Appendix I-B1

KNIGHTS FERRY
HISTORICAL STANDARDS

Adopted by the Stanislaus County Board of Supervisors

JUNE 23, 1987

APPENDIX I-B1

KNIGHTS FERRY HISTORICAL STANDARDS

INTRODUCTION

Knights Ferry's colorful historic past, along with its unique physical setting, have combined to offer a community worthy of preservation. The primary objective of this section is to develop a base of information relating to the architectural and physical setting that will adequately describe the existing situation and to provide guidelines for new construction and rehabilitation which will assist the Planning Commission and Board of Supervisors when evaluating future construction in the Knights Ferry historical designation, thus preserving and enhancing the unique historic and physical setting. The ultimate goal of this plan is to assure that Knights Ferry's heritage will remain a functioning asset to the community through continued use and enjoyment.

The Historic Section is grouped into three categories:

Inventory of Building Details
Identifies the predominant architectural details found within the community.

Suggested Design Principles and Standards for New Construction
Intended to ensure the maximum compatibility of new construction with older buildings utilizing the Inventory of Building Details as a data base.

Suggested Guidelines for the Rehabilitation of Buildings
Specific actions to be considered or avoided to ensure the ongoing historic preservation.

Inventory of Building Details
While no single architectural style predominates in Knights Ferry, there does exist strong similarities of style, proportion, scale, material, and detail. These similarities form the basis of this inventory. This inventory will be helpful in understanding the architectural qualities of Knights Ferry and, in turn, will establish a good foundation for new planning and construction in the community.

The streetscapes of Knights Ferry display a variety of design and texture limited by several common "design elements". These elements are **height, proportion and scale, window and door openings, building placement, materials and details, entrances, continuity of street facades, color, and landscaping.**

Height:
The average height of the older residences and commercial buildings is 2 to 2 1/2 stories consisting of a groundfloor, one main story, and sometimes additional attic rooms.

Proportion and Scale:
The heights of most buildings in Knights Ferry are generally at least one and one half times as great as their widths. The primary emphasis is consequently vertical. Scale, which is the relationship of the size of individual parts to one another and to man, is gauged by the building units (wood or stone), the window and door openings and their placement, and the architectural detailing. Most buildings in Knights Ferry have a consistent scale.

Window and Door Openings:
Window and door openings are vertical, reflecting the overall proportions of the buildings.

Entrances:
Door openings are placed at the ground floor level, reached by a short flight of stairs. Entrances are sheltered by a porch usually extending across the entire frontage of buildings.

Materials and Details:
Horizontal wood siding is extensively used in the community. The majority of buildings have steep gable roofs covered by corrugated metal roofing material.

Building Placement (Spacing of Buildings):
The streetscapes in Knights Ferry are composed of a rather random progression of building units. Large lots and vacant lots create voids in the streetscape.

Continuity of Street Facades:
Buildings along Main Street are set back a uniform distance creating a close feeling. Buildings along side streets are setback at random distances. Stone retaining walls create narrow streets with no curbs, gutters or sidewalks.

Landscaping:
Abundant natural vegetation and landscaping are integral parts of the Knights Ferry setting, enhancing existing buildings by creating a "grown in" feeling and acting as natural air conditioners. Most yards utilize a combination of fruit and shade trees, shrubs and fences for defining lots and private space.

Color:
Most buildings tend toward low intensity shades of white and gray, weathered wood, and redwood stain. Stone work is left natural. Roof coverings are generally galvanized metal or composition roofing in grey shades.

When combined with the "design elements", building components such as window and door openings and specific details such as building materials and unique building features help to identify the character unique to Knights Ferry. The components and details include **building lot, exterior features of buildings, roofs, windows and doors, porches, ornamentation, benches, and street furniture and improvements.**

Building Lot:
Most of the residential structures are constructed on relatively large lots sloping towards the river. However, very little cut and fill has taken place, relying entirely on low retaining walls constructed of sandstone, stone, river cobbles, or concrete for slope stability. Large trees, shrubs, and gardens are common due to the relatively large area of the lots.

Exterior Features of Buildings:
Exterior wall covering consists of horizontal wood siding which is either beveled or shiplap type giving a semi-rough texture to wood structures. Masonry buildings are constructed primarily of sandstone or river cobbles, giving them a rough texture. Exposed foundation walls are constructed of stone or concrete adding another textured surface to the exterior appearances.

Roofs:
Gables with relatively steep roofs predominate throughout the community. Vents are found in the apex of the gable. Although the original roofing materials were wood shingles, galvanized metal is the most commonly used roofing material today with some buildings utilizing gray composition roof tiles.

Windows and Doors:
Window and door openings tend to create a vertical dominance. Windows generally are 2 to 2 1/2 times as tall as they are wide extending nearly from floor to ceiling. Exterior framing around window openings is of light construction. Windows are wood frame double hung, having been added at a later date for unknown reasons.

In residential structures, the main entrance is a single door with some glazing in the top half. Wood screen doors are extensively used. Commercial and public buildings have double doors at the main entrance with glazing in the top half. Screen doors are not commonly used.

Porches:
Porches are an integral portion of the overall design of residential, commercial and public buildings. Porches normally extend across the front of the building. Support for porches is provided by 4 x 4 or 6 x 6 posts, sometimes having been given design by being turned on a lathe. The size of the supporting posts is indicative of the light frame construction utilized for almost all buildings. Flooring for the porches is wood.

Ornamentation:
Buildings tend to be of simple design with very little ornamentation. Most ornamentation is found on accessories such as door knobs and fences.

Fences:
In addition to having the most ornamentation of any structure, fences are an important building accessory in Knights Ferry. Both wood picket fences and cast-iron post and wire fences set upon stone retaining walls or curbing are prevalent in the community. Wood fences have posts with caps and pickets with a design cut into their top. Posts in cast-iron are capped by various knobs and foliate their top. Posts in cast-iron are capped by various knobs and foliate designs. The wire in these types of fences have a woven design with scalloped top wire. The fences are very light and at times delicate, enclosing the entire yard without obscuring the buildings behind them.

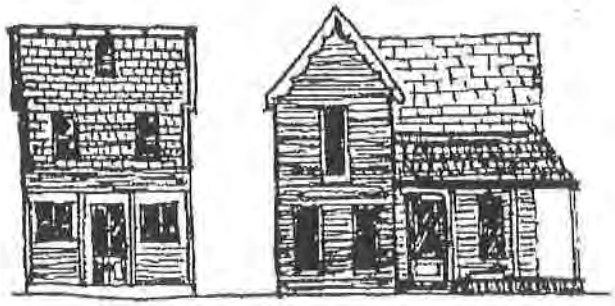
Street Furniture and Improvements:
All streets in the community, except Main Street, are narrow streets. Sidewalks, curbs, and gutters are not found in Knights Ferry. The combination of narrow streets and lack of curbs and gutters adds to the quaint character of the community which can be distinctively termed "Knights Ferry".

Suggested Design Principles and Standards for New Construction

The use of these design principles and standards is not intended to require new buildings to be an exact duplication of older styles, but to ensure the maximum compatibility of new construction with other buildings in the Knights Ferry historical designation.

Height and Scale

It is important that new buildings should be constructed to a reasonable average height of existing adjacent buildings within established historical districts.



Relationship of Materials
A variety of materials, when properly used, can add to the distinctiveness of the area. Common materials are wood, stone, brick, stucco, or other materials. Used properly, materials can enhance desired qualities such as compatibility, continuity, similarity, harmony, etc.

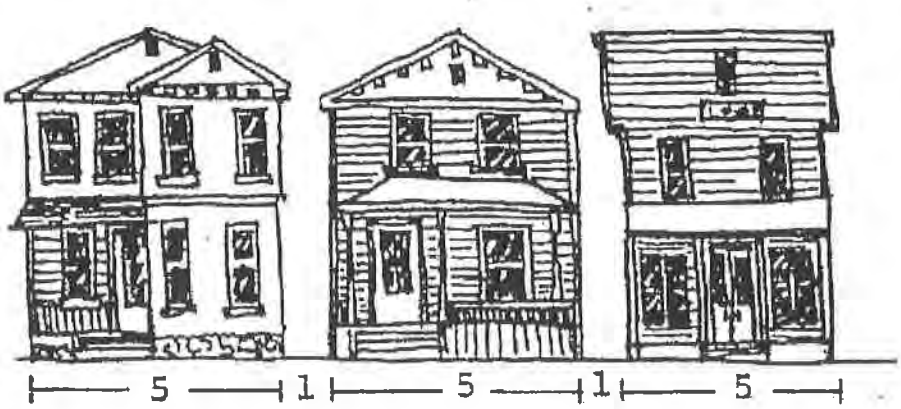
Relationship to Textures
The texture of a building is an important factor in the overall appearance of the town. The predominant texture is horizontal wood siding with rough (river cobbles), smooth (stucco), and other textures present. Whatever texture is used, its appearance must be considered in relationship to the area to ensure a compatible blending with other styles.

Relationship to Colors
The proper application of a color scheme to a building or a series of buildings can highlight important features and increase their overall appearance. Accent or blending colors on building details is also desirable in enhancing the compatibility of structures.

Relationship of Architectural Details
Similarity of architectural detail may be accomplished by the use of cornices, lintels, arches, wrought iron work, chimneys, etc. This similarity of detail is extremely important in ensuring a compatible appearance in new construction.

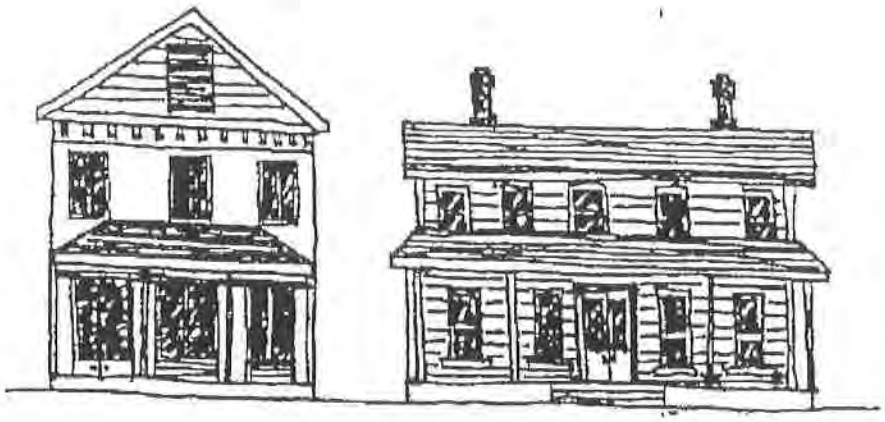
Relationship of Roof

The majority of buildings have gable or hip roofs. Roofs are an important factor in the overall design of a building to help relate items such as height and scale to those of adjacent structures.



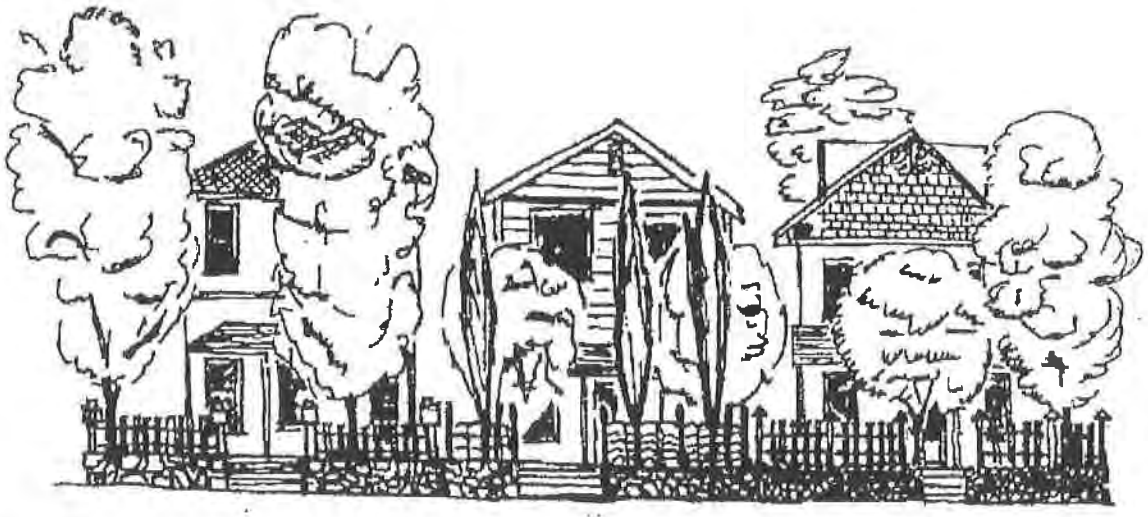
Rhythm of Spacing of Building on Street (Building Placement).

Moving past a sequence of buildings, one experiences a rhythm of recurrent building masses to spaces between them. This rhythm is necessary to create an added element of harmony in the town's architecture.



Directional Expression of Front Elevations (Window and Door Openings)

Structural shape, placement of openings, and architectural details should give a predominantly vertical character to the building's facade. Although the front elevation of two adjacent buildings may be different in heights, mass, or both, their overall appearance can be compatible when a vertical direction is achieved by proper use of detail, color, materials, etc.



Continuity

Physical ingredients such as wood fences, wrought iron fences, brick walls, evergreen landscape masses, building facades, or combinations of these form continuous, cohesive walls of enclosure along the street. This factor helps produce a cohesiveness in an area.

Relationship of Landscaping

There is a predominance of a particular quality and quantity of landscaping. The concern here is more with mass and continuity. It is important that landscaping be placed to emphasize design rather than becoming an obscuring factor.

Suggested Guidelines for the Rehabilitation of Buildings and Structures

Although stationary, structures are not static. It is necessary that they function today as they functioned a century ago and, indeed, should function a century hence. Change is inevitable. As structures age, they need maintenance and repair or alteration to accommodate new occupants and uses. This maintenance and change should be a compromise between yesterday and today to insure the architectural integrity of the structures and at the same time to enhance their utility. This category seeks both ends.

The following eight fundamental concepts can be considered basic guidelines for the rehabilitation of historic property. They are followed by a detailed checklist for the application of the guidelines to carry out actual rehabilitation projects. The checklist suggests specific actions to be considered or avoided to insure the ongoing preservation of historic property.

1. Every reasonable effort should be made to provide a compatible use for historic property which will require minimum alteration to the property and its environment.

2. Rehabilitation work should not destroy the historic character of the property and its environment. The removal or alteration of any historic material or architectural features should be held to the minimum consistent with the proposed use.

3. Deteriorated architectural features should be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of original features, substantiated by physical or pictorial evidence rather than on conjectural designs or the availability of architectural features from other properties.

4. Distinctive stylistic features or examples of skilled craftsmanship which characterize older structures and often predate the mass production of building materials, should be treated with sensitivity.

5. Changes to the property and its environment which have taken place in the course of time are evidence of the history of the property and the town. These changes may have developed significance in their own right, and this significance should be recognized and respected.

6. All historic property should be recognized as a product of its own time. Alterations to create an earlier appearance should be discouraged.

7. It is not the intent of these guidelines to discourage contemporary design of new buildings, additions to existing buildings, or landscaping in historic districts if such design is compatible with the size, scale, color, material, and character of the neighborhood, building, or its environment.

8. Wherever possible, additions or alterations to historic property should be done in such a manner that if they were to be removed in the future, the essential form and integrity of the original property would be unimpaired.

CHECKLIST FOR THE APPLICATION OF BASIC GUIDELINES

These guidelines suggest specific actions which should be considered or avoided when remodeling or restoring existing structures.

CONSIDER	TRY TO AVOID
Knights Ferry	
Retaining distinctive features such as the size, scale, mass, color, and materials of buildings, including roofs, porches, and stairways that give the town its historic character.	Introducing new construction or materials into the town which are incompatible with the character of the town because of size, scale, color and materials.
Using new plant materials, fencing, walkways and street furniture which are compatible with the character of the town in size, scale, material, and color.	Introducing signs, street lighting, street furniture, new plant materials, fencing, walkways, and paving materials which are out of scale or inappropriate to the town.
Retaining landscape features such as parks, gardens, street furniture, walkways, streets, and building setbacks which link historic properties to their environment.	Destroying the relationship of historic properties and their environment by widening existing streets, changing paving material, or by introducing poorly designed and poorly located new street and parking lots, or introducing new construction incompatible with the character of the town.
Inspecting the site carefully to locate and identify plants, trees, fencing, walkways, and street furniture which might be an important part of the property's history and development.	
Retaining plants, trees, fencing walkways, and street furniture which reflect the property's history and development.	Making hasty changes to the appearance of the site by removing old plants, trees, fencing, walkways and street furniture before evaluating their importance in the property's history and development.
Basing all decision for new work on actual knowledge of the past appearance of the property found in photographs, drawings, newspapers, and tax records. If changes are made, they should be carefully evaluated in light of the past appearance of the site.	Over-restoring the site to an appearance it never had.

CONSIDER	TRY TO AVOID
Building: Lot	
Retaining the basic topography which reflects the character of the property.	Altering the topography by extensive grading and cut-and-fill operations that will destroy the character of the site except where necessary for safety and efficiency.
Repairing and duplicating retaining walls wherever possible.	Constructing new retaining walls which are incompatible with earlier construction in the areas of materials, scale, and texture.
Building: Exterior Features (Masonry Buildings)	
Retaining original masonry, or stone and mortar, whenever possible, without the application of any surface treatment.	Applying waterproof or water repellent coatings or other treatments unless required to solve a specific technical problem that has been studied and identified. Coatings are frequently unnecessary, expensive, and can accelerate deterioration on the masonry or stone.
Duplicating old mortar in composition, color, and texture.	Repointing with mortar of high Portland cement content can create a bond that is often stronger than the building material. This can cause deterioration as a result of the differing coefficient of expansion and the differing porosity of the material and the mortar.
Duplicating old mortar in joint size, method of application, and joint profile.	Repointing with mortar joints of a differing size or joint profile, texture, or color.
Cleaning masonry, or only when necessary to halt deterioration and always with the gentlest method possible, such as low water pressure and soft, natural bristle brushes.	Sandblasting brick or stone surfaces; this method of cleaning erodes the surface of the material and accelerates deterioration.
Repairing stucco with a stucco mixture duplicating the original as closely as possible in appearance and materials.	Using chemical cleaning products which could have an adverse chemical reaction with the masonry or stone texture.

CONSIDER	TRY TO AVOID
Repairing or replacing, where necessary, deteriorated material with new material that duplicates as closely as possible.	Applying new material which is inappropriate or was unavailable when the building was constructed, such as the old artificial brick siding, artificial cast stone or brick veneer.
Replacing missing architectural features, such as cornices, brackets, railings, and shutters.	Removing architectural features such as cornices, brackets, railings, shutters, window architraves and doorway pediments. These are usually an essential part of a building's character and appearance, illustrating the continuity of growth and change.
Retaining the original or early color and texture of masonry surfaces, wherever possible. Brick or stone surfaces may have been painted or whitewashed for practical and aesthetic reasons.	Indiscriminate removal of paint from masonry surfaces. This may be historically incorrect and may also subject the building to harmful damage.
(Frame Buildings)	
Retaining original material whenever possible.	Removing architectural features such as siding, cornices, brackets, railings, shutters, window architraves and doorway pediments. These are, in most cases, an essential part of a building's character and appearance illustrating the continuity of growth and change.
Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Resurfacing frame buildings with new material which is inappropriate or was unavailable when the building was constructed such as artificial stone, brick veneer, asbestos or asphalt shingles, plastic or aluminum siding. Such material also can contribute to the deterioration of the structure from moisture and insect attacks.
(Roofs)	
Preserving the original roof shape.	Changing the original roof shape or adding features inappropriate to the essential character of the roof such as oversized dormer windows or picture windows.

CONSIDER	TRY TO AVOID
Retaining the original roofing material whenever possible.	Applying new roofing material that is inappropriate to the style of the building and the town.
Replacing deteriorated roof coverings with new material that matches the old in composition, size, shape, color, and texture.	Replacing deteriorated roof coverings with new materials which differ to such an extent from the old in composition, size, shape, color, and texture that the historical integrity of the property is diminished.
Preserving or replacing, where necessary, all architectural features which give the roof its essential character, such as dormer windows, cupolas, cornices, brackets, chimneys, and cresting.	Stripping the roof of architectural features important to its character.
Placing television antennae and mechanical equipment, such as air conditioners, in an inconspicuous location.	
(Windows and Doors)	
Retaining existing window and door openings including window sash, glass lintels, sills, architraves, shutters and doors, pediments, tools, and all hardware.	Introducing new window and door openings into the principal elevations of historic buildings, or enlarging or reducing window or door steps, openings to fit new stock window sash or new stock door sizes.
	Altering the size of window panes or sash which is part of the structure's historic fabric. Such changes destroy the scale and proportion of the building.
	Discarding original doors and door hardware when they can be repaired and reused in place.
The stylistic period or periods a building represents. If replacement of window sash or doors is necessary, the replacement should duplicate the material, design, and the hardware of the older window sash or door.	Inappropriate new window or door features such as aluminum storm and screen window combinations that require the removal of original windows and doors or the installation of plastic or metal strip awnings or false shutters that disturb the character and appearance of the building.

CONSIDER	TRY TO AVOID
Building: Exterior Features (cont.)	
(Porches and Steps)	
Retaining porches and steps which are appropriate to the building and its development. Porches or additions reflecting later architectural styles are often important to the building's historical integrity and, whenever possible, should be retained.	Removing or altering porches and steps which are appropriate to the building and its development and the style or styles it represents.
Repairing or replacing, where necessary, deteriorated architectural features of wood, iron, cast iron, terra-cotta, tile, and brick.	Stripping porches and steps of original material and architectural features, such as hand rails, balusters, columns, brackets, and roof decoration of wood, iron, cast iron, terra-cotta, tile, and brick.
Repairing or replacing, where necessary, deteriorated material with new material that duplicates as closely as possible.	Applying new material which is inappropriate or was unavailable when the building was constructed, such as the old artificial cast stone, brick veneer, asbestos or asphalt shingles, or plastic or aluminum siding. Enclosing porches and steps in a manner that destroys their intended appearance.
Building: Interior Features	
Retaining original material, architectural features and hardware, whenever possible, such as stairs, handrails, baluster, mantelpieces, cornices, chair rail, baseboard, panelings, doors and doorways, wallpaper, lighting fixtures, locks, and door knobs.	Removing original material, architectural features and hardware, except where essential for safety or efficiency.

CONSIDER	TRY TO AVOID
Building: Interior Features (cont.)	
Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Installing new decorative material which is inappropriate or was unavailable when the building was constructed, such as vinyl, plastic or imitation wood wall and floor coverings, except in utility areas such as kitchens and bathrooms.
Retaining original plaster, whenever possible.	Destroying original plaster except where necessary for safety and efficiency.
Discovering and retaining original paint colors, wallpapers and other decorative motifs or, where necessary, replacing them with colors, wallpapers or decorative motifs based on the original.	
Color	
Discovering and retaining original paint colors, or repainting with colors based on the original to illustrate distinctive character of the property.	Repainting with colors that cannot be documented through research and investigation to be appropriate to the building and neighborhood.
Plan and Function	
Using a building for its intended purpose.	Altering a building to accommodate an incompatible use requiring extensive alterations to the plan, materials and appearance of the building.
Finding an adaptive use, when necessary, which is compatible with the plan, structure, and appearance of the building.	
Retaining the basic plan of a building, whenever possible.	Altering the basic plan of a building by demolishing principal walls, partitions, and stairways.

CONSIDER	TRY TO AVOID
New Additions	
Keeping additions to historic buildings to a minimum and making them compatible in scale, building materials, and texture.	Making unnecessary additions to historic property.
Designing additions to be compatible in materials, size, scale, color, and texture with the earlier building and the area.	Designing additions which are incompatible with the earlier building and the area in materials, size, scale, and texture.
Using contemporary designs compatible with the character and mood of the building or area.	Imitating an earlier style or period of architecture in additions, except in rare cases where a contemporary design would detract from the architectural unity of an ensemble or group. Especially avoid imitating an earlier style of architecture in additions that have a completely contemporary function such as a gas station.
Mechanical Services: Heating, Electrical, and Plumbing	
Installing necessary building services in areas and spaces that will require the least possible alteration to the materials, and appearance of the building.	Causing unnecessary damage to the plan, materials, and appearance of the building when installing mechanical plan services.
Installing the vertical runs of ducts, pipes, and cables in closets, service rooms, and wall cavities.	Installing vertical runs of ducts, pipes, and cables in places where they will be a visual intrusion.
	Cutting holes in important architectural features, such as cornices, decorative ceilings and paneling.
Selecting mechanical systems that best suit the building.	Installing "dropped" acoustical ceilings to hide inappropriate mechanical systems. This destroys the proportions and character of the rooms.
Rewiring early lighting fixtures.	

Mechanical Services: Heating, Electrical, and Plumbing (cont.)

CONSIDER	TRY TO AVOID
Having exterior electrical and telephone cables installed underground.	Having exterior electrical and telephone cables attached to the principal elevations of the building.

Safety and Code Requirements

Complying with code requirements in such a manner that the essential character of a property is preserved intact.	
Investigating variances for historic properties afforded under some local codes.	
Installing adequate fire prevention equipment in a manner which does minimal damage to the appearance or historic fabric of a property.	

FOR FURTHER REFERENCE

The following books, magazines, and organizations will provide sound, basic information about the rehabilitation and care of historic property.

Books

Bullock, Orin M., Jr., The Restoration Manual: An Illustrated Guide to Preservation and Restoration of Old Buildings, Norwalk, Connecticut: Silvermine Publishers, Inc., 1966.

Cantacuzino, Sherban, New Uses for Old Buildings, London: Architectural Press, 1975.

Criswell, John F., Knights Ferry's Golden Past, United States Of America, August, 1974.

Historic Walker's Point, Inc., Preservation Minded Home Improvements: The Exterior, Milwaukee, Wisconsin.

Insall, Donald W., The Care of Old Buildings Today: A Practical Guide, London: Architectural Press, 1972.

Stephen, George, Remodeling Old Houses Without Destroying Their Character, New York: Alfred A. Knoff.

Magazine

The Old-House Journal, a monthly publication, published by the Old-House Journal Corporation, 199 Berkeley Place, Brooklyn, N.Y. 11217.

Organizations

Committee on Historic Resources; American Institute of Architects;
1735 New York Avenue, Northwest, Washington, D.C. 20006

E Clampus Vitus, Estanislao Chapter, Jack Brotherton, Historian

Appendix I-B2

LA GRANGE HISTORICAL STANDARDS

Adopted by the Stanislaus County Board of Supervisors

JUNE 23, 1987

LA GRANGE HISTORICAL STANDARDS
APPENDIX I-B2

HISTORY

La Grange's colorful historic past created many buildings and structures worthy of preservation. Unfortunately, many of these structures have since been destroyed by flood or inactivity. The few remaining structures are scattered throughout the town amidst newer structures. The primary objective of this section is to identify the structures (see Historical Site Map on Page 1-36) and develop guidelines for the preservation of their character and setting.

This section will provide guidelines that will assist the Planning Commission and Board of Supervisors when evaluating future construction and reconstruction in the La Grange historical designation, thus preserving and enhancing the unique historic character and setting. The ultimate goal of this plan is to assure that La Grange's heritage will remain a functioning asset to the community through continued use and enjoyment.

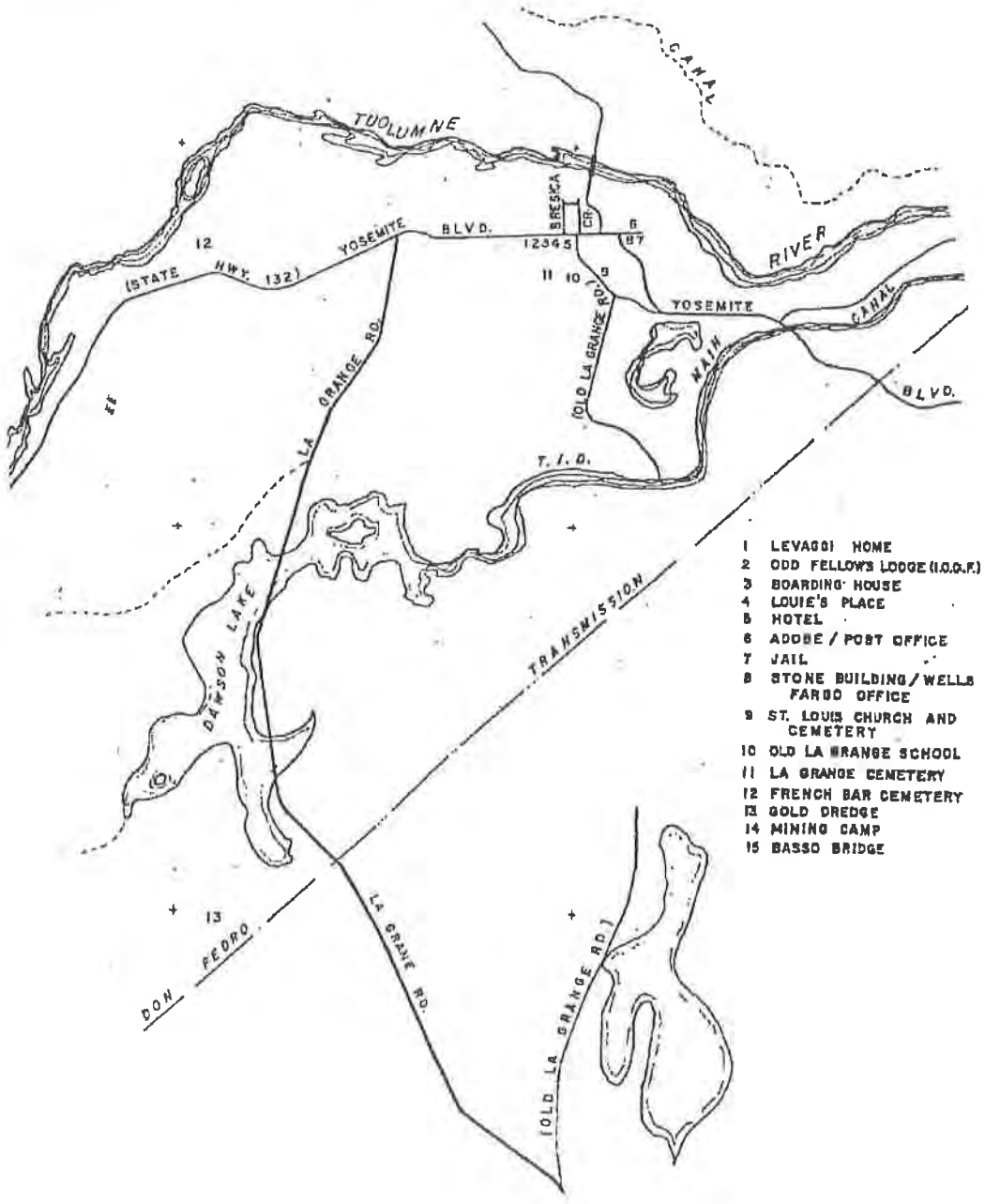
In order that the historical character and setting of the community is preserved, the Historical section is grouped into three categories:

1. Inventory of Building Details
   Identifies the predominant architectural details found within the community.

2. Suggested Design Principles and Standards for New Construction
   Intended to ensure the maximum compatibility of new construction with older buildings utilizing the Inventory of Building Details as a data base.

3. Suggested Guidelines for the Rehabilitation of Buildings
   Specific actions to be considered or avoided to ensure the ongoing historic preservation.

HISTORICAL SITES



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Inventory of Building Details

With many original buildings missing and their void being filled in by newer structures constructed over a long time span, no definitive architectural style or styles dominate. Even though there is no dominant architectural style, some similarities in building height, color, and landscaping exist. These similarities form the basis of this inventory. This inventory will establish a good foundation for planning and for evaluating proposed construction in the community.

Height: The average height of the older residences is 1 to 1 ½ stories consisting of a ground floor and sometimes additional attic rooms. Commercial buildings are either one or two stories in height.

Entrances: Door openings are placed at the ground floor level, reached by a short flight of stairs. Entrances are sheltered by a porch, at times extending across the entire frontage of buildings.

Color: Most buildings tend toward low intensity shades of white and gray, weathered wood, and redwood stain. Stone work is left natural. Roof coverings are generally wood shingles or composition roofing in grey shades.

Landscaping: Natural vegetation is an integral part of the La Grange setting. Yards are small with most of the landscaping to be found in front of the homes. Most yards utilize a combination of fruit and shade trees, shrubs, and fences for defining lots and private space.

Roofs: Most structures have either gable or hip roofs. Roofing materials are wood singles or grey composition shingles.

Suggested Design Principles and Standards for New Construction

The use of these design principles and standards is not intended to require new buildings to be an exact duplication of older styles, but to ensure the maximum compatibility of new construction with other buildings in the La Grange historical designation.

1. Height and Scale. It is important that new buildings should be constructed to a reasonable average height of existing adjacent buildings within established historical districts.

2. Relationship to Colors. The proper application of a color scheme to a building or a series of buildings can highlight important features and increase their overall appearance. Accenting or blending colors on building details is also desirable in enhancing the compatibility of structures.

3. Relationship of Landscaping. There is a predominance of a particular quality and quantity of landscaping. The concern here is more with mass and continuity. It is important that landscaping be placed to emphasize design rather than becoming an obscuring factor.

4. Continuity. Physical ingredients such as wood fences, wrought iron fences, brick walls, evergreen landscape masses, building facades, or combinations of these form continuous, cohesive walls of enclosure along the street.

5. Relationship of Roof. The majority of buildings have gable or hip roofs. Roofs are an important factor in the overall design of a building to help relate items such as height and scale to those of adjacent structures.

Suggested Guidelines for the Rehabilitation of Buildings and Structures

Due to the fact that many of the historic buildings have deteriorated or been destroyed, the emphasis of the Community Plan is placed on the preservation and rehabilitation of remaining buildings. Although stationary, structures are not static. It is necessary that they function today as they functioned a century ago and, indeed, should function a century hence. Change is inevitable. As structures age, they need maintenance and repair or alteration to accommodate new occupants and uses. This maintenance and change should be a compromise between yesterday and today at once to insure the architectural integrity of the structures and, at the same time, to enhance their utility.

The following eight fundamental concepts can be considered basic guidelines for the rehabilitation of historic property. They are followed by a detailed checklist for the application of the guidelines to carry out actual rehabilitation projects. The checklist suggests specific actions to be considered or avoided to insure the ongoing preservation of historic property.

1. Every reasonable effort should be made to provide a compatible use for historic property which will require minimum alteration to the property and its environment.

2. Rehabilitation work should not destroy the historic character of the property and its environment. The removal or alteration of any historic material or architectural features should be held to the minimum consistent with the proposed use.

3. Deteriorated architectural features should be repaired rather than replaced wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of original features, substantiated by physical or pictorial evidence rather than on conjectural designs, or the availability of architectural features from other properties.

4. Distinctive stylistic features or examples of skilled craftsmanship which characterize older structures and often predate the mass production of building materials should be treated with sensitivity.

5. Changes to the property and its environment which have taken place in the course of time are evidence of the history of the property and the town. These changes may have developed significance in their own right, and this significance should be recognized and respected.

6. All historic property should be recognized as a product of its own time. Alterations that restore a building to an earlier appearance which the building never had, should be discouraged.

7. It is not the intent of these guidelines to discourage contemporary design of new buildings, additions to existing buildings, or landscaping in historic districts if such design is compatible with the size, scale, color, material, and character of the neighborhood, building, or its environment.

8. Wherever possible, new additions or alterations to historic property should be done in such a manner that if they were to be removed in the future, the essential form and integrity of the original property would be unimpaired.

CHECKLIST FOR THE APPLICATION OF BASIC GUIDELINES

These guidelines suggest specifications which should be considered or avoided when remodeling or restoring existing structures.

CONSIDER	TRY TO AVOID
La Grange	
Retaining distinctive features such as the size, scale, mass, color, and materials or buildings, including roofs, porches, stairways that give the town its historic character.	Introducing new construction or materials into the town which are incompatible with the character of the town and because of size, scale, color, and materials.
Using new plant materials, fencing, walkways, and street furniture which are compatible with the character of the town in size, scale, material, and color.	Introducing signs, street lighting, street furniture, new plant materials, fencing, walkways, and paving materials which are out of scale or inappropriate to the town.
Retaining landscape features such as gardens, street furniture, walkways, streets, and building setbacks which link historic properties to their environment.	Destroying the relationship of historic properties and their environment by widening existing streets, changing paving material, or by introducing poorly designed and poorly located new streets and parking lots, or introducing new construction incompatible with the character of the town.
Building: Lot	
Inspecting the site carefully to locate and identify plants, trees, fencing, walkways, and street furniture which might be an important part of the property's history and development.	

CONSIDER	TRY TO AVOID
Retaining plants, trees, fencing, walkways, and street furniture which reflect the property's history and development.	Making hasty changes to the appearance of the site by removing old plants, trees, fencing, walkways, and street furniture before evaluating their importance in the property's history and development.
Basing all decisions for new work on actual knowledge of the past appearance of the property found in photographs, drawings, newspapers, and tax records. If changes are made, they should be carefully evaluated in light of the past appearance of the site.	Over-restoring the site to an appearance it never had.
Retaining the basic topography which reflects the character of the property.	Altering the topography by extensive grading and cut and fill operations that will destroy the character of the site except where necessary for safety and efficiency.
Building: Exterior Features	
(Masonry Buildings)	
Retaining original masonry, or stone and mortar, whenever possible, without the application of any surface treatment.	Applying waterproof or water repellent coatings or other treatments unless required to solve a specific technical problem that has been studied and identified. Coatings are frequently unnecessary, expensive, and can accelerate deterioration of the masonry or stone.
Duplicating old mortar in composition, color, and texture.	Repointing with mortar of high Portland cement content can create a bond that is often stronger than the material. This can cause deterioration as a result of the differing coefficient of expansion and the differing porosity of the material and the mortar.
Duplicating old mortar in joint size, method of application, and joint profile.	Repointing with mortar joints of a differing size or joint profile, texture, or color.

CONSIDER	TRY TO AVOID
Cleaning masonry, or only when necessary, to halt deterioration always with the gentlest method possible, such as low pressure water and soft, natural bristle brushes.	Sandblasting brick or stone surfaces; this method of sand cleaning erodes the surface of the material and accelerates deterioration.
Repairing stucco with a stucco mixture duplicating the original as closely as possible in appearance and texture.	Using chemical cleaning products which could have an adverse chemical reaction with the masonry or stone materials.
Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Applying new material which is inappropriate or was unavailable when the building was constructed, such as artificial brick siding, artificial cast stone or brick veneer.
Replacing missing architectural features, such as cornices, brackets, railings, and shutters.	Removing architectural features, such as cornices, brackets, railings, shutters, window architraves, and doorway pediments. These are usually an essential part of a building's character and appearance, illustrating the continuity of growth and change.
Retaining the original or early color and texture of masonry surfaces, wherever possible. Brick or stone surfaces may have been painted or whitewashed for practical and aesthetic reasons.	Indiscriminate removal of paint from masonry surfaces. This may be historically incorrect and may also subject the building to harmful damage.
(Frame Buildings)	
Retaining original material, whenever possible.	Removing architectural features such as siding, cornices, brackets, railings, shutters, window architraves, and doorway pediments. These are, in most cases, an essential part of a building's character and appearance, illustrating the continuity of growth and change.

CONSIDER	TRY TO AVOID
Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Resurfacing frame buildings with new material which is inappropriate or was unavailable when the building was constructed such as artificial stone, brick veneer, asbestos or asphalt shingles, plastic or aluminum siding. Such material also can contribute to the deterioration of the structure from moisture and insect attacks.
(Roofs)	
Preserving the original roof shape.	Changing the original roof shape or adding features inappropriate to the essential character of the roof such as oversized dormer windows or picture windows.
Retaining the original roofing material, whenever possible.	Applying new roofing material that is inappropriate to the style of the building and the town.
Replacing deteriorated roof coverings with new material that matches the old in composition, size shape, color, and texture.	Replacing deteriorated roof coverings with new materials which differ to such an extent from the old in composition, size, shape, color, and texture that the historical integrity of the property is diminished.
Preserving or replacing, where necessary, all architectural features which give the roof its essential character, such as dormer windows, cupolas, cornices, brackets, chimneys, and cresting.	Stripping the roof of architectural features important to its character.
Placing television antennae and mechanical equipment, such as air conditioners, in an inconspicuous location.	

