the end of World War I. This caused prices to fall which, combined with the spread of "curly top disease" and a decline in seed quality, severely impacted sugar beet production. Farmers needed a new crop to grow and found great success growing lettuce. The farmers nicknamed this profitable crop "green gold". This crop, along with artichokes and broccoli, was the beginning of a new era in Salinas Valley farming that continues to this day.

The Early History of Soledad

One of the major events in history that affected the City of Soledad took place in Salinas. A cattle rancher by the name of Eugene Sherwood understood the importance of the railroad in getting the agricultural products of the area to market. Sherwood offered Southern Pacific Railroad free acreage for right-of-way and a depot, which opened in 1872. That was the year Salinas City became the Monterey County seat. Two years later it was incorporated as a charter city. By 1939 over 1,000 railcars of artichokes, 24,000 cars of lettuce and 7,000 cars of other vegetables were shipped from the Salinas Valley, which emerged as the leading producer of row crops in the country.

With the railroad transporting produce to San Francisco and Los Angeles, Soledad farmers now had a fast way to sell their goods, enabling them to prosper in farming as never before. Just two years after the Salinas depot opened, the settlement of Soledad proper began with the development of two small hotels, a feedlot, post office and a store. The population rose to 54 residents in 1875. On February 6, 1876 the Monterey County Board of Supervisors upgraded the Soledad Township.

Soledad was located on the San Vincente Rancho (14,000 acres) owned by Esteban and Catalina Munras. In 1884 Catalina Munras donated 2 acres for the township cemetery. In 1886 the City was laid out into lots for sale to the general public. The arrival of the Southern Pacific Railroad led to rapid growth, due to the railroad's shipping of products for export.

Soledad's original agricultural base prospered on cattle, wheat and barley until the 1890's when an influx of Swiss and Swedish immigrants established dairy operations in the area. The community's agricultural base changed in the 1920's to the development of row crops. This increased Soledad's population of temporary agricultural workers, as portrayed in John Steinbeck's novel, "Of Mice and Men" which used Soledad as a backdrop.

The City of Soledad was officially incorporated as a municipality by the State of California on March 9, 1921. The City's official name, Soledad, was derived from the Mission Nuestra Señora de la Soledad. (Soledad meaning "solitude").

Drawn by the available agricultural work, the community experienced a marked increase in the Mexican and Filipino populations in the early 1930's, which continued through the 1940's.

The City's economic base diversified in the 1940's, with the establishment of the California Department of Corrections' Soledad Training Facility located 3 miles north of the City. The facility was officially annexed to the City in 1992. The Correctional Training Facility expanded in 1996 with the addition of the Salinas Valley State Prison.

Archaeological Resources

Native American archaeological sites in this portion of Monterey County tend to be situated at the base of hills and on the valley floor near sources of water. The only source of constant flowing water is the Salinas River. Consequently, there is low potential for identifying Native American cultural resources elsewhere in the study area.

An archival search of maps, records and literature on file at the Northwestern Information Center of California Archaeological Site Inventory was conducted and given the file number 04-450 in 2004. A search of State records was conducted to ascertain if any archaeological sites or surveys existed within one-half mile of the General Plan area and if any cultural resources were listed on inventories. There were no recorded Native American sites listed with the Historic Resources Information System for the planning area. Two historic sites, one consisting of Highway 101 and the other the Los Coches Adobe, are located within the Plan area. The Los Coches Adobe, along with three sites located outside the Plan area which include Mission la Soledad, the Rancho Los Coches, and the North Chalone Peak Fire Lookout Station are listed on the National Register or eligible for listing. Most of the surveys in the area have occurred in conjunction with the railroad or highway; only 10% of the planning area has been surveyed.

Hispanic Culture

Soledad has a sizeable Hispanic population, according to the 2000 US Census. The Hispanic culture is rich in history, religion and tradition. Traditional events such as Dia de Independencia, Cinco de Mayo, Dia de los Muertos, and Semana Santa are celebrated in the City. Ballet Folklorico events take place in town and there are numerous traditional Mexican restaurants.

Impacts

Impact C-1: Development of the land uses contemplated by the draft Plan could unearth or disturb previously undiscovered resources of cultural or historic significance. This impact is considered significant unless mitigated (Class II).

Although a records search of known archaeological sites within the City's Plan area did not reveal any previously discovered sites aside from Highway 101 and the Los Coches Adobe, development of land uses accommodated by the draft Plan could reveal previously undiscovered resources of significance.

Impact C-2: Development in accordance with the draft Plan could alter the historic character of the City. This impact is considered significant unless mitigated (Class II).

The City possesses a number of older and architecturally significant buildings in the downtown and elsewhere, including the Los Coches Adobe. The Office of Historic Preservation records include more than a dozen buildings in and around Soledad whose significance has yet to be determined. New development could adversely affect the historic context and character of these and other buildings and neighborhoods.

General Plan Policy Response

L-49 The form, scale and character of new residential development shall emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks.

L-52 Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.

Archaeological and Cultural Resources

C/OS-23 If development of a site uncovers cultural resources, the recommendations of Appendix K of the Guidelines for Implementation of the California Environmental Quality Act (Public Resources Code Section 15000 et seq.) shall be followed for identification, documentation, and preservation of the resource.

C/OS-24 The City shall document and record data or information relevant to prehistoric and historic cultural resources which may be impacted by proposed development. The accumulation of such data shall act as a tool to assist decision-makers in determinations of the potential development effects to prehistoric and historical resources located within the City.

Programs

8.5 The city shall amend the zoning ordinance to include the following or similar language:

The demolition or remodel of buildings considered to be of historic, cultural or architectural significance shall not occur unless the following findings can be made:

Remodel or Alteration
The proposed remodel or alteration does not adversely affect the historic, cultural or architectural significance of the building or site.

Demolition
The demolition of the building does not adversely affect the historic, cultural or architectural character of the City of Soledad, or the building presents a clear hazard to occupants or to the public, which cannot be feasibly corrected through restoration.

8.9 The City shall undertake a survey and documentation of potentially historic buildings and structures with the City of Soledad and the Planning Commission and shall establish policies for the preservation and restoration of such buildings and structures.

Mitigation Measures

The following additional implementation program is recommended to reduce potential programmatic impacts to a less than significant level.

8.10 The City will amend its development review regulations to incorporate the following:

1. During the environmental review process, all proposed projects, as warranted, shall receive further study to determine if archaeological resources and/or the historic built environment could be significantly impacted by project implementation. In most cases this will entail a records search at the NIC and an archaeological field survey of the proposed site.
2. Dependent upon the results of the records search and field survey, the need or lack thereof for additional archaeological investigation will be determined. Additional work, if required, could include subsurface testing programs, evaluation of significance, data recovery excavations, and/or construction monitoring. A Native American representative shall monitor any earth disturbing work within documented Native American sites.
3. In developed areas, special consideration shall be given to structures potentially eligible for listing on the California Register and/or National Register of Historic Places. Any projects that will include modifications to structures over 50 years old shall be evaluated by a historian to determine if the project will result in any significant impacts to the historic built environment.

4. Potential damage to archaeological resources and/or to the historic built environment is to be given special consideration along with other planning, environmental, social, and economic considerations when making land-use decisions. Where development would adversely impact significant archaeological resources and/or a significant historic built environment, reasonable mitigation measures shall be required to reduce the impact to a less than significant level. Avoidance of impacts is the preferred mitigation, which can often be accomplished by project redesign.
5. All projects requiring earth disturbing activities shall have the following halt work order conditions attached as conditions of project approval:
    a. In the event that archaeological resources are exposed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.
    b. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC.

Analysis of Significance After Mitigation

Potential impacts to cultural and historic resources are considered less than significant after application of the recommended policies and programs.

V.11 Housing and Population

Issue

The Draft General Plan will accommodate additional population over the timeframe of the Plan which, in turn, will generate the need for additional housing.

Thresholds of Significance

According to the State CEQA Guidelines, a project will normally have a significant impact on housing if it will affect the existing supply of housing or create a demand for more housing. The Guidelines also assume a project could have adverse impacts on population if it has the potential to substantially alter the location, distribution, density or growth rate of the population of an area.

For purposes of this DEIR, the Draft Plan is considered to have a significant impact if adoption/ implementation would create a demand for more housing without providing for accompanying housing development, or if it would be inconsistent with the City's adopted Housing Element. This DEIR also considers it a significant impact if the Draft Plan would limit housing development substantially below that necessary to accommodate forecasted population growth.

Environmental and Regulatory Setting

Existing housing and population characteristics of the City of Soledad are summarized in Chapter I of the General Plan Background Report and the recently adopted Housing Element. Chapter IV. of this DEIR provides a summary of dwelling units and population, and projected growth under the Draft General Plan.

The General Plan Housing Element

Local governments must prepare and revise housing elements generally every five years to meet state-mandated requirements concerning housing needs. The Soledad Housing Element was last updated in 2003 (City of Soledad Housing Element, A Chapter of the Soledad General Plan, March, 2003). The Element includes data and analysis required by State law, including detailed demographic, income and other information, which is published separately from the draft General Plan. Among the issues addressed by the Housing Element are:

- *Soledad needs to continue to make efforts to achieve its regional allocation of housing for all income groups.*

Each city and county take steps to produce its share of housing to meet the region's housing needs. Table V11-1 describes Soledad's regional fair share by income category.

- *A priority of the Housing Element will be the preservation and rehabilitation of existing housing for low income households.*

The analysis contained in the 2003 Housing Element suggests that rental housing stock in Soledad can be considered "affordable" by regional standards. Therefore, a priority will be to preserve and rehabilitate existing housing first, and to allow existing housing to be demolished only in circumstances where it cannot feasibly be preserved.

- *There is a substantial need for rental housing for households with moderate and above moderate incomes.*

The Fair Share allocation and previous construction trends indicate that a substantial amount of the housing for low and very low incomes is provided by the marketplace in Soledad. The income category with the greatest projected housing need is for households with 'above moderate' incomes, or over 120% of the County median.

- *Housing for households with special needs, such as seniors, farmworkers, large families and households headed by single females needs to be addressed.*

Soledad has a large number of seniors and families headed by single females. There is also a high degree of overcrowding, due to the presence of large families in smaller rental units. The special needs of these groups are addressed by the Housing Element.

Fair Share Allocation: Overall Production Objective

The California Department of Housing and Community Development (HCD) estimates the statewide need for housing, which is then broken down into regions. Within each region, the area council of governments (in Soledad's case, the Association of Monterey Bay Area Governments) prepares a more specific regional distribution of the needs to the local counties and cities. This so-called "fair share allocation" is a specific number of units in different price ranges assigned to each local jurisdiction.

In 1990, AMBAG calculated that the City of Soledad should accommodate 1,192 new housing units by 1996 to achieve an overall housing inventory of 2,807 units. This represents about 200 units per year. Of this total allocation, about 20 percent (about 247 units) were needed for households with low, or very low incomes.

In January, 2000 the City was estimated to have about 2,669 units which was short of the overall target set by AMBAG. Still, the City has made considerable progress toward achieving its share of market rate (for moderate and above moderate incomes) housing which constituted the largest portion of the City's fair share requirement in 1996.

Also in 2000, AMBAG assigned a Fair Share Housing Allocation to Soledad of 1,283 units between 2000 and 2007. These estimates were further refined to include the 527 residential building permits issued between January, 2000 and November 2002 to arrive at an adjusted housing need of 799 units. Since 525 permits were for units affordable to 'above moderate' incomes, the remaining housing need by 2007 is as shown on Table V11-1.

TABLE V.11-1 ADJUSTED CITY OF SOLEDAD FAIR SHARE HOUSING ALLOCATION BY INCOME CATEGORY 2000-2007

	Very Low	Low	Moderate	Above Moderate	Total
AMBAG Allocation	263	234	304	482	1,283
Building Permits Issued From January 2000 to August 2002	0	0	2	525	527
Balance of Need	263	234	302	0	799

Source: AMBAG and City of Soledad

Based on past housing construction levels, the objective for lower income housing seems achievable. Between 1995 and 1999, about 615 building permits for residential construction were issued, or about 123 units per year. This total includes 100 units of multi-family rental dwellings, or about 40 percent of the projected housing needs for low and very low income households. The balance of 515 units constructed are affordable to households of moderate or high incomes, meaning that about 24 percent of the future allocation for this income group has been constructed. The remainder needed for each income group will be achieved through development of the land uses designated by this General Plan and adopted specific plans.

The Housing Element includes considerable detailed background information about the City's housing and population, including the following:

- The special characteristics of the city's population, including the total number of households, large families, female head-of-households, elderly, and other special needs groups;
- A determination of the cost of dwelling units by tenure and vacancy status that may be affordable to Soledad residents;
- An estimate of the number of low-income households by tenure paying more than 30 percent of their income for housing;
- Estimates of overcrowding;
- A discussion of the city's housing stock in need of repair and rehabilitation;
- A discussion of homelessness and available programs for the homeless in Soledad;

The overall goals of the Housing Element are:

- To provide an adequate supply of sound, affordable housing in a safe and satisfying environment for all residents of the City of Soledad, consistent with the housing allocation adopted by the Association of Monterey Bay Area Governments.
- To promote community character, livability, affordability and housing choice, by requiring an integrated mix of housing types in new residential areas.
- To promote the needs of persons who have special needs not readily addressed without community leadership, including the homeless, large families, senior citizens, and single parents.
- To encourage the maintenance, improvement, and rehabilitation of the city's existing housing stock and residential neighborhoods, with special attention on conserving existing affordable housing.
- To maintain balance in land use regulation so as to refrain from unnecessary governmental constraints on the production of affordable housing and to create incentive for the production of affordable housing.
- To promote the maintenance and improvement of energy efficiency in the city's existing and new housing stock.
- To ensure equal housing opportunities for all persons regardless of age, race, sex, religion, national origin or other barriers that prevent choice in housing.

The policies of the Housing Element are aimed at achieving the City's regional fair share housing allocation, as determined by AMBAG in 2000, along with meeting the City's specific housing goals and objectives. Among the topics addressed by the Housing Element are:

- Ensure that sufficient vacant land suitable for residential development is designated by the General Plan;
- Provide housing to meet the City's regional fair share housing need as determined by AMBAG;
- Ensure that City development standards and review procedures do not unnecessarily impede the development of housing in Soledad;
- Ensure that adequate public services and facilities are available to support the development of housing;
- Assist the private sector in providing housing affordable to low- and moderate-income households;
- Adopt rehabilitation programs to conserve the supply of housing;
- Support energy conservation programs to help reduce the cost of housing;
- Support efforts to eliminate housing discrimination on the basis of race, color, sex, religion, age, marital status, offspring or handicap;
- Provide housing for households with special needs, such as the elderly; large households; and the disabled;
- Lastly, the Housing Element identifies implementation programs to improve the supply of housing and meet the City's housing goals and objectives.

Assumptions

- New housing, population and employment growth will occur consistent with the development estimates in Chapter IV. of this DEIR.
- The City will continue to update the Housing Element in accordance with the timeframe and other requirements of State law.
- Resource and infrastructure constraints will not limit population growth to levels below those identified in Chapter IV. of this DEIR.

Implications of the Land Use Diagram

Impacts PH-1 Continued development of the City as contemplated by the draft Plan will result in considerable additional housing and population growth which in turn could affect the supply of affordable housing and the relationship between jobs and housing. This impact is considered adverse but not significant (Class III).

The Draft General Plan provides land in a range of residential densities to accommodate projected housing demand and population growth through the year 2020. The Draft Plan is consistent with, and builds upon, the adopted Housing Element and provides opportunities for a better balance of jobs and housing. Among the indirect effects associated with housing and population growth are conversion of agricultural land for urban development, increased traffic with associated air quality impacts, and increased demand for public services and facilities. These indirect impacts are discussed in the topical sections of this DEIR.

Housing and Population Growth

The population of Soledad includes residents within the incorporated limits of the City, as well as inmates at the Soledad Valley State Prison and Correctional Training Facility which was annexed to the City in 1992. In 1997, the prison was expanded bringing its total inmate population to 11,200. According to the California Department of Finance (DOF), the January, 2004 non-prison population for Soledad was about 15,000. Also according to DOF, the City had about 3,192 dwelling units as of January 2004, not counting dwellings approved or under construction

Based on historical DOF data, Soledad grew at an average annual rate of 4.7% between 1990 and 1999. Between 1997 and 1998, however, the pace of growth accelerated to about 10.5%, making Soledad the fourth fastest growing city in the state. During the same period, Monterey County had the second highest growth rate of all the counties in the state at 4.7 percent. If the City continues to grow at an average annual rate of 4.7%, Soledad could be home to some 28,000 residents (excluding the prison population) by the year 2020.

The draft General Plan will accommodate a non-prison population of about 28,000 residents by 2020 and 57,000 residents at full buildout, in addition to about 11 million square feet of commercial and industrial development. It should be noted that these figures represent an estimate of conditions at full buildout of the land designated for these uses inclusive of existing development. Assuming 3,192 existing dwelling units, the remaining residential development potential of the draft Plan is about 11,000 units that could be constructed within the City's Plan area.

Jobs-Housing Balance

Achieving greater balance among housing, shopping/retail and employment opportunities provides a more diverse, stable and resilient local economy. In Soledad, these relationships are out of balance in favor of residential development, and the situation is worsening with each new residential subdivision.

One measure of the relationship between residential and non-residential land uses is the ratio of jobs to housing. In Soledad, the number of full time, year round jobs is largely limited to the prisons, the School District, and the City of Soledad, with a few small retail enterprises. Based on phone interviews conducted in November, 1999, and data from the Department of Finance, there are currently about 3,200 jobs in Soledad (including the prisons) and about 3,192 dwelling units, for a jobs to housing ratio of about 1.0.

A ratio of 1.0 means that there area bout the same number of jobs as dwelling units, which would seem at first glance to be a positive sign. However, a straight comparison of dwelling units and jobs ignores a number of important factors such as the presence of more than one wage-earner per household, the wage scale in relation to the cost of local housing, and whether or not the jobs are matched by the skill mix of the local workforce.

Another useful comparison is the number of jobs provided in town with the number of employed (and employable) persons. According to the 2000 Census, Soledad had a total workforce of 4,188 persons (employed and unemployed persons). The majority of the workforce was employed in the agriculture industry and were very likely seasonal workers. Excluding seasonally employed persons (about 1,625 workers), the total workforce in 2000 drops to about 2,593, and the ratio of workers to local jobs (3,200) is about 0.8. A ratio less than 1.0 means that are more jobs than non-seasonal workers in Soledad.

The Land Use Diagram designates additional land for commercial and industrial development. Market forces will largely dictate the rate at which employment growth occurs in Soledad, although the City will continue to aggressively pursue economic development strategies as outlined in the Economic Development Element of the Draft General Plan. Land uses designated by the Land Use Diagram provide the opportunity for Soledad to achieve a better balance of jobs to housing and reduce commuting to employment centers outside the city. Assuming one job per 500 square feet of non-residential development, the Draft General Plan could accommodate as many as 22,000 jobs at buildout, and about 14,000 total dwelling units. Should this development potential be realized, the City's ratio of jobs to dwelling units would be about 1.57, or considerably more jobs than dwelling units. It should be noted that the draft Plan provides for development beyond twenty years and that buildout is not expected for at least forty years.

Ultimately, market forces will be the major factor determining the level of employment growth through the time frame of the Draft General Plan, although policies and programs of the Draft General Plan can assist in attracting and retaining businesses. By providing for an adequate supply of commercial and industrial lands in a range of locations and parcel sizes, the City seeks to provide adequate opportunity to meet the prospective needs of new commercial and industrial development.

Consistency With the Adopted City of Soledad Housing Element

The Draft General Plan has a longer planning time frame than the Housing Element and would therefore provide additional sites to accommodate projected housing development beyond 2002, the timeframe of the adopted Housing Element, and beyond 2007, the timeframe for the next required Housing Element update.

General Plan Policy Response

General

L-1 The Soledad general plan area is shown on Figure II-9. The land use designations and policies of this General Plan apply to the general plan area. Within the City's planning area, the City will support the following:

a. Apply the City Centered Growth Principles as recommended by the City Centered Growth Task Force;
b. Preserve agriculture on large lots outside the City's sphere of influence as it may be amended by the updated general plan;
c. No new Land Conservation Act contracts to be entered into within the sphere of influence;
d. No expansion of non-soil dependent land uses;
e. No urban services from the City unless an equitable cost and revenue sharing agreement between the City and the County is executed;
f. Execution of a Memorandum of Understanding with Monterey County formalizing the land use management strategy for the City's sphere of influence embodied in the items listed above.

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B.

L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.

L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.

L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development.

L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.

L-8 The City shall permit only low-intensity land uses in areas where natural conditions such as floodplains and steep hillsides are likely to pose a threat to public safety or produce excessive maintenance costs.

L-9 To help maintain the beauty of the City, property owners shall be encouraged to maintain their property in a neat and orderly manner. The City will continue to enforce the property maintenance standards of the Soledad Municipal Code.

Jobs/Housing Balance

L-10 The City shall monitor development and adjust land use designations and new residential project approvals as needed to promote a reasonable balance between employment-generating land uses and housing.

L-11 The City shall encourage large residential development projects to be phased or timed with development that will provide primary wage-earner jobs.

Residential Development

L-12 The City shall maintain an adequate supply of land in appropriate designations to accommodate projected household growth, maintain affordability to moderate and below moderate income groups, and maintain acceptable vacancy rates.

L-13 The City shall require that residential projects be designed to reflect and consider the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by the General Plan land use designations or zoning for a given parcel of land may not be realized.

L-14 The maximum allowable residential density for new residential subdivisions or development projects shall be computed based on the gross area of the lot before dedications for highway setbacks, parks, streets, or other requirements.

L-15 The City shall require new subdivided lots to be adequate in size and shape for the range of primary and accessory uses designated for the area.

L-16 The pace of new residential development should be such that new residents can be absorbed into the fabric of the town and existing residents are not overwhelmed by newcomers. This can be accomplished in part by requiring phasing of larger residential projects and by ensuring that adequate infrastructure and public improvements are in place concurrently, or in advance of new development.

L-17 Major new residential development is appropriate in the areas on the east and north sides of the developed portions of the City.

L-18 The infill of existing residential lots shall be encouraged.

L-19 In general, higher densities of residential development shall be located in areas served by the widest range of urban services, and shall be preferred along collector and arterial streets, within walking distance of schools, city parks and transit stops.

L-20 The approval of new residential subdivisions shall incorporate provisions to ensure that an appropriate amount of new multi-family development is constructed concurrently, or in advance of, new single family residences.

L-43 Specific plans prepared for major expansion areas shall incorporate the standards described in Appendix B – Standards for Specific Plans. In general:

a. New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves.
b. Subdivision design should emphasize pedestrian connectivity within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low-speed travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees.
c. Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan.
d. Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.

Adequate Sites and New Construction

H- 1 The City of Soledad shall promote the expansion of its LAFCO Sphere of Influence and annexation of additional land consistent with its General Plan Land Use Element to accommodate long-term demand for residential development.

H- 2 The City of Soledad shall ensure adequate vacant land suitably zoned for residential development and/or redevelopment is available to meet the city's housing need as identified by the Association of Monterey Bay Area Governments.

H- 3 The City of Soledad shall require new residential areas to contain a mix of housing types targeted to very low, low, moderate, and above moderate households in approximately the proportion that each of these income categories represent in the AMBAG Fair Share Housing Allocation.

H- 4 The City shall promote the development of affordable housing by maintaining an active grant writing program aimed at securing funds for affordable housing projects.

Special Needs

H- 5 The City shall provide incentives to housing developers that provide housing opportunities for large families in new residential development areas.

H- 6 The City shall require housing developers to offer an optional design to homebuyers whose household has one or more disabled person.

H- 7 The City shall support the redevelopment of dilapidated residential and commercial property for farmworker housing, transitional housing, and other special need populations.

Rehabilitation of Affordable Housing

H- 8 The City of Soledad shall coordinate with the Soledad Housing Authority and non-profit housing developers to rehabilitate housing units that are identified as needing rehabilitation in the 2002 Housing Conditions Survey (Laurin Associates, Inc., 2002).

Removal of Development Constraints

H- 9 The City of Soledad shall ensure that city site improvement standards, development review procedures, and development fees do not unreasonably constraint the development, conservation, and rehabilitation of housing.

H- 10 The City of Soledad shall ensure the availability of adequate public facilities for the expected housing need of the city.

Energy Conservation

H- 11 The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.

Equal Access

H- 12 The City of Soledad shall support efforts to eliminate housing discrimination on the basis of race, color, sex, religion, age, marital status, off-spring, or handicap.

Programs

2.1 The City will pursue an application to the Monterey County Local Agency Formation Commission for an amendment of its sphere of influence consistent with this General Plan.

2.2 The City shall work with Monterey County to adopt a memorandum of understanding regarding future development within the City's planning area consistent with policy L-1.

2.3 The City will amend its zoning ordinance and district map to reflect the land use designations and related policies of this General Plan. Where necessary, new zoning districts and standards applicable to Soledad shall be created.

2.4 The City will amend the zoning ordinance to include provisions for incentives for projects and land uses that provide a substantial economic or other direct benefit to the community.

2.5 The City will use redevelopment and other funding mechanisms to help revitalize the Downtown and other portions of the City.

2.6 The City shall prepare, or cause to be prepared, specific plans as deemed necessary for areas designated *Expansion Area.*

2.7 The City shall establish a land use and development database to monitor the jobs/housing balance in Soledad.

Adequate Sites and New Construction

4- 1 The City shall actively seek amendment of its LAFCO Sphere of Influence and annexation of land identified in the General Plan Land Use Element as necessary to maintain an adequate number of sites upon which housing for all income categories can be developed.

4- 2 The City shall require that specific plans developed for areas annexed after July 1, 2003 and project plans for the Miravale II project area prescribe the proportion of very low, low, and moderate-income housing to be built in the area. At a minimum, 15 percent of the housing in a specific plan area and in the Miravale II project area must be affordable to very low-income households, 14 percent must be affordable to low-income households, and 25 percent must be affordable to moderate-income households. In all specific plan areas and the Miravale II project area, development must be organized into functioning neighborhoods that contain very low, low, and moderate-income housing that is fully integrated with market-rate single family housing.

4- 3 The City shall require each subdivision approved within a specific plan area or the Miravale II project area to be bound by a development agreement with the City of Soledad that prescribes the proportion of very low, low, and moderate-income housing to be built in the project, the location of these units within the subdivision, and the qualifying incomes of families to which the sale and re-sale of the units shall be limited. These parameters shall be consistent with the specific plan adopted for the area being developed.

4- 4 In drafting development agreements per Program 4.3, the City shall link housing affordability to housing type and development density to ensure design for all income categories. For very-low and low-income categories, new development areas shall achieve a minimum density of 18 dwelling units per net acre, and housing types shall be limited to multi-family, housing above commercial use, and single-room occupancy (SRO) units. For the moderate-income category, new development shall achieve a minimum density of 12 dwelling units per net acre, and housing types shall be limited to small-lot single family dwellings, attached single family dwellings, townhouse condominium, detached second units, and multi-family dwellings.

4- 5 The City may, at its sole discretion, waive all or part of the requirements of Program 4.4 where the developer can demonstrate to the satisfaction of the City that alternative densities and housing types will result in a development plan that is consistent with the applicable specific plan or Miravale II development plan per Program 4.2, is consistent with the applicable development agreement per Program 4.3, and is superior in design to what would otherwise be required.

4- 6 In drafting development agreements per Program 4.3, the City of Soledad shall ensure that all affordable housing prescribed for a development area by a specific plan or the Miravale II development plan will be constructed concurrently with any above moderate-income housing being constructed in the area.

4- 7 The City shall actively assist qualified developers in preparation of applications for State and Federal housing grants and loans as they become available and in finding appropriate land suitable for affordable housing development.

4- 8 The City shall adopt an ordinance giving priority for new sewer hook-ups to development projects that include price-restricted housing affordable to lower and moderate-income households when it determines that a sewer capacity shortfall is anticipated in the near term.

Special Needs

4- 9 The City shall amend Chapter 17.39, Density Bonus, of the Soledad Zoning Ordinance to require the City to grant a requested density bonus to housing projects in which at least 20 percent of units are four-bedroom units. The thresholds for determining the exact size of the density increase shall be determined during drafting of the ordinance.

4- 10 In drafting development agreements per Program 4.1, the City of Soledad shall require developers to offer an optional design to homebuyers whose household has one or more disabled person.

4- 11 The City of Soledad shall at its discretion use Community Development Block Grant Funds to assist in the retrofit of housing units to allow use by qualifying very low and low-income residents whose household has one or more disabled person.

4- 12 The City of Soledad shall amend its Zoning Ordinance to allow the development of Single Room Occupancy (SRO) Hotels, Boarding Houses, and other forms of second story residential use, in the C-1 Zoning District as conditional uses to help meet the housing needs of migrant farm workers. The city should also provide development standards for SRO facilities, identify potential sites suitable for SRO development, and investigate possible funding sources for such development.

Rehabilitation of Affordable Housing

4- 13 The City, in coordination with the Soledad Housing Authority or other non-profit groups, shall apply annually for CDBG rehabilitation funds.

4- 14 The City shall include information on its webpage for developers and low-income households which details the programs available to both parties for assistance in the development and rehabilitation of low income housing.

Removal of Development Constraints

4- 15 The City shall revise Section 17.14.020 of the Soledad Zoning Ordinance (R-3 District) to delete reference to "single-family dwellings" as a permitted use and to establish a minimum density per acre.

4- 16 The City of Soledad shall amend its multi-family residential zoning districts to permit multi-family development that conforms to the base density of the districts, by right (i.e. no use permit required). In the case of the R-3 District, densities up to a maximum of 22 dwelling units per acre shall be allowed without a conditional use permit. The City shall also ensure that any new

zoning created by a specific plan for multi-family development permits multi-family development of any size by right.

4- 17 The City shall amend its second unit provisions contained in the residential zoning districts and Section 17.38.260, Second Residential Units, of the Soledad Zoning Ordinance to make them consistent with new state law (AB1866 2002) that governs processing of permits for second housing units. The revised sections shall make approval of second units a ministerial act.

4- 18 The City shall amend the Soledad Zoning Ordinance to allow processing of housing retrofits that accommodate disabled persons, without discretionary review (i.e., ministerial action only).

4- 19 The City of Soledad, through the development of a Capital Improvement Program, shall continue to require that sufficient water and wastewater treatment resources are available or under development to meet the expected needs of residential development in Soledad.

Energy Conservation

4- 20 The City shall amend its subdivision ordinance to implement provisions of the Subdivision Map Act related to subdivision orientation for solar access. The City shall also amend its public improvement standards to require the planting of large-canopy deciduous trees in new subdivisions in formations that will create shade for streets and homes during hot summer months. The City shall seek ways to subsidize the cost of such landscaping.

4- 21 The City shall encourage existing residents to participate in energy efficiency retrofit programs offered by the California Energy Commission, the California Public Utilities Commission, Pacific Gas and Electric, and The U.S. Department of Energy.

Equal Access

4- 22 The City will disseminate information in Spanish and English from the Housing Authority and Department of Equal Housing and Employment regarding fair housing laws. Information will be distributed to bus operators, the Soledad Public Library, local social service offices, and community and senior centers in Soledad.

4- 23 The City will refer persons experiencing discrimination in housing to California Rural Legal Assistance.

Mitigation Measures

No mitigation measures beyond the policies and programs of the Draft General Plan and Housing Element are necessary.

Analysis of Significance After Mitigation

Impacts to population and housing are considered less than significant.

V.12 Consistency With Adopted Plans and Policies

Issue

Implementation of the 2004 Soledad General Plan may conflict with plans and policies previously adopted by other agencies with jurisdiction in and around the City's plan area.

Thresholds of Significance

Implementation of the draft Plan would have a significant impact if it were to result in:

- A conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Plan area for the purposes of avoiding or mitigating an environmental impact; or
- The physical division of an established community;

Notwithstanding the first threshold of significance provided above, the fact that a comprehensive amendment of a city's general plan might be inconsistent with goals, policies and programs currently set forth does not in itself constitute a significant impact (Baldwin v. City of Los Angeles (1999) 70 Cal. App 4th 819,842-843). Rather, inconsistency with current City policies that imply some level of environmental protection is simply an indication that adoption of the new Plan might lead to adverse effects on the physical environment. Under CEQA, significant environmental effects must involve an adverse change in physical conditions, as opposed to mere inconsistency with existing plans and policies.

