TO: **HONORABLE CHAIRMAN AND PLANNING COMMISSION**

FROM: **RON WHISENAND, COMMUNITY DEVELOPMENT DIRECTOR**

SUBJECT: **4TH STREET MASTER PLAN – MISCELLANEOUS 07-001 (APNS 009-291-008 THROUGH -018, AND 009-261-002 AND -003)**

DATE: **APRIL 10, 2007**

Needs: For the Planning Commission to recommend approval of the 4th Street Master Plan and associated Mitigated Negative Declaration to the City Council.

Facts:

1. The project area is located at 4th, Spring and Pine Streets, and includes approximately 12.5 acres of land. See attachment 1, Location Map.

2. The proposed project is a large-scale mixed-use development project. The major components of the overall Master Plan are proposed to be developed in four phases. The project scope includes up to 116,000 s.f. of commercial development and 74 residential units. It includes: four medical offices in a campus setting on the north side of 4th Street (three of the four buildings have already been entitled by the Planning Commission); an assisted living center for up to 52 residents; a mixed retail and residential project; and a 48-unit multi-family complex. See attachment 2, Conceptual Site Plan.

3. The Master Plan incorporates a realignment of Pine Street, which is consistent with the General Plan Circulation Element and Spring Street Master Plan. Pine Street is planned to intersect further west on 4th Street (in the approximate location of the existing dilapidated building on the north side of 4th Street). See attachment 4, 4th Street Realignment.

4. The Master Plan includes conceptual building elevations, site layout, circulation and parking plan. Parking is proposed to be provided in either surface lots or in parking structures. The overall parking demand for the individual land uses would require 726 parking spaces. The Site Plan provides for 692 parking spaces. When development plans are considered by the Planning Commission in the future, the Commission may consider approval of a Joint Use shared parking agreement for the remaining 34 parking spaces since the uses will have distinct day and evening use demands, or perhaps a reduction in project scope.

5. The City Council introduced a Zoning Map Amendment to rezone several properties in the Master Plan area on April 3, 2007, so that all of the properties within the Master Plan area will be appropriately zoned for this project, as Highway-Commercial Planned Development with a Mixed-Use Overlay (C2-PD-MU). This is consistent with the General Plan land use designation of Community Commercial Mixed-Use (CC-PD-MU) and Commercial Service Mixed-Use (CS-PD-MU) that applies to properties in the planning area. The Development Review Committee (DRC) considered this project at their meeting on April 2, 2006, and recommended approval to the Planning Commission.

6. Surrounding land uses included a mix of commercial retail, office, the Post Office, commercial service businesses, residences, and the Union Pacific Railroad.

7. Per the California Environmental Quality Act (CEQA), an environmental review was prepared. No significant environmental impacts were identified that could not be mitigated to a less than significant level were identified. A Draft Mitigated Negative Declaration has been prepared for consideration. (Attachment 5)

8. A Visual Analysis was prepared for the Master Plan to evaluate the massing, height and overall potential visual impacts of the proposed development. An evaluation of five specific project views is included in the analysis, which is provided in the Initial Study in attachment 5.

9. A Traffic Study was also prepared for this project to evaluate potential traffic impacts, and to also determine the applicant's pro rata share of the cost of a traffic signal at the intersection of Spring Street and 4th Street. The Traffic Study is also in the Initial Study in attachment 5.

10. The 4th Street Master Plan implements many General Plan policies and the 2006 Economic Strategy, by providing compact, urban development with a mix of uses, employment opportunities and housing, within walking distance of the downtown.

11. The City is collaborating with the property owners in developing this project through negotiation of a property exchange between the City and applicant. The City also has an objective to realign Pine Street to meet circulation goals for the downtown area consistent with the Circulation Element of the General Plan, as well as intensifying development in this area of town.

12. Development of future projects in the Master Plan area will require approval of Planned Development applications. Approval of the Master Plan provides the opportunity to consider the preliminary arrangement of buildings, parking, circulation, elevations, and to identify environmental issues to be addressed. Specific site and building details will be refined when each phase of the Master Plan are proposed.

Analysis and Conclusions:

The 4th Street Master Plan is planned to be a southerly anchor to the Westside downtown area of Paso Robles. It is designed as a compact, mix of land uses with buildings that are proposed to be 2-, 3- and up to 4-stories in height. They are proposed to be arranged with building entrances located up close to the street to create a pedestrian friendly, strong urban form along 4th and Springs Streets. The goal is to create an extension to the downtown that will provide uses that will bring employees to the area and that will provide services needed by the community. The design and intensity of the Master Plan exemplifies many of the objectives of the General Plan and Economic Strategy by providing high quality urban infill designed so that it will stimulate investment in the area, provide employment opportunities and services, and provide housing to meet the varying needs of Paso Roblans.

The architectural style and building forms propose a mix of design themes, with forms and materials that are varying in heights, rooflines, textures, materials to provide visual interest, yet transition well from one part of the Master Plan to the other so that the buildings will be architecturally compatible. The fine-grain details of the individual

buildings will be analyzed at the time the City considers individual Planned Development applications. See attachment 3, Elevations.

As noted above, a Visual Analysis was prepared for the Master Plan project, with a focus on building massing, height and overall viewshed impacts. The study evaluated five key viewing points including the view of the buildings from Spring Street, the long view of the buildings against the silhouette of the bluffs across the Salinas River, the view of the site from the Veteran's Memorial Building, and the westbound views of the site from near 4th and Pine Streets. The conclusions of the study indicate that the visual impacts from the project would result in less than significant impacts with mitigation measures, such as street trees, incorporated. The specific building heights proposed for each individual building will be evaluated at the time the City considers Planned Development requests for the various buildings. The City has the option of applying flexibility in regard to height limitations with the Planned Development Overlay zoning district.

The phasing plan for the conceptual site layout for the Master Plan project includes: 1) three medical office buildings on the 4th and Spring Street corner properties, which have already been entitled and include a reciprocal access and parking agreement, and a 4-story medical office building with an attached parking garage and a surface parking lot on the east side of Pine Street; 2) an assisted living housing project with accommodations for up to 52 residents; 3) a mixed-use retail and residential project with up to 26 residential units; and 4) an apartment complex with 47 units. It is anticipated that as future development of the Master Plan progresses, there may be changes in building use, design and orientation. The subsequent Planned Development review process will ensure conformance with the intent of the Master Plan. See attached Conceptual Site Plan.

Parking is generally proposed to the rear of the buildings in either surface lots or parking structures. The overall parking requirement for all of the proposed uses would require 726 parking spaces. The Master Plan includes provision of 692 parking spaces. This indicates that the overall parking plan is approximately four to five percent deficient. However, there are opportunities when the specific development projects are considered to address parking requirements by either modifying the intensity of development to comply with strict application of the parking code, or by consideration of a shared Joint Use parking agreement since this is a mixed use project with distinct day and night time parking demands. It is clear that a development of this size will gain at least a 10 percent parking savings due to the various uses using a pool of shared parking spaces.

Each phase will be carefully evaluated to ensure that it can be developed independently from other phases, including the provision of adequate parking. The assisted living project includes provision of 64 spaces in a parking garage. Up to 46 parking spaces are proposed in a parking structure for the mixed-use project, with a central parking area provided toward the rear of the L-shaped building. Parking for the apartments is provided in garages and surfaces lots.

The site plan also includes enhanced pedestrian linkages for the project area on the south side of 4th Street, as well as a central water feature. Sidewalk treatments are proposed to be consistent with the downtown sidewalk enhancements including wide sidewalks, street trees and brick pavers around the sidewalk edges and at corners. A bike lane is proposed on the south side of 4th Street and on Pine Street. A transit stop is already planned along Spring Street. The railroad crossing and freeway exit will remain the same until such time as the City moves forward with extending 4th Street straight to Riverside with a new

below grade railroad crossing. When Pine Street is realigned, only westbound traffic will be permitted from Riverside Avenue to Pine Street.

A traffic study was prepared for this project to evaluate project related impacts. A traffic signal will be installed a the corner of 4th and Spring Streets which will address traffic congestion on Spring and 4th Streets and reduce delays. The study indicates that impacts to surrounding streets and intersections will be less than significant.

Options: After opening the public hearing and taking public testimony, the Planning Commission is requested to take one of the actions listed below:

a. By separate motions: 1) recommend approval of the Mitigated Negative Declaration; and 2) recommend approval of the 4th Street Master Plan, Miscellaneous 07-001, to the City Council.

b. Amend, modify, or reject the above-listed action.

c. Request additional information and analysis.

Staff Report Prepared By: Susan DeCarli

Attachments:

1. Location Map
2. Conceptual Site Plan
3. Conceptual Building Elevations
4. 4th Street Realignment
5. Initial Study
6. Resolution to Recommend Approval of the Mitigated Negative Declaration
7. Resolution to Recommend Approval of the 4th Street Master Plan
8. Newspaper Notice


5th St.
4th St.
3rd St.
2nd St.
Oak St.
Spring St.
Pine St.
Highway 101
Niblick Rd.
009-261-003
009-261-004
009-261-002
009-291-008
009-291-018
009-291-017
009-291-009
009-291-010
009-291-011
009-291-016
009-291-013
009-291-012
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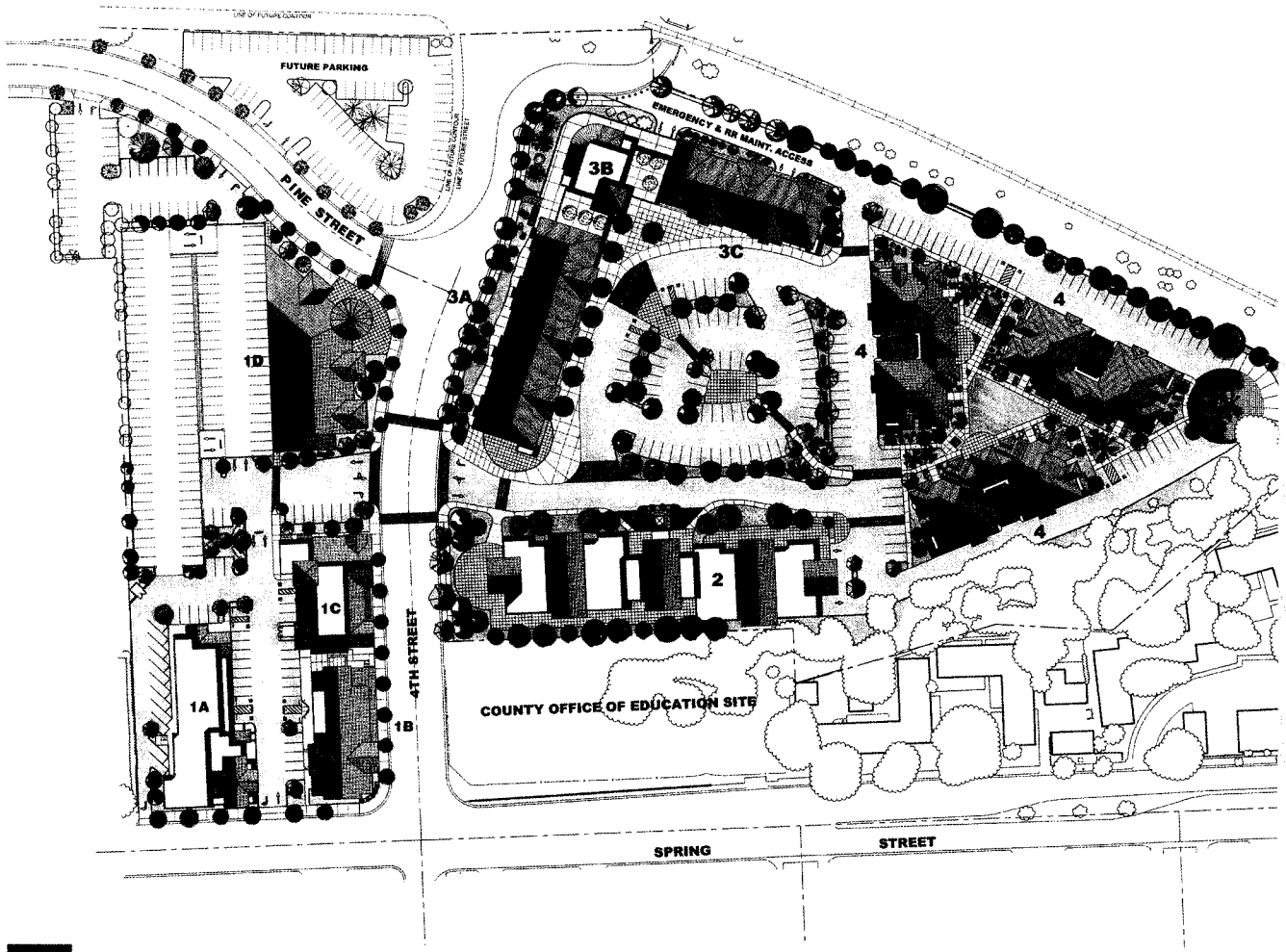
100
200
400



4th Street Master Plan Project Analysis

1. Medical Campus

Phase I

A. 416	(3-Story)	20,227 s.f.
B. 406	(2-Story)	12,500 s.f.
C. 1416B	(2-Story)	12,000 s.f.
	Total	**44,727 s.f.**

Parking Required per Ordinance 1/250 — 44,727 ± 250 = 179
Parking Spaces Required: 385
Parking Spaces Provided On-Site: 310

Phase II

D. Building (4-Story) — 51,424 s.f.
Parking Required per Ordinance 1/250 — 38,560 ± 250 = 154
(4-Story Option) 179 + 206 = 385
Parking Provided ± 310*
*Note: Parking across Pine Street (±75 Spaces)

2. Assisted Living (4-Story)

Level 1	Parking (64 Spaces)	27,000 s.f.
Level 2	Administrative	21,750 s.f.
Level 3	Living Units (26)	21,750 s.f.
Level 4	Living Units (26)	21,750 s.f.
	Total 52 Units	**92,250 s.f.**

Parking Required per Ordinance 1 Space/Unit + Staff Parking = 64

3. Mixed Use Retail/Residential

A. Building #1 (3-Story)

Level 1	Retail	2,600 s.f.
Level 2 & 3	Residential (14 Units)	

B. Building #2 (4-Story + Parking Below)

Level 1	Retail/ Common Area	3,500 s.f.
Level 2	Retail/ Support Area	3,500 s.f.
Level 3 & 4	Residential (2 Units)/ Common Area	

C. Building #3 (3-Story + Parking Below)

Level 1	Retail	9,000 s.f.
Level 2 & 3	Residential (10 Units)	

Total Square Footage Retail 28,600 s.f.

Parking Required per Ordinance
Retail 1/250 28,600 ± 250 = 114
Residential 2/Unit + 1/5 Units/Guest = 57
26 x 2 = 52 + 5 = 57 — Total 171

Parking Provided
Parking Level (Below Building 2 & 3) 46
Surface Parking 86
Additional Parking at Apartments 5
Total 137

4. Apartment Complex

16 Apartment/Building = 48 Units — 23,500 s.f. /B
Total **70,**

Required Parking 2/unit + 1/5 Units/Guest 2 x 48 = 96
48 ± 5 = 9.6 = 10
Required Spaces -- 106

Parking Provided
Garage Below Apartments 48
Surface Parking 58
Parking Provided 106

Phases - Parking Required
1 - 385 spaces
2 - 64
3 - 171
4 - 106
726 Total

Parking Proposed
1 - 385
2 - 64
3 - 137
4 - 106
692 Total

Joint Use Parking Reduction Requested
34 spaces (20%)

N

bfgc
ArchiTecture

Conceptual Site Plan

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

Attachment 2
Conceptual Site Plan

Parking Lot Elevation

4th Street Elevation

bfgc Architecture

Conceptual Exterior Elevations

Mixed-Use Retail / Residential

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

4th STREET Paso Robles

Side Elevation

4th Street Elevation

Conceptual Exterior Elevations

Medical Office Building

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

4th Street Elevation

Street Elevation

bfgc Architecture

Conceptual Exterior Elevations

Assisted Living Facility

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

4th Street Paso Robles

Side Elevation

Courtyard Elevation

bfgc Architecture

Conceptual Exterior Elevations

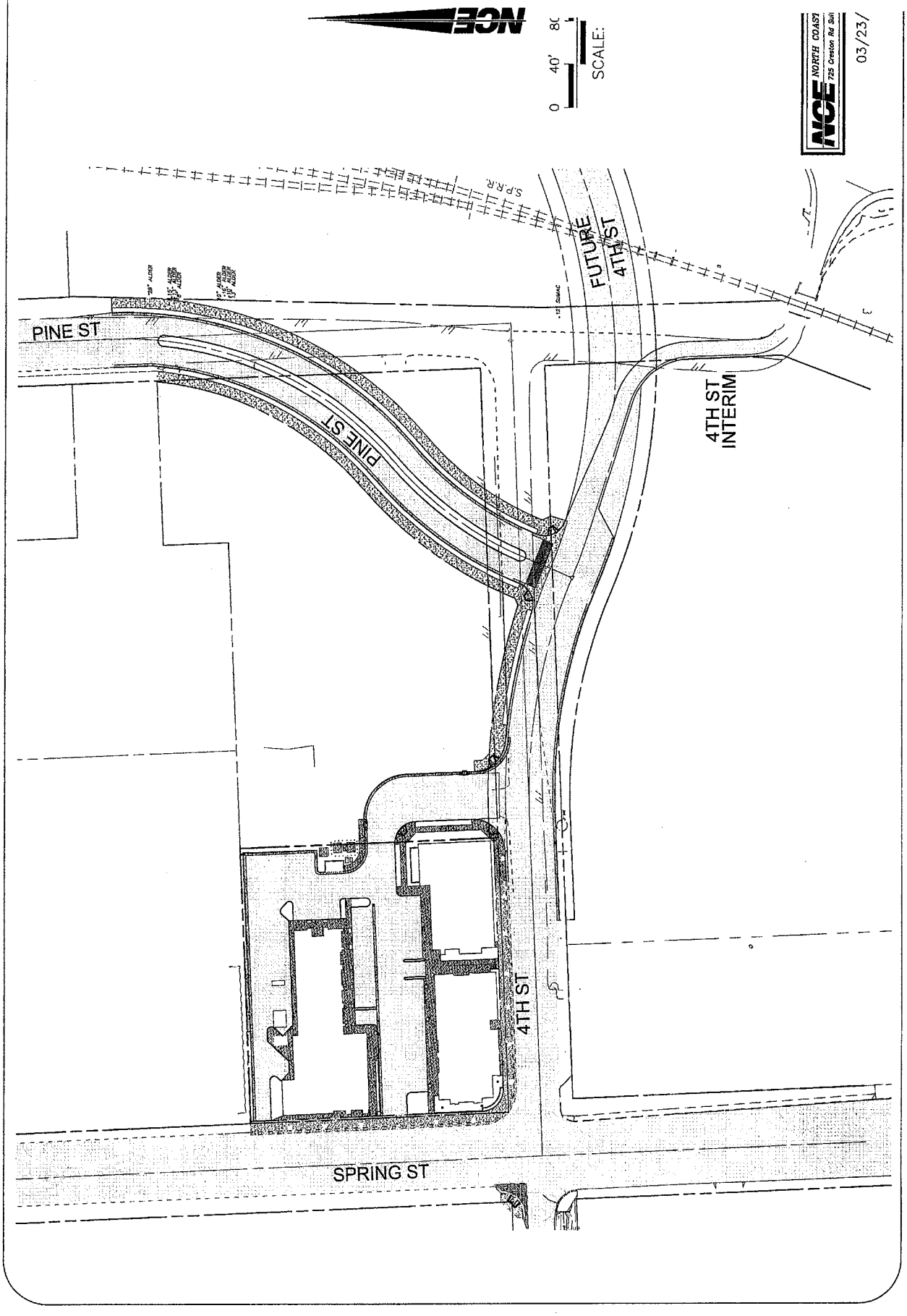
Apartment Complex

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

4th STREET Paso Robles

Attachment 4
4th Street Realignment



CITY OF PASO ROBLES – PLANNING DIVISION
INITIAL STUDY

1. GENERAL PROJECT INFORMATION

PROJECT TITLE:	4th Street Master Plan / 4th Street Re-alignment Miscellaneous 07-001
LEAD AGENCY:	City of Paso Robles - 1000 Spring Street, Paso Robles, CA 93446
Contact: **Telephone:**	Susan DeCarli, AICP, City Planner (805) 237-3970
PROJECT LOCATION:	Master Plan Area - Properties between Spring Street and Pine Street, and north and south of 4th Street – See Attachment 1, Location Map. APNs 009-291-008 through -018, and 009-261-002 and -003.
PROJECT PROPONENT:	Jim Saunders and the City of Paso Robles
LEAD AGENCY CONTACT/ INITIAL STUDY PREPARED BY:	Susan DeCarli, AICP, City Planner
Telephone: **Facsimile:** **E-Mail:**	(805) 237-3970 (805) 237-3904 sdecarli@prcity.com
GENERAL PLAN DESIGNATION:	Commercial Service and Community Commercial Mixed-Use Overlay (CC-MU and CS-MU) designations
ZONING:	Commercial Highway Planned Development Mixed Use (C2-PD-MU) Zoning District

2. PROJECT DESCRIPTION

The proposed project is a Master Development Plan for property located between Spring Street and Pine Street, and north and south of 4th Street. Concurrently, the connection of Pine and 4th Streets are proposed to be realigned. The street realignment is a feature within the Master Plan. Also, concurrent with the realignment project, the 4th Street underpass (under the Union Pacific Railroad) is proposed to be changed to a one-way direction underpass, allowing vehicles to only travel westward on 4th Street from Riverside Avenue and/or Highway 101 to Pine Street.

The Master Plan project scope includes: incorporating the realigned 4th Street connection to Pine Street; a preliminary site plan (including building footprints, parking areas, site circulation, landscaping and hardscaping); and preliminary buildings elevations. The total site area is approximately 12.45 acres, and is generally level with no other significant site constraints or unique features. There is an existing dilapidated building on the on the north side of 4th Street that will be removed. There is also a medical office on the north side of 4th Street that is nearing completion of construction, which was entitled under previous approval.

The proposed Master Plan is divided into 4 phases of development: 1) medical campus (3 office buildings/84,000 s.f.); 2) assisted living center (52 living units); 3) mixed-use retail/residential project (26 residences and 28,600 s.f. retail); and 4) apartment complex (48 units).

The total parking requirement is 726 spaces. Parking will be provided onsite and at the northeast corner of 4th and Pines Streets. Since it is a mixed use project with distinct daytime and evening uses, a Joint Use Parking reduction is requested for up to 34 spaces.

The maximum building height permitted in the Zoning Ordinance is 50 feet. All of the proposed buildings comply with height limitations, except building #3, in Phase 1. This building is proposed to be 64 feet in height. Flexibility of the height limitations may be granted during the entitlement process for this structure. A Visual Simulation and Analysis was prepared for this Master Plan which indicates that the height of the proposed buildings would not result in significant visual impacts.

A Traffic Impact Study has also been prepared for this project that evaluates trip generation and impacts at 4th and Spring Streets and the near vicinity. It also provides a breakdown of proportionate share of impacts and fees for mitigation requirements for a signal at this intersection.

3. OTHER AGENCIES WHOSE APPROVAL MAY BE REQUIRED (For example, issuance of permits, financing approval, or participation agreement):

None.

4. EARLIER ENVIRONMENTAL ANALYSIS AND RELATED ENVIRONMENTAL DOCUMENTATION:

This Initial Study incorporates by reference the City of El Paso de Robles General Plan Environmental Impact Report (EIR) (SCH#2003011123).