CONSIDER	TRY TO AVOID
Building: Exterior Features (cont).	
(Windows and Doors)	
Retaining existing window and door openings including sash, glass lintels, architraves, shutters and doors, pediments, hoods, steps, and all hardware.	Introducing new window and door openings into the window principal elevations of historic buildings, or enlarging or reducing window or door steps, openings to fit new stock window sash or new stock door sizes.
	Altering the size of window panes or sashes which are part of the structure's historic fabric. Such changes destroy the scale and proportion of the building.
	Discarding original doors and door hardware when they can be repaired and reused in place.
	Inappropriate new window or door features such as aluminum storm and screen window combinations that require the removal of original windows and doors, or the installation of plastic or metal strip awnings or fake shutters that disturb the character and appearance of the building.
The stylistic period or periods a building represents. If replacement of window sash or doors is necessary, the replacement should duplicate the material, design, and the hardware of the older window sash or door.	
(Porches and Steps)	
Retaining porches and steps which are appropriate to the building and its development. Porches or additions reflecting later architectural styles are often important to the building's historical integrity and, whenever possible, should be retained.	Removing or altering porches and steps which are appropriate to the building and its development represents.

CONSIDER	TRY TO AVOID
Building: Exterior Features (cont.)	
Repairing or replacing, where necessary, deteriorated architectural features of wood, iron, cast iron, terra-cotta, and brick.	Stripping porches and steps of original material and architectural features, such as hand rails, balusters, tile, columns, brackets, and roof decoration of wood, iron, cast iron, terra-cotta, tile, and brick.
Repairing or replacing, where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Applying new material which is inappropriate or was unavailable when the building was constructed, such as artificial cast stone, brick veneer, asbestos or asphalt shingles, or plastic or aluminum siding. Enclosing porches and steps in a manner that destroys their intended appearance.

CONSIDER	TRY TO AVOID
Building: Interior Features	
Retaining original material, architectural features, and hardware whenever possible, such as stairs, handrails, baluster, mantelpieces, cornices, chair rail, baseboard, panelings, doors and doorways, wallpaper, lighting fixtures, locks and doorknobs.	Removing original material, architectural features and hardware, except where essential for safety or efficiency.
Repairing or replacing where necessary, deteriorated material with new material that duplicates the old as closely as possible.	Installing new decorative material which is inappropriate or was unavailable when the building was constructed, such as vinyl, plastic, or imitation wood wall and floor coverings, except in utility areas such as kitchens and bathrooms.
Retaining original plaster whenever possible.	Destroying original plaster except where necessary for safety and efficiency.
Discovering and retaining original paint colors, wallpapers and other decorative motifs or where necessary, replacing them with colors, wallpapers or decorative motifs based on the original.	
Color	
Discovering and retaining original paint colors, or repainting with colors based on the original to illustrate the distinctive character of the property.	Repainting with colors that cannot be documented through research and investigation to be appropriate to the building and the neighborhood.
Plans and Function	
Using a building for its intended purpose.	Altering a building to accommodate an incompatible use requiring extensive alterations to the plan, materials, and the appearance of the building.
Finding an adaptive use, when necessary, which is compatible with the plan, structure, and appearance of the building.	

CONSIDER	TRY TO AVOID
Building: Interior Features (cont.)	
Retaining the basic plan of a building whenever possible.	Altering the basic plan of a building by demolishing principal walls, partitions and stairways.
Additions	
Keeping additions to historic buildings at a minimum and pursuing the use of similar scale, building materials, and texture.	Unnecessary additions to historic property.
Designing additions to be compatible in materials, size, scale, color, and texture with the earlier building and the area.	Additions which are incompatible with the earlier building and the area in materials, size, scale, and texture.
Using contemporary designs compatible with the character and mood of the building or the area.	Imitating an earlier style or period of architecture in additions, except in rare cases where a contemporary design would detract from the architectural unity of an ensemble or group. Especially avoid imitating an earlier style of architecture in additions that have a completely contemporary function such as a gas station.
Mechanical Services: Heating, Electrical, and Plumbing	
Installing necessary building services in areas and space that will require the least possible alteration to the plan, materials, and appearance of the building.	Causing unnecessary damage to the plan, materials, and appearance of the building when installing mechanical services.
Installing the vertical runs of ducts, pipes, and cables in closets, service rooms, and wall cavities.	Installing vertical runs of ducts, pipes, and cables in places where they will be a visual intrusion.
	Cutting holes in important architectural features, such as cornices, decorative ceilings, and paneling.

CONSIDER	TRY TO AVOID
Mechanical Services: Heating, Electrical, and Plumbing (cont.)	
Selecting mechanical systems that best suit the building.	Installing "dropped" acoustical ceilings to hid inappropriate mechanical systems. This destroys the proportions and character of the rooms.
Rewiring early lighting fixtures.	
Having exterior electrical and telephone cables installed underground.	Having exterior electrical and telephone cables attached to the principal elevations of the building.
Safety and Code Requirements	
Comply with code requirements in such a manner that the essential character of a property is preserved intact.	
Investigating variances for historic properties afforded under some local codes.	
Installing adequate fire prevention equipment in a manner which does minimal damage to the appearance or historic fabric of a property.	
Providing access for the handicapped without damaging the essential character of a property.	

FOR FURTHER REFERENCE

The following books, magazines, and organizations will provide sound, basic information about the rehabilitation and care of historic property.

Books

Bullock, Orin M., Jr., The Restoration Manual: An Illustrated Guide to Preservation and Restoration of Old Buildings, Norwalk, Connecticut: Silvermine Publishers, Inc., 1966.

Cantacuzino, Sherban, New Uses for Old Buildings, London: Architectural Press, 1975.

Gray, Thorne B., Quest for Deep Gold: The Story of La Grange, California, La Grange, California, 1973,

Historic Walker's Point, Inc., Preservation Minded Home Improvements: The Exterior, Milwaukee, Wisconsin.

Insall, Donald W., The Care of Old Buildings Today: A Practical Guide, London: Architectural Press, 1972.

Stephen, George, Remodeling Old Houses Without Destroying Their Character, New York: Alfred A. Knoff.

Magazine

The Old-House Journal, a monthly publication, published by the Old-House Journal Corporation, 199 Berkeley Place, Brooklyn, N.Y. 11217

Organizations

Committee on Historic Resources; American Institute of Architects; 1735 New York Avenue, Northwest; Washington, D.C. 20006

E Clampus Vitus, Estanislao Chapter; Jack Brotherton, Historian

Interagency Historic Architectural Services Program; Office of Archeology and Historic Preservation; National Park Service; Department of the Interior; Washington, D.C. 20240

Office of Preservation Services; National Trust for Historic Preservation; 740-748 Jackson Place, Northwest; Washington, D.C. 20006

Stanislaus County Historical Society; c/o Jack Brotherton; 1226 Fiori Avenue; Modesto, California 95350

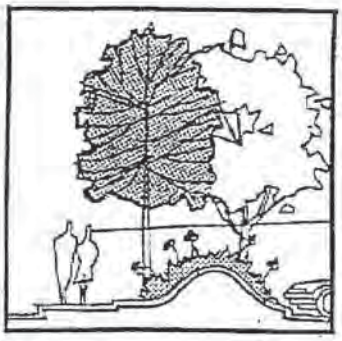
Appendix I-B3

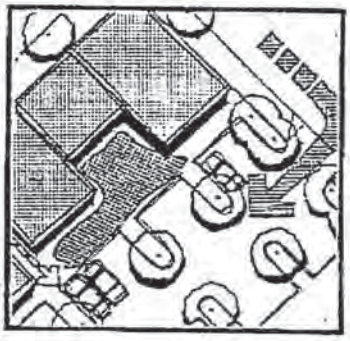
SALIDA DESIGN GUIDELINES

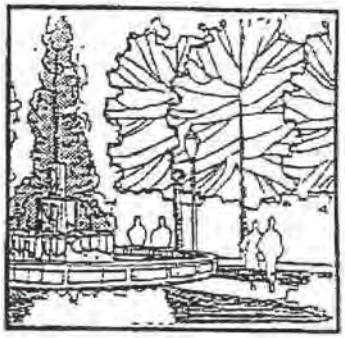
Adopted by the Stanislaus County Board of Supervisors

DECEMBER 17, 1991

Note: All page number references with in this document will be updated upon final adoption of the 2015 General Plan.





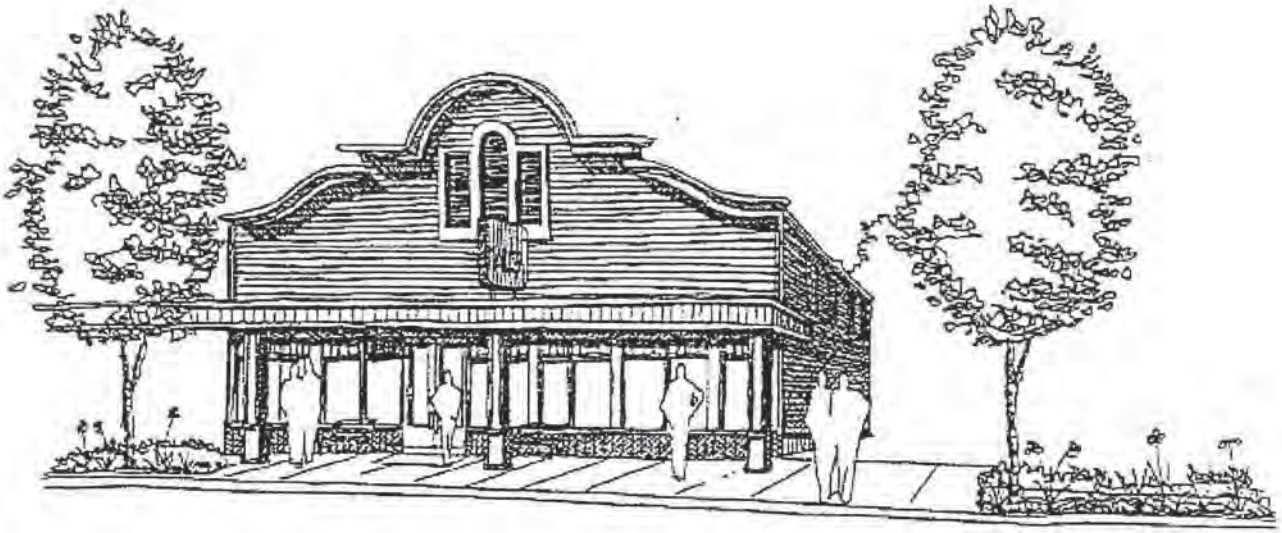


DESIGN GUIDELINES

INTRODUCTION

The Salida Design Guidelines will provide a flexible framework to guide both public and private community revitalization efforts in the form of physical and aesthetic improvements within the Salida Redevelopment Area. Improvements in the streetscape, creation of a consistent architectural theme, and preservation of the agricultural/western "small town" character represent desirable outcomes.

The following Community Design Guidelines are based on the citizen input gathered from Municipal Advisory Committee (MAC) meetings, the "Have a Say in Salida's Future"questionnaire and a photo survey. The surveys and meetings allowed local citizens to identify positive and negative elements of Salida.



Citizen Participation

Public design guidelines are a control device that affect community image, identity, and economic trends. Therefore, it is crucial that criteria for design controls be based on a consensus of citizen opinion.

Ensuring equitable representation of citizen's views is difficult considering the diversity of tastes, culture, and lifestyles resulting from changing population patterns in rural and small town communities. Long-term residents and new residents may have different ideas about what constitutes rural or small town, as well as desirable or undesirable urban design.

For Salida, these issues guided the survey methods used to retrieve citizen opinion, community character, and design image. A description of the methods used to gain public input for the development of Salida's Community Design Guidelines Manual follows:

1. Public Meetings

   Meeting with the Salida's Municipal Advisory Community (MAC) provided the opportunity to share with the community the process involved with community redevelopment. They have also been valuable for the information supplied by the community. They provided insight into survey development and potential survey problems. The MAC has provided an essential link to the community in gaining one-on-one contact and information exchange with the citizens of Salida.

The following is a list generated as a result of an "icons" and "aliens" discussion conducted at the first MAC meeting. Icons being elements of the town that are admirable or desirable and aliens being those that are undesirable or alien.

Icons	Aliens
Smallness (image of)	Poor Drainage
Main Street	Poor Lighting
Existing Median Trees	Lack of Curbs and Sidewalks
Agriculture	Walled Communities
Sense of Community	Lack of Public Restrooms
Park -- but need to redesign	Old Salida Boulevard (99) splits community
Old Grocery Store	Extra Streets --Lack of direction of some streets
Uniform Signage Ordinance	Mix of Architectural Styles
Building Height Limitations	Lack of Services
Bicycle Paths	Railroad Splits Community

2. "Have a Say" Survey

The survey was a one-page questionnaire that was made available to the public in Salida's markets, post office, bank, and library (Appendix, page 1-111). They were located in places that are frequented by a wide cross-section of Salida residents. The survey provided the design guidelines design team with the necessary information to prioritize a large range of issues affecting Salida.

A total of 123 surveys were completed, and they revealed some general trends in the public's concern over Salida's future. The primary concern involved the poor condition of streets, the lack of adequate sidewalks, and street lighting. Concern about the condition of the downtown and the parks emerged, as well as concerns about police protection. The following list summarizes the key issues raised in the survey:

* Insufficient Street (curb, gutter, and sidewalk) Improvements
* Lack of Street Lighting
* Safety in Parks
* Downtown Improvements
* Retaining "Small Town" Character
* Lack of Landscaping
* General Cleanup of Community
* Inadequate Police Protection

3. Photo Survey

The photo survey was an exercise to better understand the positive and negative community images as seen by the residents of Salida. There were 12 cameras; six were labeled "Do Like", and six were labeled "Don't Like". The MAC chose members of the community to take pictures of things and places that they liked and didn't like depending on the camera they were issued.

The result was a greater effort by the camera users to show the things and places that they didn't like (all six "Don't Like" cameras and two "Do Like" cameras were returned). To a lesser degree, the camera users took pictures of things and places they did like. The "Do Like" pictures reflect things and places located in Salida as well as other communities.

In addition to the photos, the camera users were asked to provide written comments regarding the photos taken and other concerns they wished to express. As a result, the photo survey exercise identified the following as being problem areas within the Community of Salida:

A. Street Improvements - Sidewalks, curbs, street lighting, and circulation problems.

B. Commercial Buildings - Lack of cohesive architectural style and character.

C. Commercial Development - Downtown commercial core identify. Need to develop infill lots.

D. The Median - Lack of drainage currently causing puddling in median. Needs curbs and landscaping to prevent parking within median area.

E. People Spaces and Parks - Lack of sidewalks and streetscape makes walking in and around downtown difficult.

F. Residential Areas - Lack of curbs, gutters, and sidewalks, unpaved streets and alleys. Trash and junk in residential yards and vacant lots.

The positive or desirable elements within the community reflected through the photo survey were:

A. Newer development in both the downtown and industrial areas. Examples are Carl's Jr. Restaurant, Bueno Deli, and most schools and churches in the community.

B. Buildings on Broadway, such as the Broadway Market, Union Safe Bank, Salida Home Market, and the United Congregational Church.

C. Mature landscape and trees such as those in the Broadway median and park.

Conclusion

In conclusion, the results of each of the community involvement techniques (MAC meetings, "Have a Say" questionnaire and photo survey) were successful in establishing an understanding of the problems and opportunities within the community which served to direct the preparation of the guidelines.

DESIGN GUIDELINES

The following Design Guidelines are broken up into five areas of concern or sections. The sections were established in response to initial community analysis and survey results. The first three sections represent area specific districts within Salida's redevelopment area. The guidelines in these sections are divided into physical design categories such as site planning, architecture, and street improvements and are tangibly specific. The last two sections are area-wide guidelines requiring general application. These sections are policy oriented, requiring subsequent efforts to establish implementation mechanisms. (Map on page 1-58)

Section I Downtown Commercial District

Section I focuses on the downtown commercial district. The downtown commercial district represents the Broadway Street corridor west of Highway 99. Because of overwhelming community concern over Salida's lack of a centralized downtown identity and architectural theme, the downtown was singled out as an important area warranting the need to have its own design treatment. (Page 1-59)

Section II Nonresidential District

Section II of the guidelines addresses the nonresidential district. The nonresidential district represents all commercial, office, industrial, and public facility land uses that exist within the redevelopment area, but are outside the residential district and the downtown commercial district. The design guidelines are flexible enough to apply to all land uses within this district. (Page 1-83)

Section III Residential

Section III is the residential district of Salida. The residential district represents all residential areas inside the redevelopment area. The guidelines apply primarily to the "older" existing neighborhoods, since the Salida residents expressed concerns about the condition of these neighborhoods. These are also the neighborhoods that will probably experience rehabilitation and renovation efforts first and will benefit more directly from redevelopment. Primary concerns centered around the existing housing stock, the accumulation of trash, junk, and abandoned cars, and unpaved alleys, streets, and lack of curbs.

Within the established residential neighborhoods of Salida, there are district areas representing different eras in the architecture, siting, and public improvements of the homes. These guidelines are intended to respect that and encourage the preservation of the historical nature of each district area.

The primary concern toward the "newer" neighborhoods is how they are interfacing with the existing neighborhoods. In particular, concern was expressed over the new "walled communities" that are springing up on the edges of Salida. While not denying that there are some positive attributes created by enclosing a subdivision within walls, the negative effects of walled neighborhoods is being felt by the surrounding community. Walled subdivisions represent a poor solution to suburban design and land use concerns and have resulted in the disruption and fragmentation of the uniformity in the natural outgrowth of older residential neighborhoods. Guidelines in Section III addresses this and other identified concerns. (Page 1-93)

Section IV Parks

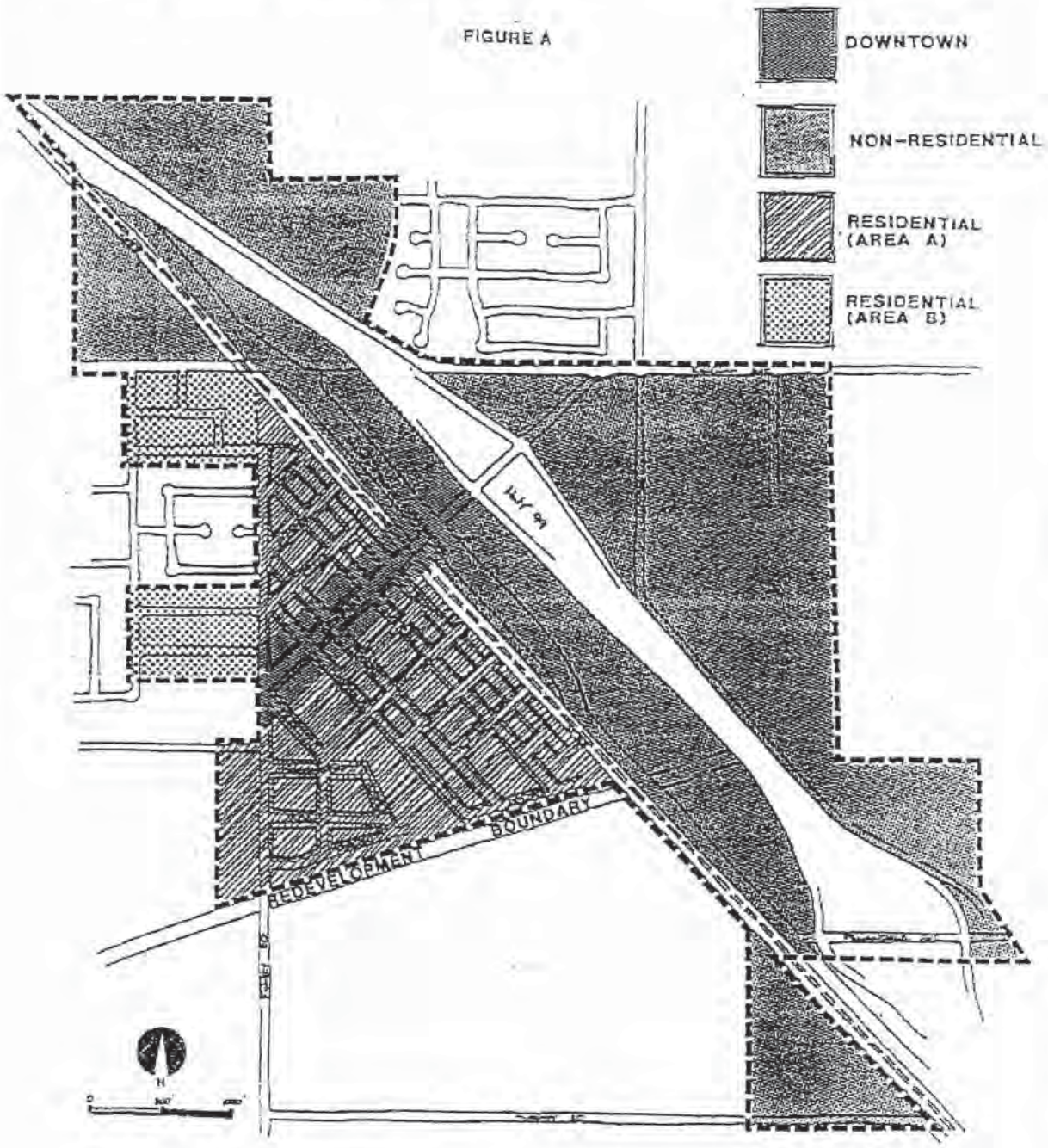
Section IV speaks specifically to concerns raised regarding parks and public use areas within Salida. The focus is on the major park in Salida located on Broadway. Park guidelines outline an overall Park Plan for the community. The plan conceptually suggests ways to increase safety, pedestrian links, and aesthetics for a comprehensive park system. (Page 1-104)

Section V General Cleanup

Section V is aimed at directing and encouraging community cleanup efforts. It is intentionally general in nature. This section was developed because of the overwhelming public response toward the enormous amounts of trash and abandoned cars that have accumulated throughout the community. The guidelines suggest ways to prevent this buildup of abandoned cars and trash. (Page 1-106)

SALIDA DESIGN GUIDELINES Design Guidelines

FIGURE A



SALIDA
COMMUNITY DESIGN GUIDELINES

DISTRICT MAP

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I. DOWNTOWN COMMERCIAL DISTRICT

Downtown Salida, (Broadway Street corridor west of Highway 99), is rundown and in a state of decay. The buildings lack architectural and site design consistency, landscaping, and pedestrian amenities. They contain incompatible uses and contribute to downtown Salida's economic dysfunction (Claire, 1990).

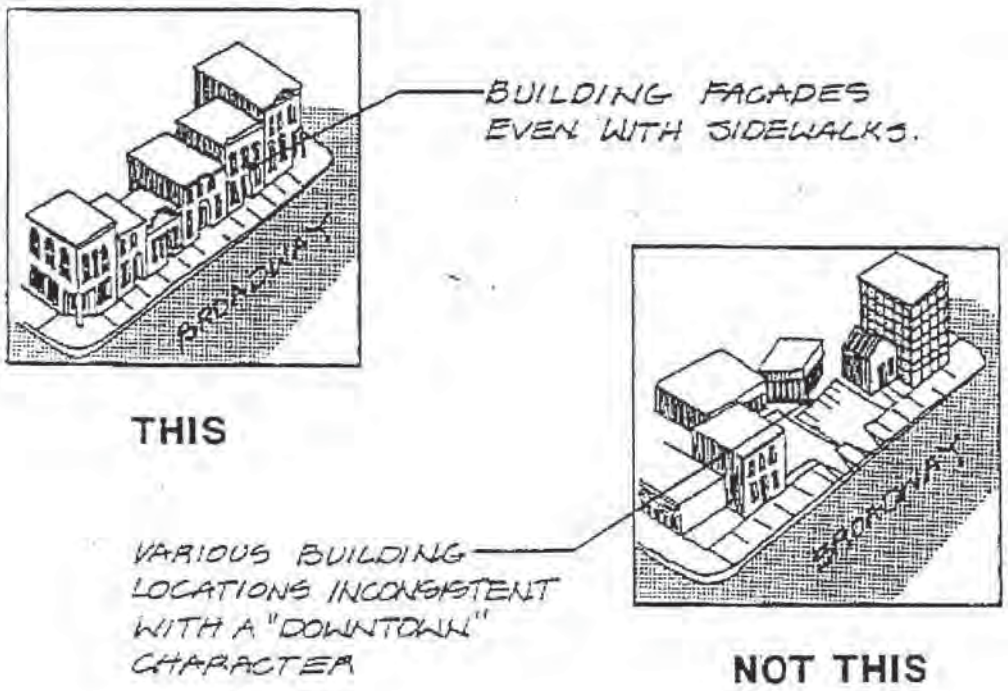
Goal: Create a downtown commercial district that provides an environment for economic growth, pedestrian movement and involvement, aesthetic harmony, parking, and safety.

A. Site Planning Guidelines

Improved site planning in the downtown core (Broadway) will increase pedestrian involvement and safety, create a traditional "downtown" look with strong street edges and pedestrian "boardwalks", and provide a "small town" feeling for Salida residents and visitors.

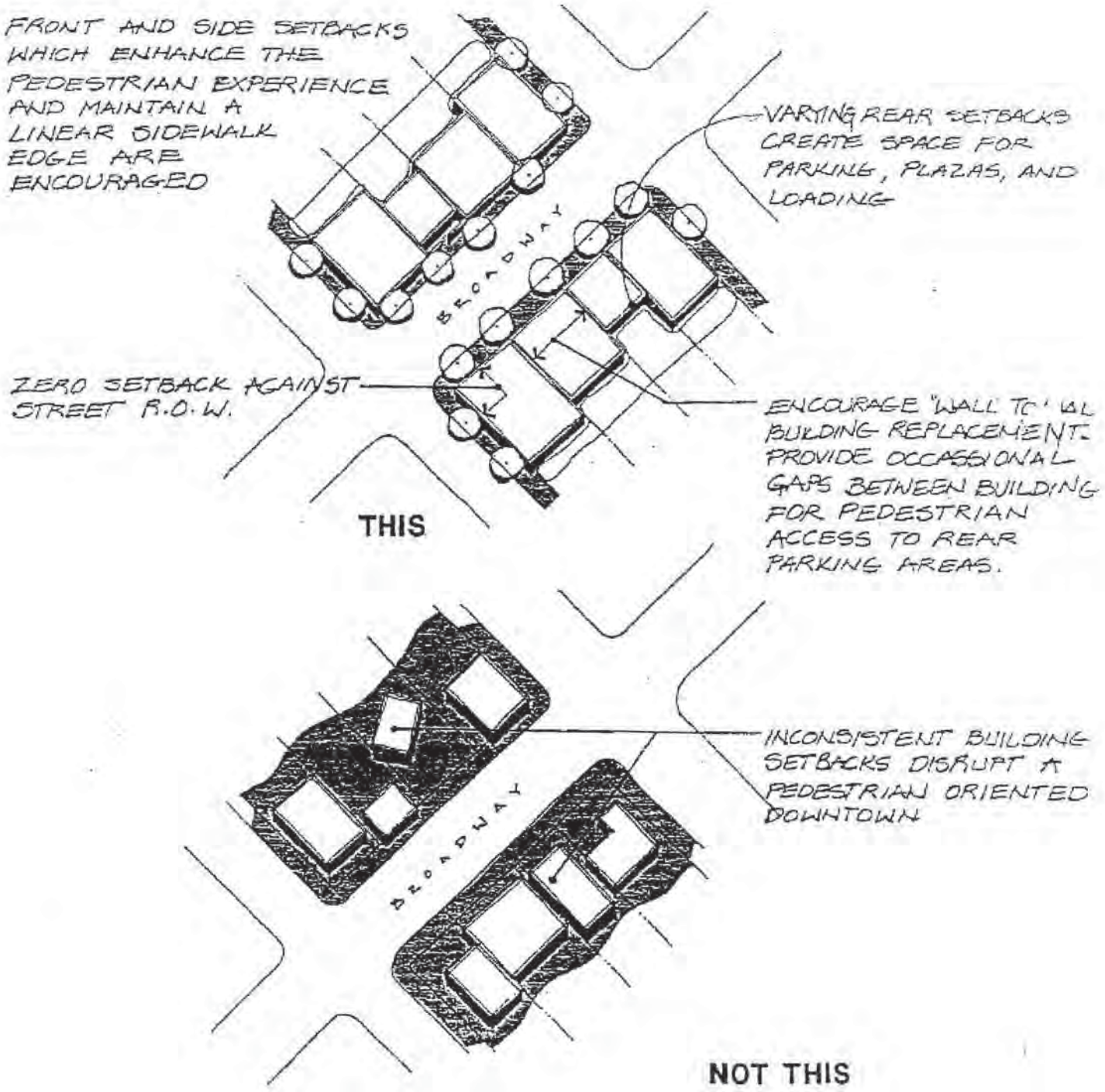
1. Building Location: Orient buildings parallel with the street.

Intent: Discourage placement of buildings which are inconsistent with the character of a downtown street.



2. Setbacks: Site downtown buildings flush with the sidewalk on the front and side property lines.

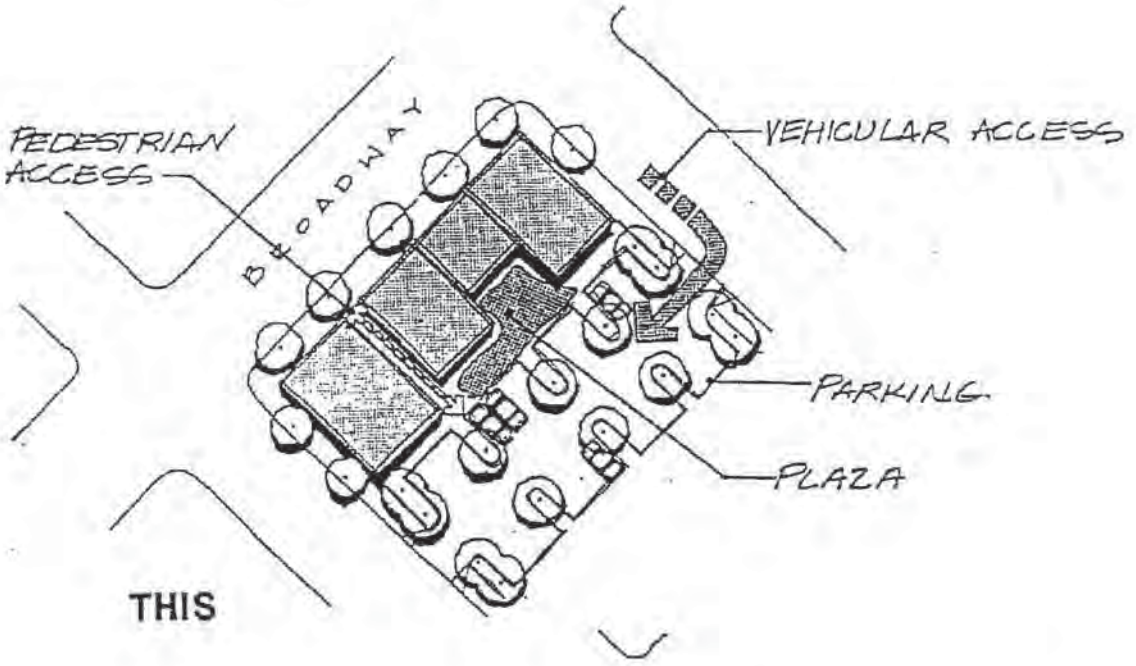
Intent: Create a strong linear experience along storefront sidewalks for the pedestrian and a downtown character for Salida.



3. Parking Lots: Locate parking lots behind buildings that front Broadway. Provide access to these lots with mid-block breaks in the street facades. Provide landscaped entries and canopy trees for shade. Prohibit parking lots that front on to Broadway.

Intent: Provide an uninterrupted street facade along Broadway.

(Refer to Parking Lot Design for queuing, screening, and entry design, pages 1-86, 1-87, and 1-88).



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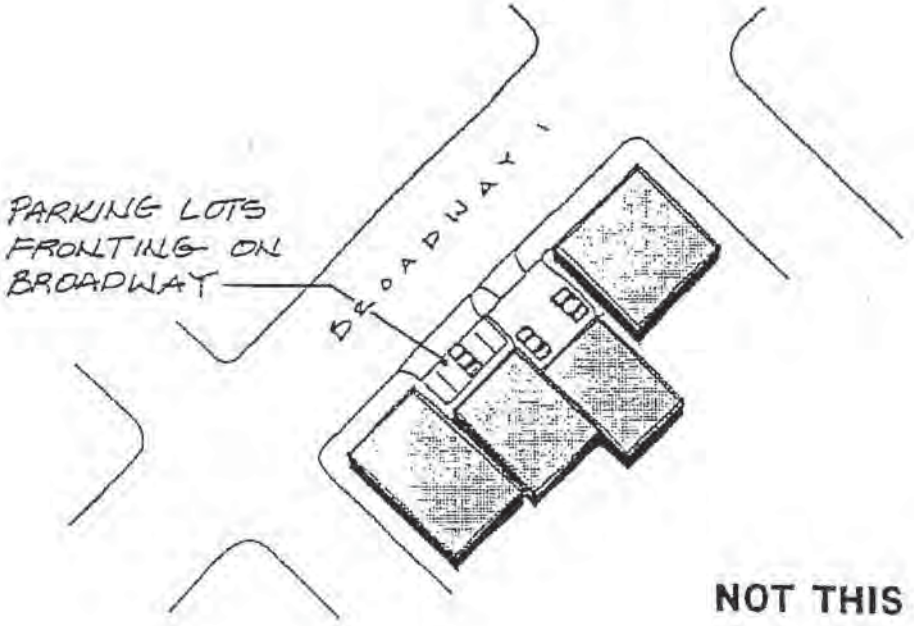

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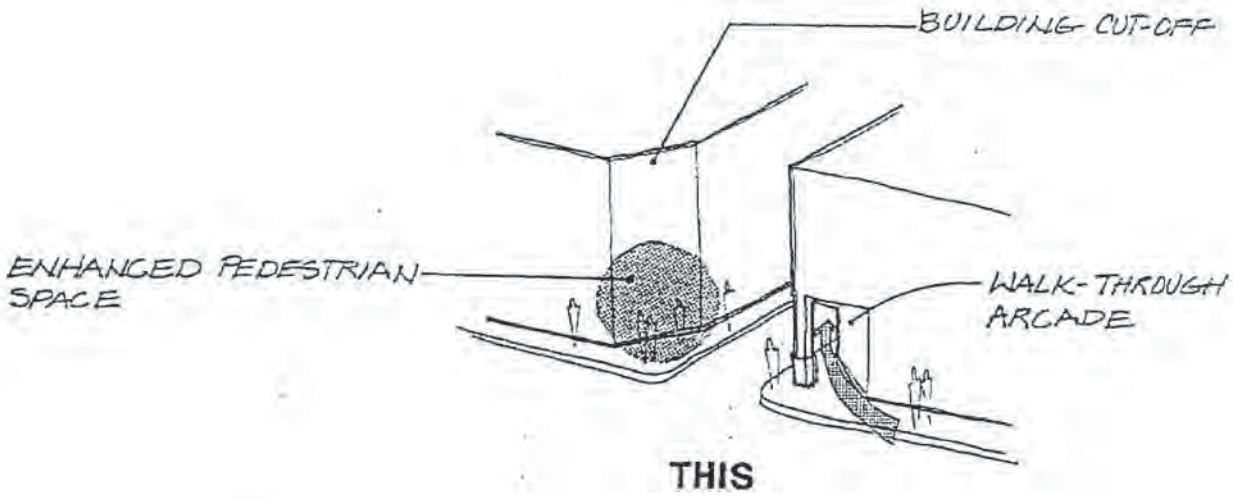
4. Corner Buildings: Corner buildings should incorporate architectural features such as building cut-offs and walk-through arcades.

Intent: Enhance pedestrian movement, driver visibility, and streetscape variety.



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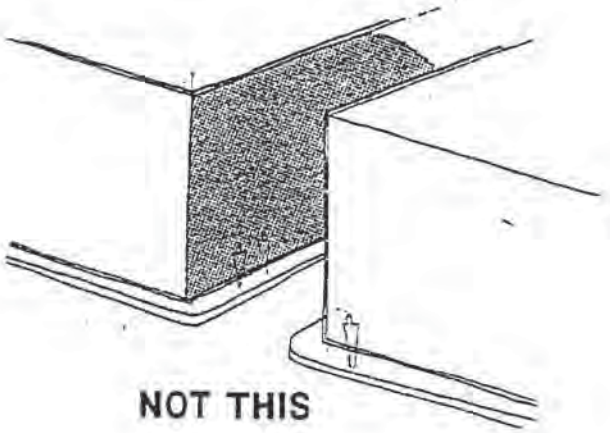

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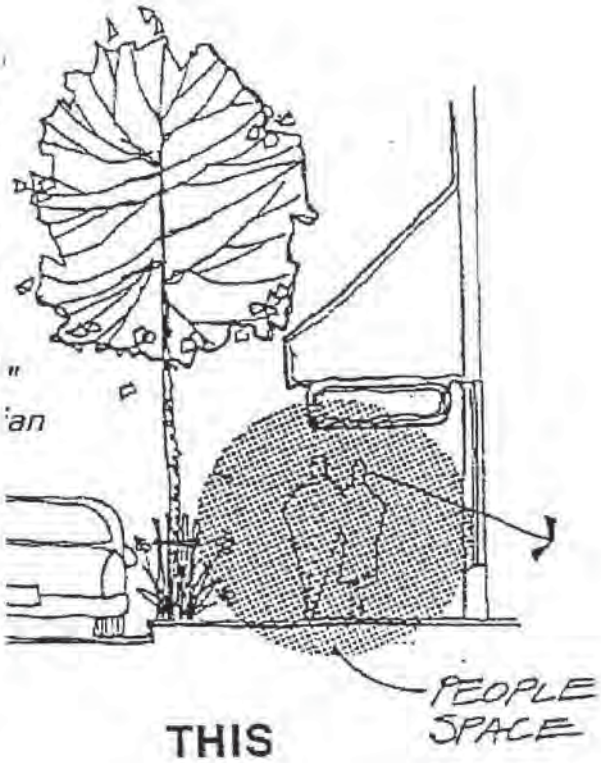
5. Pedestrian Orientation: Site and design buildings with facade variations and pedestrian-oriented streetscapes.

   * Encourage facade variations such as (but not limited to) recessed entry features, bay windows, planter boxes, sidewalk cafes, and plazas.

   * Provide streetscape with the creative use of lighting, street furniture, landscaping, and enhanced paving.

   Intent: Maintain Salida's "small town" character and create a strong pedestrian environment.

   Refer to page 1-73.



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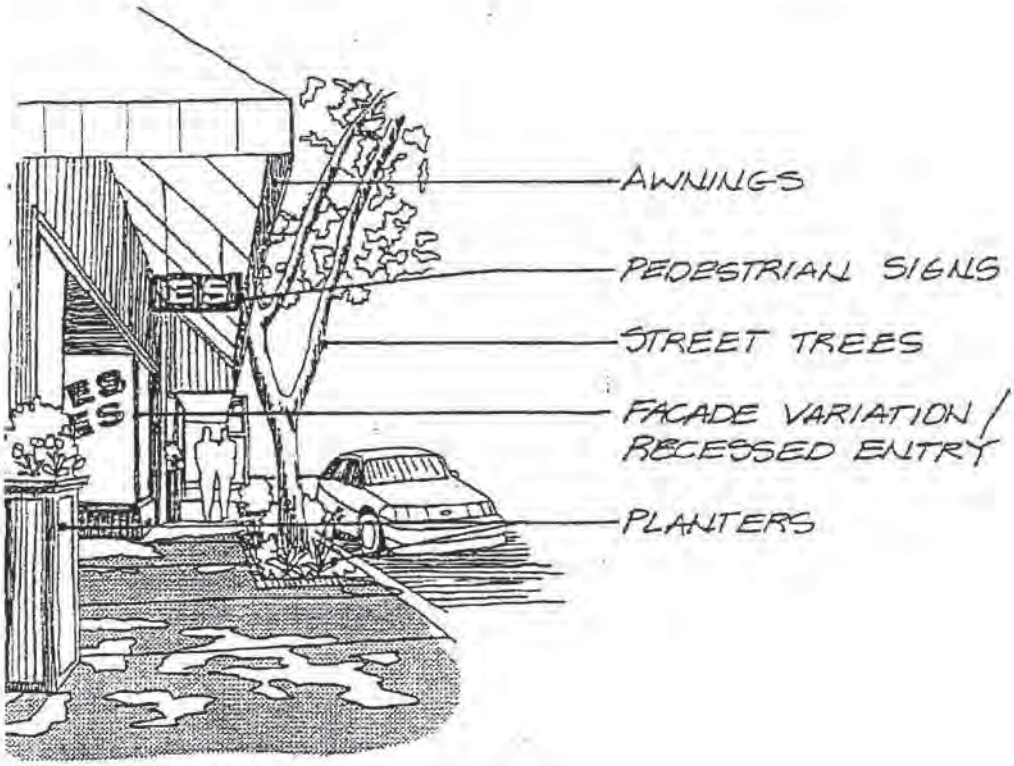

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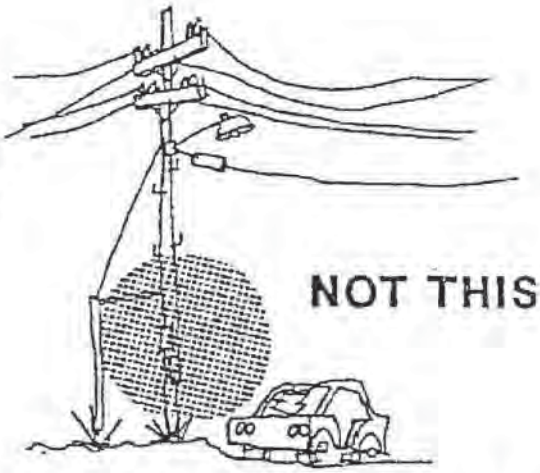
6. Sidewalks and Paving: Sidewalks, curbs, and paving design should reinforce a "small town" character rather than create an urban feeling.