It should also be noted that policy language in any plan is subject to varying interpretations. Given this, some aspects of the recommend policies and programs of the 2004 Plan may be difficult to evaluate with respct to consistency or inconsistency with other plans and policies. Case law on this subject provides some guidance. First, the courts have consistently ruled that the meaning of general plan policies is to be determined by the governing agency (City or County), as opposed to, say, the staff or consultants, or members of the public. Second, the agency's interpretations of such policies will prevail if they are "reasonable" even though other reasonable interpretations are possible. The courts have also recognized that, because general plans aften contain numerous policies emphasizing different legislative objectives, a given action (such as adoption of a general plan amendment) may be "consistent" when taken as a whole, even though certain aspects may be inconsistent.

Local Agency Formation Commission Policies and the City's Sphere of Influence

In 1985, the various state laws regulating city and special district organization and annexations were consolidated in the Cortese-Knox Local Government Reorganization Act (Government Code Section 56000 et seq.). The 1963 Knox-Nisbet Act, which was superceded by Knox-Cortese, created local agency formation commissions (LAFCOs) in each county in California to regulate the organization and extension of services provided by cities and special districts. The Act declares that:

> *"...among the purposes of the commission are the discouragement of urban sprawl and encouragement of the orderly formation and development of local agencies based on local conditions and circumstances. One of the objects of the commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local agencies in each county and to shape the development of local agencies so as to advantageously provide for the present and future needs of each county and its communities..." (Government Code Section 56301).*

In meeting these responsibilities, each LAFCO is required to

> *"...review and approve or disapprove, with or without amendment, wholly, partially, or conditionally, proposals for changes of organization or reorganization"* (Government Code Section 56375).

According to Section 56021, "change of organization" means any of the following:

- A city incorporation
- A district formation
- An annexation to, or detachment from, a city or district
- A disincorporation of a city
- A district dissolution
- A consolidation of cities or special districts
- A merger or establishment of a subsidiary district

As the basis for making decisions about organizational changes and annexations, LAFCO must adopt a sphere of influence for each local agency subject to LAFCO regulation. The Cortese-Knox Act defines a sphere of influence as a "...plan for the probable ultimate physical boundaries and service area of a local agency..." (Government Code Section 56076). In practice "ultimate" is typically defined as twenty years. Under Section 56080, this can include the identification of an urban service area which identifies an area within a city's sphere of influence that is served by urban facilities, utilities and services, or which is proposed to be served during the first five years of an adopted capital improvement program.

In determining the sphere of influence for each local agency, the LAFCO must consider and prepare a written statement of its determinations with respect to each of the following:

- The present and planned land uses in the area, including agricultural and open space lands;
- The present and probable need for public facilities and services in the area;
- The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide;
- The existence of any social or economic communities of interest in the area if the commission determines they are relevant to the agency;

Once the spheres are adopted, LAFCO decisions must be consistent with applicable spheres. This means that LAFCO may not approve city annexations outside the adopted sphere of influence for a city.

In 2000, amendments were enacted to provisions of the California Government Code relating to the responsibilities of Local Agency Formation Commissions (LAFCOs) in deciding local government reorganizations. Renamed the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act), the law now requires that service reviews be conducted in order to prepare and update spheres of influence. The service review is intended as a decision-making tool that includes an evaluation of existing and future service conditions and a review of the advantages and disadvantages of various government service options. Government Code §56430 requires the preparation of a service review concurrently or in advance of the establishment or update of a sphere of influence.

In conducting the service review, §56430 requires that LAFCOs adopt a written statement of determination with respect to each of the following factors:

- Infrastructure needs and deficiencies
- Growth and population projections for the affected areas
- Financing constraints and opportunities
- Cost avoidance opportunities
- Rate restructuring
- Opportunities for shared facilities
- Government structure options
- Evaluation of management efficiencies
- Local accountability and governance

Soledad's current sphere of influence is shown on Figure III-2. The following are selected LAFCO policies relevant to the Soledad General Plan update:

1. *LAFCO intends that its sphere of influence determination will serve as a master plan for the future organization of local government within the County. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.*

   Discussion: The 2004 Draft Plan does not recommend a revised sphere of influence for the City. Rather, the City intends to apply to LAFCo for an amendment of its sphere of influence following adoption of the updated Plan. At that time, the City expects LAFCo to determine its sphere of influence consistent with its policies and based on the City's ability to provide the full range of public services, including water supply; wastewater collection and treatment; storm drainage; and police and fire protection.

2. *The sphere of influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by the Commission shall be consistent with the spheres of influence of the agencies affected by those determinations.*

3. *Any proposal which is inconsistent with an agency's adopted sphere of influence shall not be approved until the Commission, at a noticed public hearing, has considered an amendment or revision to that agency's sphere of influence.*

4. *Inclusion within an agency's sphere of influence does not assure annexation to that agency. The Commission shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code Section 56841 et seq.).*

   Discussion: Once a sphere has been adopted by LAFCo, future reorganizations (annexations and detachments) within the City's general plan area must be within the City's adopted sphere.

5. *When possible, a single larger general purpose agency, rather than a number of adjacent smaller ones, established for a given service in the same general area will be preferred. Where an area could be assigned to the sphere of influence of more than one agency providing a particular needed service, the following hierarchy shall apply dependent upon ability to serve.*

   a. *Inclusion within a City sphere of influence.*
   b. *Inclusion within a multi-purpose district sphere of influence.*
   c. *Inclusion within a single-purpose district sphere of influence.*

   In deciding which of two or more equally ranked agencies shall include an area within its sphere of influence, LAFCO shall consider the agencies' service and financial capabilities, social and economic interdependence, topographic factors, and the effect that eventual service extension will have on adjacent agencies.

6. *Duplication of authority to perform similar functions in the same territory will be avoided. Sphere of influence boundaries shall not create islands or corridors unless it can be demonstrated that the irregular boundaries represent the most logical and orderly service area of an agency.*

   Discussion: When the outward urban expansion of the City occurs as contemplated by the draft Plan, the City intends to petition LAFCo to detach the territory from all underlying service providers and for the territory to be served by the City. Policies of the draft Plan require adequate public services to be available concurrently or in advance of such reorganization.

7. *The adopted sphere of influence shall reflect City and County General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the Cortese-Knox Act of 1985 (Government Code Section 56000 et seq.).*

   Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.

8. *Extension of urban type services promotes urban development and such development belongs in cities or areas of development concentration in the unincorporated area of Monterey County. In evaluating proposals involving urban development requiring an urban level of governmental services, the Commission will discourage the formation of new special districts or premature annexation of territory*

within existing city spheres of influence or logical expansion area. The Commission will discourage boundary change proposals involving urban development outside adopted city spheres of influence that have the potential to negatively impact prime agriculture or open space lands, public service capacity, existing local governmental agencies, or generally represents illogical growth patterns.

9. *This Commission, in recognition of the mandated requirements for considering impacts on open space lands and agricultural lands, will develop and determine spheres of influence for Cities and urban service districts in such a manner as to promote the long-term preservation and protection of this County's "Resources." The Commission believes the public interest will be best served by considering "Resources" in a broad sense to include open space, recreational opportunities, wildlife, and agricultural land. Sphere of influence determinations must conform with the Commission's Agricultural Preservation Policy adopted in November, 1979.*

   Discussion: The draft Plan provides more land for residential development than is necessary to meet the projected population growth of the City over the next twenty years. However, the draft Plan does not attempt to predict the direction of urban development within the area designated for urban development. Until land within the City's expansion areas is needed for urban development, policies of the draft Plan require that it remain in agriculture.

Monterey County General Plan and Related Land Use Regulations

The Monterey County General Plan and zoning ordinance govern land use in the unincorporated portions of the Soledad General Plan Study Area. The County General Plan was adopted in 1982 and has undergone minor amendments in the intervening years. In 1999, the County began a comprehensive revision of the general plan.

The County General Plan designates all unincorporated lands within the Study Area for agricultural uses with one exception: the area along Highway 101 north of Camphora Road is designated commercial and is developed with a variety of agriculture-serving businesses. The County General Plan describes the land use designations within the City's Planning Area as follows:

> **Commercial.** The Commercial designation covers the entire spectrum of business, retail, service and other commercial enterprises in the unincorporated county. Within the Planning Area the Commercial designation is applied to a collection of agriculture-related businesses along US Highway 101 between the City and the Prison. Within the City's plan area the "HC" Heavy Commercial zoning district is applied to these areas. The HC zone allows a wide range of commercial businesses that are more intensive in character than conventional retail. Such uses include warehousing; storage and fabrication; repair facilities; and trade centers. Other types of conditionally allowed uses (uses subject to approval of a conditional use permit) include service stations; contractors storage yard; trucking operations; agricultural processing plants; manufacturing; and wholesale distributors.
>
> Discussion: The area designated Heavy Commercial by the County lies outside the City's plan area along the 101 Freeway. The adjoining land within the City's plan area is designated as an expansion area where light industrial development is contemplated.

Agriculture is the predominant land use within the City's Planning Area. The County General Plan distinguishes between two sub-categories of the Agriculture designation within the Study Area, Farmland and Permanent Grazing.

Farmland. The Farmland designation is applied to parcels considered prime, of statewide importance, unique, or of local importance, as defined by the US Department of Agriculture. These areas are designated along the fertile floor of the Salinas Valley and generally surround the City of Soledad. The zoning district normally applied to the Farmland designation is the "F" Farmlands zoning district. Allowable uses include (but are not limited to) farming and vineyards; livestock farming and greenhouses; and single family dwellings not to exceed three in total per legal lot. Conditionally allowed uses include agricultural processing plants; farm employee housing; feed yards; and dairies.

Permanent Grazing. The Permanent Grazing designation is applied to areas with less productive soils and greater slopes which may be less desirable for irrigated agriculture but may still support livestock grazing as a viable agricultural enterprise. A 40 acre minimum parcel size is required. Within the City's Study Area, Permanent Grazing areas are located above the valley floor in the foothills of the Gabilan Range east of the City. The "PG" Permanent Grazing zoning district is applied to these areas. Allowable uses include livestock grazing and soil-dependent agricultural uses; greenhouses and farming; accessory structures such as barns, stables and storage; and water systems such as wells and storage tanks. Conditionally allowed uses include agricultural processing plants and non-soil-dependent nurseries and greenhouses.

Discussion: Most of the land within the City's plan area designated for urban expansion is designated as Farmland, except for the area above the 400 foot elevation within the Mirrasou Expansion area which is designated as Open Space. The expansion of urban development within the City's plan area will result in the permanent conversion of land designated Farmland to an urban use. Moreover, compatibility issues will arise at the interface between urban and farmland as the City grows outward and into agricultural areas. Impacts relating to agriculture are discussed in Chapter V.8: Agricultural Resources.

County General Plan Policies Relating to Agriculture

The County General Plan provides goals, policies and objectives for general land use categories that apply throughout the unincorporated areas. The following are selected polices that relate to the management and protection of agricultural resources and have a direct bearing on the Soledad General Plan.

Policy 4.1.3 *All farmlands designated as prime, of statewide importance, unique, or of local importance shall be protected from incompatible uses on adjacent lands.*

Discussion: The draft Plan provides policies and programs aimed at protecting viable agricultural resources while accommodating the outward expansion of the City.

Policy 30.0.1 *The County shall prevent non-agricultural uses which could interfere with the potential of normal agricultural operations on viable farmlands designated as prime, of statewide importance, unique, or of local importance.*

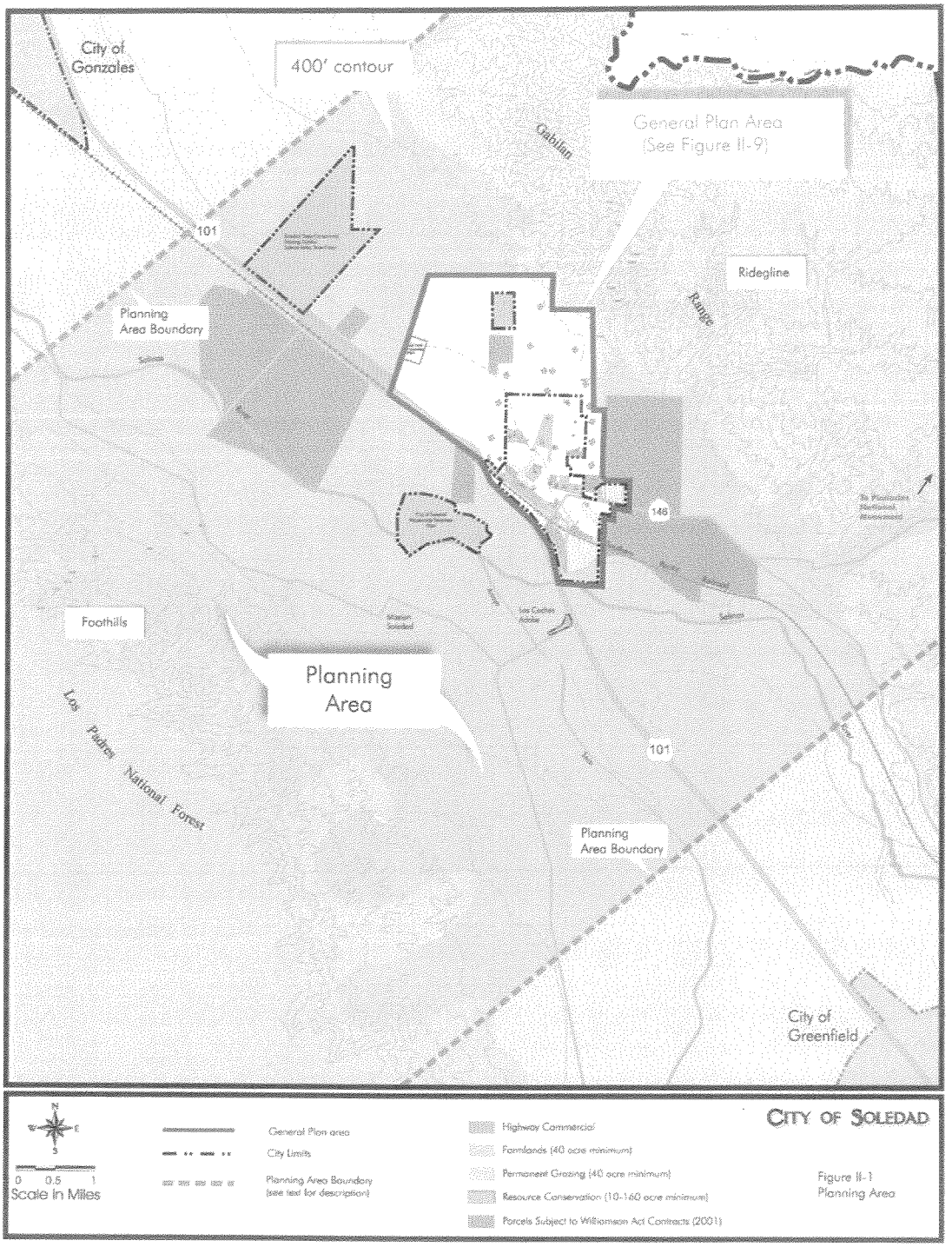
Policy 30.0.2 *The County shall require that permanent, well-defined buffer areas be provided as part of new non-agricultural development proposals which are located adjacent to agricultural land uses on viable farm lands designated as prime, of statewide importance, unique, or of local importance. These buffer areas shall be dedicated in perpetuity, shall be of sufficient size to protect agriculture from the impacts of incompatible development and to mitigate against the effects of agricultural operations on adjacent land uses, and shall be credited as open space.*

Discussion: The draft Plan does not provide for the establishment of a permanent buffer between urban development and ongoing agricultural operations.

Policy 26.1.13 *The County shall encourage infilling on vacant non-agricultural lands within existing developed areas and shall encourage new development within designated urban service areas. Infilling development shall be compatible with surrounding existing development.*

Discussion: Policies of the draft Plan encourage infill development first before expanding onto productive agricultural land.

Figure V.12-1: Monterey County General Plan Land Use Designations



City Centered Growth

In1994 Monterey County established a City-Centered Growth Task Force which grew out of efforts to address County-wide housing needs and the equitable allocation of future housing production among the member jurisdictions. The Task Force produced a statement of issues and assumptions on behalf of the member cities and Monterey County which express general agreement over strategies to address housing issues. Issues which expressed disagreement were set for additional discussion and a final report was presented to the Board of Supervisors and the respective city councils in 1995. Among the issues and assumptions reflecting general agreement among the members were:

- A commitment to the preservation and conservation of agricultural land because the fiscal health of both the County and cities are tied to agriculture. and,

- A large percentage of the unincorporated area's residential growth could and should be directed to the cities as long as development is financially viable and contains balance between residential, commercial and industrial growth opportunities for both the cities and County.

One of the action plans recommended by the Task Force was the possibility of allocating a portion of the County's housing requirements to cities. The Task Force also recommended that each member jurisdiction commit to incorporating City-Centered Growth principles into their respective general plans by June 30, 2000. Four general principles were recommended:

- Monterey County will recognize and support the concept that logical, planned growth patterns and direction of Salinas Valley cities require the use of agricultural lands. The County will allow the use of agricultural land for development adjacent to City boundaries and Spheres of Influence that is logical, well-planned and fiscally sound.

- In order to strengthen the economic base and service delivery capability of cities, the County will support economic development in Cities by directing commercial and industrial development to the Cities that is in the best interest of both the Cities and the County. The County shall encourage LAFCO to allow sufficient land within each City's Sphere of Influence to allow for commercial and industrial growth.

- The Cities and the County will work together to ensure that the regional fair share allocation process does not disproportionately place affordable housing requirements in the Salinas Valley area compared to other housing markets of the region. Should this be accomplished, the Cities will accept a fair share of the County's housing allocation. This will be accomplished by encouraging the redevelopment and rehabilitation of blighted properties, or through new construction, within Cities and unincorporated areas. The County will assist in financing these efforts using County Inclusionary Housing Fund.

- The existing property tax transfer process between the County and Cities shall be amended to provide adequate revenue to cities for the provision of services to areas annexed to cities, at the same time continuing to provide revenues for service the County is required by law to provide.

As of March, 2005 it is unclear how many jurisdictions have incorporated these principles. However, as part of the County General Plan update begun in 1999, the County is re-visiting the concept of city-centered growth as a county land use strategy. Nonetheless, the draft Plan incorporates the concept of City-centered growth.

Other Plans and Land Use Regulations/Agencies Affecting Soledad

Fort Ord Reuse Plan

Fort Ord was a US Army installation consisting of 28,000 acres situated between the cities of Marina and Seaside on the Monterey Peninsula. In the early 1990's the federal government concluded that the base was no longer necessary for the furtherance of national defense and ordered the base closed. In May, 1994, the Fort Ord Reuse Authority (FORA) was formed by special legislation (SB 899) to oversee the re-use of the former army base. Part of the re-use of the site is the conversion of a portion of the existing facilities into a university under the auspices of the California State University system. In August, 1995, classes began at the newly created California State University Monterey Bay while plans for reuse of the remaining portions of the base were undertaken.

In June, 1997, the FORA approved the Fort Ord Re-use Plan. The Plan focuses on three underlying themes - economic development, education/research, and environmental protection. It applies community development themes, phasing, and principles/goals for managing the growth and development of the former base.

The 1997 Base Reuse Plan serves as a general plan, with attendant environmental analyses for the former Fort Ord area. As specific projects are proposed within the context of the Base Reuse Plan, they may be subject to further planning and environmental assessment. Land uses considered in the Base Reuse Plan are:

Residential;
Office and research parks;
Light industrial and business parks;
Commercial and retail businesses;
A variety of visitor-serving uses such as lodging, golf courses, and equestrian facilities;
Open space

The Base Reuse Plan projects that about 35,000 people will be living at the former Fort Ord by the year 2015. The Base Reuse Plan defines land uses for the nearly 28,000 acres that comprise the former Fort Ord base as follows:

- Nearly 18,000 acres of land being preserved as endangered species habitat;
- About 4,000 acres for parks, open space, visitor serving, and public facility uses (10%);
- Over 2,300 acres for educational or research uses (9%);
- About 2,000 acres for new and (remodeled) existing residential units including single family homes, apartments, and other housing facilities (7%);
- Approximately 1,500 acres for business (5%) and retail (1%) uses;
- Nearly 800 acres to be retained by the Army (3%);

- About 1,100 acres for infrastructure/rights of way (4%).

Discussion: The closure and re-use of Fort Ord in accordance with the land uses described above will have a significant effect on the economy of the region, including Soledad. The magnitude of development accommodated by the reuse plan is equivalent to the development of a new town with a population of 35,000 residents, or roughly three times the current (2000) population of Soledad. Accordingly, the reuse plan will help satisfy a substantial portion of the regional demand for housing and job-generating land uses, which may temper the demand for such uses in Soledad over the next twenty or more years.

Air Quality Planning

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) shares responsibility with the California Air Resources Board (CARB) and U. S. Environmental Protection Agency (EPA) for ensuring that the State and national ambient air quality standards are met within Monterey County. The District is responsible for developing regulations governing emissions of air pollution, permitting and inspecting stationary sources, monitoring air quality and air quality planning activities. Federal-mandated air quality planning is regulated by the Clean Air Act Amendments of 1990 (CAAA).

The District adopted Air Quality Management Plans in 1991 and 1994 to address attainment of the state air quality standards. In 1997, the MBUAPCD published its 1997 Air Quality Management Plan, the most recent plan. The 1991 and 1994 AQMPs relied on implementation of Trip Reduction Ordinances to meet requirements. More recently, mandatory Trip Reduction Ordinances are prohibited by State law and can no longer be used.

Attainment of the PM10 standard is addressed in the "1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region." The California Air Resources Board indicates that a 20% reduction in 1987 ROG and NOx was needed by 1997 to meet the ozone standard. ROG emissions have been reduced by 36 percent and NOx emissions by 26 percent in this ten-year period in the region.

Discussion: The draft Plan provides policies and programs aimed at protecting air quality. Consistency with relevant air quality plans is discussed in Chapter V.3: Air Quality.

Integrated Solid Waste Management Plan

In September, 1989, the Governor signed into law the Integrated Waste Management Act of 1989. This Act establishes mandates for local agencies to achieve a 25 percent per year reduction in solid waste disposed by 1995 and a 50 percent reduction by 2000, relative to the waste generated in 1989. The Act superceded the California Waste Management Board and created the State Integrated Waste Management and Recycling Board. The Board's duties are to review county and city source reduction and recycling elements and to make recommendations concerning state actions needed to maintain an efficient and environmentally safe solid waste management infrastructure.

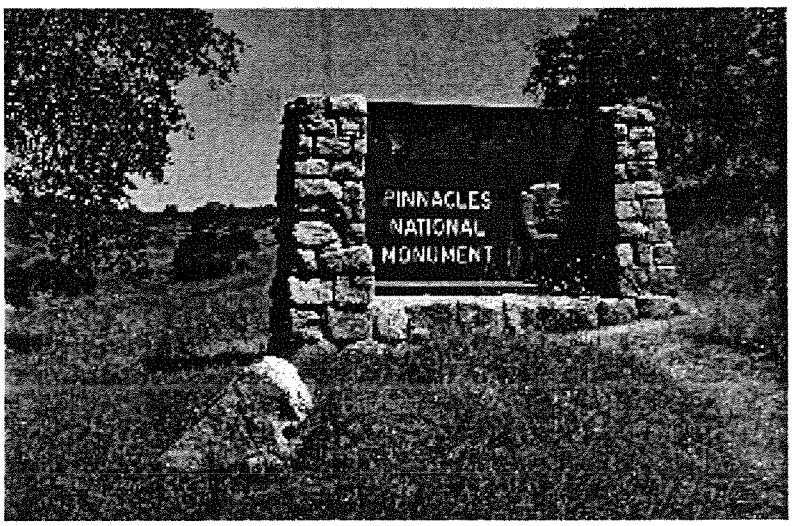
Each city is required to prepare, adopt and submit to the County a source reduction and recycling element which includes the following:

- Waste characteristics
- Source reduction
- Recycling
- Composting
- Solid waste facility capacity
- Education and public information
- Funding
- Special waste
- Household hazardous waste

Counties are required to prepare source reduction and recycling elements for unincorporated areas.

Discussion: The draft Plan provides policies and programs aimed at reducing the impact of urban development on available landfill capacity, consistent with the policies and programs of the Integrated Solid Waste Plan. Impacts to landfill capacity and consistency with the IWMP is discussed in greater detail in Chapter V.1: Public Services and Facilities.

Pinnacles National Monument Development Concept Plans



Pinnacles National Monument was established in 1908 and covers over 24,000 acres of unique volcanic formations in the Gabilan Range about 15 miles east of Soledad. Recreation activities accommodated by the Monument include hiking and rock climbing; picnicking; bird and other wildlife viewing; and camping. The Monument is surrounded by a mixture of public and private land holdings, including land administered by the Bureau of Land Management (BLM) and ranches used for grazing and wine grape production.

Management of the Monument is divided into the East Unit, accessed from State Highway 25 south from the City of Hollister, and the West Unit which is accessed from Soledad by State Highway 146. A management plan for the West Unit was adopted in 1992. Among the main recommendations of the plan are:

- Elimination of the campground and camping facilities;
- Relocation and reduction of the number of vehicle parking spaces;

- Construction of a visitor center.

Discussion: The purpose of the plan is to help protect fragile natural resources associated with the Monument, while enriching the experience of the visitor. No plans are currently being considered which would significantly expand visitor-serving facilities at the Monument. Policies of the draft Plan are aimed at taking advantage of the proximity of the National Monument to foster increased tourism to the Soledad area.

Association of Monterey Bay Area Governments (AMBAG)

The Association was organized for the permanent establishment of a forum for planning, discussion and study of regional problems of mutual interest and concern to the counties and cities in Monterey, San Benito, and Santa Cruz Counties; and for the development of studies, plans, policy and action recommendations.

AMBAG's Board of Directors is composed of locally elected officials appointed by their respective city council or board of supervisors. Each member city has one representative on the Board, while each member county has two. The AMBAG Board of Directors sets policy and oversees a small professional staff. AMBAG's funding comes primarily from the state and federal governments for mandated planning activities and grant projects. Local funding comes primarily from annual membership dues contributed by each member agency.

Among the topics and issues studied by AMBAG are:

- Regional population and demographics
- Air quality and transportation
- Water quality issues
- Regional data analysis using mapping techniques and geographic information systems (GIS)

AMBAG also produces plans and publications to aid local decision-makers and property owners. These plans address a wide range of issues such as management practices for groundwater resources; affordable housing; ridesharing programs; and programs for the protection of sensitive environmental resources.

Discussion: The draft Plan provides policies and programs aimed at protecting air and water quality consistent with AMBAG goals and objectives.

California Department of Fish and Game (DFG)

DFG has jurisdiction over all "waters of the state" including any lakes, streams, or rivers containing fish or wildlife resources. The Department of Fish and Game has authority over two permitting processes. Streambed Alteration Agreements are required for projects which alter the flow of any lake, stream or river in the State. Suction Dredging Permits are required for projects involving suction or vacuum dredging activities in State waterways. DFG also reviews projects for potential impacts to fish and wildlife resources in general and as they pertain to endangered or threatened animal or plant species under the California Endangered Species Act. DFG is required to issue a finding indicating whether a proposed project would "jeopardize" the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of the species.

Discussion: The draft Plan provides policies and programs aimed at protecting significant biological resources that may fall under the jurisdiction of DFG while accommodating the outward expansion of the City.

California Department of Transportation (Caltrans)

Caltrans has authority over all State highway and freeway rights-of-way, including easements and undeveloped rights-of-way which have been acquired in anticipation of future construction. Any project which proposes to construct a road connection or perform earthwork within a State highway or freeway must obtain an Encroachment Permit from Caltrans.

Discussion: Impacts to the State highway system are assessed in Chapter V.2: Traffic and Circulation.

The United States Army Corps of Engineers

Pursuant to the Rivers and Harbors Act, the Army Corps maintains jurisdiction over all navigable waterways (including nonnavigable streams, creeks, marshes, wetlands, and diked lands) and requires a permit for any work within these waterways.

Discussion: The draft Plan does not anticipate any direct impacts to waterways or resources under the jurisdiction of the Corps of Engineers.

Regional Water Quality Control Board (RWQCB)

The RWQCB maintains jurisdiction over discharges into all rivers, creeks, streams, and canals and regulates discharges to groundwater. Any project that will discharge wastes into surface waters must obtain waste discharge requirements from the RWQCB. These requirements serve as the Federal National Pollutant Discharge Elimination System (NPDES) Permit.

Discussion: The City is currently undergoing an expansion of the capacity of its wastewater treatment plant to accommodate present and future demand. Any increase in the capacity of the treatment plant must be approved by the RWQCB.

General Plan Policy Response

General

L-1 The Soledad general plan area is shown on Figure II-9. The land use designations and policies of this General Plan apply to the general plan area. Within the City's planning area, the City will support the following:

a. Apply the City Centered Growth Principles as recommended by the City Centered Growth Task Force;
b. Preserve agriculture on large lots outside the City's sphere of influence as it may be amended by the updated general plan;
c. No new Land Conservation Act contracts to be entered into within the sphere of influence;
d. No expansion of non-soil dependent land uses;

e. No urban services from the City unless an equitable cost and revenue sharing agreement between the City and the County is executed;
f. Execution of a Memorandum of Understanding with Monterey County formalizing the land use management strategy for the City's sphere of influence embodied in the items listed above.

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

C/OS-1 The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.

C/OS-2 The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.

C/OS-3 The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated Agriculture by the Monterey County General Plan.

C/OS-4 The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.

C/OS-5 The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.

C/OS-6 The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.

Scenic Resources

C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;

c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected;

d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;

e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and

f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.

Hillside Protection

C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.

b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety.

c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside.

d. Incorporate recreation and public access on or near hillsides consistent with this Element.

Programs

8.7 The City shall work toward the public acquisition as open space of areas with significant ecological resources where such resources cannot be effectively preserved through the regulatory process. Public protection may take the form of fee acquisition and/or open space easements and may be carried out in cooperation with other local, State and federal agencies, and private entities.

8.8 The City shall develop and adopt an ordinance requiring the dedication of open space lands, or the payment of open space mitigation fees, to provide and maintain open space. The ordinance shall further define geographic areas of benefit.

VI. Alternatives

Introduction

The California Environmental Quality Act requires the consideration of a range of reasonable alternatives to the proposed project. Section 15126.6(c) of the CEQA Guidelines states:

> *"...the range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination."*

Thus, the range of alternatives should have the potential to reduce or eliminate potential adverse impacts to a less than significant level, while achieving most of the basic objectives of the original project. The significant impacts associated with the recommended land use plan and the Wastewater Treatment and Disposal Master Plan are analyzed in detail in the topical chapters of this DEIR. They include (among others):

- The permanent loss of prime agricultural land (Class I, unavoidable and adverse);
- Traffic (Class II, significant unless mitigated);
- Cumulative air quality impacts (Class II, significant unless mitigated);
- Impacts to public infrastructure (Class II, significant unless mitigated);
- Impacts to water supply and groundwater (Class I, unavoidable and adverse)

Thus, alternatives that help reduce these significant impacts while achieving most of the basic objectives of the 2004 draft Plan (see Chapter III) would satisfy Section 15126.6 and provide a range of alternatives for consideration by the decision-makers.

The Process of Selecting Alternatives

General Plan Alternatives

A comprehensive revision of a general plan affords the opportunity to consider a broad range of policy options for future growth and development. Accordingly, a number of options for the future of Soledad were considered as part of the public outreach program that lead to the selection of the preferred Plan.

To obtain input directly from residents, the consultants conducted four public workshops. At the first workshop participants were asked to identify potential problems in Soledad and to describe their vision for the future of the community. The workshop was well attended and led to the development of a set of "planning principles" which became the guideposts for the preparation of the Plan. Based on this input, the consultant team prepared a series of land use alternatives depicting different visions for the future of the community. These in turn were shared with the community at a second workshop at which participants were asked to rate the different alternatives to express a preference. The preferred land use plan was one characterized as having a medium-high level of future development resulting in a 2020 population of about 28,000

residents and concentrating future development on the less productive farm land north and east of the City (see Figure VI-1). This concept plan, or *urban fabric diagram,* served as the basis for a draft plan that prepared and presented to the City in 2001.

Further along in the plan preparation process, the City was approached by the owners of property to the north between the existing City limits and Camphora-Gloria (Figure VI-2) who expressed interest in being a part of the City's long-range development plans. The City's consultants prepared three land use alternatives for these areas (the Braga/Silva properties) which were shared with the public at two additional workshops. All three alternatives incorporated the 2001 Plan while adding all or a portion of these new expansion areas to the area designated for urban development. The preferred land use plan was a hybrid of Alternatives II and III and formed the basis for the Land Use Diagram contained in the 2004 draft Plan.

The topical sections of this DEIR identify a range of potentially significant impacts associated with the preferred plan. Most notably are the following:

Water Demand. Future water demand at buildout of the draft Plan would worsen the current overdraft situation of the City's groundwater resources.