5. CONTEXT OF ENVIRONMENTAL ANALYSIS FOR THE PROJECT:

This Initial Study relies on expert opinion supported by the facts, technical studies, and technical appendices of the City of El Paso de Robles General Plan EIR. These documents are incorporated herein by reference. They provide substantial evidence to document the basis upon which the City has arrived at its environmental determination regarding various resources.

6. PURPOSES OF AN INITIAL STUDY

The purposes of an Initial Study for a Development Project Application are:

A. To provide the City with sufficient information and analysis to use as the basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration for a site specific development project proposal;

B. To enable the Applicant of a site specific development project proposal or the City as the lead agency to modify a project, mitigating adverse impacts before an Environmental Impact Report is required to be prepared, thereby enabling the proposed Project to qualify for issuance of a Negative Declaration or a Mitigated Negative Declaration;

C. To facilitate environmental assessment early in the design of a project;

D. To eliminate unnecessary EIRs;

E. To explain the reasons for determining that potentially significant effects would not be significant;

F. To determine if a previously prepared EIR could be used for the project;

G. To assist in the preparation of an Environmental Impact Report if one is required; and

H. To provide documentation of the factual basis for the finding of no significant effect as set forth in a Negative Declaration or a Mitigated Negative Declaration prepared for the a project.

7. EXPLANATION OF ANSWERS FOUND ON THE ENVIRONMENTAL CHECKLIST FORM

A. Scope of Environmental Review

This Initial Study evaluates potential impacts identified in the following checklist.

B. Evaluation of Environmental Impacts

1. A brief explanation is required for all answers to the questions presented on the following Environmental Checklist Form, except where the answer is that the proposed project will have "No Impact." The "No Impact" answers are to be adequately supported by the information sources cited in the parentheses following each question or as otherwise explained in the introductory remarks. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A "No Impact" answer should be explained where it is based on project-specific factors and/or general standards. The basis for the "No Impact" answers on the following Environmental Checklist Form is explained in further detail in this Initial Study in Section 9 (Earlier Environmental Analysis and Related Environmental Documentation) and Section 10 (Context of Environmental Analysis for the Project).

2. All answers on the following Environmental Checklist Form must take into account the whole action involved with the project, including implementation. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. "Potentially Significant Impact" is appropriate, if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more "Potentially Significant Impact" entries when the determination is made, preparation of an Environmental Impact Report is warranted.

4. Potentially Significant Impact Unless Mitigated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. Mitigation Measures from Section 9 (Earlier Environmental Analysis and Related Environmental Documentation) may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). See Section 4 (Earlier Environmental Analysis and Related Environmental Documentation) and Section 11 (Earlier Analysis and Background Materials) of this Initial Study.

6. References to the information sources for potential impacts (e.g., general plans, zoning ordinances) have been incorporated into the Environmental Checklist Form. See Section 11 (Earlier Analysis and Related Environmental Documentation). Other sources used or individuals contacted are cited where appropriate.

7. The following Environmental Checklist Form generally is the same as the one contained in Title 14, California Code of Regulations; with some modifications to reflect the City's needs and requirements.

8. Standard Conditions of Approval: The City imposes standard conditions of approval on Projects. These conditions are considered to be components of and/or modifications to the Project and some reduce or minimize environmental impacts to a level of insignificance. Because they are considered part of the Project, they have not been identified as mitigation measures. For the readers' information, the standard conditions identified in this Initial Study are available for review at the Community Development Department.

9. Certification Statement: The statements made in this Initial Study and those made in the documents referenced herein present the data and information that are required to satisfy the provisions of the California Environmental Quality Act (CEQA) – Statutes and Guidelines, as well as the City's Procedures for Implementing CEQA. Further, the facts, statements, information, and analysis presented are true and correct in accordance with standard business practices of qualified professionals with expertise in the development review process, including building, planning, and engineering.

8. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The proposed project may potentially affect the environmental factors checked below, and may involve at least one impact that is a "Potentially Significant Impact" or is "Potentially Significant Unless Mitigated," if so indicated on the following Environmental Checklist Form (Pages 8 to.15)

☐ Land Use & Planning	■ Transportation/Circulation	☐ Public Services
☐ Population & Housing	☐ Biological Resources	☐ Utilities & Service Systems
☐ Geological Problems	☐ Energy & Mineral Resources	☐ Aesthetics
☐ Water	☐ Hazards	☐ Cultural Resources
☐ Air Quality	☐ Noise	☐ Recreation
	☐ Mandatory Findings of Significance	

9. ENVIRONMENTAL DETERMINATION: On the basis of this initial evaluation: I find that:

The proposed project could not have a significant effect on the environment; and, therefore, a **NEGATIVE DECLARATION** will be prepared. ☐

Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. Therefore, a **MITIGATED NEGATIVE DECLARATION** will be prepared. ■

The proposed project may have a significant effect on the environment; and, therefore an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

The proposed project may have a significant effect(s) on the environment, but one or more effects (1) have been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) have been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or is "potentially significant unless mitigated." ☐

Therefore, an **ENVIRONMENTAL IMPACT REPORT** is required, but it will analyze only the effect or effects that remain to be addressed.

Signature:	Date:
	March 23, 2007
Susan DeCarli, AICP, City Planner	

10 Environmental Checklist Form

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. LAND USE AND PLANNING. Would the Proposal:				
a) Conflict with general plan designation or zoning? (Sources: 1 & 8)	☐	☐	☐	☑
Discussion: The proposed amendment is consistent with the General Plan land use designation and Zoning District that applies to the project site. The 4th Street realignment implements policies and actions established in the General Plan Circulation Element for the downtown and the Spring Street Master Plan.				
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project? (Sources: 1 & 3)	☐	☐	☐	☑
Discussion: The proposed project complies with the EIR recently certified for the City General Plan Update, 2003.				
c) Be incompatible with existing land uses in the vicinity? (Sources: 1 & 3)	☐	☐	☐	☑
Discussion: The Master Plan incorporates a mix of residential and commercial land uses that would be compatible with surrounding land uses which are commercial and residential. The residential uses are proposed to be located adjacent to existing residential land uses, and the commercial uses are proposed adjacent to existing commercial development.				
d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible uses)?	☐	☐	☐	☑
Discussion: There are no agricultural land uses or resources on or near the project site, therefore, this Master Plan could not affect agricultural resources.				
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? (Sources: 1 & 3)	☐	☐	☐	☑
Discussion: The property is (mostly) currently vacant. One of the medical offices in phase one is currently under construction, under previously approved entitlements. Also, as noted in the Project Description there is a dilapidated building that will be demolished with this project. The project will not disrupt or divide the arrangement of land uses in the community.				
II. POPULATION AND HOUSING. Would the proposal:				
a) Cumulatively exceed official regional or local population projections? (Sources: 1 & 3)	☐	☐	☐	☑
Discussion: This project and applicable density established in the General Plan are consistent with the General Plan build out capacity, and will not result in exceeding population projections.				
b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? (Sources: 1 & 3)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: This project will not induce substantial growth as it is an infill development project, and existing infrastructure serves the project area, although service lines will be upgraded to accommodate required capacity needs for the project.

c) Displace existing housing, especially affordable housing? (Sources: 1, 3, & 5) ☐ ☐ ☐ ☑

Discussion: This project will not displace existing housing since it is a generally vacant site.

III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:

a) Fault rupture? (Sources: 1, 2, & 3) ☐ ☐ ☐ ☑

Discussion: The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the General Plan EIR, pg. 4.5-8. There are two known fault zones on either side of this valley. The Rinconada Fault system runs on the west side of the valley. The San Andreas Fault is on the east side of the valley and runs through the community of Parkfield east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the Uniform Building Code to all new development within the City. Review of available information and examinations indicate that neither of these faults is active with respect to ground rupture in Paso Robles. Soils reports and structural engineering in accordance with local seismic influences would be applied in conjunction with any new development proposal. Based on standard conditions of approval, the potential for fault rupture and exposure of persons or property to seismic hazards is not considered significant. In addition, per requirements of the Alquist-Priolo Earthquake Fault Zones, only structures for human habitation need to be setback a minimum of 50 feet of a known active trace fault. The proposed structures are not intended for human habitation.

b) Seismic ground shaking? (Sources:1, 2, & 3) ☐ ☐ ☐ ☑

Discussion: The City is located within an active earthquake area that could experience seismic ground shaking from the Rinconada and San Andreas Faults. The proposed structure will be constructed to current UBC codes. The General Plan EIR identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of this project including adequate structural design and not constructing over active or potentially active faults.

c) Seismic ground failure, including liquefaction? (Sources: 1, 2 & 3) ☐ ☐ ☐ ☑

Discussion: See a. & b.

d) Seiche, tsunami, or volcanic hazard? (Sources: 1, 2, & 3) ☐ ☐ ☐ ☑

Discussion: There are no water or volcanic hazards that could affect this property, thus potential impacts are less than significant.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Landslides or Mudflows? (Sources: 1, 2, & 3)	☐	☐	☐	☑

Discussion: There are no landslide or mudflow hazards that could affect this property, thus potential impacts are less than significant.

f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? (Sources: 1, 2, 3, & 4)	☐	☐	☐	☑

Discussion: There are no erosion or soil conditions that could negatively affect this property, thus potential impacts are less than significant. Site grading will be necessary for future site development, however potential erosion impacts will be addressed in compliance with NPDES / SWPPS requirements.

g) Subsidence of the land? (Sources: 1, 2, & 3)	☐	☐	☐	☑

Discussion: Refer to a. above.

h) Expansive soils? (Sources: 4)	☐	☐	☐	☑

Discussion: Refer to a. above.

i) Unique geologic or physical features? (Sources:1 & 3)	☐	☐	☐	☑

Discussion: Refer to a. above.

IV. WATER. Would the proposal result in:

a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? (Sources:1, 3, & 7)	☐	☐	☑	☐

Discussion: This Master Plan and road realignment will not directly affect water absorption, drainage patterns and surface runoff, however future development of the Master Plan development projects may affect these issues. Future development of the project site shall require surface drainage to be directed to onsite landscape areas and retention basins and/or to install subterranean drainage retention facilities, as determined appropriate by the City Engineer to reduce surface runoff and maintain absorption rates. Water that does leave the site will be in compliance with NPDES requirements, and shall not change historic drainage patterns.

b) Exposure of people or property to water related hazards such as flooding? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: There are no flood related hazards on or near the project site that could expose people or property to water related hazards.

c) Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)? (Sources: 1, 3, & 7)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: See a. above.

d) Changes in the amount of surface water in any water body? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: This project could not changes the amount of surface water in any water body such as the Salinas River since surface runoff will be addressed on-site and/or not exceed historic drainage patterns.

e) Changes in currents, or the course or direction of water movement? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: See a. above.

f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability? (Sources: 1,3, & 7) ☐ ☐ ☑ ☐

Discussion: Due to the relatively small scale of this project, it could not affect water quantity, and no direct withdrawals or excavations will result from this project.

g) Altered direction or rate of flow of groundwater? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: See f. above.

h) Impacts to groundwater quality? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: See a above.

i) Substantial reduction in the amount of groundwater otherwise available for public water supplies? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: See f above.

V. AIR QUALITY. Would the proposal:

a) Violate any air quality standard or contribute to an existing or projected air quality violation? (Sources: 1, 3, & 7) ☐ ☐ ☑ ☐

Discussion: Items a –d) This Master Plan and road realignment project is an infill project that will include mixed-uses designed in a compact urban form, therefore this project complies with the Clean Air Act and applicable policies. Project specific air emissions shall be addressed at the time of future development in compliance with the San Luis

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Obispo Air Quality Control District requirements.

b) Expose sensitive receptors to pollutants? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: There are no sensitive receptors in the project vicinity, thus this project will not affect sensitive receptors.

c) Alter air movement, moisture, or temperature? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: Future development of the Master Plan area could not affect air movement, moisture or temperature since it is a relatively small scale project. Future development will include significant parking lot shade trees to reduce open expanses of paved parking lot areas and potential resulting heat gain.

d) Create objectionable odors? ☐ ☐ ☐ ☑

Discussion: As a Master Plan and road project, this project could not create objectionable odors. Future development projects will be evaluated on a case-by-case basis to evaluate and control potential odor impacts, however, it is not likely that office, residential or retail uses will result in odors.

VI. TRANSPORTATION/CIRCULATION. Would the proposal result in:

a) Increased vehicle trips or traffic congestion? (Sources: 1, 3, & 7) ☐ ☐ ☑ ☐

Discussion: The road realignment component of this project could not result in trip generation.

A Traffic Study was prepared for this project by Pinnacle Traffic Engineering, November 2005 for the Master Plan project. The Master Plan project anticipates future development of up to approximately 113,000 s.f. of office and retail uses, 74 apartments, and 52 assisted living units. Traffic impacts will be mitigated from this project with street and road improvements and the installation of a traffic signal at 4th and Spring Streets. While the 4th Street realignment will not result in increased trips, and it is not a mitigation measures of the Master Plan, it will enable a smoother flow of traffic for uses in the vicinity since it will provide for an alternative route for vehicles traveling toward downtown. Concurrently, the one-way underpass will reduce traffic congestion of southbound traffic entering onto Hwy. 101 at Riverside Avenue.

Overall, the Master Plan project with the installation of the traffic signal at 4th and Spring Streets is anticipated to result in a Level of Service (LOS) "C" for the intersection, and surrounding streets at LOS A or B, which are within the City's adopted threshold for Level of Service.. See attached Traffic Study.

b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: The construction of frontage improvements, road realignment and installation of the traffic signal will improve existing design features.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Inadequate emergency access or inadequate access to nearby uses? (Sources:1, 3, & 7)	☐	☐	☐	☑
Discussion: The proposed project will not result in inadequate emergency access.				
d) Insufficient parking capacity on-site or off-site? (Sources: 1, 3, 7, & 8)	☐	☐	☑	☐
Discussion: The Master Plan anticipates the need for up to 726 parking spaces to accommodate future parking needs from the preliminary development plan. Approximately, 692 parking spaces are proposed in the preliminary plan. However, as a mixed-use project, future entitlements will request a Joint Use shared parking agreement for up to 34 parking spaces, in compliance with the City Zoning Ordinance. If a shared parking agreement is determined not to be appropriate, the final development projects will need to be reduced to ensure parking demand and proposed parking are in conformance with the required parking.				
e) Hazards or barriers for pedestrians or bicyclists? (Source: 7)	☐	☐	☐	☑
Discussion: Bike lanes and sidewalks are proposed as part of the Master Plan design, therefore the projects will not result in hazards or barriers for pedestrians or bicyclists.				
f) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Sources: 1 & 8)	☐	☐	☐	☑
Discussion: A transit stop is proposed along the Spring Street frontage of the proposed Master Plan, therefore the project will not conflict with adopted policies supporting alternative transportation.				
g) Rail, waterborne or air traffic impacts?	☐	☐	☐	☑
Discussion: The project will not affect these transportation facilities.				
BIOLOGICAL RESOURCES. Would the proposal result in impacts to:				
Endangered, threatened or rare species or their habitats (including but not limited to: plants, fish, insects, animals, and birds)?	☐	☐	☐	☑
Discussion: a-e) There are no endangered, threatened or rare species or their habitats on the project, or other important biological resources. Therefore, this project could not impact these resources.				
b) Locally designated species (e.g., heritage trees)?	☐	☐	☐	☑
Discussion: See above.				

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?	☐	☐	☐	☑
Discussion: See above.				
d) Wetland habitat (e.g., marsh, riparian and vernal pool)?	☐	☐	☐	☑
Discussion: See above.				
e) Wildlife dispersal or migration corridors?	☐	☐	☐	☑
Discussion: See above.				
VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:				
a) Conflict with adopted energy conservation plans? (Sources: 1 & 7)	☐	☐	☐	☑
Discussion: This project could not affect or conflict with energy conservation plans.				
b) Use non-renewable resources in a wasteful and inefficient manner? (Sources: 1 & 7)	☐	☐	☐	☑
Discussion: The project will not use non-renewable resource in a wasteful and inefficient manner.				
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? (Sources: 1 & 7)	☐	☐	☐	☑
Discussion: The project is not located in an area of a known mineral resources that would be of future value to the region and the residents of the State.				
IX. HAZARDS. Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	☐	☐	☐	☑
Discussion: No development is proposed with this project therefore it could not result in hazard related impacts.				
b) Possible interference with an emergency response plan or emergency evacuation plan? (Sources: 1 & 7)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Discussion: Refer to item a.				
c) The creation of any health hazard or potential hazards?	☐	☐	☐	☑
Discussion: Refer to item a.				
d) Increased fire hazard in areas with flammable brush, grass, or trees?	☐	☐	☐	☑
Discussion: Refer to item a.				
X. NOISE. Would the proposal result in:				
a) Increases in existing noise levels? (Sources: 1, 7, & 8)	☐	☐	☐	☑
Discussion: No development is proposed with this project, therefore it could not result in noise related impacts. Future project specific noise impacts will be evaluated and mitigated when development is proposed.				
b) Exposure of people to severe noise levels? (Source: 3)	☐	☐	☐	☑
See item a.				
XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire protection? (Sources: 1, 3, 6, & 7)	☐	☐	☐	☑
b) Police Protection? (Sources: 1, 3, & 7)	☐	☐	☐	☑
c) Schools? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Maintenance of public facilities, including roads? (Sources: 1, 3, & 7)	☐	☐	☐	☑
e) Other governmental services? (Sources: 1,3, & 7)	☐	☐	☐	☑
Discussion: a.-e) No development is proposed with this project therefore it could not result in public service related impacts.				
XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a) Power or natural gas? (Sources: 1, 3, & 7)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Communication systems? (Sources: 1, 3, & 7)	☐	☐	☐	☑
c) Local or regional water treatment or distribution facilities? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Sewer or septic tanks? (Sources: 1, 3, 7, & 8)	☐	☐	☐	☑
e) Storm water drainage? (Sources: 1, 3, & 7)	☐	☐	☐	☑
f) Solid waste disposal? (Sources: 1, 3, & 7)	☐	☐	☐	☑
g) Local or regional water supplies? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: a.-g. The project will not result in the need for new systems or supplies, or result in substantial alterations to utilities and service systems.

XIII. AESTHETICS. Would the proposal:

a) Affect a scenic vista or scenic highway? (Sources: 1, 3, & 7)	☐	☐	☐	☑
b) Have a demonstrable negative aesthetic effect? (Sources: 1, 3, & 7)	☐	☑	☐	☐
c) Create light or glare? (Sources: 1, 3, 7, & 8)	☐	☐	☐	☑

Discussion: While this project is not within an area with a scenic vista or scenic highway, a Visual Analysis was prepared, which is discussed more in b. below.

Discussion: The Visual Analysis prepared for this project evaluated 5 Key Viewing Areas (KVAs), which are the primary important views of the planning area. The study evaluated potential impacts according to the standard CEQA visual analysis assessment criteria: Visual Impact Susceptibility (Visual Quality, Visual Sensitivity, and Viewer Exposure); and Visual Impact Severity (Visual Contrast, Project Dominance, View Impairment). The conclusions of the study indicate that KVAs 1, 2, and 4 will result in less than significant impacts. However, KVAs 3 and 5 were determined to be moderate or potentially significant, but that they can be mitigated to a less than significant level. Mitigation measures are included with this environmental study. See attached Visual Analysis.

Discussion: Future street lighting and building lighting fixtures to be installed will be shielded and downcast in compliance with Zoning Ordinance.

XIV. CULTURAL RESOURCES. Would the proposal:

a) Disturb paleontological resources? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: There are no known paleontological or other cultural resources on site and the project does not proposed new development; therefore these resources could not be impacted.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Disturb archaeological resources? (Sources: 1, 3, & 7)	☐	☐	☐	☑
Discussion: Refer to item a.				
c) Affect historical resources? (Sources: 1, 3, & 7)	☐	☐	☐	☑
Discussion: see item a. above..				
d) Have the potential to cause a physical change which would affect unique ethnic cultural values? (Sources: 1, 3, & 7)	☐	☐	☐	☑
Discussion: Refer to item a.				
e) Restrict existing religious or sacred uses within the potential impact area? (Sources: 1, 3, & 7)	☐	☐	☐	☑
Discussion: Refer to item a.				
XV.RECREATION. Would the proposal:				
a) Increase the demand for neighborhood or regional parks or other recreational facilities? (Sources: 1, 3, & 7)	☐	☐	☐	☑
Discussion: This project does not include development, however, the City has an adequate supply of parks and recreational facilities to accommodate future demands on those facilities with inclusion of anticipated growth that will result from this project.				
b) Affect existing recreational opportunities? (Sources 1, 3, & 7)	☐	☐	☐	☑
Discussion: The project will not affect existing recreational opportunities.				
XVI.MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: This project does not include development and it could not result in impacts that would degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important history or prehistory.

10 Environmental Checklist Form

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals? (Sources: 1 & 3)	☐	☐	☐	☑
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) (Sources: 1 & 3)	☐	☐	☐	☑
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: This project will not result in significant environmental impacts and therefore will not result in short term or long term environmental goals.

Discussion: This project will not result in cumulative environmental impacts.

Discussion: This project does not have the potential to result in substantial adverse effects on human beings either directly or indirectly.

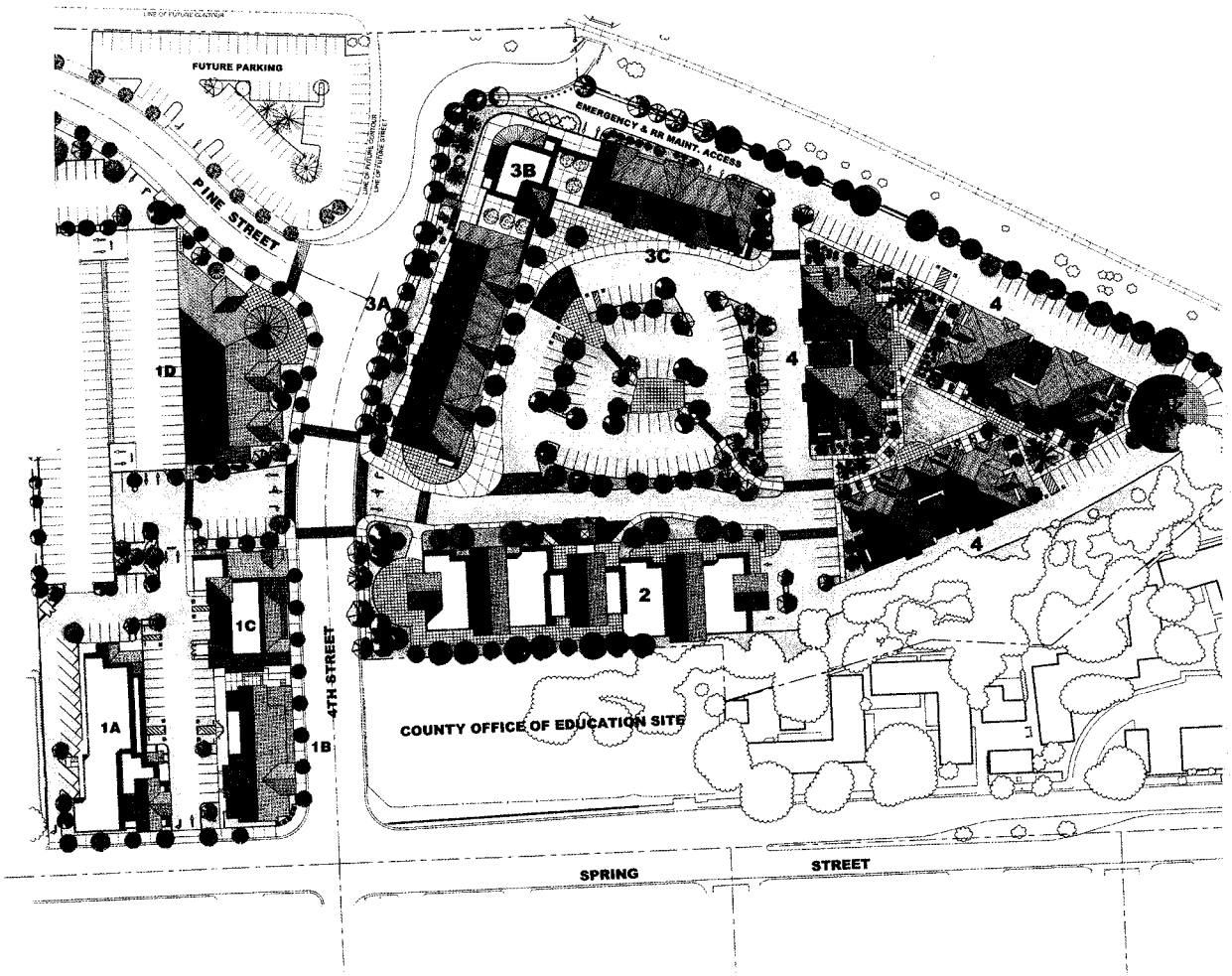
11. EARLIER ANALYSIS AND BACKGROUND MATERIALS

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). The earlier documents that have been used in this Initial Study are listed below.