* Provide continuous storefront sidewalks (minimum 10-feet wide), with integral curb and gutter throughout the downtown commercial areas.

Refer to Page 1-65.



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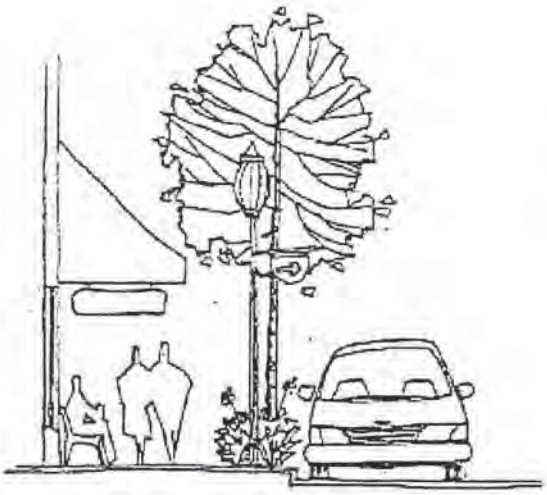


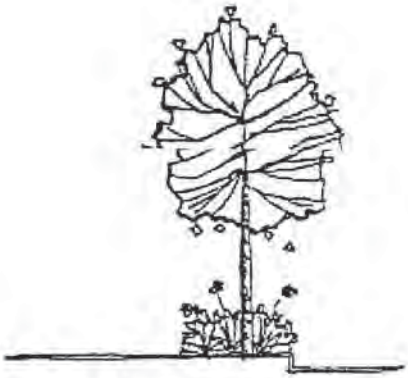
*

Encourage special paving, colored concretes, and the development of a consistent paving pattern throughout the downtown core.

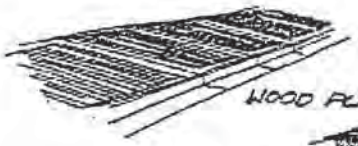
Intent: Reinforce a continuous pedestrian-oriented downtown street environment with a system of storefront sidewalks.

THIS

STREET LIGHTING AND SIGNAGE

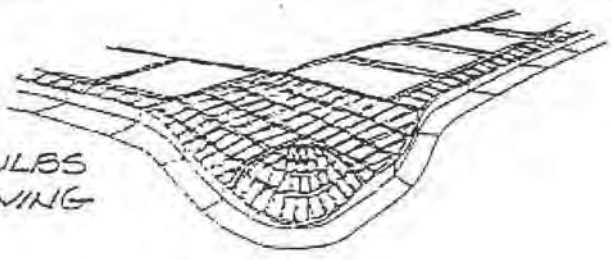


STREET TREE AND PLANTER

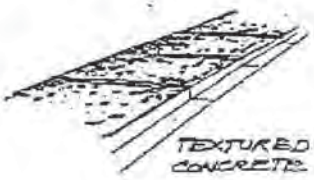


WOOD PLANK

COLORED CONCRETE



CORNER BULBS SPECIAL PAVING



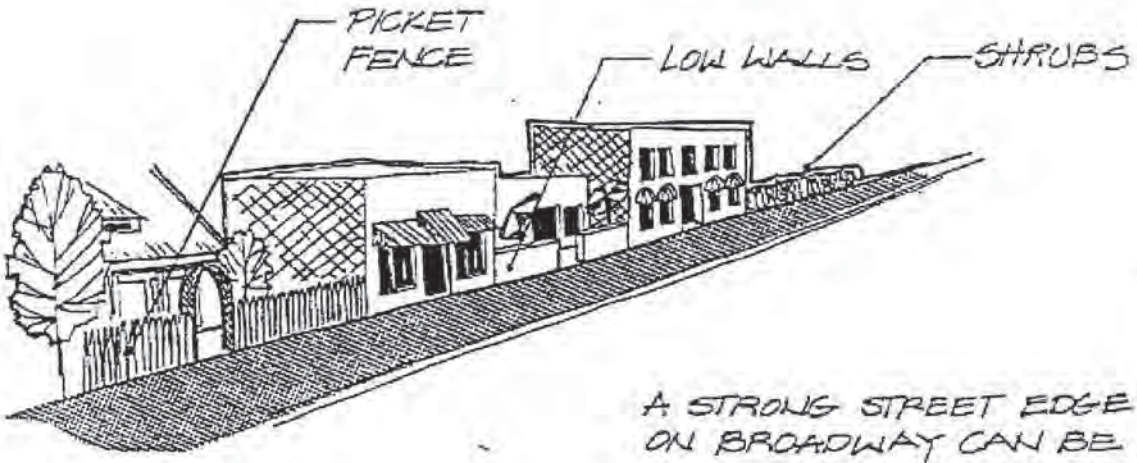
TEXTURED CONCRETE

* Develop sidewalks that create a series of paths and linkages to bring the community together.

  Intent: Make walking downtown from other parts of town an inviting and variable alternative to the automobile.

* Provide a continuous edge along Broadway with landscaping or a low wall/wood fence (Materials, page 1-68), where there is not a building adjacent to the sidewalk.

  Intent: Define the pedestrian space along Broadway with an uninterrupted edge along the sidewalk.



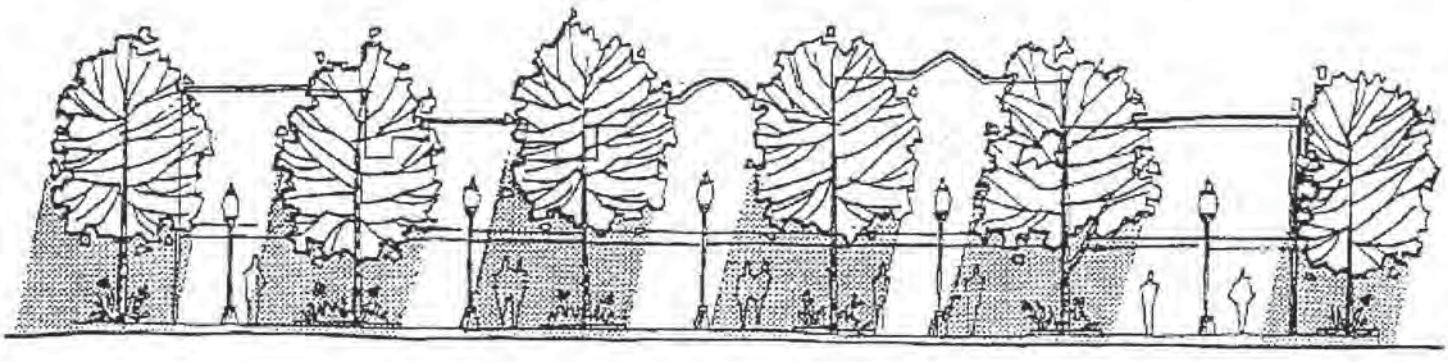
A STRONG STREET EDGE ON BROADWAY CAN BE MAINTAINED WHERE SETBACKS VARY BY USE OF LOW WALLS, FENCES AND SHRUB AREAS

7. Landscaping: Creative use of landscape will soften building edges, enhance pedestrian scale, and the overall visual appearance of the downtown core.

   * Encourage the use of planters, planter boxes, and street trees along Broadway.

   * Provide street trees in front of every business or every 50 feet, whichever provides the greatest number of trees. Condition new developments and rehabilitation of existing buildings to provide street trees.

   Intent: Provide scale, softer edges, people spaces, shading definition of sidewalk space, aesthetics, and to add to the overall character of the downtown core.



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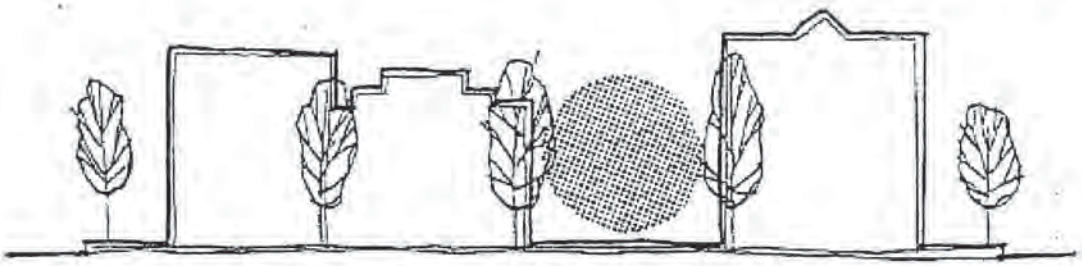
8. Infill: Vacant lots detract from the downtown and the pedestrian experience. Efforts to infill the empty lots should be made.

Intent: Develop a uniform facade along Broadway to enhance the pedestrian experience.

Refer to pages 1-65 and 1-82.

VACANT LOT DISRUPTS DOWNTOWN PEDESTRIAN EXPERIENCE



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B. Architectural Guidelines

Integration of certain architectural features in the downtown buildings will restore and enhance Salida's historical past. Salida is a small agricultural town with a substantial historical influence from the railroad. The following architectural guidelines promote elements of a typical California agricultural/western town with historical railroad influence.

1. Desirable Features:

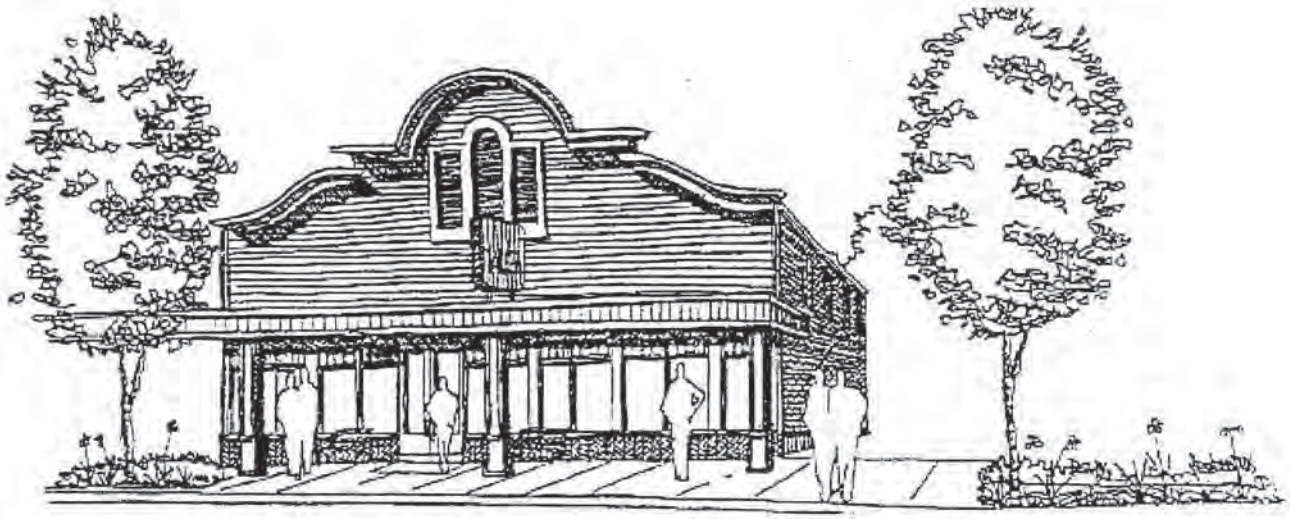
* Second story balconies and decks
* Decorative parapets and varying roof lines
* Plaster or lap siding, both in light tones
* Recessed entries/facade relief
* Signage with historic significance

2. Undesirable Features:

* Shingled awnings or canopies
* Mansard roofs
* Dark exterior building colors
* Blank facades/Use of inappropriate facade materials

3. Materials: Require materials that are compatible in quality, color, texture, finish, and dimension to those existing downtown.

* Stucco (smooth finishes)
* Wood as primary and accent
* Brick as primary and accent
* River rock as primary and accent
* Unglazed tile as accent or roofing material
* Split-faced masonry block
* Canvas/cloth awnings and canopies

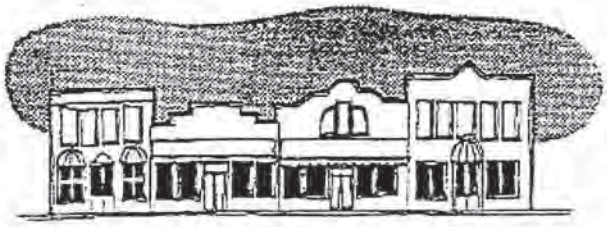


4. Rhythm, Massing, and Scale: Rhythm is a pattern reflected in the relationships of buildings or the components of a building to one another. Consistency in the massing and scale of buildings will begin to establish an appropriate rhythm for Salida's Downtown Commercial District.

   * The massing of adjacent buildings should complement each other by maintaining relative consistency. The mass of the structure should be controlled by incorporating vertical and horizontal articulation that is consistent with adjacent buildings.

   * Building scale refers to the size and shape of a building as well as the building's components (i.e., windows, doors, canopies, etc). The scale of building components should relate to the scale of the entire building, and building scale should be consistent throughout Salida's Commercial District. There should be greater emphasis on creating a building scale which will emphasize human scale.

   * Human Scale: Relationship between the size of a building and its features to the size of a person is important to a downtown's character. Buildings and building elements should be intimate and at human scale at the street level.



BUILDINGS COMPLIMENT EACH OTHER WITH CONSISTENT SCALE, WIDTH AND MASS

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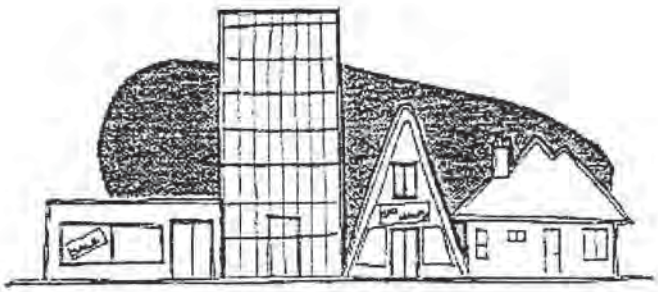
BUILDINGS TOTALLY UNRELATED



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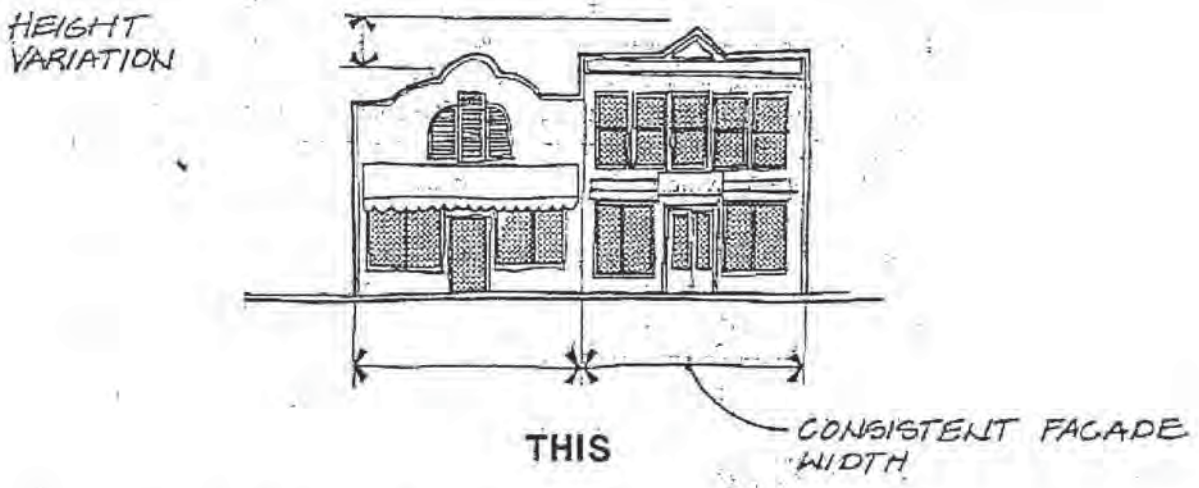
5. Height and Width: Buildings should vary in height and width while remaining within the parameters of those set for downtown.

   * Require new buildings to be constructed at heights that are compatible with the height of existing adjacent buildings.

     Intent: Create an interesting and appropriate roof line as a backdrop to Broadway.

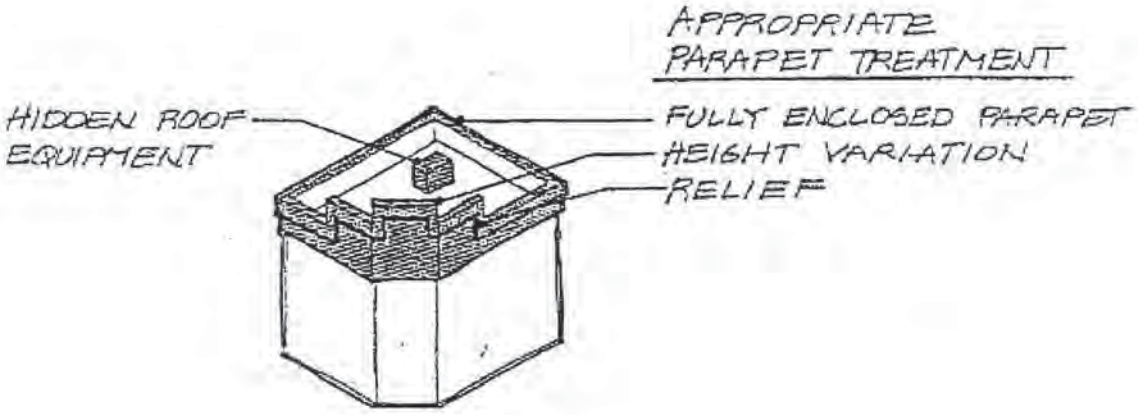


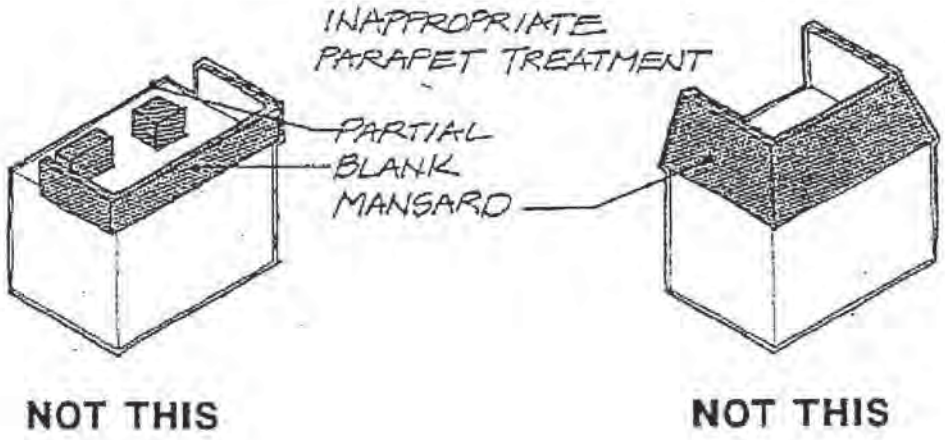
6. Proportion: The relationship between the width to height of the front elevation of a building must be in proportion to those of the building's neighbors.

7. Roofs: Roof lines of new structures should conform to existing parapet and false front roof lines found in the downtown and reflect the western theme of an agricultural/railroad town.

* Avoid blank parapets
* Provide relief and detail
* Conceal roof equipment
* Avoid pitched roofs or mansards

Intent: Encourage roofs which are consistent with existing roofs or buildings with historical significance.





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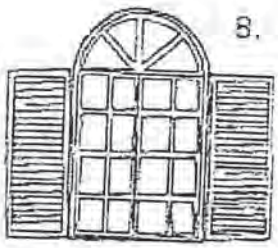
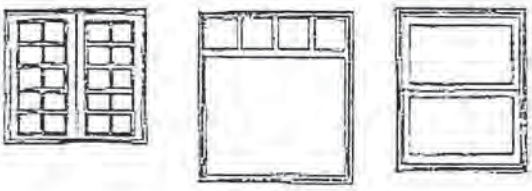
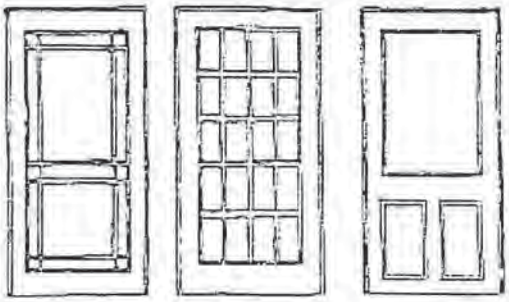


Doors and Windows: The style and proportions of doors and windows are very important elements for setting the character and style of buildings.



PAINTED WOOD FRAMES
CLEAR GLASS



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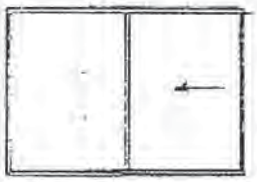
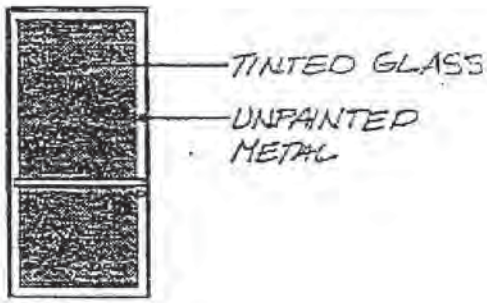


GOLD OR SILVER METAL FRAMES
HORIZONTAL SLIDER



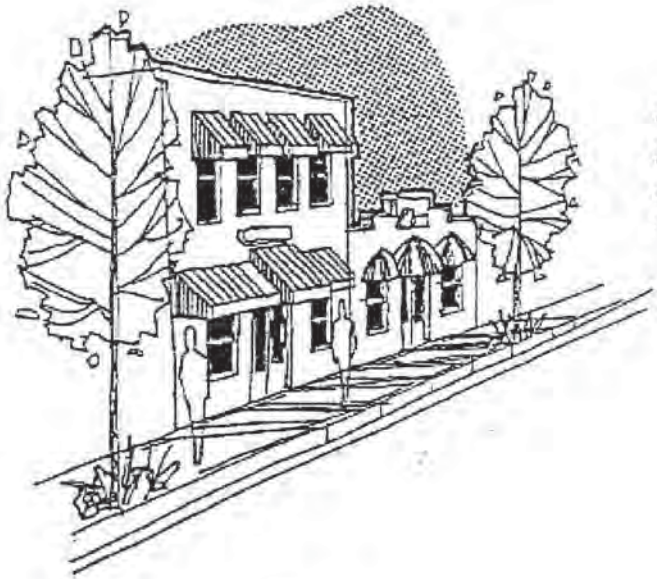
NOT THESE

* Provide windows at street level to create links between pedestrians, streetscape, and businesses.

  Intent: Add variety and detail to buildings while discouraging use of plain and inappropriate doors and windows.

* Proportion of Openings Within Facade: Width to height relationships of new building's windows and doors must be in proportion to adjacent buildings. Windows should not extend all the way to the ground. Provide a minimum 12" base.

9. Awnings and Canopies: Encourage awnings and canopies for use over building openings. In addition to weather protection and shade, they add character, color, interest, scale, and identity to individual buildings. (See page 1-68 for desired awning and canopy materials).



AWNINGS CREATE BUILDING RELIEF AND PEDESTRIAN SPACE

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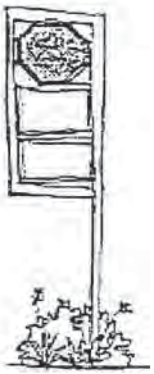
10. Signs: Require appropriate signage that relates to the size and scale of the business, to the pedestrian scale, and enhances the overall downtown image.



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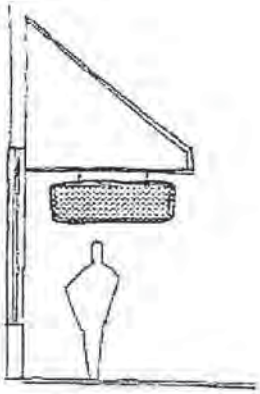
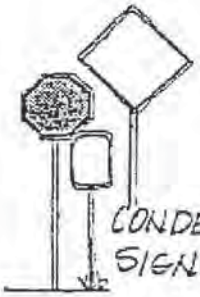
* Discourage building signs that advertise merchandise. They contribute to a cluttered and confusing streetscape. Discourage signs above the roof or parapet line.



PEDESTRIAN SIGNS

* Suggested sign types are: Flush-mounted signs with individual cut letters, hanging signs, window signs, icon/graphic signs, externally lighted neon tube signs, and awning signs.



CONDENSE PUBLIC SIGNAGE

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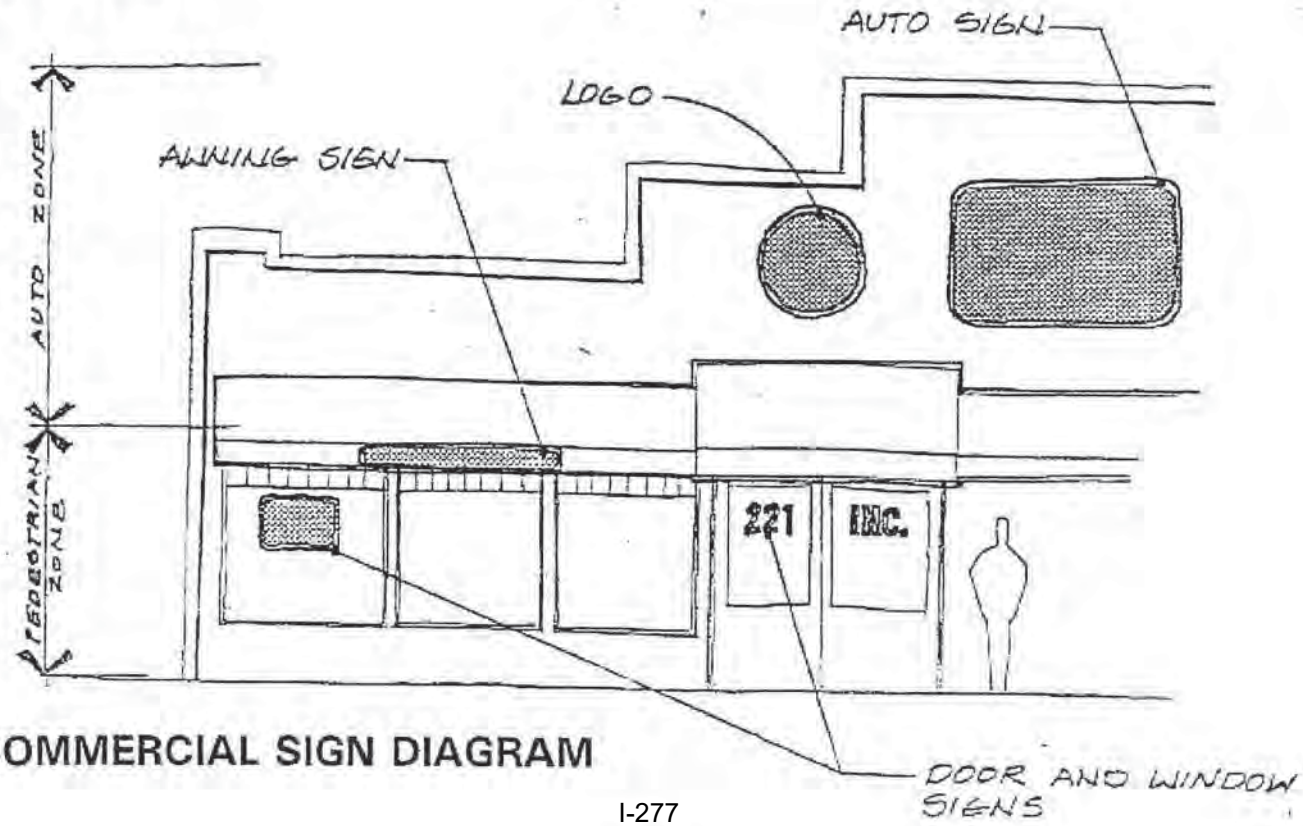
* Locate signs within the "Auto Zone" or the "Pedestrian Zone" described below.

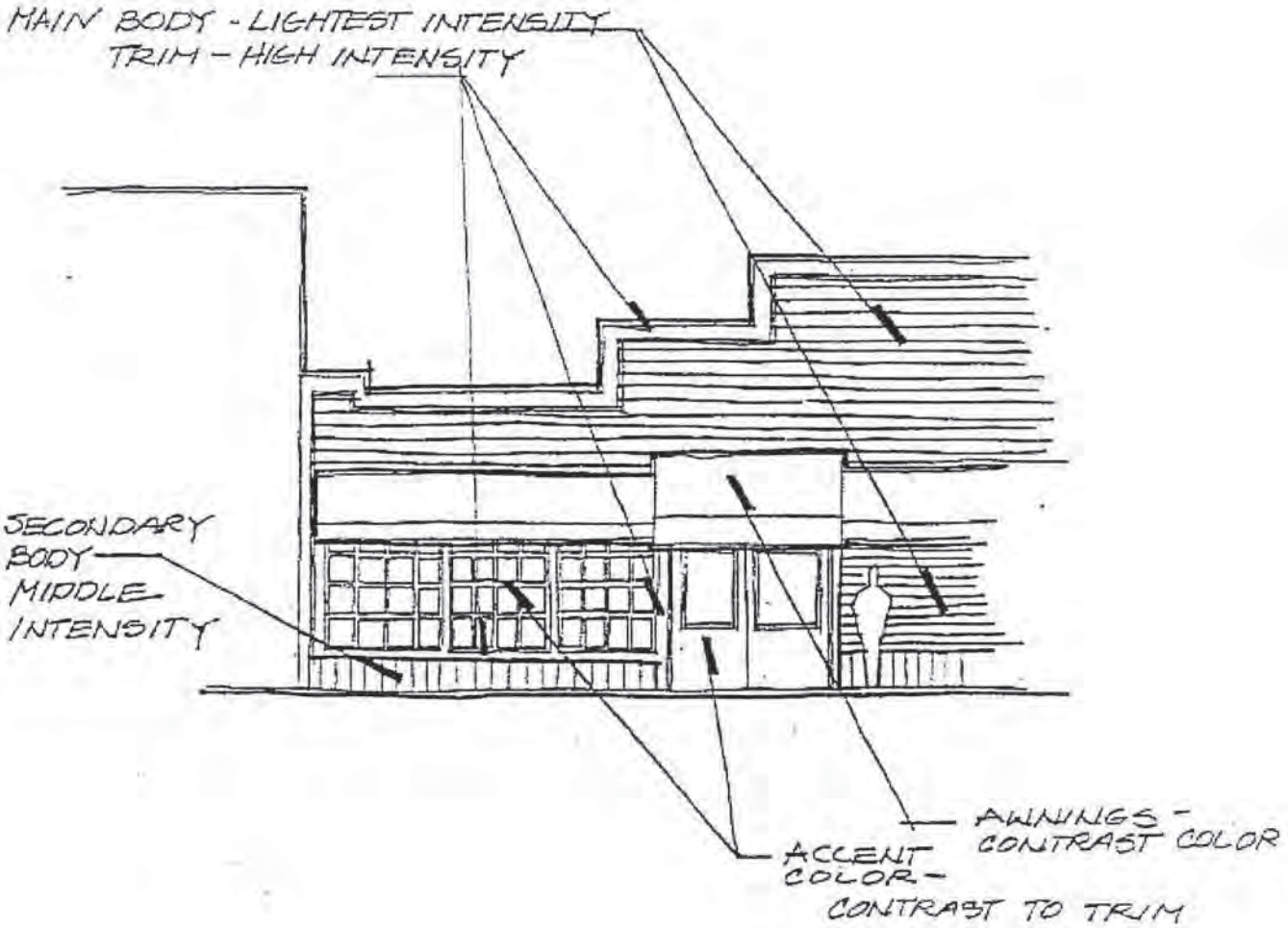
Intent: Attractive and informative pedestrian-oriented streetscape and shopping area.



COMMERCIAL SIGN DIAGRAM

11. Colors: Colors and materials used on buildings are important in creating variation while maintaining an overall consistency in the downtown.

* Require larger buildings to be painted with subtle colors.
* Discourage intense hues of color and the use of more than one vivid color per building.
* Avoid colors that create disharmony with other buildings.
* Accept colors that relate to the natural materials of the building.



BUILDING PAINTING DIAGRAM

* Allow the use of contrasting colors to accentuate building entry features and architectural details.

  Intent: Prevent inappropriate and unattractive painting schemes in the downtown area. Encourage consistency in overall color palette for the downtown area.

12. Renovations and Remodeling: Encourage buildings which do not meet architectural design standards to conform by facilitating cosmetic changes such as: repainting, new signage, landscaping, cloth awnings, addition of street trees, and removal of undesirable features.

    Refer to pages 1-66, 1-73, 1-74, and 1-75.

    Intent: Updating existing downtown buildings so they are consistent with new development.

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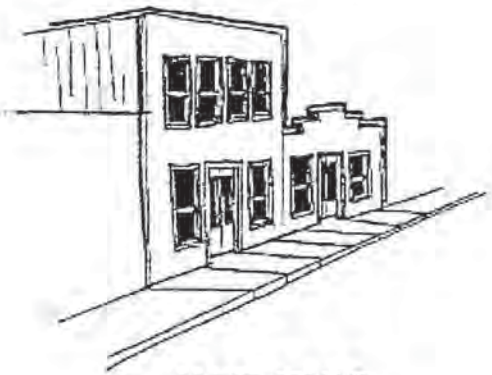

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C. Downtown Streets

Broadway, as the main street in the commercial area, is substandard. The street's current condition hinders circulation, disrupts parking, endangers pedestrians, and creates a negative image of downtown Salida.

Broadway has a 100-foot right-of-way (ROW). The existing space that is created by this ROW is too large to achieve pedestrian orientation along the street. Enhancement of the existing median by the addition of street improvements will restore human scale.

Salida's commercial streets should provide for circulation, parking, pedestrian movement, and create an aesthetically pleasing image.

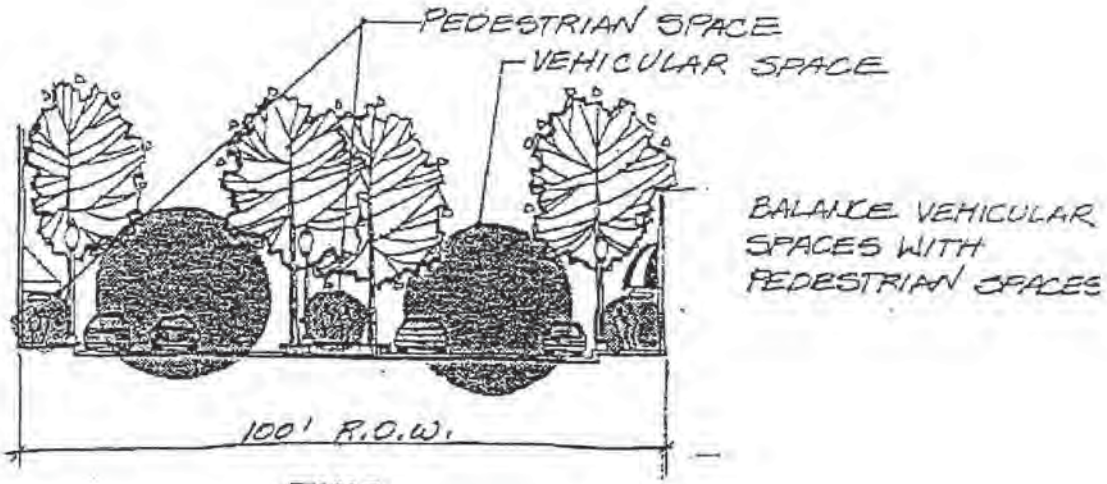
The following street guidelines are intended to improve circulation, parking, pedestrian movement, aesthetics, and promote safety.

1. Street Improvements and Design: Repave existing commercial streets, provide line striping, curbs, gutters and sidewalks, and on-street parking (either parallel or angled).

   Refer to pages 1-63 and 1-64.

   * Design streets to safely accommodate all forms of local transportation such as trucks, cars, bicycles, and pedestrians.

     Intent: Promote walking and bicycle riding as energy efficient alternatives to automobiles; also, minimize the impact of delivery trucks on traffic flow and parking.



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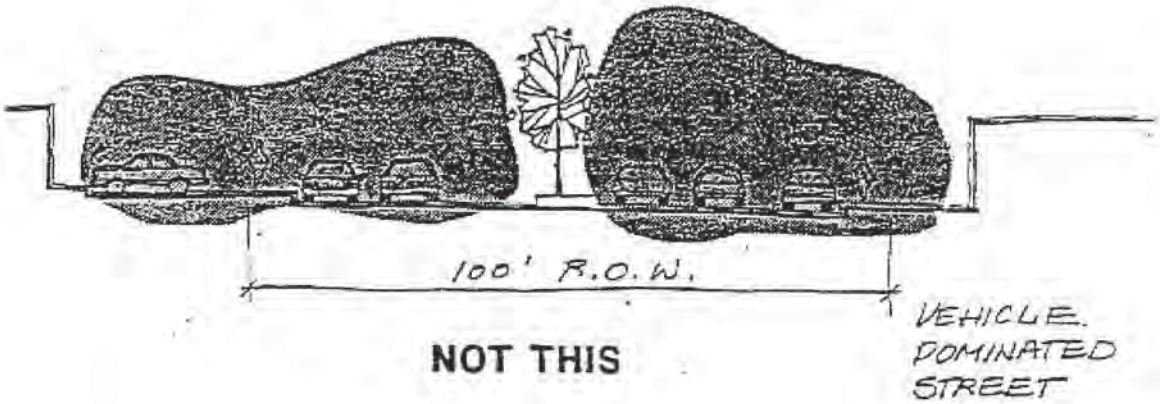

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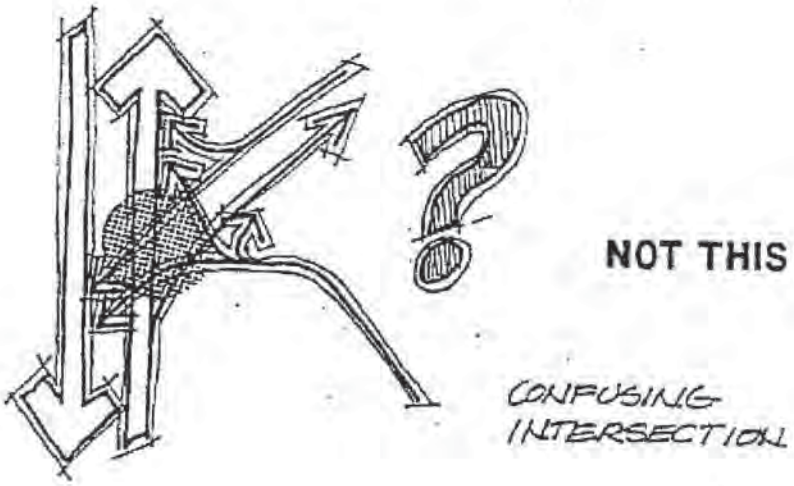
2. On-Street Parking: On-street parking provides a buffer between the pedestrian and vehicular traffic and is essential to the economic vitality of the downtown district.

   * Provide designated on-street parking wherever possible on Broadway. Every effort should be made to maximize the number of available stalls (i.e., diagonal on-street parking).

     Intent: Maximize convenient parking opportunities in the downtown area.

3. Circulation: Re-engineer intersections where necessary to provide safer and more logical traffic circulation.



4. Traffic Speed: Design roads to encourage traffic flow at a safe rate of speed. Post speed limit accordingly.

   Intent: Slow traffic to allow for safe pedestrian movement and parking in and around Broadway.

   * Clear signage, posting speed limits, and legal enforcement on Broadway.

   * Stop sign placement at all intersections on Broadway.

5. Median Treatment: The existing median is a large unimproved area located in only a small section of Broadway. The median is currently used as a make shift parking lot and contains mature landmark trees.