Wastewater Treatment. In 2005, the City's wastewater treatment system reached capacity. To accommodate existing and future development as envisioned by the draft General Plan , the City embarked on a comprehensive program to expand treatment capacity as described in the draft 2005 Wastewater Treatment and Disposal Master Plan. The Master Plan recommends significant improvements that would be necessary over time to accommodate increased flows associated with buildout of the draft General Plan.

Traffic. Traffic impacts associated with buildout of the draft Plan will be significant, especially cumulative impacts to Highway 101. In addition significant roadway, intersection and interchange improvements will be necessary to achieve and maintain an acceptable level of service on roadways serving the City.

Conversion of Agricultural Land. Development of the City's planning area with urban uses will result in the permanent conversion of about 3,000 acres of productive farmland to urban uses.

Air Quality. Although the draft General Plan seeks to achieve a greater measure of balance between housing and employment opportunities in Soledad, which would reduce the home-to-work commute, the overall increase in motor vehicle trips will result in a significant and unavoidable impact to air quality.

The alternatives considered in this DEIR seek to achieve most of the basic objectives of the draft Plan while reducing or minimizing the significant impacts identified above.

Wastewater Treatment and Disposal Alternatives

The main issue being addressed by the Wastewater Treatment and Disposal Master Plan is the deficient percolation capacity for treated wastewater. The recommended program involves renovating the treatment works and the existing ponds at the Soledad State Prisons wastewater facility to solve the near-term shortfall, and to acquire additional land for more percolation ponds adjacent to the existing wastewater treatment plant to provide capacity necessary to serve buildout. The other aspects of the Wastewater Master Plan that could result in significant effects

include construction activities associated with construction of a new pump station and pipeline from the existing treatment plant to the recommended percolation ponds adjacent to the wastewater treatment plant. There is also a risk of spill or overflow in the event of a malfunction of either the Prison or the City's wastewater treatment system.

Figure VI-1: Urban Fabric Diagram

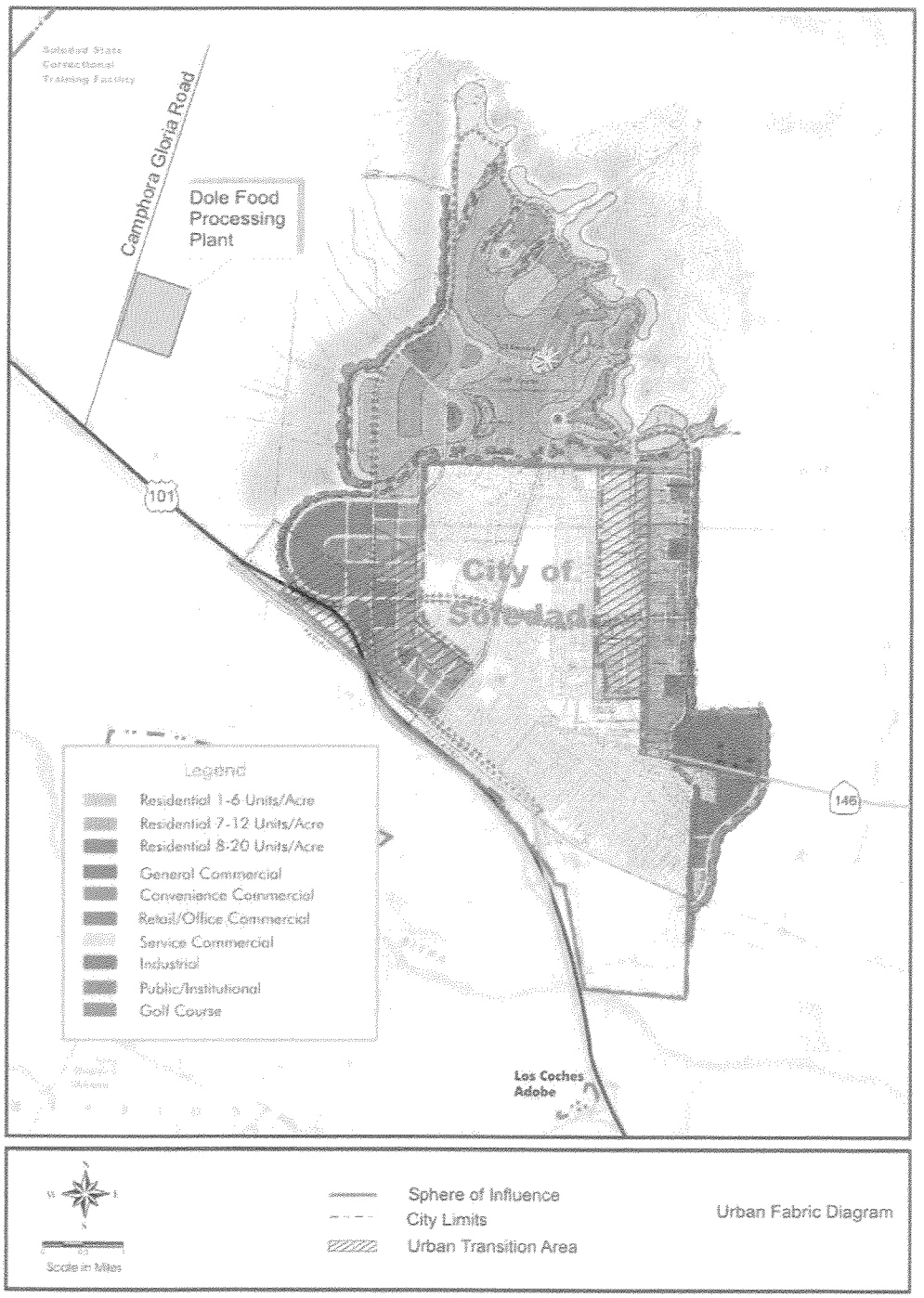
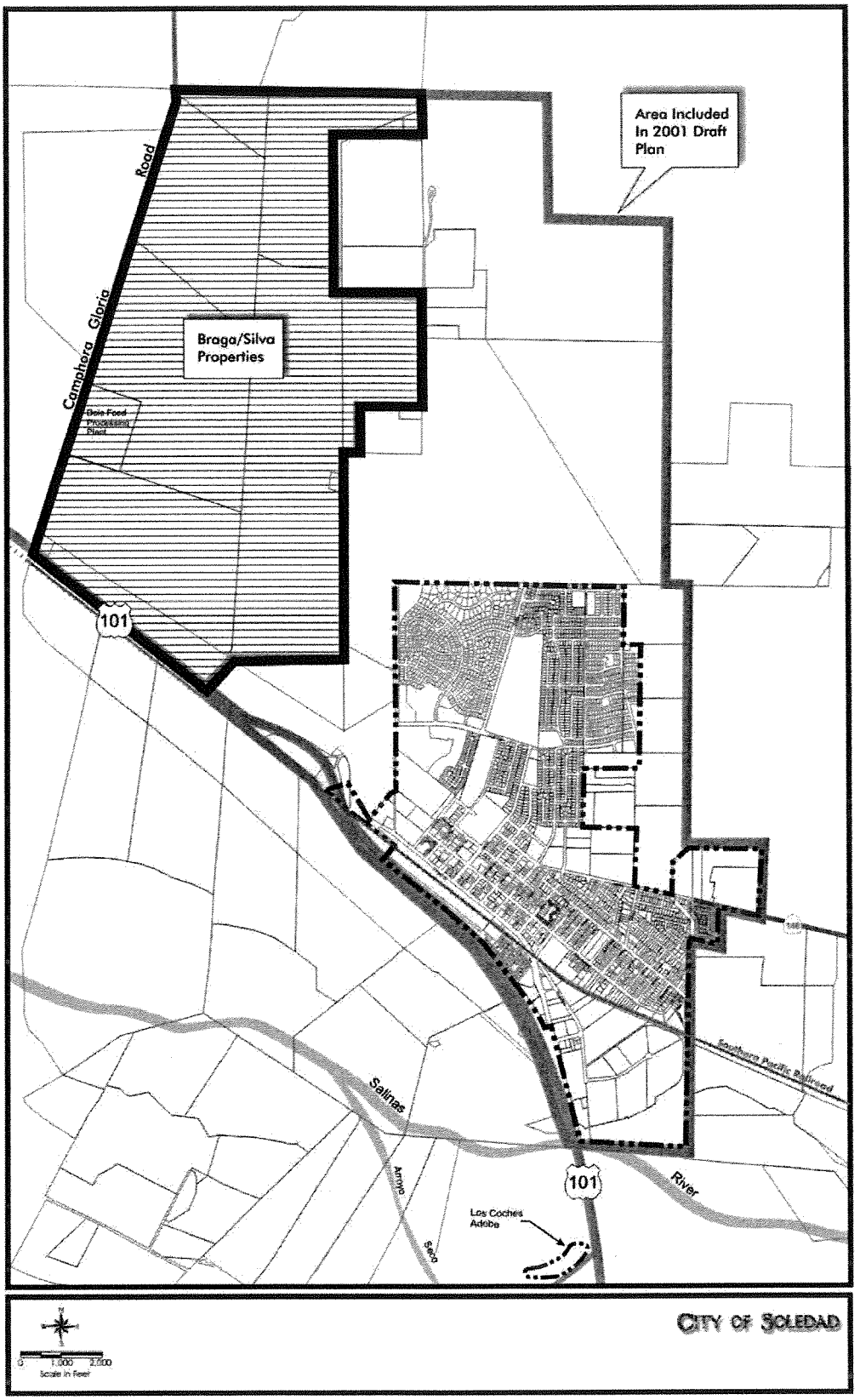


Figure VI-2: The Braga/Silva Properties



General Plan Alternatives Considered and Rejected from Further Consideration

Urban Expansion to the South

Under this alternative, the future urban expansion of the City would proceed to the south into the area shown on Figure VI-3. This alternative was rejected because:

- The property is currently encumbered by a Land Conservation Act and would not be available for urban development for at least twenty years (the time necessary to cancel the contract);
- The property consists of prime agricultural soils currently in production;
- Urban development of this area offers no environmental advantages over development to the east and north.

Urban Development West of the 101 Freeway

Under this alternative, future urban expansion would occur on the west side of the 101 Freeway. This alternative was considered and rejected because:

- Soils in this area are among the most productive in the area being in the bottom of the Salinas Valley;
- The cost and environmental constraints of extending public infrastructure, especially roads, water, sewer, storm drains, to serve urban development of this area would be prohibitively high;
- Urban development on the west side of the freeway and railroad right-of-way would be physically divided from the remainder of the City, making pedestrian and bicycle access to schools, shopping and employment difficult and expensive;
- Urban development of this area affords no environmental advantages to development east and north of the existing city.
- The City's wastewater treatment plant is located in this area and will need additional land for additional disposal ponds as contemplated by the 2005 Wastewater Treatment and Disposal Plan;
- One of the properties in this area is subject to a Land Conservation Act contract;
- The are lies within the 100 year floodplain of the Salinas River;

Figure VI-3: Urban Expansion to the South

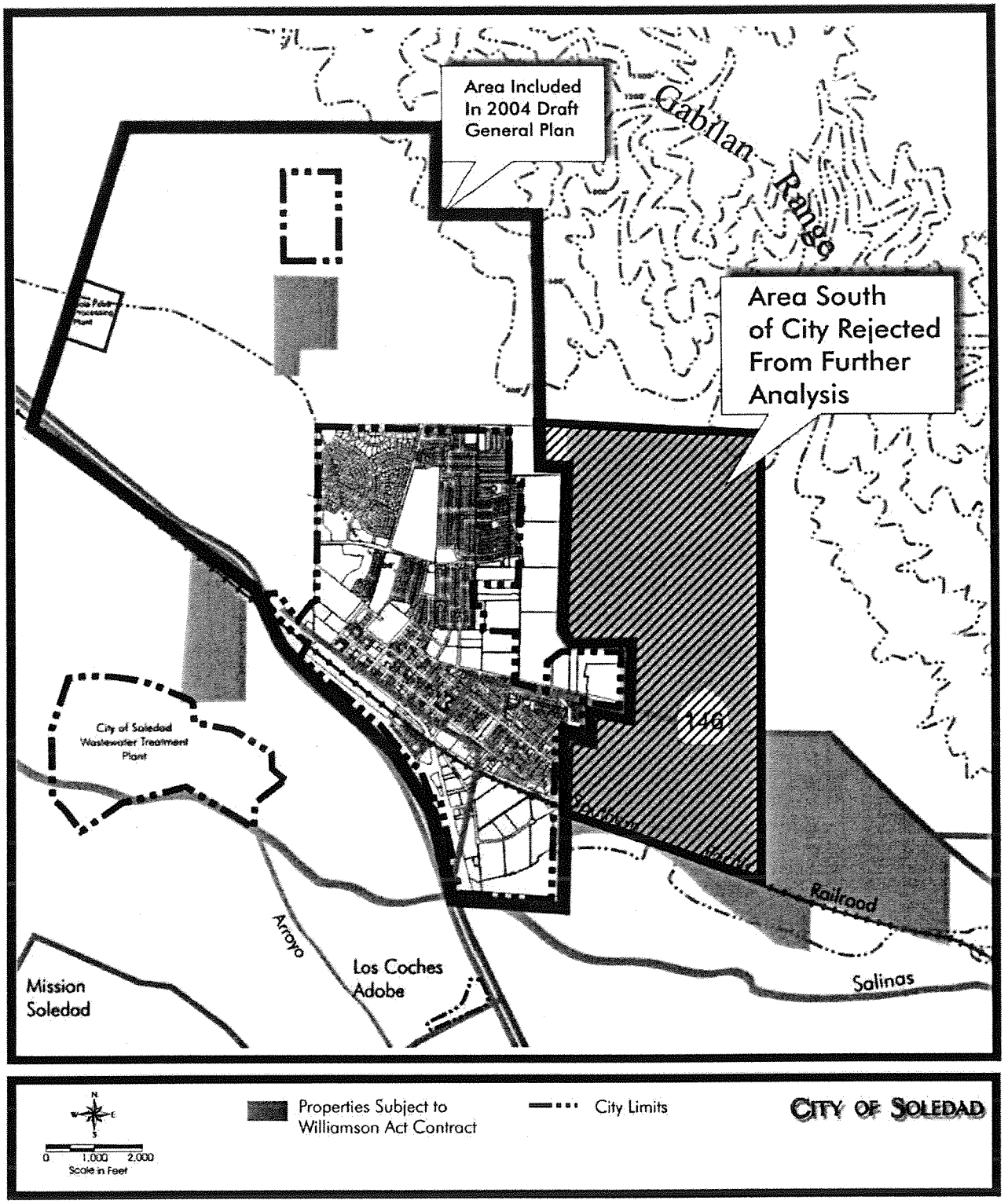
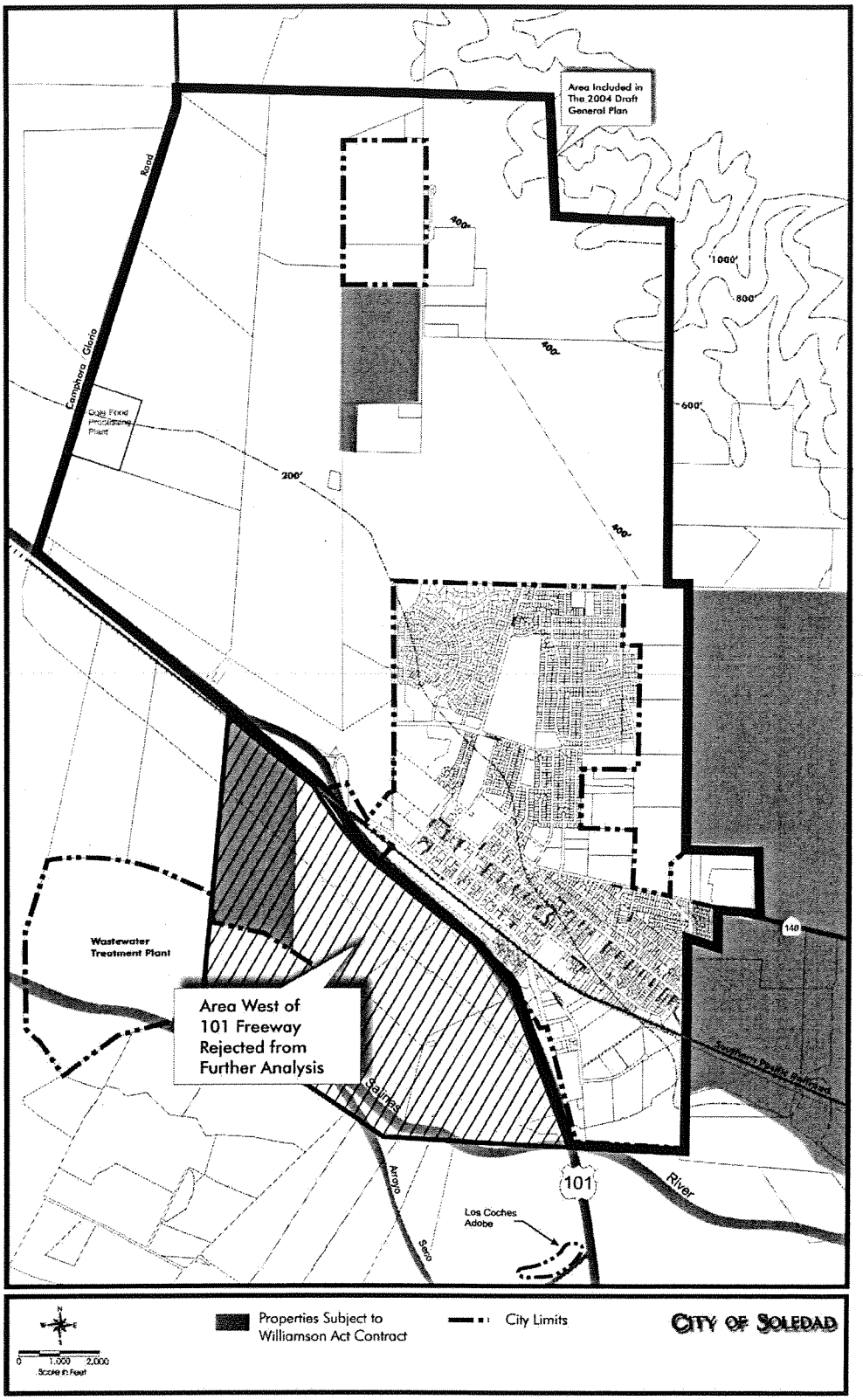


Figure VI-4: Urban Expansion on West Side of the 101 Freeway



General Plan Alternative A -- No Project

This alternative is required by CEQA and would constitute continued development of the City in accordance with the 1994 General Plan. Under this alternative, the remaining vacant land within the City's planning area and sphere of influence would be developed as prescribed in the existing adopted general plan. Impacts associated with the permanent loss of agricultural land, traffic, air quality, noise, public services, and other impacts would be considerably less with the No Project alternative because of the small amount of undeveloped land remaining within the City's planning area. However, few of the stated objectives of the 2004 draft Plan would be realized.

Summary of Potential Impacts

Table VI-1 provides a summary of the holding capacity of the 1994 General Plan, which is illustrated by Figure VI-5. In 2005, almost all of the land designated for urban development by the 1994 General Plan has been developed. The remaining undeveloped areas lie to the north along the 101 freeway and are designated for General Commercial, Highway Commercial (a strip of land bounded by the freeway and railroad tracks), Medium Density Residential and Public (PG&E substation).

The certified final EIR for the 1994 General Plan provides an estimate of impacts associated with buildout of the City, as follows.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 2.68 MGD at buildout of the 1994 Plan, an increase of about 23 percent. To meet this increased demand, the City's well production will need to be expanded as described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. As stated above, the City's wastewater treatment system reached capacity temporarily in the spring of 2005. To accommodate existing and future flows, the City has prepared the Wastewater Treatment and Disposal Master Plan. Buildout of the City under the currently adopted General Plan would increase wastewater flows from about 2.9 MGD to 3.7 MGD (about23 percent). This will involve diverting about 1.1 MGD to disposal leach fields previously operated by the Soledad Valley State Prisons.

Traffic. Motor vehicle traffic is expected to increase at buildout of the remaining land designated for urban development by the 1994 General Plan. Total estimated average daily trips is expected to increase by about 46 percent to around 70,000 total ADT citywide. Recommended roadway improvements funded by development impact fees (see Chapter V.2: Traffic and Circulation) is expected to maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 107 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the 1994 General Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 27 percent from 2005 levels.

TABLE VI-1: THE NO PROJECT ALTERNATIVE
Holding Capacity By Land Use Category

Land Use Category	Acres[1]	Building Intensity	Max. Estimated Holding Capacity (80% of max. dev. potential)		
			Dwelling Units[3]	Square Feet	Non-Prison Population[3]
Single Family Residential	780	6 units/acre	3,897	--	15,588
Medium Density Residential	50	12 units/acre	660	--	2,640
High Density Residential	34	20 units/acre	680	--	2,720
Commercial	132	FAR 0.2	--	919,987	
Industrial	137	FAR 0.3	--	1,432,275	
Parks/Schools/Other Public	132	FAR 0.2	--	--	
TOTAL[2]	1,265	--	5,241	2,352,239	20,948
2001 PRISON POPULATION:					11,200
TOTAL POPULATION AT BUILDOUT:					32,148

1. Source: 1993 Soledad General Plan and 2000 GIIS data;
2. Includes streets; excludes agriculture and open space designations.
3. Based on an average household size of 4.0 persons per household.

Figure VI-5: No Project Alternative

General Plan Alternative B -- The Foothill Plan

Under this alternative, urban development would be limited to the less productive agricultural land east of the City. The Foothill Plan Alternative is illustrated by Figure VI-6 and reflects the following characteristics:

- Sufficient residential land would be designated to accommodate nearly the same number of dwelling units at buildout as the draft Plan by increasing the amount of land designated for medium-density and high-density development;
- The area designated for a golf course in the draft Plan would be designated for residential and public/quasi-public development;
- Land for a 50 acre industrial park would be designated near the northerly interchange with Highway 101;
- The remaining land surrounding the City would be designated Agriculture;
- As with the draft Plan, buildout of the Foothill Plan Alternative would occur over a period of 30 to 40 years;

Table VI-2 provides a summary of the development holding capacity of the Foothill Plan alternative.

The Foothill Plan alternative preserves the productive agricultural lands to the north of the existing City while achieving most of the basic objectives for housing, commercial, and industrial development as the draft Plan. Development would be more compact but higher in density.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 6.2 MGD at buildout of the Foothill Plan, an increase of about 67 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Foothill Plan would increase wastewater flows from about 2.9 MGD to 8.7 MGD (about 67 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 54,700 by the year 2038, or about 6,000 less than the population accommodated at buildout of the Foothill Plan. To accommodate the added population beyond 2038, the capacity of the treatment system will need to be expanded by about 647,000 gallons per day (about 11 percent).

Traffic. Motor vehicle traffic is expected to increase significantly at buildout of the Foothill Plan. Total estimated average daily trips is expected to increase by about 72 percent to around 134,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 1,596 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Foothill Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 68 percent from 2005 levels.

Figure VI-6: The Foothill Plan

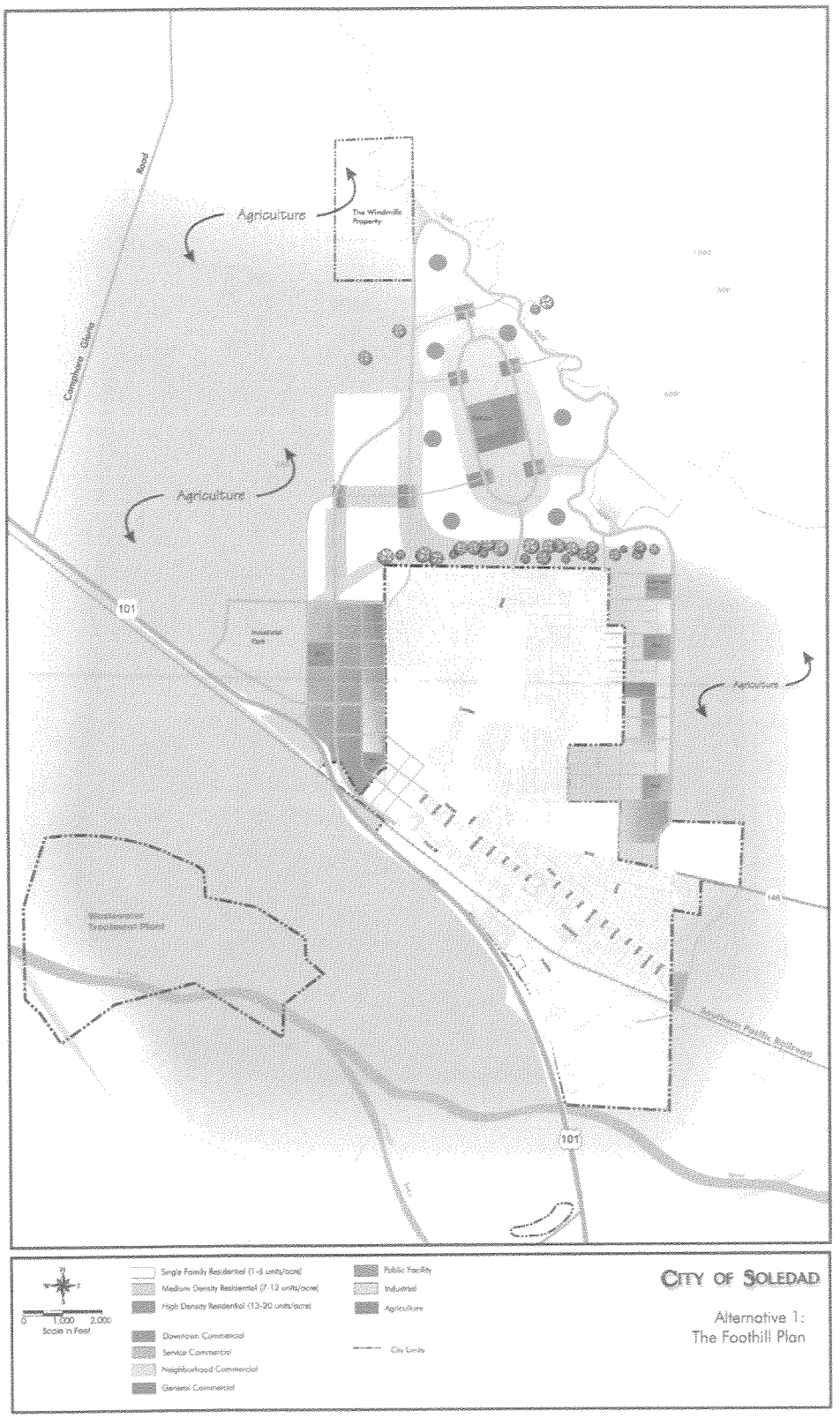


TABLE VI-2: THE FOOTHILL PLAN
Holding Capacity By Land Use Category

Land Use Category	Acres[1]	Building Intensity	Max. Estimated Holding Capacity (80% of max. dev. potential)		
			Dwelling Units[3]	Square Feet	Non-Prison Population[3]
Single Family Residential	1,135	6 units/acre	5,000	--	20,361
Medium Density Residential	367	12 units/acre	3,429	--	13,696
High Density Residential	239	20 units/acre	3,704	--	14,816
Commercial	148	FAR 0.2	--	1,800,000	--
Industrial	196	FAR 0.3	--	3,400,000	--
Parks/Schools/Other Public	383		--	N/A	--
TOTAL[2]:	2,468	--	12,218		48,873
2001 PRISON POPULATION:					11,200
TOTAL POPULATION AT BUILDOUT:					60,000

1. Source: CMCA
2. Includes streets; excludes agriculture and open space designations.
3. Based on an average household size of 4.0 persons per household.

General Plan Alternative C – The Camphora Gloria Road Plan

This alternative accommodates a similar population and dwelling unit holding capacity as the draft Plan by concentrating new development in the area shown in Figure VI-7. Table VI-3 provides a summary of the development holding capacity and acreage by land use categories associated with the Compact Plan alternative, which has the following characteristics:

- Sufficient land is designated to accommodate a similar residential and population holding capacity as the draft Plan, including land for a golf course;
- This alternative accommodates about the same amount of commercial development and about one-half of the industrial development accommodated by the draft Plan;
- As with the draft Plan, buildout of the Highway 101/Camphora Gloria Alternative would occur over a period of 30 to 40 years;
- The productive agricultural lands to the north and east would be preserved;

This alternative extends urban development outward from the existing City to Camphora-Gloria Road to the north and toward the foothills to the east, but preserves the productive agricultural lands beyond. An area for an industrial and service-commercial business park is provided in the area bounded by Camphora-Gloria Road, Highway 101.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 7.2 MGD at buildout of the Camphora/Gloria Plan, an increase of about 72 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Camphora/Gloria Plan would increase wastewater flows from about 2.9 MGD to 10.2 MGD (about 72 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 54,700 by the year 2038, or about 13,000 less than the population accommodated at buildout of the Camphora-Gloria Plan. To accommodate the added population beyond 2038, the capacity of the treatment system will need to be expanded by about 1.4 million gallons per day (about 23 percent).

Traffic. Motor vehicle traffic is expected to increase significantly at buildout of the Camphora Gloria Plan. Total estimated average daily trips is expected to increase by about 79 percent to around 178,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about 2,275 acres of additional productive agricultural land.

Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Camphora-Gloria Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard

(see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 79 percent from 2005 levels.

Figure VI-7: The Highway 101/Camphora-Gloria Alternative

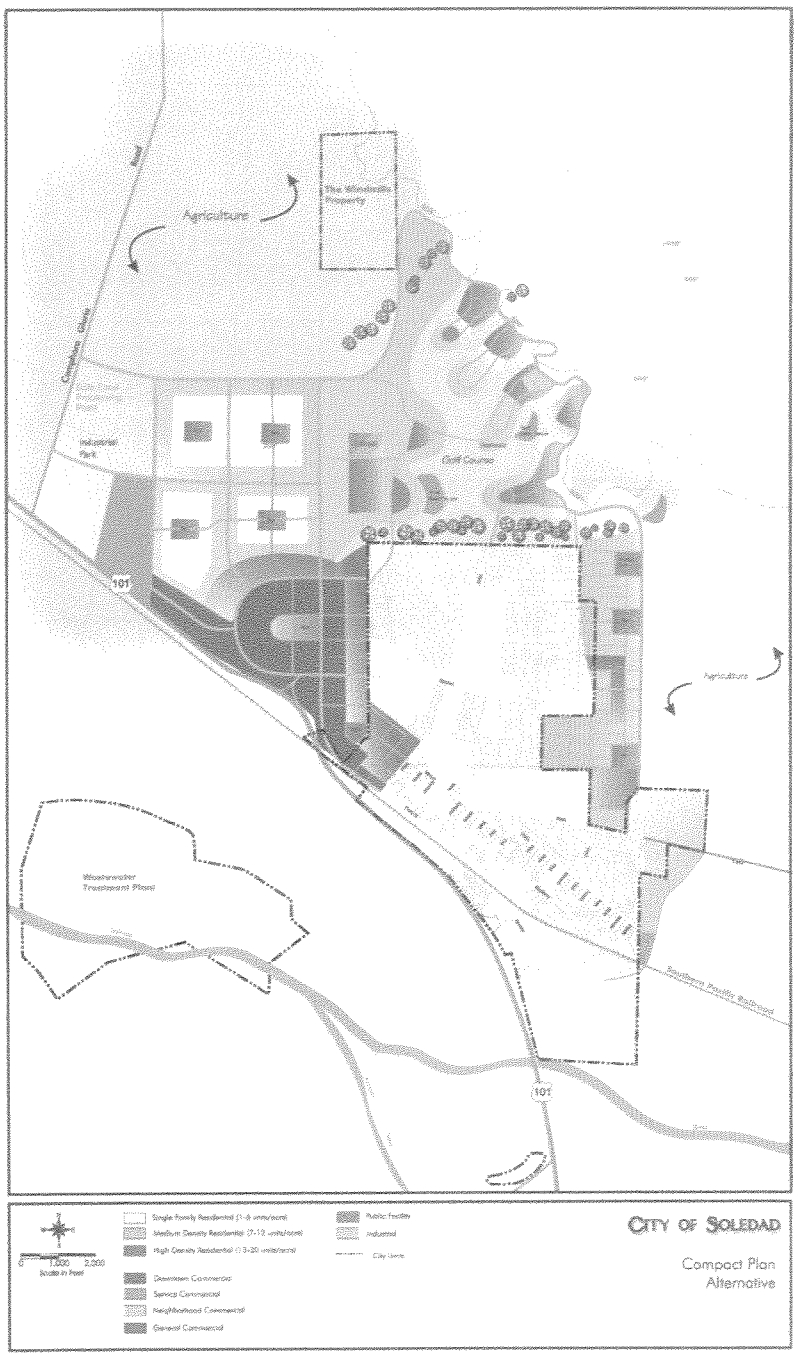


TABLE VI-3: THE CAMPHORA-GLORIA PLAN
Holding Capacity By Land Use Category

Land Use Category	Acres[1]	Building Intensity	Max. Estimated Holding Capacity (80% of max. dev. potential)		
			Dwelling Units[3]	Square Feet	Non-Prison Population[3]
Single Family Residential	1,838	6 units/acre	8,465		33,858
Medium Density Residential	377	12 units/acre	3,520		14,080
High Density Residential	144	20 units/acre	2,184		8,736
Commercial	232	FAR 0.2	--	3,200,000	--
Industrial	356	FAR 0.3	--	6,000,000	--
Parks/Schools/Other Public	200[4]	FAR 0.2	--		--
TOTAL[2]:	3,147	--	14,169	9,200,000	56,674
2001 PRISON POPULATION:					11,200
TOTAL POPULATION AT BUILDOUT:					67,874

1. Source: CMCA and the City of Soledad
2. Includes streets; excludes agriculture and open space designations.
3. Based on an average household size of 4.0 persons per household.
4. Includes golf course.