Reference Number	Document Title	Available for Review At
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
2	Seismic Safety Element for City of Paso Robles	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
3	Final Environmental Impact Report City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
4	Soil Survey of San Luis Obispo County, California Paso Robles Area	USDA-NRCS, 65 Main Street-Suite 108 Templeton, CA 93465
5	Uniform Building Code	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
6	City of Paso Robles Standard Conditions of Approval For New Development	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
7	City of Paso Robles Zoning Code	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
8	City of Paso Robles, Water Master Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
9	City of Paso Robles, Sewer Master Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
10	Federal Emergency Management Agency Flood Insurance Rate Map	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446

Attachments:

A – Master Site Plan
B – 4th Street Realignment Design
C – Traffic Study
D – Visual Analysis
E – Mitigation Measures



4th Street Master Plan Project Analysis

1. Medical Campus

Phase I

A. 416	(3-Story)	20,227 s.f.
B. 406	(2-Story)	12,500 s.f.
C. 1416B	(2-Story)	12,000 s.f.
	Total	**44,727 s.f.**

Parking Required per Ordinance 1/250 — 44,727 ± 250 = 179
Parking Spaces Required: 385
Parking Spaces Provided On-Site: 310

Phase II

D. Building (4-Story) — 51,424 s.f.
Parking Required per Ordinance 1/250 — 38,560 ± 250 = 154
(4-Story Option) 179 + 206 = 385
Parking Provided ± 310*
*Note: Parking across Pine Street (±75 Spaces)

2. Assisted Living (4-Story)

Level 1	Parking (64 Spaces)	27,000 s.f.
Level 2	Administrative	21,750 s.f.
Level 3	Living Units (26)	21,750 s.f.
Level 4	Living Units (26)	21,750 s.f.
	Total 52 Units	**92,250 s.f.**

Parking Required per Ordinance 1 Space/Unit + Staff Parking = 64

3. Mixed Use Retail/Residential

A. Building #1 (3-Story)

Level 1	Retail	2,600 s.f.
Level 2 & 3	Residential (14 Units)	

B. Building #2 (4-Story + Parking Below)

Level 1	Retail/ Common Area	3,500 s.f.
Level 2	Retail/ Support Area	3,500 s.f.
Level 3 & 4	Residential (2 Units)/ Common Area	

C. Building #3 (3-Story + Parking Below)

Level 1	Retail	9,000 s.f.
Level 2 & 3	Residential (10 Units)	

Total Square Footage Retail 28,600 s.f.

Parking Required per Ordinance
Retail 1/250 28,600 ± 250 = 114
Residential 2/Unit + 1/5 Units/Guest = 57
26 x 2 = 52 + 5 = 57 — Total 171

Parking Provided
Parking Level (Below Building 2 & 3) 46
Surface Parking 86
Additional Parking at Apartments 5
Total 137

4. Apartment Complex

16 Apartment/Building = 48 Units — 23,500 s.f. /Bldg x 3
Total — **70,500 s.f**

Required Parking 2/unit + 1/5 Units/Guest 2 x 48 = 96
48 ± 5 = 9.6 = 10
Required Spaces – 106 Spaces

Parking Provided
Garage Below Apartments 48
Surface Parking 58
Parking Provided 106 Spaces

Phases - Parking Required
1 - 385 spaces
2 - 64
3 - 171
4 - 106
726 Total

Parking Proposed
1 - 385
2 - 64
3 - 137
4 - 106
692 Total

Joint Use Parking Reduction Requested
34 spaces (20%)

N

bfgc
Architecture

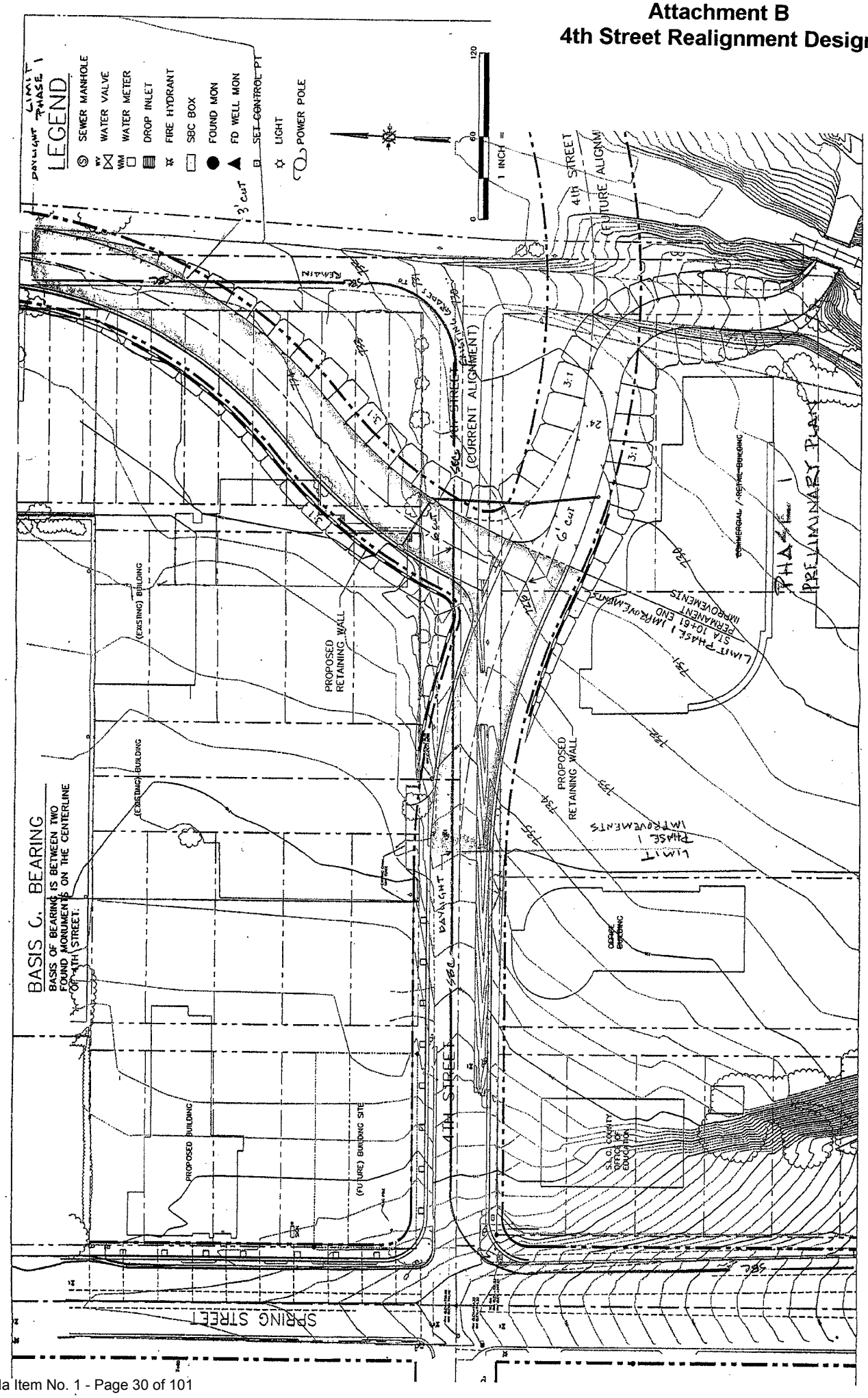
Conceptual Site Plan

Saunders 4th Street Master Plan

Pacific Management & Development Corp.

Attachment A
Master Site Plan

Attachment B
4th Street Realignment Design



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November 8, 2005

Mr. Doug Kuentzel
Architecture Planning Consulting
4310 Almond Drive
Templeton, CA 93465

RE: 4th Street Master Plan Project; Paso Robles, California
Traffic Study

Dear Mr. Kuentzel,

Per your request, I have prepared a study to summarize the findings of the traffic analysis for the proposed 4th Street Master Plan project in the City of Paso Robles, California. The project consists of 3 separate phases including commercial, office and residential related uses. Parts I and II are located on the north side of 4th Street, between Spring Street and Pine Street. Part III is located on the south side of 4th Street west of the Union Pacific Railroad (UPRR) property. The general location of the project site is illustrated on Figure 1. Based on the "conditions of approval," a traffic study is required to determine the project's fair share participation in the costs of installing a traffic signal at the 4th Street and Spring Street intersection. In addition, the traffic study is also required to determine the lengths of left-turn pockets on 4th Street at Spring Street and at the project driveway. The scope of the traffic analysis was discussed with John Falkenstien at the City' Community Development Department. The following includes an overview of the existing conditions, an estimate of the project trip generation quantities, the derivation of General Plan (Year 2025) traffic projections, the determination of the project's fair share participation towards future traffic signal improvements, and a discussion regarding the length of left-turn lane pockets at Spring Street and at the project driveway. Various planning documents were reviewed during the course of preparing the traffic study including:

City of El Paso de Robles General Plan 2003
City of El Paso de Robles General Plan 2003 Circulation Element
4th Street Underpass Project Study Report (PSR) - Project Development Study (Dec. 2003)
Chandler Ranch Area Specific Plan (Aug. 2004)
Downtown Parking and Circulation Analysis and Action Plan - Final Report (Sept. 2002)

EXISTING CONDITIONS

Spring Street serves as the primary north-south secondary arterial through the downtown area of Paso Robles. This secondary arterial serves the local commercial and office uses, and residential

areas to the west of downtown. Spring Street extends north from the 1stStreet-Niblick Road intersection with 2 northbound travel lanes that merge into a single lane north of 3rd Street. At 4th Street, Spring Street is striped for a left-turn only lane and a shared through-right lane on both the north and southbound approaches. The east and westbound approaches on 4th Street are striped for a single approach lane and are stop-sign controlled. 4th Street extends both east and west from Spring Street. East of Spring Street, 4th Street continues with a single travel lane in each direction (60' right-of-way) and is stop-sign controlled on the eastbound approach at Pine Street. Pine Street extends north from the Riverside Avenue and US101 southbound ramps intersection, and serves as a north-south collector street through the downtown area. Future planned improvements to 4th Street and Pine Street are discussed in the following study sections.

To document existing traffic conditions at the 4th Street and Spring Street intersection new turning movement traffic count data was collected on October 11, 2005 (Tuesday); between 7:00-9:00AM and 4:00-6:00 PM. The new traffic count data was collected to determine the amount traffic currently using 4th Street during critical peak hour time periods. The existing peak hour traffic volumes at the 4th Street and Pine Street intersection were estimated using data contained in the 4th Street Underpass PSR and the new data collected for this traffic study. The existing traffic volumes are illustrated on Figure 2. A copy of the new traffic count data is included with the Attachment Material.

Various "level of service" (LOS) methodologies are used to evaluate traffic operations. Operating conditions range from LOS "A" (free-flowing conditions) to LOS "F" (forced-flow conditions). A brief description of the LOS values and the ranges of vehicle delay (seconds per vehicle) are included with the Attachment Material. The analysis of unsignalized (stop-sign) and signalized traffic control conditions was performed using the LOS methodologies outlined in the 2000 Highway Capacity Manual (HCM). The "Synchro" program was used to evaluate intersection operations. The results of the existing intersection LOS analysis are presented in Table 1, with copies of the LOS worksheets included with the Attachment Material.

Table 1 - Existing Level of Service (LOS) Analysis

Study Intersection	Average Delay - LOS Value	
	AM Peak Hour	PM Peak Hour
4th Street and Spring Street:	**1.6 - A**	**16.6 - C**
Eastbound -	35.4 - E	> 50 - F
Westbound -	47.3 - E	> 50 - F
Northbound -	0.2 - A	0.4 - A
Southbound -	0.1 - A	0.0 - A
4th Street and Pine Street:	**4.6 - A**	**4.5 - A**
Eastbound -	9.4 - A	10.2 - B
Northbound -	3.4 - A	2.5 - A
Southbound -	0.0 - A	0.0 - A

The data presented in Table 1 indicates that the during the AM peak hour total average vehicle delays are within the LOS A range at both intersections. During the PM peak hour average vehicle delays are within the LOS C range at the 4th Street and Spring Street intersection and

within the LOS A range at the 4th Street and Pine Street intersection. This data also demonstrates that vehicle delays on 4th Street (stop-sign controlled) at Spring Street are within the LOS E-F range (east and westbound approaches).

Observations of actual traffic operations at the 4th Street and Spring Street intersection indicated that a significant portion of the northbound right-turn traffic was comprised of large vehicles (ie: trucks). In addition, during the PM peak hour period a large number of northbound vehicles were observed turning right at 4th Street to avoid the queue of vehicles on Spring Street resulting from the traffic signal operations at the 6th and Spring Street intersection.

PROJECT CONDITIONS

As previously stated, the project consists of 3 separate phases including commercial, office and residential related uses. A copy of the project site plan is illustrated on Figure 3. Part I will be constructed on the northeast corner of the 4th Street and Spring Street intersection, and will include a total of 27,400 square feet of gross leasable floor area designated for office and commercial retail uses. For the purpose of this traffic study, it was assumed that approximately 50% will be designated for offices uses (13,700 square feet) and 50% will be designated for commercial uses (13,700 square feet). Access will be provided via 2 driveways on Spring Street and 1 driveway on 4th Street (primary). Though initially left-turn access from Spring Street may be permitted at the Spring Street driveways, it is anticipated that both driveways will eventually be restricted to right-turns only (in and out). In addition, the existing roadway width of Spring Street will necessitate the restriction of the southbound "U" turn movement at the 4th Street and Spring Street intersection. Part II will be constructed on the northwest corner of the 4th Street and Pine Street intersection, and will include a 10,000 square foot restaurant and 7,000 square feet designated for commercial retail uses. An additional driveway will be provided on Pine Street for access to Parts I and II. Part III will be constructed south of 4th Street and will include 60 apartment units, 4,500 square feet of neighborhood commercial space and a 45 unit assisted living facility. Access will be provided via a new access road opposite the project driveway on 4th Street.

The estimate of project trips was based on the project description information previously stated and the applicable trip generation rate data contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual (7^{th} edition). The ITE trip generation rates for the various project uses are displayed in Table 2.

Table 2 - ITE Trip Generation Rates

Land Use (ITE Code)	Unit	Number of Vehicle Trips Per Unit				
		AM Peak Hour		PM Peak Hour		Daily
		IN	OUT	IN	OUT	
Commercial Retail (#820)	1,000 SF	0.63	0.40	1.80	1.95	42.94
General Office (#710)	1,000 SF	1.36	0.19	0.25	1.24	11.01
Quality Restaurant (#931)	1,000 SF	0.42	0.39	5.02	2.47	89.95
Residential Apartment (#220)	Unit	0.10	0.41	0.40	0.22	6.72
Assisted Living (#254)	Occ. Bed	0.09	0.05	0.10	0.12	2.66

The trip generation estimates for each project part are presented in Table 3, along with the total amount of traffic anticipated to be generated by the project site. The amount of "pass-by" traffic that will be associated with the commercial components was estimated based on data contained in the ITE Trip Generation Handbook (March 2001).

Table 3 - Project Trip Generation Estimates

Project Component	Number of Vehicle Trips				
	AM Peak Hour		PM Peak Hour		Daily
	IN	OUT	IN	OUT	
Part I :					
13,700 SF Commercial Retail	9	5	25	27	588
13,700 SF General Office	19	3	3	17	151
Part II :					
10,000 SF Quality Restaurant	4	4	50	25	900
7,000 SF Commercial Retail	4	3	13	14	300
Part III :					
60 Residential Apartment Units	6	25	24	13	403
4,500 SF Neighborhood Retail	3	2	8	9	193
45 Unit-Bed Assisted Living	4	2	5	5	120
Total Parts I, II and III Trips :	**49**	**44**	**128**	**110**	**2,655**
Pass-By Retail Trips (a) :	-9	-6	-27	-29	-627
Net New Project Trips :	**40**	**38**	**101**	**81**	**2,028**

(a) Pass-by percentage based on a total of 25,200 SF of commercial retail (58%)

The data in Table 3 indicates that the total project will generate approximately 2,655 daily trips, with 93 trips occurring during the AM peak hour (49 inbound and 44 outbound) and 238 trips occurring during the PM peak hour (128 inbound and 110 outbound). It should be noted that "pass-by" and "diverted-link" trips will be associated with the proposed commercial retail uses. Information in the ITE Trip Generation Handbook (March 2001) indicates that approximately

58% percent of the project commercial trips could be "pass-by" traffic. However, actual peak hour traffic volumes at the project driveways will reflect the total amount of trips (100%). There will be a small portion of the project traffic generated by the residential uses (Part III) that will account for some traffic to and from the office and commercial uses.

As stated in the introduction, the "conditions of approval" required a traffic study to determine the project's fair share participation in the costs of installing a traffic signal at the 4th Street and Spring Street intersection. Based on information received from your office, it is my understanding that your firm is in the process of requesting the development entitlements for Part I at this time. Therefore, the project trips associated with Part I were distributed to the existing local street system as illustrated on Figure 4A. It was estimated that approximately 90% of the general office peak hour trips will come from traffic traveling on Spring Street (40%-north, 40%-south and 10%west), while the remain 10% will use 4th Street east of the project site. A larger portion (25%) of the peak hour trips associated with the commercial retail uses are anticipated to come from the downtown area via 4th Street and Pine Street.

Though a detailed evaluation of the impacts associated with Part I was not required as part of the traffic study, the existing plus project (Part I) LOS values were calculated to evaluate the possible need for any future improvements at Spring Street and Pine Street. The existing plus Part I peak hour LOS values are presented in Table 4.

Table 4 - Existing Plus Part I Level of Service (LOS) Analysis

Study Intersection	Average Delay - LOS Value	
	AM Peak Hour	PM Peak Hour
4th Street and Spring Street:	**2.1 - A**	**> 50 - F**
Eastbound -	40.7 - E	> 50 - F
Westbound -	55.1 - F	> 50 - F
Northbound -	0.2 - A	0.4 - A
Southbound -	0.3 - A	0.2 - A
4th Street and Pine Street:	**4.6 - A**	**4.7 - A**
Eastbound -	9.4 - A	10.4 - B
Northbound -	3.6 - A	2.7 - A
Southbound -	0.0 - A	0.0 - A

The data in Table 4 indicates that the traffic associated with Part I will result in average vehicle delays in excess of 50 seconds per vehicle at the 4th Street and Spring Street intersection during the PM peak hour (LOS F). The City has designated LOS C as the minimum acceptable LOS standard on City facilities. A review of the existing plus project peak hour traffic volumes and the "peak hour" traffic signal warrant criteria contained in the Manual on Uniform Traffic Control Devices (MUTCD, including 2003 California Supplement) indicated that the westbound volumes on 4th Street will be below the level required for traffic signal control. The City has already determined that traffic signal improvements will be required at the 4th Street and Spring Street intersection. The installation of a traffic signal will reduce vehicle delays to within the LOS B range (10.3 seconds per vehicle) during the PM peak hour period.

The time line for the development of Parts II and III of the project is unknown at this time. However, the City has adopted a "plan line" for the future improvements of 4th Street, Pine Street, the UPRR underpass, and Riverside Avenue. These improvements are designed to increase flow to and from the downtown area and reduced traffic congestion on Spring Street during critical peak hour time periods. In addition, the City has also prepared a detailed evaluation of several options to address parking and circulation in the downtown central business district (Downtown Parking and Circulation Analysis and Action Plan-Final Report). This report describes alternative improvements to widening Spring Street and 13th Street to 4 lanes.

A review of the project site plan illustrated on Figure 3 indicates that the project layout has been designed to accommodate the future improvements to 4th Street (68' right-of way) and Pine Street. Therefore, the trips associate with Parts II and III were distributed to the local street system assuming a majority of these future planned improvements will be constructed. These trips were combined with the Part I trips illustrated on Figure 4A, to derive the total project trips for all 3 parts (Parts I, II and III) as illustrated on Figure 4B.

GENERAL PLAN CONDITIONS

To determine the project's fair share participation in the costs of installing a traffic signal at the 4th Street and Spring Street intersection, the General Plan (Year 2025) traffic projections were derived using information contained in the various reference documents. The General Plan traffic projections for 4th Street will be comprised of traffic generated by the proposed project (Parts I, II and III), traffic generated by other known future projects on 4th Street, and the additional traffic traveling to and from Spring Street (based on future planned improvements). Information provided by your office and illustrated on the project site plan (refer to Figure 3) indicates that there are 2 other future projects in the local vicinity that will generate traffic on 4th Street (between Spring Street and Pine Street). The first project will include the development of approximately 15,000 square feet for the County Office of Education. This project will be constructed on the southeast corner of the 4th Street and Spring Street intersection. Based on a review of the project site plan, it is assumed that all access will be provided via 1 two-way driveway on 4th Street. The second project will include the development of approximately 25,000 square feet of medical office space. This project will be located on the south side of 4th Street, between the County Office of Education and the new access road constructed for Part III. It is assumed that all access for this project will be provided via a driveway connection to the new access road for Part III. The trip generation estimates for these 2 future projects are presented in Table 5.

Table 5 - Other Future Projects Trip Generation Estimates

Project Component	Number of Vehicle Trips				
	AM Peak Hour		PM Peak Hour		Daily
	IN	OUT	IN	OUT	
15,000 SF County Education Office					
(ITE #710 - Trips per 1,000 SF)	(1.36)	(0.19)	(0.25)	(1.24)	(11.01)
Number of Vehicle Trips	20	3	4	19	165
25,000 SF Medical Office					
(ITE #720 - Trips per 1,000 SF)	(1.96)	(0.52)	(0.94)	(2.53)	(32.29)
Number of Vehicle Trips	49	13	24	63	807
Total Trips :	**69**	**16**	**28**	**82**	**972**

The data in Table 5 indicates that the 2 future projects will generate approximately 972 daily trips, with 85 trips occurring during the AM peak hour (69 inbound and 16 outbound) and 110 trips occurring during the PM peak hour (28 inbound and 82 outbound). The additional trips were assigned to the local street system based on distribution percentages similar to those used for the proposed project.