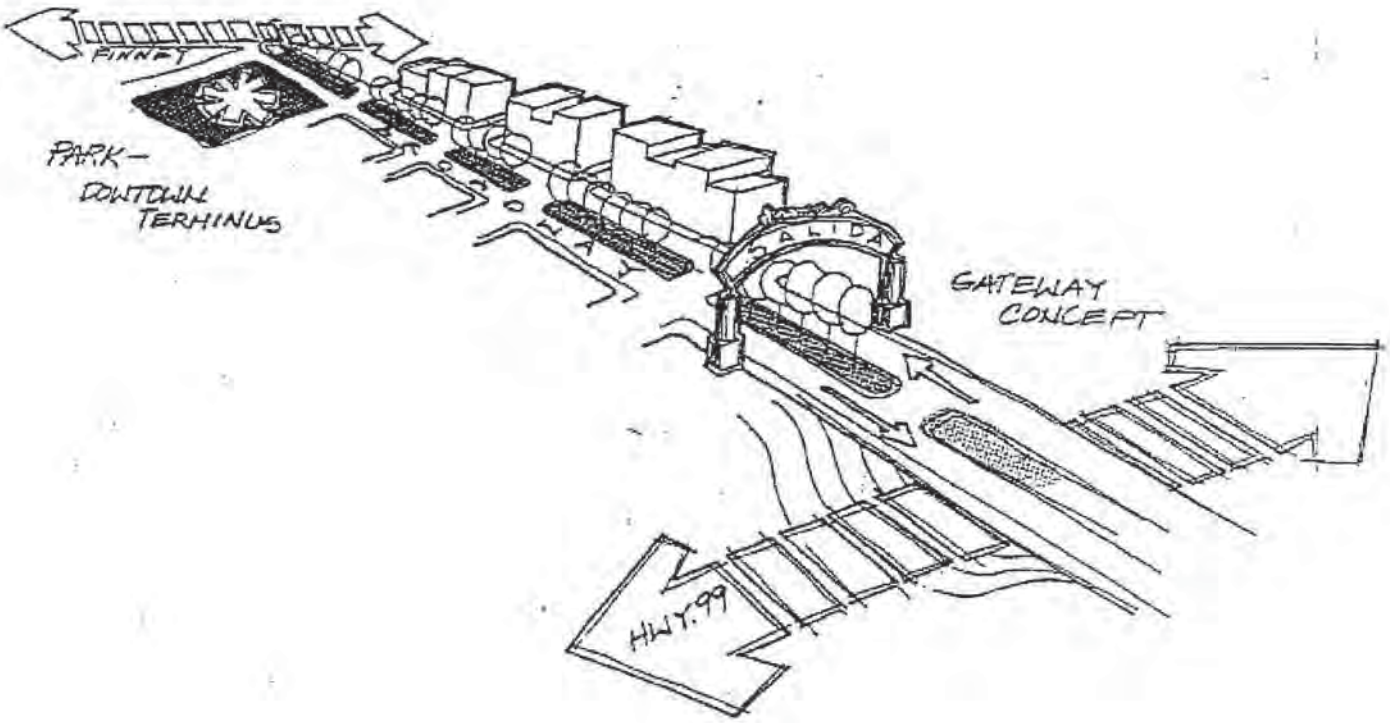
* The median design should extend to other portions of the Broadway corridor. Curbs, sidewalks, lawn, trees, and other park-like amenities should be incorporated into the median design.

* Care to existing median trees should be observed during any improvements to the median.

* The median should provide aesthetic and visual cohesion to the downtown.

Refer to page 1-105.

Intent: Balance vehicular environment with the pedestrian environment to create a balanced street environment.

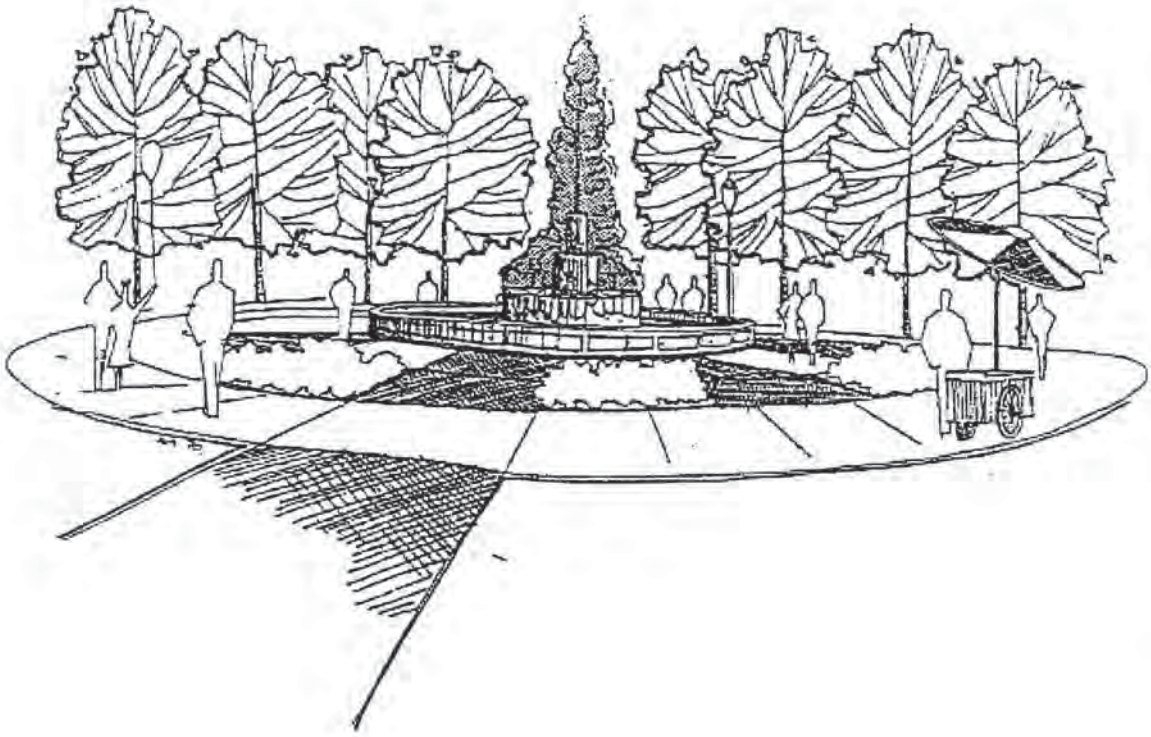


DOWNTOWN CONCEPT

6. Gateway: The intersection of Broadway and Old Highway 99 provides an opportunity for commercial development, and also could provide a gateway to downtown.

   Intent: Gateway to serve as a community landmark to highway travelers, as well as define the edge of the downtown commercial area.

7. Landmarks: Landmarks serve an important function in defining spaces and increasing the identity and orientation of an area. Encourage appropriate use of landmarks throughout Salida.



D. Economic Development

According to the Stanislaus County Redevelopment Feasibility Assessment, Salida's downtown is ideally positioned to take advantage of growth occurring on the community's fringes. Therefore, Salida should develop a diverse and strong business community.

1. New Businesses: Encourage new viable businesses and services to locate in the Salida downtown. Refer to page 1-67.

   Intent: Create an economically viable commercial and service center in downtown Salida.

2. Mixed Uses: Encourage a variety of mixed uses in the downtown (commercial, service, residential, professional).

   * Encourage residential development downtown to increase the hours of activity in the area.

   * Implement vertical zoning downtown that restricts first floor residential development.

   Intent: Provide a dynamic environment to accommodate a variety of lifestyles, promote economic growth, and promote and provide affordable housing.

MIXED USE DEVELOPMENT

II. NONRESIDENTIAL DISTRICT

Outside Salida's main downtown commercial district, there are several commercial, office, public service, and industrial areas. The following guidelines apply to all areas that are outside the Broadway "downtown commercial" core and are not zoned residential.

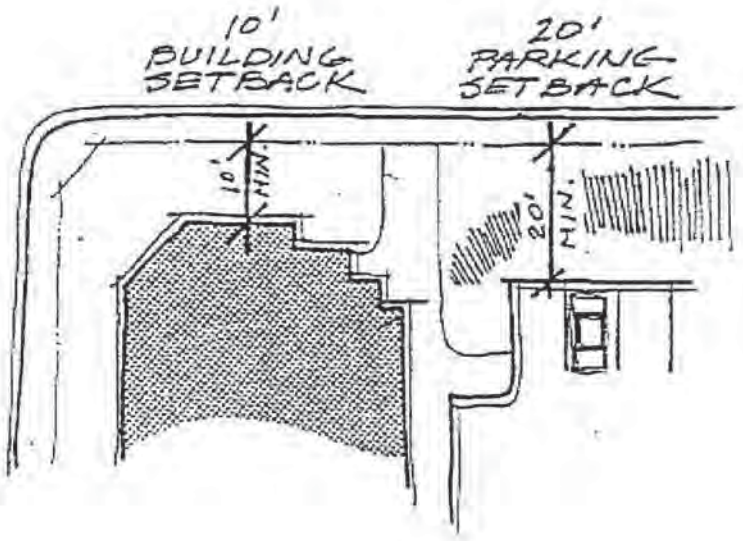
These areas are lacking in site planning, architectural consistency, and road improvement standards. The guidelines will help obtain basic consistencies to enhance and improve pedestrian movement and safety, traffic flow, parking, and aesthetic appearance of these areas.

Goal: Create an aesthetically-pleasing, secondary commercial district that functions economically while enhancing Salida's "small town" character.

A. Site Planning

1. Setbacks: Require a 15-foot minimum street setback for nonresidential buildings and a 15-foot minimum setback for parking lots.

   * Recommend use of low walls of native stone, wooden rail fences, berms, and native rock in landscape areas along streets to provide visual definition and interest.

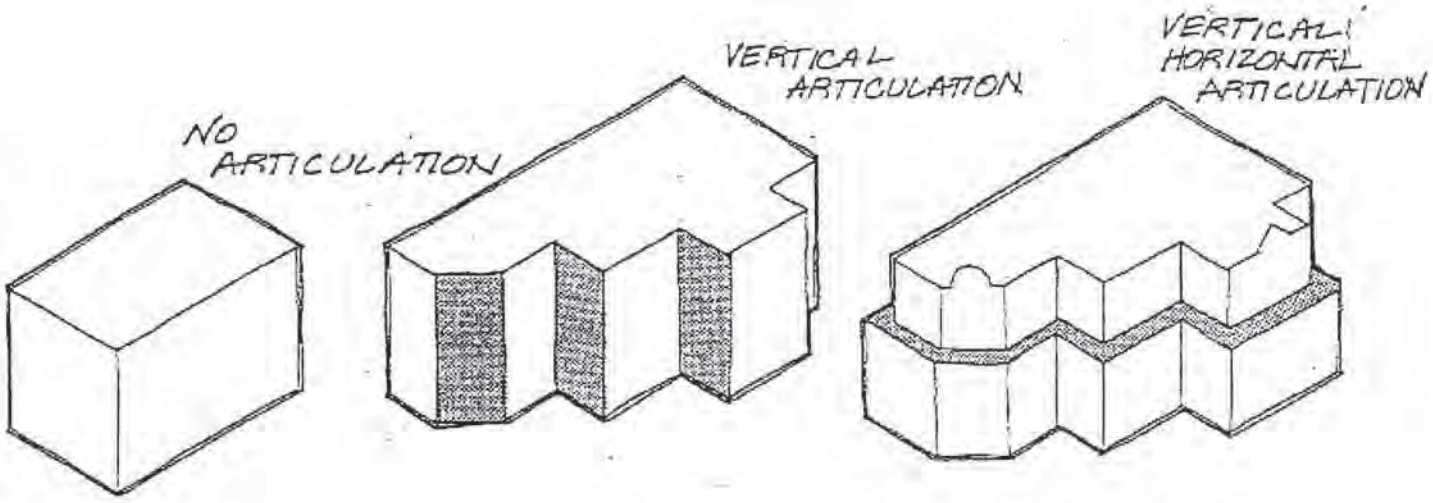


2. Building Location: Locate buildings adjacent to at least 25% of the road to minimize parking lot frontage. Provide a minimum of one public street entrance. Relate to adjacent buildings and avoid double blank walls that face each other at a property line.

   Intent: Avoid parking lot dominated streetscape of all nonresidential areas.

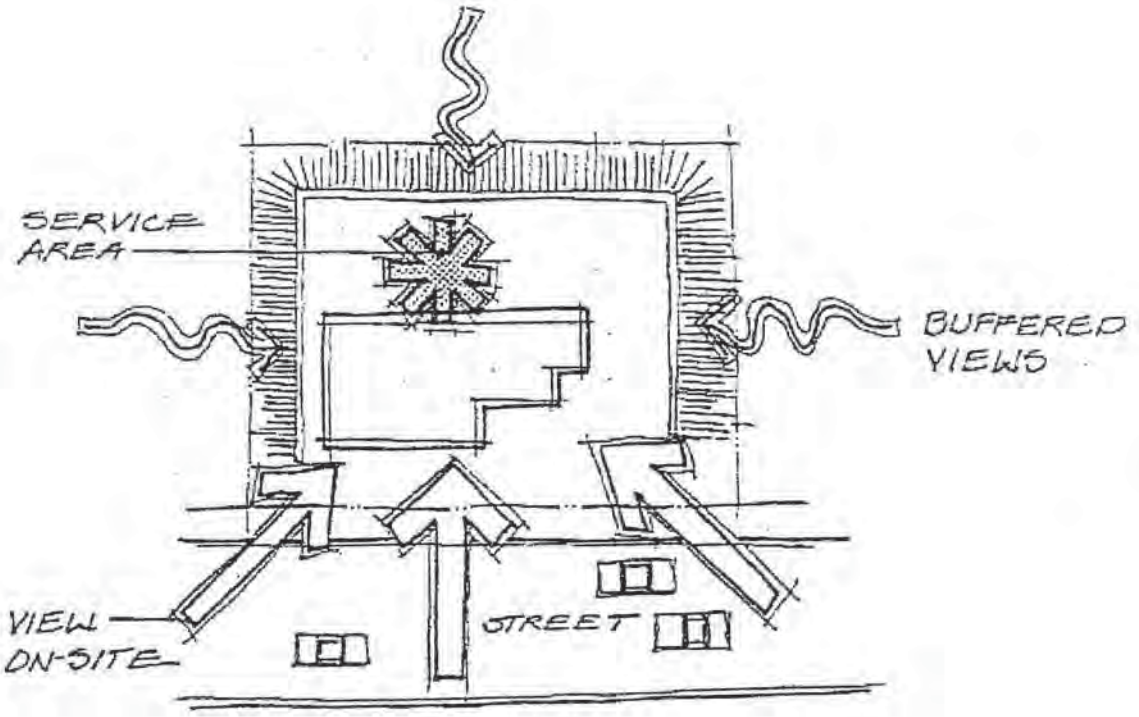
3. Building Coverage: Limit all site disturbances involving grading, building, and parking lots to 70% of the total site, excluding setbacks. The remaining should be left in open space and landscaping.

4. Building Footprint: Articulate building footprints by use of insets, corners, and jogs that emphasize pedestrian movement and interest.



5. Service Areas: Orient buildings to hide all service and storage areas from public street view. Incorporate these areas into the main building whenever possible.

6. Utility Areas: Locate utility areas such as meter boxes, water meters, trash dumpsters, etc., to the rear of building, or screen them from street view.



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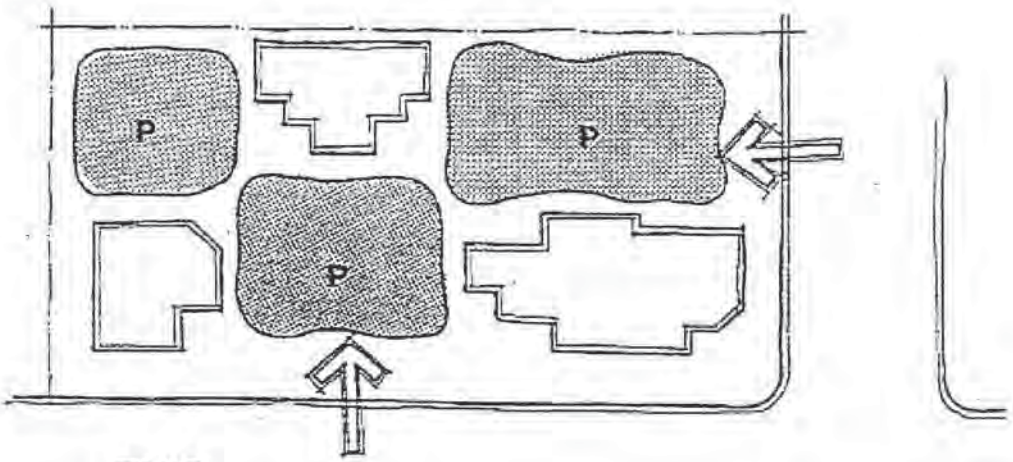
7. Parking Lot Design: Encourage use of landscaping and enhanced paving surfaces (i.e., stamped concrete, paver tiles, etc.), to minimize large expanses of uninterrupted pavement areas.

   * Orient parking aisles perpendicular to the building entrance.

   * Inter-relate parking lots (whenever possible), with adjacent parcels to provide pedestrian and vehicular connection.

   * Lot Building Transition: Maintain a transition space between parking lot and building. Require a 5-foot wide minimum space with landscaping.



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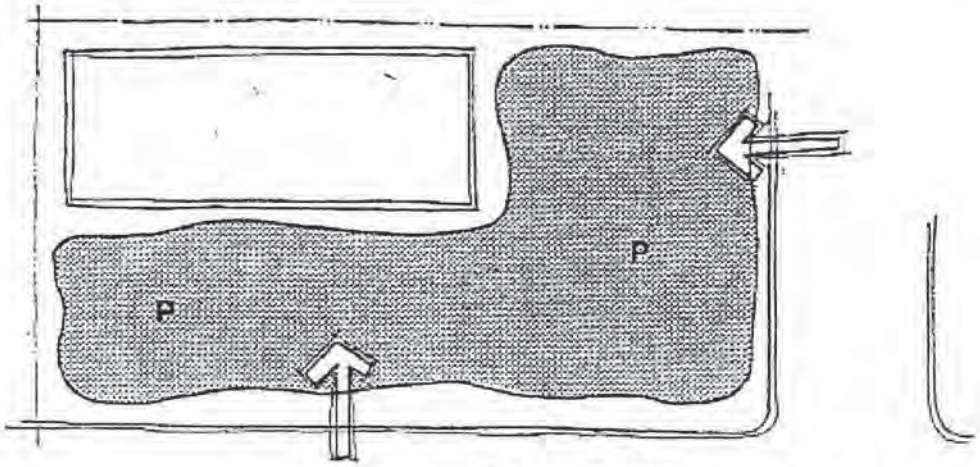


NOT THIS

* Landscape: Encourage canopy tree landscaping in parking areas, and special landscaping treatment for parking lot entrances.

* Provide:

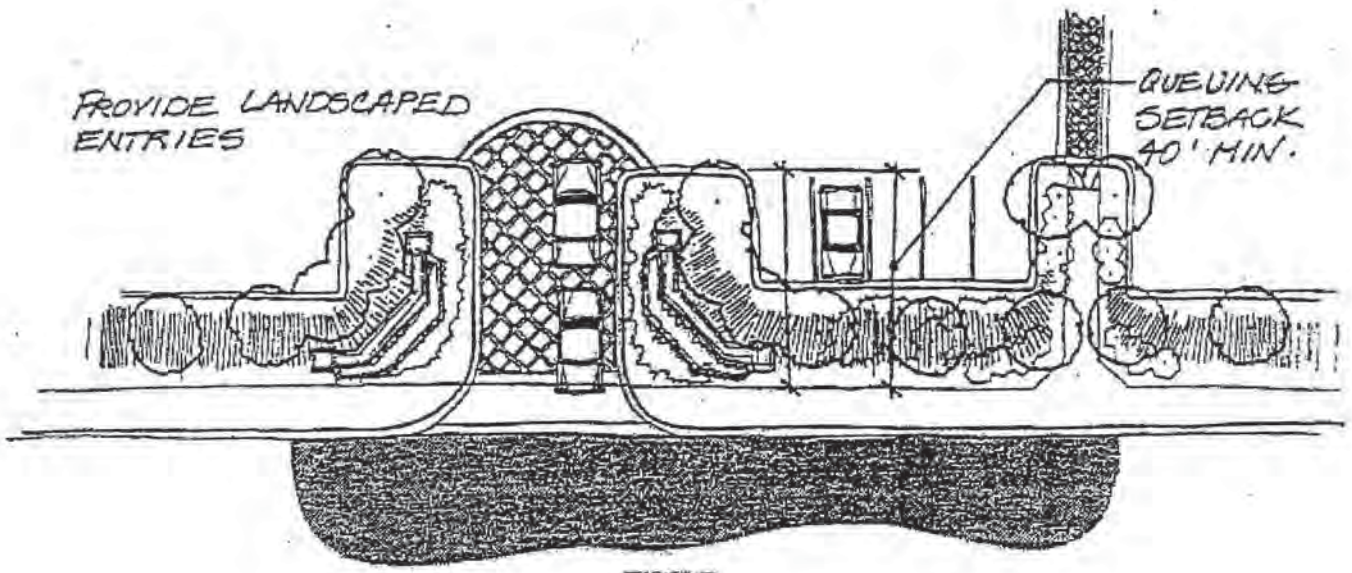
  - Planted island or breaks (five-foot wide minimum) every six spaces
  - Two trees each break
  - 15-gallon minimum tree size
  - Two trees at the end of each row of spaces

8. Entry Design: Locate entries to corner buildings on side streets (less busy). Locate parking entries at least 150 feet from intersections.

* Require parking lot entries for commercial developments to be at least 200 feet apart and a minimum width of 25 feet. Combine driveways for adjacent parcels when feasible.

* Require a 40-foot setback from the curb for the first parking stall, or first aisle, to provide a waiting space (queuing) for vehicles leaving and entering lot.

Intent: To provide safety and easy circulation for both pedestrian and vehicle.



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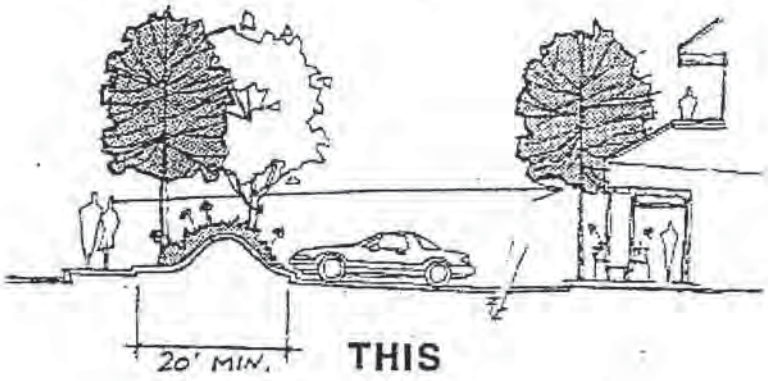
9. Screening: Provide landscape screening to parking lots.

* Shrub areas between major streets and parking lots
* Grade differential between public street and parking lots
* Low wall (3' 6" maximum height) with landscaping



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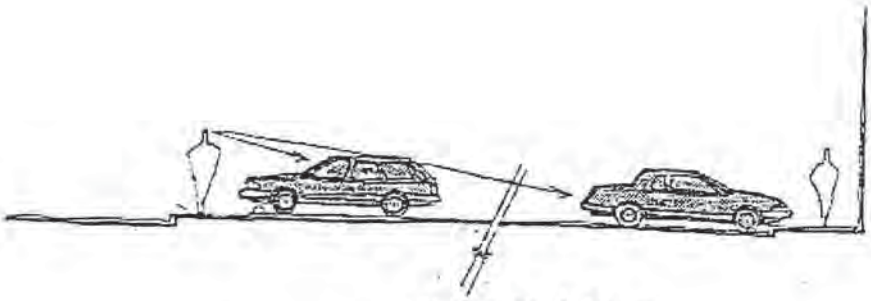
PARKING LOTS SHOULD SETBACK 20 FEET (MIN.) AND PROVIDE SCREENING WITH LANDSCAPING OR BERMS



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B. Architectural Guidelines

The town of Salida is currently a mix of architectural styles. The town history denotes that a small agricultural theme is appropriate. The following architectural guidelines will help maintain and emphasize the agricultural vernacular in the nonresidential areas:

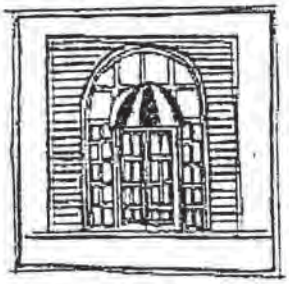
1. Desirable Elements:

* Richness and texture (see Materials Guide, page 1-90)
* Significant wall articulation and interest (insets, jogs, canopies, etc.)
* Distinctive massing (barn, western false fronts, multi-level, multi-planed pitched roofs)
* Wide roof overhangs
* Distinctive entries
* Shingled awnings or canopies

2. Undesirable Elements:

* Highly reflective surfaces
* Large, blank, unarticulated wall surfaces
* Unpainted concrete block
* Extensive flat roofs
* Unarticulated roof lines and parapets
* Irregular or contemporary window shapes
* Shingled awnings/canopies

STORE FRONTS



ENTRIES

PEDESTRIAN SPACE

3. Appropriate Materials:

   * Stucco (smooth finishes)
   * Wood as primary and accent
   * Brick as primary and accent
   * River rock as primary and accent
   * Unglazed tile as accent or roofing material
   * Split-face masonry block
   * Cloth/canvas awnings

4. Inappropriate Materials:

   * Large uniform expanses of metal or aluminum siding
   * Log cabin look
   * Unfinished concrete block /unfinished concrete tilt-up
   * Painted or white brick
   * Prefab metal structures
   * Lava rock facades

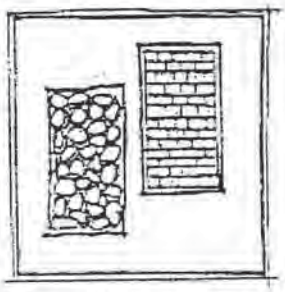
5. Height and Scale: Height and scale of new development should relate to surrounding development. New development should provide transition in height and scale to adjacent development.

6. Color-Dominant/Accents:

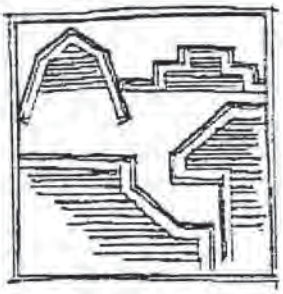
   * Dominant Color: Use earth tone colors for the dominant building color.

   * Accent Color: Highlight the dominant color with accent colors to provide contrast or harmony with dominant colors.

Refer to page 1-75.



STONE AND BRICK

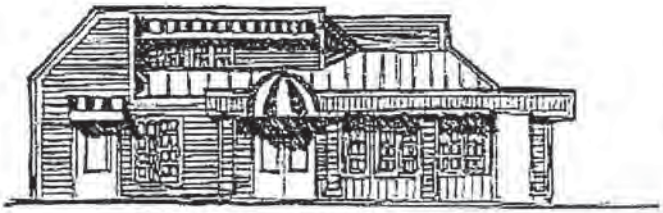


ROOF LINES

BALCONIES

7. Solid to Void: Main (front, main building entry) facade construction should be at least 30% transparent. Avoid blank or solid end walls that are visible from public view. Provide elements such as awnings, cornice bands, arcades, trellises, etc., to avoid blank or solid walls which are visible from off site.

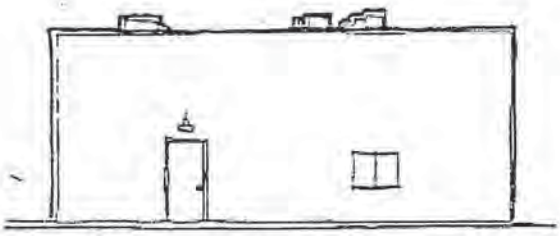
8. Roofs: Flat or sloped roofs are acceptable while partial mansard roofs are not. Design roof form to work with the building mass and facade to produce a consistent and integrated composition. Roof design should conceal rooftop equipment.



POSSIBLE USE OF TEXTURE, RELIEF, ARTICULATION (WALL AND ROOF)

THIS

100% SOLID
NO TEXTURE
NO RELIEF
NO ROOF, WALL ARTICULATION



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C. **Streets**

Improvement to streets in the nonresidential districts of Salida should increase convenience and safety and provide alternatives to existing primary routes (Broadway).

Special attention should be given to "Old" Highway 99 (Salida Boulevard). Because of its proximity to the "New" Highway 99, the ROW of "Old" Highway 99 holds the potential for commercial, retail, and service development. Improved traffic circulation will increase development opportunities within this area.

III. RESIDENTIAL

The residential portion of the redevelopment area consists of two major eras of homes. Residential Area A consists mostly of homes built in the early 1900's and the other (Residential Area B), includes homes that were built in the 1960's (see area map, page 1-58). The condition of houses varies from good to deteriorating and abandoned. The residential neighborhoods of Salida should provide adequate housing and satisfactory quality of life for people of all ages, incomes, and social backgrounds, while maintaining the "small town" scale and style.

The following guidelines address these residential neighborhood areas. These guidelines are more generalized than the "Downtown Commercial District" and the "Nonresidential District" guidelines. The guidelines' intent is to direct new infill development, as well as the renovation of existing housing stock in a way that preserves and enriches Salida's "small town" character and maintains the character of the two eras in which the majority of the homes were built.

The guidelines also address concerns over how the newer residential neighborhoods interface with the older residential neighborhoods. Currently, there are residential subdivisions being built adjacent to the established residential neighborhoods that have incorporated +6-foot solid perimeter walls with homes that turn their back to the street. By doing so, isolated enclaves of neighborhoods are created that do not visually or functionally relate. These guidelines will encourage neighborhood designs that provide visual, pedestrian, and vehicular links.

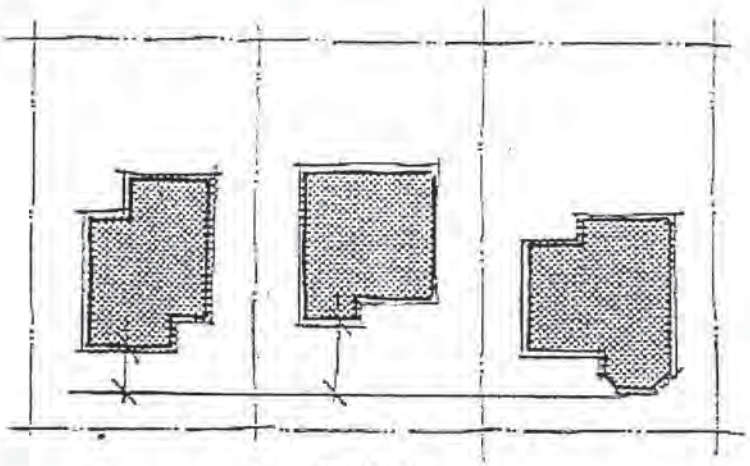
EXAMPLE OF EARLY 1900'S HOME

Goal: Improve the appearance and condition of the existing housing stock and neighborhoods to provide housing for a variety of income groups, safety for residents, a sense of neighborhood, and area rejuvenation.

A. Site Planning Guidelines

1. Setbacks: Each housing unit should vary in setback (approximately 10%), yet maintain enough street setback to prevent crowding the street. Encourage traditional side lot setbacks. Discourage zero lot lines.

   Intent: Discourage house siting that conflicts with the existing neighborhood character.



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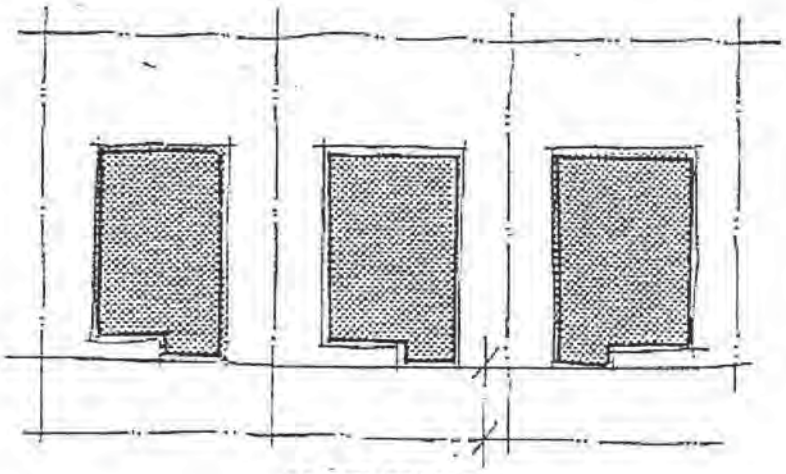

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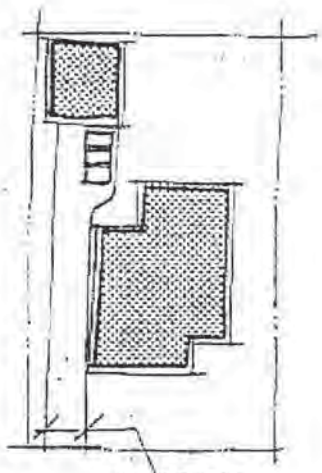
2. Driveway Frontage: Driveway openings may occupy no more than 25% or 18 feet of the lot's total street frontage, whichever is less. However, in no case should a driveway opening be less than 10 feet.



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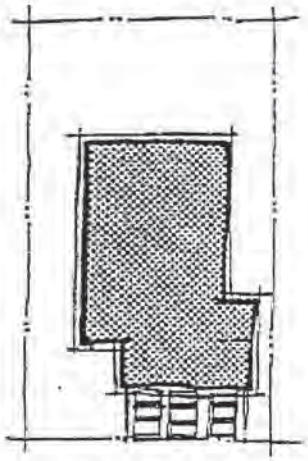

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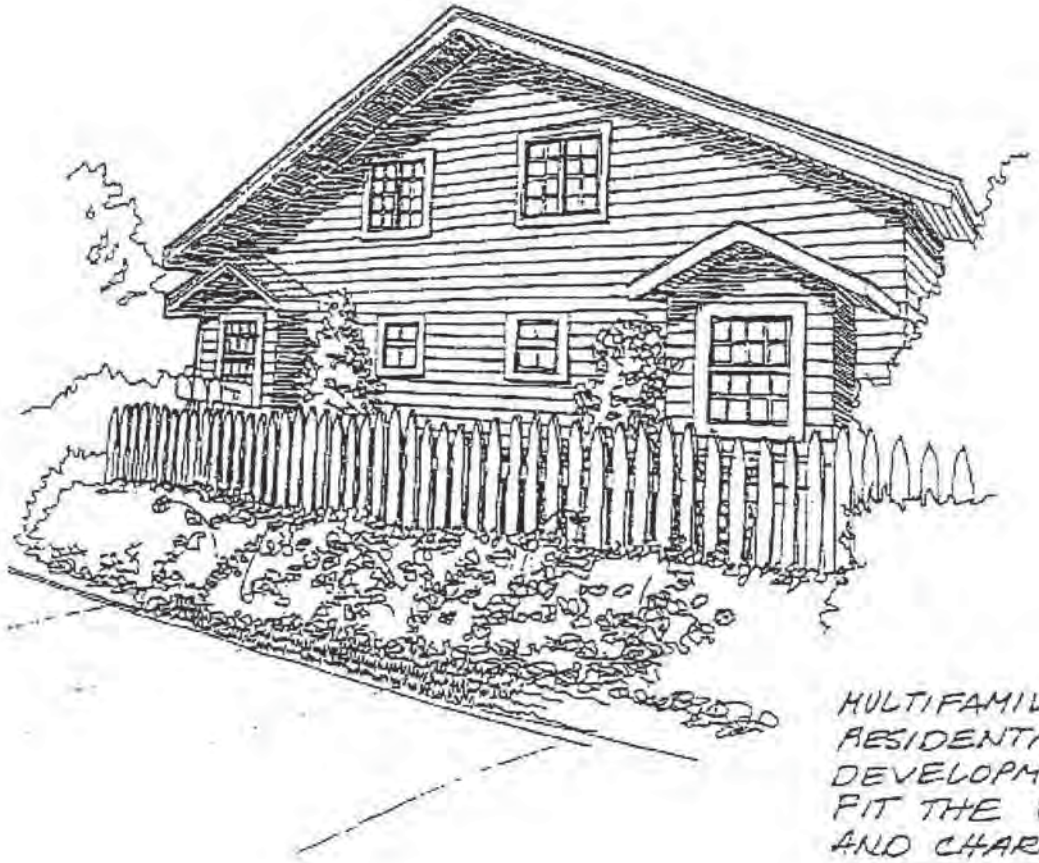
3. Infill Housing: Develop vacant lots with a variety of new housing types to meet the various housing demands of the community.

   * Relate residential infill development to the surrounding neighborhood.

     Intent: Encourage infill housing which would provide quality housing for people from a variety of income and social groups and be compatible with surrounding housing.



MULTIFAMILY RESIDENTIAL DEVELOPMENT TO FIT THE SCALE AND CHARACTER OF THE RESIDENTIAL NEIGHBORHOOD (AREA A).

B. Landscaping

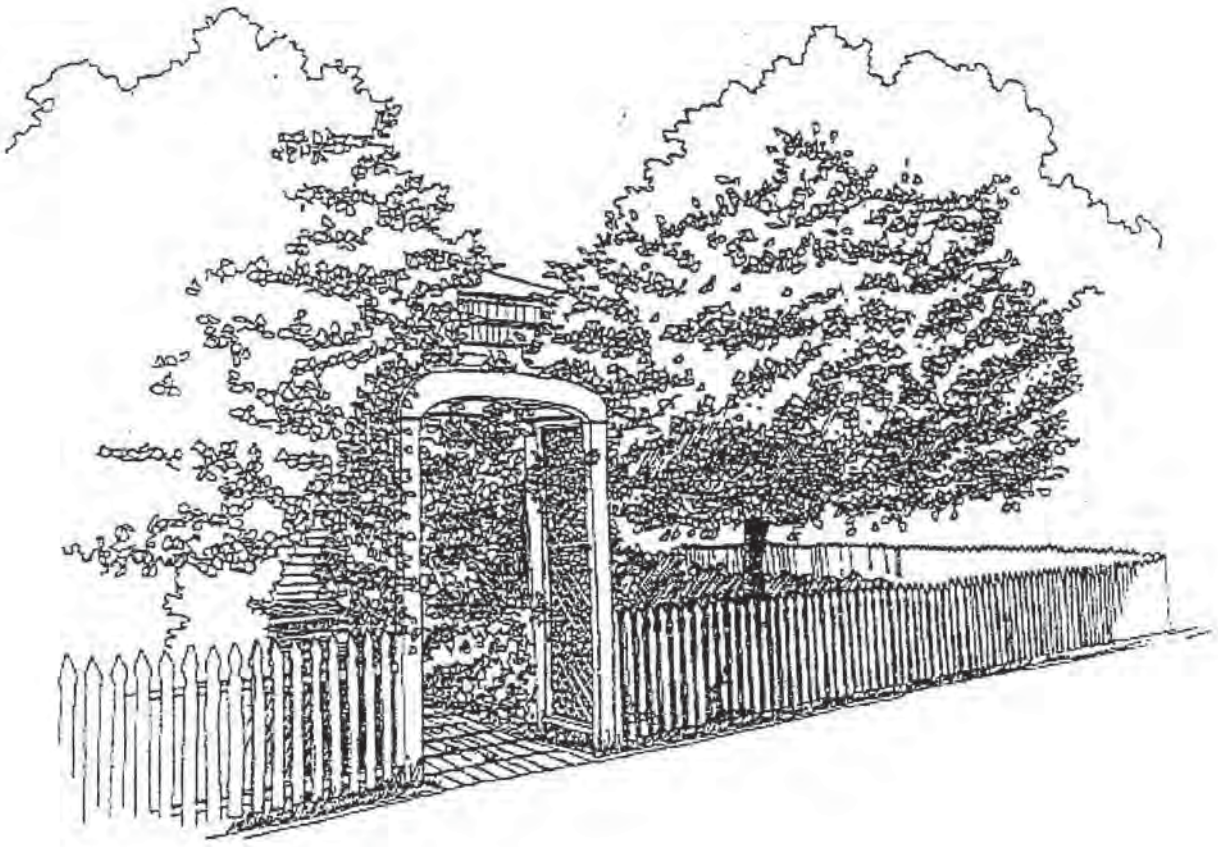
1. Fencing: Proper front yard fencing is an important part of maintaining the neighborhood's image and ensuring defensible space for safety. Limit fencing to simple picket fences and low garden walls.