General Plan Alternative D -- The Twenty Year Plan

Based on the population projections provided in Chapter IV. it is clear that the draft 2004 General Plan will accommodate future population growth beyond a twenty year timeframe. Although nothing in State law prohibits a general plan from addressing a 'long-term' timeframe, projections of future population growth and the demand for land become less accurate the further into the future they project.

The population projections provided in Chapter IV. assume the pace of development experienced in the City over the past five years will continue in a linear fashion into the future, reaching a non-prison population of about 31,000 by the year 2025. The Twenty Year Plan Alternative is identical to the Foothill Plan, except that it designates only enough land for urban development to accommodate the expected twenty year demand, and locates this expansion area on the least productive farmland nearest the foothills.

This alternative extends urban development outward from the existing City to Camphora-Gloria Road to the north and toward the foothills to the east, but preserves the productive agricultural lands beyond. An area for an industrial and service-commercial business park is provided in the area bounded by Camphora-Gloria Road, Highway 101.

Water Demand. Water demand is expected to increase from about 2.0 million gallons per day to about 3.8 MGD at buildout of the Twenty Year Plan, an increase of about 47 percent. To meet this increased demand, the City's well production will need to be significantly expanded beyond those improvements described in the 1999 Water Impact Fee Study. Meeting the increased demand will worsen the overdraft situation currently affecting the groundwater basin underlying the City,

Wastewater Generation. Buildout of the City under the Twenty Year Plan would increase wastewater flows from about 2.9 MGD to 5.5 MGD (about 47 percent). Improvements recommended by the draft Wastewater Treatment and Disposal Master Plan are designed to accommodate a population of about 34,500 by the year 2025, or about 3,500 more than the population accommodated at buildout of the Twenty Year Plan.

Traffic. Motor vehicle traffic is expected to increase under the Twenty Year Plan. Total estimated average daily trips is expected to increase by about 61 percent to around 95,000 total ADT citywide. Improvements recommended by the Circulation Element as summarized in Chapter V.2: Traffic and Circulation, is expected to achieve and maintain an acceptable level of service.

Loss of Agricultural Land. Buildout of the remaining areas designated for urban development will result in the permanent conversion of about1,000 acres of additional productive agricultural land.

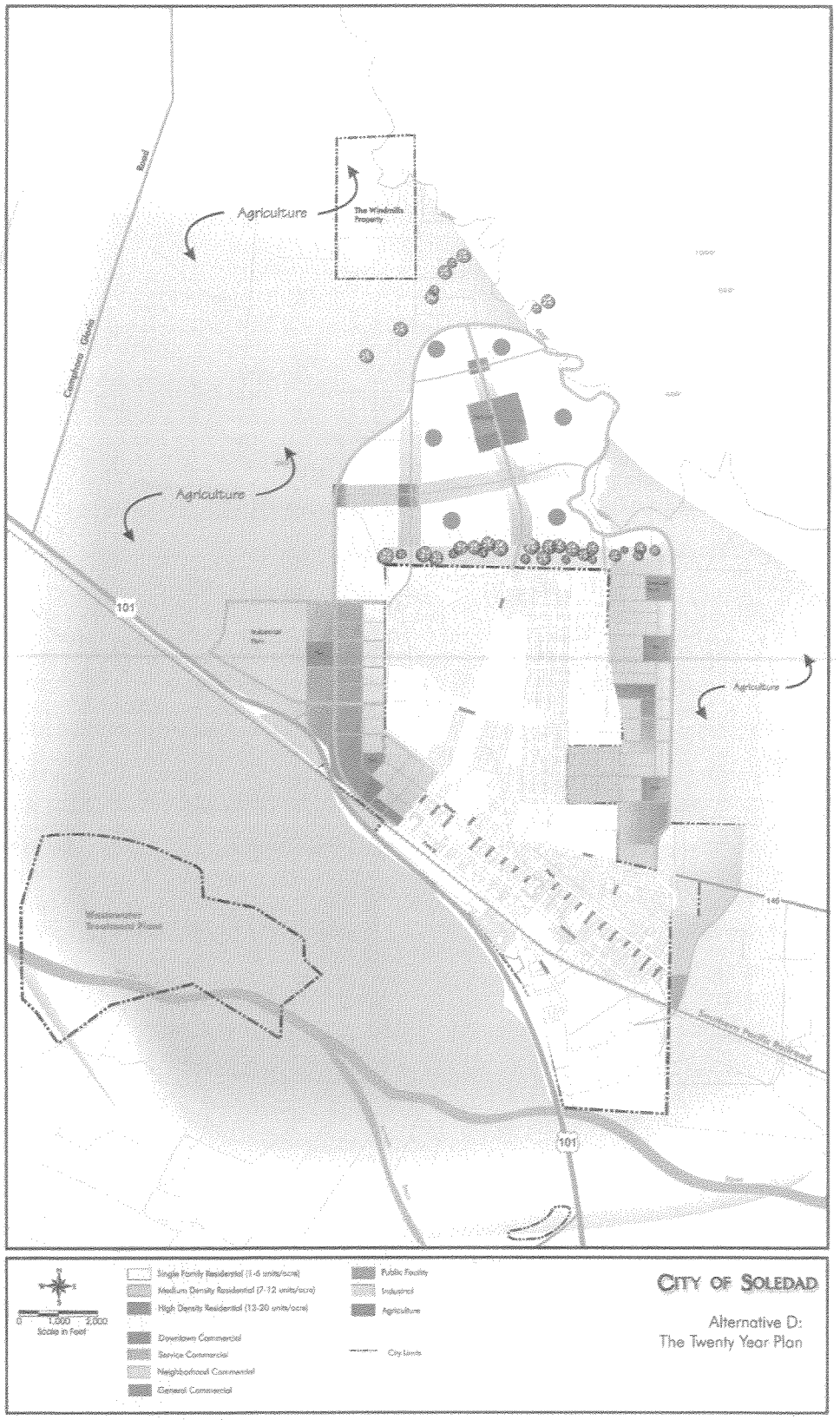
Air Quality. Emissions of pollutants from motor vehicles, stationary sources and construction activities will increase through buildout of the Twenty Year Plan, contributing to the nonattainment status of the North Central Coast Air Basin for the State 1-hour ozone standard (see Chapter V.3: Air Quality). Based on increases in motor vehicle trips, emissions of total organic compounds citywide is expected to increase about 50 percent from 2005 levels.

TABLE VI-4: THE TWENTY YEAR PLAN
Holding Capacity By Land Use Category

Land Use Category	Acres[1]	Building Intensity	Max. Estimated Holding Capacity (80% of max. dev. potential)		
			Dwelling Units[3]	Square Feet	Non-Prison Population[3]
Single Family Residential	928	6 units/acre	4,097		16,386
Medium Density Residential	217	12 units/acre	1,984		7,936
High Density Residential	102	20 units/acre	1,512		6,048
Commercial	118	FAR 0.2		1,439,000	
Industrial	196	FAR 0.3		3,415,000	
Parks/Schools/Other Public	331	FAR 0.2		--	
TOTAL[2]:	1,892	--	7,593		30,370
2001 PRISON POPULATION:					11,200
TOTAL POPULATION AT BUILDOUT:					41,570

1. Source: CMCA and the City of Soledad
2. Includes streets; excludes open space designations.
3. Based on an average household size of 4.0 persons per household.

Figure VI-8: The Twenty Year Plan



General Plan Alternative E -- The Mitigated Project

The term "mitigated project" means the project as modified by the mitigation measures described in this EIR. As discussed in the topical sections, the mitigation measures reduce potential adverse impacts to insignificance, except for impacts to groundwater supplies and the permanent loss of prime agricultural land.

TABLE VI-5: THE MITIGATED PROJECT
Holding Capacity By Land Use Category
(City Limits and Urban Reserve)

Land Use Category	Acres[1]	Building Intensity	Max. Estimated Holding Capacity (80% of max. dev. potential)		
			Dwelling Units[3]	Square Feet	Non-Prison Population[3]
Single Family Residential	1,963	6 units/acre	9,065		36,258
Medium Density Residential	367	12 units/acre	3,424		13,696
High Density Residential	119	20 units/acre	1,784		7,136
Commercial	275	FAR 0.2		3,354,120	
Industrial	547	FAR 0.3		9,500,000	
Parks/Schools/Other Public	707[4]	FAR 0.2			
Open Space	+/-500				
TOTAL[2]:	4,500	--	14,273	12,800,000	57,000
2001 PRISON POPULATION:					11,200
TOTAL POPULATION AT BUILDOUT:					68,290

1. Includes 153 mobile homes.
2. Includes streets; excludes agriculture and open space designations.
3. Based on an average household size of 4.65 persons per household from the 1990 US Census. Total dwelling units and non-prison population are expressed as a range which corresponds to the range of densities allowed for each land use category.
4. Includes golf course.

Comparison of General Plan Alternatives

Each of the alternatives is compared with the draft General Plan on Table VI-6.

TABLE VI-6: COMPARISON OF ALTERNATIVES

Topics	No Project	Twenty Year Plan	Foothill Plan	Camphora-Gloria Plan	Draft 2005 General Plan
Total Residential Acres	864	1,247	1,741	2,359	2,449
Dwelling Units					
Single Family	3,897	4,097	5,000	8,465	9,065
Medium Density	660	1,984	3,429	3,520	3,424
High Density	680	1,512	3,704	2,184	1,784
TOTAL:	5,237	7,593	12,133	14,169	14,273
Commercial Acres	132	118	148	232	275
Commercial Floor Area (sq.ft.)	919,987	1,439,000	1,800,000	3,200,000	3,354,120
Industrial Acres	137	196	196	356	546
Industrial Floor Area (sq.ft.)	1,432,275	3,415,000	3,400,000	6,000,000	9,500,000
Parks, Schools and Other Acreage	132	331	383	200	707
Ratio of Potential Jobs to Dwelling Units At Buildout[1]	1.51	0.47	0.85	1.29	2.0
Total Population at Buildout[2]	32,148	41,570	60,000	67,874	68,290

1. Based on 1 job per 500 square feet of non-residential development.
2. Includes prison population of 11,200.

Environmentally Superior General Plan Alternative

Section 15126 of the CEQA Guidelines requires that an EIR identify the "environmentally superior" alternative from among the alternatives analyzed. Based on the comparison provided on Table VI-7, the No Project alternative is considered the environmentally superior alternative.

The State CEQA Guidelines state that when the No Project alternative is found to be environmentally superior, the next most environmentally superior alternative is determined to be the Environmentally Superior alternative for CEQA purposes. The next most environmentally superior alternative is Alternative D, The Twenty Year Plan.

TABLE VI-7: COMPARISON OF SELECTED IMPACTS OF GENERAL PLAN ALTERNATIVES WITH THOSE OF THE DRAFT PLAN

Selected Topics	No Project		Twenty Year Plan		Foothill Plan		Camphora-Gloria Plan		Draft Plan
Water Demand	2.6 mgd	<	3.8 mgd	<	6.2 mgd	<	7.25 mgd	<	7.29 mgd
Wastewater Generation	3.7 mgd	<	5.46 mgd	<	8.7 mgd	<	10.20 mgd	<	10.26 mgd
Average Daily Trips	69,590 trips	<	95,110	<	133,000	<	178,390	>	175,742
Conversion of Agricultural Land	107 acres	<	1,000	<	1,596	<	2,275	<	3,105
ROG Emissions	1,128 lbs/day	<	1,657	<	2,600	<	3,967	<	4,372
Overall:		<		<		<		<	

Notes: >: greater impacts
<: less impact
=: more or less equivalent impact

Wastewater Treatment and Disposal Master Plan Alternative F – No Project

As with the General Plan, CEQA requires the consideration of a range of alternatives to the Wastewater Treatment and Disposal Master Plan. Although the program of improvements recommended by the draft Master Plan consists largely of renovating and re-using existing wastewater treatment infrastructure, aspects of the Master Plan will have the potential to result in significant adverse impacts relating to:

- The permanent conversion of 469 acres of productive agricultural land for disposal basins;
- Construction activities that may result in temporary erosion and air quality impacts from the renovation of existing disposal basins, installation of a pump station and pipeline to convey treated wastewater to disposal basin;
- Water quality issues from the disposal of additional treated wastewater over time;

Thus, the alternatives that follow are aimed at reducing or minimizing these potentially significant impacts.

The No Project Alternative is required by CEQA and would consist of the continued operation of the existing wastewater collection, treatment and disposal system without the improvements recommended by the draft Master Plan.

The capacity of the wastewater treatment system was exceeded in the fall of 2004, leading the City to take a number of emergency measures to correct the problem. The purpose of the Master Plan is to set forth a program of improvements to remedy these existing limitations and to meet the future demand for wastewater treatment associated with buildout of the draft Genera Plan. In the absence of the improvements recommended by the Master Plan, treatment plant disposal capacity will continue to be exceeded with the resulting jeopardy to surface and groundwater quality and the continuation of a building moratorium.

Wastewater Treatment and Disposal Master Plan Alternative G – Disposal Through Farmland Irrigation

This alternative would dispose of the treated wastewater through the irrigation of farmland surrounding the treatment plant. In accordance with Section 60304(a) of the California Code of Regulations, the level of treatment afforded by the upgraded treatment plant will meet Title 22, or tertiary treatment standards. This type of wastewater can be used to irrigate a wider variety of crops than secondary treated wastewater; in addition to parks and playgrounds; schoolyards; residential landscaping; and unrestricted access golf courses. Assuming 200 acres of irrigated land per million gallons per day of treated wastewater, it would take up to 1,654 acres of irrigation land to dispose of the treated wastewater at General Plan buildout. However, land application can only occur when the soil and crop conditions are favorable, so treated wastewater must be stored in ponds until it can be used for irrigation. Assuming storage of 50 acres per million gallons per day of treated wastewater, approximately 413 acres of storage ponds would be required for the 8.27 mgd needed for General Plan buildout.

Soledad has approximately 24 acres of irrigated parks and will require as much as 228 acres to provide for the buildout population. Therefore, parks could accept a portion of the treated effluent generated by the expanded wastewater treatment facility. The remaining effluent would need to be used to irrigate farmland. Because Title 22 of the California Code of Regulations restricts irrigation of certain food crops with tertiary treated wastewater, farmers electing to

contract with the City to accept treated wastewater for irrigation might need to select other types of crops than they would otherwise choose to grow. Farming of a less economically productive crop could impair the agricultural productivity (i.e., economic productivity) of the farmland. However, because agricultural operations would be allowed to continue, this impact would be considered less than significant.

Most of the land surrounding Soledad (where urban development has not occurred) is comprised of farmland. Those areas not in farmland or urbanization are located within the floodplain and riparian habitat of the Salinas River, or on the hillsides that form the Salinas Valley. Consequently, the construction of new storage ponds would either adversely affect farmland or natural habitat. The total acreage of land conversion for storage ponds (413 acres) would be somewhat less than the amount of land conversion needed for the proposed infiltration basins (about 469 acres). Therefore, this alternative would reduce the amount of groundwater pumped for irrigation, but would still be expected to result in significant impacts related to farmland conversion (unavoidable impacts), loss of foraging habitat, construction noise, short-term construction-related emissions, and odors. These impacts would be somewhat less than with the exclusive use of infiltration basins.

Wastewater Treatment and Disposal Master Plan Alternative H – Disposal Into the Salinas River

This alternative would result in the disposal of treated wastewater through direct discharge to the Salinas River. The Waste Discharge Requirements (WDRs; Order No. R3-2005-0074; adopted May 13, 2005) for the City's wastewater treatment facility does not authorize river discharge. The City's wastewater treatment plant, therefore, relies on rapid infiltration ponds. Ponds require large surface areas to provide optimal interface with the atmosphere (for evaporation) and the earth (for percolation). No storage ponds would be required if all effluent is discharged to surface water. A hybrid approach might also include evaporation/ percolation ponds for disposal when river flows are low, and dilution of effluent is reduced.

Approximately 469 acres of additional land for infiltration ponds would be needed for General Plan buildout. Construction of the ponds would result in significant impacts related to farmland conversion (unavoidable impacts), loss of foraging habitat, short-term construction-related emissions, and odors. No new storage ponds would be required if all of the treated effluent were discharged to the river, but they would be required if river disposal occurs seasonally. River disposal would require discharge pipes (i.e., outfalls) to the river. It is conceivable that new outfalls could be constructed in a manner that would minimize or avoid impacts to the floodplain and to riparian habitat supported by the Salinas River, such as using a jack-and-bore construction method. It is also conceivable, that mitigation measures could reduce potentially significant impacts related to outfall construction (e.g., vegetation removal, erosion/sedimentation, loss of foraging habitat) to a less-than-significant level.

Because this type of system would discharge effluent directly into the Salinas River, under the current regulatory environment for new discharges, it is likely the City's wastewater treatment facility would require upgrading to tertiary treatment. Pursuant to the federal Clean Water Act, the State of California has placed the portion of the Salinas River from its mouth to the Gonzales Road crossing on the 303(d) list as a waterbody whose beneficial uses are impaired by certain pollutants (e.g., fecal coliform and nutrients). Tertiary-treated wastewat'er generally has very low concentrations of these pollutants. Thus, in some instances, river discharge of high-quality tertiary effluent can result in a localized improvement in certain water quality parameters through dilution. In other instances, river discharge can reduce the quality of fish habitat by increasing water temperatures and slightly decreasing dissolved oxygen concentrations.

Wastewater treatment facilities can likely include treatment features to reduce water quality impacts from discharged effluent to a less-than-significant level.

Although technology is expected to be available to reduce the impacts of river discharge to a less-than-significant level, this alternative may be infeasible for other reasons. The Regional Water Quality Control Board (RWQCB) is currently developing Total Maximum Daily Load (TMDL) limitations for several pollutants in the Salinas River. Obtaining NPDES permit for river discharge during RWQCB's development of the TMDL plan would likely be difficult and, thus, could render a river discharge alternative infeasible at this time.

Nevertheless, a river discharge system would reduce the acreage of land conversion by approximately 469 acres if all effluent is discharged to the river, and would avoid significant impacts related to farmland conversion. Such a river discharge system would likely reduce significant impacts related to loss of foraging habitat, construction noise, short-term construction-related emissions, and odors. However, a river discharge system would likely result in significant, but mitigable, impacts related to disturbance of floodplain and riparian habitat. It is expected that a river discharge wastewater treatment system could be designed that would result in less-than-significant impacts to the quality of the Salinas River. Alternatively, seasonal river discharge would require land conversion for disposal ponds, and would be expected to result in similar impacts as the proposed project. Obtaining. an NPDES permit for river discharge during RWQCB's development of the TMDL plan, however, is likely to be difficult and would likely render this alternative infeasible at this time.

Wastewater Treatment and Disposal Master Plan Alternative I – Provide Disposal Capacity For Twenty Year Development

The draft 2004 General Plan represents a long-term vision for the growth and development of the City of Soledad, as discussed in the Project Description. The impacts of providing disposal capacity for the full buildout of the City as contemplated by the draft Plan are discussed in the topical sections of this DEIR.

One way to reduce the magnitude of potential impacts associated with the development of disposal capacity is to provide capacity for a twenty year development horizon as discussed above under General Plan Alternative D. The wastewater disposal capacity needed to serve the twenty year population/development would be about 179 additional acres of rapid infiltration basins, versus 469 additional acres for full buildout. This alternative would reduce the near-term impacts relating to the permanent conversion of productive farmland, but would still result in significant and unavoidable impacts. In addition, construction related impacts associated with noise, erosion, air quality and the loss of potential foraging habitat would remain but would be less than for full buildout.

TableVI.8 provides a summary comparison of wastewater disposal alternatives.

Figure VI-9: Disposal basins of the Soledad Valley State Prisons

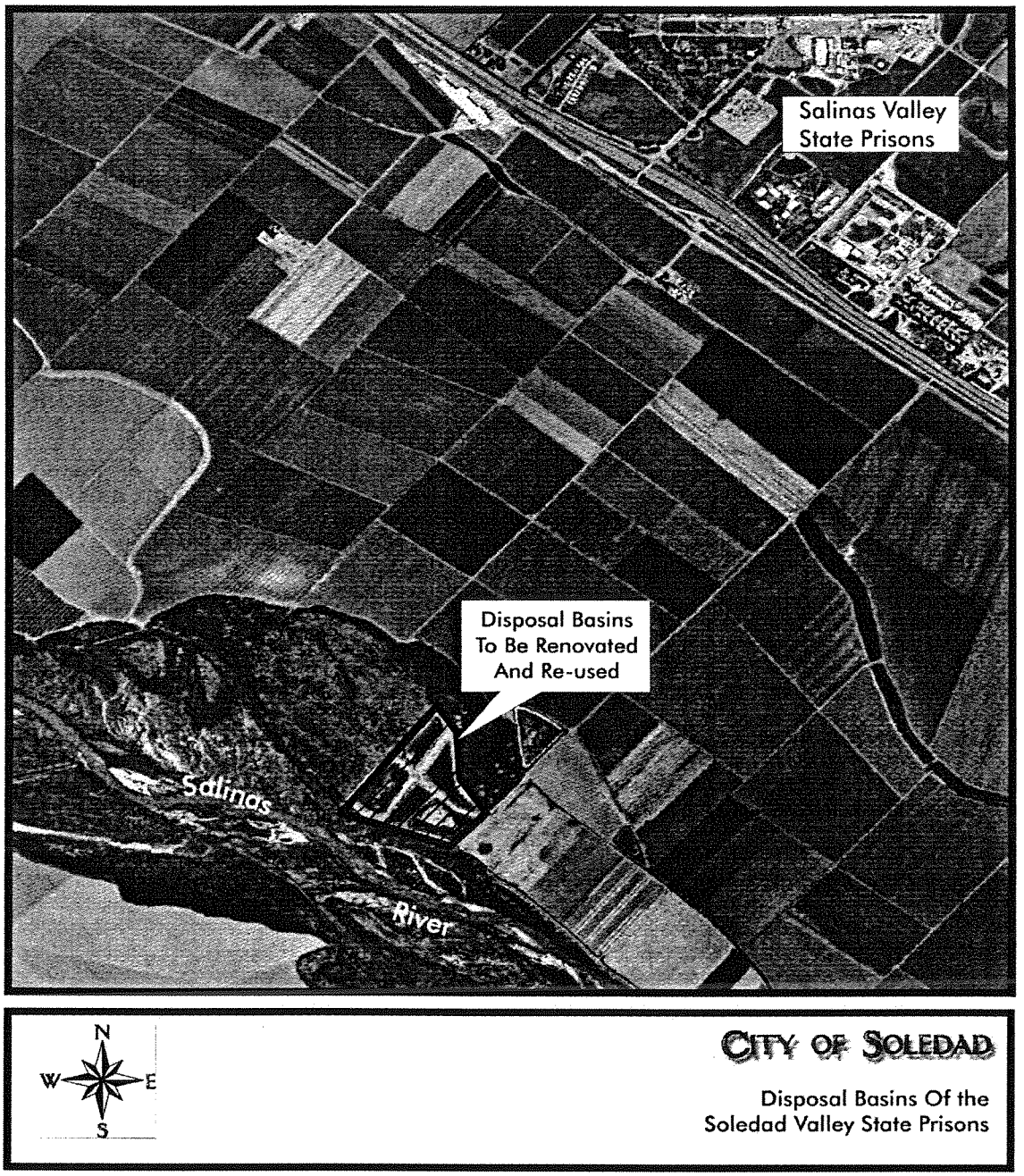


TABLE VI-8: COMPARISON OF WASTEWATER TREATMENT AND DISPOSAL ALTERNATIVES

Alternative	Farmland Conversion (acres)			Water Quality	Biological Resources	Construction Impacts (noise, erosion, air quality)
	Basins	Storage	Total			
F-- No Project	0	0	0	>	<	<
G -- Farmland Irrigation	0	413	413	=	<	=
H -- River Disposal	0	0	0	<	<	<
I -- Twenty Year Plan	179	0	179	=	<	<
Mitigated Project	469	0	469			

Notes: >: greater impacts
<: less impact
=: more or less equivalent impact

Environmentally Superior General Plan Alternative

Section 15126 of the CEQA Guidelines requires that an EIR identify the "environmentally superior" alternative from among the alternatives analyzed. Based on the comparison provided on Table VI-8, the River Disposal alternative is considered the environmentally superior alternative. However, given the regulatory constraints associated with disposing Title 22 wastewater to the Salinas River, this alternative is considered infeasible at present.

The next most environmentally superior alternative is the Twenty Year Plan, which is considered the Environmentally Superior alternative for CEQA purposes.

VII. Mandatory CEQA Sections

Cumulative and Growth Inducing Impacts

The California Environmental Quality Act requires that an EIR evaluate a project's potential to induce additional development (growth inducement) and generate impacts that may be individually limited, but could be significant when taken together with other similar projects in the area (cumulative impacts).

The cumulative and growth inducing impacts of continued development of the Project Area are evaluated by this Draft EIR which concludes that buildout of the Plan area in forty or more years will have unavoidable adverse impacts related to the permanent loss of prime agricultural land, regional traffic, cumulative air quality, visual resources, biological resources, energy consumption, and water supply. However, potentially significant adverse impacts related to infrastructure, traffic, noise, and others, will be avoided by implementing the policies and programs recommended by the draft General Plan. Thus, the cumulative impacts have been evaluated and by this DEIR.

Irreversible Environmental Changes

Section 15026© requires a discussion of the potential for an activity to result in irreversible changes to the environment. This section is required for EIRs prepared for plans, policies and ordinances, and for actions involving LAFCo. The intent is to focus special attention on impacts that narrow the range of beneficial uses of the environment or pose long-term risks to health or safety.

Continued development of the Plan Area as anticipated by the draft General Plan and draft Wastewater Treatment and Disposal Master Plan will result in irreversible changes to the environment in the following areas:

- The permanent conversion of over 3,000 acres of productive farmland to urban and/or non-agricultural uses;
- The permanent loss of potential foraging habitat associated with the permanent conversion of agricultural land to non-agricultural uses;
- The permanent loss of petroleum products and other materials used to produce energy;
- The permanent change of the visual character of the City and its environs from one consisting predominantly of agriculture to a more suburban character;

Although the policies and programs of the draft Plan and Wastewater Treatment and Disposal Master are aimed at minimizing the effects of these changes on the environment, they will remain permanent and adverse when compared to current conditions.

VIII. Document Preparation and Sources

Authors

Crawford, Multari & Clark

Chris Clark, JD, AICP Principle
David Moran, project manager and principal author
Nicole Carter, Environmental Specialist
Whitney Fisher, Associate
Jeff Legato, Mapping and Graphics Coordinator

TJKM Transportation Engineers

Christopher Thnay, PE, AICP

Persons, Organizations and Agencies Consulted

Pacific Gas & Electric, Rick Cowing
Monterey County Planning Department, Scott Hennessy
Monterey County Department of Environmental Health, Allen Stroh
Charter Communications
Monterey County Water Resources Agency, Curtis Weeks
T.A.M.C., DeEtta Nicely
Pacific Bell, Al Gutierrez
Soledad-Mission Recreation District, Mr. Tom Green
Soledad Unified School District, Jorge Guzman, Superintendent
Union Pacific Railroad, Ted Stenstrom
CA Regional Water Quality Control Board
California Archaeological Inventory, Sonoma State University, Dept. of Anthropology
AMBAG, Nicolas Papadakis
Soledad-Mission Chamber of Commerce, Bobbie Reynolds, President
Monterey County Health Department, Bill Munger
State of California, Department of Transportation, Jay D. Walter
Soledad Housing Authority
Soledad Community Health Care District, Helen Piini
Monterey Bay Unified Air Pollution Control District, Doug Quetin
Monterey County Resource Conservation District
Monterey County Department of Public Works, Bryce Hori

City of Soledad, Don Fleming, Planning Director

Bibliography

Andalucia Phase IV Subdivision Final Supplemental Environmental Impact Report, 1992, EMC Planning Group Inc.

Association of Monterey Bay Area Governments Regional Population and Employment Forecasts for Monterey, San Benito and Santa Cruz Counties, 1997

Brown-Buntin Asociates, Typical Construction Equipment Noise Levels

California Air Resources Board, URBEMIS 2002

California Code of Regulations, Title 22, Division 4, Chapter 15 " Domestic Water Quality Monitoring"

California Criminal profile, FBI Crime Index, 1998

California Department of Conservation, Farmland Mapping and Monitoring Program, Soil Survey of Monterey County

California Department of Finance City/County Population and Housing Estimates, 1996, 1997, 1998, 1999, 2000, 2004

California Department of Fish and Game, Natural Diversity Database for Monterey County

California Employment Development Department, Labor Market Information Division

California Department of Water Resources Bulletin 118, February 2004

California Department of Transportation, Sound 2000

California Energy Commission

California Integrated Waste Management Board

California Mission History, Mission Nuestra Señora de la Soledad

City of Soledad Downtown Specific Plan and Front Street Rehabilitation Plan, May 1994

City of Soledad Economic Base Analysis, 1991, Applied Development Economics

City of Soledad General Plan, 1993

City of Soledad General Plan Update Final EIR, 1993, EMC Planning Group Inc.

City of Soledad Impact Fee Study for Wastewater System, 1999, Hanna & Brunetti

City of Soledad Storm Drain Impact Fee Study, 1999, Hanna & Brunetti

City of Soledad Traffic Fees Cost Estimate and Schedule, 1999, Hanna & Brunetti

City of Soledad Water Impact Fee Study, 1999, Hanna & Brunetti

City of Soledad Zoning Ordinance

CMCA, 2004 Draft City of Soledad General Plan

Common Ground – Stability and Change in Monterey County, 1998

EDAW, Miravale Partnership – Hambey Property Draft Environmental Impact Report, 1999

Federal Emergency Management Agency Flood Insurance Rate Maps

Fort Ord Reuse Plan, 1999

Fugro West, City of Soledad Wastewater Treatment and Disposal Master Plan, January 2005

Growing the Economy: Solutions for Rural California 1998

Minnesota Pollution Control Agency, 1987, An Introduction to Sound Basics

Monterey Bay Unified Air Pollution Control District CEQA Guidelines and Clean Air Plan

Monterey County Agricultural Commissioner's Crop Report, 1997, 1998, 1999, 2002

Monterey County Integrated Waste Management Plan

Monterey County General Plan, incorporating amendments through 1992

Monterey County General Plan Update, Draft Existing Conditions Report, 1999

Monterey County General Plan Update, Draft EIR, 2002

Monterey County Overall Economic Development Program, 1998

Monterey County Planning and Building Inspection Department/Jones and Stokes Draft EIR for the Pebble Beach Company Del Monte Forest Management Plan, 2004

Monterey County Regional Transportation Plan and Congestion Management Plan, 2000

Monterey County Zoning Ordinance, Title 21 of the County Code4, 1991

Monterey County Water Resources Agency

Monterey County Water Resources Agency Salinas Valley Water Project and FEIR, 2002

Monterey Regional waste Management District

Public Resources Code s. 22000 et seq

Report to the City Council on the Second Amendment of the Redevelopment Plan for the Soledad Redevelopment Project, 1998, Katz Hollis

Regional water quality Control Board – Central Coast Region Order No. 95-25

Salinas Valley Solid Waste Authority

Soledad Union School District, School Facility Master Plan, 1994

State of Monterey County 1999, Land Watch of Monterey County

Transportation Agency for Monterey County

Transportation Agency for Monterey County Regional development Impact Fee Nexus Study, 2005

TJKM Transportation Engineers, Traffic Study for the Soledad General Plan Update, 2005

United States Bureau of the Census, 2000 Census of Population and Housing

United States Soil Conservation Service

United States Department of Agriculture, 1997 Census of Agriculture

United States Department of Commerce Bureau of Labor Statistics, 2000

United States Fish and Wildlife Service (USFWS), 1998. Recovery Plan for upland species of the San Joaquin Valley, California. Region 1, Portland OR.