Future north-south peak hour traffic demands on Spring Street as associated with the General Plan (Year 2025) scenario were obtained from the Chandler Ranch Area Specific Plan. These future traffic demands are anticipated to represent a "worst-case" scenario, assuming that Chandler Ranch will be developed without the addition of the Charolais Road overcrossing. The future "Year 2025" peak hour traffic demands for 4th Street were derived by adding the project traffic volumes (Parts I, II and III) to the traffic generated by other 2 future projects and the future north-south traffic demands on Spring Street. As documented in the 4th Street Underpass PSR, future improvements to 4th Street, Pine Street, the UPRR underpass, and Riverside Avenue will "divert approximately 1,000 vehicles per day from Spring Street." Using this assumption, the appropriate adjustments to the traffic using the Spring Street and 4th Street intersection were applied. The total Year 2025 peak hour traffic demands for 4th Street at Spring Street, the project driveway and Pine Street are illustrated on Figure 5.

To determine the level of peak hour traffic operations associated with the General Plan (Year 2025) scenario, the LOS values were calculated using the traffic volumes illustrated on Figure 5. Based on a review of the project site plan (refer to Figure3), the westbound approach on 4th Street at Spring Street will be striped for a left-turn only lane and a shared through-right turn lane. The eastbound approach will also need to be striped for a left-turn only lane and a shared through-right turn lane. The LOS calculations were determined assuming that a traffic signal will be installed at the 4th Street and Spring Street intersection. A review of the Year 2025 traffic volumes at the project driveway and Pine Street intersections, and the "peak hour" traffic signal warrant criteria contained in the MUTCD (including 2003 California Supplement) indicated that future turning movement demands will be below the level required for traffic signal control. Therefore, the LOS values were calculated assuming that both of these

intersections will be stop-sign controlled. The results of the LOS analysis are presented in Table 6, with copies of the LOS worksheets included with the attachment material. A copy of the MUTCD "peak hour" traffic signal warrant criteria is also included with the attachment material.

Table 6 - Year 2025 Level of Service (LOS) Analysis

Study Intersection	Average Delay - LOS Value	
	AM Peak Hour	PM Peak Hour
4th Street and Spring Street:	**23.4 - C**	**27.4 - C**
4th Street and Project Driveway:	**2.2 - A**	**4.0 - A**
Eastbound -	0.6 - A	1.1 - A
Westbound -	1.3 - A	1.3 - A
Northbound -	10.9 - B	12.6 - B
Southbound -	9.6 - A	10.4 - B
4th Street and Pine Street:	**6.2 - A**	**5.9 - A**
Eastbound -	3.4 - A	5.5 - A
Westbound -	0.0 - A	0.0 - A
Southbound -	14.2 - B	13.2 - B

The data in Table 6 indicates that the Year 2025 traffic operations will be within acceptable limits (LOS C or better) at the 3 intersections during both peak hour periods. It should be mentioned that the northbound approach on Spring Street at 4th Street could be striped for a left-turn only lane, one through lane and a right-turn only lane within the existing roadway width. This improvement could further reduce vehicle delays at the 4th Street and Spring Street intersection (AM=13.8 seconds/vehicle LOS B and PM=23.0 seconds/vehicle LOS C). As discussed with City staff, another option for improving future levels of service at the 4th Street and Spring Street intersection could include closing the west leg (no access to and from the west). The traffic volumes on this leg are relatively minor during the peak hour time periods and it may become essential to minimize the amount of signal "green" time required for the 4th Street approaches (maximize "green" time on Spring Street). Based on this option, the Year 2025 peak hour traffic demands were adjusted to reflect closing the west leg of the 4th Street and Spring Street intersection (refer to Figure 5). This option could also further reduce vehicle delays during the critical peak hour periods (AM=12.6 seconds/vehicle LOS B and PM=19.9 seconds/vehicle LOS B). Though the Year 2025 peak hour turning movement demands do not satisfy the warrant criteria for exclusive north-south left-turn phasing on Spring Street, the addition of left-turn phasing may be required to safely accommodate the southbound left-turn movement and provide an efficient signal timing progression along Spring Street.

One of the primary objectives of the traffic study was to determine the project's fair share participation in the costs of installing a traffic signal at the 4th Street and Spring Street intersection. Therefore, the amount of peak hour traffic associated with each project part was divided by the total amount of Year 2025 traffic. These calculations were performed for both street system scenarios, with and without the west leg of the 4th Street. It should be mentioned that data contained in the Chandler Ranch Area Specific Plan indicates that the addition of the Charolais Road overcrossing could reduce daily traffic demands on Spring Street by about 22%.

Since this future street system improvement could affect the overall percentage of project traffic at the 4th Street and Spring Street intersection, the project's fair share percentages were also calculated assuming this improvement in place. The project's fair share percentages at the 4th Street and Spring Street intersection are presented in Table 7, with a copy of the calculations included with the attachment material.

Table 7 - Project's Fair Share Percent at 4th Street and Spring Street

Street System Scenario	Project Component		
	PART I	PART II	PART III
Without Charolais Road Overcrossing:			
With West Leg of 4th Street	1.24%	1.02%	0.92%
Without West Leg of 4th Street	1.18%	1.04%	0.93%
With Charolais Road Overcrossing:			
With West Leg of 4th Street	1.52%	1.26%	1.13%
Without West Leg of 4th Street	1.46%	1.28%	1.15%

The data in Table 7 indicates that Part I will comprise between 1.18% and 1.52% of the total Year 2025 traffic demands at the 4th Street and Spring Street intersection. Part II will comprise about 1.02%-1.28% and Part III will comprise about 0.92%-1.15%.

As discussed in the introduction, the "conditions of approval" also required that the traffic study determine the left-turn pocket lengths on 4th Street at Spring Street and the project driveway. A review of the project site plan (refer to Figure 3) indicates that there will be approximately 270' between Spring Street and the 4th Street project driveway. Guidelines for designing left-turn lanes are contained in the Highway Design Manual (HDM) published by the State of California Department of Transportation (Caltrans). Typically, sufficient room for vehicle storage and deceleration are required for left-turn lanes on the State Highway system. Due to the limited space between Spring Street and the project driveway, and the fact that vehicles will be traveling on 4th Street at speeds less than 25-30 miles per hour (mph) there is little need to provide for vehicle deceleration. Vehicle storage for "unsignalized" and "signalized" intersections are calculated differently. At "unsignalized" intersections, "storage length may be based on the number of turning vehicles likely to arrive in an average 2-minute during the peak hour." Storage should be provided for a minimum of 2 vehicles at 25' per vehicle (50'). At "signalized" intersections, "the storage length may be based on one and one-half to two times the average number of vehicles that would store per signal cycle depending on cycle length, signal phasing, and arrival and departure rates." Similar to that for "unsignalized" intersections, storage should be provided for a minimum of 2 vehicles (50'). A copy of the Caltrans HDM material regarding left-turn channelization is included with the attachment material.

Based on a review of the Year 2025 traffic demands on Figure 5, it is apparent that the PM peak hour will be the critical time period for left-turn movements at Spring Street (westbound-144 vph) and the project driveway (eastbound-34 vph). If it is assumed that the signal cycle length at the Spring Street intersection will not exceed 90 seconds (40 signal cycles per hour), left-turn storage should be provided for a minimum of 6 vehicles (5.4 vehicles = 144 vph / 40 cycles per

hour x 1.5) or 150' (150' = 6 vehicles at 25' per vehicle). Based on the left-turn channelization guidelines for "unsignalized" control, left-turn storage should be provided at the project driveway for a minimum of 2 vehicles (1.1 vehicles = 34 vph / 30) or 50' (50' = 2 vehicles at 25' per vehicle). If a 150' left-turn lane is provided on the westbound approach at Spring Street and a 50' left-turn lane is provided on the eastbound approach at the project driveway, 70' will be remaining for the transition taper (70' = 270'-150'-50'). The minimum length for the transition taper as defined by Caltrans is 60'. Therefore, there will be sufficient room for vehicle storage in the westbound left-turn lane at Spring Street and the eastbound left-turn lane at the project driveway. A 50' left-turn lane should also be provided on the westbound approach on 4th Street and the project driveway intersection. A 68' right-of-way on 4th Street will accommodate a 14' center lane (back-to-back left-turn pockets), a 12' eastbound lane, a 12' westbound lane, 5' bike lanes (both sides) and 10' sidewalks (both sides).

The information contained in this traffic study addresses the issues requested by the "conditions of approval" for the project. If you have any questions regarding the contents of the traffic study or need additional information, please contact me at your earliest possible opportunity.

Pinnacle Traffic Engineering

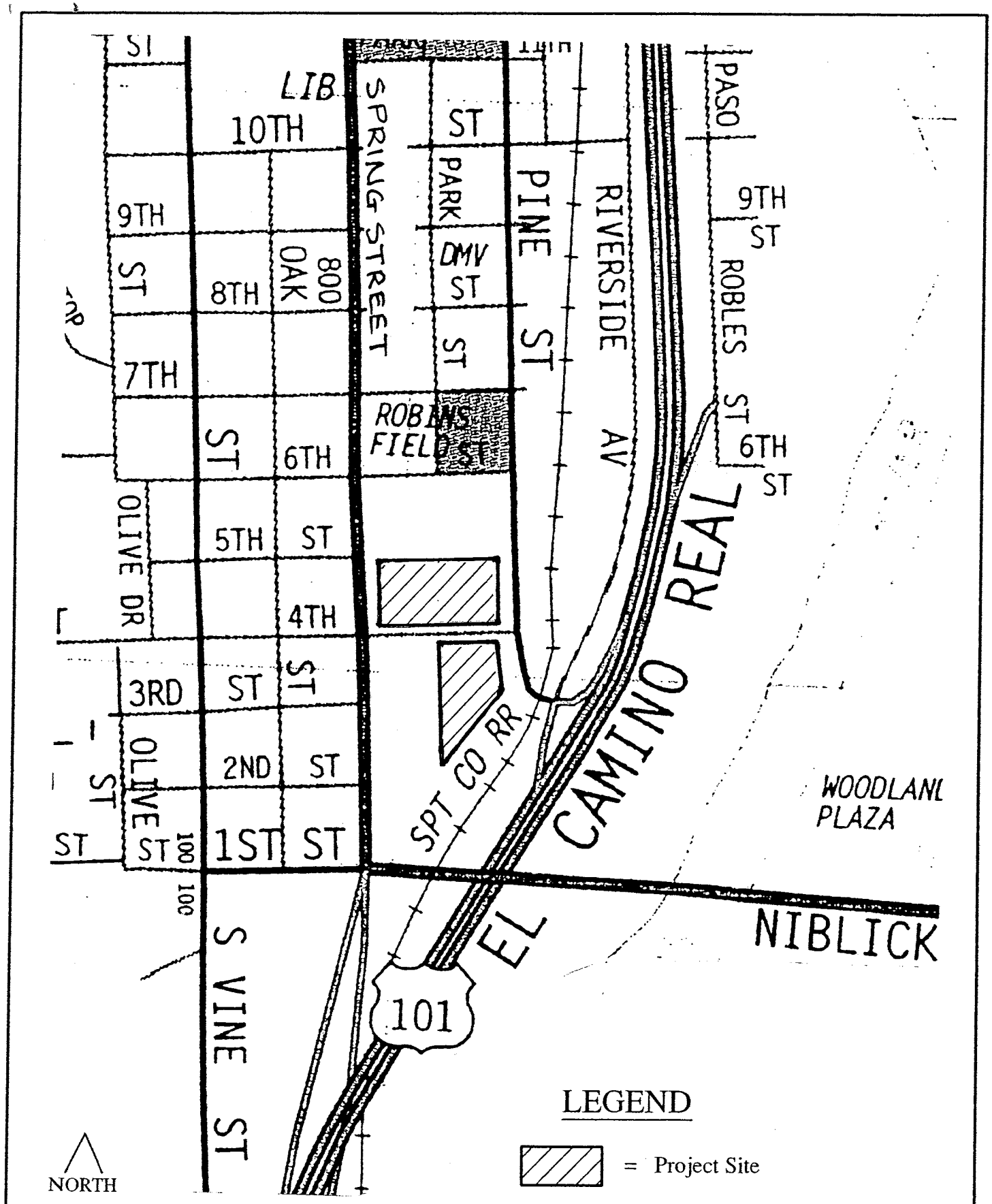
Larry D. Hail, P.E.
President

ldh:msword

Attachment Material:

Figure 1 - Project Location Map
Figure 2 - Existing Traffic Volumes
Figure 3 - Project Site Plan
Figure 4A - Project Traffic Volumes (Part I)
Figure 4B - Project Traffic Volumes (Parts I, II and III)
Figure 5 - General Plan (Year 2025) Traffic Volumes

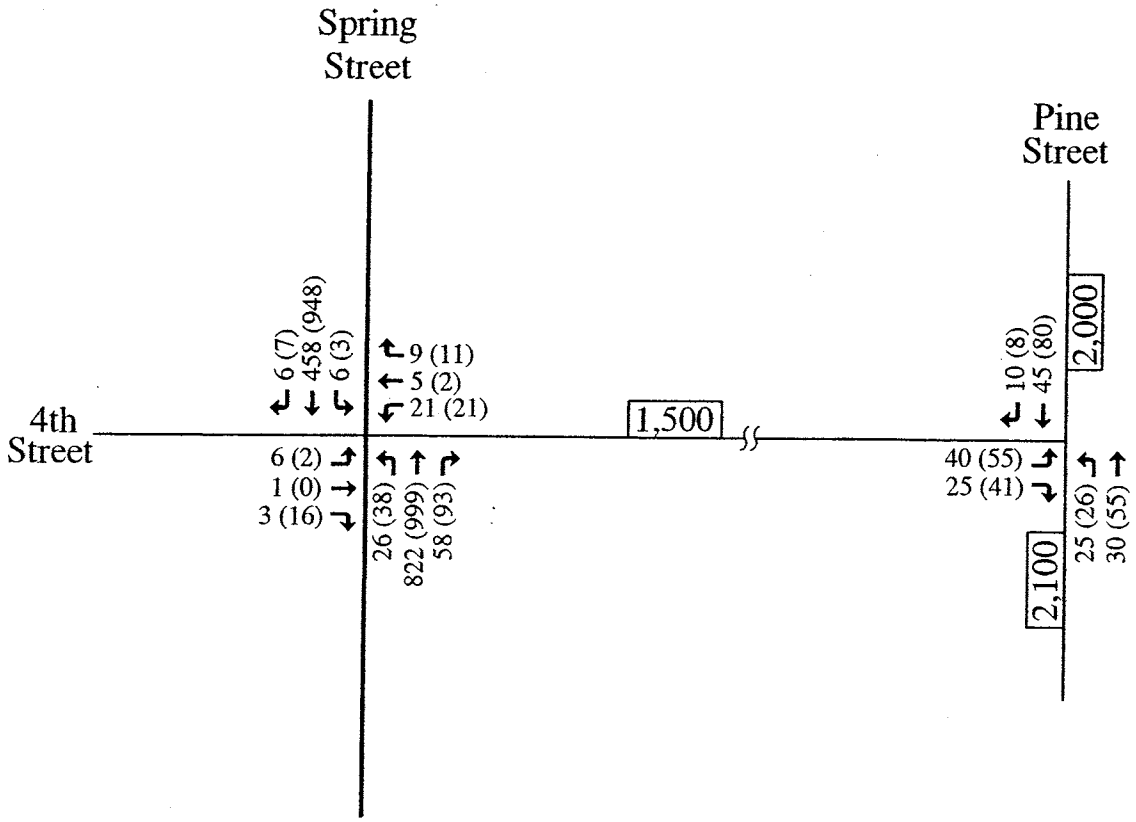
New Traffic Count Data at 4th Street and Spring Street
Description of "Level of Service" (LOS) Values and Ranges of Vehicle Delay
"Level of Service" (LOS) Worksheets
Manual on Uniform Traffic Control Devices (MUTCD) "Peak Hour" Signal Warrant Criteria
Project's Fair Share Percentage Calculations (4th Street and Spring Street)
Caltrans Highway Design Manual (HDM) Left-Turn Channelization Guidelines



PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 1
PROJECT LOCATION MAP



LEGEND

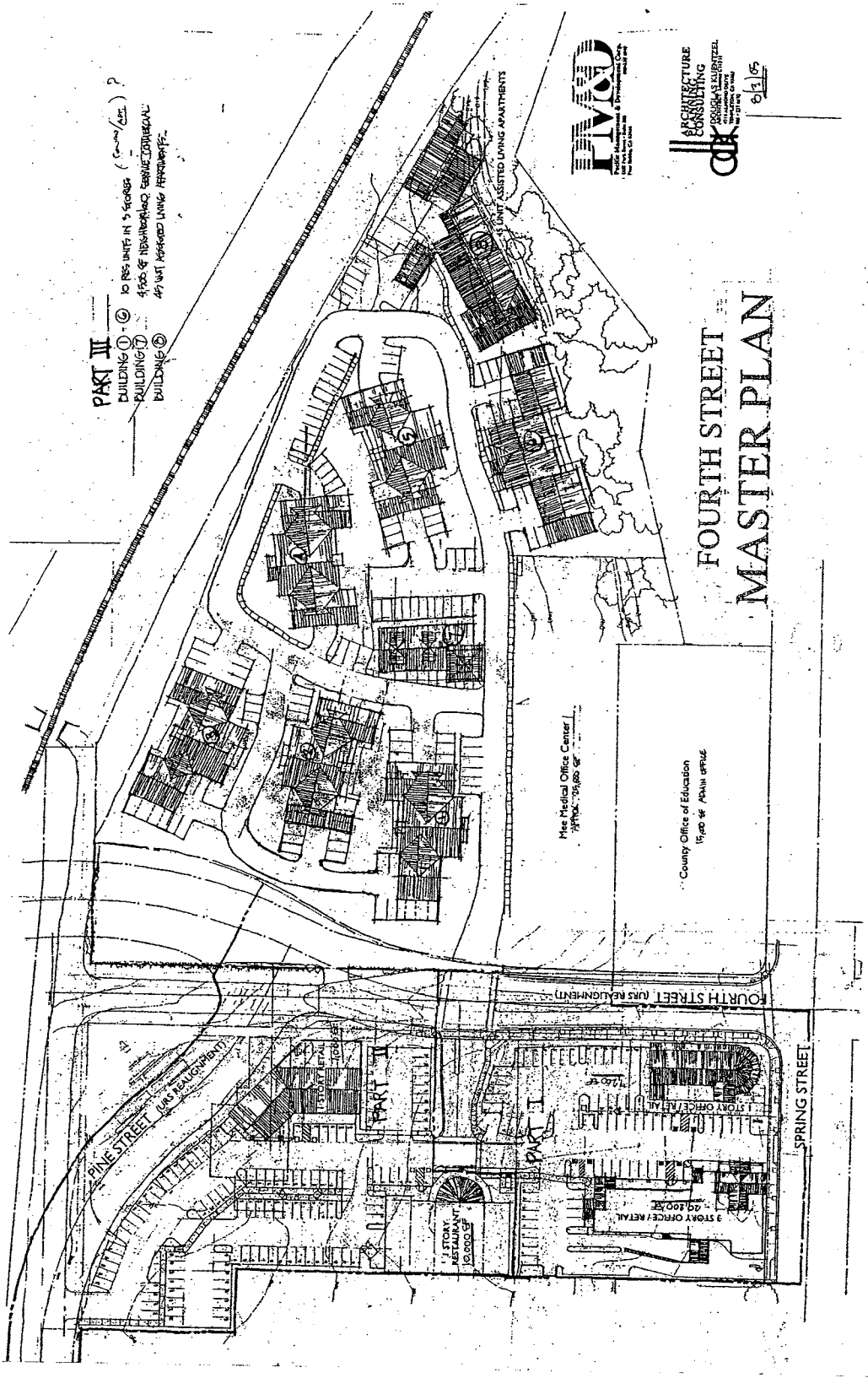
← 00 (00) = Existing AM (PM) Peak Hour Traffic Volume

NORTH

PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 2
EXISTING
TRAFFIC VOLUMES

