# INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

FOR THE

# The Villages Planned Development (PD) and Annexation Project

*PREPARED FOR:*

CITY OF GREENFIELD
COMMUNITY DEVELOPMENT DEPARTMENT
45 El Camino Real
Greenfield, California 93927

*PREPARED BY:*

PMC®

**SEPTEMBER 2008**

# INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

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# THE VILLAGES PLANNED DEVELOPMENT (PD) AND ANNEXATION PROJECT

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*Prepared for:*

CITY OF GREENFIELD
45 El Camino Real
Greenfield, CA 93927
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**SEPTEMBER 2008**

**Notice of Intent/Mitigated Negative Declaration**

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# NOTICE OF INTENT/
# MITIGATED NEGATIVE DECLARATION

**CITY OF GREENFIELD**
**COMMUNTIY DEVELOPMENT DEPARTMENT**
45 El CAMINO REAL
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**September 18, 2008**

# NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

**NOTICE IS HEREBY GIVEN** that the City of Greenfield has prepared a Mitigated Negative Declaration, pursuant to the requirements of CEQA, for the Villages Planned Development Annexation Project. The parcels proposed for the subdivision are located in the northwestern portion of the City of Greenfield, southwest of Walnut Avenue and 12th Street intersection. The proposed Mitigated Negative Declaration and Initial Study, as well as referenced documents, are available for review at the Community Development Department, 45 El Camino Real, Greenfield, CA 93927. An additional copy for public review is available at the Greenfield Branch Library at 215 El Camino Real. In accordance with time limits mandated by State law, written comments on this Negative Declaration and Initial Study will be accepted from:

**Begins – September 18, 2008 Ends –October 18, 2008**

**Project Description:** The proposed project involves the annexation of approximately 80 acres from Monterey County into the City of Greenfield, consisting of two separate PD areas: Mira Monte and Willow Glen. Mira Monte proposes 166 dwelling units and 2.76 acres of open space/parkland on 28.08 acres. Willow Glen proposes 86 dwelling units with 1.13 acres of open space/parkland on 14.05 acres (with a proposed adjusted lot line of the current 13.64 acre property). The proposed project also includes two neighborhood parks within two percolation basins. No new development is currently proposed on the five remaining parcels (APN's 109-232-004, -007,013, -014 and –015).

**FOR ADDITIONAL INFORMATION CONTACT:**

**Brent Slama, Community Development Director**
**City of Greenfield**
**45 El Camino Real**
**Greenfield, CA 93927**
**(831) 674-5591**

**For reviewing agencies**: The City of Greenfield requests that you review the enclosed materials and provide any appropriate comments related to your agency's area of responsibility. The space below may be used to indicate that your agency has no comments or to state brief comments.

**Distribution:** (see below)

____ No Comments provided
____ Comments noted below
____ Comments provided in separate letter

**COMMENTS:** _____

_____

_____

_____

**Return to:** Brent Slama, Community Development Director
City of Greenfield
45 El Camino Real
Greenfield, CA 93927

**From:** Agency Name: _____

Contact Person:_____

Phone Number:_____

# DISTRIBUTION

1. Geary Coats/Coats Consulting, Applicant
2. John Bakker, Greenfield City Attorney
3. Mike Ranker, Greenfield City Engineer
4. Greenfield Chamber of Commerce
5. Greenfield City Library
6. Greenfield Fire Protection District
7. Greenfield Union School District (GUSD)
8. King City Union School District (KCUSD)
9. City of King City
10. City of Soledad
11. Clark Colony Water Company
12. Monterey County Agricultural Commissioner
13. Monterey County Clerk's Office
14. Monterey County Environmental Health Department
15. Monterey County Local Agency Formation Commission (LAFCO)
16. Monterey County Planning and Building Inspection Department
17. Monterey County Water Resources Agency (MCWRA)
18. Monterey Regional Water Pollution Control Agency (MRWPCA)
19. Monterey Bay Unified Air Pollution Control District (MBUAPCD)
20. Monterey County Agricultural and Historic Conservancy, Inc
21. Simón Salinas, Monterey County Supervisor – District #3
22. Association of Monterey Bay Area Governments (AMBAG)
23. Transportation Agency for Monterey County (TAMC)
24. Regional Water Quality Control Board (RWQCB)

# CITY OF GREENFIELD, STATE OF CALIFORNIA
# MITIGATED NEGATIVE DECLARATION

| | |
|---|---|
| **Project Title:** | The Villages Planned Development (PD) and Annexation Project |
| **Lead Agency:** | City of Greenfield |
| **Property Owner(s):** | Montana Skies, LLC; Thorp & Panziera, et al; Harold & Donna Riva; Stanley Visoria, et al; Marc Tunzi, et al; William Petrovic, et al; Joe & Helen Zamora |
| **Project Location:** | Southwest of Walnut Avenue and 12th Street intersection |
| **Project Applicant(s):** | Geary Coats/Coats Consulting |
| **APN's:** | Montana Skies Parcels: 109-232-001 and 109-232-008;<br>Thorpe/Riva Parcels: 109-232- 006 and 109-232-012;<br>Remainder Parcels: 109-232-004, -007,013, -014 and -015 |
| **Permit Type:** | Planned Development (PD), Annexation, Prezoning, Vesting Tentative Map |
| **Project Description:** | The proposed project involves the annexation of approximately 80 acres from Monterey County into the City of Greenfield, consisting of two separate PD areas: Mira Monte and Willow Glen. Mira Monte proposes 166 dwelling units and 2.76 acres of open space/parkland on 28.08 acres. Willow Glen proposes 86 dwelling units with 1.13 acres of open space/parkland on 14.05 acres (with a proposed adjusted lot line of the current 13.64 acre property). The proposed project also includes two neighborhood parks within two percolation basins. No new development is currently proposed on the five remaining parcels (APN's 109-232-004, -007,013, -014 and –015). |
| **Public Review Period:** | 30 days: September 18, 2008 through October 18, 2008 |
| **Address where copy of Initial Study is Available for Public Review:** | City of Greenfield<br>Building and Planning Department<br>45 El Camino Real<br>Greenfield, CA 93927 |
| **Address Where Written Comments Should be Sent:** | Brent Slama, Community Development Director<br>City of Greenfield<br>45 El Camino Real<br>Greenfield, CA 93927 |