Vista Soledad Final Environmental Impact Report, 1994, EMC Planning Group, Inc.

IX. Appendix

Appendix A

Initial Study and Notice of Preparation

Responses to Notice of Preparation
[attached]

Appendix B – Traffic Study (TJKM Transportation Engineers)

[attached]

Appendix C – Draft Wastewater Treatment and Disposal Master Plan

[attached]

Appendix D -- Mitigation Monitoring

State law requires that mitigation measures be monitored 1) to ensure that required mitigation measures are implemented; 2) to allow the City and interested citizens to verify compliance before, during and after project construction; 3) to generate information on the effectiveness of mitigation measures to improve their effectiveness in future applications, and 4) to guide future decision-making.

A mitigation monitoring program will be prepared for consideration by the decision makers prior to taking an action to approve the project.

Notice of Preparation of A Draft Environmental Impact Report

March 18, 2005

TO: Responsible and Trustee Agencies and Other Interested Parties

FROM: The City of Soledad

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report (DEIR)

The City of Soledad will be the lead agency for the preparation of an environmental impact report (EIR) for the 2004 General Plan update and Wastewater Treatment and Disposal Master Plan. A detailed description of the General Plan and Wastewater Master Plan is provided in the attached initial study.

The City needs to know the views of your agency relative to the scope and content of the analysis to be provided in the EIR. In accordance with the time limits prescribed by State law, your response must be sent at the earliest date **but not later than 30 days** from the date of this notice. Please send your comments to:

City of Soledad
c/o Crawford Multari & Clark Associates
(consultants to the City)
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402
Attn: David Moran

We would also appreciate the name(s) of a contact person at your agency. If you have any questions regarding the project or this notice, please call me at (805) 541-2622 X-19.

Sincerely,

David Moran
Crawford Multari & Clark Associates
(on behalf of the City of Soledad)

attached: initial study

Introduction

The City of Soledad will be the lead agency for preparation of a Draft Environmental Impact Report ("DEIR") for the 2004 Soledad General Plan ("the Plan") and Wastewater Treatment and Disposal Master Plan ("Wastewater Master Plan"). The Plan is a comprehensive revision of the City's 1994 General Plan and sets forth goals, policies and programs to guide the growth and development of the City for the next twenty or more years. The Plan designates a significant amount of additional land for urban development to meet the expected future needs of the City. The Wastewater Master Plan sets forth a systematic program of improvements to the City's wastewater treatment and disposal systems aimed at remedying existing deficiencies while providing capacity to serve the continued development of the City. A more complete discussion of the draft Plan and Wastewater Master Plan and their potential environmental implications is provided below.

The Environmental Review Process

A comprehensive revision of a General Plan and adoption of a wastewater master plan is considered a "project" for purposes of compliance with the California Environmental Quality Act (Public Resources Code §22000 et seq, or "CEQA"). When comparing the scale and intensity of development contemplated by the 2004 General Plan and Wastewater Master Plan with existing conditions, it is clear that implementation will result in a number of significant adverse environmental impacts. Accordingly, the City has concluded that an Environmental Impact Report ("EIR") is required. As provided by Section 15121(a) of the State CEQA Guidelines, the purpose of an EIR is to serve as an information document that will:

> *". . . inform the public agency, decision-makers and the public generally of the significant environmental effects of a project, identify ways to minimize the significant effects, and describe reasonable alternatives to the project . . ."*

Section 15060(d.) of the Guidelines states:

> *(d) If the lead agency can determine that an EIR will be clearly required for a project, the agency may skip further initial review of the project and begin work directly on the EIR process....*

Thus, the following initial study is intended to assist the lead agency and interested parties in determining the scope of analysis to be included in the EIR.

Regional and Local Context

The City of Soledad is located in south-central Monterey County about 25 miles south of the City of Salinas in the heart of the Salinas Valley, an agricultural region of Statewide and even national importance. To the east is the Gabilan Range and Pinnacles National Monument. To the west is the Coast Range and the Los Padres National Forest; beyond lies the Big Sur Coast (Figure 1). Soledad incorporated as a City in 1921 and derives its name from the Mission Nuestra Señora de la Soledad (Soledad meaning "solitude") established by Father Fermin Lasuen in 1791 on land west of the Salinas River.

Figure 2 shows the existing City limits and surroundings, including the Soledad State Correctional Training Facility/Salinas Valley State Prison, which lie to the north of the City's urban area but within the incorporated limits. The current City limits comprise about 1,273 acres, including 3,800 dwelling units and about 2 million square feet of commercial and industrial floor space.

Figure 1: Regional Location

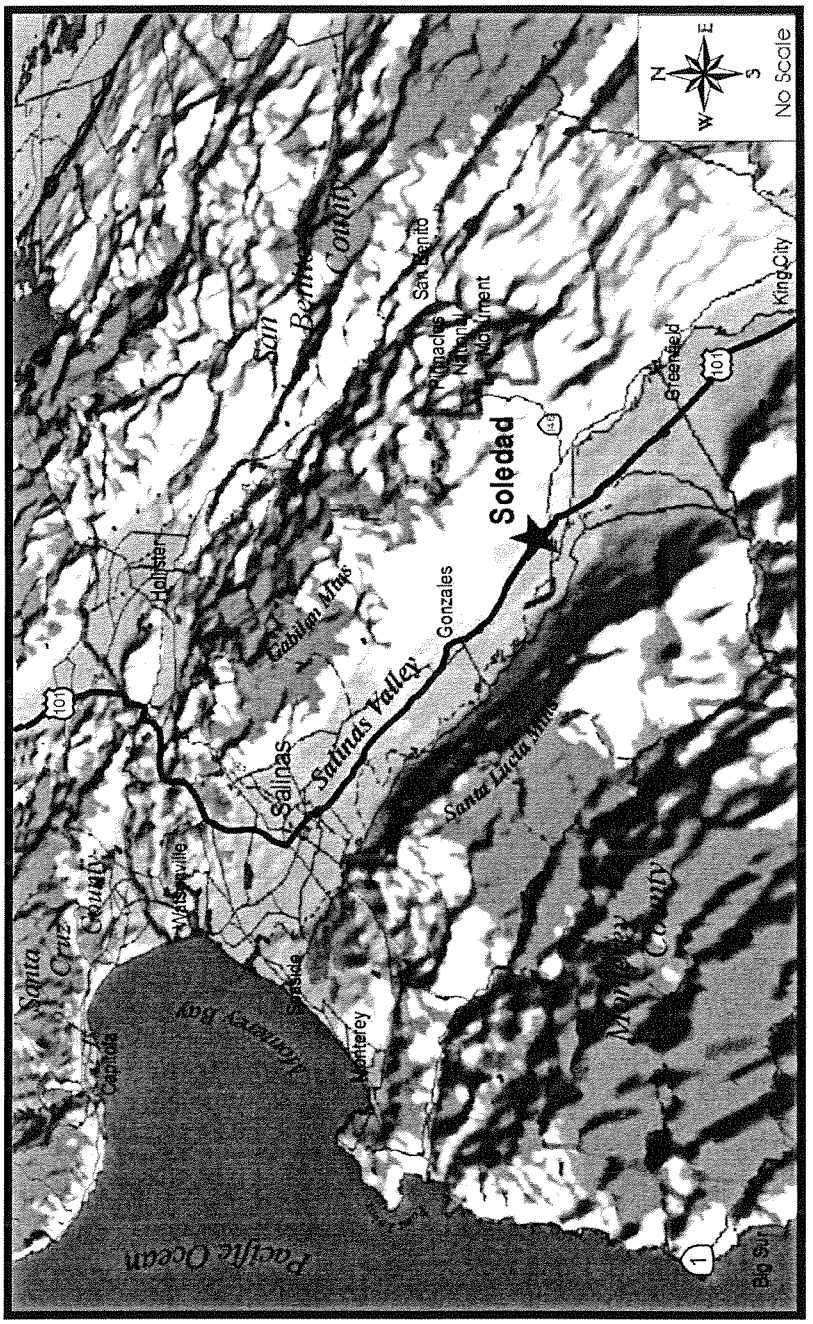
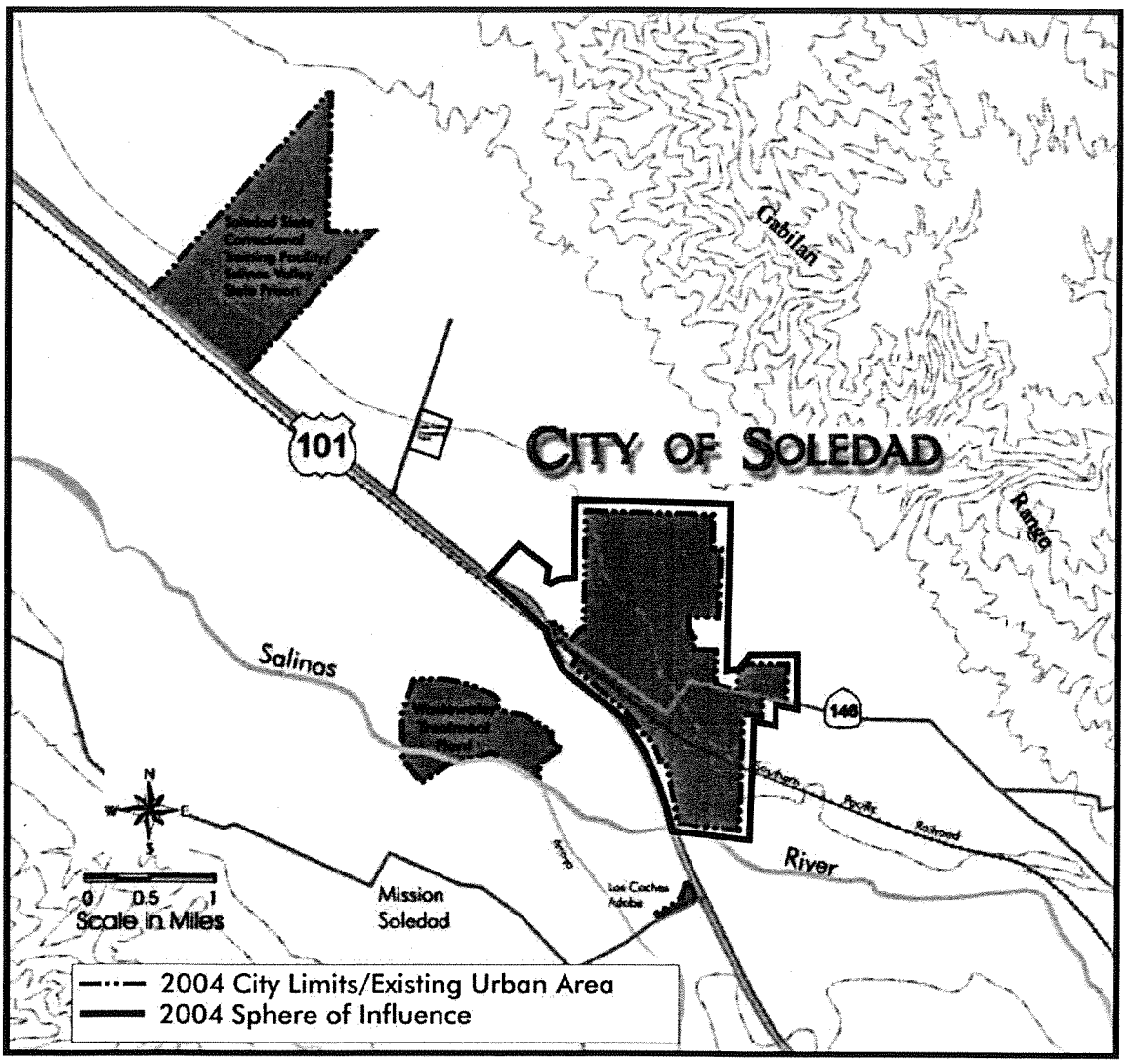


Figure 2: Local Context



Project Description

The project to be assessed by the EIR is a comprehensive update and revision of the City's General Plan and adoption of a Wastewater Treatment and Disposal Master Plan.

Draft General Plan

A general plan is a requirement of State law and must address at least the following seven interrelated topics or, "elements":

Land Use. The Land Use Element describes the various uses to which land within the City may be committed, and designates areas where these uses may take place. In this sense, the Land Use Element is the most basic of the elements. It must be closely coordinated with the other elements to provide consistent policy guidance that results in orderly and logical development.

Housing. The Housing Element describes the manner in which safe, affordable housing will be provided to present and future City residents anticipated through the time frame of the General Plan. The Housing Element also provides incentives for the production and rehabilitation of affordable housing within the City.

Circulation (transportation). The Circulation Element describes how the transportation needs of the city will be met during the time frame of the General Plan. The Circulation Element identifies where new roadways will be constructed to support the land uses contained in the Land Use Element, and also contains provisions for the use of alternate modes of transportation, including bicycle and pedestrian circulation plans, and transit.

Conservation and Open Space. The Conservation and Open Space Elements are two separate elements required by state law but are often combined as one. These elements describe the diverse natural and human-made resources in and around Soledad, and how these resources will be preserved and protected during the time frame of the General Plan.

Safety. The Safety Element inventories seismic, geologic, flood, and fire hazards in Soledad, and discusses how the effect of these hazards can be minimized.

Noise. The Noise Element describes the existing and projected noise environments for the City and establishes land use compatibility guidelines for various noise levels. On the basis of expected population and traffic growth, the Noise Element establishes policies and standards to protect residents from exposure to excessive noise.

The Soledad General Plan also contains the following three optional elements:.

Parks and Recreation. The Parks and Recreation Element provides policies and standards for the development of additional parks and the expansion of recreation programs to meet the needs of Soledad residents.

Public Services and Facilities. This element summarizes the infrastructure and public facilities needs of the City through buildout of the General Plan.

Economic Development. This Element includes a generalized discussion of expected costs of operating the future city, and potential revenue sources likely to be available to cover

those costs. Among other purposes, this element will assist the City in determining whether new development should be subject to different fees or exactions than are currently in place to better cover the costs of growth to the community.

Two other documents, while not part of the General Plan, provide important guidance with regard to development.

Downtown Specific Plan/ Front Street Improvement Plan. The Downtown Specific Plan/Front Street Improvement Plan (FSIP) provides specific goals, policies and programs for the revitalization of the City's traditional commercial center along Front Street. The main goal of the FSIP is to create an attractive and inviting place to gather and shop by providing street trees, benches and other amenities, and by developing open plazas and walkways that provide protection from the heat and wind.

Community Design Guidelines. Another important component of the City's development regulations is a set of design guidelines for new development. The design guidelines are intended to supplement the policy and development guidance provided by the General Plan and Zoning Ordinance by describing the City's expectations for the quality and character desired of new development.

Each element of the General Plan contains **goals, policies** and **programs** that provide guidance to decision-makers and the public when questions arise about the appropriate use of individual parcels of land and other resources. A goal is a desirable future condition or state towards which the community will work to achieve. Policies are statements of the community's position regarding a particular issue that provides guidance for decision-making. A program is an action or series of actions, procedures or techniques that the City will employ or undertake to implement the policies contained in the General Plan. The implementation programs specify the agency, department or other party responsible for carrying out and monitoring the actions described, the funding source (when one can be identified) and a time frame for its accomplishment.

Quantified objectives are measurable milestones that can be used to judge the effectiveness of the implementation of the Plan. For example, the Housing Element provides quantified objectives for the number of dwelling units the City expects to be constructed over the next five years.

The General Plan must be a comprehensive, long-term document. The Soledad General Plan provides a framework for the orderly growth and development of the City for the next twenty or more years from our vantage of today. The General Plan, however, will certainly be amended from time to time to keep pace with the changing needs of the community.

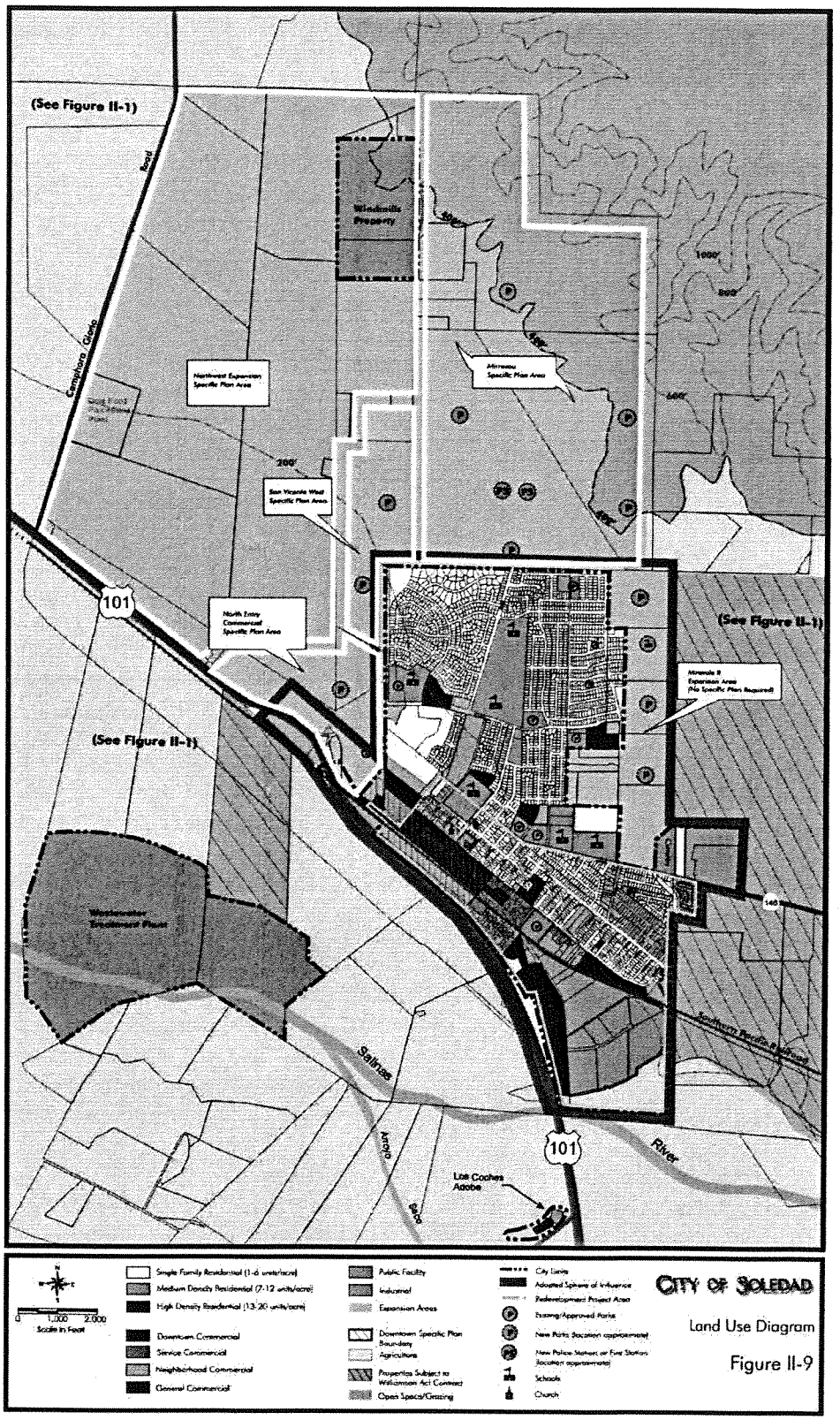
Land Use Diagram

The recommended Land Use Diagram for the City of Soledad is shown on Figure II-9. The Land Use Diagram assigns a land use designation to all property within the City, both public and private, and properties within the City's sphere of influence. The individual land use designations are described below:

Single Family Residential (1 - 6 units per acre)	This land use designation allows for single family residential development with up to six dwellings per acre, and allows a range of other uses which includes schools, churches and public facilities.

Duplex Residential (7 - 12 units per acre)	This designation allows for the construction of duplexes (two attached units on the same lot) and attached housing clusters.
Multiple Residential (13 - 20 units per acre)	The Multiple Residential designation allows for the development of multi-family housing such as apartments, condominiums and townhouses.
General Commercial	The General Commercial designation is intended to support uses of a community retail nature such as appliance stores, food stores, offices, banks and other uses for the community as a whole.
Neighborhood Commercial	Neighborhood Commercial land uses provide goods and services for a specific neighborhood, such as convenience stores, food stores, drug stores, etc.
Downtown Commercial	A mix of retail, office, and other service uses appropriate for the Central Business District, also potentially including some residential uses on upper floors.
Service Commercial	Uses such as wholesale and retail stores and shops of a heavy commercial and business park character conducted inside or outside a building, such as auto repair shops, farm equipment repair and sales, etc.
Industrial	Manufacturing, processing, repair, storage and/or agricultural related industries in a conventional industrial or business park setting.
Public/Institutional	Schools, government buildings, libraries, churches, hospitals, etc.
Recreational	Open space lands that provide active recreation areas, with maintained landscaping and facilities.
Open Space/Grazing Land	Undisturbed open space uses that maintain scenic and natural habitat values as well as flood zone safety and safety from other hazards. Grazing land is generally located on hillsides above the 400 foot contour elevation.
Agriculture	Agricultural lands intended for soil-dependent uses.

Figure II-9 – Land Use Diagram



Expansion Areas

The Land Use Diagram designates areas adjacent to the City where it will eventually grow and extend public services over the next twenty or more years. These areas are designated *Expansion Area/Specific Plan Required* and are primarily residential in nature, but will also provide the range of complementary land uses necessary to support liveable neighborhoods that are integrated with the fabric of the community.

A *specific plan* will be required in advance of annexation and development of each sub-area identified on the Land Use Diagram, which in turn will be subject to project-specific environmental review.

The Plan provides standards for the preparation of specific plans for new expansion areas in Appendix B on page XII-2. Standards are provided for the allowable mix of land uses and for the overall objectives to be achieved through the specific plan process.

The Plan provides a description of each specific plan sub-area along with a brief discussion of development constraints and opportunities, and the overall objectives to be achieved.

Development Assumptions and General Plan Holding Capacity

A general plan must be based on a thorough understanding of future population and the demand for land if the community's vision for the City is ever to be achieved. The 2004 General Plan is based on projected future population growth as illustrated in Figure 3, which provides a Low, Medium and High range of growth over the next twenty years. The Plan assumes that the City's population will continue to grow as it has over the past five years, reaching about 28,000 residents in about twenty years and about 58,000 residents in forty years (excluding the prison population) (see Figure 3).

Table 1 provides a summary of the General Plan "holding capacity", which is the number of dwelling units, and the floor area of commercial and industrial development, that can be accommodated based on the amount of land designated for these uses. Due to market forces, the size and shape of parcels and other factors, the maximum development potential is rarely achieved. For this reason, holding capacity is expressed as 80 percent of the gross development potential (acres x building intensity). However, the actual buildout population achieved by the general plan will likely be much less because existing residential neighborhoods are developed at densities much less than 80% of their maximum allowable density, and the residential density of new expansion areas will likewise be constrained by slope, irregularly shaped lots and preferences reflected in the marketplace.

According to the 2000 Census, the City had about 2,472 dwelling units, not counting dwellings approved or under construction. Since then, about 1,375 additional units have been constructed, which brings the total in the City to about 3,847. This leaves a remaining development potential of about 11,000 units that could be constructed within the City's general plan area.

Figure 3: Future Population Trends

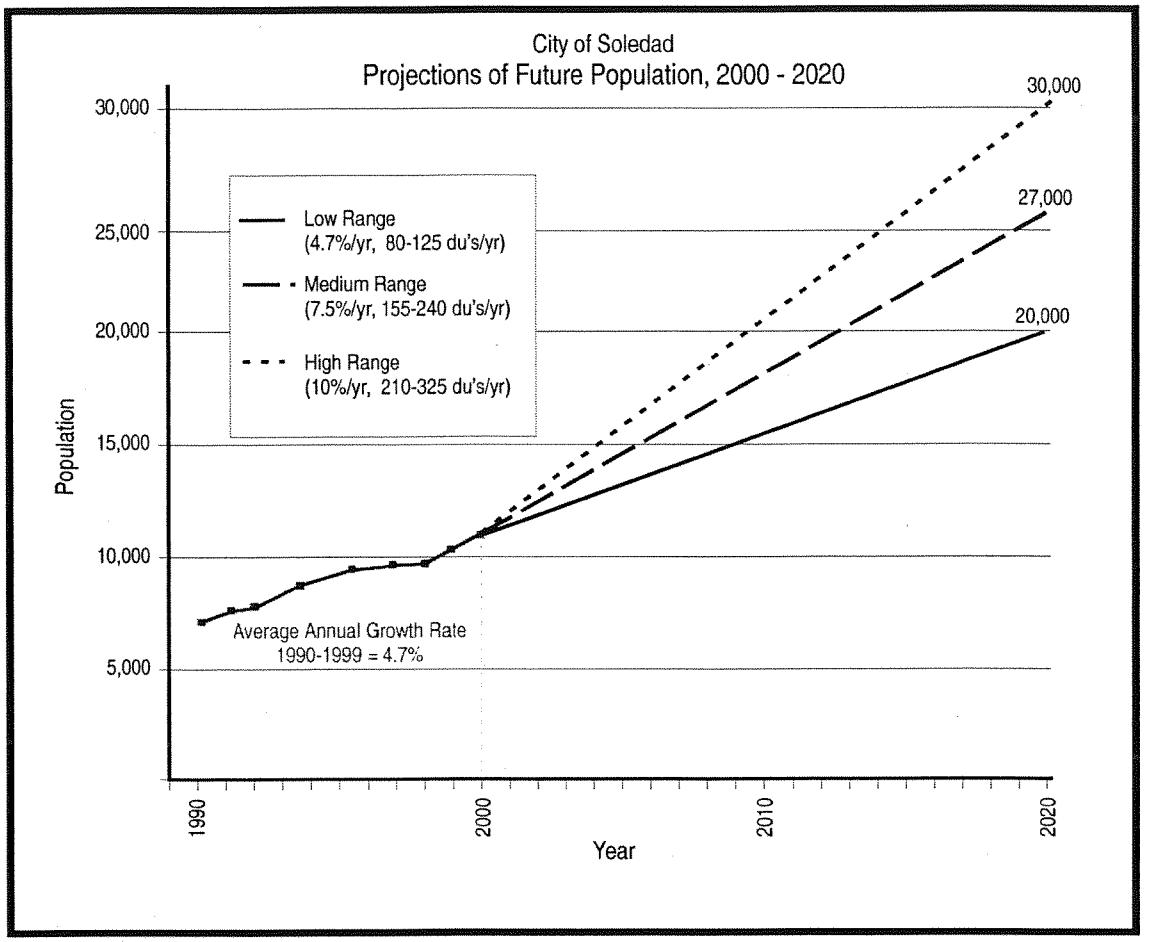


TABLE 1: SUMMARY GENERAL PLAN HOLDING CAPACITY	
Total Potential Dwelling Units At Buildout of Plan Area[1]:	14,273
Total Potential Commercial Floor Area At Buildout[1]:	3.3 million sq.ft.
Total Potential Industrial Floor Area At Buildout[1]:	9.5 million sq.ft.
Total Potential Non-Prison Population at Buildout:	57,000
2000 Prison Population:	11,200
Total Acres in Plan Area:	4,530

1. 80 percent of maximum potential.

TABLE 2: SUMMARY DWELLING UNIT AND POPULATION HOLDING CAPACITY

Portion of Planning Area	Holding Capacity		
	Total Res. Acres	Dwelling Units (80% of Maximum)	Population[1]
City Limits[2]	736	3,847	15,571
Miravale II	186	1,146	4,582
San Vicente West	155	950	3,802
North Entry	39	267	1,069
Mirrasou	383	2,262	9,050
Northwest Expansion Area	950	5,800	23,200
Total At Buildout:	2,449	14,273	57,000[4]
Existing[3]:		3,192	15,000
Remaining To Buildout:		11,081	42,000

1. Excluding prison population of 11,200.
2. Source: City of Soledad, 2002
3. California Department of Finance, January 2004
4. Total dwelling units X 4.0 persons per dwelling.

TABLE 3: SUMMARY NON-RESIDENTIAL HOLDING CAPACITY

Planning Area	Industrial		General Commercial		Neighborhood Commercial		Service Commercial		Downtown Commercial		Public Facilities/Parks	
	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area	Acres	Floor Area
City Limits	146	2,543,904	41	500,069	7	85,378	10	121,968	20	243,936	278	N/A
Miravale II					5	60,984					26	N/A
San Vicente West					5	60,984					19	N/A
North Entry			100	1,219,680							7	N/A
Mirrasou					10	121,968					53	N/A
Northwest Expansion Area	400	6,969,600	68	829,382	9	109,771					124	N/A
Total At Buildout:	546	9,513,504	209	2,549,131	36	439,085	10	121,968	20	243,936	507	

Wastewater Treatment and Disposal Master Plan

Prior to 1995 the City of Soledad had a wastewater treatment plant with a capacity of 650,000 gallons per day. The City and the State entered into an agreement wherein the City's treatment plant was expanded to a capacity of 3.1 million gallons per day (MGD) with 2.1 MGD reserved for the California Department of Corrections Salinas State Prison and Correctional Training Facility (prisons) facilities in Soledad California. The net capacity gain for the City was 350,000 gallons per day.

The disposal rates of the ponds at the Wastewater Treatment Plant ('WWTP) have been monitored closely for disposal performance over the past several years. The average dry weather flow slowly increased from 2.5 MGD in 2001 to 2.7 MGD in 2003.

By August of 2004, the flow rate had reached 2.8 MGD, multiple ponds were full and it was evident that the ponds were not emptying fast enough between filling and emptying cycles. By September 2004, the flow was at 2.9 MGD and plant operators took a number of operational actions in an effort to dry out the empty ponds faster between fills.

At the request of the City, in June of 2003, Fugro West, Inc. prepared a report entitled "Hydro-geological Investigation Percolation Basin Capacity Analysis Soledad Wastewater Treatment Plant". Based on information in the report and other data combined with in-field observations that the disposal capacity of the existing ponds at the WWTP are at or very near capacity, Staff concluded in October 2004 that there was no alternative available other than to recommend additional inflow to the system be prohibited until additional disposal capacity could be achieved.

In response, on October 20, 2004 the City Council adopted Urgency Ordinance No. 612 "Establishing a Moratorium on the Issuance of Building Permits Requiring Sewer Connections and Making Findings Related Thereto" in order to minimize inflow to the WWTP. The Council also adopted Resolution No. 3557 "Declaring an Emergency Pursuant to Section 20168 of the Public Contract Code and Authorizing Contracting Without Compliance With Mandatory Contract Bidding Procedures" in order to expedite design and construction efforts necessary to resolve the treatment and disposal emergency created by the hydro-geologic conditions at the facility.

The Council subsequently authorized preparation of the Wastewater Treatment and Disposal Master Plan to provide a program for remedying existing deficiencies and providing capacity to serve the continued development of the City as envisioned by the draft General Plan. The Master Plan provides for the orderly expansion of the City's wastewater facilities to a capacity of 5.90 mgd which is sufficient to accommodate a population of 54,700, inclusive of the prisons. To accomplish this, the Master Recommends the following:

Immediate Actions to Be Taken To Avoid A Spill to the Salinas River

1. Enforce Urgency Ordinance No. 612 that established a moratorium on the issuance of building permits requiring sewer connections.
2. Raise road levies at wastewater treatment plant between basins 6 and 7, and between basins 4 and 5.
3. Complete prison wastewater facility emergency discharge CEQA process.
4. Obtain CDC approval to temporarily discharge at prison disposal site with commitment to negotiate long-term use.
5. Obtain Regional Board interim approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site while a long term site use agreement can be negotiated

between the City and the State so that a permanent request of wastewater discharge can then be processed.

6. Rehabilitate the Prison WWTP treatment and disposal site.
7. Divert part of prison wastewater flow to prison wastewater facility in order to be able to operate the existing City wastewater facility at an onsite disposal rate of approximately 2.5 MGD.

Actions to Be Taken Immediately to Remedy Existing Wastewater Disposal Deficiencies

1. Adopt Wastewater Treatment and Disposal Master Plan.
2. Provide the Regional Board a copy of the Master Plan and request approval to discharge temporarily at the prison abandoned wastewater treatment site.
3. Request the California Department of Corrections (CDC) to enter into an agreement with the City to allow the City to temporarily discharge to the prison abandoned wastewater disposal site.
4. Obtain RWQCB approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site on a temporary basis while a permanent request of wastewater discharge is being processed.
5. Complete restoration maintenance at the prison abandoned disposal site.
6. Connect aerators and install pond circulators.
7. Divert 1.1 MGD of the prison flow to the prison abandoned disposal site.
8. Operate the existing City facility site at a disposal rate of approximately 2.5 MGD.