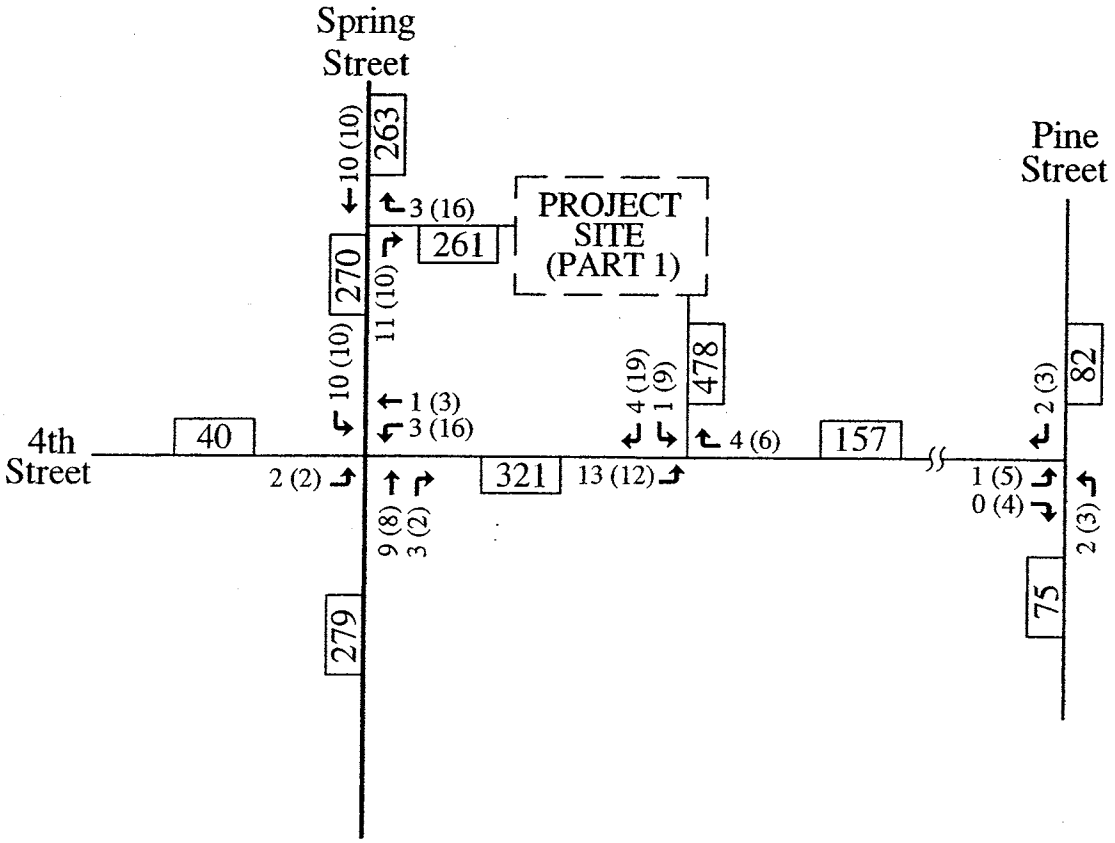


NORTH

PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 3
PROJECT SITE PLAN



LEGEND

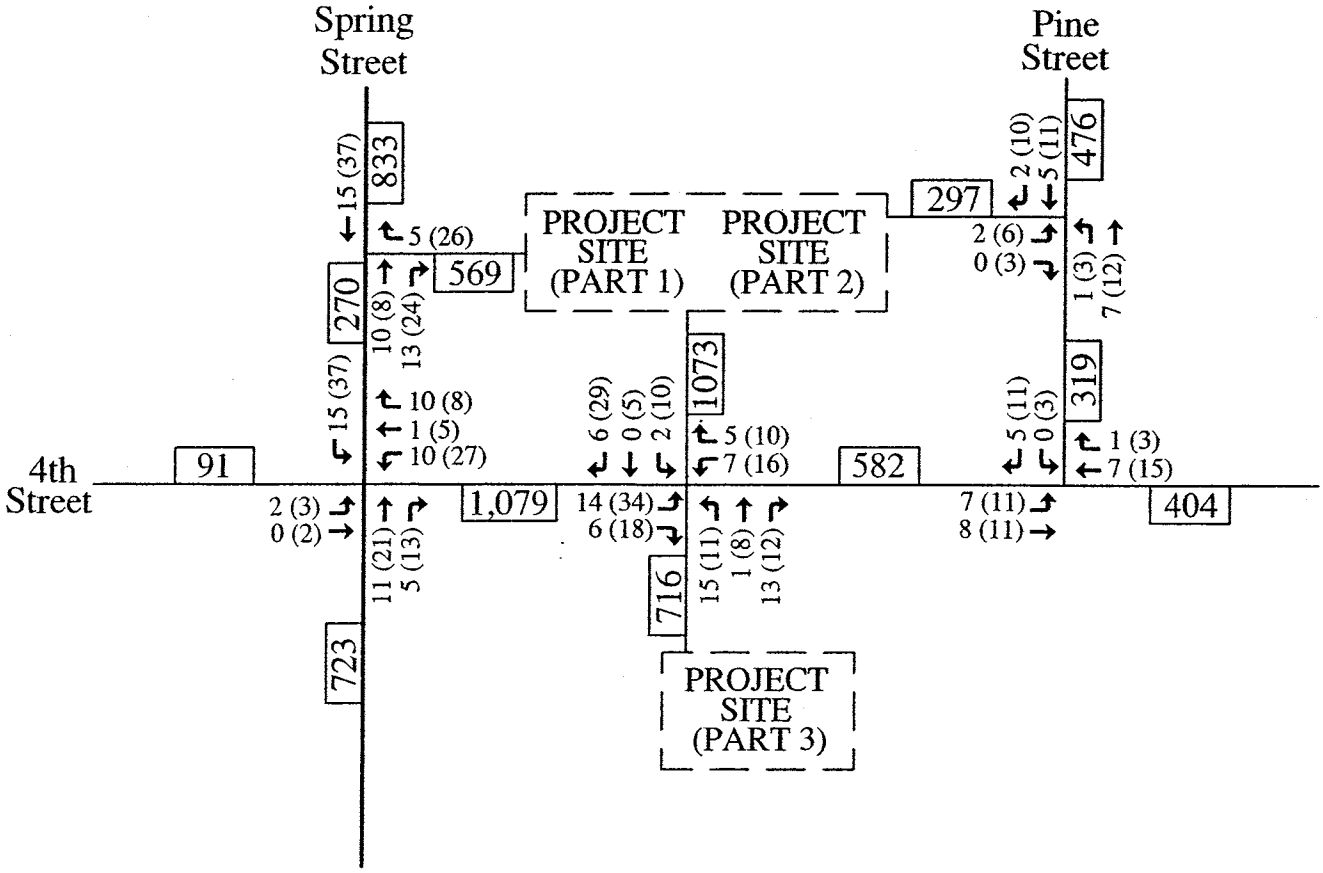
← 00 (00) = AM (PM) Peak Hour Traffic Volume

[000] = Average Daily Traffic (ADT)

PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 4A
PROJECT (PART 1)
TRAFFIC VOLUMES



LEGEND

← 00 (00) = AM (PM) Peak Hour Traffic Volume

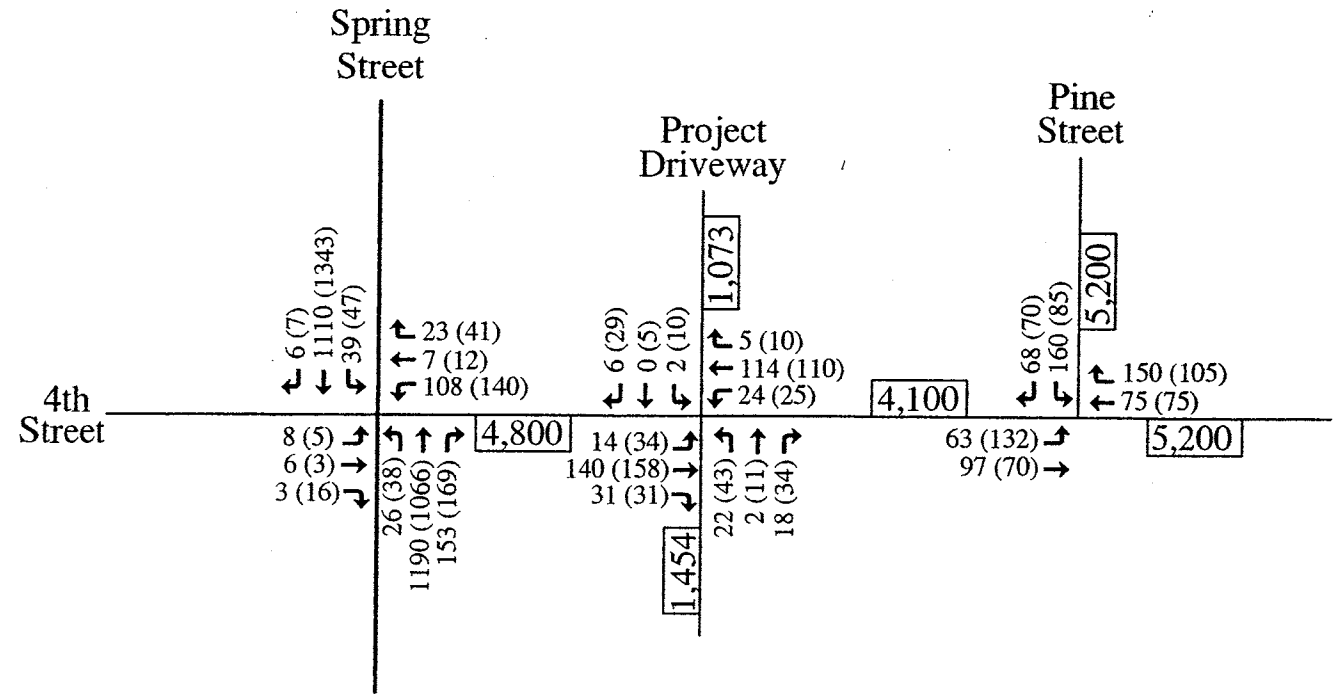
000 = Average Daily Traffic (ADT)

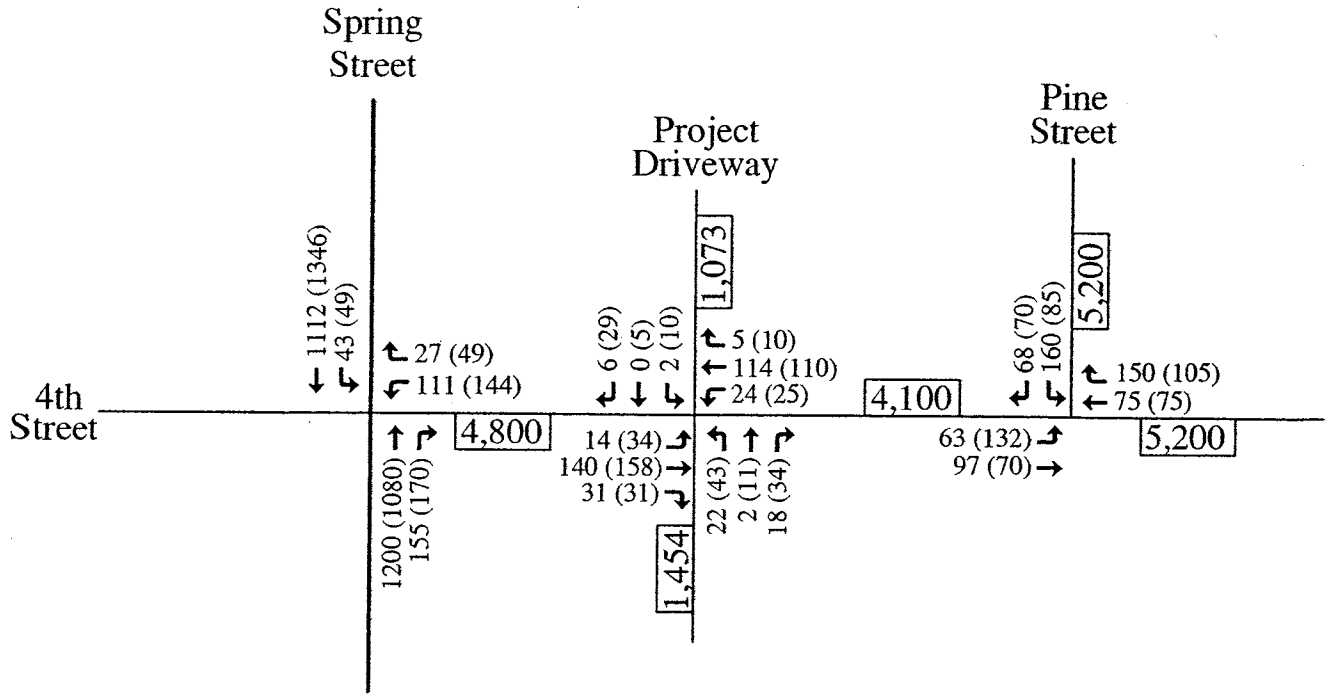
NORTH

PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 4B
PROJECT (ALL PARTS)
TRAFFIC VOLUMES





LEGEND

← 00 (00) = Project AM (PM) Peak Hour Traffic

000 = Project Daily Traffic (ADT)

NORTH

PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 5
GENERAL PLAN (2025)
TRAFFIC VOLUMES

PINNACLE TRAFFIC ENGINEERING

(4th Street Master Plan - Traffic Impact Report)

Intersection: Spring Street and 4th Street

Weather: Clear & Dry **Date:** 10/11/05

Count Conducted By: Sean McEachin

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement												15-Min. Totals	Hourly Totals
	Southbound			Eastbound			Northbound			Westbound				
	1	2	3	4	5	6	7	8	9	10	11	12		
Direction	LT.	THRU	RT.	LT.	THRU	RT.	LT.	THRU	RT.	LT.	THRU	RT.		
7:00 AM - 7:15 AM	0	60	0	1	0	2	4	90	5	0	0	0	162	
7:15 AM - 7:30 AM	0	78	3	0	0	0	0	104	3	9	1	0	198	
7:30 AM - 7:45 AM	0	121	1	1	1	4	1	123	9	6	0	0	267	
7:45 AM - 8:00 AM	1	106	2	0	0	3	5	221	14	9	3	2	366	993
8:00 AM - 8:15 AM	1	85	3	4	0	0	12	257	20	2	0	2	386	1217
8:15 AM - 8:30 AM	1	129	0	2	1	0	4	181	17	7	1	2	345	1364
8:30 AM - 8:45 AM	3	138	1	0	0	0	5	163	7	3	1	3	324	1421
8:45 AM - 9:00 AM	1	100	1	1	0	3	4	193	9	3	1	6	322	1377
2 Hour Totals :	7	817	11	9	2	12	35	1332	84	39	7	15		

Peak Period													
Direction	SBLT	SBTH	SBRT	EBLT	EBTH	EBRT	NBLT	NBTH	NBRT	WBLT	WBTH	WBRT	Total
7:45-8:45 AM	6	458	6	6	1	3	26	822	58	21	5	9	1421

$$PHF = \frac{1421}{4 * 386} = 0.92$$

PINNACLE TRAFFIC ENGINEERING

(4th Street Master Plan - Traffic Impact Report)

Intersection: Spring Street and 4th Street

Weather: Clear & Dry **Date:** 10/11/05

Count Conducted By: Sean McEachin

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement												15-Min. Totals	Hourly Totals
	Southbound			Eastbound			Northbound			Westbound				
	1	2	3	4	5	6	7	8	9	10	11	12		
Direction	LT.	THRU	RT.	LT.	THRU	RT.	LT.	THRU	RT.	LT.	THRU	RT.		
4:00 PM - 4:15 PM	2	313	2	1	0	1	10	310	23	10	1	1	674	
4:15 PM - 4:30 PM	1	212	0	0	0	6	12	231	27	2	1	3	495	
4:30 PM - 4:45 PM	0	217	2	0	0	6	8	225	19	3	0	0	480	
4:45 PM - 5:00 PM	0	206	3	1	0	3	8	233	24	6	0	7	491	2140
5:00 PM - 5:15 PM	2	247	1	2	0	8	4	208	9	7	1	1	490	1956
5:15 PM - 5:30 PM	0	263	2	1	0	6	9	162	9	12	0	1	465	1926
5:30 PM - 5:45 PM	0	213	3	2	0	7	6	210	7	11	1	1	461	1907
5:45 PM - 6:00 PM	0	193	2	1	0	6	8	218	5	8	0	0	441	1857
2 Hour Totals :	5	1864	15	8	0	43	65	1797	123	59	4	14		

Peak Period													
Direction	SBLT	SBTH	SBRT	EBLT	EBTH	EBRT	NBLT	NBTH	NBRT	WBLT	WBTH	WBRT	Total
4:00 - 5:00 PM	3	948	7	2	0	16	38	999	93	21	2	11	2140

$\frac{2140}{1956} = 1.09$

$PHF = \frac{2140}{4 * 674} = 0.79$

$\frac{4\text{-}5 \rightarrow 2140}{5\text{-}6 \rightarrow 1857} \rightarrow 1.15$

4th-Spring C01.xls

The ability of a highway system to carry traffic is expressed in terms of its "service Level" at critical locations, usually intersections. Service levels are defined as follows:

"A" Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.

"B" Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.

"C" Conditions of stable flow, delays are low to moderate, full use of peak direction signal phase(s) is experienced.

"D" Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.

"E" Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.

"F" Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

PINNACLE TRAFFIC ENGINEERING

LEVELS OF SERVICE DESCRIPTION

930 San Benito Street - Hollister, CA 95023
(831) 638-9260 / FAX (831) 638-9268

TWO-WAY STOP-SIGNED CONTROLLED INTERSECTIONS

EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

SIGNALIZED INTERSECTIONS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	1	3	21	5	9	26	822	58	6	458	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	1	3	23	5	10	28	893	63	7	498	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1477	1527	501	1496	1499	925	504			957		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1477	1527	501	1496	1499	925	504			957		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	99	99	76	95	97	97			99		
cM capacity (veh/h)	95	113	570	97	118	326	1060			719		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	11	38	28	957	7	504
Volume Left	7	23	28	0	7	0
Volume Right	3	10	0	63	0	7
cSH	129	122	1060	1700	719	1700
Volume to Capacity	0.08	0.31	0.03	0.56	0.01	0.30
Queue Length 95th (ft)	7	30	2	0	1	0
Control Delay (s)	35.4	47.3	8.5	0.0	10.1	0.0
Lane LOS	E	E	A		B	
Approach Delay (s)	35.4	47.3	0.2		0.1	
Approach LOS	E	E				

Intersection Summary			
Average Delay	1.6 (A)		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↖	↑		↖	↑	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	16	21	2	11	38	999	93	3	948	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	20	27	3	14	48	1265	118	4	1200	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2588	2691	1204	2647	2636	1323	1209			1382		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2588	2691	1204	2647	2636	1323	1209			1382		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	81	100	91	0	88	93	92			99		
cM capacity (veh/h)	13	20	224	13	21	191	577			496		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	23	43	48	1382	4	1209
Volume Left	3	27	48	0	4	0
Volume Right	20	14	0	118	0	9
cSH	81	19	577	1700	496	1700
Volume to Capacity	0.28	2.25	0.08	0.81	0.01	0.71
Queue Length 95th (ft)	26	145	7	0	1	0
Control Delay (s)	66.1	995.1	11.8	0.0	12.3	0.0
Lane LOS	F	F	B		B	
Approach Delay (s)	66.1	995.1	0.4		0.0	
Approach LOS	F	F				

Intersection Summary			
Average Delay	16.6	(C)	
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	40	25	25	30	45	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	27	27	33	49	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	54	60			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	54	60			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	97	98			
cM capacity (veh/h)	837	1013	1544			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	71	60	60
Volume Left	43	27	0
Volume Right	27	0	11
cSH	897	1544	1700
Volume to Capacity	0.08	0.02	0.04
Queue Length 95th (ft)	6	1	0
Control Delay (s)	9.4	3.4	0.0
Lane LOS	A	A	
Approach Delay (s)	9.4	3.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.6	(A)	
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	55	41	26	55	80	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	70	52	33	70	101	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	242	106	111			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	242	106	111			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	95	98			
cM capacity (veh/h)	730	948	1478			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	122	103	111
Volume Left	70	33	0
Volume Right	52	0	10
cSH	809	1478	1700
Volume to Capacity	0.15	0.02	0.07
Queue Length 95th (ft)	13	2	0
Control Delay (s)	10.2	2.5	0.0
Lane LOS	B	A	
Approach Delay (s)	10.2	2.5	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	4.5	(A)	
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	1	3	24	6	9	26	831	61	16	458	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	1	3	26	7	10	28	903	66	17	498	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1509	1562	501	1529	1532	936	504			970		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1509	1562	501	1529	1532	936	504			970		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	99	99	71	94	97	97			98		
cM capacity (veh/h)	88	106	570	91	111	321	1060			711		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	42	28	970	17	504
Volume Left	9	26	28	0	17	0
Volume Right	3	10	0	66	0	7
cSH	114	113	1060	1700	711	1700
Volume to Capacity	0.11	0.38	0.03	0.57	0.02	0.30
Queue Length 95th (ft)	9	39	2	0	2	0
Control Delay (s)	40.7	55.1	8.5	0.0	10.2	0.0
Lane LOS	E	F	A		B	
Approach Delay (s)	40.7	55.1	0.2		0.3	
Approach LOS	E	F				

Intersection Summary			
Average Delay	2.1 (A)		
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	0	16	37	5	11	38	1007	95	13	948	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	5	0	20	47	6	14	48	1275	120	16	1200	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2625	2728	1204	2684	2673	1335	1209			1395		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2625	2728	1204	2684	2673	1335	1209			1395		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	50	100	91	0	68	93	92			97		
cM capacity (veh/h)	10	18	224	12	20	188	577			490		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	25	67	48	1395	16	1209
Volume Left	5	47	48	0	16	0
Volume Right	20	14	0	120	0	9
cSH	43	15	577	1700	490	1700
Volume to Capacity	0.59	4.33	0.08	0.82	0.03	0.71
Queue Length 95th (ft)	54	Err	7	0	3	0
Control Delay (s)	173.1	Err	11.8	0.0	12.6	0.0
Lane LOS	F	F	B		B	
Approach Delay (s)	173.1	Err	0.4		0.2	
Approach LOS	F	F				

Intersection Summary			
Average Delay	244.9 (F)		
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.89			0.97		1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1645			1749		1770	1839		1770	1861	
Flt Permitted		0.96			0.78		0.17	1.00		0.09	1.00	
Satd. Flow (perm)		1593			1404		311	1839		163	1861	
Volume (vph)	4	0	16	37	5	11	38	1007	95	13	948	7
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	5	0	20	47	6	14	48	1275	120	16	1200	9
RTOR Reduction (vph)	0	18	0	0	12	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	7	0	0	55	0	48	1393	0	16	1209	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.1			8.1		89.1	89.1		89.1	89.1	
Effective Green, g (s)		8.1			8.1		89.1	89.1		89.1	89.1	
Actuated g/C Ratio		0.08			0.08		0.85	0.85		0.85	0.85	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		123			108		263	1558		138	1576	
v/s Ratio Prot								c0.76			0.65	
v/s Ratio Perm		0.00			c0.04		0.15			0.10		
v/c Ratio		0.05			0.51		0.18	0.89		0.12	0.77	
Uniform Delay, d1		45.0			46.6		1.5	5.1		1.4	3.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			3.7		0.3	7.0		0.4	2.3	
Delay (s)		45.2			50.4		1.8	12.1		1.7	5.8	
Level of Service		D			D		A	B		A	A	
Approach Delay (s)		45.2			50.4			11.7			5.8	
Approach LOS		D			D			B			A	

Intersection Summary

HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	41	25	27	30	45	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	27	29	33	49	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	147	55	62			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	147	55	62			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	97	98			
cM capacity (veh/h)	829	1011	1541			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	72	62	62
Volume Left	45	29	0
Volume Right	27	0	13
cSH	890	1541	1700
Volume to Capacity	0.08	0.02	0.04
Queue Length 95th (ft)	7	1	0
Control Delay (s)	9.4	3.6	0.0
Lane LOS	A	A	
Approach Delay (s)	9.4	3.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.6 (A)		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	60	45	29	55	80	11
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	76	57	37	70	101	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	251	108	115			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	251	108	115			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	94	98			
cM capacity (veh/h)	719	946	1474			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	133	106	115
Volume Left	76	37	0
Volume Right	57	0	14
cSH	801	1474	1700
Volume to Capacity	0.17	0.02	0.07
Queue Length 95th (ft)	15	2	0
Control Delay (s)	10.4	2.7	0.0
Lane LOS	B	A	
Approach Delay (s)	10.4	2.7	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	4.7 (A)		
Intersection Capacity Utilization	23.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1779		1770	1651		1770	1831		1770	1861	
Flt Permitted	0.74	1.00		0.75	1.00		0.13	1.00		0.05	1.00	
Satd. Flow (perm)	1370	1779		1399	1651		251	1831		84	1861	
Volume (vph)	8	6	3	108	7	23	26	1190	153	39	1110	6
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	7	3	117	8	25	28	1293	166	42	1207	7
RTOR Reduction (vph)	0	3	0	0	22	0	0	4	0	0	0	0
Lane Group Flow (vph)	9	7	0	117	11	0	28	1455	0	42	1214	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.3	13.3		13.3	13.3		88.7	88.7		88.7	88.7	
Effective Green, g (s)	13.3	13.3		13.3	13.3		88.7	88.7		88.7	88.7	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.81	0.81		0.81	0.81	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	166	215		169	200		202	1476		68	1501	
v/s Ratio Prot		0.00			0.01			c0.79			0.65	
v/s Ratio Perm	0.01			c0.08			0.11			0.50		
v/c Ratio	0.05	0.03		0.69	0.06		0.14	0.99		0.62	0.81	
Uniform Delay, d1	42.8	42.7		46.4	42.8		2.3	10.1		4.1	5.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		11.6	0.1		1.4	20.3		35.5	4.8	
Delay (s)	42.9	42.7		58.0	42.9		3.8	30.4		39.6	10.7	
Level of Service	D	D		E	D		A	C		D	B	
Approach Delay (s)		42.8			54.7			29.9			11.7	
Approach LOS		D			D			C			B	