   * Define public and private space with landscaping and low garden walls or fences at the inside edge of the sidewalk.

   * Discourage front yard perimeter fences and walls and chainlink fences that act as visual barriers in front yards.

2. Street Trees: Encourage street trees in existing residential neighborhoods and new developments. Plant trees every 30 feet (15 gallon minimum).

   Intent: Provide a shady canopy in residential neighborhoods and create pedestrian scale along residential streets.



C. Architectural Guidelines

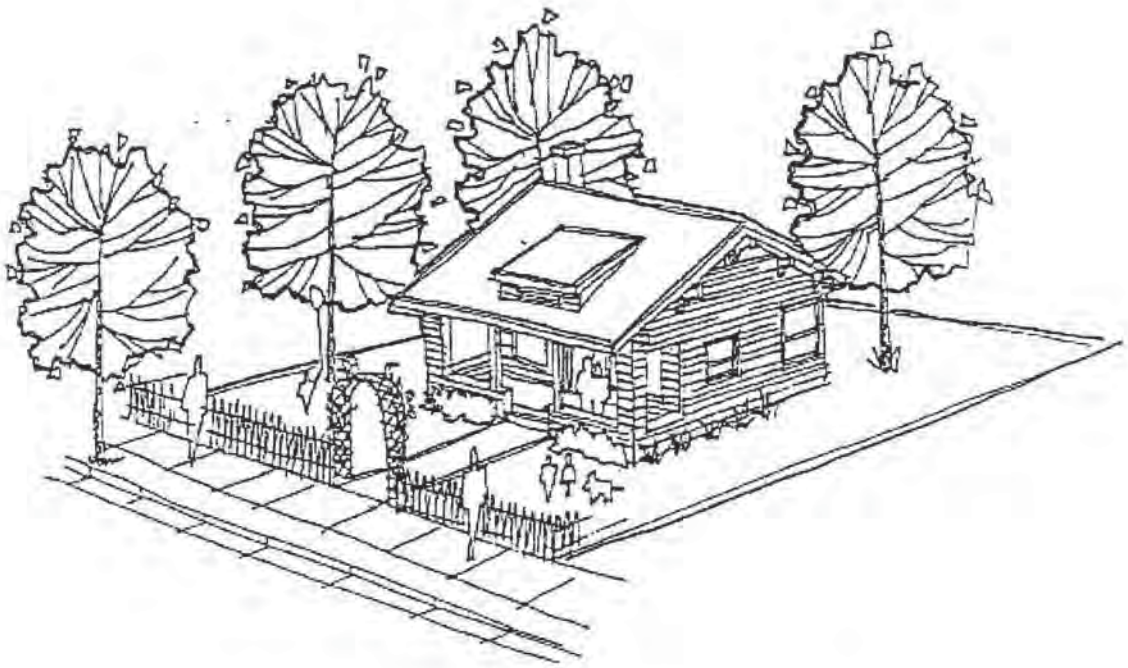
1. Renovation: Improve the condition of existing neighborhood housing that is in poor condition.

   * Preserve, whenever possible, existing structures which display desirable character. Renovation, remodeling, and improvements should respect and enhance any established neighborhood character.

2. Traditional Design Elements: Homes built in the early 1900's lack typical design elements such as porches, low walls, and picket fences at the sidewalk's edge and garages and carports to rear of the property, as well as other traditional residential features (see page 1-99). Homes built in the 1960's were auto-oriented and had a different look, such as garages facing the front and ranch style layout (see page 1-100).

   Efforts to maintain the character of these two sub areas of homes should be made by respecting the predominant agricultural character of each of the existing homes in these areas.

   Intent: Preserve existing neighborhood character and protect "small town" image.



3. Height and Scale: Height and scale of homes should reflect the established pattern in the existing neighborhood.

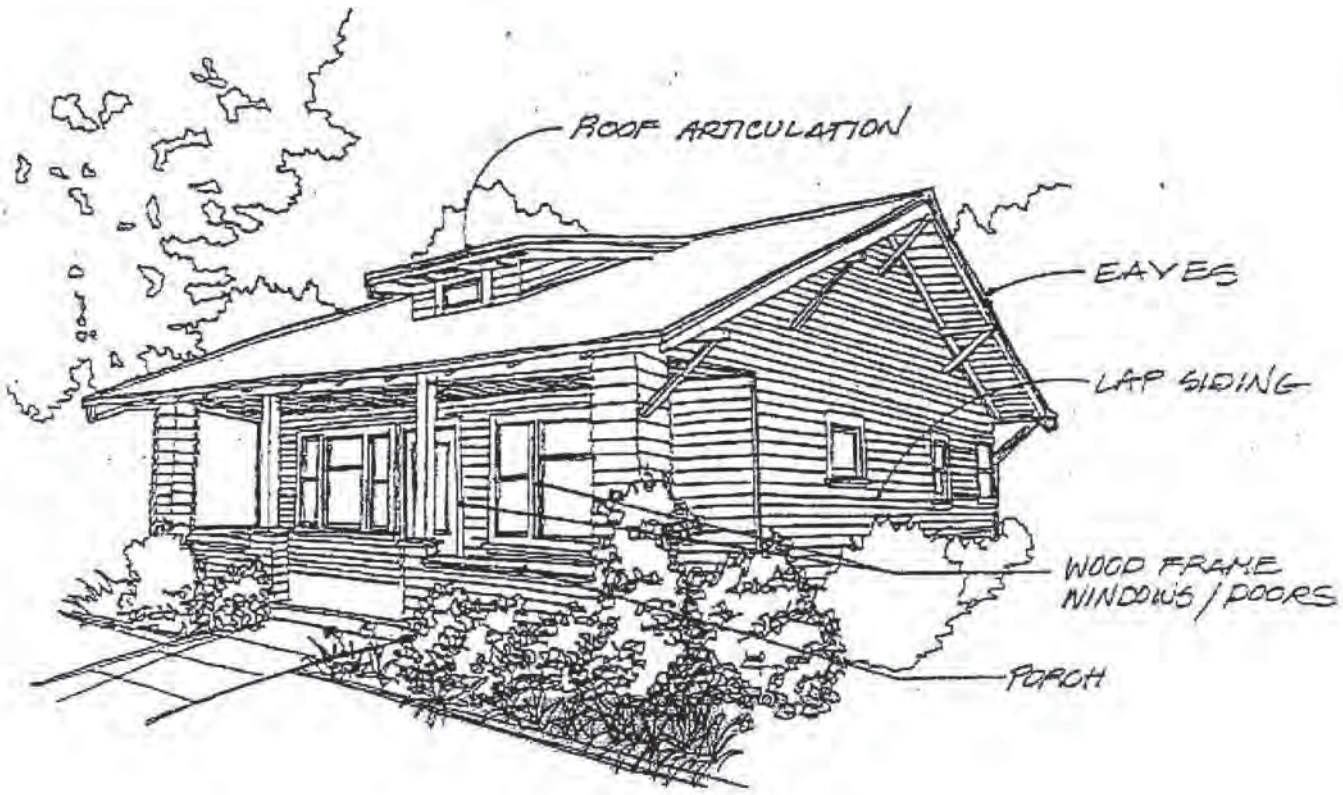
4. Materials: Materials consisting of simple lap siding, brick, river rock, and smooth stucco are common and reflect the proper image of the neighborhood. Materials used should be consistent with adjacent homes.

   Intent: Encourage new and remodeled houses and apartments to use materials which characterize the immediate neighborhood.

5. Doors and Windows: Doors and windows should reflect the neighborhood's era. Features like multi-paned glass, greater vertical proportions than width windows, glass doors, window shutters, and cloth awnings are desirable.

   Intent: Preserve a continuity between existing historical structures and new buildings.

Refer to page 1-72.



Design Elements of a Residence Within Area A

6. Roofs: Simplify roofs with low pitches and overhangs. Roof materials should consist of simple asphalt shingles or Spanish tiles. Flat roofs hidden by extended facades are also appropriate.

7. Garages: Early American homes lack garage-dominated streetscapes (Area A). Encourage alley access where possible. Elsewhere, minimize visual impact of garage doors and driveways by placing garages to the rear of the residence and minimizing driveway width. In Residential Area A, existing garage doors face to street; where possible, the garage doors can be turned perpendicular to the street to minimize the visual impact of the door.

   Intent: Preserve traditional neighborhood character by minimizing the automobile's visual impact.

8. Color: Refer to page 1-75.

Design Elements of a Residence Within Area B

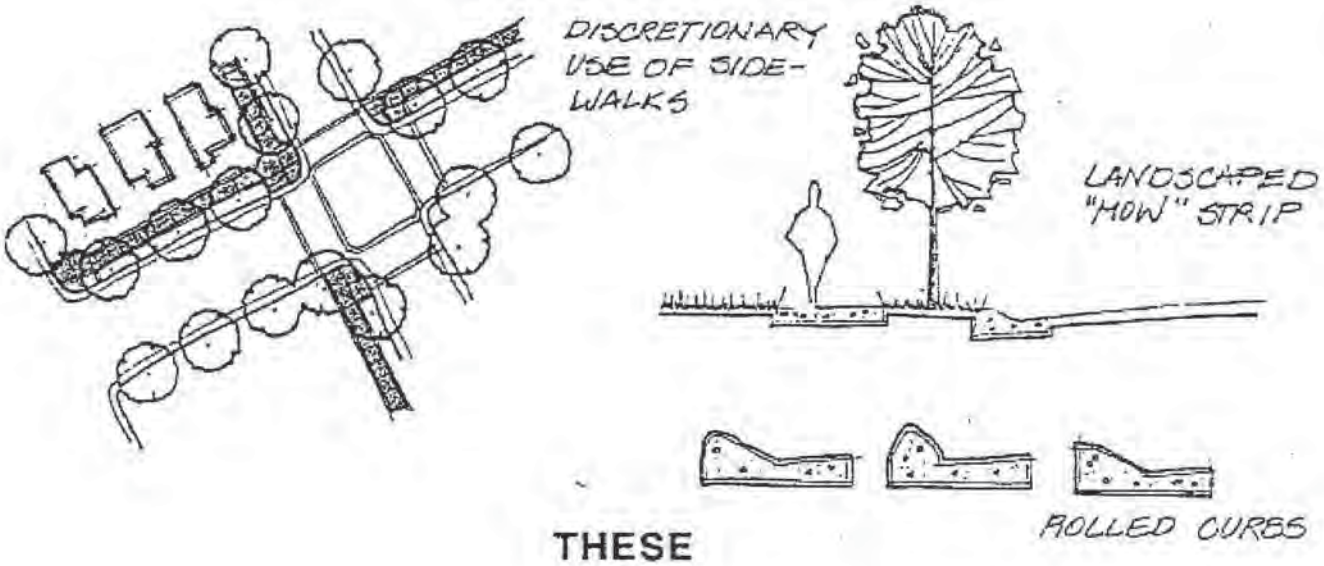
D. **Streets and Alleys**

Existing streets and alleys in the residential zone lack differentiation, adequate paving (drainage), lighting, and marking (and in many areas, sidewalks). Pursue Public Work's projects with redevelopment funding and Community Development Block Grant (CDBG) funds to provide improved streets, curbs, gutters, and sidewalks.

Intent: Provide streets and alleys which are safe and functional, while maintaining the neighborhood's rural character.

1. Residential Streets: Resurface and improve signage and lighting on existing streets.

   Intent: Provide safe and legible roadways for drivers and pedestrians.



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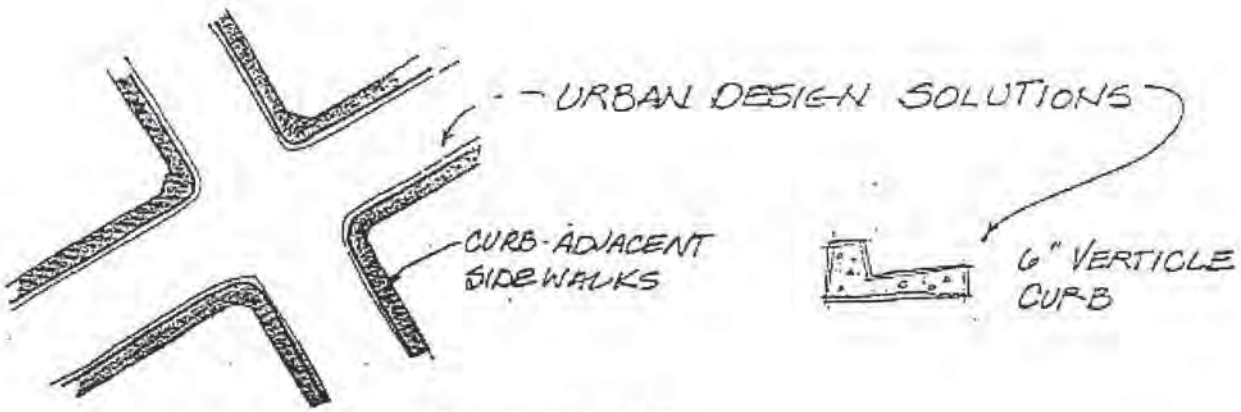
2. Sidewalks: Provide curbs, gutters, and sidewalks in a manner which maintains a "small town" character, while providing for pedestrian paths, road edges, and drainage.

   * Encourage the use of rolled curbs, straight, narrow sidewalks, and planted parkways.

     Intent: Preserve the neighborhood's character and prevent the larger scale urban look occurring in newer housing developments.

     Refer to page 1-64.



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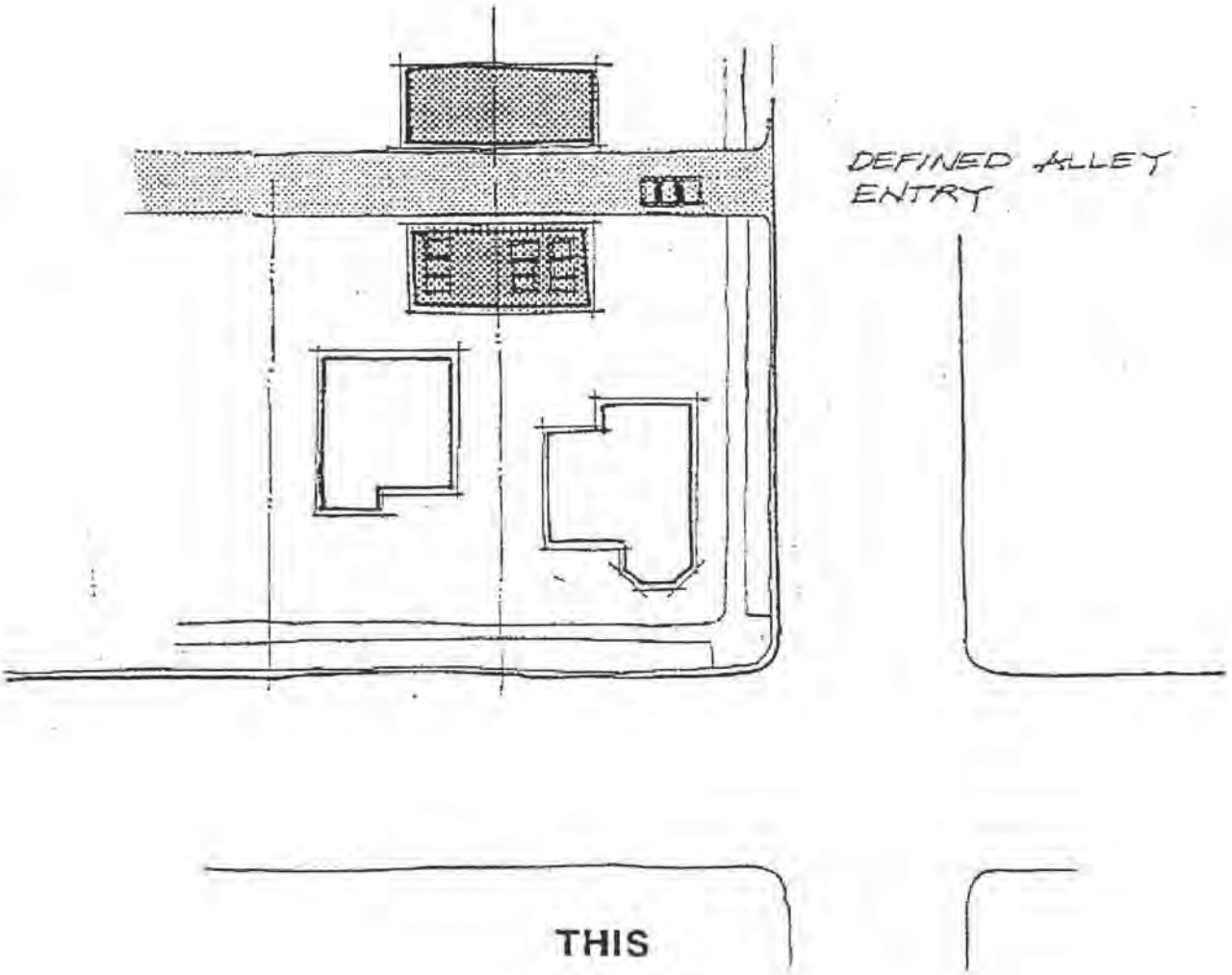
3. Alleys: Alleys are a desirable feature. Use them to their full potential. Place garages, carports, utilities, and solid waste storage areas in the alleys.

   * Differentiate alleys from streets to discourage through traffic and promote a more logical neighborhood circulation pattern.

   Intent: Minimize visual impact of garages, cars, utilities, and garbage cans on streets.

4. Parking: Limit parking of vehicles to driveways, garages, and street frontages. Avoid parking in front yard areas.

   Intent: Discourage clutter of automobiles throughout neighborhoods.



IV. PARKS

Based upon the community survey results, Salida's major downtown park has become an unfriendly, unsafe place not suitable for families and children. Park improvements can create an improved environment that people will enjoy. A park facility redesign effort should be pursued. Expansion of the park into a system of parks will further serve to enhance the safety and desirability of the park while providing important linkages throughout the community.

Goal: Promote overall community vitality and participation which enhance the "small town" character and offer safe recreation for all Salida residents and children.

A. Site Planning Guidelines

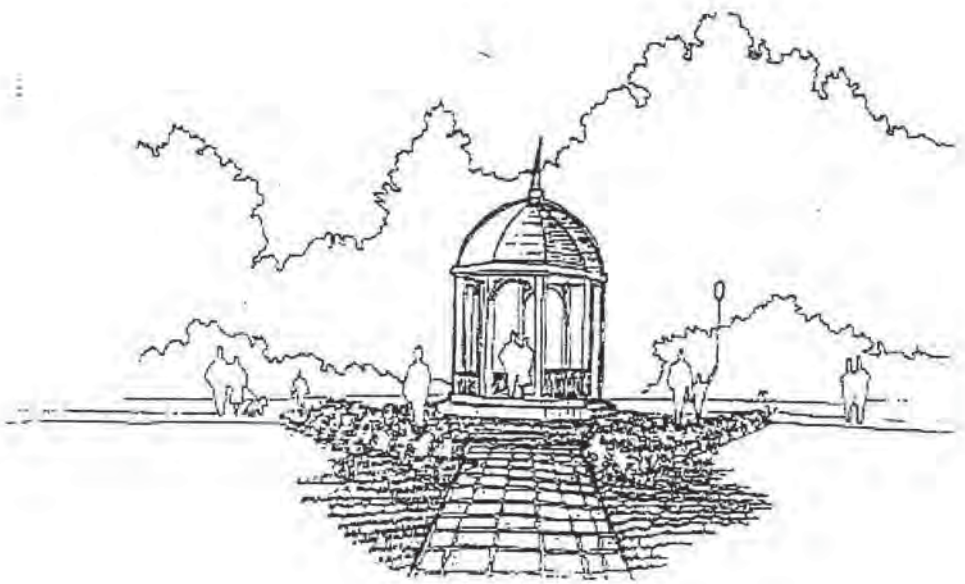
1. Visibility: Eliminate areas of low visibility behind buildings, barriers, and landscaping. Maximizing visibility of all areas from the street.

   Intent: Discourage vagrancy and crime to increase safety for park goers.

2. Pocket Parks: Develop a system of neighborhood pocket parks on empty lots within the neighborhoods. Link all parks with the large park.

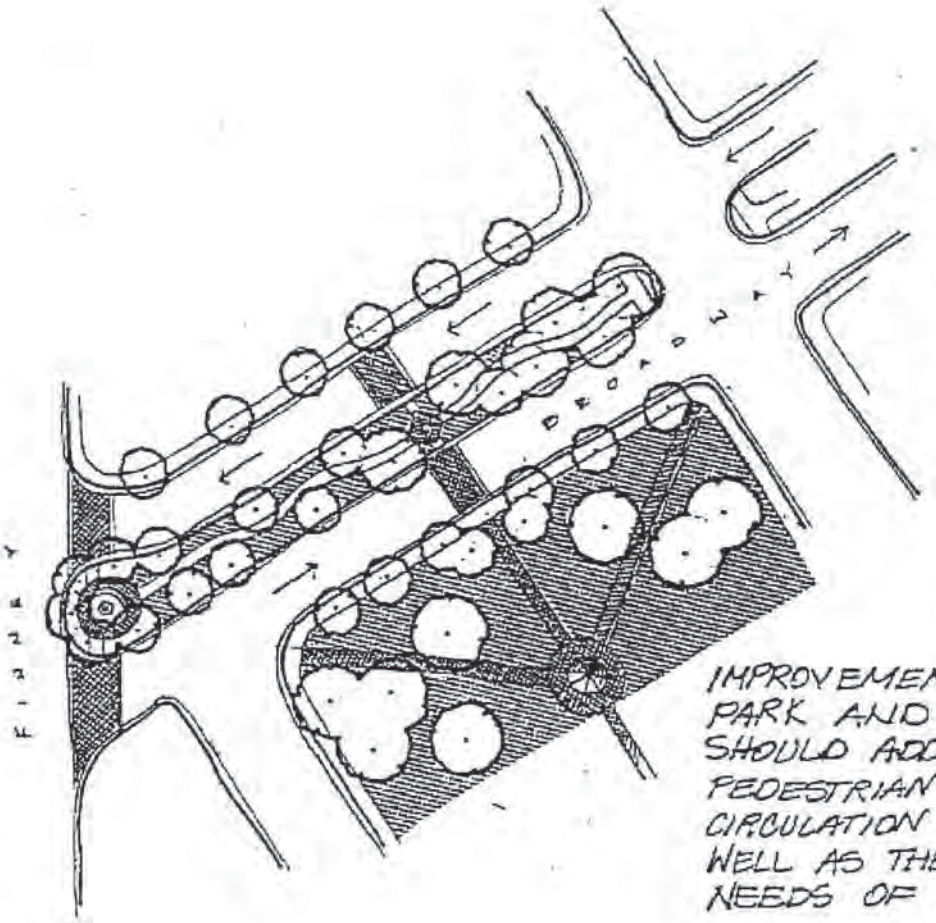
   Intent: Provide small local play lots.

3. Park Facilities: Redesign restrooms and park facilities to minimize the potential for crime and to maximize policing.



4. Parks as Nodes: The park should serve as a central node with good linkages to neighborhoods and downtown. Streetscape and street improvements in both the commercial and residential areas should reinforce the concept of linkages and paths to the park.

Intent: Make the park easily accessible by foot and an important central open space element of the downtown.



IMPROVEMENTS TO THE PARK AND MEDIAN SHOULD ADDRESS EXISTING PEDESTRIAN AND VEHICULAR CIRCULATION PROBLEMS AS WELL AS THE AESTHETIC NEEDS OF THE DOWNTOWN

V. GENERAL NEIGHBORHOOD CLEANUP

The old neighborhoods of Salida contain many instances of abandoned cars, junk in yards, weeds, overgrown trees, and trash in empty lots creating a rundown appearance, as well as potentially dangerous conditions. The community should be encouraged to get involved in community cleanup through a "Community Beautification Program". This type of program typically involves a lead committee (perhaps the MAC), which organizes efforts that will involve the citizens of Salida in massive volunteer cleanup efforts. These efforts not only result in cleanup, but will also build community pride.

Goal: Improve the visual appearance of Salida's neighborhoods.

The following guidelines address four neighborhood cleanup issues which can be addressed through a community-wide cleanup campaign resulting in an improved visual appearance.

A. Guidelines

1. Cars and Trucks: Remove abandoned vehicles and reduce car repair in yards and on streets.

2. Rubbish: Remove junk and trash (auto parts, refrigerators, furniture, etc.), from private property and empty lots.

3. Trees: Properly maintain street trees and remove weeds from around houses and empty lots.

4. Vacant Lots: Encourage the "recycling" of vacant lots into new housing or neighborhood parks.

VI. IMPLEMENTATION AND INTERPRETATION OF GUIDELINES

These Design Guidelines are intended to be directive, not mandatory and should be applied within the context of the County of Stanislaus General Plan and Zoning. Graphics are intended to convey ideas and concepts, not to be taken literally. It shall be the responsibility and authority of the Stanislaus County Planning Director/Redevelopment Agency staff or his duly appointed representative to interpret and apply these guidelines. Where dispute may arise, appeal procedures pursuant to the Stanislaus County Zoning Ordinance are available for remedy.

GLOSSARY

Articulation	Horizontal and vertical variations in the surface plane of a structure. For example: A cube has no articulation; by adding and subtracting vertical and horizonal elements to the cube, (articulation), a more interesting shape is created (see illustration on page 1-84).
Awnings	Cloth-covered door and window overhangs which provide shade and shelter. Usually colorful, can be embellished with signs and have a variety of shapes.
Buffer Zone	A strip of land which protects one land use from another. For example: Landscaped buffers with earth berms and low walls are excellent at "buffering" parking lots from adjacent uses.
Building Facades	The side of the building facing the street. Typically, the front of the building.
Canopies	Structural projections from buildings designed to provide shelter and define pedestrian space on the sidewalk.
Community Fringes	The areas of new growth directly adjacent to the existing developed Community of Salida, particularly those areas outside of the redevelopment plan boundaries.
Community Revitalization	The goal of bringing new development, while renovating, restoring, and renewing existing development in Salida in order to improve economic function and quality of life.
Continuous Edge	Alignment of buildings, low walls, and fences along a street or sidewalk which creates an uninterrupted linear edge.
Curb Adjacent	Refers to a sidewalk's position directly against the curb. Often typical of downtown areas, but not preferable in residential areas.
Districts	An area of homogeneous characteristics (e.g., structures, uses, etc.), that distinguishes it from another area. For example: Salida's downtown "district" is different than the residential "district".

GLOSSARY (continued)

False Front	An architectural treatment of the front of a building that masks the structural form and material of the building.
Graphic/Icon Signs	Signs which use symbols rather than words to advertise a message. For example: A barber pole is an icon sign; another example could be an ice cream cone graphic to advertise an ice cream store. Icon signs are especially well suited as pedestrian signs (page 1-74).
Human Scale	The perceived size of a building or space defined in terms of its relationship to the size of a person. A building or space of a human scale will be proportioned in such a way that it is comfortable, desirable, and pleasing to people.
Recessed Entries	A space off the sidewalk that allows for opening doors and window shopping and increases facade variation.
Right-of-Way (R.O.W.)	The width of land set aside for streets, sidewalks, and landscaping. Generally, development does not occur within the R.O.W.
Rhythm	The pattern of form created by a series of buildings with related character, width, and scale.
Scale	The size of a structure as perceived by the eye. The same size building can reduce its scale by adding detail, articulation, overhangs, and landscaping (see articulation).
Setback	The distance between a structure and the lot lines (property lines), sometimes referred to as "yards". Typically setbacks are specified for front yards, rear yards, and side yards.
Shingled Canopies	Shed, roof-like canopies projecting from buildings with wood shingles.
Streetscape	Elements of a street that improve the pedestrian experience and vehicular circulation. For example: Street trees, curbs and sidewalks, clear signage, street lighting, street furniture, and crosswalks (see pedestrian environment).
Vertical	Zoning which allows for different uses at different elevations in the same building. For example: Commercial uses limited to the first floor and residential uses limited to the second and third floors would constitute vertical zoning (see mixed uses).

APPENDIX

HAVE A SAY IN SALIDA'S FUTURE

Salida has been chosen to receive funds which will be used to help improve the quality of your community. We are interested in knowing what you think about your community and what you would like to see happen in the future. Please take a few minutes to share your thoughts with us by completing this survey. Your participation is essential!!

1. PLEASE RATE THE IMPORTANCE OF EACH OF THE FOLLOWING: (Circle one)

		Very Important	Moderately Important	Not Important	No Opinion
A.	Street and curb improvements	1	2	3	4
B.	Uniform architectural style				
	1. In residential areas	1	2	3	4
	2. In commercial areas	1	2	3	4
C.	Public restrooms	1	2	3	4
D.	"Small town" character	1	2	3	4
E.	Landscaping	1	2	3	4
F.	Bicycle paths	1	2	3	4
G.	Economic/commercial growth	1	2	3	4
H.	Parking	1	2	3	4
I.	Street lighting	1	2	3	4
J.	Pedestrian circulation	1	2	3	4
K.	Improved store fronts	1	2	3	4
L.	Parks	1	2	3	4
M.	Downtown	1	2	3	4
N.	Street furniture	1	2	3	4
O.	Public utility improvements	1	2	3	4
P.	Salida's town history	1	2	3	4
Q.	Other _____	1	2	3	4

2. **OF THE ABOVE ITEMS, WHICH FIVE DO YOU THINK ARE THE MOST IMPORTANT?** (Identify by letter)

1._____ 2._____ 3._____ 4._____ 5._____

3. **PLEASE LIST THREE THINGS ABOUT YOUR COMMUNITY THAT YOU THINK NEED IMPROVEMENT:**

1. _____
2. _____
3. _____

4. **DO YOU LIKE THE VISUAL APPEARANCE OF:** (Circle one)

A.	Older residential neighborhoods	Yes	No	No opinion
B.	Newer residential neighborhoods	Yes	No	No opinion
C.	Older business areas	Yes	No	No opinion
D.	Newer business areas	Yes	No	No opinion

5. PLEASE PROVIDE ANY OTHER COMMENTS YOU MAY HAVE THAT WILL HELP US UNDERSTAND YOUR DESIRES FOR THE FUTURE OF SALIDA.

_____
_____
_____

6. **ARE YOU A RESIDENT OF SALIDA?** (Circle one) Yes No

UPON COMPLETION OF THIS SURVEY, PLEASE DEPOSIT IT IN ONE OF THE MARKED BOXES OR RETURN NO LATER THAN AUGUST 29, 1990 TO: STANISLAUS COUNTY, MUNICIPAL ADVISORY COUNCIL, P.O. Box 374, SALIDA, CALIFORNIA 95368.

Summary of Responses to:

HAVE A SAY IN SALIDA'S FUTURE

Salida has been chosen to receive funds which will be used to help improve the quality of your community. We are interested in knowing what you think abou your community and what you would like to see happen in the future. Please take a few minutes to share your thoughts with us by completing this survey. Your participation is essential!

1. PLEASE RATE THE IMPORTANCE OF EACH OF THE FOLLOWING: (Circle one)
Categories with an ✳ are identified as "most important" in question number 2; bold percentages indicate greatest response (mode).

		Very Important	Moderately Important	Not Important	NoOpinion
✳A.	Street and curb improvements	**72.2%**	24.1%	2.8%	1.0%
B.	Uniform architectural style				
	1. In residential areas	21.2%	28.8%	**40.4%**	9.6%
	2. In commercial areas	29.8%	**31.9%**	30.9%	7.4%
C.	Public restrooms	30.7%	**34.7%**	30.7%	4.0%
✳D.	"Small town" character	**58.7%**	25.0%	11.5%	4.8%
E.	Landscaping	**57.0%**	30.8%	10.3%	1.9%
F.	Bicycle paths	**42.7%**	34.0%	20.4%	2.9%
G.	Economic/commercial growth	**43.3%**	34.6%	17.3%	4.8%
H.	Parking	**46.2%**	43.3%	9.6%	1.0%
✳I.	Street lighting	**68.9%**	26.4%	3.8%	0.9%
J.	Pedestrian circulation	**47.1%**	32.4%	9.8%	10.8%
K.	Improved store fronts	**52.8%**	35.8%	9.4%	1.9%
✳L.	Parks	**66.3%**	26.0%	6.7%	1.0%
✳M.	Downtown	**65.4%**	19.6%	10.3%	4.7%
N.	Street furniture	20.8%	32.1%	**38.7%**	8.5%
O.	Public utility improvements	37.7%	**42.5%**	8.5%	11.3%
P.	Salida's town history	**43.7%**	32.0%	15.5%	8.7%
Q.	Other				

2. **OF THE ABOVE ITEMS, WHICH FIVE DO YOU THINK ARE THE MOST IMPORTANT?** (Identify by letter)

1. (A) 14.4% 2. (I) 11.4% 3. (L) 8.7% 4. (M) 8.7% 5. (D) 7.2%

3. **PLEASE LIST THREE THINGS ABOUT YOUR COMMUNITY THAT YOU THINK NEED IMPROVEMENT:**

1. Police Protection (own police department; faster response times)
2. Sidewalks/street improvements (Broadway & major streets, bike paths, curbs & gutters)
3. General clean-up (housing, streets, junk, weeds, removal of abandoned cars)

Also mentioned often: Park safety, landscaping, street lighting

4. **DO YOU LIKE THE VISUAL APPEARANCE OF:** (Circle one)

		Yes	No	No Opinion
A.	Older residential neighborhoods	25.5%	**63.3%**	11.2%
B.	Newer residential neighborhoods	**84.6%**	7.8%	7.8%
C.	Older business areas	31.7%	**60.4%**	7.9%
D.	Newer business areas	**81.0%**	7.0%	12.0%

5. **PLEASE PROVIDE ANY OTHER COMMENTS YOU MAY HAVE THAT WILL HELP US UNDERSTAND YOUR DESIRES FOR THE FUTURE OF SALIDA.**

1. General cleanup
2. Parks not suitable for families
3. Police protection

Also Mentioned often: Growth management, landscaping, sidewalk and street improvements, drunkenness/loitering

6. **ARE YOU A RESIDENT OF SALIDA?** (Circle one) Yes **82.4%** No 17.6%

UPON COMPLETION OF THIS SURVEY, PLEASE DEPOSIT IT IN ONE OF THE MARKED BOXES OR RETURN NO LATER THAN AUGUST 29, 1990 TO: STANISLAUS COUNTY, MUNICIPAL ADVISORY COUNCIL, PO BOX 374, SALIDA, CA 95368. IF YOU HAVE ANY QUESTIONS OR WOULD LIK ADDITIONAL INFORMATION, PLEASE CONTACT: GARY DEW (209) 545-0205.

SOURCES

Claire Associates, Inc., 1990, Preliminary Redevelopment Plan for Stanislaus County Redevelopment Project No. 1.

Claire Associates, Inc., 1990, Draft Redevelopment and Housing Needs Assessment and Community Redevelopment Plan for Stanislaus County and the Salida Community.

Habe, Reiko, Design Guidelines and Community Character Compatibility

John B. Dykstra & Associates, 1989, Stanislaus County Redevelopment Feasibility Assessment.

RRM Design Group, 1990, Have a Say in Salida's Future: (community survey questionnaire).

Appendix I-C

PLANNED DEVELOPMENT AREA SPECIFIC RESOLUTIONS

1. RESOLUTION NO. 87-1 – UPPER MCHENRY

2. RESOLUTION NO. 87-3 – FREEWAY INTERCHANGE AND FRONTAGE ROADS

APPENDIX I-1

RESOLUTION NO. 87-1

RESOLUTION OF THE STANISLAUS COUNTY PLANNING COMMISSION AMENDING DEVELOPMENT POLICIES WITH RESPECT TO THE REVIEW AND APPROVAL OF PLANNED DEVELOPMENT APPLICATION ON UPPER MCHENRY AVENUE.

WHEREAS, the proper regulation of development along McHenry has been the subject of concern to the City of Modesto and the County of Stanislaus for a long period of time, and

WHEREAS, the Stanislaus County Board of Supervisors, on the recommendation of the County Planning Commission, amended the Land Use Element of the Stanislaus County General Plan to designate the upper McHenry frontages for "Planned Development", and

WHEREAS, it is consistent with the "Planned Development" designation to establish development policies which will serve as guidelines for property owners and the County in the formulation and review of specific development proposals, and

WHEREAS, the Stanislaus County Planning Commission adopted Resolution No. 74-1 on April 11, 1974 to establish said policies.

NOW, THEREFORE, BE IT RESOLVED that the following policies are hereby established by the Stanislaus County Planning Commission with respect to the development of the "Planned Development" designations on upper McHenry Avenue.

Precise plans should be adopted to provide for two collector streets to cross McHenry at one-quarter mile intervals between Pelandale Avenue and Kiernan Avenue.

No planned development application should be approved which would conflict with the above mentioned precise plans or with the adopted Pelandale Avenue precise plan.

All planned development approvals shall provide for establishment of access driveways at intervals no closer than 200 feet where possible and on-site accessways (customer-front; freight-rear) shall be provided as approved.

Shopping centers should be permitted only at the McHenry Avenue-Pelandale Avenue and McHenry Avenue-Kiernan Avenue intersections.

Planned development approval on properties which are no on the intersections noted above should be limited to uses with a demonstrated history of lower traffic generation.

The "Planned Development" designation which has been applied to upper McHenry Avenue should not be interpreted to allow non-residential uses to project easterly or westerly from the

McHenry frontage to the extent that they could initially or potentially diminish the agricultural or residential usage of lands in the immediate area. With the exception of the shopping centers at the corners listed above, the following depths are hereby established:

A. From Modesto Irrigation District Lateral No. 6 north - 450 feet from the centerline of McHenry Avenue.

B. From the Modesto City Limits north to Lateral No. 6 on the east side of McHenry Avenue - 488 feet from the centerline of McHenry Avenue.

C. From the Modesto City Limits north to Lateral No. 6 on the west side of McHenry Avenue - the westerly property lines of the existing parcels.

Planned development applications on upper McHenry Avenue should include provisions for the ultimate usage of entire contiguous ownerships. However, the application may provide for the phasing of development.

All non-residential planned development approvals shall include as an exhibit thereto, a signed agreement in a form satisfactory to the Modesto City Attorney and Stanislaus County Counsel guaranteeing that the property on which the planned development is applicable will be annexed to the City of Modesto and/or connected to the Modesto public sewer system when such annexation or sewer connection is demanded by the City of Modesto with the approval of the Stanislaus County Board of Supervisors.

All residential planned development approvals shall include provisions for annexation to the City of Modesto prior to occupancy thereof.

All planned development applications should provide for consistence with City of Modesto and County of Stanislaus standards with respect to landscaping, off-street parking, sign control and street improvements.

The Planning Commission should review all divisions of land within the planned development designation to insure that such divisions are consistent with the above policies and approved land uses.

PASSED AND ADOPTED this 21st day of May, 1987 on motion of Commissioner Parks, seconded by Commissioner Steinpress, by the following vote:

AYES: Coe, Entin, Graham, Hertle, Parks, Rettig, Steinpress, Wikoff
NOES: None
ABSTAIN: Stephens

THOMAS RETTIG, CHAIRPERSON

APPENDIX I-3

RESOLUTION NO. 87-3

RESOLUTION OF THE STANISLAUS COUNTY PLANNING COMMISSION ESTABLISHING DEVELOPMENT POLICIES WITH RESPECT TO THE REVIEW AND APPROVAL OF PLANNED DEVELOPMENT APPLICATIONS AT FREEWAY INTERCHANGES AND ADJACENT FRONTAGE ROADS.

WHEREAS, the proper regulation of development at freeway interchanges and adjacent frontage roads has been the subject of concern to the County of Stanislaus for a long period of time, and

WHEREAS, the Stanislaus County Board of Supervisors, on the recommendation of the County Planning Commission, amended the Land Use Element of the Stanislaus County General Plan to designate these interchanges and frontage road areas, for "Planned Development", and

WHEREAS, it is consistent with the "Planned Development" designation to establish development policies which will serve as guidelines for property owners and the County in the formulation and review of specific development proposals, and

WHEREAS, the Stanislaus County Planning Commission adopted Resolution No. 77-5 on April 14, 1977 to establish said policies.

NOW, THEREFORE, BE IT RESOLVED that the following policies are hereby established by the Stanislaus County Planning Commission with respect to the development of the "Planned Development" designations on freeway interchanges and adjacent frontage roads.

Planned Development Applications for freeway and adjacent frontage roads should be for only those uses that service highway oriented traffic and would not be more properly located in any of the zoning districts existing in the County of Stanislaus or any of the cities within the County.

All planned development applications for adjacent freeway frontage roads should include provision for the ultimate usage of entire contiguous ownerships. However, the application may provide for the phasing of development.