In summary, mitigation of existing disposal deficiency is accomplished by diverting up to 1.1 million gallons per day to abandoned prison disposal site and limiting flow to the existing City facility to no more than 2.5 million gallons per day.

Actions to Be Taken to Remedy Existing Treatment Plant Capacity Deficiencies

1. Complete process to mitigate existing plant disposal deficiency.
2. Install equipment that will enable plant operators to achieve Title 22 reclamation quality effluent at both WWTP sites:
    a. Phase 1: Install 12 Pond Circulators and Telemetry to modify Operation of Aerators
    b. Phase 2: Renovate the CDC wastewater facility and divert 1.1 mgd of the CDC wastewater flow to that facility, thus providing ability to provide maintenance for City disposal basins.
    c. Phase 3: Install 5.5 MGD Secondary Effluent Filter Pump Station, 5.5 MGD Continuous Backwash Filter System (Including influent channel, flash mix/flocculation, chemical feed, and compressed air systems if needed), and 5.0 MGD Concrete Channel Ultra-Violet Disinfection System.

The City desires to lease the Prison Abandoned WWTP, with option to renovate and purchase the facility. This would enable the City to reduce flow to the City's WWTP by diverting prison wastewater flow to the CDC wastewater facility. The results would be immediate availability of capacity at the City WWTP and ability to perform more effective maintenance of the disposal basins. The master plan envisions various alternatives described as phases. Costs of land acquisition and costs of constructing infrastructure on sites acquired have not been estimated.

Phase 1: Commence upgrading treatment at the City's WWTP to Title 22 Water Reuse Standard. The project consists of installation of pond circulators and completion of the final design for treatment upgrades to achieve reclamation quality effluent.

Phase 2: Renovate the CDC wastewater treatment facility for interim (4 — 6 years) secondary treatment and disposal use. It is anticipated this phase of the project will be completed by September of 2005 if the lease and tentative purchase agreements can be executed by the end of February 2005.

Phase 3: Complete Title 22 Water Reuse treatment upgrades to the City's WWTP. This project will provide treatment for up to the flow capacity of the existing head works. Additional disposal sites will increase future disposal capacity up to the flow capabilities of the existing head works.

Phase 4: Acquire land contiguous to the City's WWTP (Parcel A), install pump station and pipeline and other infrastructure in order to commence reclamation discharge to the parcel. The City has constructed segments of a reclamation line between the City WWTP and the freeway and at various locations within the City limits. The Phase 5 Parcel is an ideal site to use for reclaimed irrigation water purposes. The plan is to use the site for reclaimed water storage and for installation of a pump station. This site is considered a strategic component to be able to provide reclaimed water to a future golf course and to be able to provide reclaimed water for irrigation of freeway landscaping.

Phase 5: Provide reclaimed water for irrigation of freeway landscaping.

Phase 6: Upgrade treatment to reclamation quality at the prison WWTP by June of 2009.

Phase 7: Expand the City's WWTP head works.

Phase 8: Acquire additional disposal site (Parcel B) contiguous to and southeast of the City's WWTP and expand the City's WWTP facility onto that site.

Phase 9 Upgrade the City's WWTP to 7.0 MGD Reclamation Treatment Capacity. At an average growth rate of 250 dwelling units and related services, it is estimated this would provide sufficient treatment capacity through June of 2028 to serve a City population of 43,500.

Phases 10 and 11: Acquire and develop additional disposal sites (Parcels C and D) southeast of the City's WWTP. These disposal sites have also been identified as preferred sites to consider for reclamation disposal purposes.

Phases 12 through 17: Various alternative phases that increase treatment and disposal capacity to meet the service needs of the City. Various parcels of land have been identified as potential reclaimed wastewater disposal sites. These projects are beyond the scope of this master plan. Acquire land be used for tertiary disposal purposes. Identify, and make arrangements to connect to, various landscaping, crop and spray field groundwater recharge disposal and storage sites (Title 22 reclamation quality effluent).

Phases 12 through 16 are additional conceptual disposal sites. Various parcels of land have been identified as potential reclaimed wastewater disposal sites.

Environmental Implications of the General Plan Land Use Diagram and Wastewater Master Plan

Aesthetics and Visual Resources

Implications of the Land Use Diagram/Wastewater Master Plan

The draft Plan designates about 2,000 acres to the east and north of the City for additional urban development. Most of this land is currently farmland, although the Dole food processing plan occupies about ten acres on Camphora-Gloria Road and existing highway commercial development in the unincorporated County has been constructed along Highway 101 north of Camphor-Gloria Road.

Potentially Significant Impacts

The development of urban land uses contemplated by the Plan in an area whose visual character is largely agrarian will significantly alter the aesthetic and visual quality of the area surrounding the City. These impacts are considered potentially significant and warrant further analysis in an EIR.

Agricultural Resources

Implications of the Land Use Diagram/Wastewater Master Plan

The soil in and around Soledad is considered "Prime Agricultural Land" with very few exceptions. The higher quality agricultural soils are located closer to the Valley floor along the floodplain of the Salinas River. Higher elevations may still have productive soils, but slope and the availability of irrigation water may limit agricultural productivity. Many of the properties surrounding the City are subject to Land Conservation Act (Williamson Act) contracts, however none of the properties designated for future urban development are under contract.

Potentially Significant Impacts

The draft Plan designates about 2,000 acres to the north and east of the City for additional urban development. Over time, development of this land will result in the permanent conversion of this important and productive agricultural land to an urban use. These impacts are considered potentially significant and warrant further analysis in an EIR.

In addition, the Wastewater Master Plan identifies properties adjacent to the existing treatment plant to be converted to disposal ponds. This is recommended as a means of remedying existing treatment plant capacity limitations while providing capacity to serve the continued development of the City as contemplated by the draft General Plan. Converting these properties to disposal ponds will result in their permanent conversion from an agricultural use.

Air Quality

Implications of the Land Use Diagram/Wastewater Master Plan

Development of urban uses contemplated by the draft Plan will result in direct and indirect impacts to air quality. Direct impacts will result from construction activities and the generation of emissions from new stationary sources such as those that might be developed in the areas designated for

industrial development. Indirect impacts will result from increased generation of motor vehicle trips associated with the various urban uses.

Potentially Significant Impacts

The scale of future urban development contemplated by the draft Plan will significantly increase the potential for direct and indirect emissions which in turn could hamper efforts to achieve and maintain State and federal air quality standards. These impacts are considered potentially significant and warrant further analysis in an EIR.

Biological Resources

Implications of the Land Use Diagram/Wastewater Master Plan

Although native vegetation on the valley floor has been substantially altered, the extensive agricultural fields and the presence of large tracts of undeveloped land in and around the City provide suitable habitat for a diverse variety of resident and migrant wildlife species.

Potentially Significant Impacts

Additional urban development envisioned by the draft Plan will result in the permanent loss of over 2,000 acres of agricultural and otherwise undeveloped land which may provide suitable habitat for sensitive biological resources. These impacts are considered potentially significant and warrant further analysis in an EIR.

Cultural and Historical Resources

Implications of the Land Use Diagram/Wastewater Master Plan

Native American archaeological sites in the Salinas Valley tend to be situated at the base of hills and on the valley floor near the Salinas River, the only source of constant flowing water. Consequently, there is low potential for identifying Native American cultural resources within most of the area designated for urban development by the draft Plan. Nonetheless, buildout has the potential to result in the disturbance of previously unknown archaeological and historical resources.

The City is also home to a number of potentially historic structures that may be adversely impacted by development in accordance with the draft Plan. Sources of impact can include direct and indirect disturbance, which includes alteration of historical context.

Potentially Significant Impacts

The potential to disturb previously undiscovered resources of cultural and/or historical significance is a potentially significant impact which warrants further analysis in an EIR. Likewise, the potential for future development contemplated by the draft Plan to alter the historic character and context of structures in the City is potentially significant.

Geologic Hazards, Mineral Resources and Soils

Implications of the Land Use Diagram/Wastewater Master Plan

Soledad, as most places near the coast of California, is subject to the periodic effect of seismic events. The San Andreas Fault is located about twelve miles to the east of the City which has the potential to produce major earthquakes. In addition, the alluvial soils that underlie the City's planning area are vulnerable to erosion and sedimentation.

Potentially Significant Impacts

The significant urban development contemplated by the draft Plan will expose additional people and property to the risk of seismically induced groundshaking in the event of an earthquake. In addition, construction activities and the increase in impermeable surfaces associated with urban development will increase the potential for erosion and sedimentation. These impacts are considered potentially significant and warrant further analysis in an EIR.

Hazards and Hazardous Materials

Implications of the Land Use Diagram/Wastewater Master Plan /Potentially Significant Impacts

Urban development accommodated by the draft Plan will increase the amount of hazardous materials used, stored, generated, and transported in and through the City. These impacts are considered potentially significant and warrant further analysis in an EIR.

Drainage and Water Quality

Implications of the Land Use Diagram/Wastewater Master Plan

The draft Plan designates significant acreage for urban development which will increase the volume and velocity of runoff.

Potentially Significant Impacts

The additional runoff associated with urban development may result in localized flooding or ponding, increase the potential for erosion and sedimentation and the potential for the degradation of surface and groundwater quality. These impacts are considered potentially significant and warrant further analysis in an EIR.

Improvements to the City's wastewater treatment and disposal system as contemplated by the Wastewater Master Plan are expected to have a beneficial impact on water quality by helping the City achieve and maintain the discharge requirements set by the Regional Board.

Noise

Implications of the Land Use Diagram/Wastewater Master Plan

Significant noise sources in Soledad include the Southern pacific Railroad, traffic on Highway 101 and traffic noise on existing streets. The significant urban development contemplated by the draft Plan will result in new noise sources and the exposure of additional sensitive receptors to increased noise.

Potentially Significant Impacts/Wastewater Master Plan

Exposure of additional residents to existing noise sources associated with the freeway and railroad is considered a potentially significant impact. In addition, noise associated with construction activities and the increased noise from additional motor vehicle trips in and through the City are considered potentially significant and warrant further analysis in an EIR.

Population and Housing

Implications of the Land Use Diagram/Wastewater Master Plan

Buildout of the draft Plan will result in a future City population of about 58,000 (non-prison) residents over a period of about forty years. The Plan designates considerable acreage for residential development in a variety of densities aimed at meeting the widest range of incomes.

Potentially Significant Impacts

The additional population will increase the demand for public services, schools, parks and other public facilities. New development will also increase the supply of housing. These impacts are considered potentially significant and warrant further analysis in an EIR.

Public Services, Utilities and Services/Recreation

Implications of the Land Use Diagram/Wastewater Master Plan

Development as envisioned by the draft General Plan will result in considerable additional demand for public services. Water supply, wastewater collection and treatment, and storm drainage capacities will need to be expanded to accommodate the addition development and population. The added population will also increase the demand for parks and recreation, schools, police and fire protection services as well.

The Wastewater Master Plan provides a program for the expansion of wastewater treatment and disposal facilities necessary to serve the continued growth and development of the City.

Potentially Significant Impacts

The development and installation of new utilities infrastructure and the increased capacity for sewer and water, will result in significant impacts from noise, traffic and the intermittent disruption of services. Impacts to water supply are required to be addressed in accordance with recent changes to State law (SB 610/210). These impacts are potentially significant and warrant further analysis in an EIR. Growth inducing impacts associated with the increase in service capacity will also need to be addressed by an EIR, along with cumulative effects.

Transportation and Traffic

Implications of the Land Use Diagram/Wastewater Master Plan

Traffic generation from urban development will significantly increase as a result of buildout in accordance with the draft Plan.

Potentially Significant Impacts

To maintain an acceptable level of service on City streets and intersections and on the State Highway, significant transportation improvements will be necessary concurrently or in advance of new development. Additional railroad at-grade crossing will pose a potential safety hazard. These impacts are considered potentially significant and warrant further analysis in an EIR.

Mandatory Findings of Significance

In accordance with Sections 15152 and 15168 of the State CEQA Guidelines, this initial study has been prepared to evaluate the potential impacts of the proposed project. On the basis of this initial evaluation I find that the proposed project has the potential to result in one or more significant effects on the environment, and an Environmental Impact Report is required.

David Moran 2/18/2005

David Moran, consultant (on behalf of the City) Date

Sources

City of Soledad Downtown Specific Plan and Front Street Rehabilitation Plan, May 1994
City of Soledad General Plan, 1993
City of Soledad Impact Fee Study for Wastewater System, 1999, Hanna & Brunetti
General Plan Background Report, 2000, CMCA
SVSWA website: http://www.svswa.org (accessed 6/1/04)
City of Soledad, 2004 Final Draft General Plan
City of Soledad Wastewater Treatment and Disposal Master Plan, 2005

List Of Preparers

David Moran, Senior Associate, CMCA
Nicole Carter, Senior Environmental Specialist, CMCA
Whitney Fisher, Associate, CMCA
Chris Clark, Principal, CMCA

MONTEREY COUNTY

PLANNING AND BUILDING INSPECTION DEPARTMENT

240 CHURCH STREET, SALINAS, CA 93901 PLANNING: (831) 755-5025 BUILDING: (831) 755-5027 FAX: (831) 755-5487
MAILING ADDRESS: P. O. BOX 1208, SALINAS, CA 93902
COASTAL OFFICE, 2620 1st Avenue, MARINA, CALIFORNIA 93933 PLANNING: (831) 883-7500 BUILDING: (831) 883-7501 FAX: (831) 384-3261

SCOTT HENNESSY, DIRECTOR

City of Soledad
C/O Crawford Multari & Clark Associates
641 Higuera St., Suite 302
San Luis Obispo, CA 93402
Attn: David Moran

April 26, 2005

Re: Notice of Preparation of Draft Environmental Impact Report for City of Soledad General Plan Update and Wastewater Master Plan

Dear David:

The County of Monterey thanks the City for the opportunity to comment on the Notice of Preparation (NOP) for the two projects referenced above. The County desires to assist the City in preparation of adequate environmental documents to insure that potential impacts from the two projects are thoroughly addressed. The County applauds the City for going beyond the 7 state mandate General Plan Elements to include the optional elements of: Parks and Recreation, Public Services and Facilities, and Economic Development.

The County will provide comments on a number of the Elements and on the Wastewater Master Plan.

Sincerely,

Scott Hennessy

Scott Hennessy

Land Use
The planning and development of the City of Soledad should result in a housing and jobs balance to provide the opportunity for city residents to live and work within the community. The Land Use Element should also address how the development of the city lands will include buffers to assure the city development does not impact the farming on adjacent unincorporated agricultural.

Circulation Element
Please see attached letter from Monterey County Public Works Department

Conservation and Open Space
The City should indicate how it will address treatment and retention of stormwater runoff from the develop surfaces of the city to insure adequate treatment of the surface water to prevent pollution of receiving water bodies and the groundwater basin.
The City should also address the issue of loss of all categories of farmland to be converted to non-agricultural uses and how the loss will be mitigated from both the loss of agricultural production and job loss perspectives

Parks
The City should address the issue of adequate openspace and recreational land to accommodate the current and future demand for recreation within the City.

Safety
The EIR should address the resulting impact to County services to include public safety (patrol services/jail capacity). The document should also include a plan that details how the growth of the Soledad Police Department would parallel the growth of the City so there are no gaps in the police coverage for the expansion area.

Wastewater Master Plan

The County has reviewed the January 13, 2005, *Draft Wastewater Treatment and Disposal Facilities Master Plan.* The report indicates its purpose is intended to promptly mitigate existing treatment and disposal inadequacies that the City is attempting to resolve. In addition, the plan is intended to provide flexible disposal options and provide a plan for future expansion consistent with the policies and projections embodied in the City General Plan (CGP).

The Wastewater Master Plan (WMP) references the appropriate sections of the CGP on page six. It states:

> Policy S-1 on Page 4 of Section VII of the January 2004 Final Draft of the City General Plan stipulates that "New development shall not be allowed until adequate public services and facilities to serve such development are provided."
>
> Policy S-2 on the same page notes that it shall be the policy of the City to "plan for the expansion of the needed water and sewer infrastructure including, but not limited to, the expansion of water production, storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion."

The County strongly supports these two goals. Adequate wastewater treatment and disposal capacity must be available *prior* to the issuance of building permits for development. Due to unforeseen circumstances, the City now finds that it lacks the capacity to implement this policy and enacted Urgency Ordinance No. 612 and Resolution 3557 in October 2004. The County urges that the City do everything possible to implement these policies. We encourage the City to plan and construct infrastructure necessary to support new development. This includes the use of accurate population forecasts for the calculation of wastewater flows.

To implement these goals, a complete and detailed WMP that identifies construction phasing, in relationship to financial impact and potential sources of financing is critical. The WMP as drafted in January 2005 does not appear to adequately describe the technical, managerial and financial resources to support the critical infrastructure. In addition to providing the immediate infrastructure needs necessary to continue the issuance of building permits and protect from accidental discharges into the Salinas River, now is the time to establish and implement a program to collect impact fees to assure future upgrades of the treatment process and to provide opportunities for water reuse.

Long-term basin water quality is also an important concern. The upgrade of treatment will help to offset new water uses and reduce the contribution of nitrates to the groundwater. The City of Soledad and the Correctional Facilities have had a history of water supply wells that have exceeded the drinking water standard for nitrates.

The County Health Department, Division of Environmental Health will participate in the preparation and review of the Revised Wastewater Discharge Requirements, which will be issued by the Regional Water Quality Control Board on May 12, 2005. The County looks forward to working with the City and the Regional Water Quality Control Board to resolve the immediate and long-term wastewater issues which will assure the protection of public health.

MONTEREY COUNTY

DEPARTMENT OF PUBLIC WORKS
312 E. Alisal Street, Salinas, CA 93901-4371 • (831) 755-4800 • FAX (831) 755-4958
Ronald J. Lundquist, P.E., Interim Public Works Director

MARCH 28, 2005

CITY OF SOLEDAD
C/O CRAWFORD MULTARI & CLARK ASSOCIATES
641 HIGUERA ST STE 302
SAN LUIS OBISPO CA 93402

DEAR MR. MORAN:

SUBJECT: RESPONSE TO NOTICE OF PREPARATION – DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR CITY OF SOLEDAD 2004 GENERAL PLAN UPDATE & WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

We have received your Notice of Preparation for the above DEIR. As the Public Works Department for Monterey County, we are keenly interested in the Circulation Element of the Soledad General Plan and its potential side effects on the County roadway system.

Based on of our review of the NOP, we offer the following comments:

- The Soledad General Plan should be consistent with other regional planning documents, such as the Monterey County General Plan.
- Given the anticipated doubling of the City's population by 2020, attention should be paid to the effect that this growth will have on the County roadway system, in particular, to County roads located north and west of the City.
- The Environmental Impact Report should address the impacts of proposed City growth on the regional transportation network and proposed mitigations should be consistent with other regional transportation planning documents, i.e. Transportation Agency of Monterey County's RTP.

Thank you for taking our comments into consideration. We also look forward to reviewing and providing comments on the Draft Environmental Impact Report. If you have any questions, please call me at (831) 755-8970.

Sincerely,

RONALD J. LUNDQUIST, P.E.
INTERIM PUBLIC WORKS DIRECTOR

By

Enrique Saavedra, P.E.
Senior Transportation & Development Engineer

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TDD (805) 549-3259
http://www.dot.gov/dist05

Flex your power!
Be energy efficient!

March 22, 2005

City of Soledad General Plan
GP & DEIR

David Moran
Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

SUBJECT: City of Soledad Notice of Preparation for General Plan Update Comments

Dear Mr. Moran:

The California Department of Transportation (Department) District 5 staff appreciates the opportunity to comment the on the scope and content of the City of Soledad's upcoming General Plan update and environmental document. The Department offers the following comments for your consideration:

1) Traffic Study Area - The traffic analysis in the Draft EIR should have a clearly defined study area, which should include roadways outside of the city limits. Since regional access to the City of Soledad will be provided from Route 101, District 5 suggests that the study area for the traffic analysis include the Route 101 segments and interchanges/intersections from the junction with Route 146 to the exit for the correctional facility. Additionally, all issues regarding Route 146 should be presented in the document.

2) LOS Policies - The Department is responsible for the safety, operations, and maintenance of the state highway system pursuant to the California Streets and Highways Code. Therefore, the Department's level of service (LOS) policies should be used in the traffic analysis to determine the significance of any project's impact to the state highway system. The Department endeavors to maintain a target LOS at the transition between LOS C and LOS D (i.e. not worse than LOS C) on state highway facilities.

3) LOS Methodologies - The methodologies used to calculate the LOS for the state highway system should be consistent with the methods in the current version of the Highway Capacity Manual (HCM). All LOS calculations should be included in the Draft EIR as an appendix and made available for review.

4) Existing Conditions - The traffic analysis in the Draft EIR should include information on existing traffic volumes within the study area, including the state highway system. This information should be based upon recent traffic counts. Information on existing traffic levels can be obtained from other recent traffic studies (i.e. not more than two years old) and may also be obtained from District 5. The LOS for the segments, interchanges, and intersections on the state highway system under existing conditions should be identified.

5) Cumulative Conditions - The traffic analysis in the Draft EIR should include information on cumulative traffic volumes within the study area, including the state highway system. The cumulative analysis should be based upon a 20-year timeframe or General Plan buildout forecasts. The cumulative analysis should include a discussion of the land use and roadway network assumptions used in the traffic forecasts. The LOS for the segments, interchanges, and intersections on the state highway system under cumulative conditions should be identified.

AMBAG
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

May 12, 2005

Mr. David Moran
City of Soledad
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

Re: MCH# 050513- Notice of Preparation of Draft Environmental Impact Report for the 2004 General Plan Update and Wastewater Treatment and Disposal Master Plan

Dear Mr. Moran:

AMBAG's Regional Clearinghouse circulated a summary of notice of your environmental document to our member agencies and interested parties for review and comment.

The AMBAG Board of Directors considered the project on **May 11, 2005** and has no comments at this time.

Thank you for complying with the Clearinghouse process.

Sincerely,

Nicolas Papadakis
Executive Director

SERVING OUR REGIONAL COMMUNITY SINCE 1968
445 RESERVATION ROAD, SUITE G ✦ P. O. BOX 809 ✦ MARINA, CA 93933-0809
(831) 883-3750 ✦ FAX (831) 883-3755 ✦ www.ambag.org

MONTEREY COUNTY

DEPARTMENT OF PUBLIC WORKS
312 E. Alisal Street, Salinas, CA 93901-4371 • (831) 755-4800 • FAX (831) 755-4958
Ronald J. Lundquist, P.E., Interim Public Works Director

MARCH 28, 2005

CITY OF SOLEDAD
C/O CRAWFORD MULTARI & CLARK ASSOCIATES
641 HIGUERA ST STE 302
SAN LUIS OBISPO CA 93402

DEAR MR. MORAN:

SUBJECT: RESPONSE TO NOTICE OF PREPARATION – DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR CITY OF SOLEDAD 2004 GENERAL PLAN UPDATE & WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

We have received your Notice of Preparation for the above DEIR. As the Public Works Department for Monterey County, we are keenly interested in the Circulation Element of the Soledad General Plan and its potential side effects on the County roadway system.

Based on of our review of the NOP, we offer the following comments:

- The Soledad General Plan should be consistent with other regional planning documents, such as the Monterey County General Plan.
- Given the anticipated doubling of the City's population by 2020, attention should be paid to the effect that this growth will have on the County roadway system, in particular, to County roads located north and west of the City.
- The Environmental Impact Report should address the impacts of proposed City growth on the regional transportation network and proposed mitigations should be consistent with other regional transportation planning documents, i.e. Transportation Agency of Monterey County's RTP.

Thank you for taking our comments into consideration. We also look forward to reviewing and providing comments on the Draft Environmental Impact Report. If you have any questions, please call me at (831) 755-8970.

Sincerely,

RONALD J. LUNDQUIST, P.E.
INTERIM PUBLIC WORKS DIRECTOR

By

Enrique Saavedra, P.E.
Senior Transportation & Development Engineer

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1303 Maurice Avenue
Rohnert Park, California 94928-3609
Tel: 707.664.0880 • Fax: 707.664.0890
E-mail: nwic@sonoma.edu

11 April 2005

File No.: 04-MT-10E

David Moran
Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93401

re: Notice of Preparation of a Draft Environmental Impact Report for the City of Soledad, Monterey County.

Dear Mr. Moran:

Records at this office were reviewed to determine if this project could adversely affect historical resources. The review for possible historic structures, however, was limited to references currently in our office. **Please note that use of the term historical resources includes both archaeological sites and historic structures.**

XX The proposed project area contains or is adjacent to numerous archaeological sites. A study on a project by project basis is recommended prior to commencement of project activities.

XX The proposed project area has the possibility of containing unrecorded archaeological site(s). A study on a project by project basis is recommended prior to commencement of project activities.

____ The proposed project area has a low possibility of containing unrecorded archaeological site(s). Therefore, no further study for archaeological resources is recommended.

XX Numerous studies identified one or more historical resources. It is recommended that a qualified archaeologist assess the status of the sites and provide project specific recommendations on a project by project basis.

XX Review for possible historic structures was limited to the Northwest Information Centers documents and should not be considered comprehensive. Since the Office of Historic Preservation has determined that any building or structure 45 years or older maybe of historic value, if the project area contains such properties it is recommended that they be assess by the Sonoma County Landmarks Commission to determine if a formal CEQA evaluation is warranted.

XX The guidelines for implementation of the California Register of Historical Resources (Cal Register) criteria for evaluation of historical properties have been developed by the State Office of Historical Preservation. For the purposes of CEQA, all identified sites should be evaluated using the Cal Register criteria.

XX We recommend you contact the local Native American tribe(s) regarding traditional, cultural, and religious values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/653-4082.

____ Comments:

If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 664-0880.

Sincerely,

Liz Black for

Leigh Jordan
Coordinator

TAMC

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

April 21, 2005

City of Soledad
C/O David Moran, Crawford Multari Associates
641 Higuera Street
San Luis Obispo, CA 93402

SUBJECT: Comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report for the City of Soledad General Plan Update.

Dear Mr. Moran:

Transportation Agency for Monterey County (TAMC) staff have reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the proposed City of Soledad General Plan Update. TAMC is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County.

The project includes a comprehensive revision of the City of Soledad's 1994 General Plan. The plan establishes goals, policies, and programs for guiding the physical development of the City, which is expected to reach a population of 28,000 residents over the 20-year planning horizon. The plan will accommodate a development potential of 11,000 new residential units.

TAMC staff offers the following comments for your consideration:

1. The DEIR should analyze the impacts to regional transportation infrastructure associated with implementation of the updated general plan. TAMC has completed a Nexus Study for a proposed regional development impact fee program that analyzed the regional, countywide traffic impacts of development according to adopted city and county general plans. This Nexus Study identifies projects to address countywide impacts to regional infrastructure and a schedule of development impact fees based on the proportion of project costs that can be attributed to new trips. The Nexus Study can be accessed via the TAMC website (www.tamcmonterey.org), or obtained by contacting the TAMC offices.

   TAMC recommends that the Nexus Study be used as a resource to identify the regional traffic impacts associated with implementation of the updated Soledad General Plan, and is requesting that proposed regional fees be identified as a mechanism for mitigating regional impacts. The proposed regional fee program includes interchange improvements

55-B Plaza Circle, Salinas, CA 93901-2902 • Tel: (831) 775-0903 • Fax: (831) 775-0897 • Website: www.tamcmonterey.org

to US 101 in Soledad. It should also be noted that TAMC is currently requesting that new development projects be assessed regional fees on an ad hoc basis prior to formal adoption and enactment of the fee program.

TAMC will be meeting with and encouraging each county jurisdiction to adopt and implement TAMC's proposed regional fee program.

2. The traffic analysis in the Draft EIR should have a clearly defined study area including the significant regional roadways outside of the city limits that would potentially be impacted by development allowed by the proposed Specific Plan. All state highways and principal arterials within this study area should be identified. Applicable Level of Service (LOS) standards for each of the roadway segments and intersections on state highways and principle arterials should also be identified in the DEIR.

3. The traffic analysis in the Draft EIR should include information on existing traffic volumes within the study area, especially for those roadway segments and intersections on state highways and principal arterials. This information should be based upon recent traffic counts. The existing LOS for each roadway segment and intersection should also be calculated and included in the DEIR.

4. The LOS for each regional roadway segment and intersection should be calculated under project-specific and "cumulative conditions" and included in the DEIR. "Cumulative conditions" should be clearly defined in the DEIR. Roadway performance deficiencies and feasible mitigation measures under both scenarios should be identified. TAMC and Caltrans District 5 consider the TAMC Nexus Study to be sufficient for addressing the cumulative regional traffic impacts of new land use development.

5. The methodology used to calculate the LOS should be consistent with the methods in the current version of the Highway Capacity Manual (HCM). All LOS calculations should be included in the DEIR as an appendix and made available for public review.

6. TAMC supports accommodation of alternative forms of transportation (rail, bus transit, bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. TAMC urges that the attached list of alternative measures be considered and implemented by development included in the City of Soledad General Plan update to promote alternatives to automobile travel that would help address the impacts of project-related traffic on regional roadways. A discussion of any travel demand reduction measures to be implemented by the City of Soledad should be included in the DEIR. In addition, any bicycle and pedestrian facilities to be implemented according to the updated plan should be identified in the Draft EIR and be consistent with the TAMC General Bikeways Plan for Monterey County.

We would like to express our appreciation for the opportunity to review this NOP document. If you have any questions, please contact Andrew Cook of my staff at (831) 775-0903.

Sincerely,

Wm. Reichmuth, P.E., Executive Director

Attachment: Samples of Alternative Measures

Cc: Dave Murray, California Department of Transportation (Caltrans) District 5
Ron Lundquist, Monterey County Department of Public Works
Frank Lichtanski, Monterey-Salinas Transit
Nicholas Papadakis, AMBAG
Douglas Quetin, Monterey Bay Unified Air Pollution Control District

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

DISTRICT BOARD MEMBERS

CHAIR:
Lou Calcagno
Monterey County

VICE CHAIR:
Tony Campos
Santa Cruz County

Anna Caballero
Salinas

Butch Lindley
Monterey County

Ila Mettee-McCutchon
Marina

Reb Monaco
San Benito County

John Myers
King City

Dennis Norton
Capitola

Ellen Pirie
Santa Cruz County

Jerry Smith
Monterey County

April 15, 2005

Mr. David Moran
Crawford, Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93401

SUBJECT: NOP FOR DEIR FOR GENERAL PLAN UPDATE AND WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN (CITY OF SOLEDAD)

Dear Mr. Moran:

Staff has reviewed the referenced document and has the following recommendations for a scope of work for the air quality analysis:

1. Direct and indirect source emissions (VOC and NO_x) from all proposed operational activities should be quantified and assessed. VOC and NO_x emissions need not be quantified for "typical" construction activity. Staff should be consulted regarding potential construction equipment to be used on the project.

2. If project <u>or</u> cumulative traffic would cause LOS to decline from D or better to E or F, dispersion modeling should be undertaken to determine if carbon monoxide concentrations would violate ambient air quality standards at sensitive receptor locations.

3. Project operational and construction PM_{10} emissions should be quantified. If emissions would exceed 82 lb/day, the project would have a significant impact on air quality. However, PM_{10} modeling could be undertaken to verify or dispute this finding per the District's CEQA Air Quality Guidelines.

4. If the project might expose sensitive receptors in adjacent land uses to air quality problems such as odors or toxic air contaminants (e.g., diesel exhaust), the DEIR should include an assessment of these impacts. The impact of prescribed burning on sensitive receptors who would reside in the project area should also be addressed.

5. Mitigation measures should be identified for any significant impacts on air quality.
The EIR should quantify the emission reduction effectiveness of each measure, identify agencies responsible for implementation and monitoring, and conclude whether mitigation measures would reduce impacts below significance levels.

6. The District's Rule 216 regarding Permit Requirements for Wastewater and Sewage Treatment Facilities should be reviewed for applicable requirements.

7. The District's Rule 402 regarding Nuisances should be reviewed for applicable requirements.

8. Project consistency with the 2004 Air Quality Management Plan for the Monterey Bay Region should be addressed. Consistency is used by the District to determine a project's cumulative impact on regional air quality (i.e., ozone levels). AMBAG should be contacted for a formal consistency determination, which should be included in the DEIR.

The District's 2004 CEQA Air Quality Guidelines can be used to help prepare the air quality analysis. The Guidelines are available at the District's website - www.mbuapcd.org. Please do not hesitate to call if you have any questions.