Intersection Summary

HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.88		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1625		1770	1646		1770	1824		1770	1861	
Flt Permitted	0.72	1.00		0.74	1.00		0.04	1.00		0.07	1.00	
Satd. Flow (perm)	1340	1625		1386	1646		82	1824		123	1861	
Volume (vph)	5	3	16	140	12	41	38	1066	169	47	1343	7
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	3	17	152	13	45	41	1159	184	51	1460	8
RTOR Reduction (vph)	0	15	0	0	39	0	0	5	0	0	0	0
Lane Group Flow (vph)	5	5	0	152	19	0	41	1338	0	51	1468	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	14.8	14.8		14.8	14.8		90.6	90.6		90.6	90.6	
Effective Green, g (s)	14.8	14.8		14.8	14.8		90.6	90.6		90.6	90.6	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.80	0.80		0.80	0.80	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	175	212		181	215		66	1457		98	1487	
v/s Ratio Prot		0.00			0.01			0.73			c0.79	
v/s Ratio Perm	0.00			c0.11			0.50			0.41		
v/c Ratio	0.03	0.02		0.84	0.09		0.62	0.92		0.52	0.99	
Uniform Delay, d1	43.0	43.0		48.1	43.4		4.6	8.6		3.9	10.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		27.5	0.2		16.8	9.5		4.9	20.1	
Delay (s)	43.1	43.1		75.6	43.5		21.3	18.1		8.8	30.9	
Level of Service	D	D		E	D		C	B		A	C	
Approach Delay (s)		43.1			66.8			18.2			30.2	
Approach LOS		D			E			B			C	

Intersection Summary

HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	14	140	31	24	114	5	22	2	18	2	0	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	152	34	26	124	5	24	2	20	2	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	129			186			382	381	169	382	395	127
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	129			186			382	381	169	382	395	127
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			96	100	98	100	100	99
cM capacity (veh/h)	1456			1389			559	536	875	549	526	924

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	15	186	26	129	46	2	7
Volume Left	15	0	26	0	24	2	0
Volume Right	0	34	0	5	20	0	7
cSH	1456	1700	1389	1700	660	549	924
Volume to Capacity	0.01	0.11	0.02	0.08	0.07	0.00	0.01
Queue Length 95th (ft)	1	0	1	0	6	0	1
Control Delay (s)	7.5	0.0	7.6	0.0	10.9	11.6	8.9
Lane LOS	A		A		B	B	A
Approach Delay (s)	0.6		1.3		10.9	9.6	
Approach LOS					B	A	

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	31.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	34	158	31	25	110	10	43	11	34	10	5	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	37	172	34	27	120	11	47	12	37	11	5	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	130			205			471	447	189	468	459	125
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	130			205			471	447	189	468	459	125
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			90	98	96	98	99	97
cM capacity (veh/h)	1455			1366			465	484	853	458	476	926

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	37	205	27	130	96	16	32
Volume Left	37	0	27	0	47	11	0
Volume Right	0	34	0	11	37	0	32
cSH	1455	1700	1366	1700	568	464	926
Volume to Capacity	0.03	0.12	0.02	0.08	0.17	0.04	0.03
Queue Length 95th (ft)	2	0	2	0	15	3	3
Control Delay (s)	7.5	0.0	7.7	0.0	12.6	13.0	9.0
Lane LOS	A		A		B	B	A
Approach Delay (s)	1.1		1.3		12.6	10.4	
Approach LOS					B	B	

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	35.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	63	97	75	150	160	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	105	82	163	174	74
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	245				405	163
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	245				405	163
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				70	92
cM capacity (veh/h)	1322				570	882

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	174	245	248
Volume Left	68	0	174
Volume Right	0	163	74
cSH	1322	1700	637
Volume to Capacity	0.05	0.14	0.39
Queue Length 95th (ft)	4	0	46
Control Delay (s)	3.4	0.0	14.2
Lane LOS	A		B
Approach Delay (s)	3.4	0.0	14.2
Approach LOS			B

Intersection Summary			
Average Delay	6.2 (A)		
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	132	70	75	105	85	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	143	76	82	114	92	76
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	196				502	139
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196				502	139
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				81	92
cM capacity (veh/h)	1377				474	910

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	220	196	168
Volume Left	143	0	92
Volume Right	0	114	76
cSH	1377	1700	605
Volume to Capacity	0.10	0.12	0.28
Queue Length 95th (ft)	9	0	28
Control Delay (s)	5.5	0.0	13.2
Lane LOS	A		B
Approach Delay (s)	5.5	0.0	13.2
Approach LOS			B

Intersection Summary			
Average Delay	5.9 (A)		
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.89		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1779		1770	1651		1770	1863	1583	1770	1861	
Flt Permitted	0.74	1.00		0.75	1.00		0.13	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	1370	1779		1399	1651		251	1863	1583	184	1861	
Volume (vph)	8	6	3	108	7	23	26	1190	153	39	1110	6
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	7	3	117	8	25	28	1293	166	42	1207	7
RTOR Reduction (vph)	0	3	0	0	22	0	0	0	32	0	0	0
Lane Group Flow (vph)	9	7	0	117	11	0	28	1293	134	42	1214	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	13.3	13.3		13.3	13.3		88.7	88.7	88.7	88.7	88.7	
Effective Green, g (s)	13.3	13.3		13.3	13.3		88.7	88.7	88.7	88.7	88.7	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.81	0.81	0.81	0.81	0.81	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	166	215		169	200		202	1502	1276	148	1501	
v/s Ratio Prot		0.00			0.01			c0.69			0.65	
v/s Ratio Perm	0.01			c0.08			0.11		0.08	0.23		
v/c Ratio	0.05	0.03		0.69	0.06		0.14	0.86	0.10	0.28	0.81	
Uniform Delay, d1	42.8	42.7		46.4	42.8		2.3	6.7	2.3	2.7	5.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.1		11.6	0.1		1.4	6.7	0.2	4.7	4.8	
Delay (s)	42.9	42.7		58.0	42.9		3.8	13.4	2.4	7.4	10.7	
Level of Service	D	D		E	D		A	B	A	A	B	
Approach Delay (s)		42.8			54.7			12.0			10.6	
Approach LOS		D			D			B			B	

Intersection Summary

HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1625		1770	1646		1770	1863	1583	1770	1861	
Flt Permitted	0.72	1.00		0.74	1.00		0.04	1.00	1.00	0.15	1.00	
Satd. Flow (perm)	1340	1625		1386	1646		82	1863	1583	284	1861	
Volume (vph)	5	3	16	140	12	41	38	1066	169	47	1343	7
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	3	17	152	13	45	41	1159	184	51	1460	8
RTOR Reduction (vph)	0	15	0	0	39	0	0	0	37	0	0	0
Lane Group Flow (vph)	5	5	0	152	19	0	41	1159	147	51	1468	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	14.8	14.8		14.8	14.8		90.6	90.6	90.6	90.6	90.6	
Effective Green, g (s)	14.8	14.8		14.8	14.8		90.6	90.6	90.6	90.6	90.6	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.80	0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	175	212		181	215		66	1488	1265	227	1487	
v/s Ratio Prot		0.00			0.01			0.62			c0.79	
v/s Ratio Perm	0.00			c0.11			0.50		0.09	0.18		
v/c Ratio	0.03	0.02		0.84	0.09		0.62	0.78	0.12	0.22	0.99	
Uniform Delay, d1	43.0	43.0		48.1	43.4		4.6	6.1	2.5	2.8	10.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.0		27.5	0.2		16.8	2.6	0.0	0.5	20.1	
Delay (s)	43.1	43.1		75.6	43.5		21.3	8.7	2.6	3.3	30.9	
Level of Service	D	D		E	D		C	A	A	A	C	
Approach Delay (s)		43.1			66.8			8.3			30.0	
Approach LOS		D			E			A			C	

Intersection Summary

HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.09	1.00
Satd. Flow (perm)	1770	1583	1863	1583	171	1863
Volume (vph)	111	27	1200	155	43	1112
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	121	29	1304	168	47	1209
RTOR Reduction (vph)	0	26	0	33	0	0
Lane Group Flow (vph)	121	3	1304	135	47	1209
Turn Type		custom		Perm	Perm	
Protected Phases			2			6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	9.8	9.8	72.2	72.2	72.2	72.2
Effective Green, g (s)	9.8	9.8	72.2	72.2	72.2	72.2
Actuated g/C Ratio	0.11	0.11	0.80	0.80	0.80	0.80
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	193	172	1495	1270	137	1495
v/s Ratio Prot			c0.70			0.65
v/s Ratio Perm	c0.07	0.00		0.09	0.27	
v/c Ratio	0.63	0.02	0.87	0.11	0.34	0.81
Uniform Delay, d1	38.4	35.8	5.9	1.9	2.4	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.0	7.3	0.2	6.7	4.8
Delay (s)	44.6	35.8	13.2	2.1	9.1	9.8
Level of Service	D	D	B	A	A	A
Approach Delay (s)	42.9		11.9			9.8
Approach LOS	D		B			A

Intersection Summary

HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

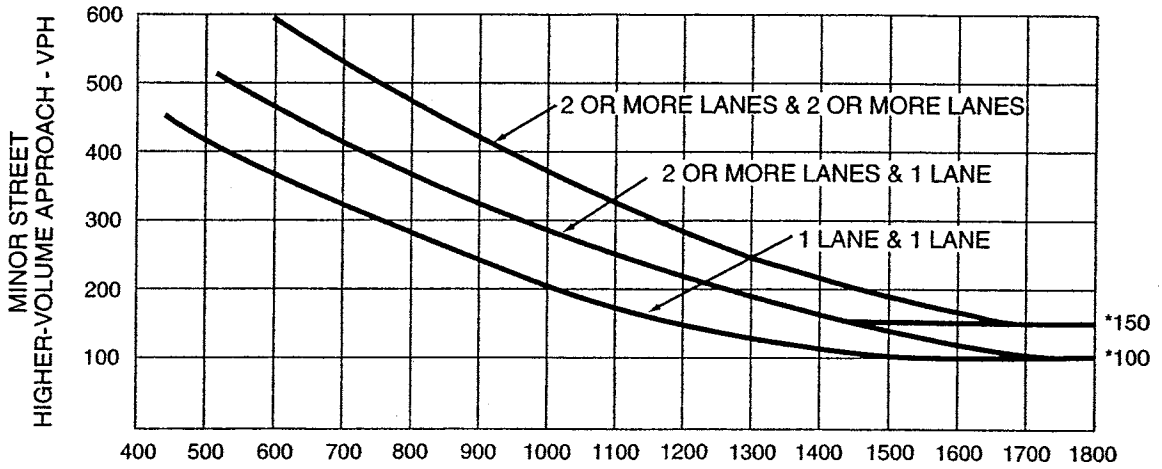
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.15	1.00
Satd. Flow (perm)	1770	1583	1863	1583	284	1863
Volume (vph)	144	49	1080	170	49	1346
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	53	1174	185	53	1463
RTOR Reduction (vph)	0	47	0	36	0	0
Lane Group Flow (vph)	157	6	1174	149	53	1463
Turn Type		custom		Perm	Perm	
Protected Phases			2			6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	13.8	13.8	91.3	91.3	91.3	91.3
Effective Green, g (s)	13.8	13.8	91.3	91.3	91.3	91.3
Actuated g/C Ratio	0.12	0.12	0.81	0.81	0.81	0.81
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	216	193	1504	1278	229	1504
v/s Ratio Prot			0.63			c0.79
v/s Ratio Perm	c0.09	0.00		0.09	0.19	
v/c Ratio	0.73	0.03	0.78	0.12	0.23	0.97
Uniform Delay, d1	47.8	43.8	5.7	2.3	2.6	9.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.5	0.1	2.7	0.0	0.5	17.0
Delay (s)	59.4	43.8	8.4	2.4	3.1	26.8
Level of Service	E	D	A	A	A	C
Approach Delay (s)	55.4		7.6			26.0
Approach LOS	E		A			C

Intersection Summary

HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	113.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

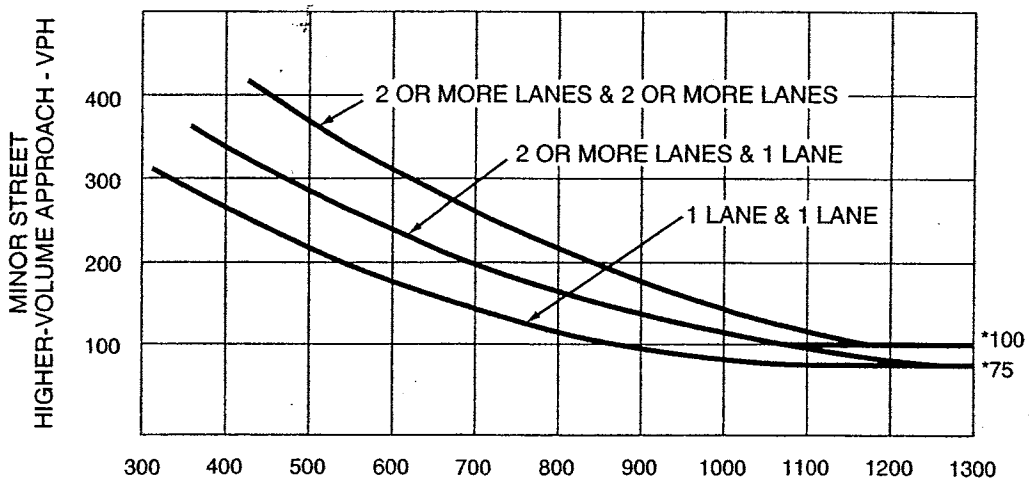
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-101. Traffic Signal Warrants Worksheet (Sheet 2 of 4)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for four hours.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Highest Approaches - Minor Street						

*All plotted points fall above the curves in MUTCD Figure 4C-1 or 4C-2. Yes ☐ No ☐

WARRANT 3 - Peak Hour **PART A or PART B SATISFIED YES ☐ NO ☐**

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceedds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND Yes ☐ No ☐
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaoches. Yes ☐ No ☐

PART B **SATISFIED YES ☐ NO ☐**

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Highest Approaches - Minor Street						

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume vehicle minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above the applicable curves in MUTCD Figure 4C-3 or 4C-4.

PINNACLE TRAFFIC ENGINEERING

930 San Benito Street
Hollister, California 95023
(831) 638-9260 / FAX (831) 638-9268

PROJECT: 4th Street Master Plan Project (Paso Robles, California)

Year 2025 Projections and % Contribution Estimates (4th Street / Spring Street)

- Without Charolais Road Overcrossing -

Move.	Total 2025		Part 1 Trips		Part 2 Trips		Part 3 Trips	
	AM	PM	AM	PM	AM	PM	AM	PM
NBLT	26	38						
NBTH	1,190	1,066	9	8	2	13		
NBRT	153	169	3	2	0	5	2	7
SBLT	39	47	10	10	2	18	4	11
SBTH	1,110	1,343						
SBRT	6	7						
EBLT	8	5	2	2	0	1		
EBTH	6	3			0	2	0	0
EBRT	3	16						
WBLT	108	140	3	16	2	10	5	4
WBTH	7	12	1	3	0	2	0	0
WBRT	23	41					10	8
Subtotal:	**2,679**	**2,887**	**28**	**41**	**6**	**51**	**21**	**30**
Totals:		**5,566**		**69**		**57**		**51**
% Total:				**1.24%**		**1.02%**		**0.92%**

Year 2025 Projections and % Contribution Estimates (4th Street / Spring Street)

(West Leg of 4th Street / Spring Street Intersection Closed)

Move.	Total 2025		Part 1 Trips		Part 2 Trips		Part 3 Trips	
	AM	PM	AM	PM	AM	PM	AM	PM
NBTH	1,200	1,080	9	8	2	13		
NBRT	155	170	3	2	0	5	2	7
SBLT	43	49	10	10	2	21	4	11
SBTH	1,112	1,346						
WBLT	111	144	3	16	2	10	5	4
WBRT	27	49	1	3	0	2	10	8
Subtotal:	**2,648**	**2,838**	**26**	**39**	**6**	**51**	**21**	**30**
Totals:		**5,486**		**65**		**57**		**51**
% Total:				**1.18%**		**1.04%**		**0.93%**

PINNACLE TRAFFIC ENGINEERING

930 San Benito Street
Hollister, California 95023
(831) 638-9260 / FAX (831) 638-9268

PROJECT: 4th Street Master Plan Project (Paso Robles, California)

Year 2025 Projections and % Contribution Estimates (4th Street / Spring Street)

- With Charolais Road Overcrossing -

Move.	Total 2025		Part 1 Trips		Part 2 Trips		Part 3 Trips	
	AM	PM	AM	PM	AM	PM	AM	PM
NBLT	26	38						
NBTH	928	831	9	8	2	13		
NBRT	153	169	3	2	0	5	2	7
SBLT	39	47	10	10	2	18	4	11
SBTH	866	1,048						
SBRT	6	7						
EBLT	8	5	2	2	0	1		
EBTH	6	3			0	2	0	0
EBRT	3	16						
WBLT	108	140	3	16	2	10	5	4
WBTH	7	12	1	3	0	2	0	0
WBRT	23	41					10	8
Subtotal:	**2,173**	**2,357**	**28**	**41**	**6**	**51**	**21**	**30**
Totals:		**4,530**		**69**		**57**		**51**
% Total:				**1.52%**		**1.26%**		**1.13%**

Year 2025 Projections and % Contribution Estimates (4th Street / Spring Street)

(West Leg of 4th Street / Spring Street Intersection Closed)

Move.	Total 2025		Part 1 Trips		Part 2 Trips		Part 3 Trips	
	AM	PM	AM	PM	AM	PM	AM	PM
NBTH	936	842	9	8	2	13		
NBRT	155	170	3	2	0	5	2	7
SBLT	43	49	10	10	2	21	4	11
SBTH	868	1,050						
WBLT	111	144	3	16	2	10	5	4
WBRT	27	49	1	3	0	2	10	8
Subtotal:	**2,140**	**2,304**	**26**	**39**	**6**	**51**	**21**	**30**
Totals:		**4,444**		**65**		**57**		**51**
% Total:				**1.46%**		**1.28%**		**1.15%**

Table 405.1A
Corner Sight Distance
(7-1/2 Second Criteria)

Design Speed (km/h)	Corner Sight Distance (m)
40 (25 MPH)	90 (295')
50 (31 MPH)	110 (360')
60 (37 MPH)	130 (427')
70 (44 MPH)	150 (492')
80 (50 MPH)	170 (558')
90 (56 MPH)	190 (623')
100 (63 MPH)	210 (689')
110 (68 MPH)	230 (755')

Table 405.1B
Application of Sight Distance Requirements

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X(1)	
Public Streets and Roads	X	X	
Signalized Intersections	X	(2)	
State Route Intersections & Route Direction Changes, with or without Signals	X	X	X

(1) Using stopping sight distance between an eye height of 1070 mm and an object height of 1300 mm. See Index 405.1(2)(a) for setback requirements.

(2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).

405.2 Left-turn Channelization

(1) General. The purpose of a left-turn lane is to expedite the movement of through traffic, control the movement of turning traffic, increase the capacity of the intersection, and improve safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes. See "Guidelines for Reconstruction of Intersections," August 1985, published by the California Division of Transportation Operations.

(2) Design Elements.

(a) Lane Width – **The lane width for both single and double left-turn lanes on State highways shall be 3.6 m.** Under certain circumstances (listed below), left-turn lane widths of 3.3 m or as narrow as 3.0 m may be used on RRR or other projects on existing State highways and on roads or streets under other jurisdictions when supported by an approved design exception pursuant to Index 82.2. For curbed medians refer to Index 209.3.

- On high speed rural highways or moderate speed suburban highways where width is restricted, the minimum width of single or dual left-turn lanes may be reduced to 3.3 m.
- In severely constrained situations on low to moderate speed urban highways where large trucks are not expected, the minimum width of single left-turn lanes may be reduced to 3.0 m. When double left-turn lanes are warranted under these same circumstances the width of each lane shall be no less than 3.3 m. This added width is needed to assure adequate clearance between turning vehicles.

(b) Approach Taper – On a conventional highway without a median, an approach taper provides space for a left-turn lane by moving traffic laterally to the right. The approach taper is unnecessary where a median is available for the full width of the left-turn lane. Length of the approach taper is given by the formula on Figures 405.2A, B and C.

Figure 405.2A shows a standard left-turn channelization design in which all widening is to the right of approaching traffic and the deceleration lane (see below) begins at the end of the approach

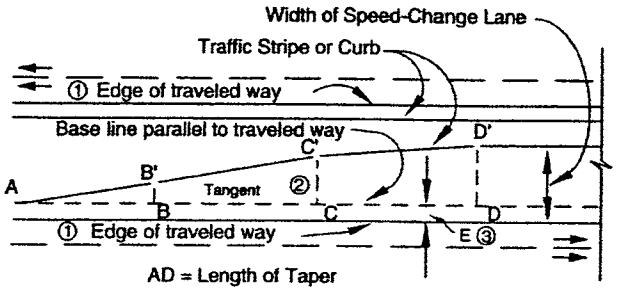
taper. This design should be used in all situations where space is available, usually in rural and semi-rural areas or in urban areas with high traffic speeds and/or volumes.

Figures 405.2B and 405.2C show alternate designs foreshortened with the deceleration lane beginning at the 2/3 point of the approach taper so that part of the deceleration takes place in the through traffic lane. Figure 405.2C is shortened further by widening half (or other appropriate fraction) on each side. These designs may be used in urban areas where constraints exist, speeds are moderate and traffic volumes are relatively low.

(c) Bay Taper – A reversing curve along the left edge of the traveled way directs traffic into the left-turn lane. The length of this bay taper should be short to clearly delineate the left-turn move and to discourage through traffic from drifting into the left-turn lane. Table 405.2A gives offset data for design of bay tapers. In urban areas, lengths of 18 m and 27 m are normally used. Where space is restricted and speeds are low, a 18 m bay taper is appropriate. On rural high-speed highways, a 36 m length is considered appropriate.

(d) Deceleration Lane Length – Design speed of the roadway approaching the intersection should be the basis for determining deceleration lane length. It is desirable that deceleration take place entirely off the through traffic lanes. Deceleration lane lengths are given in Table 405.2B; the bay taper length is included. Where partial deceleration is permitted on the through lanes, as in Figures 405.2B and 405.2C, design speeds in Table 405.2B may be reduced 15 to 30 km/h for a lower entry speed. In urban areas where cross streets are closely spaced and deceleration lengths cannot be achieved, the District Traffic branch should be consulted for guidance.

Table 405.2A
Bay Taper for Median Speed-change Lanes



AD = Length of Taper
AB = BC = CD = 1/3 AD
AB' & C'D' are Parabolic Curves

	LENGTH OF TAPER - meters				OFFSET DISTANCE			
	18	27	36		DD' = 3.0 m	DD' = 3.3 m	DD' = 3.6 m	
	Distance From Point "A"							
	-	-	-		0	0	0	
	1.5	2.25	3.0		0.048	0.051	0.057	
	3.0	4.5	6.0		0.186	0.207	0.225	
	4.5	6.75	9.0		0.423	0.465	0.507	
B'	6	9	12	B'	0.75	0.825	0.90	B'
	9	13.5	18		1.50	1.65	1.80	
C'	12	18	24	C'	2.25	2.475	2.70	C'
	13.5	20.25	27		2.58	2.84	3.10	
	15	22.5	30		2.81	3.09	3.38	
	16.5	24.75	33		2.95	3.25	3.54	
	18	27	36		3.0	3.3	3.6	

NOTES:

(1) The table gives offsets from a base line parallel to the edge of traveled way at intervals measured from point "A". Add "E" for measurements from edge of traveled way.

(2) Where edge of traveled way is a curve, neither base line nor taper between B & C will be a tangent. Use proportional offsets from B to C.