All planned development approvals shall include as an exhibit thereto, a signed agreement in a form satisfactory to the appropriate City Attorney and Stanislaus County Counsel guaranteeing that the property on which the planned development is applicable will be annexed to the appropriate city and/or connected to a public sewer system when such annexation or sewer connection is demanded by said city with the approval of the Stanislaus County Board of Supervisors.

All planned development applications should provide for consistence with County of Stanislaus standards with respect to landscaping, off-street parking, sign control and street improvements.

The Planning Commission should review all divisions of land within the planned development designation to insure that such divisions are consistent with the above policies and approved land uses.

PASSED AND ADOPTED this 21st day of May, 1987 on motion of Commissioner Parks, seconded by Commissioner Steinpress, by the following vote:

AYES: Coe, Entin, Graham, Hertle, Parks, Rettig, Steinpress, Wikoff
NOES: None
ABSTAIN: Stephens

THOMAS RETTIG, CHAIRPERSON

Appendix I-D

STANISLAUS COUNTY DISADVANTAGED UNINCORPORATED COMMUNITIES REPORT

STANISLAUS COUNTY DISADVANTAGED UNINCORPORATED COMMUNITIES REPORT

PREPARED FOR:

Stanislaus County Planning and Community Development
1010 Tenth Street, Suite 3400
Modesto, CA 95354
Contact: Kristin Doud, Associate Planner
209.565.6330

PREPARED BY:

ICF International
630 K Street, Suite 400
Sacramento, CA 95814
Contact: Antero Rivasplata
916.737.3000

November 2015

ICF International. 2015. *Stanislaus County Disadvantaged Unincorporated Communities Report*. November. (ICF 00230.10.) Sacramento, CA. Prepared for Stanislaus County, CA.

Contents

Tables

Figures

Acronyms and Abbreviations

AB	Assembly Bill
ACE	Altamont Commuter Express
AGS	Applied Geographic Solutions
BART	Bay Area Rapid Transit
CAT	Ceres Area Transit
CDP	Census-Designated Place
CHA	Community Health Assessment of Stanislaus County
CSA	County Service Area
CSD	County Service Area
DUC	disadvantaged unincorporated community
FBI	Federal Bureau of Investigation
FPD	Fire Protection District
General Plan	*Stanislaus County General Plan*
GHG	greenhouse gas
GIS	geographic information system
I-5	Interstate 5
LAFCO	Local Agency Formation Commissions
LEB	life expectancy at birth
LOS	level of service
MAX	Modesto Area Express
MCL	maximum contaminant level
P-D	Planned Development District
PM	particulate matter
PM10	particulate matter of 10 microns or less
PM2.5	particulate matter of 2.5 microns or less
SB	Senate Bill
SJVAB	San Joaquin Valley air basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SOI	sphere of influence
SR	State Route
StaRT	Stanislaus Regional Transit
WSID	Westside Irrigation District

Chapter 1
Background and Overview of Statutory Requirements

Senate Bill (SB) 244 of 2011 mandates that city and county general plans consider disadvantaged unincorporated communities (DUCs) and the availability of services to such communities. SB 244 states, in part: "It is the intent of the Legislature to encourage investment in these communities and address the complex legal, financial, and political barriers that contribute to regional inequity and infrastructure deficits within disadvantaged unincorporated communities." SB 244 also establishes requirements for Local Agency Formation Commissions (LAFCO) to consider DUCs relating to agency formation and annexation proposals, and as part of their municipal service reviews.

Accordingly, the general plan must include analyses of the water, wastewater, stormwater drainage, and structural fire protection needs or deficiencies of those communities, and a discussion of benefit assessment districts or other financing alternatives that could make the extension of services to such communities financially feasible (Government Code Section 65302.10).

Responsibility for addressing the concerns of DUCs is split between cities and counties, depending on the location and age of such communities. Government Code Section 65302.10(b)(1) provides that a county must include "an identification of each legacy community within the boundaries of the county that is a disadvantaged unincorporated community, but not including any area within the sphere of influence of any city. This identification shall include a description of the community and a map designating its location." *Community* is defined as "an inhabited area within a city or county that is comprised of no less than 10 dwellings adjacent or in close proximity to one another." *Legacy community* is defined as "a geographically isolated community that is inhabited and has existed for at least 50 years."

The selection criteria for DUCs subject to Stanislaus County jurisdiction are as follows:

- Identified community (Census-Designated Place, or CDP), with distinguishable boundaries, located within the unincorporated area of the county.
- Developed, with 10 dwellings, or 12 or more registered voters.
- Annual median income of households is less than 80% of the statewide median household income.
- Outside of the sphere of influence of any city.

As defined under Government Code Section 65302.10, the DUCs within Stanislaus County that fall within the responsibility of the *Stanislaus County General Plan* (General Plan) are listed below and shown in Figure 1-1, *Disadvantaged Unincorporated Communities in Stanislaus County*.

- Cowan Tract.
- Crows Landing.
- Grayson.
- Keyes.
- Monterey Park Tract.

- Riverdale Park Tract.
- Westley.

These DUCs are the subject of this report, which compiles information from various sources to characterize the conditions in each DUC. This includes geographic information system (GIS) files for infrastructure, the most recent Municipal Service Reviews prepared by the Stanislaus County LAFCO, and available health information. There is no community-specific health information available; consequently, the DUCs are discussed in the context of the nine geographic areas by which the information is presented in the 2013 *Community Health Assessment of Stanislaus County* prepared by the Stanislaus County Health Services Agency. The references used in Chapter 2, *Existing Conditions*, are identified after the discussion of each DUC.

This report was prepared with partial funding from a grant from the California Strategic Growth Council and goes beyond the basic provisions of SB 244, which specifically requires consideration of water, wastewater, stormwater drainage, and structural fire protection needs or deficiencies. In addition to those services and in order to meet the requirements of the California Strategic Growth Council grant, this report includes information on air quality, public health issues, and the presence or absence of additional factors, such as community services, that result from or contribute to a community's general health.

The report is organized in the following chapters:

- Chapter 1, *Background and Overview of Statutory Requirements*
- Chapter 2, *Existing Conditions*, documents the existing infrastructure, services, and chronic health issues for each of the identified DUCs
- Chapter 3, *Community Assets and Deficits*, describes the condition of infrastructure and services for each DUC
- Chapter 4, *Healthy Communities Strategies*, recommends a number of policies that will further the development of healthy communities.

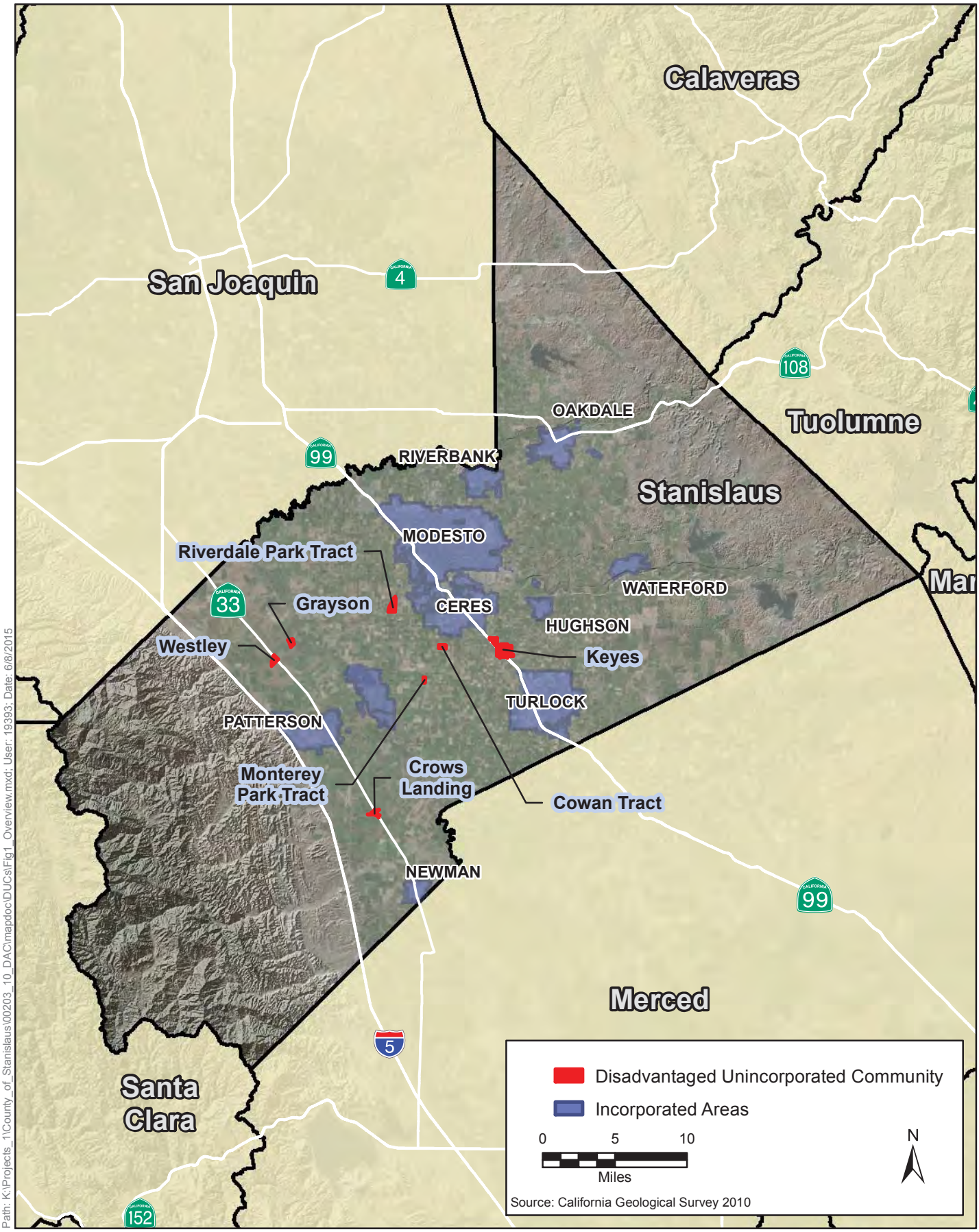


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Figure 1-1
Disadvantaged Unincorporated Communities in Stanislaus County

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Chapter 2
Existing Conditions, By Community

2.1 Cowan Tract

2.1.1 General Characteristics and Demographics

Located approximately 1 mile southwest of the city of Ceres, Cowan Tract is a rural neighborhood primarily comprised of mobile homes. Cowan Tract is a CDP with a 2010 census population of 318 people in 94 households and an average household size of 3.38 persons (United States Census Bureau 2013a). The median annual household income in California was $60,190 in 2013; it was $39,563 in Cowan Tract (United States Census Bureau 2013b). In 2010, Cowan Tract had 102 housing units, 94 of which were occupied (United States Census Bureau 2013a).

At 102 acres, the Cowan CDP occupies a larger area than the 78-acre area identified as the Cowan Tract DUC described below and encompasses approximately 24 acres of agricultural land immediately south of the DUC. All of the land immediately surrounding the Cowan Tract DUC is zoned General Agriculture, with a 40-acre minimum parcel size (A-2-40) (Stanislaus County 2014d). The western part of the agricultural land is classified by the California Department of Conservation's Important Farmlands Inventory as "semi-agricultural and rural commercial land," defined as "farmsteads, agricultural storage and packing sheds, unpaved parking areas, composting facilities, equine facilities, firewood lots, and campgrounds" (California Department of Conservation 2014); most of this area is also under Williamson Act contract (California Department of Conservation 2012). The eastern portion of the agricultural acreage is non–Williamson Act contracted prime farmland (California Department of Conservation 2012 and 2014). These agricultural lands do not support the requisite intensity of existing development for SB 244 consideration and are unlikely to develop; therefore, they are not included as part of the Cowan Tract DUC residential community evaluated for SB 244 purposes.

Cowan Tract DUC is defined by San Joaquin Street on the north, the Union Pacific Railroad tracks on the east, Lathrop Street on the south, and Crows Landing Road on the west. Turlock Irrigation District's Lower Lateral No. 2½ parallels the south side of Lathrop Street, separating Cowan Tract from neighboring farmland to the south. The area is surrounded by agricultural land and accompanying agriculture-related residences, with the exception of the driving range/9-hole golf course located immediately north of Cowan Tract's northwest corner.

The General Plan's Housing Element identifies Cowan Tract as a Residential Development Potential Study Area, noting that Cowan Tract does not have the potential to accommodate additional housing units (Stanislaus County 2012). Existing infrastructure and services for Cowan Tract—like many rural areas—are limited; these are described below.

2.1.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Cowan Tract DUC are presented in Figure 2-1, *Cowan Tract Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water,

wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available for Cowan Tract DUC specifically.

2.1.3 Transportation Facilities and Services

Cowan Tract lies approximately 4 miles west of State Route (SR) 99, a major north-south travel corridor and a six-lane freeway in Stanislaus County. Transportation infrastructure in the immediate Cowan Tract area consists of a mixture of public, County-maintained roads and privately maintained roadways, and railroad tracks. County-maintained roads include San Joaquin Street, Crows Landing Road, the western half of Cowan Road, and the northern halves of Avenues A, B, and C. San Joaquin Street forms the DUC's northern edge and, like the roads within Cowan Tract, consists of a narrow, two-lane local road with no sidewalks, curbs, or bicycle lanes.

Crows Landing Road, adjacent to the west side of Cowan Tract, is a two-lane major roadway; in the vicinity of Cowan Tract the road currently has two lanes plus a center bidirectional turn lane (Stanislaus Council of Governments 2014). The County General Plan Circulation Element designates Crows Landing Road as a four-lane expressway, a category of road intended to move high volumes of people and goods between urban areas within the county at higher speeds (Stanislaus County 2006). The level of service (LOS) on that segment of Crows Landing Road has not been recorded; however, the segment between Grayson Road (0.25 mile north of Cowan Tract) and Service Road (1.25 miles north of Cowan Tract) operates at LOS D, below Stanislaus County's LOS C goal and at the minimum adopted level of service allowed by the General Plan (Stanislaus County 2006; Stanislaus Council of Governments 2014). Crows Landing Road, including the segment adjacent to Cowan Tract, is proposed for widening and designated in the draft Circulation Element as a future six-lane expressway (County of Stanislaus (no date) Stanislaus Council of Governments 2014).

The 2013 *Stanislaus County Non-Motorized Facilities Master Plan* identifies Crows Landing Road north of Cowan Tract as 1 of 10 countywide first-tier—or high-priority—bikeways scheduled for improvement (Stanislaus Council of Governments 2013). Adjacent to and south of Cowan Tract, Crows Landing Road is designated as a planned Class 3 bikeway (Stanislaus Council of Governments 2013).

Within the Cowan Tract DUC, private roads that are not maintained by the County include Avenues A, B, and C south of Cowan Street; Cowan Street east of Avenue C; and the entirety of Avenue D and Lathrop Street—all of these are two-lane local roads. No sidewalks are present on any of the Cowan Tract roads, and there are no designated bicycle lanes beyond those on Crows Landing Road.

No curbs, gutters, or street lights are present on the roadways in and around Cowan Tract (Stanislaus County 2012). The Union Pacific railroad tracks extend north-south immediately east of Cowan Tract.

Bus service within Cowan Tract is limited to the Turlock–Modesto Shuttle, which provides four roundtrips between Turlock and Modesto, with curbside service, to the general public Monday–Saturday between 7:00 a.m. and 6:30 p.m. (Stanislaus Regional Transit 2014a).

The nearest fixed bus routes to Cowan Tract are Ceres Area Transit (CAT) Route B, Modesto Area Express (MAX) Route 42, and Stanislaus Regional Transit (StaRT) Route 40 (City of Ceres 2014; City of Modesto 2014; Stanislaus Regional Transit 2014a). CAT Route B runs buses nine times per day,

Figure 2-1
Cowan Tract Disadvantaged Unincorporated Community

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Monday–Friday, connecting Ceres and Modesto between the hours of 8:15 a.m. and 6:10 p.m.; no weekend service is provided on CAT Route B (City of Ceres 2013). The nearest CAT Route B bus stop is approximately 1.25 miles north of Cowan Tract at the northeast corner of Crows Landing and Service Roads. MAX Route 42 provides bus service every 30 minutes between the hours of 5:51 a.m. and 7:59 p.m. Monday–Saturday and 8:45 a.m.–6:40 p.m. on Sundays; the nearest MAX bus stop to Cowan Tract is 1.75 miles north at the Stanislaus County Community Services Agency/Community Safety Center facility on Hackett Road (City of Modesto 2009c). All CAT and MAX buses are equipped with bicycle racks (City of Modesto 2009a; City of Ceres 2014). StaRT Route 40 connects Modesto, Grayson, Westley, and Patterson, and passes 0.25 mile north of Cowan Tract on Crows Landing and Grayson Roads. StaRT Route 40 provides round trips between Modesto and Patterson; Monday–Friday, there are eight round trips, running approximately every 2 hours from 5:20 a.m. to 9:08 p.m.; on Saturdays, there are five round trips, running every 2 hours and 45 minutes from 8:15 a.m. to 8:12 p.m.; no StaRT buses run on Route 40 on Sundays (Stanislaus Regional Transit 2014b). The nearest StaRT Route 40 bus stop to Cowan Tract is 1.75 miles north at the Stanislaus County Community Services Agency/Community Safety Center facility on Hackett Road (Stanislaus Regional Transit 2014b). All three routes, CAT Route B, MAX Route 42, and StaRT Route 40, connect to Modesto's Downtown Transportation Center, from which riders can transfer and connect to the Modesto Amtrak station, the Altamont Commuter Express (ACE) train station in Lathrop, and the Dublin Bay Area Rapid Transit (BART) station (Stanislaus Regional Transit 2014c; City of Modesto 2009b).

2.1.4 Water, Wastewater, and Stormwater Drainage Systems

No community services district serves Cowan Tract. Water is obtained through individual private wells, and wastewater is disposed through private septic systems (Stanislaus County 2012). Like many rural areas, storm drainage in the vicinity of Cowan Tract consists of either field percolation or roadside ditches that drain to nearby creeks. No storm drainage system serves Cowan Tract.

2.1.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in unincorporated Stanislaus County (Stanislaus County 2014a). Cowan Tract falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Monday–Saturday, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.1.6 Law Enforcement and Fire Protection

Law enforcement services for Cowan Tract, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The nearest sheriff's station to Cowan Tract is the main station, approximately 2.3 miles north at 250 East Hackett Road in Ceres.

The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The crime rates presented below were compiled by Applied Geographic Solutions (AGS) using the primary reporting categories from the Federal Bureau of Investigation (FBI) 2005 – 2010 Uniform Crime Report databases, along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories: personal crimes (murder, rape, robbery, and assault) and property crimes (burglary, larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes) and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). Cowan Tract DUC falls within census block group 060990030.021.

The overall personal crime and property crime indices for Cowan Tract are 141 and 85, respectively, which means that personal crimes in Cowan Tract occur at a rate 41% higher than the nationwide average, and property crimes occur at a rate of 85% of the national average. The general and individual crime indices for these categories are shown in Table 2-1 below.

Table 2-1. Cowan Tract Crime Indices

Personal Crime		Property Crime	
Personal Crime Index	141	Property Crime Index	85
Murder	166	Burglary	166
Rape	114	Larceny	97
Robbery	67	Motor Vehicle Theft	12
Assault	187		

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The Westport Fire Protection District (FPD) provides fire protection and emergency response services to the Cowan Tract area from its one fire station, located approximately 2.5 miles west at 5160 South Carpenter Road. The Westport fire station serves a 45-square-mile area with a staff of 17 volunteer firefighters and houses two engines, one water tender, and one rescue vehicle (Emergency Services Consulting 2007). The station's workload, defined by the number of incidents

per year, increased from just over 100 in 1987 to about 300 in 2005 (Emergency Services Consulting 2007).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. Westport FPD has an ISO rating of 8 within a 5-mile radius of the station (Emergency Services Consulting 2007).

2.1.7 Schools and Community Amenities

Cowan Tract lies within the boundaries of the Ceres Unified School District, which includes a total of 22 schools serving a total of 12,742 students in grades K–12 (Ceres Unified School District 2014a). The nearest elementary school to Cowan Tract is Westport Elementary, which is 2.9 miles west at 5218 South Carpenter Road. This school serves 454 students in grades K–6 (California Department of Education 2014c; Ceres Unified School District 2013). The nearest junior high school is Blaker Kinser Junior High School, serving 612 students in grades 7 and 8, approximately 4 miles northeast of Cowan Tract at 1601 Kinser Road in Ceres. The nearest high school is Central Valley High School, 3.5 miles northeast at 4033 South Central Avenue in Ceres (California Department of Education 2014a). Central Valley High School serves 1,686 students in grades 9–12 (California Department of Education 2014b). The school district provides bus transportation to and from school for students living beyond walking distance to their schools (Ceres Unified School District 2014b).

Several city parks lie approximately 1.5–2 miles northeast of Cowan Tract in southwest Ceres. Of these, Sam Ryno Park, at about 1.5 miles, is the closest but has no developed amenities; nearby developed park and recreational facilities include Strawberry Fields Park, Don Pedro Park, and Central Valley High School. Strawberry Fields Park is a neighborhood park featuring picnic facilities and play equipment, and Don Pedro Park features picnic facilities, play equipment, and an adult fitness area (City of Ceres 2010). The City of Ceres considers school facilities to be joint-use recreational facilities (City of Ceres 1997). Developed recreational amenities at Central Valley High School include baseball/softball fields, soccer fields, tennis courts, and a track.

The nearest grocery store to Cowan Tract is Joe's Food Mart, a small convenience market, approximately 0.25 mile north of Cowan Tract at the corner of Crows Landing Road and West Grayson Road. The nearest full-service supermarkets are Magic Market, 2.7 miles northeast of Cowan Tract at 3900 Morgan Road in Ceres, and La Perla Tapatia, 2.9 miles north of Cowan Tract at 2031 Crows Landing Road in Modesto.

2.1.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county San Joaquin Valley Air Pollution Control District (SJVAPCD), a regional public health agency responsible for air quality management in those eight counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San

Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that two pollutants—ozone and particulate matter (PM) of both 10 microns or less (PM10) and 2.5 microns or less (PM2.5)— are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006) and SB 375 (Sustainable Communities and Climate Protection Act of 2008), California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Cowan Tract DUC is not atypical for a small, rural community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. The Modesto monitoring site is the closest to Cowan Tract, approximately 5.5 miles north of the community. Table 2-2 shows the San Joaquin Valley air basin's (SJVAB's) current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-2. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-3 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-3. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 *Community Health Assessment of Stanislaus County* (CHA), prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes, and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-4 below. Cowan Tract falls within the central region identified in Table 2-4.

Table 2-4. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas, including Cowan Tract, with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 2.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the central region, including Cowan Tract, ranks fifth for hypertension-related emergency room visits, fourth highest for hypertension-related hospitalizations, and fifth for hypertension-related mortality (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. The central region of Stanislaus County, including Cowan Tract, ranks third-lowest for heart disease–related emergency room visits among the county's nine regions, has the fourth-lowest rate of heart disease–related hospitalizations, and has the third-highest rate of heart disease–related mortality (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other more closely tracked conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. The central region of Stanislaus County, including Cowan Tract, ranks fourth-lowest among the nine regions for cancer-related emergency room visits, fifth for cancer-related hospitalizations, and has the fourth-highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001 to 2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the central region, including Cowan Tract, ranks fifth for diabetes-related emergency room visits and hospitalizations, and fourth-highest for diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. Among Stanislaus County's nine regions, the central region, including Cowan Tract, has the third-highest rate of asthma-related emergency room visits and ranks fifth for asthma-related hospitalizations (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses life expectancy at birth (LEB) as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is

projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 year less than the nationwide LEB of 78.9. The LEBs within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the central region, which includes Cowan Tract, ranks second-shortest among these, with a LEB of 77.73 years (Stanislaus County Health Services Agency 2013).

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2.2 Crows Landing

2.2.1 General Characteristics and Demographics

Crows Landing is an unincorporated community located in southwest Stanislaus County 6 miles southeast of the city of Patterson and 13 miles southwest of the city of Turlock. The community of Crows Landing is within the approximately 2,030-acre Crows Landing CDP and had a 2010 census population of 355 people in 121 households. The median annual household income in California was $60,190 in 2013; it was $29,141 in Crows Landing (United States Census Bureau 2013a, 2013b). With 41% of its housing units in need of rehabilitation, Crows Landing ranks sixth among unincorporated communities in the county for percentage of housing units in need of rehabilitation (Stanislaus County 2012). At approximately 2,030 acres, the Crows Landing CDP occupies a much larger area than the 86-acre area identified as the Crows Landing DUC and encompasses approximately 1,944 acres of agricultural lands surrounding the DUC, particularly to the north, west, and south.

The Crows Landing DUC is roughly bound by 4th Street on the northwest, E Street and Armstrong Road on the northeast, Fink Road on the south, and agricultural lands and Bonita Avenue on the west. SR 33 and the Union Pacific Railroad tracks bisect the community in a northwest-southeast direction. In addition to the residential uses, a range of commercial and public uses are present in Crows Landing. The community includes agricultural packing and shipping operations and a variety of commercial uses clustered along and near SR 33 and the Union Pacific Railroad tracks, as well as a fire station, an elementary school, and a United States Post Office. Crows Landing is surrounded by agricultural land and accompanying agriculture-related residences. Residential uses in Crows Landing consist of single-family residential units (Stanislaus County 2012). All of the land immediately surrounding the Crows Landing DUC is zoned General Agriculture, with a 40-acre minimum parcel size (A-2-40) (Stanislaus County 2014d). These agricultural lands are identified by the California Department of Conservation's Important Farmlands Inventory as prime farmland (California Department of Conservation 2014); much of this area, including land adjacent to the DUC, is also under Williamson Act contract (California Department of Conservation 2012). These agricultural lands neither support the requisite level of existing development for consideration under SB 244 nor are likely to develop; therefore, they are not included as part of the Crows Landing community studied for SB 244 purposes. The former Crows Landing airfield, proposed for development as the Crows Landing Business Industrial Park with a general aviation airport, is located approximately 1.5 miles to the west.

The General Plan's Housing Element identifies Crows Landing as a Residential Development Potential Study Area, noting that Crows Landing has the potential to accommodate three more single-family dwelling units (Stanislaus County 2012). Existing infrastructure and services for the Crows Landing DUC are described below.

2.2.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Crows Landing DUC are presented in Figure 2-2, *Crows Landing Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools,

parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available for the Crows Landing DUC specifically.

2.2.3 Transportation Facilities and Services

Transportation infrastructure in Crows Landing consists of public highways and roads, railroad tracks, and StaRT bus service. Major north-south highways serving western Stanislaus County include Interstate 5 (I-5) and SR 33. Crows Landing lies approximately 3 miles east of I-5 and is bisected by SR 33 and the Union Pacific Railroad tracks. SR 33 is a two-lane undivided highway through Crows Landing, with a four-way stop at its intersection with Fink Road; the County General Plan classifies SR 33 as a four-lane expressway, a category of road intended to move high volumes of people and goods between urban areas within the county at higher speeds (Stanislaus County 2006). (Stanislaus Council of Governments 2014). Fink Road is also currently characterized as a two-lane major road and classified by the County General Plan as a four-lane expressway (Stanislaus Council of Governments 2014; Stanislaus County 2006). With the exception of SR 33 and Fink Road, all remaining roads within Crows Landing are presently two-lane local roads and are expected to remain as such (Stanislaus Council of Governments 2014; Stanislaus County 2006). Other than a short segment of sidewalk on the west side of SR 33 between 4th and 6th Streets, no sidewalks, curbs, or gutters are present on the roadways in and around Crows Landing (Stanislaus County 2012). Street lights are present along SR 33 and parts of 5th Street and Fink Road. The Union Pacific railroad tracks extend north-south immediately east of Crows Landing.

Fixed-route bus service on StaRT Route 45 West connects Crows Landing to Gustine, Newman, and Patterson (Stanislaus Regional Transit 2014a). Buses run on Route 45 West Monday–Friday from 5:30 a.m. to 9:26 p.m., providing eight round trips, and on Saturdays from 5:45 a.m. to 8:39 p.m., providing six round trips (Stanislaus Regional Transit 2014a). From the Patterson Transfer Location at Veteran's Memorial Park, passengers can transfer to buses on Route 45 East, which travels between Patterson and Turlock, or to Route 40, which connects to Westley, Grayson, and Modesto (Stanislaus Regional Transit 2014b). From Modesto's Downtown Transportation Center, riders can transfer and connect to the Modesto Amtrak station, the ACE train station in Lathrop, and the Dublin BART station (Stanislaus Regional Transit 2014b; City of Modesto 2009).

Crows Landing has two StaRT bus stops, one northbound and one southbound, on SR 33 near 5th Street (Stanislaus Regional Transit 2014a). In addition, Crows Landing falls within the Newman Dial-a-Ride service area, which comprises the cities of Newman and Patterson in addition to the communities of Crows Landing and Gustine (Stanislaus Regional Transit 2014b). Newman Dial-a-Ride provides bus service three times per day, Monday–Saturday (Stanislaus Regional Transit 2014b).

2.2.4 Water, Wastewater, and Stormwater Drainage Systems

Crows Landing receives all of its domestic water for residential and commercial use from ground water supplied by the Crows Landing CSD. The Crows Landing CSD obtains water through its two groundwater wells (Stanislaus Local Agency Formation Commission 2014). The Crows Landing CSD water supply system is operating at capacity and has a history of water supply problems, caused in large part by the age of its infrastructure (Stanislaus Local Agency Formation Commission 2014). Most of the Crows Landing CSD's water supply flows through an aging system of small pipelines that lose pressure under heavy consumptive demands (Stanislaus Local Agency Formation Commission

Figure 2-2
Crows Landing Disadvantaged Unincorporated Community

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2014). The Crows Landing CSD recently received a $20,000 grant from the Stanislaus County Community Development Fund toward the repair of one of its wells that was found to have several large holes (Stanislaus County Local Agency Formation Commission 2014).

Wastewater in Crows Landing is processed through individual private septic systems, and no storm drainage system is present in the community (Stanislaus Local Agency Formation Commission 2014). Drainage consists primarily of roadside percolation, with no pipelines or detention ponds (Stanislaus County 2004).

2.2.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in the unincorporated area (Stanislaus County 2014a). Crows Landing falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.2.6 Law Enforcement and Fire Protection

Law enforcement services for Crows Landing, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The nearest sheriff's station to Crows Landing is the main station, approximately 16 miles northeast at 250 East Hackett Road in Ceres. In addition, the Patterson police station, located approximately 6.5 miles northwest of Crows Landing in the city of Patterson, is staffed by the Stanislaus County Sheriff's Department, which provides contract police services to Patterson under the title of Patterson Police Services (Stanislaus County Sheriff's Department 2014). The Newman police station is 6 miles southeast of Crows Landing. Although the Sheriff's Department remains the designated law enforcement agency for unincorporated areas of the county, in practice, the County Sheriff's Department and Newman Police Department provide each another with frequent mutual aid and back-up services (Stanislaus County Sheriff's Department 2014).

The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary,

larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). Crows Landing DUC falls within two census block groups; the primarily residential area north of Fink Road and west of SR 33 falls within block group 060990034.001 and the area southeast of Fink Road/SR 33 falls within block group 060990034.002.

The overall personal crime indices for the two census block groups comprising Crows Landing are 118 and 83, and the property crime indices are 55 and 82. These rates mean that personal crimes occur at rates 18% higher than the national average in the main area of Crows Landing, north of Fink Road, and 83% of the national average for the small area of Crows Landing southeast of Fink Road and SR 33. Property crimes occur at a rate of 55% and 82% of the national average for these two block groups. The general and individual crime indices for these categories are shown in Table 2-5 below.

Table 2-5. Crows Landing Crime Indices

Personal Crime			Property Crime		
Block Group	060990034.001	060990034.002	Block Group	060990034.001	060990034.002
Personal Crime Index	118	83	Property Crime Index	55	82
Murder	160	208	Burglary	86	163
Rape	136	49	Larceny	63	88
Robbery	80	44	Motor Vehicle Theft	41	12
Assault	85	32			

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The West Stanislaus County FPD provides fire protection, emergency, and rescue services to the Crows Landing area, as well as to Grayson, Diablo Grande, and Westley (Emergency Services Consulting 2007). District-wide, 5 full-time firefighters per shift and 100 volunteers staff the West Stanislaus County FPD (Emergency Services Consulting 2007). The West Stanislaus County FPD's Fire Station No. 6 is located within Crows Landing at 22012 G Street and houses two engines (West Stanislaus County Fire Protection District 2014).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale

from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. The West Stanislaus County FPD carries an ISO rating of 4 (West Stanislaus Fire Protection District 2015).

2.2.7 Schools and Community Amenities

Crows Landing is within the Newman-Crows Landing Unified School District, which in 9 schools serves 2,887 students in grades K–12 (California Department of Education 2014b; Stanislaus County Office of Education 2009). One school, Bonita Elementary School, is located in Crows Landing. Bonita Elementary School serves 156 students in grades K–5 (California Department of Education 2014a). The nearest middle school to Crows Landing is Yolo Middle School, 7 miles south in the city of Newman. Yolo Middle School serves 646 students in grades 6–8 (California Department of Education 2014d). The closest high school is also in Newman, Orestimba High School, serving 768 students in grades 9–12, is 6 miles south of Crows Landing (California Department of Education 2014c).

Crows Landing has one public park, the 1-acre Bonita Park and Pool facility, located near the northwestern edge of the community across the street from Bonita Elementary School. Bonita Park features picnic tables, a swimming pool, and an informal play area; however, the Bonita Park swimming pool is closed and unavailable for public use pending future repairs (Stanislaus County n.d.). In addition, Bonita Elementary School includes a playground, outdoor basketball courts, and a baseball/softball field.

Two small convenience markets are located in Crows Landing. Las Palmas Market & Deli is located at the north end of Crows Landing on SR 33 and the Qwik-Serve Market #2 is also on SR 33 at 6th Street. The nearest full-service supermarkets are Save Mart, approximately 6 miles northwest in Patterson, and Nob Hill Foods, about 6.5 miles south in Newman.

2.2.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, the regional public health agency responsible for air quality management in those eight counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that ozone, PM10, and PM2.5, are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Crows Landing DUC is not atypical for a small, rural community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. The Turlock monitoring site is the closest to Crows Landing, approximately 14.3 miles northeast of the community. Table 2-6 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-6. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved SJVAB reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-7 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-7. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-8 below. Crows Landing falls within the west side region identified in Table 2-8.

Table 2-8. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 2.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the west side, including Crows Landing, has the lowest rate of hypertension-related emergency room visits, ranks fifth for hypertension-related hospitalizations, and has the second-lowest hypertension-related mortality rate (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. Stanislaus County's west side has the second-lowest rate of heart disease–related emergency room visits among the county's nine regions, the lowest rate of heart disease–related hospitalizations, and the fourth-highest mortality rate (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. The west side of Stanislaus County ranks seventh (third-lowest) among the nine regions for cancer-related emergency room visits, has the lowest rate of cancer-related hospitalizations, and the highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001 to 2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the west side has the lowest rate of diabetes-related emergency room visits, the third-lowest rate of hospitalizations, and the highest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. The west side region has Stanislaus County's second-lowest rate of asthma-related emergency room visits and hospitalizations among the county's nine regions (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs

within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the west side region ranks third-highest among these, with a LEB of 79.58 years (Stanislaus County Health Services Agency 2013).

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2.3 Grayson

2.3.1 General Characteristics and Demographics

Grayson is an unincorporated residential community comprised primarily of single-family residential units located approximately 11 miles southwest of the city of Modesto and 6.5 miles northwest of the city of Patterson. In 2010, Grayson had 280 housing units, 250 of which were occupied (United States Census Bureau 2013a). The community of Grayson is a CDP with a population of approximately 952 people in 250 households. California's median annual income was $60,190 in 2013; Grayson's median annual household income was $37,899 (United States Census Bureau 2013a, 2013b). At 1,632 acres, the Grayson CDP occupies a much larger area than the roughly 100-acre area identified as the Grayson DUC, and encompasses approximately 1,532 acres of agricultural lands north of the DUC. The majority of land within the Grayson CDP is categorized by the California Department of Conservation's Important Farmlands Inventory as either prime farmland or nonagricultural and natural vegetation; the remaining small areas consist of grazing land and farmland of local importance (California Department of Conservation 2014); most of this area is not enrolled in the Williamson Act program (California Department of Conservation 2012). Part of the Grayson CDP north of the DUC is zoned Planned Development (PD), however, the PD is expired and use of the area is limited to agricultural use that does not support the requisite level of existing development for consideration under SB 244; therefore, it is not included as part of the Grayson DUC.

The Grayson DUC is roughly bordered by Hito Drive on the north, the San Joaquin River on the east, Grayson Road on the south, and River Road on the west. The community is surrounded on the north, west, and south by agricultural land and scattered agriculture-related structures and residences, and bordered on the eastern side by the San Joaquin River. Adjacent land to the west, south, and east of the Grayson DUC is zoned General Agriculture, with a 40-acre minimum parcel size (A-2-40) (Stanislaus County 2014).

The General Plan's Housing Element identifies Grayson as a Residential Development Potential Study Area and that it has the potential to accommodate 10 more dwelling units (Stanislaus County 2012). Existing infrastructure and services for Grayson are described below.

2.3.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Grayson DUC are presented in Figure 2-3, *Grayson Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available specifically for the Grayson DUC.

2.3.3 Transportation Facilities and Services

Transportation infrastructure in the Grayson area consists of public highways and roads, and StaRT bus service. Major north-south highways serving western Stanislaus County include I-5 and SR 33. Grayson lies approximately 4.7 miles east of I-5 and 1.3 miles east of SR 33, the Union Pacific

Railroad tracks, and the community of Westley on West Grayson Road. West Grayson Road, which forms the DUC's southern border, is a two-lane major road; all of the roads within Grayson are two-lane local roads (Stanislaus County 2006; Stanislaus Council of Governments 2014). The County General Plan classifies West Grayson Road as a four-lane expressway, intended to move high volumes of people and goods between urban areas within the county (Stanislaus County 2006). Although all streets are paved and most have sidewalks, curbs, and gutters, approximately 40% of the housing units in Grayson lack sidewalks (Stanislaus County 2012).

Fixed-route bus service on StaRT Route 40 connects Grayson to Modesto, Westley, and Patterson (Stanislaus Regional Transit 2014a). StaRT Route 40 provides round trips between Modesto and Patterson; Monday–Friday, there are eight round trips, running approximately every 2 hours from 5:20 a.m. to 9:08 p.m.; on Saturdays, there are five round trips, running every 2 hours and 45 minutes from 8:15 a.m. to 8:12 p.m.; no StaRT buses run on Route 40 on Sundays (Stanislaus Regional Transit 2014b). From the Modesto Downtown Transit Center, passengers can transfer to buses on Route 10 Express to Turlock; Route 15 to Ceres, Keyes, and Turlock; and Route 60 to Riverbank and Oakdale, as well as to the Modesto Amtrak station, the ACE train station in Lathrop, and the Dublin BART station (City of Modesto 2009; Stanislaus Regional Transit 2014c). From the Patterson Transfer Location at Veteran's Memorial Park, passengers can transfer to buses on Route 45 East, which travels between Patterson and Turlock, and Route 45 West, which connects Patterson to Crows Landing, Newman, and Gustine (Stanislaus Regional Transit 2014c). Grayson has two StaRT bus stops, one at Amelia Street and Stakes Road, and another at Laird and Mary Streets (Stanislaus Regional Transit 2014c).

2.3.4 Water, Wastewater, and Stormwater Drainage Systems

The City of Modesto provides municipal water service to Grayson through the former Del Este water system; the water is pumped from two groundwater wells in the Grayson area, treated through an ion exchange nitrate treatment system, then stored in a 0.22 million gallon tank prior to distribution (Stanislaus County Local Agency Formation Commission 2014). This approach has reduced nitrate contamination levels such that Grayson's water supply had no recorded water quality violations in 2014 (City of Modesto 2010, 2014). However, the City of Modesto's *2010 Water System Engineer's Report* identifies deficiencies in Grayson's water supply and distribution system. Specific deficiencies include the pumping capacity of the two wells and areas of the distribution system in which minimum water pressure could not be maintained. To remedy the deficiencies, the *Engineer's Report* recommends capital improvement projects, including construction of a new (third) well with a 400 gallon per minute (gpm) pumping capacity; a new backup generator at one of the existing wells; 900 gpm of additional pump capacity at the existing storage tank; repair and replacement of aging infrastructure; and 4,600 feet of upsized distribution pipelines to ensure adequate fire flow (City of Modesto 2010). In 2014, the City of Modesto applied, unsuccessfully, to the California Department of Water Resources for an Expedited Drought Grant to implement these improvements (California Department of Water Resources 2014a, 2014b).