Sincerely,

Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390

April 27, 2005

Don Fleming
City of Soledad
248 Main Street
Soledad, CA 93960

RE: SCH# 2005032122, City of Soledad 2004 General Plan Update, Wastewater Treatment and Disposal Master Plan, Monterey County

Dear Mr. Fleming:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

1. Contact the appropriate Information Center for a record search. The record search will determine:
   - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
   - If any known cultural resources have already been recorded on or adjacent to the APE.
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
   - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
   - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
3. Contact the Native American Heritage Commission for:
   - A Sacred Lands File Check. Requests must be made in writing with the County, Quad map name, township, range and section.
   - A list of appropriate Native American Contacts for consultation concerning the project site and to assist in the mitigation measures.
4. Lack of surface evidence of archeological resources does not preclude their subsurface existence.
   - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
   - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
   - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5 (e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

If you have any questions, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

CC: State Clearinghouse

City of Soledad
General Plan Update

Methodology

Appendix A shows the trip generation for these approved projects. The trip generation for the proposed General Plan Update land use was estimated based on rates provided in *Trip Generation, 7th Edition*, published by the Institute of Transportation Engineers (ITE).

Trip generation is defined as the number of "vehicle trips" produced by a particular land use or project. A trip is defined as a one-direction vehicle movement. The total number of trips generated by each land use includes the inbound and outbound trips.

The City's buildout General Plan land use includes approximately 14,273 dwelling units as shown below. The potential trip generation is approximately 11,846 a.m. peak hour and 19,532 p.m. peak hour trips. At buildout, it is assumed that there will be a large percentage of trips that will be internal to the City. It is assumed that approximately 30 to 35 percent of these trips would be link, pass-by or internal trips. This percentage includes the commute work trips, but also trips for shopping, schools, groceries, banking, meals, gas stations, etc.

For a small city, typically a very small percentage (usually less than 10 percent) of internal trips are work related. Generally, for non-work related trips during the peak hour, the majority of the trips prefer to stay internal for such purposes as shopping, banking, childcare, going to the gym, meals and etc. On the other hand, typically 70 to 80 percent of all external trips are work related. Consequently, a very large percentage of the residents have been assigned to work outside of the city.

Land Use	Quantity
Dwelling Units	
Single Family	9,065
Medium Density	3,424
High Density	1,784
TOTAL:	14,273
Commercial Floor Area	3,354,120 s.f.
Industrial Floor Area	9,500,000
Total Population at Buildout	68,290 s.f.

Trip Distribution and Assignment

Trip distribution is the process of determining in what proportion vehicles would travel between the project site and various destinations within a study area. Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area and the input from the City staff. Trip assignment is the process of determining the various paths vehicles would take from the project site to each destination.

The estimated General Plan buildout land use trip generation was assigned onto the City's major street network using a TRAFFIX Model. The traffic distribution and assignment assumptions in a TRAFFIX model was developed based on existing travel patterns and knowledge of the study area. For residential traffic, it is assumed that approximately 40 percent of the traffic will be northbound

on US 101, 25 percent southbound on US 101 and the remaining internal to the city. And for non-residential traffic, it is assumed that approximately 30 percent of the traffic will be northbound on US 101, 40 percent southbound on US 101 and the remaining internal to the city.

At build-out conditions, the levels of service (LOS) of all the study intersections would deteriorate to unacceptable conditions. All study intersections (which are currently unsignalized) would operate at unacceptable level of service F conditions. Figure V-3 shows the estimated Average Daily Traffic (ADT) traffic volumes on all the major arterials. Table V-4 shows the projected level of service at build-out conditions. Roadway widening and signalization of all major intersections would be required to accommodate the projected traffic.

Table V-4: Buildout Level of Service

No.	Intersection Name	Intersection Type	a.m.		p.m.	
			Average Delay (sec)	LOS	Average Delay (sec)	LOS
1.	Front Street/East Street	Four –Way Stop	>120	F	>120	F
2.	Front Street/Dixie Street	Two-Way Stop	>120(>120)	F(F)	>120	F
3.	Front Street/Oak Street	Two –Way Stop	>120(>120)	F(F)	>120(>120)	F (F)
4.	Front Street/Nestles Road	Two-Way Stop	>120(>120)	F(F)	>120(>120)	F (F)
5.	Mobile Home Park Drwy./SB 101 Ramps	Two-Way Stop	10.8(>120)	B(F)	62.7(>120)	F(F)
6.	Front Street/Fourth Street	Two-Way Stop	3.9(64.0)	A(F)	>120(>120)	F (F)
7.	Nestles Rd./Fourth Street	Two-Way Stop	8.5(14.3)	A(B)	>120(>120)	F(F)

Proposed Mitigation Measures

Figure V-4 shows the proposed mitigation measures to accommodate the projected traffic from the buildout of the proposed General Plan lane use.

As shown in Figure V-4, it is anticipated that significant improvements to the interchanges would be required to accommodate the full Buildout of the proposed General Plan land use. Improvements might include traffic signals and modification to the interchange. Due to the large amount of proposed land use, interchange improvements at Camphora Gloria/US 101 would also be required to accommodate the projected traffic to the north of the City.

With the proposed mitigations, the levels of service (LOS) will improve to LOS D or better as shown in Table V-5.

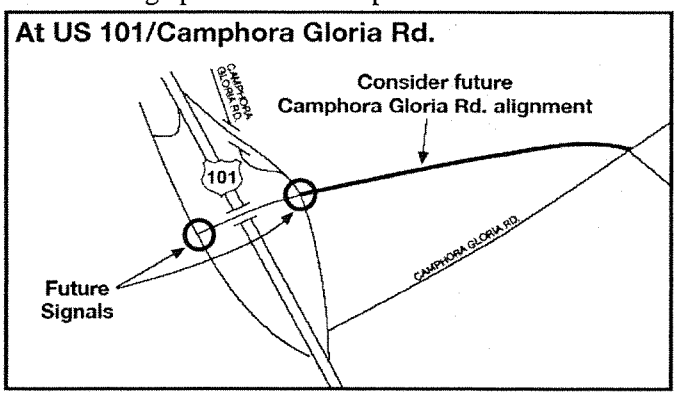
Table V-5: Buildout Mitigated Level of Service

No.	Intersection Name	Intersection Type	a.m.		p.m.	
			Average Delay (sec)	LOS	Average Delay (sec)	LOS
1.	Front Street/East Street	**Signalized**	18.0	B	29.9	C
2.	Front Street/Dixi Street	**Signalized**	17.3	B	23.6	C
3.	Front Street/Oak Street	**Signalized**	15.3	B	21.5	C
4.	Front Street/Nestles Road	**Signalized**	18.2	B	40.2	D
5.	Mobile Home Park Drwy./SB 101 Ramps	**Signalized**	3.2	A	4.0	A
6.	Front Street/Fourth Street	**Signalized**	6.4	A	24.8	C
7.	Nestles Rd./Fourth Street	**Signalized**	10.4	B	13.4	B

Potential Improvements at the Interchange

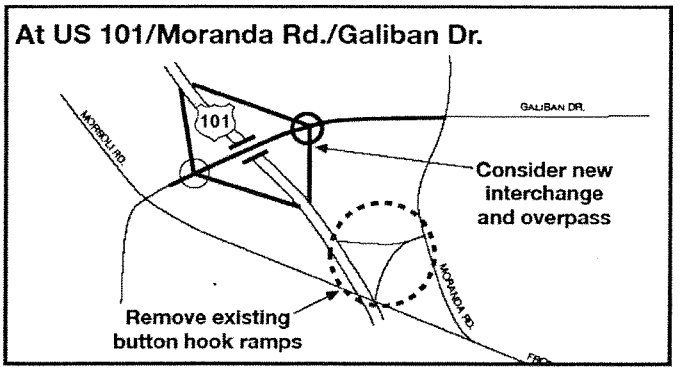
The three interchanges that serve Soledad are operating fine for the low traffic volume that it currently serves. However, there are some inherent operational and access deficiencies. For example,

1. US 101/Camphora Gloria Road - The current interchange provides an overpass at US 101 and consists of a long northbound off-ramp that tees into Camphora Gloria Road. Going southbound, the interchange provides for a short "button hook" off-ramp that tees into Sillman Road. Sillman Road leads to the overpass and eventually becomes the southbound on-ramp to US 101.



It is anticipated that both of the overpass intersections would need signalization. In addition, realignment of Camphora Gloria Road with the overpass intersection should also be considered.

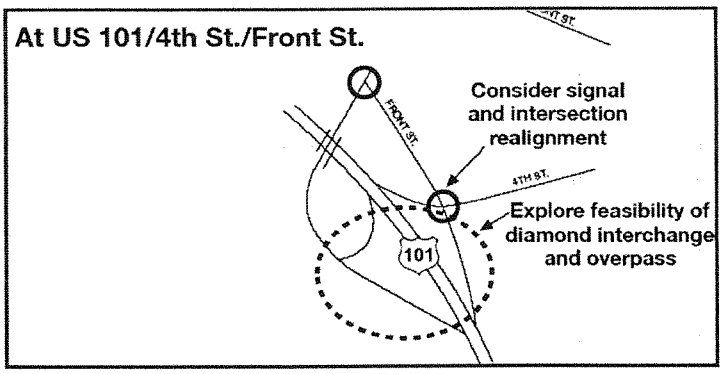
2. US 101/Moranda Road/Galiban Drive – currently the northbound and southbound ramps are split approximately a mile apart. The northbound on/off-ramps are short button hook ramps that tee onto Moranda Road. The southbound on/off-ramps is located approximately a mile to the north of the northbound ramp. To access this ramp, traffic needs to drive below an underpass and is therefore not very accessible.



TJKM proposed a future study that looks into the feasibility of consolidating the northbound and southbound on/off-ramps into a diamond interchange with an overpass that will be aligned with the future

extensions of Galiban Drive. Such a reconfiguration will more directly serve future traffic on the north side of town and will vastly improve the traffic operations at the interchange.

3. US 101/Fourth Street interchange – there is no freeway overpass, so southbound off-ramp or northbound on-ramp traffic are required to take the long loop ramp to access the freeway. Operationally, southbound off-ramp traffic with a destination to the south of Front Street would be required to either traverse the entire length of Front Street or cut through one of the neighborhood arterials that parallel Front Street. Consequently, it is expected that a lot of this traffic would unnecessary clogged-up Front Street or cut-through some of the residential arterial streets in the future buildout scenario.



Future improvements such as signals will be required at the northbound off-ramp and for southbound traffic at Front Street. Due to the short distance between US 101 and Front Street, it is unclear if it is feasible to provide a diagonally angled freeway overpass so that a diamond interchange could be constructed. A study to explore this alternative would be useful.

Land Use Alternatives Trip Generation

Trip generation estimates were made for four potential land use alternatives:

i. No Project
ii. Foothill Plan
iii. Expanded Foothill Plan and
iv. Proposed General Plan

As mentioned earlier, the City's proposed General Plan buildout land use trip generation is approximately 11,846 a.m. peak hour and 19,532 p.m. peak hour trips. The No Project land use trip generation is estimated to be approximately 4,454 a.m. peak hour and 7,703 p.m. peak hour trips.

The proposed Foothill Plan land use trip generation is estimated to be approximately 6,409 a.m. peak hour and 11,896 p.m. peak hour trips. Compared to the proposed General Plan, the Foothill Plan is approximately 54 percent and 63 percent respectively of the total peak hour trips during the a.m. and p.m. peak hours. The difference of traffic in the peak flow direction during the peak hour is approximately 3,600 trips. Therefore, compared to the proposed General Plan, this roughly translates to approximately four less lanes than would be required for the Foothill Plan land use plan.

The proposed Expanded Foothill Plan land use trip generation is estimated to be approximately 10,114 a.m. peak hour and 18,136 p.m. peak hour trips. Compared to the proposed General Plan land use, the difference of traffic in the peak flow direction during the peak hour is approximately 1,100 trips. This roughly translates to approximately one less lane than would be required for the Foothill Plan Expanded land use plan.

Appendix A
City of Soledad Land Use Alternatives Trip Generation

Trip Generation: No Project

Use	ITE Code	Size	Units	Daily rate	Daily Trips	A.M. Peak Hour						P.M. Peak Hour					
						Rate	In %	Out %	In	Out	Total	Rate	In %	Out %	In	Out	Total
SFR	210	3,897	du	9.57	37,306	0.75	0.3	0.75	731	2,192	2,923	1.01	0.6	0.37	2,480	1,456	3,936
MDR	220	660	du	6.24	4,117	0.50	0.2	0.8	65	262	327	0.58	0.7	0.35	248	133	381
HDR	220	680	du	6.23	4,237	0.50	0.2	0.8	67	270	337	0.58	0.7	0.35	255	137	392
GC/NC	820	920	ksf	31.23	28,734	0.64	0.6	0.39	362	231	593	2.94	0.5	0.52	1,300	1,408	2,708
Ind	130	33	acres	66.06	2,172	8.33	0.8	0.17	227	47	274	8.70	0.2	0.79	60	226	286
Total					76,566				1,453	3,001	4,454				4,342	3,361	7,703

Trip Generation: Foothill Plan

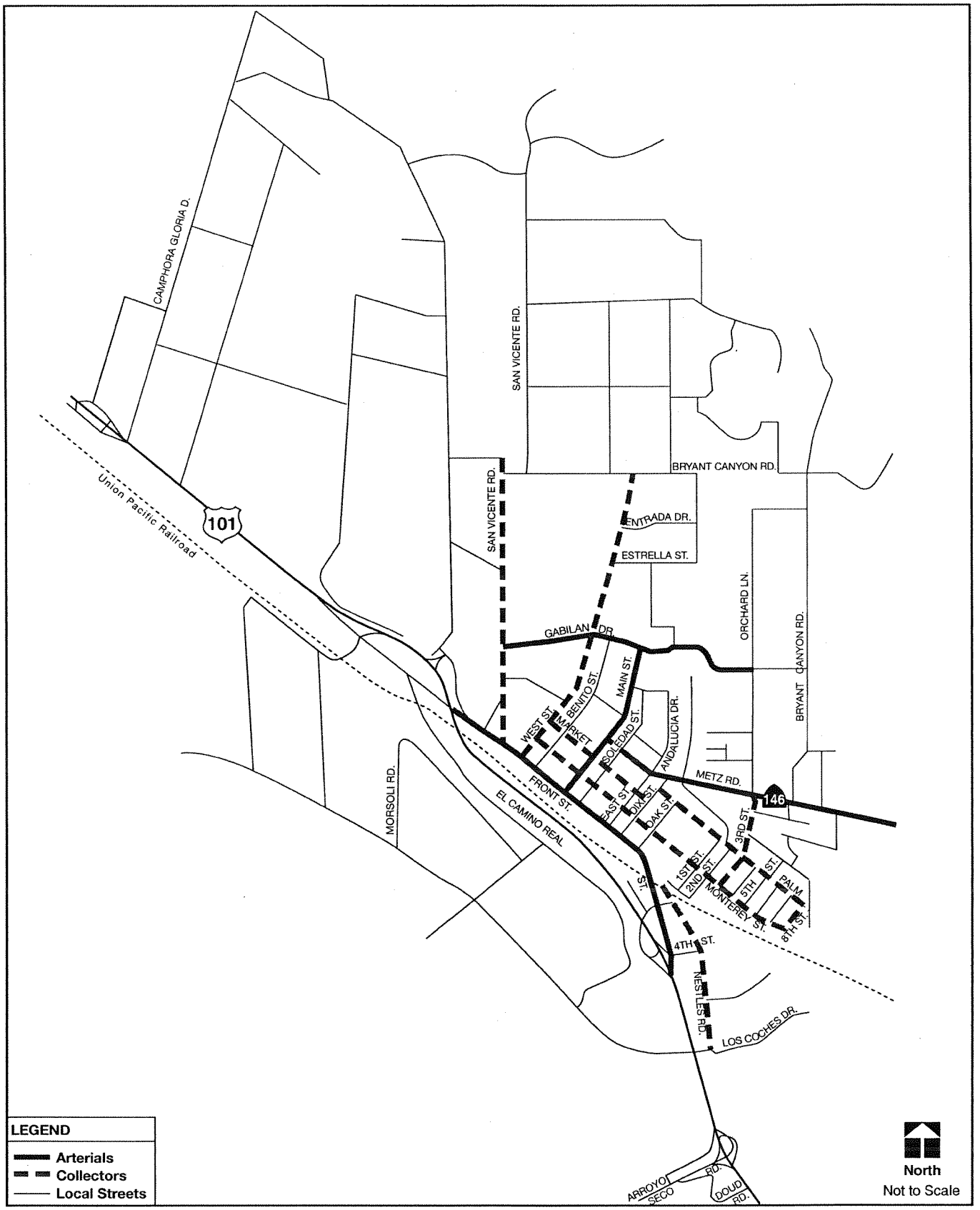
Use	ITE Code	Size	Units	Daily rate	Daily Trips	A.M. Peak Hour						P.M. Peak Hour					
						Rate	In %	Out %	In	Out	Total	Rate	In %	Out %	In	Out	Total
SFR	210	4,800	du	9.57	45,950	0.75	0.3	0.75	900	2,700	3,600	1.01	0.6	0.37	3,054	1,794	4,848
MDR	220	1,500	du	6.11	9,165	0.49	0.2	0.8	148	591	739	0.56	0.7	0.35	548	295	843
HDR	220	1,200	du	6.14	7,362	0.49	0.2	0.8	118	474	592	0.57	0.7	0.35	441	237	678
GC/NC	820	2,400	ksf	22.33	53,589	0.44	0.6	0.39	643	411	1,054	2.13	0.5	0.52	2,448	2,652	5,100
Ind	130	57	acres	58.32	3,347	7.39	0.8	0.17	352	72	424	7.44	0.2	0.79	90	337	427
Total					119,413				2,161	4,248	6,409				6,581	5,315	11,896

Trip Generation: Expanded Foothill Plan

Use	ITE Code	Size	Units	Daily rate	Daily Trips	A.M. Peak Hour						P.M. Peak Hour					
						Rate	In %	Out %	In	Out	Total	Rate	In %	Out %	In	Out	Total
SFR	210	7,985	du	9.57	76,440	0.75	0.3	0.75	1,497	4,492	5,989	1.01	0.6	0.37	5,081	2,984	8,065
MDR	220	2,522	du	6.07	15,308	0.49	0.2	0.8	248	992	1,240	0.56	0.7	0.35	913	492	1,405
HDR	220	1,384	du	6.12	8,468	0.49	0.2	0.8	136	546	682	0.56	0.7	0.35	506	273	779
GC/NC	820	4,000	ksf	18.67	74,692	0.36	0.6	0.39	873	558	1,431	1.79	0.5	0.52	3,429	3,715	7,144
Ind	130	124	acres	52.74	6,538	6.23	0.8	0.17	641	131	772	5.99	0.2	0.79	156	587	743
Total					181,446				3,395	6,718	10,114				10,086	8,050	18,136

Trip Generation: Draft 2004 General Plan

Use	ITE Code	Size	Units	Daily rate	Daily Trips	A.M. Peak Hour						P.M. Peak Hour					
						Rate	In %	Out %	In	Out	Total	Rate	In %	Out %	In	Out	Total
SFR	210	9,065	du	9.57	86,779	0.75	0.3	0.75	1,700	5,099	6,799	1.01	0.6	0.37	5,768	3,388	9,156
MDR	220	3,424	du	6.05	20,729	0.49	0.2	0.8	336	1,345	1,681	0.56	0.7	0.35	1,236	665	1,901
HDR	220	1,784	du	6.09	10,872	0.49	0.2	0.8	176	702	878	0.56	0.7	0.35	649	350	999
GC/NC	820	3,354	ksf	19.86	66,614	0.38	0.6	0.39	786	502	1,288	1.90	0.5	0.52	3,053	3,307	6,360
Ind	130	218	acres	50.67	11,051	5.50	0.8	0.17	996	204	1,200	5.12	0.2	0.79	234	882	1,116
Total					196,045				3,993	7,853	11,846				10,940	8,591	19,532



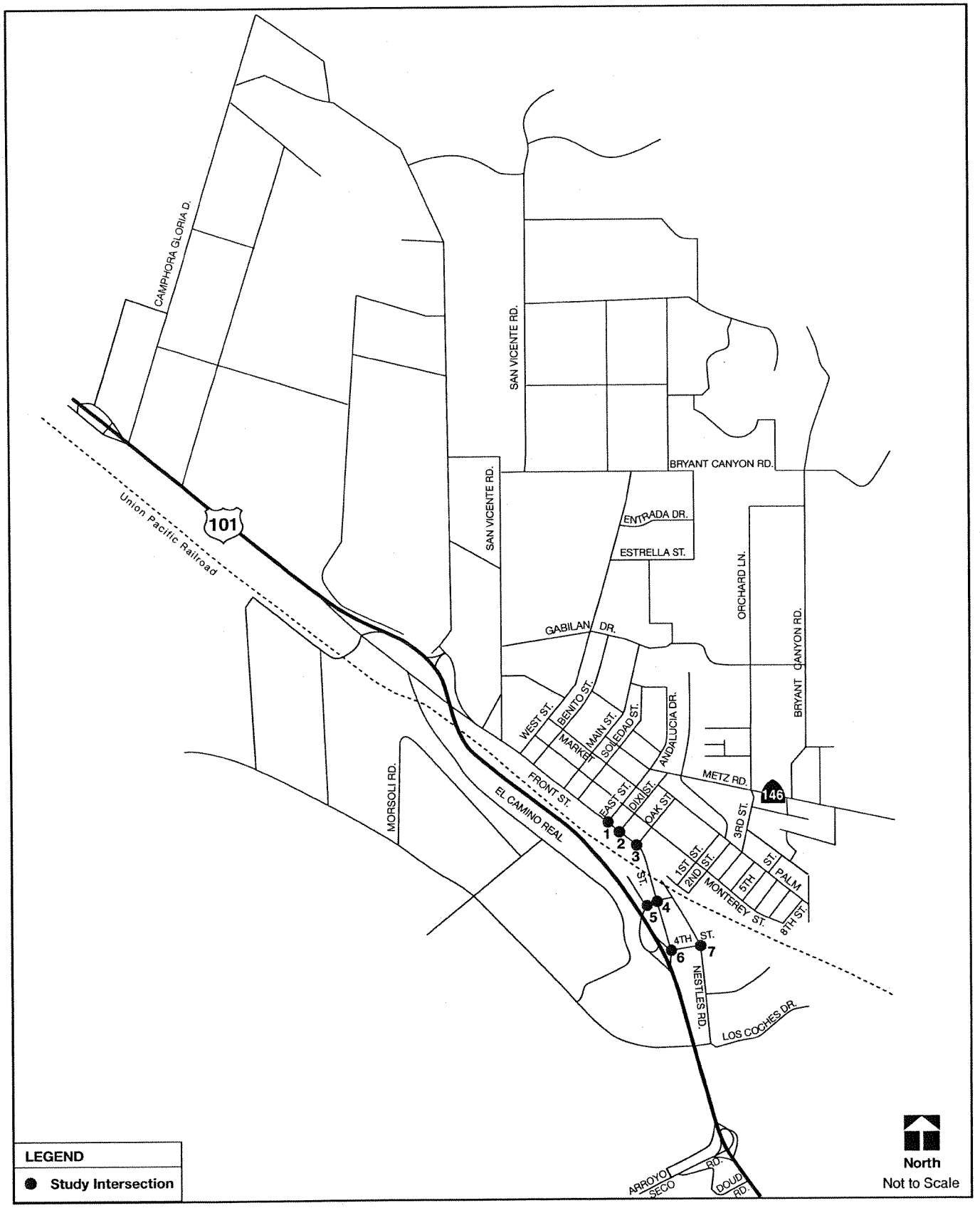
City Of Soledad
General Plan Update–Circulation Element

Existing Street System & Classifications

Figure
V-1

TJKM

279-001 - 5/29/05 - PB



City Of Soledad
General Plan Update–Circulation Element

Vicinity Map & Study Intersections

Figure V-2

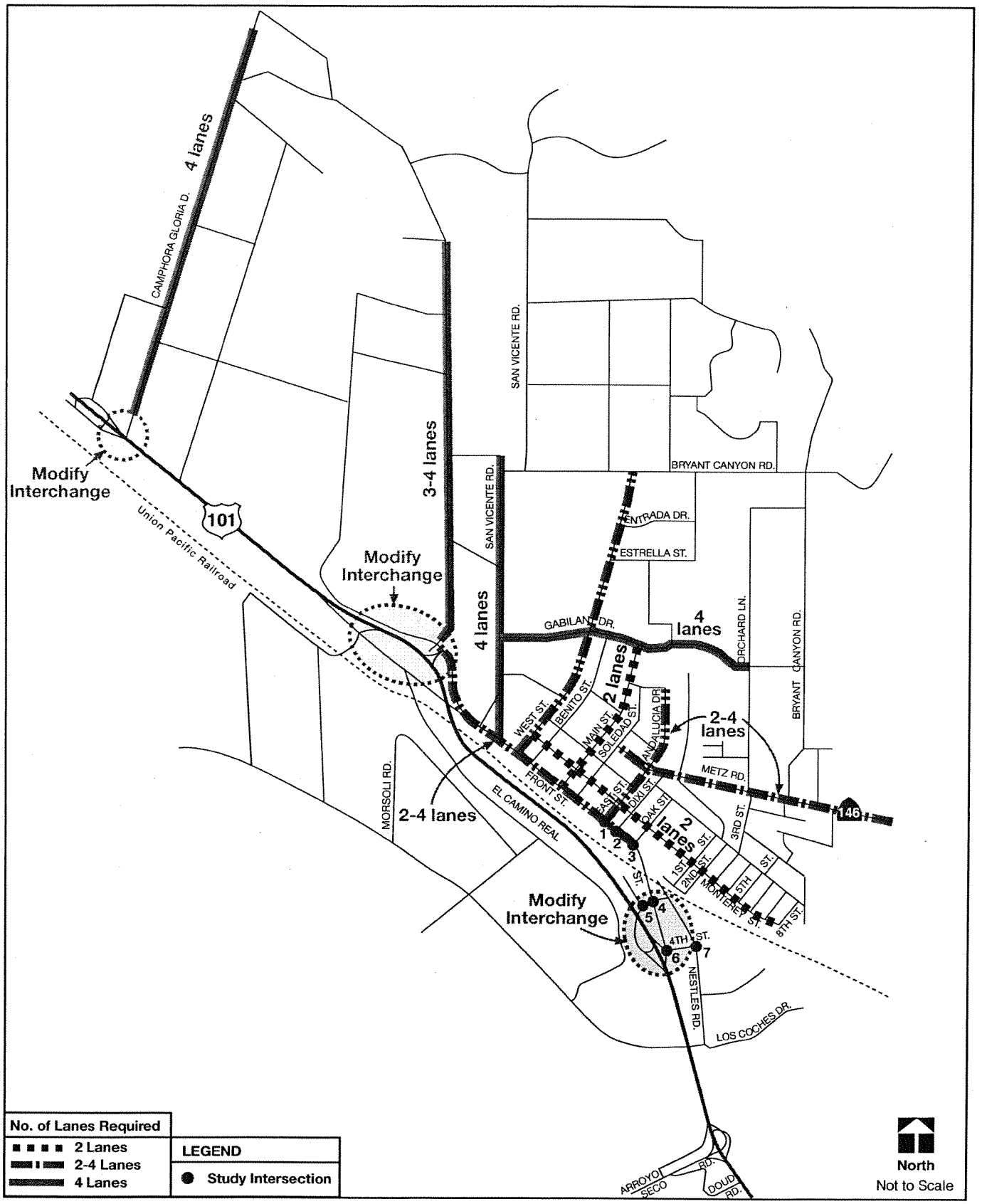
279-001 - 5/29/05 - PB

City Of Soledad
General Plan Update–Circulation Element

General Plan Buildout ADT Estimates

Figure V-3

279-001 - 5/29/05 - PB

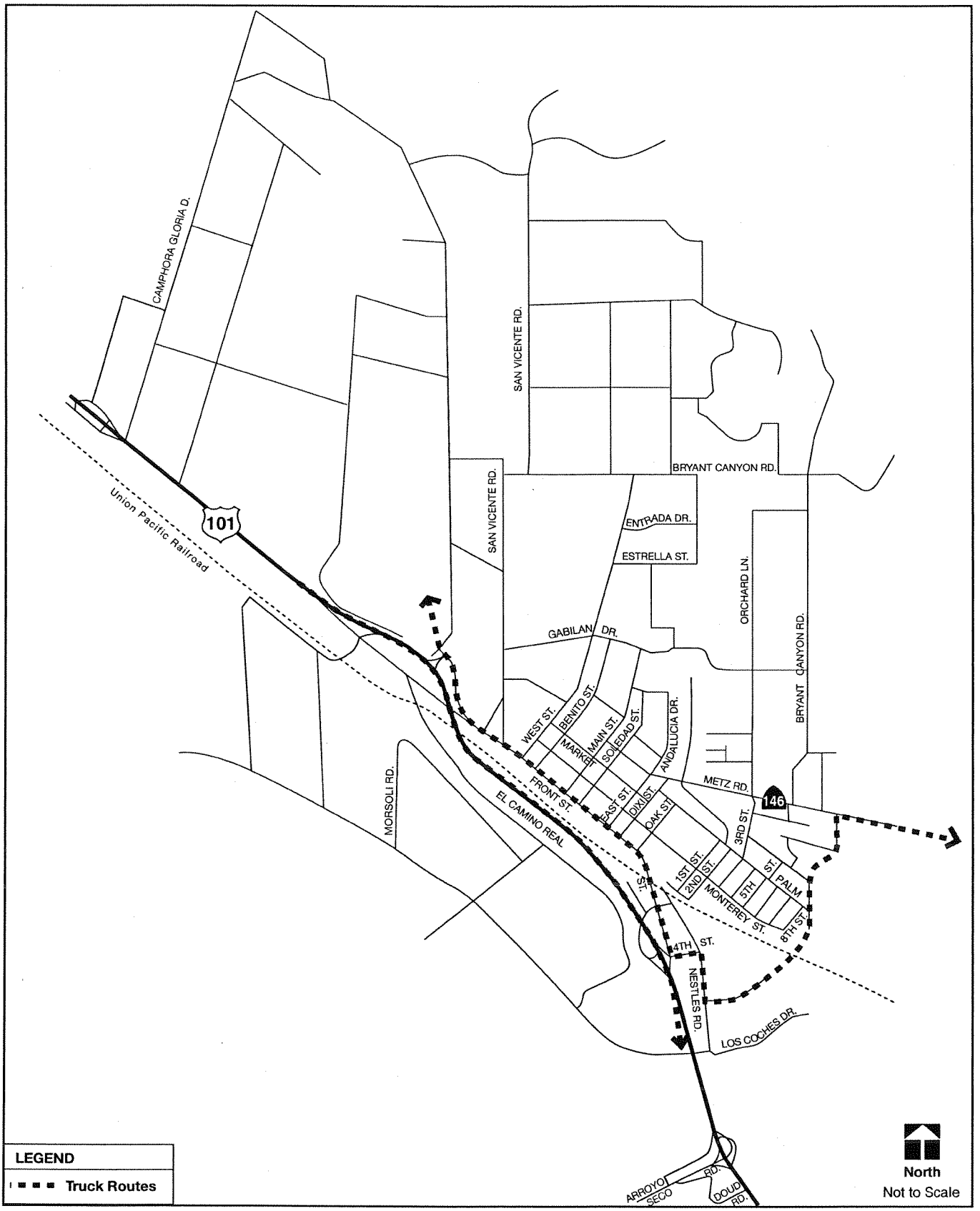


City Of Soledad
General Plan Update–Circulation Element

Roadway Lane Requirements

Figure
V-4

279-001 - 5/29/05 - PB

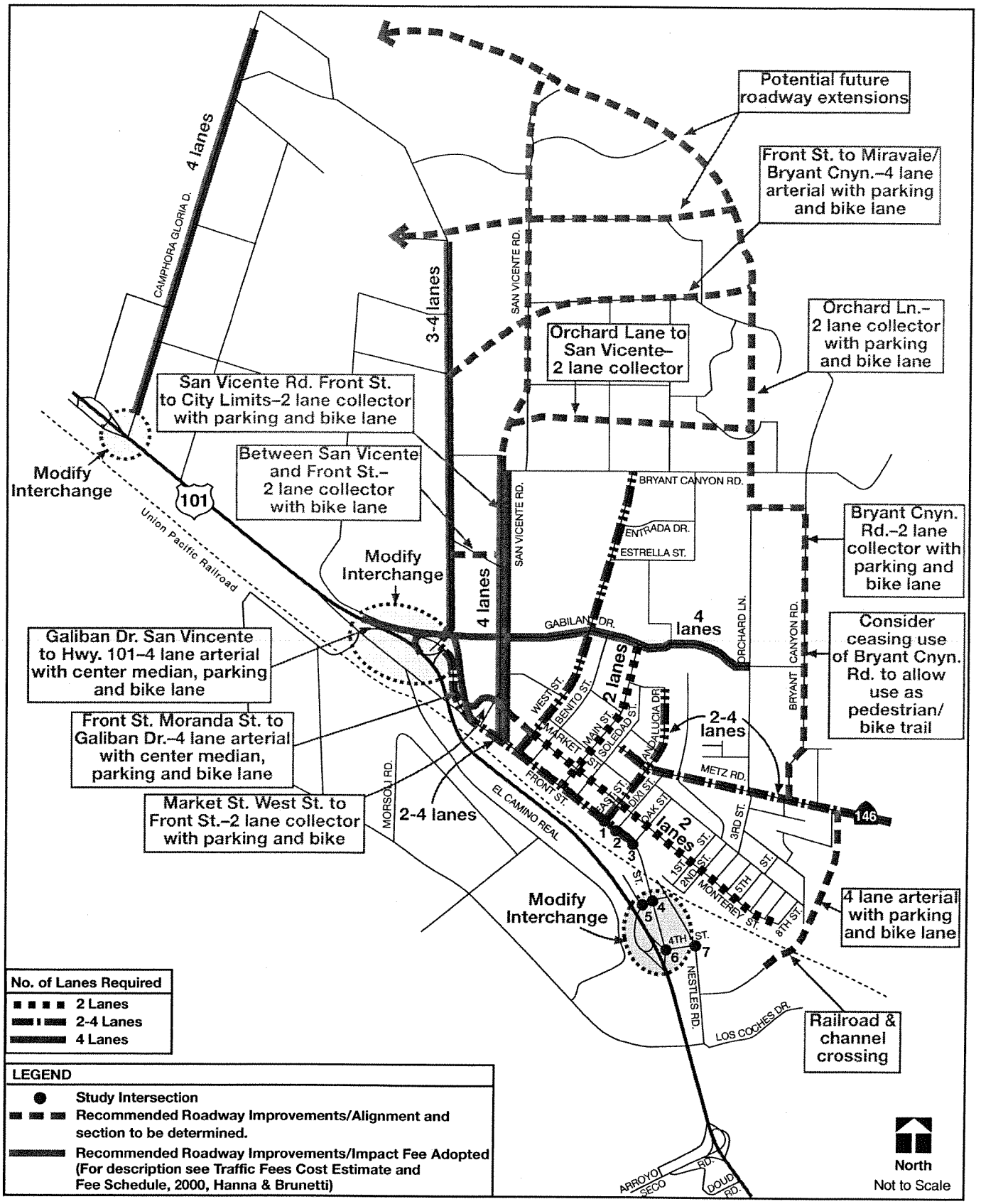


City Of Soledad
General Plan Update–Circulation Element

Truck Routes

Figure V-5

279-001 - 5/29/05 - PB



City Of Soledad
General Plan Update–Circulation Element

Transportation Circulation System

Figure V-6

279-001 - 5/29/05 - PB

CITY OF SOLEDAD
DRAFT
WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

JANUARY 13, 2005

INTRODUCTION

This is the City of Soledad Draft Wastewater Facilities Treatment and Disposal Master Plan (WWMP). The plan goals are to immediately perform emergency measures to avoid a spill into the Salinas River, promptly mitigate existing treatment and disposal inadequacies, provide flexible disposal options by upgrading to tertiary Title 22 Reclamation treatment, and provide a plan for future expansion consistent with the policies and projections embodied in the City General Plan (CGP).