(3) The offset "E" is usually 0.6 m along edge of traveled way for curbed medians; Use "E" = 0 m for striped medians.

30 (19 mph) 37 (122')
40 (25 mph) 56 (184')

Table 405.2B
Deceleration Lane Length

Design Speed (km/h)	Length to Stop (m)	
50 (31 mph)	75 (246')	>62'
60 (37 mph)	94 (308')	
70 (43 mph)	113 (370')	
80 (50 mph)	132 (433')	
90 (56 mph)	150 (492')	
100 (63 mph)	169 (555')	

(e) Storage Length--At unsignalized intersections, storage length may be based on the number of turning vehicles likely to arrive in an average 2-minute period during the peak hour. As a minimum, space for 2 passenger cars should be provided at 7.5 m per car. If the peak hour truck traffic is 10 % or more, space for one passenger car and one truck should be provided.

At signalized intersections, the storage length may be based on one and one-half to two times the average number of vehicles that would store per signal cycle depending on cycle length, signal phasing, and arrival and departure rates. As a minimum, storage length should be calculated the same manner as unsignalized intersection. The District Traffic Branch should be consulted for this information.

When determining storage length, the end of the left turn lane is typically placed at least 1 m, but not more than 10 m, from the nearest edge of shoulder of the intersecting roadway. Although often set by the placement of a crosswalk stripe or limit line, the end of the storage lane should always be located so that the appropriate turning template can be accommodated.

(3) Double Left-turn Lanes. At signalized intersections on multilane conventional highways and on multilane ramp terminals, double left-turn lanes should be considered if the left-turn demand is 300 vehicles per hour or more. The lane widths and other design elements of left-turn lanes given under Index 405.2(2) apply to double as well as single left-turn lanes.

The design of double left-turn lanes can be accomplished by adding one or two lanes in the median. See "Guidelines for Reconstruction of Intersections", published by Headquarters, Division of Traffic Operations, for the various treatments of double left-turn lanes.

(4) Two-way Left-turn Lane (TWLTL). The TWLTL consists of a striped lane in the median of an arterial and is devised to address the special capacity and safety problems associated with high-density strip development. It can be used on 2-lane highways as well as multilane highways. Normally, the District Traffic Operations Branch should determine the need for a TWLTL.

The minimum width for a TWLTL shall be 3.6 m (see Index 301.1). The preferred width is 4.2 m. Wider TWLTL's are occasionally provided to conform with local agency standards. However, TWLTL's wider than 4.2 m are not recommended, and in no case should the width of a TWLTL exceed 4.8 m. Additional width may encourage drivers in opposite directions to use the TWLTL simultaneously.

405.3 Right-turn Channelization

(1) General. For right-turning traffic, delays are less critical and conflicts less severe than for left-turning traffic. Nevertheless, right-turn lanes can be justified on the basis of capacity, analysis, and accident experience.

In rural areas a history of high speed rear-end accidents may warrant the addition of a right-turn lane.

In urban areas other factors may contribute to the need such as:

- High volumes of right-turning traffic causing backup and delay on the through lanes.
- Pedestrians conflicting with right turning vehicles.
- Frequent rear-end and sideswipe accidents involving right-turning vehicles.

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805) 687-4418 • FAX (805) 682-8509

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August 28, 2006 06084L01.doc

Mr. Jim Saunders
Pacific Management and Development
1232 Park Street, Suite 200
Paso Robles, CA 93446

Re: Traffic Related Report for the 4th Street Development, City of Paso Robles

This report addresses issues related to the implementation of the 4th Street Master Plan prior to the construction of the PSR project. The proposed underpass and alignment of 4th Street is not programmed for some time. Thus the report is to discuss how the current Pine Street underpass will function when the development projects are occupied. The second task is to determine each project's proportionate share of the traffic added to the Spring Street/4th Street intersection for the City's purpose of allocating the share of the installation cost of a traffic signal. For the purposes of this report, data from the PSR project report by URS, the 4th and Spring Special Education and Vocation School Report by ATE, and the traffic volumes from the 4th Street Master Plan Traffic Study by Pinnacle Engineering were used.

4th Street Circulation/PSR Improvement/Pine Street Underpass

The PSR project proposes to realign 4th street with a grade separated crossing under the Union Pacific Railroad. The new alignment would connect to Riverside Avenue and replace the one-lane underpass, maintaining operations at the southbound U.S. Highway 101 ramps at Pine Street. As the PSR project has not been programmed and would not be constructed for some time, the current underpass needs to remain in operation to maintain the connection with U.S. Highway 101.

Of the 175 vehicles using the underpass during the p.m. peak hour, 95 vehicles travel eastbound toward the freeway and 80 travel westbound toward Spring Street. With restricted sight distance, vehicles must travel at speeds of 10 to 15 mph in the underpass, restricting the capacity. When the 4th Street Master Plan is implemented, the volumes are forecast to increase to 385 vehicles during the p.m. peak hour, with 185 traveling eastbound and 200 vehicles traveling westbound. The increase in volumes would increase the potential for conflicts and safety issues.

Pine Street Underpass Interim Operations

For safety reasons, consideration should be given to converting the Pine Street underpass to a one-way facility. The question then arises as to which direction the underpass should operate. There are three southbound exits on U.S. Highway 101 in Paso Robles: 24th Street, 16th Street, and Pine Street. There is no southbound exit at Spring Street. Pine Street is the last southbound exit into Paso Robles and this part of the City. In order to maintain the connection to this part of town, the underpass should be routed one-way westbound toward Spring Street.

Conversion to one-way traffic will modify the traffic patterns of cars that currently use the one-lane underpass to get to Riverside Avenue or the freeway onramp. Of the 95 eastbound cars, 20 turn north onto Riverside Avenue and 75 turn south onto the freeway. The 20 cars heading north on Riverside Avenue may drive north on Pine Street to 10th Street and cross to Riverside. The 75 cars turning onto the freeway have two choices: they can drive north on Pine Street, cross at 10th Street, then drive south to the freeway onramp; or they can turn west onto 4th Street, turn south at Spring Street and drive directly to the freeway. The new signal at Spring Street and 4th Street should facilitate this movement. The majority of the 75 cars turning onto the freeway are coming from Pine Street somewhere between 10th and 4th Streets. These cars would likely split between the two options depending on their proximity to either street.

The question of timing the conversion also arises. The conversion should occur before the projects listed below are occupied so that tenants would not have used the two-way underpass and would not have to modify their traffic patterns.

Spring Street/4th Street Signal

The traffic volumes from 4th Street Master Plan Traffic Study by Pinnacle Engineering were used as the basis to determine the adjacent projects' contribution to the Spring Street/4th Street intersection volumes. The added volumes generated by the adjacent projects were calculated, and the proportionate share was determined for each project by dividing the project-added traffic by the net-added cumulative traffic (project/cumulative-existing).

Project	Proportionate Share Percentage
4th Street Master Plan	15.53%
Medical Office	12.12%
County Education Office	0.79%
Other Contributions	71.56%
Total	100.00%

The method used by Pinnacle Engineering to determine the proportionate share of the 4th Street Master Plan project used the total cumulative traffic, including existing volumes, rather than the net-added approach shown above.

Associated Transportation Engineers

By: Richard L. Pool, P.E.
President

RLP/JSL/wp

Enclosures: Proportionate Share Calculation Sheets
4th Street Master Plan Site Map

Copy to: Greg Jaeger, North Coast Engineering

4th Street/Spring Street Signal

4th Street Development Proportionate Share Analysis

Existing P.M. Peak Hour Volumes:	2140
Cumulative (2025) P.M. Peak Hour Volumes:	2757
Cumulative Net Added Volumes:	617
Project-Added P.M. Peak Hour Volumes:	130
Proportionate Share:	17.40%

4th Street/Spring Street Signal

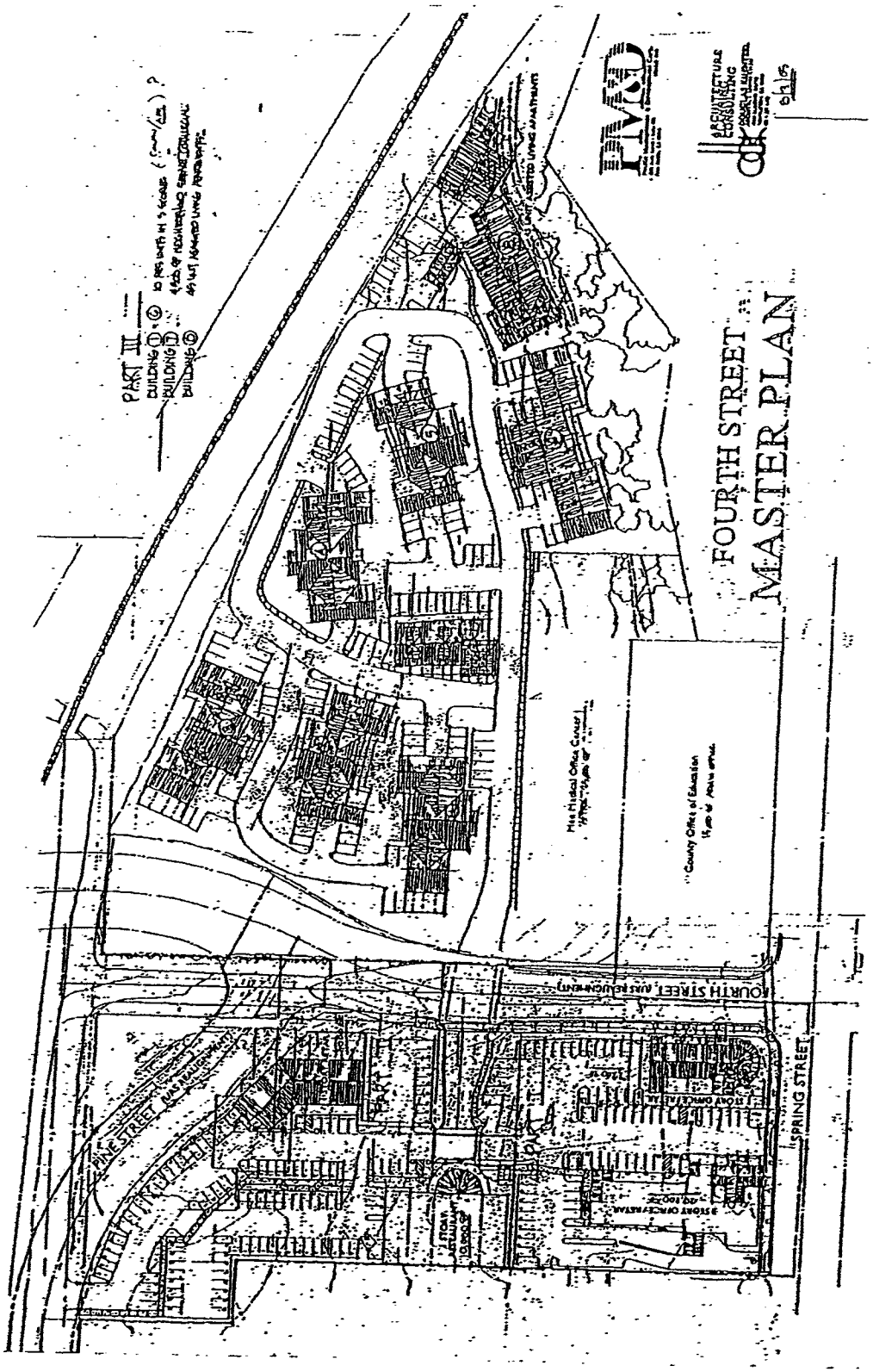
Medical Office Proportionate Share Analysis

Existing P.M. Peak Hour Volumes:	2140
Cumulative (2025) P.M. Peak Hour Volumes:	2771
Cumulative Net Added Volumes:	631
Project-Added P.M. Peak Hour Volumes:	83
Proportionate Share:	11.62%

4th Street/Spring Street Signal

County Education Office Proportionate Share Analysis

Existing P.M. Peak Hour Volumes:	2140
Cumulative (2025) P.M. Peak Hour Volumes:	2771
Cumulative Net Added Volumes:	631
Project-Added P.M. Peak Hour Volumes:	5
Proportionate Share:	0.79%



PINNACLE TRAFFIC ENGINEERING

4th Street Master Plan
- Traffic Study -

FIGURE 3
PROJECT
SITE PLAN

Visual Analysis: Saunders Project at 4th & Spring Streets

Paso Robles, California
(February 2007)

Overview

The applicant is submitting for a general plan amendment with a complex mixed use project. The City of Paso Robles is concerned that this approximately 11.3 acre project has the potential to create significant visual impacts under CEQA definitions by:

- Creating a substantial adverse effect on a scenic vista,
- Degrading the existing visual character or quality of the site and its surroundings,
- Obscuring views of scenic or historic resources essential to the visual character or image of the City of Paso Robles,
- Creating a significant new source of night time light and glare.

In order to assist in the visual analysis, applicant's architect has prepared a series of conceptual designs which show height, general massing and site locations of the potential structures. While not detailed in the usual architectural sense, the City and visual consultant determined that they were adequate to evaluate the potential for generating visual impacts.

Applicant Proposed Project

The project, designated as the 4th Street Mixed Use Project, is located on the north and south side of 4th street between Spring Street and the Union Pacific Railroad right of way which parallels Highway 101. The site north of 4th Street is approximately 3.45 acres planned as a Medical Campus. There is currently one medical office building under construction located along Spring Street. This and two other medical office buildings comprise Phase One of construction – including:

Building 1A: 3-story	20227 s.f.
Building 1B: 2-story	12500 s.f.
Building 1C: 2-story	12000 s.f.
Parking	154 spaces

Phase Two is comprised of one 4-story medical office building (51,424s.f.) and a 2 level parking structure combined with surface parking to provide 156 parking spaces.

The south side of 4th Street is approximately 9 acres of which approximately 7.8 acres are useable. This acreage is divided into 3 distinct project types, including an assisted living facility, a mixed use retail/residential project, and an apartment complex.

The assisted living project is a 4-story building comprised of a partially subterranean parking garage for 64 vehicles, administration and support facilities on the ground level floor, with 2 floors (52 units) of assisted living units above.

The 'L' shaped retail/residential facility is a 3 and 4-story structure. Again, a portion of the parking is provided in a subterranean parking structure (46 spaces) below one of the legs of the 'L' while the remaining parking spaces are located around a central fountain (91 spaces). The retail spaces are located on the ground level of the 'L' plaza (30,400s.f.), while 2 stories of townhouse apartments above provide 26 living units with support facilities (41,800 s.f.)

The third project type is a 3-story apartment complex (48 units). The complex is comprised of 3 identical buildings located around a central triangular green space. Each building houses 16 units. One parking space per unit is provided in a first floor garage while the remaining parking surrounds the perimeter of the complex (106 total spaces).

The architectural character for this project is a combination of the eclectic styles found in the downtown Paso Robles "Old Town." Although modern in interpretation, each project type is styled after actual buildings downtown. The apartments are "Mission Style" with stucco and tile roofs. The assisted living structure is "Mediterranean Style" with stucco and stone. The medical office building is formal in appearance with the character of large office building built in the 30's and 40's. The mixed use retail/residential center is a combination of many styles reflective of "Old Town." This style utilizes storefronts with varying details including stucco, stone, brick, simulated wood, and block united by a repetitive form and metal roof.

The overall massing of the proposed project is shown in Figure 2A: 3D Block Model and Figure 2B: proposed site plan. These images illustrate the overall relationships of the buildings to each other and to the site.

Methodology

With the criteria described above, the site was reviewed and photographed on January 6, 2007. The intent was to pick representative Key Viewing Areas (KVAs) that best portray the potential of the project to generate significant visual impacts. Three KVAs were selected along Spring Street where the project would be most visible to the greatest number of residents and visitors. Views are shown heading north into the downtown area, looking northeast toward the bluffs above South River Road, and at a right angle to Spring Street near 4th Street. Also selected was a relatively close view adjacent to Pine Street near the Union Pacific (former Southern Pacific) railroad tracks as well as a more distant view northwest from the Niblick Bridge. While the site will be visible from other areas of the City, these views were felt to have the greater potential to demonstrate visual impacts, if any. All the baseline photographs were taken with a lens focal length equivalent to the human eye; in other words there is no wide angle or telephoto distortion.

Utilizing the baseline photographs, generalized simulations were created based on the applicant's submitted designs. The primary concern was whether the project might affect a view or change the skyline. Therefore, the effort was spent on rendering the general architectural character but not the details or specific color schemes. Some street trees were simulated as being representative of the landscape screening that would be seen after the planting has matured for five years.

The determination of impacts is a refinement of the general CEQA criteria identified above and includes two major components:

A. Evaluation of the overall visual character of the existing landscape to determine the **Visual Impact Susceptibility** of the area including:
   - Visual Quality which is defined as a measure of the overall impression or appeal of an area or existing view. Visual Quality is studied as a point of reference in assessing whether a given project would appear compatible with the established features of the scene or would contrast unfavorably with them.
   - Viewer Sensitivity which addresses the level of concern viewers may have regarding a change in the overall scenic character. The sensitivity level deals with the public's expectation for the local or regional area and their potential reaction to development that may occur within the context of the area's visual quality.
   - Viewer Exposure which describes the degree to which viewers are exposed to views of the landscape. Viewer exposure considers the number of viewers, the duration of view and the proximity of the viewers to potential changes in the view.

B. Evaluation of the **Visual Impact Severity** when the project is inserted into the scene. The severity is determined by the following key factors;
   - Visual Contrast which evaluates the project's consistency with the existing visual elements such as form, line, color and texture, natural screening and integration

within the viewing context. Generally visual contrast increases the potential for generating significant visual impacts.

- Project Dominance which refers to the project's relationship to other visible landscape components. A project's scale and spatial relationship to the existing landscape can be categorized as subordinate, co-dominant, or dominant.
- View Impairment which identifies the extent to which a project's scale and position results in blockage or higher quality visual elements by lower quality elements.

Once the visual "susceptibility" and "severity" have been determined based on the above described factors, the degree of effect or impact can be defined. An impact is defined as significant only if both the Visual Susceptibility and the Impact Severity are classified as high. Put another way, while a project may completely obscure the previous view, if that view was not scenic or important to the community's image of itself, then the visual impact is still less than significant.

This approach is applied to each of the KVAs selected for analysis. Night time potential to generate light and glare is also evaluated.

Impact Analysis

KVAs 1, 2 and 3 generally share the same view characteristics and therefore have similar Visual Impact Susceptibility factors. The views from this component of Spring Street are of an immediate foreground that is a relatively non-descript area of land between two urbanized portions of Spring Street near the southern entry to the City's core. A new 3-story structure is under construction at the northern portion of the site. In the mid-ground are several existing City service structures along with the existing railroad right of way. The most memorable portion of the scene is of the residential development on the bluff above South River Road. This component of the view is urbanized but of a smaller grained character than the larger foreground commercial buildings. The overall view quality is rated moderate (a high rating would be reserved for views of the coast or more dramatic views of natural vistas or even well integrated areas of the urban core such as near the Carnegie Library.)

Viewer Sensitivity is rated as moderate since most of those traveling along Spring Street will be sensitive to general changes in the view but are not there just for the scenic resources such as those traveling on Highway 1 along the Coast. Viewer Exposure is also rated as moderate because the views are relatively short in duration (10 seconds at an average of 35 miles per hour) but for the most part the more interesting distant portion of the view is not in the travelers primary cone of vision (defined as 30 degrees to the left and right of the direction of travel.) Average Daily Traffic for Spring Street is 15,800 (ADT provided by City of Paso Robles Engineering Department.)

In conclusion, the Visual Impact Susceptibility for KVAs 1 through 3 is rated low to moderate.

KVA 1: Spring Street facing north
The Impact Severity can be evaluated by comparing the baseline photo of the existing view (Figure 3A) with the insertion of the project as presented in the simulation (Figure 3B). In this case, the project is infill between existing urban developments and while the change in scene will be noticeable, within five years when the street trees are in place the contrast with the rest of Spring Street is classified as low to moderate. Project dominance will be moderately high but reduced when the vacant lot adjacent to Spring Street is developed. View impairment is classified as moderate since no scenic vista is being impaired but the scene will be changed. In summary, the Impact Severity is classified as moderate.

In conclusion, because the Impact Susceptibility is moderate from KVA 1, the visual impact is less than significant.

KVA 2: Spring Street facing east near 4th Street
As with KVA 1, the Impact Severity is demonstrated by comparing photos A and B in Figure 4. While this view is facing east north east, the analysis and conclusions are generally the same as for KVA 1.

The Impact Severity is moderately high. While the view of the historic Alliance Silo is blocked, the view of this structure was not considered as significant when seen from Spring Street.

The Impact Susceptibility is moderate. While the views are changed, the resulting impact is considered less than significant. The views will be further improved with street trees as discussed below for KVA 3.

KVA 3: Spring Street facing southeast
The analysis factors for this view are the same as in KVAs 1 and 2 except the "project dominance" and "view impairment" levels are raised to "high" since the project is closer to the viewer, which can be seen in reviewing Figure 5.

In conclusion, although the Impact Severity is high, the Impact Susceptibility is moderate. As a result, the visual impact is classified as potentially significant but capable of being reduced to a less than significant level. Application of mitigation measures, such as planting street trees, will aid in the reduction of the visual impact. The street tree plantings should be similar to the rest of this portion of Spring Street, which will both soften the hard-edged planes of the architecture and integrate the street character of this project with the commercial development in the downtown core.

KVA 4: Niblick Bridge facing west
The overall Impact Susceptibility for this view is rated as moderate. Visual quality primarily relates to the foreground views of the Salinas River. Distant views are of the older urbanized portions of Paso Robles on the hills west of the City. However, the overall view generally lacks major features or coherency and is therefore rated low to moderate. While those traveling on the bridge are not primarily there for scenic or recreation purposes, most will appreciate the open natural character of this scene. Viewer sensitivity is rated as moderate. Viewer exposure is high given the 19,710 car trips per day (ADT) and the relatively long time the project will be visible (estimated to be 15 to 20 seconds when traffic is moving).

The potential impact severity is visible when comparing the baseline photo of the existing view (Figure 6A) with the insertion of the project as presented in the simulation (Figure 6B). In this case, since the view is relatively distant, the project does not obscure the skyline and is seen within an already urbanized context. Both the "visual contrast" and "view impairment" criteria are rated low to moderate, especially if the overall project articulation of the roof forms and landscaping at a five year maturity level is taken into account (not shown in these representative simulations). View impairment is also moderate.

In conclusion, while the change in the scene will be very noticeable, the result is a change in the middle ground view from low intensity urbanized and vacant land to more intense uses. The visual impact is less than significant.

KVA 5: Pine Street and Railroad facing west
Reviewing the Impact Susceptibility criteria we find that the area's visual quality is dominated by earth embankments and generally uncared for character of the vacant land in the foreground. From this viewing angle there are no significant middle or distant views. Visual quality is rated as low. Viewer sensitivity is also rated as low since most travelers are traversing a low intensity industrial area to get to or from the freeway. In the future, if a new underpass is developed, this component would be raised to moderate. Similarly, the number of viewers is low since so few vehicles use this route. However, the duration of views and the proximity are high. This criterion is rated as moderate. In summary, the Impact Susceptibility of this KVA is currently rated as low but has the potential to be elevated to moderate if the underpass and the immediate area are improved as proposed in the City General Plan and the applicant's project.

The impact severity can be evaluated by comparing the baseline photo of the existing view (Figure 7A) with the insertion of the project as presented in the simulation (Figure 7B.) In this case, all three criteria are rated high (visual contrast, project dominance and view impairment). Given the low existing

visual quality when compared to the applicant's proposal, however, many would consider views from this area to be improved.