The Grayson CSD provides wastewater and street lighting service to the Grayson DUC. The Grayson CSD's wastewater collection and treatment system has a designed flow capacity of 100,000 gallons per day and is presently operating at capacity (Stanislaus Local Agency Formation Commission 2014).

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Figure 2-3
Grayson Disadvantaged Unincorporated Community

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Gutters that run along the streets in Grayson drain into storm drain pipes and a detention basin that pumps to the San Joaquin River bottom, where the water flows overland to the river (Stanislaus County 2004). Grayson's storm drainage facilities are in good condition (Stanislaus County 2004).

2.3.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in the unincorporated area (Stanislaus County 2014a). Grayson falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.3.6 Law Enforcement and Fire Protection

Law enforcement services for Grayson, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The nearest sheriff's station to Grayson is the main station, approximately 10.5 miles east at 250 East Hackett Road in Ceres. In addition, the Patterson police station, located approximately 8 miles southeast of Grayson in the city of Patterson, is staffed by the Stanislaus County Sheriff's Department, which provides contract police services to Patterson under the title of Patterson Police Services (Stanislaus Local Agency Formation Commission 2013).

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary, larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block

group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). Grayson falls within census block group 060990033.001.

The overall personal crime and property crime indices for Grayson are 181 and 190, respectively, which means that personal crimes in Grayson occur at a rate 81% greater than the average nationwide, and property crimes occur at a rate 90% greater than the national average. The general and individual crime indices for these categories are shown in Table 2-9 below.

Table 2-9. Grayson Crime Indices

Personal Crime		Property Crime	
Personal Crime Index	181	Property Crime Index	190
Murder	88	Burglary	383
Rape	114	Larceny	201
Robbery	21	Motor Vehicle Theft	31
Assault	429		

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The West Stanislaus FPD provides fire protection, emergency, and rescue services to Grayson, as well as to Crows Landing, Diablo Grande, and Westley (Emergency Services Consulting 2007). District-wide, 5 full-time firefighters per shift and 100 volunteers staff the West Stanislaus County Fire Protection District (Stanislaus Local Agency Formation Commission 2007). The West Stanislaus FPD's Fire Station No. 3 is located approximately 1 mile away from Grayson at 8598 Kern Street in Westley and houses WSF-Engine 3, WSF-Water Tender 3, and WSF-Rescue 3 (West Stanislaus Fire Protection District 2014). Volunteer firefighters staff the Westley Station (West Stanislaus Fire Protection District 2014).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. The West Stanislaus County FPD carries an ISO rating of 4 (West Stanislaus Fire Protection District 2015).

2.3.7 Schools and Community Amenities

Grayson lies within the boundaries of the Patterson Unified School District, which includes a total of 8 schools serving 6,023 students in grades K–12 (Stanislaus County Office of Education 2009; California Department of Education 2014e). The nearest elementary school to the community is Grayson Charter, approximately 2 miles southwest in Westley. Grayson Charter provides a dual-language immersion program in English and Spanish to 262 children in grades K–5 (California Department of Education 2014b). The nearest non-charter elementary school is Northmead

Elementary, located approximately 7 miles southwest in Patterson. Northmead Elementary serves 572 students in grades K–5 (California Department of Education 2014c). The nearest middle school to Grayson is Creekside Middle School in Patterson, serving 1,201 students in grades 6–8 (California Department of Education 2014a). The nearest high school to Grayson is Patterson High School, located approximately 8 miles southwest in Patterson and serving 1,690 students in grades 9–12 (California Department of Education 2014d).

Three public park facilities operated and maintained by the Stanislaus County Department of Parks and Recreation are present in the community of Grayson: Leroy F. Fitzsimmons Memorial Park, United Community Center and Park, and Laird Regional Park. Leroy F. Fitzsimmons Memorial Park is located on the eastern edge of Grayson at the corner of Amelia and Stakes Streets. The 0.5-acre park has a basketball court, picnic shelter, tables, and playground equipment (Stanislaus County n.d.). The 5-acre United Community Center and Park is at the intersection of Laird and Mary Streets, and includes a 3,165 square-foot community center building that serves as a meeting space for local events, recreational programs, after-school activities, and community programs (Stanislaus County n.d.). The park features play equipment, an amphitheater lawn area, barbecues, picnic tables, basketball courts, and informal play areas (Stanislaus County n.d.). Laird Park is a 97-acre regional park approximately 2 miles east of the community on the San Joaquin River. Laird Park features a baseball/softball field, a soccer field, informal play areas, picnic shelters with picnic tables and barbecues, river access, and an unpaved parking area (Stanislaus County n.d.). No restrooms are available at either Leroy F. Fitzsimmons Memorial Park or Laird Park (Stanislaus County n.d.).

One small convenience market with gas pumps and a laundromat, the One-Stop Market, is located in Grayson. The nearest full-service grocery stores are El Mercadito and the Westley Market/El Paisano Supermarket, both on Highway 33 in Westley, about 2 miles southwest of Grayson.

2.3.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, the regional public health agency responsible for air quality management in those eight counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that ozone, PM10, and PM2.5 are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals,

increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Grayson DUC is not atypical for a small, rural community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. The Modesto monitoring site is the closest to Grayson, approximately 11 miles northeast of the community. Table 2-10 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2.10. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved SJVAB reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-11 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-11. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-12 below. Grayson falls within the west side region identified in Table 2-12.

Table 2-12. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 1.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the west side, including Grayson, has the lowest rate of hypertension-related emergency room visits, ranks fifth for hypertension-related hospitalizations, and has the second-lowest hypertension-related mortality rate (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. Stanislaus County's west side has the second-lowest rate among the county's nine regions for heart disease–related emergency room visits, the lowest rate of heart disease–related hospitalizations, and the fourth-highest mortality rate (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. The west side of Stanislaus County ranks seventh (third-fewest) among the nine regions for cancer-related emergency room visits, has the lowest rate of cancer-related hospitalizations, and has the highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001 to 2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County

are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the west side has the lowest rate of diabetes-related emergency room visits, the third-lowest rate of hospitalizations, and the highest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. The west side region has the second-lowest rate of asthma-related emergency room visits and hospitalizations among the county's nine regions (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the west side region ranks third-highest, with a LEB of 79.58 years (Stanislaus County Health Services Agency 2013).

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2.4 Keyes

2.4.1 General Characteristics and Demographics

Keyes is a 1,810-acre unincorporated community spanning SR 99 in central Stanislaus County, roughly halfway between the cities of Ceres and Turlock. The northern edge of Keyes is about 1 mile southeast of Ceres and the southern edge of Keyes is about 1 mile northwest of Turlock. Keyes is bordered by Redwood Road on the north, Washington Road on the east, Keyes Road on the south, Faith Home Road on the southwest and SR 99 on the northwest. Turlock Irrigation District's Laterals No. 2 ½ and No. 3 cross Keyes in an east-west direction, SR 99 bisects the southern part of the community from northwest to southeast, and the Union Pacific Railroad tracks parallel the western side of SR 99. Keyes is surrounded by agricultural land, including both field crops and orchards, as well as accompanying agriculture-related structures and residences.

Keyes is a predominantly residential community with some commercial and public uses. Residences in Keyes are primarily single-family dwelling units, with a small quantity of duplexes and multifamily units, and several mobile home parks (United States Census Bureau 2013a). In 2010, Keyes had 1,714 housing units, 1,588 of which were occupied (United States Census Bureau 2013a). Commercial uses in Keyes include large-scale agricultural-industrial facilities and agricultural packing and shipping operations, primarily located west of SR 99. Numerous smaller service and retail businesses, as well as an elementary school, a public library, a fire station, and a United States post office, lie immediately east of SR 99.

Keyes is a CDP with a 2010 census population of 5,601 people in 1,588 households and an average household size of 3.29 (United States Census Bureau 2013a, 2013b). In 2013, the median annual household income in California was $60,190; in the Keyes CDP it was $34,967 (United States Census Bureau 2013b).

At 1,810 acres, the Keyes CDP occupies a larger area than the 626-acre Keyes DUC and encompasses surrounding agricultural lands. The majority of these surrounding agricultural lands are identified by the California Department of Conservation's Important Farmlands Inventory as prime farmland (California Department of Conservation 2014). The agricultural lands outside the DUC do not support the requisite level of existing development for consideration under SB 244 and are unlikely to develop in the near future. Therefore, they are not included as part of the Keyes DUC studied for SB 244 purposes.

The General Plan's Housing Element identifies Keyes as a Residential Development Potential Study Area and indicates that available land, infrastructure, and services give Keyes the potential to accommodate 207 additional dwelling units (Stanislaus County 2012). The General Plan's Housing Element notes that a portion of Keyes falls within the Stanislaus County Redevelopment Project Area (Stanislaus County 2012). However, this is of little practical importance with the dissolution of the redevelopment agencies in California. Existing infrastructure and services for Keyes are described below.

2.4.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Keyes DUC are presented in Figure 2-4, *Keyes Disadvantaged Unincorporated Community*, and include transportation facilities and services

including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available specifically for the Keyes DUC.

2.4.3 Transportation Facilities and Services

Transportation infrastructure in the Keyes area consists of public highways and roads, railroad tracks, and fixed-route and curb-to-curb bus service. SR 99, a major north-south route through California, passes through the community of Keyes; SR 99 consists of a six-lane divided freeway with limited access points; one on/off ramp, Keyes Road, provides access to and from SR 99 at the south end of Keyes. The nearest on/off ramp to the north of Keyes is Mitchell Road, approximately 0.7 mile north near Ceres. The Union Pacific railroad tracks bisect Keyes immediately west of and parallel to SR 99.

With the exception of SR 99, Faith Home Road, and Keyes Road, roadways within Keyes presently consist of two-lane local roads. Both Faith Home Road and Keyes Road two-lane major roads classified by the California Department of Transportation as major collectors (California Department of Transportation 2014; Stanislaus Council of Governments 2014). The County General Plan classifies Faith Home Road as a collector south of Keyes Road, and as a four-lane expressway north of Keyes Road; Keyes Road is classified as a major four-lane road west of Keyes Road, a six-lane expressway south of Keyes, and a four-lane expressway east of Washington Road (Stanislaus County 2006). Rohde Road/7th Street, paralleling the northeastern side of SR 99 through Keyes, is classified as a collector (Stanislaus County 2006). Collectors are intended to provide direct access to abutting property as well as movement of moderate volumes of people and goods for medium length trips, and serve as transition facilities, carrying traffic from lower to higher level roads, while expressways are intended to move high volumes of people and goods between urban areas within the county (Stanislaus County 2006).

Curbs, gutters, and street lights are present on the majority of roadways in and around Keyes, particularly in the central and outlying residential areas. One commercial area around Starlite Drive lies outside the boundaries of CSAs No. 5 and No. 26, but within the boundary of the Keyes CSD, and lacks curbs, gutters, and sidewalks. With the exception of one small segment of Jessup Road that has a curb and gutter, the area southwest of SR 99, comprised predominantly of agricultural-industrial and commercial uses with several single-family residences, lacks curbs, gutters, sidewalks, and street lights.

In 2009 Stanislaus County installed curbs, gutters, handicap curb returns, new street sections, and a storm drain collection system in an area generally bounded by SR 99 on the west, Anna Street on the north, the Bonita Ranch Subdivision on the east, and Nunes Road on the south (Stanislaus County 2009). When the County constructed curbs and gutters in 2009, individual property owners were given the opportunity to install sidewalks fronting their property at their own expense. Sidewalks are primarily limited to newer residential neighborhoods on the north, east, and south sides of town and, in the central area to those properties whose owners opted to install them during curb and gutter construction in 2009.The Keyes CSD provides street lighting service to areas within its approximately 444-acre boundary (Stanislaus Local Agency Formation Commission 2014).

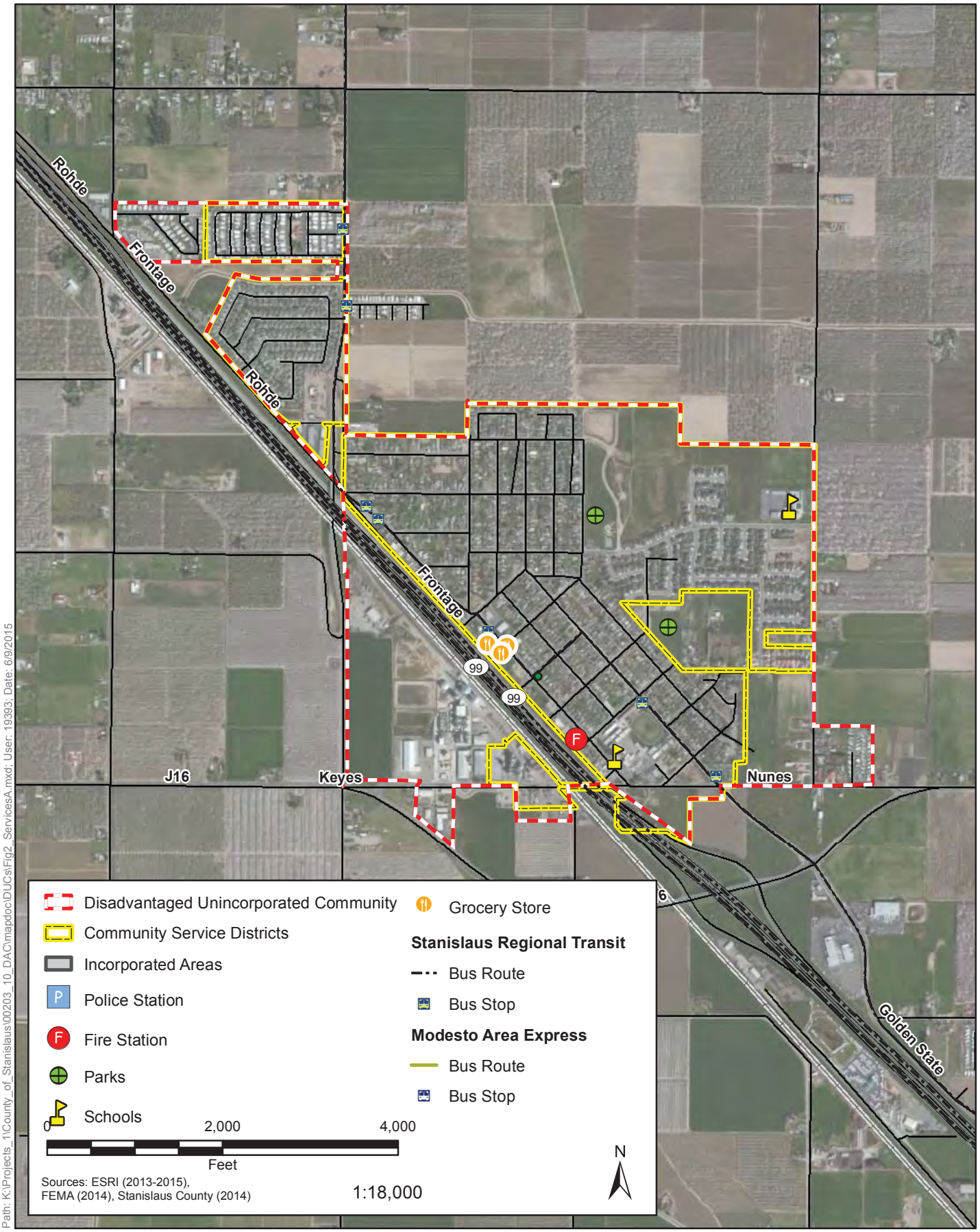

Figure 2-4
Keyes Disadvantaged Unincorporated Community

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Fixed-route bus service on StaRT Route 15 connects Keyes to surrounding cities; Route 10 Express and Route 70 buses run through Keyes Monday–Friday without stopping on their trips between Modesto and Turlock (Stanislaus Regional Transit 2014a). Route 15 provides 12 round trips between Modesto and Turlock, with stops in Ceres and Keyes, Monday–Friday from 4:50 a.m. to 9:46 p.m., and 8 round trips on Saturdays between 6:30 a.m. and 8:32 p.m. (Stanislaus Regional Transit 2014a). From the Modesto Downtown Transit Center, passengers can transfer to buses traveling to other Stanislaus County communities, as well as to the Modesto Amtrak station, the ACE train station in Lathrop, and the Dublin BART station (City of Modesto 2009; Stanislaus Regional Transit 2014a). In addition, Keyes falls within the Turlock-Modesto Shuttle service area. The Turlock-Modesto Shuttle provides curb-to-curb service between the cities of Modesto, Ceres, and Turlock, the communities of Denair and Keyes, and surrounding rural areas (Stanislaus Regional Transit 2014a). Turlock-Modesto Shuttle runs Monday–Saturday, with four southbound trips between 7:00 a.m. and 4:00 p.m. and four northbound trips between 8:30 a.m. and 5:30 p.m. (Stanislaus Regional Transit 2014b).

2.4.4 Water, Wastewater, and Stormwater Drainage Systems

The Keyes CSD provides sewer and water services to the community of Keyes, and has a contractual agreement with the City of Turlock for sewer disposal services (Stanislaus Local Agency Formation Commission 2014). Together, CSA No. 5 and CSA No. 26 provide storm drainage service to approximately 372 acres of the community (Stanislaus Local Agency Formation Commission 2010). The boundaries of these CSAs roughly correspond to those of the Keyes CSD, which encompasses approximately 444 acres (Stanislaus Local Agency Formation Commission 2014).

The Keyes CSD provides its 444-acre district with domestic water from four groundwater wells (Stanislaus Local Agency Formation Commission 2014). Poor water quality is an issue in Keyes, as the level of arsenic in the groundwater exceeds the state's maximum contaminant levels; the Keyes CSD is in the process of establishing treatment facilities to remediate this contaminant (Stanislaus Local Agency Formation Commission 2014). Most of the developed area of Keyes falls within the Keyes CSD boundaries. Some urban uses, including two mobile home parks, are outside the Keyes CSD's boundaries but within its approximately 793-acre sphere of influence. Those uses are not presently served by the CSD. These areas currently rely on onsite wells for their water supply (Stanislaus Local Agency Formation Commission 2014). Once the water treatment facilities are completed, and pending Local Agency Formation Commission (LAFCO) approval of either an out-of-boundary service extension or annexation, the Keyes CSD plans to serve the mobile home parks outside its present boundaries with arsenic-free drinking water (Stanislaus Local Agency Formation Commission 2014).

Wastewater from the Keyes CSD is sent to the Turlock Regional Water Quality Control Facility for treatment (East Stanislaus Regional Water Management Partnership 2013). Scattered urban uses within the Keyes CSD sphere of influence, including the abovementioned mobile home parks, are presently served by onsite septic systems (Stanislaus Local Agency Formation Commission 2014). Although the Keyes CSD is meeting the needs of customers within its existing boundaries, the district recently purchased an additional 25,000 gallons per day of sewage treatment capacity from the City of Turlock, and developers have purchased capacity for future developments in Keyes (Stanislaus Local Agency Formation Commission 2014).

Stormwater drainage poses a challenge in Keyes due to the high water table, only 2.5 feet below the surface in some areas (Stanislaus County 2004). In 2009 Stanislaus County installed curbs, gutters, a

storm drain collection system, and related facilities in an area of Keyes generally bounded by SR 99 on the west, Anna Street on the north, the Bonita Ranch Subdivision on the east, and Nunes Road on the south (Stanislaus County 2009). The County also expanded Keyes' existing drainage basin and excavated an extension to the north of the basin (Stanislaus County 2009). Drainage in the remaining area of Keyes is provided by CSAs No. 5 and No. 26 via roadside ditches and detention basins (Stanislaus Local Agency Formation Commission 2010). Some of the basins allow only for percolation; the Starlite Place storm drain discharges to Turlock Irrigation District Lateral 2 ½ at Faith Home Road and CSA #26 discharges stormwater to Turlock Irrigation District Lateral 2 ½ just east of 10th Street (Stanislaus County 2004).

2.4.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in unincorporated Stanislaus County (Stanislaus County 2014c). Keyes falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014a).

2.4.6 Law Enforcement and Fire Protection

Law enforcement services for Keyes, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The nearest sheriff's station to Keyes is the main station, about 4.5 miles northwest at 250 East Hackett Road in Ceres. The County Sheriff's Department also operates and staffs the Hughson police station, located approximately 3.5 miles northeast of Keyes in the city of Hughson (Stanislaus Local Agency Formation Commission 2005).

The Ceres police station is approximately 2.5 miles northwest of Keyes; however, the City of Ceres does not typically provide law enforcement services beyond its boundaries except under joint actions (Stanislaus Local Agency Formation Commission and City of Ceres 2012).

The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary,

larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). Keyes DUC falls within two census block groups. Most of Keyes east of SR 99 falls within census block group 060990030.023; the area west of SR 99, including the southwest portion of the DUC west of SR 99 and the northernmost portion of the DUC between SR 99 and Faith Home Road, falls within census block group 060990030.022.

The overall personal crime and property crime indices for most of Keyes (census block group 060990030.023) are 121 and 34, respectively, which means that personal crimes in that area occur at a rate 21% higher than the nationwide average, and property crimes occur at a rate 34% of the national average. For the outlying areas, northern and western Keyes (census block group 060990030.022), the overall personal crime and property crime indices are both 148. The general and individual crime indices for these categories are shown in Table 2-13 below.

Table 2-13. Keyes Crime Indices

Personal Crime			Property Crime		
Block Group	060990030.022	060990030.023	Block Group	060990030.022	060990030.023
Personal Crime Index	148	121	Property Crime Index	148	34
Murder	151	57	Burglary	181	66
Rape	119	205	Larceny	104	38
Robbery	76	136	Motor Vehicle Theft	12	5
Assault	209	75			

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The Keyes FPD provides fire protection, emergency response, and rescue services to a 20-square-mile area encompassing the community of Keyes (Emergency Services Consulting 2007). The Keyes FPD boundary abuts those of the Ceres, Hughson, Denair, Turlock Rural, and Mountain View FPDs (Emergency Services Consulting 2007). Small parts of the district fall within the spheres of influence of the cities of Ceres and Turlock (Emergency Services Consulting 2007). The Keyes FPD staffs one fire station, located at 5625 7th Street in Keyes, with 28 volunteers (Emergency Services Consulting 2007). These volunteers operate the district's three engines, one water tender, and rescue vehicle (Emergency Services Consulting 2007).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire

protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. The Keyes FPD carries an ISO rating of 5 within its urbanized area and 9 for rural portions of its service area (Emergency Services Consulting 2007).

2.4.7 Public Services and Community Amenities

Keyes is served by the Keyes Union School District, comprised of 3 schools with 1,071 students in grades K–12 plus two preschool programs, Keyes Head Start and Keyes Preschool (Keyes Union School District 2012; Stanislaus County Office of Education 2009). One elementary school, Keyes Elementary, is located in Keyes and serves 518 children in grades K–5 (California Department of Education 2014b). The district's middle school, Barbara Spratling Middle School, serves 202 students in grades 6–8 (California Department of Education 2014a). The district's third school, Keyes to Learning Charter School, provides both classroom-based and home-study educational programs for 351 students in grades K–12; of these, 91 children are in grades 9–12 (California Department of Education 2014c; Keyes to Learning Charter School 2013).

Two parks, Bonita Ranch Park and Hatch Park, are located within Keyes and maintained by CSA No. 26 (Stanislaus Local Agency Formation Commission 2010). Both the 7-acre Bonita Ranch Park and the 4-acre Hatch Park are on the eastern side of Keyes. Bonita Ranch Park features picnic tables, a basketball court, soccer field, play structures, drinking fountains, paved pathways, and lighting (Stanislaus County n.d.). There are no restrooms at this facility (Stanislaus County n.d.). Hatch Park includes a baseball/softball field, community center, parking area and informal play area.

Keyes has three grocery stores, Tower Super Market, Food Cost U Less, and Keyes Market; all three are located at the intersection of 7th Street and Christine Street in central Keyes. Tower Super Market is a small, full-service market; Food Cost U Less and Keyes Market are small convenience markets. An additional convenience store, Dollar General, is under construction at 5521 7th Street and scheduled to open in late 2015. The nearest large-scale, full-service supermarket is Safeway, approximately 3.25 miles south of Keyes in Turlock.

2.4.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, the regional public health agency responsible for air quality management in those eight counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that ozone, PM10, and PM2.5 are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases

with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Keyes DUC is not atypical for a small, mixed use community. Although industrial uses are larger emitters than residences and Keyes is larger than the other DUCs in Stanislaus County, the fact that GHGs are not localized pollutants means that its residents are not exposed to any greater effect than the rest of Stanislaus County.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. Keyes is almost equidistant from the Modesto and Turlock monitoring sites, approximately 7 miles southeast of the Modesto station and 6.5 miles northwest of the Turlock site. Table 2-14 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-14. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-15 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-15. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-16 below. Keyes falls within the south central region identified in Table 2-16.

Table 2-16. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 1.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the south central region has the fourth-lowest rate of hypertension-related hospitalizations, the second-highest rate of hypertension-related emergency room visits, and the fourth-highest rate of hypertension-related mortality (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. Stanislaus County's south central region has the fourth-lowest rate among the nine regions for heart disease–related emergency room visits, fourth-highest rate of hospitalizations, and third-lowest rate of heart disease–related mortality (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. Stanislaus County's south central region has the fourth-highest rate of cancer-related emergency room visits and hospitalizations among the nine regions, and third-highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001 to 2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the south central region has the fourth-highest rate of diabetes-related emergency room visits, the fourth-lowest rate of hospitalizations, and the third-lowest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. Among Stanislaus County's nine regions, the south central region ranks fifth for asthma-related emergency room visits and third highest for asthma-related hospitalizations (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its 9 regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs

within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the south central region has the fourth-shortest life expectancy, with a LEB of 78.71 years (Stanislaus County Health Services Agency 2013).

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2.5 Monterey Park Tract

2.5.1 General Characteristics and Demographics

Monterey Park Tract is an approximately 30-acre rural neighborhood in central Stanislaus County consisting of single-family residential units approximately 4.5 miles southwest of the city of Ceres and 7 miles west of the city of Turlock. In 2010, Monterey Park Tract had 42 housing units, 35 of which were occupied (United States Census Bureau 2013a). Monterey Park Tract is roughly defined by Durango Avenue on the north, Foy Avenue on the east, La Siesta Avenue on the south, and Monterey Avenue on the west. Monterey Park Tract is surrounded by agricultural land and accompanying agriculture-related facilities and residences. The City of Modesto's Jennings Wastewater Treatment Plant and Modesto Compost Facility are located approximately 2.2 miles west of Monterey Park Tract. A variety of agricultural lands surround Monterey Park Tract; the majority of these lands are identified by the California Department of Conservation's Important Farmlands Inventory as prime farmland, with smaller areas of farmland of statewide importance, unique farmland and, immediately southwest and slightly southeast of Monterey Park Tract, confined animal facilities (California Department of Conservation 2014). Much of this area, particularly the adjacent land west, north, and east of the DUC, is also under Williamson Act contract (California Department of Conservation 2012).

Monterey Park Tract is a 30.2-acre CDP with a 2010 census population of approximately 133 people in 35 households (United States Census Bureau 2013a). In 2013, median annual household income in California was $60,190; in Monterey Park Tract it was $43,750 (United States Census Bureau 2013b). In addition to the residential uses, a church and a community center are present in Monterey Park Tract.

The General Plan's Housing Element identifies Monterey Park Tract as a Residential Development Potential Study Area that has the potential to accommodate 17 more dwelling units on existing vacant parcels (Stanislaus County 2012). Monterey Park Tract falls within the Stanislaus County Redevelopment Project Area (Stanislaus County 2012). However, this is of little practical importance with the dissolution of the redevelopment agencies in California. Existing infrastructure and services for Monterey Park Tract are described below.

2.5.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Monterey Park Tract DUC are presented in Figure 2-5, *Monterey Park Tract Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available specifically for the Monterey Park Tract DUC.

2.5.3 Transportation Facilities and Services

Monterey Park Tract lies approximately 6.7 miles west of SR 99, a major north-south travel corridor and a six-lane freeway in Stanislaus County. Transportation infrastructure in the immediate

Figure 2-5
Monterey Park Tract Disadvantaged Unincorporated Community

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Monterey Park Tract area consists of public two-lane roads. The Union Pacific Railroad tracks run northwest-southeast approximately 1.6 miles east of Monterey Park Tract.

The nearest roads outside the neighborhood are Crows Landing Road 0.9 mile to the east, Taylor Road 0.6 mile to the north, Carpenter Road 1 mile to the west, and Monte Vista Avenue 0.1 mile to the south. Crows Landing Road and Carpenter Road are currently two-lane major roads (Stanislaus Council of Governments 2014). Monte Vista Avenue is a two-lane rural collector, and Taylor Road is a two-lane local roadway (Stanislaus Council of Governments 2014). In the vicinity of the Monterey Park Tract DUC, the County General Plan classifies Crows Landing Road as a four-lane expressway, Carpenter Road as a major four-lane road, and both Monte Vista Avenue and Taylor Road as local roadways (Stanislaus County 2006). Expressways are intended to move high volumes of people and goods between urban areas within the county, while local roadways provide direct access to abutting property and movement of small volumes of people and goods for medium length trips in the agricultural areas of the County (Stanislaus County 2006).

Roads within Monterey Park Tract consist of two-lane local roadways and include Durango Avenue on the north, Foy Avenue on the east, La Siesta Avenue on the south, and Monterey Avenue on the west. A small number of street lights are present along each of these roadways. No sidewalks, curbs, or gutters exist within Monterey Park Tract (Stanislaus County 2012).

No bus service is available within Monterey Park Tract. The nearest bus routes are StaRT Routes 40 and 45 East. Route 40 travels east-west on Grayson Road, approximately 3 miles north of Monterey Park Tract; Route 45 East travels east-west on West Main Avenue, 2 miles south of the neighborhood (Stanislaus Regional Transit 2014). Monterey Park Tract lies approximately 2 miles outside the boundary of the Turlock-Modesto Shuttle service area (Stanislaus Regional Transit 2014).

2.5.4 Water, Wastewater, and Stormwater Drainage Systems

The Monterey Park Tract CSD provides the Monterey Park Tract community with domestic water from two groundwater wells (Stanislaus Local Agency Formation Commission 2010). Monterey Park Tract has a history of poor water quality, and its water supply has repeatedly exceeded California's Title 22 primary drinking water quality maximum contaminant level (MCL) for nitrate and the secondary MCL for manganese, and also recorded high levels of arsenic (Stanislaus County Board of Supervisors 2015). The Monterey Park Tract CSD commissioned a study, completed in September 2011, to evaluate these water quality problems, analyze water supply alternatives to resolve the problems, and identify the best solution (Fremming, Parson & Pecchenino 2011).

On January 26, 2015, a Water Service Agreement was executed among the Monterey Park Tract CSD, the City of Ceres, and Stanislaus County (Stanislaus County Board of Supervisors 2015). Under the Water Service Agreement, the City of Ceres will provide water to the Monterey Park Tract CSD, which will construct, own, and be responsible for the operation and maintenance of improvements necessary for the delivery of water from the City of Ceres water system. The planned water delivery system will connect to a City of Ceres water main on Crows Landing Road, approximately 0.5 mile south of Service Road, and extend roughly 4.5 miles to the Monterey Park Tract CSD delivery system (Stanislaus County Board of Supervisors 2015).

Wastewater is disposed through private septic systems (Fremming, Parson & Pecchenino 2011). No storm drainage system serves Monterey Park Tract.

2.5.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in unincorporated Stanislaus County (Stanislaus County 2014a). Monterey Park Tract falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.5.6 Law Enforcement and Fire Protection

Law enforcement services for Monterey Park Tract, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The nearest sheriff's station to Monterey Park Tract is the main station, approximately 5 miles northeast at 250 East Hackett Road in Ceres.

The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary, larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). The Monterey Park Tract DUC falls within census block group 060990031.001.

The overall personal crime and property crime indices for Monterey Park Tract are 173 and 121, respectively, which means that personal crimes in Monterey Park Tract occur at a rate 73% higher

than the nationwide average, and property crimes occur at a rate 21% higher than the national average. The general and individual crime indices for these categories are shown in Table 2-17 below.

Table 2-17. Monterey Park Tract Crime Indices

Personal Crime		Property Crime	
Personal Crime Index	173	Property Crime Index	121
Murder	235	Burglary	241
Rape	95	Larceny	134
Robbery	45	Motor Vehicle Theft	12
Assault	276		

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The Westport FPD provides fire protection and emergency response services to the Monterey Park Tract and surrounding area from its one fire station, located approximately 3 miles northwest at 5160 South Carpenter Road. The Westport fire station serves a 45-square-mile area with a staff of 17 volunteer firefighters and houses two engines, one water tender, and one rescue vehicle (Emergency Services Consulting 2007). The station's workload, defined by the number of incidents per year, increased from just over 100 in 1987 to about 300 in 2005 (Emergency Services Consulting 2007).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. Westport FPD has an ISO rating of 8 within a 5-mile radius of the station (Emergency Services Consulting 2007).

2.5.7 Schools and Community Amenities

Monterey Park Tract lies within the boundaries of the Ceres Unified School District, which includes a total of 22 schools enrolling a total of 12,742 students in grades K–12 (Ceres Unified School District 2014a; Stanislaus County Office of Education 2009). The nearest elementary school to Monterey Park Tract is Westport Elementary, 2.8 miles north at 5218 South Carpenter Road; Westport Elementary serves 454 students in grades K–6 (California Department of Education 2014c; Ceres Unified School District 2013). The nearest junior high school is Blaker Kinser Junior High School, serving 612 students in grades 7 and 8, approximately 5.5 miles northeast of Monterey Park Tract at 1601 Kinser Road in Ceres. The nearest high school is Central Valley High School, approximately 4.8 miles northeast at 4033 South Central Avenue in Ceres (California Department of Education 2014a). Central Valley High School serves 1,686 students grades 9–12 (California Department of Education 2014b). The school district provides bus transportation to and from school for students living beyond walking distance to their schools (Ceres Unified School District 2014b).

No parks are present within the Monterey Park Tract. The nearest public park, Las Palmas boat launch facility, is approximately 4.5 miles southwest on the San Joaquin River at Las Palmas/West Main Street. The 3-acre Las Palmas facility occupies 1 mile of riverbank along the western bank of the river and features a concrete boat ramp, parking lot, day use area with picnic tables and barbecues, and restrooms (Stanislaus County n.d.[b]).

Several city parks lie approximately 4.5–4.7 miles northeast of Monterey Park Tract in southwest Ceres. Of these, Sam Ryno Neighborhood Park, at about 4.5 miles, is the closest but has no developed amenities; nearby developed park and recreational facilities include Strawberry Fields Park, Don Pedro Park, and Central Valley High School. Strawberry Fields Park is a neighborhood park featuring picnic facilities and play equipment, and Don Pedro Park features picnic facilities, play equipment, and an adult fitness area (City of Ceres 2010). The City of Ceres considers school facilities to be joint-use recreational facilities (City of Ceres 1997). Developed recreational amenities at Central Valley High School include baseball/softball fields, soccer fields, tennis courts, and a track.

There are no grocery stores in Monterey Park Tract. The nearest grocery store is Charlie's Market, a small convenience market, about 1.5 miles northeast at the corner of Crows Landing Road and Taylor Road. The nearest full-service supermarkets are Magic Market, approximately 4.5 miles northeast of Monterey Park Tract in Ceres, and La Perla Tapatia, about 5 miles north of Monterey Park Tract in Modesto.

2.5.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, the regional public health agency responsible for air quality management in those 8 counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). The SVAPCD notes that ozone, PM10, and PM2.5 are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Monterey Park Tract DUC is not atypical for a small, largely residential community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. At approximately 8 miles to the northeast, the Modesto monitoring site is the closest to Monterey Park Tract. Table 2-18 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-18. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-19 presents the number of days in

which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-19. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-20 below. Monterey Park Tract falls within the south central region identified in Table 2-20.

Table 2-20. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes, Monterey Park Tract with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 2.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the south central region, including Monterey Park Tract, has the fourth-lowest rate of hypertension-related hospitalizations, the second-highest rate of hypertension-related emergency room visits, and the fourth-highest rate of hypertension-related mortality (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. Stanislaus County's south central region has the fourth-lowest rate among the nine regions for heart disease–related emergency room visits, fourth-highest rate of hospitalizations, and third-lowest rate of heart disease–related mortality (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. Stanislaus County's south central region has the fourth-highest rate of cancer-related emergency room visits and hospitalizations among the nine regions, and third-highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001 to 2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been

diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the south central region has the fourth-highest rate of diabetes-related emergency room visits, the fourth-lowest rate of hospitalizations, and the third-lowest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. Among Stanislaus County's nine regions, the south central region ranks fifth for asthma-related emergency room visits and third highest for asthma-related hospitalizations (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the south central region has the fourth-shortest life expectancy, with a LEB of 78.71 (Stanislaus County Health Services Agency 2013).

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2.6 Riverdale Park Tract

2.6.1 General Characteristics and Demographics

The Riverdale Park Tract DUC is an approximately 200-acre rural residential neighborhood with 175 dwelling units, composed primarily of single-family residential units, within the larger Riverdale Park CDP. The Riverdale Park Tract DUC is roughly defined by the Tuolumne River on the north and west, Vivian Road on the east, and West Whitmore Avenue on the south. The Riverdale Park Tract DUC is immediately west of the City of Modesto's sphere of influence, which aligns with Vivian Road, and approximately 1 mile west of Modesto's city limit.

The Riverdale Park Tract CDP also includes a portion of the Riverdale Park Tract that is located within the City of Modesto's sphere of influence and within the boundaries of the Riverdale Park Tract CSD. Because Government Code Section 65302.10 does not consider the area within a city's sphere of influence to be a DUC for county purposes, that portion of the Riverdale Park Tract is not the subject of this analysis.

The Riverdale Park Tract DUC consists of five census blocks within the Riverdale Park CDP. The CDP had a 2010 census population of approximately 1,128 people in 354 households. In 2013, California's median annual household income was $60,190; in the Riverdale Park Tract it was $37,656 (United States Census Bureau 2011, 2013a, 2013b). The DUC had a 2010 census population of 607 people in 164 households, for an average household size of 3.7 people (United States Census Bureau n.d.).

The General Plan's Housing Element identifies Riverdale Park Tract as a Residential Development Potential Study Area; however, the geographic area identified in the Housing Element is northeast and independent of the DUC area considered in this document (Stanislaus County 2012). Existing infrastructure and services for the Riverdale Park Tract DUC are limited and are described below.

2.6.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Riverdale Park Tract DUC are presented in Figure 2-6, *Riverdale Park Tract Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available specifically for the Riverdale Park Tract DUC.

2.6.3 Transportation Facilities and Services

The Riverdale Park Tract DUC lies approximately 4 miles west of SR 99, a major north-south travel corridor and a six-lane freeway in Stanislaus County. Transportation infrastructure in the immediate Riverdale Park Tract vicinity consists entirely of two-lane local roadways with no curbs, gutters, sidewalks, or streetlights. The nearest two-lane major roadway is Carpenter Road, 1 mile east of the DUC (Stanislaus Council of Governments 2014). The County General Plan designates this segment of

Carpenter Road as a six-lane expressway, intended to move high volumes of people and goods between urban areas within the county (Stanislaus County 2006).

Most of the Riverdale Park Tract DUC falls immediately outside the service areas of three public StaRT shuttle services, the Eastside Shuttle, the Turlock/Modesto Shuttle, and the Waterford/Modesto Runabout (Stanislaus Regional Transit 2014). All of these StaRT shuttles provide curb-to-curb service within designated areas by advance reservation of at least 4 hours, and the Waterford/Modesto Runabout combines curb-to-curb service with several designated fixed stops (Stanislaus Regional Transit 2014). Vivian Road, the easternmost road of the DUC, serves as the western boundary of the Eastside and Turlock/Modesto shuttles, and Hatch Road, which terminates at the northern end of the DUC, forms the southern boundary of the Waterford/Modesto Runabout (Stanislaus Regional Transit 2014).

2.6.4 Water, Wastewater, and Stormwater Drainage Systems

No CSD or CSA serves the Riverdale Park Tract DUC. Domestic water within the DUC is provided by individual private wells, and wastewater is disposed through private septic systems. No storm drainage system serves the Riverdale Park Tract DUC.

The Riverdale Park Tract CSD operates a well and storage tanks that provide domestic water services to the residents of the unincorporated community northeast of the DUC between the Tuolumne River and West Hatch Road and contracts with the City of Modesto for its emergency water supply (Stanislaus Local Agency Formation Commission 2011). The Riverdale Park Tract CSD does not serve the Riverdale Park Tract DUC. Its boundary and sphere of influence are coterminous and encompass 58 acres located northeast of the DUC. The CSD's western boundary is 0.3 mile east of the northeastern edge of the DUC (Stanislaus Local Agency Formation Commission 2011).