WASTEWATER FACILITIES DRAFT MASTER PLAN CONTEXT

Prior to 1995 the City of Soledad (City) had a wastewater treatment plant with a capacity of 650,000 gallons per day. The City and the State entered into an agreement wherein the City's treatment plant was expanded to a capacity of 3.1 million gallons per day (MGD) with 2.1 MGD reserved for the California Department of Corrections Salinas State Prison and Correctional Training Facility (prisons) facilities in Soledad California. The net capacity gain for the City was 350,000 gallons per day.

The disposal rates of the ponds at the City of Soledad Wastewater Treatment Plant (WWTP) have been monitored closely for disposal performance over the past several years. The average dry weather flow slowly increased from 2.5 MGD in 2001 to 2.7 MGD in 2003.

By August of 2004, the flow rate had reached 2.8 MGD, multiple ponds were full and it was evident that the ponds were not emptying fast enough between filling and emptying cycles. By September 2004, the flow was at 2.9 MGD and plant operators took a number of operational actions in an effort to dry out the empty ponds faster between fills.

At the request of the City in June of 2003, Fugro West, Inc. prepared a report entitled "Hydro-geological Investigation Percolation Basin Capacity Analysis Soledad Wastewater Treatment Plant". Based on information in the report and other data combined with in-field observations that the disposal capacity of the existing ponds at the WWTP are at or very near capacity, Staff concluded in October 2004 that there was no alternative available other than to recommend additional inflow to the system be prohibited until additional disposal capacity could be achieved.

In response to the City's WWTP treatment and disposal capacity concerns on October 20, 2004 the City Council of the City of Soledad adopted Urgency Ordinance No. 612

"Establishing a Moratorium on the Issuance of Building Permits Requiring Sewer Connections and Making Findings Related Thereto" in order to minimize inflow to the WWTP. The Council also adopted Resolution No. 3557 "Declaring an Emergency Pursuant to Section 20168 of the Public Contract Code and Authorizing Contracting Without Compliance With Mandatory Contract Bidding Procedures" in order to expedite design and construction efforts necessary to resolve the treatment and disposal emergency created by the hydro-geologic conditions at the facility.

REGULATORY COMPLIANCE

The City is required to operate its WWTP in compliance with requirements stipulated in a Discharge Permit issued by the California regional Water Quality Control Board (RWQCB), an Operating License issued by Monterey County, and an Operating License issued by the Monterey Bay Unified Air Pollution Control District (Air Board).

Permission to Operate the WWTP is Conditional.

The WWTP Discharge Permit and WWTP Operating Licenses can be compared in some respects to Conditional Use Permits (CUP's) issued by the City to a business. The Monterey County Environmental Health Department, Air Board and RWQCB are responsible for enforcing County, State and Federal environmental requirements. These agencies grant the City **conditional** permission to operate its WWTP and discharge effluent to disposal.

WASTEWATER TREATMENT PLANT CAPACITY

Capacity is Complex and Variable.

There are many variables that can limit the capacity of a wastewater treatment plant. The capacity of the City's wastewater treatment plant (WWTP) is not constant. It varies in direct relationship to the maximum flow that is permissible as a result of the most restrictive regulatory requirement in effect at any given time. A few capacity variables are in the discussion that follows.

Capacity Limited by Discharge Permit Conditions.

Capacity of the City's WWTP is limited primarily by the discharge conditions stipulated in the discharge permit (Waste Discharge Requirements Order No. 95-25) that is issued by the State Regional Water Quality Control Board (RWQCB). The discharge permit stipulates the manner in which the City's disposal basins must be operated, the minimum effluent water quality that may be discharged, the maximum daily average flow that can be discharged from the facility during dry weather months, and the specific locations where discharge is allowed. These discharge requirements limit the capacity of the City WWTP to no greater than the maximum flow that can be maintained while remaining in compliance with the most limiting flow condition stipulated in the Discharge Permit.

Capacity Limited by Volume that can be Discharged to Wastewater Disposal Areas.

Due to high ground water beneath disposal basins, in order to assure proper treatment, the Regional Water Quality Control Board has imposed operating procedures that, if followed, limit disposal.

The Discharge Permit stipulates both the manner in which the City's disposal basins must be operated and when discharge to disposal basins may occur by stipulating "when depth to ground water beneath the disposal areas is less than three feet... discharge to disposal areas shall be no more than one foot of wastewater, then allowing the pond to dry to field moisture conditions before reapplying more wastewater." The permit also stipulates "discharge to wastewater disposal areas shall occur only when there is some measurable separation between pond bottoms and ground water." In addition, "no discharge to wastewater disposal areas shall occur when it is raining or the wastewater irrigation area is flooded." Disposal capacity is therefore limited by the requisite operational parameters.

As a result of the hydro-geological testing performed in 2003, City consultant Fugro West has concluded the disposal capacity of the City WWTP "range(s) from 3.0 to 3.5 MGD. However, based upon field observations and other data, Staff has concluded a prudent rate for discharge to the disposal basins is approximately 2.5 MGD.

Capacity Limited by Minimum Effluent Water Quality.

The Discharge Permit issued to the City by the RWQCB stipulates that effluent discharged to disposal shall not exceed:

- 990 mg/l Total Dissolved Solids (TDS);
- 175 mg/l Sodium;
- 170 mg/l Chloride;
- 205 mg/l Sulfate; and
- 5 mg/L Nitrate.

Further, TDS discharged to disposal may not exceed a 4-month flow weighted average of the water supply TDS by more than 400 mg/L, and effluent may not have a pH of less than 6.5 or be greater than 8.4.

Among other things, discharge is prohibited that would cause downstream nitrate nitrogen concentrations greater than 8 mg/l.

WWTP effluent presently exceeds 170 mg/L Chloride, and nitrate treatment is not effective due to inability to dry out disposal basins adequately under present operating conditions.

Reclamation and groundwater standards are also addressed in the current Discharge Permit. However, the reclamation and groundwater standards stipulated in the current Discharge Permit are less stringent than the new Discharge Permit standards will be.

Because the Discharge Permit stipulates the minimum effluent quality that can be discharged to the disposal site, capacity is limited to no more than the maximum flow rate the City can allow wastewater to travel through the facility and still maintain the minimum level of treatment required to meet the discharge water quality. It is possible to move wastewater through a plant at a rate so fast that proper treatment is not achieved. Treatment capacity, the maximum rate the wastewater can be moved through the facility without compromising required treatment, is one limitation on plant capacity.

Capacity Limited by Maximum Daily Average Flow During Dry Weather Months.

The Discharge Permit allows "effluent discharge of up to a monthly average dry weather flow of 3.1 MGD (m3/day)." An additional, temporary dry weather average flow allowance of .5 MGD has also been granted to the City in order to allow time to prepare a WWTP expansion plan to be submitted to the RWQCB.

Dry weather average monthly flow was approximately 2.8 million gallons per day (mgd) in 2004. Based upon both observation and a report prepared by Fugro West, Inc., the WWTP is at or near disposal capacity.

Capacity Limited by Physical Disposal Limitations.

The Discharge Permit restricts discharge to the existing rapid infiltration disposal basins at the WWTP. Discharge, overflow or spill to any other area, including the Salinas River, is prohibited. City Consultant, Fugro West, Inc. is reluctant to quantify the flow rate at which the plant will eventually overflow the facility banks and spill into the Salinas River, but has concluded the capacity of the facility is in a range of 3.0 to 3.5 MGD. Staff does not have the luxury of waiting until a spill occurs to recognize the problem and is of the opinion the plant cannot be operated in compliance with its Discharge Permit at flows in excess of 2.5 MGD. Further, based upon field observation and pond data, staff concluded in October of 2004 that additional flow to the WWTP should be restricted until such time as additional disposal area can be acquired.

Capacity Limitation Conclusion

The present plant flow of approximately 2.9 – 3.0 million gallons per day is approximately 400,000 to 500,000 gallons more per day than the flow rate the WWTP can be operated in compliance with its Discharge Permit.

CRITERIA FOR WWTP EXPANSION

Treatment and Disposal Capacity for City Build Out.

Page II-22 of the January 2004 Draft City General Plan summarizes non-prison City full build out population to be 53,000 – 61,000 "in addition to about 10 – 12 million square feet of commercial and industrial development."

This master plan is prepared on the basis of the following utility department planning criteria averages:

250 dwelling units per year
4 people per dwelling (used for population forecasting)

400 gallons wastewater flow per day to WWTP from each dwelling unit which provides sufficient allocation of wastewater flow per day for commercial and light industrial support services

The reasoning behind the 250 dwelling units per year is because this is the approximate maximum annual level of development that has occurred to date.

This WWTP facilities master plan is a conceptual model that provides an orderly and responsible process to serve a City population of approximately 39,500 by December of 2029. For comparative illustration, an average of approximately 455 dwelling units per year would have to be constructed with occupancy of 5 people per unit in order for the City population to reach 60,000 over the next twenty years. Perhaps a more realistic projection would be a population of approximately 60,000 over the next 50 years.

If the decision is made to accelerate growth and development to more than 250 residential units per year, the planning, public works, building and central administration departments will all have to be expanded significantly and infrastructure funding and completion will have to be greatly accelerated beyond levels accomplished to date.

This conceptual wastewater facilities expansion model is not intended as a rigid document but rather as a flexible methodology that can be adapted to the reality of circumstances over time.

Treatment and Disposal Capacity for Prisons.

The City is under contractual obligation to provide on-going wastewater capacity of 2.1 million gallons per day for the two nearby state prison facilities.

Combined Treatment and Disposal Capacity.

This wastewater facilities master plan provides an orderly conceptual process to be able to expand the City's wastewater facilities in order to be able to provide the following level of services consistent with the intent of the City's General Plan:

Date	Capacity	Population	Additional Dwelling Units
• September 2010	3.50 MGD	19,500 + prisons	1,250
• September 2012	3.70 MGD	21,500 + prisons	500
• March 2013	3.75 MGD	22,000 + prisons	125
• August 2025	5.00 MGD	34,500 + prisons	3,125
• December 2029	5.50 MGD	39,500 + prisons	1,250
• June 2038	5.90 MGD	43,500 + prisons	1,000

The strengths of this Wastewater Treatment and Disposal Master Plan are that it is conceptual, environmentally sensitive, cost effective, and incremental. It embraces reclamation and therefore maximizes expansion alternatives. Dates and disposal sites and methodologies can be changed without compromising the plan. In other words, the plan portrays realistic possibilities but is flexible with the ability to be sensitive to many factors. The illustration above is premised upon obtaining required approvals for relevant treatment and disposal sites after permanently reactivating the prison wastewater treatment and disposal site. However, sites illustrated subsequent to reactivation of the prison site can be considered in different order than illustrated in this document, or replaced by more appropriate sites in the future and dates can become more aggressive or more leisurely depending upon circumstances. Through the years treatment methodologies selected for the incremental elements of the plan can be varied based upon improvements in technology. Disposal alternatives are the most flexible possible due to the decision to commit to treating the City's wastewater to Title 22 Reclamation quality standards prior to discharge.

This master plan blueprint should be considered a 'living document' to be reviewed regularly and changed and adapted as new and better ways become known of how to accomplish the goals and objectives of the City's General Plan.

SCOPE AND PURPOSE OF THE WASTEWATER TREATMENT AND DISPOSAL MASTER PLAN

To meet the needs and goals of the City General Plan wastewater facilities are being upgraded in order to bring them into compliance with existing permit requirements.

Policy S-1 on Page 4 of Section VII of the January, 2004 Final Draft of the City General Plan stipulates that "New development shall not be allowed until adequate public services and facilities to serve such development are provided". Policy S-2 on the same page notes that it shall be the policy of the City to "plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of water production,

storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion."

Implementation of the urgency and emergency measures outlined in the Wastewater Treatment and Disposal Master Plan (WWMP) will bring the facilities into compliance with existing permit requirements.

Disposal will remain an obstacle to the implementation of the City General Plan until the City either acquires or leases additional disposal area. However, completion of all conceptual phases of the WWMP will provide the City sufficient treatment and disposal infrastructure to accommodate the needs of the CGP.

Scope of the Wastewater Treatment and Disposal Master Plan.

This plan addresses domestic and commercial wastewater treatment and disposal, but it does not address water, sewage collection or storm drain issues.

Purpose of the Wastewater Treatment and Disposal Master Plan.

The purpose of the WWMP is to serve as a blueprint for prompt, responsible, cost-effective action to avoid wastewater spill into the Salinas River, mitigate existing wastewater disposal and treatment deficiencies, and expand the capacity of the City's wastewater facilities consistent with the City's General Plan.

Emergency Procedures to Avoid Spill into Salinas River

1. Enforce Urgency Ordinance No. 612 that established a moratorium on the issuance of building permits requiring sewer connections.

2. The City Council of the City of Soledad authorized by adoption of Resolution No. 3557 the initial steps needed to expeditiously mitigate the wastewater treatment plant emergency.

3. Immediately raise road levies at wastewater treatment plant between basins 6 and 7, and between basins 4 and 5.

4. Complete prison wastewater facility emergency discharge CEQA process.

5. Obtain CDC approval to temporarily discharge at prison disposal site with commitment to negotiate long-term use.

6. Obtain Regional Board interim approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site while a long term site use agreement can be negotiated between the City and the State so that a permanent request of wastewater discharge can then be processed.

7. Rehabilitate the PWWTP treatment and disposal site.

8. Divert part of prison wastewater flow to prison wastewater facility in order to be able to operate the existing City wastewater facility at an onsite disposal rate of approximately 2.5 MGD.

Mitigation of Existing City Plant Disposal and Treatment Deficiencies

Process to Mitigate Existing City Plant Disposal Deficiency:

1. Adopt this master plan.

2. Provide the Regional Board a copy of this master plan and request approval to discharge temporarily at the prison abandoned wastewater treatment site.

3. Request the California Department of Corrections (CDC) to enter into an agreement with the City to allow the City to temporarily discharge to the prison abandoned wastewater disposal site.

4. Obtain RWQCB approval for the City to discharge up to 1.1 MGD to the prison abandoned disposal site on a temporary basis while a permanent request of wastewater discharge is being processed.

5. Complete environmental analysis.
   Obtain CDC approval to temporarily discharge at prison disposal site.
   Complete restoration maintenance at the prison abandoned disposal site.
   Connect aerators and install pond circulators.

6. Divert 1.1 MGD of the prison flow to the prison abandoned disposal site.

7. Operate the existing City facility site at a disposal rate of approximately 2.5 MGD.

In summary, mitigation of existing disposal deficiency is accomplished by diverting up to 1.1 million gallons per day to abandoned prison disposal site and limiting flow to the existing City facility to no more than 2.5 million gallons per day.

Process to Mitigate Existing Plant Treatment Deficiency:

1. Complete process to mitigate existing plant disposal deficiency.
2. Install equipment that will enable plant operators to achieve Title 22 reclamation quality effluent at both WWTP sites.

Phase 1. Install 12 Pond Circulators and Telemetry to modify Operation of Aerators

Phase 2. Renovate the CDC wastewater facility and divert 1.1 mgd of the CDC wastewater flow to that facility, thus providing ability to provide maintenance for City disposal basins.

Phase 3. Install 5.5 MGD Secondary Effluent Filter Pump Station, 5.5 MGD Continuous Backwash Filter System (Including influent channel, flash mix/flocculation, chemical feed, and compressed air systems if needed), and 5.0 MGD Concrete Channel Ultra-Violet Disinfection System.

Summary of Mitigation of Existing Disposal and Treatment Deficiencies

The Wastewater Treatment and Disposal Master Plan (WWMP) provides an orderly plan to mitigate existing disposal and treatment deficiencies by diverting 1.1 MGD of the prison flow to the abandoned prison disposal site (thus immediately reducing flow to the existing facility); installing equipment at both the existing facility and the abandoned prison disposal site to achieve Title 22 reclamation quality effluent.

EXPANSION OF THE CITY'S WASTEWATER FACILITIES

The Wastewater Facilities Master Plan includes expansion of the City's wastewater facilities to accommodate growth as outlined in the City General Plan.

The City desires to lease the Prison Abandoned WWTP, with option to renovate and purchase the facility. This would enable the City to reduce flow to the City's WWTP by diverting prison wastewater flow to the CDC wastewater facility. The results would be immediate availability of capacity at the City WWTP and ability to perform more effective maintenance of the disposal basins. The master plan envisions various alternatives described as phases. Costs of land acquisition and costs of constructing infrastructure on sites acquired have not been estimated in this conceptual master plan.

Phase 1 of the WWMP is the first project to commence upgrading treatment at the City's WWTP to Title 22 Water Reuse Standard. The project consists of installation of pond circulators and completion of the final design for treatment upgrades to achieve reclamation quality effluent.

Phase 2 of the WWMP is a project to renovate the CDC wastewater treatment facility for interim (4 – 6 years) secondary treatment and disposal use. It is anticipated this phase of the project will be completed by September of 2005 if the lease and tentative purchase agreements can be executed by the end of February 2005.

Phase 3 of the WWMP is the project to complete Title 22 Water Reuse treatment upgrades to the City's WWTP. This project will provide treatment for up to the flow capacity of the existing head works. Additional disposal sites will increase future disposal capacity up to the flow capabilities of the existing head works.

Phase 4 is acquisition of land contiguous to the City's WWTP (Parcel A), installation of a pump station and pipeline and other infrastructure in order to commence reclamation discharge to the parcel.

The City has constructed segments of a reclamation line between the City WWTP and the freeway and at various locations within the City limits. The Phase 5 Parcel is an ideal site to use for reclaimed irrigation water purposes. The plan is to use the site for reclaimed water storage and for installation of a pump station.

This site is considered a strategic component to be able to provide reclaimed water to a future golf course and to be able to provide reclaimed water for irrigation of freeway landscaping.

Phase 5 is a project to provide reclaimed water for irrigation of freeway landscaping.

Phase 6 of the WWMP is a project to upgrade treatment to reclamation quality at the prison WWTP by June of 2009.

Phase 7 of the WWMP is a project to expand the City's WWTP head works.

Phase 8 is acquisition of an additional disposal site (Parcel B) contiguous to and southeast of the City's WWTP and expansion of the City's WWTP facility onto that site.

Phase 9 is a project to upgrade the City's WWTP to 7.0 MGD Reclamation **Treatment** Capacity. At an average growth rate of 250 dwelling units and related services, it is estimated this would provide sufficient **treatment** capacity through June of 2028 to serve a City population of 43,500.

Phases 10 and 11 are acquisition and development of additional disposal sites (Parcels C and D) southeast of the City's WWTP. These disposal sites have also been identified as preferred sites to consider for reclamation disposal purposes.

Phases 12 through 17 are various alternative phases that increase treatment and disposal capacity to meet the service needs of the City. Various parcels of land have been identified as potential reclaimed wastewater disposal sites. These projects are beyond the scope of this master plan.

Acquire Access to land be used for tertiary disposal purposes.

Identify and make arrangements to connect to various landscaping, crop and spray field groundwater recharge disposal and storage sites (Title 22 reclamation quality effluent).

Phases 12 through 16 are additional conceptual disposal sites. Various parcels of land have been identified as potential reclaimed wastewater disposal sites.

20 Year Disposal Plan

2.5 Million Gallons	**Existing Facility**	
1.1 Million Gallons	**Tertiary @ Prison**	**Dec. 2009**
.05 Million Gallons	**Vicinity of Freeway**	**June 2010**
2.45 Million Gallons	**Additional Tertiary Sites**	
6.10 Million Gallons		

20 Year Title 22 Reclamation Treatment Plan

5.0 Million Gallons	**Treatment on Existing Site**
1.1 Million Gallons	**Treatment on Prison WWTP Site**
6.1 Million Gallons	

			Phase 1			**Phase 2**		**Phase 3**
	City of Soledad		Pond Circulators &					
			Treatment Design			Renovate		Upgrade
	Wastewater Facilities Master Plan		City	CDC		CDC		City wwtp
			Flow	Flow		WWTP		Treatment
	Est Time to Accomplish	(1)	1			8		13
	Est. Cost to Accomplish	(2)	0.835			0.9		7.500
	Estimated Useful Disposal Acres		104 Acres			27		
	Type of Disposal		Sec.	Sec.		Sec		Recl.
	Existing Flow		3.0 MGD			0.00		
	Estimated Disposal Capacity of Each Phase		0.81	1.69		1.00		
	Cumulative mgd Disposal Capacity excl CDC TP		2.5 MGD		(6)	3.50		
	Est Addl. Equiv. Dwelling Units	(3)	N.A.		(7)	1250		
	Estimated Household Population	(4)	14,500			19,500		
	Estimated Build Out		No new connections			Sept 2010		
	Yrs capacity provided by phase @ 250 EDU/YR					5.0		
			Phase 1			**Phase 2**		**Phase 3**
	Commence Phase (Project)		July 7, 2004			Feb. 2005		Mar. 2005
	Complete Project	(5)	April. 2005		(8)	April 2005	(9)	Feb. 2006
(1)	Months subsequent to Jan. 2005		1			8		13
(2)	$M Est for Treatment Equip Only		0.835			0.9		7.500
	(In April 2004 Dollars)							
(3)	Estimated at 400GPD/EDU							
(4)	Estimated at 4/EDU							
(5)	Assumes 2 mos. Approvals/4mos project							
(6)	Assumes 2.5mgd flow to City WWTP							
(7)	Assumes permanent disposal of 1 mgd at							
	prison wwtp							
(8)	Assumes 7 mos expedited emergency project							
(9)	Assumes Design completed end Feb 05							
	and construction Mar 05 thru Feb 06							
(10)	Assumes 4 months design and 6 mos constr							
	(including receiving and awarding bids)							
(11)	Assumes 6 mos design and 6 mos constr							
(12)	Assumes 6 mos design and 12 mos constr							
(13)	Assumes 4 mos design/8 mos constr.							
(14)	Assumes 18 mos design/24 mos constr.							
(15)	Assumes 12 mos design/24 mos constr.							
(16)	Time and cost estimates not provided							
	commencing with Phase 10							

			Phase 4		**Phase 5**		**Phase 6**		**Phase 7**
	City of Soledad								
			Reclaimed		Reclaimed		Upgrade		Modify
	Wastewater Facilities Master Plan		effluent to		effluent		CDC wwtp		City
			Parcel A		to FWY		Treatment		Headwks
	Est Time to Accomplish	(1)	23		35		53		65
	Est. Cost to Accomplish	(2)	0.700		0.500		4.000		0.500
	Estimated Useful Disposal Acres		10		2				
	Type of Disposal		Recl.		Recl.		Recl.		
	Existing Flow								
	Estimated Disposal Capacity of Each Phase		0.20		0.05				
	Cumulative mgd Disposal Capacity excl CDC TP		#REF!		#REF!				
	Est Addl. Equiv. Dwelling Units	(3)	500		125				
	Estimated Household Population	(4)	#REF!		#REF!				
	Estimated Build Out		Sept 2012		Mar. 2013				
	Yrs capacity provided by phase @ 250 EDU/YR		2.0		0.5				
			Phase 4		**Phase 5**		**Phase 6**		**Phase 7**
	Commence Phase (Project)		Mar. 2006		Jan. 2007		Jan. 2008		July 2009
	Complete Project	(10)	Dec. 2006	(11)	Dec 2007	(12)	Jun. 2009	(13)	June 2010
(1)	Months subsequent to Jan. 2005		23		35		53		65
(2)	$M Est for Treatment Equip Only		0.700		0.500		4.000		0.500
	(In April 2004 Dollars)								
(3)	Estimated at 400GPD/EDU								
(4)	Estimated at 4/EDU								
(5)	Assumes 2 mos. Approvals/4mos project								
(6)	Assumes 2.5mgd flow to City WWTP								
(7)	Assumes permanent disposal of 1 mgd at								
	prison wwtp								
(8)	Assumes 7 mos expedited emergency project								
(9)	Assumes Design completed end Feb 05								
	and construction Mar 05 thru Feb 06								
(10)	Assumes 4 months design and 6 mos constr								
	(including receiving and awarding bids)								
(11)	Assumes 6 mos design and 6 mos constr								
(12)	Assumes 6 mos design and 12 mos constr								
(13)	Assumes 4 mos design/8 mos constr.								
(14)	Assumes 18 mos design/24 mos constr.								
(15)	Assumes 12 mos design/24 mos constr.								
(16)	Time and cost estimates not provided								
	commencing with Phase 10								

			Phase 8		**Phase 9**		**Phase 10**		**Phase 11**
	City of Soledad				Provide				
			Reclaimed		Addl.		Reclaimed		Reclaimed
	Wastewater Facilities Master Plan		effluent to		2MGD		effluent to		effluent to
			Parcel B		Treatment		Parcel C		Parcel D
	Est Time to Accomplish	(1)	95		197		239		287
	Est. Cost to Accomplish	(2)			12.600				
	Estimated Useful Disposal Acres		100				40		35
	Type of Disposal		Recl.				Recl.		Recl.
	Existing Flow								
	Estimated Disposal Capacity of Each Phase		1.25				0.50		0.40
	Cumulative mgd Disposal Capacity excl CDC TP		#REF!				#REF!		#REF!
	Est Addl. Equiv. Dwelling Units	(3)	3125				1250		1000
	Estimated Household Population	(4)	#REF!				#REF!		#REF!
	Estimated Build Out		Aug. 2025				Dec. 2029		June 2038
	Yrs capacity provided by phase @ 250 EDU/YR		12.5				5.0		10.0
			Phase 8		**Phase 9**		**Phase 10**		**Phase 11**
	Commence Phase (Project)		July 2009		Jan. 2020		Jan. 2022		June 2026
	Complete Project	(14)	Dec.2012	(12)	June 2021	(15)	Dec 2024	(15)	June 2028
(1)	Months subsequent to Jan. 2005		95		197		239		287.0
(2)	$M Est for Treatment Equip Only				12.600				
	(In April 2004 Dollars)								
(3)	Estimated at 400GPD/EDU								
(4)	Estimated at 4/EDU								
(5)	Assumes 2 mos. Approvals/4mos project								
(6)	Assumes 2.5mgd flow to City WWTP								
(7)	Assumes permanent disposal of 1 mgd at								
	prison wwtp								
(8)	Assumes 7 mos expedited emergency project								
(9)	Assumes Design completed end Feb 05								
	and construction Mar 05 thru Feb 06								
(10)	Assumes 4 months design and 6 mos constr								
	(including receiving and awarding bids)								
(11)	Assumes 6 mos design and 6 mos constr								
(12)	Assumes 6 mos design and 12 mos constr								
(13)	Assumes 4 mos design/8 mos constr.								
(14)	Assumes 18 mos design/24 mos constr.								
(15)	Assumes 12 mos design/24 mos constr.								
(16)	Time and cost estimates not provided								
	commencing with Phase 10								

			Phase 12	Phase 13	Phase 14	Phase 15	Phase 16	Phase 17
	City of Soledad							
			Addl.	Reclaimed	Reclaimed	Reclaimed	Reclaimed	Reclaimed
	Wastewater Facilities Master Plan		4MGD	effluent to	effluent to	effluent to	to Golf	effluent to
			Treatment	Parcel E	Adobe	Parcel F	Course	CDC LS
(1)	Est Time to Accomplish							
(2)	Est. Cost to Accomplish	(2)	14.000					
	Estimated Useful Disposal Acres			50	5	50	100/2	50
	Type of Disposal			Recl.	Recl.	Recl.	Recl.	Recl.
	Existing Flow							
	Estimated Disposal Capacity of Each Phase			1.25	0.12	1.25	1.25	0.50
	Cumulative mgd Disposal Capacity excl CDC TP			#REF!	#REF!	#REF!	#REF!	#REF!
	Est Addl. Equiv. Dwelling Units			3125	300	3125	3125	1250
	Estimated Household Population			#REF!	#REF!	#REF!	#REF!	#REF!
	Estimated Build Out			Dec. 2049	Dec. 2050	June 2063	Dec 2075	Dec 2080
	Yrs capacity provided by phase @ 250 EDU/YR			12.5	1.2	12.5	12.5	5.0
			Phase 12	**Phase 13**	**Phase 14**	**Phase 15**	**Phase 16**	**Phase 17**
	Commence Phase (Project)		June 2035					
	Complete Project	(15)	June 2037					
(1)	Months subsequent to Jan. 2005							
(2)	$M Est for Treatment Equip Only	(2)	14.000					
	(In April 2004 Dollars)							
(3)	Estimated at 400GPD/EDU							
(4)	Estimated at 4/EDU							
(5)	Assumes 2 mos. Approvals/4mos project							
(6)	Assumes 2.5mgd flow to City WWTP							
(7)	Assumes permanent disposal of 1 mgd at							
	prison wwtp							
(8)	Assumes 7 mos expedited emergency project							
(9)	Assumes Design completed end Feb 05							
	and construction Mar 05 thru Feb 06							
(10)	Assumes 4 months design and 6 mos constr							
	(including receiving and awarding bids)							
(11)	Assumes 6 mos design and 6 mos constr							
(12)	Assumes 6 mos design and 12 mos constr							
(13)	Assumes 4 mos design/8 mos constr.							
(14)	Assumes 18 mos design/24 mos constr.							
(15)	Assumes 12 mos design/24 mos constr.							
(16)	Time and cost estimates not provided							
	commencing with Phase 10							