In conclusion, given the levels of Visual Susceptibility (low to moderate), the high rating of the Impact Severity can be mitigated through landscaping and architectural design to a level that is less than significant.

Light and Glare

While there is the potential to generate a new source of light and glare, this is an urban project within an existing urbanized area. Light and glare would most likely be an annoyance to the residents along the bluffs east of the Salinas River. This issue can be addressed by requiring that night lighting for the project and related parking lots be kept to the minimum required for public safety. Also required shall be that all exterior lighting fixtures be provided with shields that cut the light such that the luminaries themselves are not directly visible to residential areas. The applicant shall provide a lighting plan and specifications at the time of building permit submittal demonstrating that the intent of the above requirement is met.

Suggested Mitigation Measures

- **Vis-1: Architectural Design.** At the time of submittal for building permits, the applicant (applicant's architect) shall demonstrate that the final design is in substantial conformity with the preliminary submittal used as the basis for this evaluation; specifically the buildings are not to be increased in height and the relatively high degree of building facade and roof articulation is retained. Color boards shall be submitted that demonstrate to the satisfaction of the Planning Director that the structures are compatible with the rest of Spring Street's commercial architecture.

- **Vis-2: Landscape Design.** At the time of submittal for building permits for each phase, the applicant (applicant's landscape architect) shall demonstrate that street trees have been provided along Spring, 4th and Pine Streets to generally be compatible with the existing scale and species of trees in the area and to provide screening of up to 15 feet within five years of planting to soften the architectural features of the proposed structures. Further, special landscape features shall be provided in the area of Pine Street along the embankments to the railroad underpass to control erosion and insure a high quality (to the satisfaction of the Planning Director) entry to this portion of Paso Robles.

- **Vis-3: Lighting Plan.** All night lighting for the project and related parking lots shall be kept to the minimum required for public safety. All exterior lighting fixtures shall be provided with shields that cut the light to the extent that the luminaries themselves are not directly visible to residential areas. At the time of building permit submittal, the applicant shall provide a lighting plan and specifications demonstrating that the intent of the above requirement is met.

Analysis Preparation

This analysis was prepared under the supervision of Andrew Merriam, architect and urban planner with the Wallace Group. Mr. Merriam has prepared over 60 visual analyses in the past decade ranging from offshore oil platforms, refineries, power plants and projects within the Coastal Zone, as well as many residential and commercial projects.

Google Earth Aerial Image

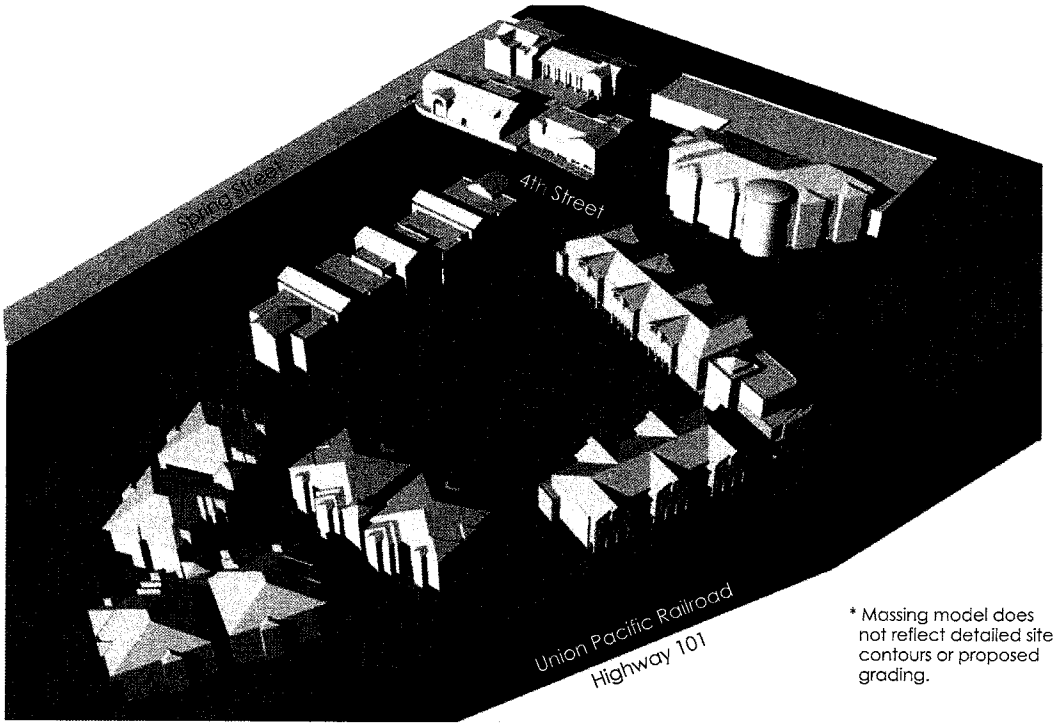
North

WALLACE GROUP®

Key Viewing Area Map

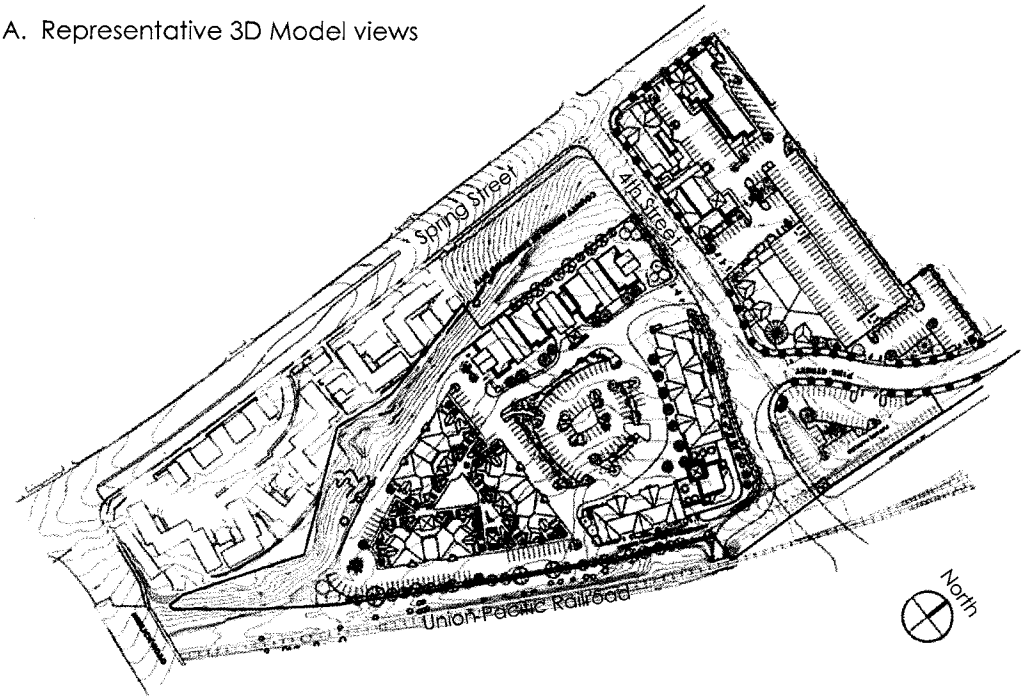
Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 1



* Massing model does not reflect detailed site contours or proposed grading.

A. Representative 3D Model views



B. Proposed Site Plan

WALLACE GROUP®

3D Model View & Proposed Site Plan

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 2

A. Baseline view of the existing project site

B. Simulation of the proposed project

WALLACE GROUP®

Key Viewing Area 1

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 3

A. Baseline view of the existing project site

B. Simulation of the proposed project

WALLACE GROUP®

Key Viewing Area 2

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 4

A. Baseline view of the existing project site

B. Simulation of the proposed project

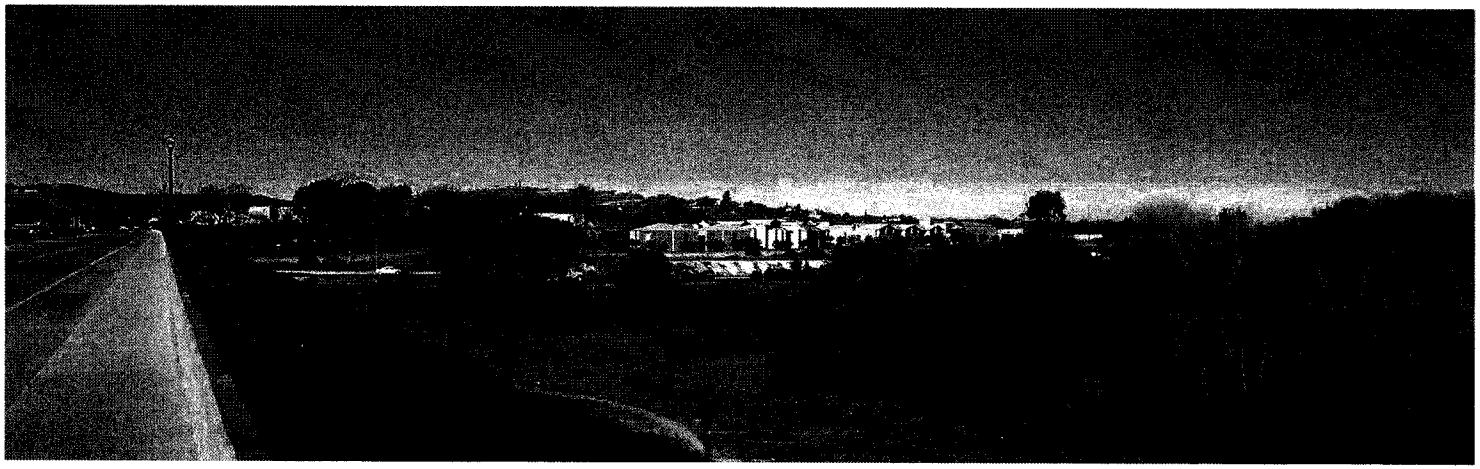
WALLACE GROUP®

Key Viewing Area 3

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 5

A. Baseline view of the existing project site



B. Simulation of the proposed project

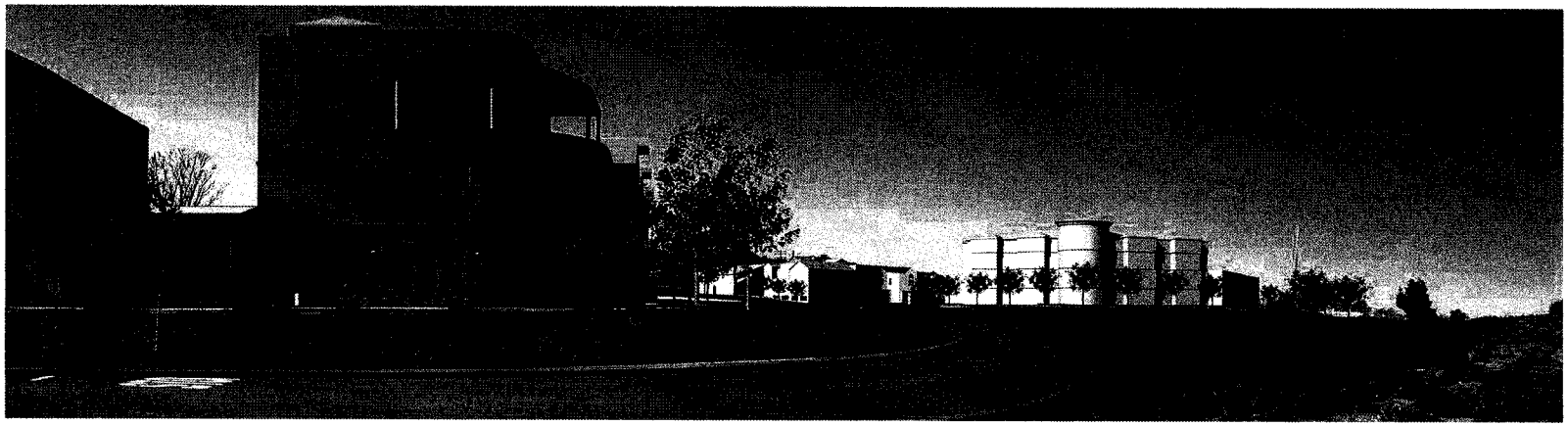
WALLACE GROUP®

Key Viewing Area 4

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 6

A. Baseline view of the existing project site



B. Simulation of the proposed project

WALLACE GROUP®

Key Viewing Area 5

Saunders - 4th and Spring Street Visual
Paso Robles, CA

Figure 7

Mitigation Measures
4th Street Master Plan and 4th Street Realignment

Transportation:

T-1 Install a traffic signal at the corner of 4th and Spring Streets.

T-2 Prohibit eastbound traffic on 4th Street from Pine Street to Riverside Avenue.

Aesthetics:

- **Vis-1: Architectural Design.** At the time of submittal for building permits, the applicant (applicant's architect) shall demonstrate that the final design is in substantial conformity with the preliminary submittal used as the basis for this evaluation; specifically the buildings are not to be increased in height and the relatively high degree of building facade and roof articulation is retained. Color boards shall be submitted that demonstrate to the satisfaction of the Planning Director that the structures are compatible with the rest of Spring Street's commercial architecture.

- **Vis-2: Landscape Design.** At the time of submittal for building permits for each phase, the applicant (applicant's landscape architect) shall demonstrate that street trees have been provided along Spring, 4th and Pine Streets to generally be compatible with the existing scale and species of trees in the area and to provide screening of up to 15 feet within five years of planting to soften the architectural features of the proposed structures. Further, special landscape features shall be provided in the area of Pine Street along the embankments to the railroad underpass to control erosion and insure a high quality (to the satisfaction of the Planning Director) entry to this portion of Paso Robles.

- **Vis-3: Lighting Plan.** All night lighting for the project and related parking lots shall be kept to the minimum required for public safety. All exterior lighting fixtures shall be provided with shields that cut the light to the extent that the luminaries themselves are not directly visible to residential areas. At the time of building permit submittal, the applicant shall provide a lighting plan and specifications demonstrating that the intent of the above requirement is met.

RESOLUTION NO:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PASO ROBLES RECOMMENDING ADOPTION TO THE CITY COUNCIL OF A MITIGATED NEGATIVE DECLARATION FOR MISCELLANEOUS 07-001 THE 4TH STREET MASTER PLAN AND PINE STREET REALIGNMENT APNS: 009-291-008 THROUGH -018, AND 009-261-002 AND -003 APPLICANT – PACIFIC MANAGEMENT AND DEVELOPMENT CORPORATION

WHEREAS, Miscellaneous 07-001 has been filed by Pacific Management and Development Corporation; and

WHEREAS, the proposed project is a collaboration between the applicant and the City to prepare a Master Development Plan for the subject site and to realign Pine Street; and

WHEREAS, the City Council of the City of El Paso de Robles adopted an updated General Plan in December 2003; and

WHEREAS, this Master Development Plan and Pine Street Realignment are consistent with the Land Use and Circulation Elements of the General Plan; and

WHEREAS, the General Plan Environmental Impact Report (EIR) considered and evaluated potential impacts that may result from implementation of the General Plan, and includes mitigation measures as appropriate; and

WHEREAS, the proposed Master Plan includes preliminary Site Plan and Building Elevations that are consistent with the Commercial Highway Mixed Use (C-2 MU) zoning district, and the Community Commercial Mixed Use (CC-MU), and the Commercial Service Mixed Use (CS-MU) land use category in the General Plan; and

WHEREAS, future development that may be proposed in compliance with the land uses permitted and applicable development standards and regulations, in the Zoning Ordinance and General Plan, will be evaluated to determine specific development project impacts; and

WHEREAS, an Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) to evaluate whether this project would result in environmental impacts, and the City has determined that this Master Development Plan and the 4th Street Realignment project will not result in significant environmental impacts if mitigation measures included with the Initial Study that establish the scope of issues for any future development of this property, in addition to project specific development impacts are applied; and

WHEREAS, pursuant to the Statutes and Guidelines of the California Environmental Quality Act (CEQA), and the City's Procedures for Implementing CEQA, an Initial Study and a Draft Mitigated Negative Declaration was prepared and circulated for public review and comment; and

WHEREAS, no public comments or responses were received in regard to the Draft Mitigated Negative Declaration and Initial Study prepared for these amendments; and

WHEREAS, Public Notice of the proposed Draft Mitigated Negative Declaration was posted as required by Section 21092 of the Public Resources Code; and

WHEREAS, a public hearing was conducted by the Planning Commission on April 10, 2007 to consider the Initial Study, the proposed Mitigated Negative Declaration prepared for the proposed project, and to accept public testimony on the Master Development Plan and 4th Street Realignment, and environmental determination; and

WHEREAS, based on the information and analysis contained in the Initial Study prepared for this project and testimony received as a result of the public notice, the Planning Commission finds that there is no substantial evidence that there would be a significant impact on the environment as a result of the development and operation of the proposed project.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the City of El Paso de Robles, based on its independent judgment, that it does hereby recommend the City Council adopt a Mitigated Negative Declaration for Miscellaneous 07-001 in accordance with the Statutes and Guidelines of the California Environmental Quality Act (CEQA) and the City's Procedures for Implementing CEQA.

PASSED AND ADOPTED THIS 10th day of April, 2007, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
CHAIRMAN MARGARET HOLSTINE

ATTEST:

_____
RON WHISENAND, PLANNING COMMISSION SECRETARY

RESOLUTION NO.

**A RESOLUTION OF
THE PLANNING COMMISSION
OF THE CITY OF EL PASO DE ROBLES
RECOMMENDING APPROVAL OF THE 4TH STREET MASTER PLAN
TO THE CITY COUNCIL FOR PROPERTY LOCATED AT
4TH, SPRING AND PINE STREETS
APNS: 009-291-008 THROUGH -018, AND 009-261-002 AND -003
APPLICANT – PACIFIC MANAGEMENT AND DEVELOPMENT CORPORATION**

WHEREAS, a Master Development Plan has been proposed by Pacific Management and Development Corporation; and

WHEREAS, a preliminary Site Plan and Building Elevations are proposed with this Master Plan that include up to 116,000 s.f. of commercial office and retail uses and 74 residential units (including 52 assisted living units); and

WHEREAS, the project is consistent with the General Plan land use designation Community Commercial/Mixed Use Overlay (CC M-U) and the Zoning district which is Highway Commercial-Planned Development/Mixed Use Overlay (C2 M-U); and

WHEREAS, the proposed project is consistent with and supports implementation of the *2006 Paso Robles Economic Strategy* since it proposes an efficient use of land and infrastructure, and is proposed as a mixed use, compact, pedestrian oriented development near transit facilities and the downtown and provides for employment opportunities; and

WHEREAS, the Planning Commission held a duly noticed public hearing on April 10, 2007 on this project to accept public testimony on the Master Development Plan; and

WHEREAS, pursuant to the Statutes and Guidelines of the California Environmental Quality Act (CEQA), this project an Initial Study and Mitigated Negative Declaration were prepared for this project and has been considered by the Planning Commission under a separate resolution.

WHEREAS, based upon the facts and analysis presented in the staff report and the attachments thereto, the public testimony received, the Planning Commission makes the following findings:

1. The design and intensity of the proposed Master Development Plan is consistent C2-PD-MU zoning district and the adopted codes, policies, standards and plans of the City, specifically the Zoning Ordinance and General Plan, and that subsequent Planned Development requests for individual buildings in the planning area will address building heights and parking requirements, and ensure that each phase of development has adequate parking provided; and

2. The proposed development plan will not be detrimental to the health, safety, morals, comfort, convenience and general welfare of the residents and or businesses in the surrounding area, or be injurious or detrimental to property and improvements in the neighborhood or to the general welfare of the City since the project will improve the existing quality of development on the site and neighborhood; and

3. The proposed development plan accommodates the aesthetic quality of the City as a whole, since the project incorporates compatible, yet varying building forms, colors and materials, and the

Master Plan indicates building footprints and entrances located close to the street, and that parking will generally be located to the rear of the development projects.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission of the City of El Paso de Robles does hereby recommend approval of this Master Development Plan to the City Council.

PASSED AND ADOPTED THIS 10th day of April, 2007 by the following Roll Call Vote:

AYES: Commissioners –
NOES: Commissioners –
ABSENT: Commissioners –
ABSTAIN: Commissioners –

_____
CHAIRMAN HOLSTINE

ATTEST:

_____
RON WHISENAND, PLANNING COMMISSION SECRETARY

PROOF OF PUBLICATION

LEGAL NEWSPAPER NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

Newspaper: Tribune

Date of Publication: March 21, 2007

Meeting Date: April 10, 2007
(Planning Commission)
May 1, 2007
(City Council)

Project: Miscellaneous 07-001
(4th Street Master Plan)

I, Lonnie Dolan, employee of the Community Development Department, Planning Division, of the City of El Paso de Robles, do hereby certify that this notice is a true copy of a published legal newspaper notice for the above named project.

Signed: Lonnie Dolan

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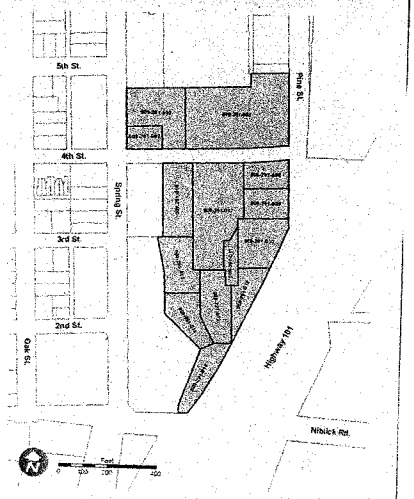
of El Paso de Robles will hold two Public Hearings to consider a Master Development Plan and a draft Negative Declaration.

The Planning Commission will consider this item at a Public Hearing on Tuesday, April 10, 2007, and the City Council will consider this item at a Public Hearing on May 1, 2007. Both meetings will be held at 7:30 p.m. at the City of El Paso de Robles, 1000 Spring Street, Paso Robles, California, in the City Council Chambers.

The two hearings will consider the following project and associated draft Negative Declaration:

Master Development Plan: A multi-phased mixed-use development project planned for properties located north and south of 4th Street and between Spring Street and Pine Street and the Union Pacific Railroad right-of-way. The Master Plan is planned to include 4 medical office buildings (approximately 96,000 s.f.), an assisted living residential care facility (52 rooms), a mixed-use retail/residential project with approximately 20,000 s.f. of retail area and 26 residences, and a 48 unit apartment complex. See attached Location Map.



The draft Negative Declaration to be considered is a statement that there will be no significant environmental impacts resulting from the proposed project, in accordance with the provisions of the California Environmental Quality Act (CEQA).

The public review period for this project is March 22nd through April 10, 2007. The proposed project and Negative Declaration may be reviewed at the Community Development Department, 1000 Spring Street, Paso Robles, California. Copies may be purchased for the cost of reproduction.

Written comments on the proposed project and corresponding Negative Declaration may be mailed to the Community Development Department, 1000 Spring Street, Paso Robles, CA 93446, provided that the comments are received prior to the time of the public hearing. Oral comments may be made at the hearing. Should you have any questions regarding this application, please call Susan DeCarli at (805) 237-3970.

If you challenge the proposed project or Negative Declaration application in court, you may be limited to raising only those issues you or someone else raised at the public hearings described in this notice, or in written correspondence delivered to the Planning Commission or City Council at or prior to the public hearing.

Susan DeCarli, AICP
City Planner
March 21, 2007