2.6.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in the unincorporated area (Stanislaus County 2014a). Riverdale Park Tract falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday–Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.6.6 Law Enforcement and Fire Protection

Law enforcement services for Riverdale Park Tract, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit

Figure 2-6
Riverdale Park Tract Disadvantaged Unincorporated Community

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responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014). The nearest sheriff's station to Riverdale Park Tract is the main station, approximately 3.5 miles southeast at 250 East Hackett Road in Ceres.

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary, larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between 600 and 3,000 people (United States Census Bureau 1994). The Riverdale Park Tract DUC falls within two large census block groups. Most of the DUC parcels and population, east of Poland Road, fall within census block group 060990031.002; the area west of Poland Road falls within census block group 060990031.003.

The overall personal crime and property crime indices for most of the Riverdale Park Tract DUC (census block group 060990031.002) are 173 and 124, respectively, which means that personal crimes in that area occur at a rate 73% higher than the nationwide average, and property crimes occur at a rate 24% above national average. For the western portion of the DUC (census block group 060990031.003), the overall personal crime and property crime indices are 184 and 166. The general and individual crime indices for these categories are shown in Table 2-21 below.

Table 2-21. Riverdale Park Tract DUC Crime Indices

Personal Crime			Property Crime		
Block Group	060990031.002	060990031.003	Block Group	060990031.002	060990031.003
Personal Crime Index	173	184	Property Crime Index	124	166
Murder	230	112	Burglary	245	329
Rape	95	117	Larceny	136	182
Robbery	50	65	Motor Vehicle Theft	19	26
Assault	273	375			

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The Burbank-Paradise FPD provides fire protection and emergency response services to the Riverdale Park Tract DUC and surrounding area from its one fire station, located approximately 2.5 miles northeast on Beverly Drive in Modesto. The Burbank-Paradise FPD fire station serves a 5.5-square-mile area with a staff of 6 paid and 30 volunteer firefighters, and it houses three structure fire engines and one wildland fire engine (Emergency Services Consulting 2007). The station's workload, defined by the number of incidents per year, increased from just under 300 in 1987 to over 800 in 2005 (Emergency Services Consulting 2007).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. The Burbank-Paradise FPD has an ISO rating of 5 in hydrant-served areas and 8 in non-hydrant areas within its district boundaries (Emergency Services Consulting 2007).

2.6.7 Schools and Community Amenities

Riverdale Park Tract lies within the boundaries of the Modesto City School District, which is a common administration district comprised of the Modesto City Elementary and Modesto City High School districts (Modesto City Schools 2015). Modesto City Elementary District includes a total of 26 schools serving students in grades K–8. Modesto City High School District serves students in grades 9–12. The nearest elementary school to which K–6 students from Riverdale Park Tract are assigned is Fairview Elementary, which is about 1.5 miles east of the Riverdale Park Tract DUC. Fairview Elementary serves 878 students (California Department of Education 2014b). Fairview Preschool and Head Start are also located on the Fairview Elementary campus. The nearest middle school to Riverdale Park Tract is Evelyn Hanshaw Middle School, approximately 2.5 miles east in Modesto, serving 789 students in grades 7 and 8 (California Department of Education 2014a). The Riverdale Park Tract DUC falls within the attendance zone for Thomas Downey High School, located approximately 6 miles northwest in Modesto. Thomas Downey High School serves 1,974 students in grades 9–12 (California Department of Education 2014c). Modesto City Schools buses elementary students living more than 1 mile from their school, middle school students living more than 2 miles from their school, and high school students living more than 3 miles from their school (Modesto City Schools 2015).

There are no public parks within the Riverdale Park Tract DUC. Nearby parks and recreation facilities include the Riverdale Park and Fishing Access and Fairview Park. The Riverdale Park and Fishing Access is located approximately 0.5 mile northeast of the DUC on the south side of the Tuolumne River at Parkdale Drive. The 3-acre Riverdale Park and Fishing Access features play structures, informal play areas, a picnic shelter and picnic tables, benches, a drinking fountain, a walking trail, parking, and a carry-in boat path to the river, but there are no restroom facilities (Stanislaus County n.d.). Fairview Park, located approximately 1.8 miles east of the Riverdale Park Tract DUC in southwest Modesto near West Whitmore and Tucson Avenues, occupies 4 acres and includes a baseball/softball field, a basketball court, a picnic shelter, picnic tables with barbecues, and informal play areas (Stanislaus County n.d.).

There are no grocery stores in Riverdale Park Tract. The nearest grocery store to Riverdale Park Tract is the Country Market, a small convenience market, approximately 0.75 mile east of the DUC

on West Hatch Road near Woodlane Avenue. The Fairview Market, another small convenience market, is about 2 miles east of the Riverdale Park Tract DUC on Inyo Avenue. The nearest full-service supermarkets are La Perla Tapatia and Mi Pueblo Food Center, both approximately 3.2 miles east of Riverdale Park Tract in Modesto.

2.6.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, the regional public health agency responsible for air quality management in those 8 counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that ozone, PM10, and PM2.5 are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Riverdale Park Tract DUC is not atypical for a small, largely residential community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. The Modesto monitoring site, approximately 3.6 miles to the northeast, is the closest monitoring station to Riverdale Park Tract. Table 2-22 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-22. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-23 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-23. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-24 below. The Riverdale Park Tract DUC falls within the central region identified in Table 2-24.

Table 2-24. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas, including Riverdale Park, with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 2.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the central region ranks fifth for hypertension-related emergency room visits, has the fourth-highest rate of hypertension-related hospitalizations, and ranks fifth for hypertension-related mortality (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. The central region of Stanislaus County, including Riverdale Park Tract, ranks third lowest among the nine regions for heart disease–related emergency room visits, has the fourth-lowest rate of heart disease–related hospitalizations, and has the third-highest rate of heart disease–related mortality (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. The central region of Stanislaus County has the fourth-lowest rate of cancer-related emergency room visits among the county's nine regions ranks fifth for cancer-related hospitalizations, and has the fourth-highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001-2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the central region ranks fifth for diabetes-related emergency room visits and hospitalizations, and has the fourth-highest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. Among the county's nine geographic regions, the central region has the third-highest rate of asthma-related emergency room visits and ranks fifth for asthma-related hospitalizations (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus

County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs within the nine regions range from a high of 80.27 years to a low of 75.01 years; the area encompassing the Riverdale Park Tract DUC has the second-shortest LEB, 77.73 years (Stanislaus County Health Services Agency 2013).

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2.7 Westley

2.7.1 General Characteristics and Demographics

Westley is an unincorporated community located roughly 5.5 miles north of the city of Patterson in western Stanislaus County. At 1,116 acres, the Westley CDP occupies a much larger area than the 107-acre area identified as the Westley DUC, and encompasses approximately 1,000 acres of agricultural lands immediately west and northwest of the DUC. These agricultural lands are identified by the California Department of Conservation's Important Farmlands Inventory as prime farmland (California Department of Conservation 2014). Most of the area immediately north of the DUC is under Williamson Act contract (California Department of Conservation 2012). These agricultural lands do not support the requisite level of existing development for consideration under SB 244 and are unlikely to develop; therefore, they are not included as part of the Westley DUC studied for SB 244 purposes.

The Westley DUC has a population of approximately 603 people in 149 households. In 2013, the median annual household income in California was $60,190; it was $24,762 in the Westley DUC (United States Census Bureau 2013a, 2013b). Westley DUC is defined by E Street on the north, State Highway 33 on the east, Howard Road on the south, and roughly encompassing the Westley Migrant Center on the west. In addition to residential uses, Westley features a variety of commercial and public uses, including agricultural packing and shipping operations, commercial uses clustered along and near Highway 33 and the Union Pacific Railroad tracks, as well as a fire station, an elementary school, and a United States Post Office. Westley is surrounded by orchards and agriculture-related structures and is roughly bordered on the east by the Union Pacific Railroad tracks and the Westside Irrigation District (WSID) South Lateral canal. Residential uses in Westley consist of single-family residential units and the Stanislaus County Housing Authority's 88-unit Westley Migrant Center housing complex (Stanislaus County 2012; Stanislaus Local Agency Formation Commission 2014).

The General Plan's Housing Element identifies Westley as a Residential Development Potential Study Area and indicates that it has the capacity to accommodate only one more dwelling unit (Stanislaus County 2012). Existing infrastructure and services for Westley are described below.

2.7.2 Infrastructure, Utilities, and Services

Infrastructure, utilities, and services considered for the Westley DUC are presented in Figure 2-7, *Westley Disadvantaged Unincorporated Community*, and include transportation facilities and services including roads, sidewalks, street lighting, and bus stops/service; water, wastewater, and storm drainage systems; solid waste disposal; public safety services such as law enforcement and fire protection; and access to community amenities and services such as schools, parks, and grocery stores. Data associated with chronic health conditions and air quality are described at a regional level because they are not available specifically for the Westley DUC.

2.7.3 Transportation Facilities and Services

Transportation infrastructure in Westley consists of public highways and roads, railroad tracks, a small private airport, and StaRT bus service. Major north-south highways serving western Stanislaus County include I-5 and Highway 33. Westley lies approximately 3 miles east of I-5. SR 33 and the Union Pacific Railroad tracks run northwest-southeast along the eastern side of Westley. SR 33 is a

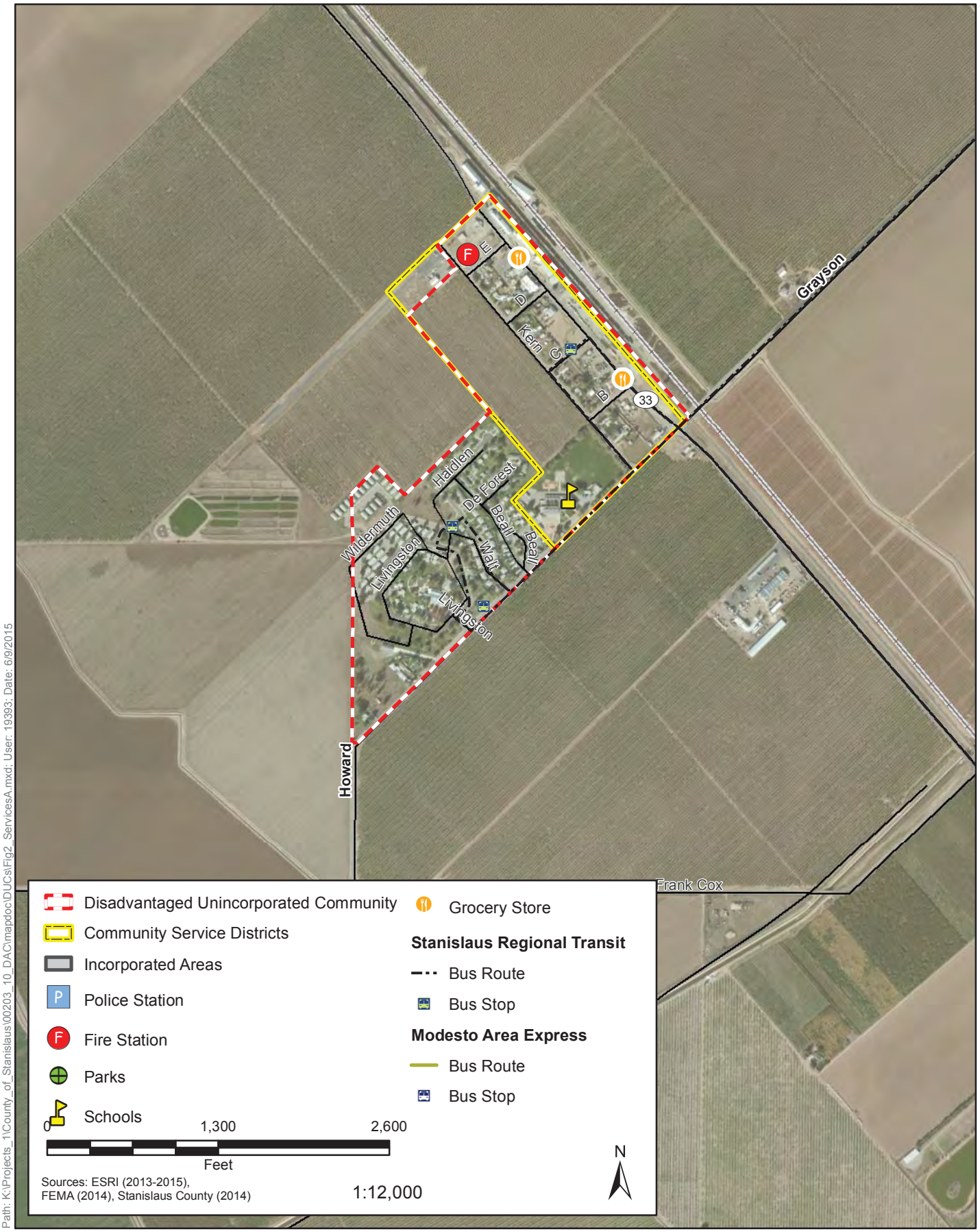

Figure 2-7
Westley Disadvantaged Unincorporated Community

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two-lane undivided highway through Westley, with a four-way stop at its intersection with Howard Road. SR 33 is designated as a four-lane expressway by the County General Plan (Stanislaus County 2006). Expressways are intended to move high volumes of people and goods between urban areas within the county (Stanislaus County 2006). Howard Road is currently a two-lane major road designated as a four-lane expressway in the County General Plan (Stanislaus Council of Governments 2014; Stanislaus County 2006). All other roads within Westley are two-lane local roadways. No curbs, gutters, or sidewalks are present in the eastern portion of Westley; however, the streets around Grayson Charter School and the Westley Migrant Center feature sidewalks, curbs, gutters, and above-ground drainage ditches. Street lights, provided by the Westley CSD are present at several intersections, primarily along SR 33 and along Howard Road, as well as along the streets of the Westley Migrant Center. The Westley Airport, located along the northern edge of Westley, is a private airport owned by Valley Crop Dusters and used primarily by crop dusting aircraft (Great Circle Mapper 2015).

Fixed-route bus service on StaRT Route 40 connects Westley to Modesto, Grayson, and Patterson (Stanislaus Regional Transit 2014a). StaRT Route 40 provides round trips between Modesto and Patterson; Monday–Friday, there are eight round trips, running approximately every 2 hours from 5:20 a.m. to 9:08 p.m.; on Saturdays, there are five round trips, running every 2 hours and 45 minutes from 8:15 a.m. to 8:12 p.m.; no StaRT buses run on Route 40 on Sundays (Stanislaus Regional Transit 2014b). From the Modesto Downtown Transit Center, passengers can transfer to buses on Route 10 Express to Turlock; Route 15 to Ceres, Keyes, and Turlock; and Route 60 to Riverbank and Oakdale, as well as to the Modesto Amtrak station, the ACE train station in Lathrop, and the Dublin BART station (City of Modesto 2009; Stanislaus Regional Transit 2014c). From the Patterson Transfer Location at Veteran's Memorial Park, passengers can transfer to buses on Route 45 East, which travels between Patterson and Turlock, and Route 45 West, which connects Patterson to Crows Landing, Newman, and Gustine (Stanislaus Regional Transit 2014c). Westley has three StaRT bus stops, one at C Street and SR 33, one at Howard Road and Livingston Circle, and a third at Griscott Way and Walt Avenue (Stanislaus Regional Transit 2014b).

2.7.4 Water, Wastewater, and Stormwater Drainage Systems

Water and wastewater services in Westley are provided by the Westley CSD and the Stanislaus County Housing Authority. The Stanislaus County Housing Authority operates a wastewater treatment facility that serves the Housing Authority's Westley Migrant Center complex and provides sewer service to the Westley CSD on a contractual basis (Stanislaus Local Agency Formation Commission 2014). Although the CSD currently meets the needs of its customers, major repairs to the existing sewer lift station and two pumps will be necessary in the near future(Stanislaus Local Agency Formation Commission 2014). Furthermore, the two groundwater wells serving the DUC have both recently required improvements and the wastewater treatment plant is operating at capacity. The Housing Authority also provides municipal water service within the Westley CSD boundaries via two groundwater wells (Stanislaus Local Agency Formation Commission 2014). The CSD's infrastructure is aging and in need of system-wide improvements (Stanislaus Local Agency Formation Commission 2014). Although streets within the Migrant Center complex have gutters, no gutters are present within the rest of Westley. Drainage in Westley is provided by rock wells in fair condition; no pipelines or detention ponds are present (Stanislaus County 2004).

2.7.5 Solid Waste Disposal

Stanislaus County contracts with four franchised solid waste collection companies, Bertolotti Disposal, Gilton Solid Waste, Modesto Disposal/Waste Management, and Turlock Scavenger, for residential and commercial garbage collection service in the unincorporated area (Stanislaus County 2014a). Westley falls within County-designated Franchise Area 1, served by Bertolotti Disposal (Stanislaus County 2014b). Besides providing solid waste and recyclables collection services to Franchise Area 1, Bertolotti Disposal operates a transfer station, open to the public Mondays through Saturdays, on Flamingo Road in Ceres. Additionally, Stanislaus County's Fink Road Sanitary Landfill, a Class III landfill for nonhazardous municipal solid waste, is operated by the County's Department of Environmental Resources and is open Monday through Saturday to private citizens, school districts, businesses, and local agencies for individual disposal of solid waste (Stanislaus County 2014c).

2.7.6 Law Enforcement and Fire Protection

Law enforcement services for Westley, as for the rest of unincorporated Stanislaus County and four contract cities, are provided by the Stanislaus County Sheriff's Department. The operations division of the Sheriff's Department provides law enforcement services to over 200,000 people in a 1,521-square-mile area (Stanislaus County Sheriff's Department 2014). Two units—patrol and investigations—comprise the Sheriff's Department operations division. The patrol unit responds to calls for assistance, investigates crime, makes arrests, and performs preventive patrol services (Stanislaus County Sheriff's Department 2014). The investigations unit follows up reports of major crimes, collects and prepares evidence for trials, apprehends offenders, and recovers stolen property (Stanislaus County Sheriff's Department 2014).

The nearest sheriff's station to Westley is the main station, approximately 12.5 miles east at 250 East Hackett Road in Ceres. In addition, the Patterson police station, located approximately 6 miles south of Westley in the city of Patterson, is staffed by the Stanislaus County Sheriff's Department, which provides contract police services to Patterson under the title of Patterson Police Services (Stanislaus Local Agency Formation Commission 2013).

The crime rates presented below were compiled by AGS using the primary reporting categories from the FBI 2005 – 2010 Uniform Crime Report databases along with preliminary 2011 release data and census data related to socioeconomic characteristics. The crimes are divided into two main categories, personal crimes (murder, rape, robbery, and assault) and property crimes (burglary, larceny, and motor vehicle theft). These crime rates are based on a comparison of the average local crime rate to the national average for the same crime, with a crime index of 100 considered average; scores above 100 are therefore considered greater, or worse, than average. For example, a score of 130 would represent a crime rate 30% greater than the national average for that type of crime. These crime rates are unweighted (i.e., a murder and a theft carry the same weight for calculation purposes), and are tracked at the census block group level and above, which may not correspond precisely to the DUC boundaries. Census blocks are the smallest geographic area for which the United States Census Bureau collects and tabulates data; a set of these constitutes a census block group. Census blocks vary widely in geographic size, and are generally smaller in urban areas and progressively larger in suburban, rural, or remote areas; a given block group is larger in area and population than the individual census blocks of which it is made, and generally contains between

600 and 3,000 people (United States Census Bureau 1994). The Westley DUC falls within census block group 060990033.001.

Both the overall personal crime and property crime indices for Westley are 168, which means that personal and property crimes occur at a rate 68% higher than the national average. The general and individual crime indices for these categories are shown in Table 2-25 below.

Table 2-25. Westley Crime Indices

Personal Crime		Property Crime	
Personal Crime Index	168	Property Crime Index	168
Murder	86	Burglary	347
Rape	112	Larceny	157
Robbery	60	Motor Vehicle Theft	35
Assault	348		

Source: Applied Geographic Solutions and Atlas Publishing 2012.

The West Stanislaus County FPD provides fire protection, emergency, and rescue services to the community of Westley, as well as to Grayson, Crows Landing, and Diablo Grande (Emergency Services Consulting 2007). The West Stanislaus County FPD's Fire Station No. 3 is located in Westley, at 8598 Kern Street, and houses WSF-Engine 3, WSF-Water Tender 3, and WSF-Rescue 3 (West Stanislaus County Fire Protection District 2014). District-wide, 5 full-time firefighters per shift and 100 volunteers staff the West Stanislaus County FPD; the Westley Station is staffed entirely by volunteer firefighters (Stanislaus Local Agency Formation Commission 2007; West Stanislaus County Fire Protection District 2014).

A fire department's ability to meet the fire protection needs of its service area is typically evaluated by the Insurance Services Office (ISO), a private organization that assesses risks, including fire protection, for insurance purposes. The ISO considers a variety of factors, including a district's fire-fighting apparatus, staffing, training, location, and water supply, to rate fire departments on a scale from 1 (best fire protection possible) to 10 (no fire protection). The ISO rating therefore reflects a fire department's ability to protect the residents and businesses within its service area from fire. The West Stanislaus County FPD carries an ISO rating of 4 (West Stanislaus Fire Protection District 2015).

2.7.7 Schools and Community Amenities

Westley lies within the boundaries of the Patterson Unified School District, which includes a total of 8 schools serving 6,023 students in grades K–12 (Stanislaus County Office of Education 2009; California Department of Education 2014e). One elementary school, Grayson Charter, is located in Westley. Grayson Charter provides a dual-language immersion program in English and Spanish to 262 children in grades K–5 (California Department of Education 2014b). The nearest non-charter elementary school is Northmead Elementary, located approximately 5 miles south in Patterson. Northmead Elementary serves 572 students in grades K–5 (California Department of Education 2014c). The nearest middle school to Westley is Creekside Middle School in Patterson, serving 1,201 students in grades 6–8 (California Department of Education 2014a). The nearest high school to

Westley is Patterson High School, located approximately 6 miles southwest in Patterson and serving 1,690 students in grades 9–12 (California Department of Education 2014d).

No public parks are present in Westley; however, three are located approximately 2 miles east of Westley in the nearby community of Grayson. The three facilities in Grayson include Leroy F. Fitzsimmons Memorial Park, United Community Center and Park, and Laird Regional Park. The 0.5-acre Leroy F. Fitzsimmons Memorial Park has a basketball court, picnic shelter, tables and playground equipment (Stanislaus County n.d.). The 5-acre United Community Center and Park features a 3,165 square-foot community center building, play equipment, an amphitheater lawn area, barbecues and picnic tables, basketball courts, and informal play areas (Stanislaus County n.d.). Laird Park is a 97-acre regional park approximately 2 miles east of Grayson on the San Joaquin River. Laird Park features a baseball/softball field, a soccer field, informal play areas, picnic shelters with picnic tables and barbecues, river access, and an unpaved parking area (Stanislaus County n.d.). No restrooms are available at either Fitzsimmons or Laird Park (Stanislaus County n.d.). The Stanislaus County Department of Parks and Recreation's Community Parks Division operates and maintains these parks. In addition, Grayson Charter School has ball fields and basketball courts. The Westley Migrant Center immediately southwest of the Westley DUC has a community center and age-separated playground equipment.

Westley has two grocery stores, El Mercadito and the Westley Market/El Paisano Supermarket, both on Highway 33. In addition, the One-Stop Market, a small convenience market with gas pumps and a laundromat, is located approximately 2 miles northeast of Westley in the community of Grayson.

2.7.8 Air Quality and Chronic Health Conditions

Stanislaus County is within the northern part of the eight-county SJVAPCD, a regional public health agency responsible for air quality management in those eight counties. SJVAPCD cites several factors that contribute to the valley's air quality challenges, including high rates of chronic poverty and unemployment coupled with a high population growth rate, the presence of major transportation corridors, and topographic features such as the surrounding mountains combined with the area's meteorological conditions (San Joaquin Valley Air Pollution Control District 2014a). SJVAPCD notes that ozone, PM10, and PM2.5 are of special concern, causing or exacerbating a variety of health conditions (San Joaquin Valley Air Pollution Control District 2014a). The presence of PM2.5, primarily a winter condition, triggers heart attacks, asthma, bronchitis, and respiratory infections, and has a strong correlation with hospital admissions and deaths (San Joaquin Valley Air Pollution Control District 2014a).

GHGs are not a criteria air pollutant and do not directly affect human health. GHG emissions are largely the result of combustion, decay and digestive processes, and emissions of industrial gases with high climate change potential. Unlike criteria pollutants such as carbon monoxide, PM10, PM2.5, and ozone, GHGs do not collect within a specific area or air basin. Their harm is done at a global level through the effect of increased concentrations of GHGs in Earth's atmosphere.

Worldwide concern over GHG emissions is based on the climate change that they are causing by altering the way in which Earth's atmosphere traps solar radiation as heat. The adverse effects of global climate change include rising sea levels, changes in habitat conditions for plants and animals, increased potential for wildfires, more severe weather extremes, and a reduction in California's winter snow pack, among others. Through the impetus of AB 32 (California Global Warming

Solutions Act of 2006) and other legislation, California has undertaken a statewide program of reducing GHG emissions to 1990 levels by 2020 in order to slow the rate of global climate change.

Climate change can have an indirect effect on human health in Stanislaus County to the extent that it results in warmer summer temperatures that facilitate ozone formation and exacerbate heat-related stress among outdoor workers, the elderly, small children, and the infirm. The amount of GHGs emitted within the Westley DUC is not atypical for a small community.

SJVAPCD operates 36 air monitoring sites within its eight-county air basin. Of these, two air quality stations, one in Modesto and another in Turlock, monitor air quality within Stanislaus County. At a distance of 13 miles to the northeast, the Modesto monitoring site is the closest to Westley. Table 2-26 shows the SJVAB's current air quality attainment status for state and federal criteria pollutants (San Joaquin Valley Air Pollution Control District 2012).

Table 2-26. San Joaquin Valley Air Basin Air Quality Attainment Status

	Designation/Classification	
Pollutant	Federal Standards	State Standards
Ozone—1-hour	No Federal Standard[a]	Nonattainment/Severe
Ozone—8-hour	Nonattainment/Extreme[b]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead (particulate)	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source: San Joaquin Valley Air Pollution Control District 2012.

[a] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the San Joaquin Valley air basin (SJVAB) as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[b] Though the SJVAB was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved SJVAB reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[c] On September 25, 2008, EPA redesignated the SJVAB to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The SJVAB is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the SJVAB as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Over the past decade, ozone levels have been trending downward within the SJVAB and, in 2013, for the first time on record, the air basin overall had zero violations of the federal hourly ozone

standard, compared to 281 violations in 1996 (San Joaquin Valley Air Pollution Control District 2014b). At the same time, PM2.5 and PM10 levels have fluctuated with no clear upward or downward trend (California Air Resources Board 2015). Table 2-27 presents the number of days in which Stanislaus County ozone, PM2.5, and PM10 levels exceeded state and federal air quality standards in 2013 (California Air Resources Board 2015).

Table 2-27. Stanislaus County Days in Exceedance of State and Federal Air Quality Standards, 2013

	Ozone			PM 2.5	PM 10
Monitoring Site	# Days > State 1-Hr Standard	# Days > National '08 8-Hr Standard	# Days > State 8-Hr Standard	Est Days > National 24-Hr Standard	Est Days > State 24-Hr Standard
Modesto 14th St.	0	2	13	37.6	57.7
Turlock S. Minaret St.	1	14	24	40.3	73.7

Source: California Air Resources Board 2015.

The 2013 CHA, prepared by the Stanislaus County Health Services Agency, presents data about the health and well-being of Stanislaus County residents, including information on the burden of five major chronic diseases—hypertension, heart disease, stroke, diabetes and asthma—and the environmental and behavioral factors that influence their prevalence. Primary environmental factors identified in the CHA as contributing to these chronic health conditions are air quality and retail food environment; behavioral factors include diet, fast food consumption, fruit and vegetable consumption, quality of clinical care, physical activity, obesity, and tobacco use (Stanislaus County Health Services Agency 2013). As measured in 2007, Stanislaus County has the second worst retail food environment in California, with 5.48 fast-food purveyors and convenience stores for every grocery store or produce vendor near residences, compared to 4.48 statewide, and a high rate of fast food consumption in the low income population (Stanislaus County Health Services Agency 2013). The county also has the highest prevalence of obesity in the state (31.5% compared to 21.2% statewide), particularly among males, and a higher percentage of smokers than the California average (Stanislaus County Health Services Agency 2013).

The CHA presents countywide data and also divides Stanislaus County into nine geographic regions, shown in Table 2-28 below. Westley falls within the west side region identified in Table 2-28.

Table 2-28. Community Health Assessment of Stanislaus County Geographic Regions

Region	Communities
Central	Modesto (parts) and outlying areas with ZIP codes 95350, 95355, 95357, and 95358
East Central	Airport Neighborhood and East Modesto (parts) with ZIP code 95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford with ZIP codes 95316, 95319, 95326, 95323, 95329, and 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank with ZIP codes 95230, 95361, and 95367
North Side	Del Rio, Salida and Modesto (parts) with ZIP codes 95356 and 95368
Southwest Central	West Modesto and South Modesto with ZIP code 95351
West Side	Crows Landing, Grayson, Newman, Patterson, Westley with ZIP codes 95313, 95360, 95363, 95385, and 95387
South Central	Ceres, Keyes with ZIP codes 95307 and 95328
South Side	Turlock with ZIP codes 95380 and 95382

Source: Stanislaus County Health Services Agency 2013:Table 2.

Chronic health conditions of concern within Stanislaus County include hypertension, heart disease, stroke, diabetes and asthma. According to the CHA, the percentage of Stanislaus adults diagnosed with high blood pressure increased 31.2% between 2001 and 2009, and surpassed the percentage of California adults diagnosed with high blood pressure use. As of 2009, approximately 30.7% of Stanislaus County adults were diagnosed with hypertension, compared to 26.2% statewide. Among Stanislaus County's nine regions, the west side, including Westley, has the lowest rate of hypertension-related emergency room visits, ranks fifth for hypertension-related hospitalizations, and has the second-lowest hypertension-related mortality rate (Stanislaus County Health Services Agency 2013).

The CHA notes that in 2009, 5% of Stanislaus County adults had been diagnosed with heart disease, compared to 5.9% statewide and 12% of adults nationwide. Stanislaus County's west side has the second-lowest rate among the nine regions for heart disease–related emergency room visits, the lowest rate of heart disease–related hospitalizations, and the fourth-highest mortality rate among the county's nine regions (Stanislaus County Health Services Agency 2013).

The CHA indicates that the California Health Interview Survey, on which it relies for some data, has not consistently tracked either the overall prevalence of cancer or the rates of individual types of cancer; data for cancer rates is therefore less current than for other, more closely tracked, conditions. Although the percentage of Stanislaus County adults diagnosed with cancer has increased from 7.4% in 2001 to 8.5% in 2005, it remains lower than the statewide rate. However, at a rate of approximately 21.4% of all deaths annually, cancer is the second most common cause of death in Stanislaus County. The west side of Stanislaus County ranks seventh (third-lowest) among the nine regions for cancer-related emergency room visits, has the lowest rate of cancer-related hospitalizations, and has the highest rate of cancer-related mortality (Stanislaus County Health Services Agency 2013).

Diabetes, according to the CHA, affects 8.3% of the United States population and is the seventh leading cause of death nationwide. Within California, from 2001-2007, the percentage of people diagnosed with diabetes increased from 6.2% to 8.5%, a 37% increase. Trends in Stanislaus County

are consistent with the statewide increase; in 2009, 7.6% of adults in Stanislaus County had been diagnosed with diabetes. While the prevalence of diabetes was lower in Stanislaus County than California, in 2011, Stanislaus County had higher hospitalization rates than California for four primary indicators of diabetes management, including hospitalization for short-term complications, long-term complications, lower-extremity amputation, and uncontrolled diabetes (Stanislaus County Health Services Agency 2013). Among Stanislaus County's nine regions, the west side has the lowest rate of diabetes-related emergency room visits, the third-lowest rate of hospitalizations, and the highest rate of diabetes-related mortality (Stanislaus County Health Services Agency 2013).

According to the CHA, in 2009 the percentage of Stanislaus County adults diagnosed with asthma was 21.8%, compared to 13.5% of the adult population statewide. The west side region has Stanislaus County's second-lowest rate of asthma-related emergency room visits and hospitalizations among the nine regions (Stanislaus County Health Services Agency 2013). Due to the low asthma-related death rate, the CHA does not track or rank asthma-related mortality.

The CHA also uses LEB as a measure of quality of life within Stanislaus County and each of its nine regions. LEB is defined as the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life. The LEB for Stanislaus County is calculated to be 77.2 years, 1.7 years less than the nationwide LEB of 78.9. The LEBs within the nine Stanislaus County regions range from a high of 80.27 years to a low of 75.01 years; the west side region ranks third-highest among these, with a LEB of 79.58 years (Stanislaus County Health Services Agency 2013).

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Chapter 3
Community Needs Assessment

The following discusses the needs of Stanislaus County's seven DUCs.

3.1 Cowan Tract DUC

The Cowan Tract DUC lacks curbs, gutters, sidewalks, streetlights, and a storm drainage system. Water is supplied through individual private wells and wastewater is disposed through private septic systems. These could be provided by a CSD; however, no such district exists in this DUC. Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in Cowan Tract given its low median income.

3.2 Crows Landing DUC

Most of the Crows Landing DUC lacks curbs, gutters, sidewalks, and streetlights. There is no storm drainage system. Wastewater in Crows Landing is processed through individual private septic systems. The existing water supply system, although in the process of being upgraded, relies on an aging system of pipelines that does not provide adequate water pressure during periods of peak demand. Although the Crows Landing CSD was recently granted up to $20,000 from the Stanislaus County Community Development Fund to assist in the repair of a corroded well, the CSD has limited financial resources to address existing water supply system deficiencies. Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in Cowan Tract given its low median income.

3.3 Grayson DUC

This DUC has adequate infrastructure and services, with the exception of the water supply system. Specific water supply system deficiencies include the pumping capacity of the two wells and areas of the distribution system in which minimum water pressure could not be maintained. Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in Grayson DUC given its low median income. Further, the City of Modesto applied unsuccessfully, in 2014, to the California Department of Water Resources for an Expedited Drought Grant to implement the needed improvements.

3.4 Keyes DUC

Curbs, gutters, sidewalks, and streetlights are absent in small portions of the Keyes DUC. Areas outside the Keyes CSD, including two mobile home parks, are not served by public water, sewer, or storm drainage systems. Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in the Keyes DUC given its low median income.

3.5 Monterey Park Tract DUC

No sidewalks, curbs, or gutters exist within Monterey Park Tract DUC, and there is no storm drainage system. The Monterey Park Tract CSD provides the DUC with domestic water from two groundwater wells and, due to a history of poor water quality and continuing contamination, is in the process of constructing a new water delivery system that will utilize water from the City of Ceres. Wastewater is disposed through private septic systems. In addition, portions of the DUC are without street lights. Monterey Park Tract lacks public bus service. Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in Monterey Park Tract given its low median income and lack of a CSD.

3.6 Riverdale Park Tract DUC

There are no curbs, gutters, sidewalks, or streetlights in this DUC. The Riverdale Park Tract CSD serves only the northern portion of the Riverdale Park Tract CDP that is within the sphere of influence of the City of Modesto. As a result, the DUC has no CSD and relies on private wells and private septic systems. Further, there is no storm drainage system. Most of the Riverdale Park Tract DUC also lacks public bus service.

At the present time, the nearby Riverdale Park Tract CSD appears to have limited financial resources to operate the domestic water system within its territory. The potential to expand the CSD to cover the DUC is limited in that future funding of improvements from benefit assessments or other property-based revenue sources would be problematic in the Riverdale Park Tract DUC given its low median income.

3.7 Westley DUC

Curbs, gutters, sidewalks, and streetlights are absent in portions of the Westley DUC. There is no storm drainage system. The Westley CSD contracts with the Stanislaus County Housing Authority for water and wastewater services; the Stanislaus County Housing Authority also serves the area outside the Westley CSD. Although the CSD currently meets the needs of its customers, major repairs to the existing sewer lift station and two pumps will be necessary in the near future. Furthermore, the two groundwater wells serving the DUC have both recently required improvements and the wastewater treatment plant is operating at capacity. The CSD's infrastructure is aging and in need of system-wide improvements (Stanislaus Local Agency Formation Commission 2014). Funding of improvements from benefit assessments or other property-based revenue sources would be problematic in the Westley DUC given its low median income.

Chapter 4
Healthy Communities Strategies

In general, the Stanislaus County DUCs lack certain community infrastructure, water and sewer service, and access to transit and full-service grocery stores. As described in Chapter 2, Existing Conditions, the Stanislaus County Health Services Agency's 2013 *Community Health Assessment of Stanislaus County* (CHA) indicates a correlation between poor infrastructure, particularly accessibility, and an unhealthy population. The CHA notes that Stanislaus County has the second worst retail food environment in California, a high rate of fast food consumption in the low income population, the highest prevalence of obesity in the state, and a higher percentage of smokers (Stanislaus County Health Services Agency 2013). The CHA identifies air quality and retail food environment (access to healthy food) as primary environmental factors contributing to several chronic health conditions prevalent in Stanislaus County, including hypertension, heart disease, stroke, diabetes, and asthma (Stanislaus County Health Services Agency 2013).

Infrastructure improvements and other strategies to address these issues will improve conditions within the DUCs over the long term.

The proposed General Plan update includes the following policies and implementation measures as strategies to address DUC deficits.

4.1 Land Use Element

POLICY SIX: Preserve and encourage upgrading of existing unincorporated urban communities. [existing policy]

IMPLEMENTATION MEASURE 1: The County shall support State efforts to reestablish redevelopment tools utilizing tax increment for the purpose of upgrading existing unincorporated communities. [amended measure]

IMPLEMENTATION MEASURE 2: The County will apply for federal and state funds to aid in upgrading existing urban areas. [existing measure]

IMPLEMENTATION MEASURE 4: When feasible, new development shall be designed and built to allow for the upgrading or expansion of services necessary to upgrade existing unincorporated urban communities; however, new development will not be expected to be financially responsible for providing upgrades. [new measure]

IMPLEMENTATION MEASURE 5: The County shall support and assist unincorporated urban communities in their efforts to establish "self-help" programs (such as assessment financing districts) necessary to upgrade their communities. [new measure]

IMPLEMENTATION MEASURE 6: As part of the environmental work the County will review, and if necessary, amend the General Plan to address the infrastructure, housing and public health needs to assist in transforming identified disadvantaged communities into healthy communities. [new measure]

POLICY TWENTY-THREE: Future growth shall not exceed the capabilities/capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc. [existing policy]

IMPLEMENTATION MEASURE 6: Rezoning of property prior to: 1) annexation to a special district; 2) inclusion of such property into a newly formed special district, or community service district~~)~~ shall be approved only if the development is adequately conditioned to restrict development from occurring until annexation to or formation of the required district is complete. [amended policy]

POLICY THIRTY: The County shall support efforts to improve local health care options through the siting of new facilities in locations with the infrastructure (including, but not limited to, transportation and utility) to support both facility and client needs. [new policy]

4.2 Circulation Element

POLICY EIGHT: Promote public transit as a viable transportation source. [Existing policy]

IMPLEMENTATION MEASURE 1: Continue to operate existing transit systems and coordinate with other County transit operators to provide public transit serving Stanislaus County. [amended policy]

IMPLEMENTATION MEASURE 6: Where possible, coordinate public transportation with land use planning, transportation planning, and air quality policies such that transit investments are complementary to land use planning and air quality policies. [new policy]

IMPLEMENTATION MEASURE 9: The County shall encourage infill development of vacant parcels and redevelopment projects that will align with and improve the overall effectiveness of the public transit system. [new policy]

4.3 Additional Policies

Although deficits are identified in Chapter 3, improvements to existing infrastructure are either in process, under the jurisdiction of the appropriate CSDs, or are not viable due to location, funding, and other constraints. In some cases, the locations of DUCs preclude connections to existing municipal water and wastewater services; in nearly all cases, the cost of providing such services to these locations is prohibitive. As identified in the Municipal Service Reviews for the relevant CSAs and CSDs, funding opportunities for infrastructure improvements in the DUCs are limited because of the low assessed values of the properties within the DUCs. The low values would not support sufficient benefit assessments or special taxes to finance the needed improvements and continued maintenance and operation of infrastructure. The existing and proposed amended General Plan policies and implementation measures outlined above adequately address the needs of the identified DUCs to the extent that improvements are viable, and no additional policies or implementation measures are necessary.