THIS PROPOSED PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AS IT HAS BEEN FOUND:

a. That said project would not have the potential to significantly degrade the environment;
b. That said project will have no significant impact on long-term environmental goals;
c. That said project will have no significant cumulative effect upon the environment;
d. That said project would not cause substantial adverse effects on human beings, either directly or indirectly.

## MITIGATION MEASURES

**MM 1-1** Prior to Final Map approval, the Applicant shall prepare and submit to the City of Greenfield a detailed exterior lighting plan and photometric study that indicates the location and type of lighting that will be used. Exterior lighting shall specify type and maker, and demonstrate a non-intrusive quality through incorporation of baffles and lens cut-offs to direct lighting downward, while still providing an adequate amount of light for safety and/or security.

**MM 2-1** As a condition of the annexation of this property into the City, the Applicant shall be subject to any agriculture preservation program, agricultural mitigation fee, or other agricultural mitigation mechanisms adopted by the City of Greenfield. Participation in any such adopted program must be demonstrated by the Applicant following LAFCO's approval of the annexation and prior to obtaining grading permits. Any program adopted by the City up to the point of obtaining building permits shall be enforceable and applicable to this project.

**MM 2-2** 1) The Applicant shall demonstrate adequate land use separation on all site plans and applications for subdivision. Consistent with the City of Greenfield policies regarding land use buffers, final site plans shall include a 100-foot minimum land use buffer along the northern boundary of the project site. The buffer distance shall be measured from the edge of active agricultural fields or vineyards and the nearest residential building line. Distances comprising the buffer may include roadway rights-of-way, easements, landscaping and other uninhabited uses. Ultimate design and consideration of setbacks will be subject to review and approval by the City of Greenfield.

**or**

2) Contribution or participation in any mitigation adopted by the City of Greenfield and in place at the time that LAFCO considers the annexation.

**MM 2-3** The City of Greenfield shall require a Right-to-Farm notification statement to run with the title as disclosure and notice in deeds at the time of transfer or sale of all properties on the project site. The statement shall inform any future property owners of the continuation of agricultural activities in the area and shall disclose the potential effects of agricultural activities on adjacent land uses to future residents.

**MM 3-1** Best-available control measures (BACM) shall be required during site preparation and construction of proposed land uses. When tentative subdivision maps are submitted and prior to approval of building permits, a construction emissions reduction plan (CERP) shall be prepared, for endorsement by the MBUAPCD, to reduce construction-generated fugitive and mobile-source emissions. The MBUAPCD shall be consulted to determine BACM to be implemented to minimize impacts to nearby sensitive receptors. Measures to be included in the CERP prepared for this project, as currently recommended by the MBUAPCD, include but are not limited to the following:

<u>Fugitive Dust</u>

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure;
- Prohibit all grading activities during periods of high wind (over 15 mph);

- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- Replant vegetation in disturbed areas as quickly as possible.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles, such as dirt, sand, etc.
- Sweep daily, with water sweepers, all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily, with water sweepers, if visible soil materials are carried onto adjacent public streets.
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Limit areas of active disturbance to no more than 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (grubbing, excavation, rough grading), or 8.1 acres per day for activities that involve minimal earth moving (e.g., finish grading).

Mobile/Stationary-Source Emissions

- *Title 13. §2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (a) Purpose.* The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. (b) Applicability. This section applies to diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes: (1) California-based vehicles; and (2) Non-California-based vehicles. (c) Requirements. On or after February 1, 2005, the driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location, except as noted in Subsection (d); and (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d).
- Stationary Sources shall comply with all applicable rules and requirements of the Monterey Bay Unified Air Pollution Control District, and State and federal law.
- Construction activities shall be scheduled so that major onsite construction activities (e.g., grading, demolition) do not occur simultaneously on any given day.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding emissions-related complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).

**MM 3-2** The Applicant and/or Contractor shall include the following as components of Final Map and Building Design/Construction:

*Residential Uses*

- Provide pedestrian sidewalks and bicycle paths that link to adjacent land uses and external networks.
- Incorporate energy-efficient appliance into residential uses

*All Uses*

- Use of wood-burning fireplaces shall be prohibited. Any fireplaces proposed for use within onsite structures shall be gas-fired and meet U.S. EPA-certification requirements.
- Orient buildings to minimize heating and cooling needs
- Provide shade trees to reduce cooling needs
- Include energy-efficient lighting systems
- Include solar water heaters or centralized water heating systems
- Increase insulation beyond Title 24 requirements to minimize heating and cooling needs

**MM 4-1** If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the Applicant shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys DFG shall be notified regarding the status of the nests. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with the USFWS and/or DFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the non-breeding season (generally September 1st through February 28th).

If there is any significant lapse in construction activities, and construction resumes during the nesting season, new surveys shall be conducted no more that 30 days prior to the re-initiation of construction activities.

**MM 5-1** As a condition of project approval, and implemented during construction activities, if any prehistoric or historic artifacts, or other indications of archaeological resources are found once project construction is underway, all work in the immediate vicinity must stop and the City of Greenfield Building and Planning Department shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The City and the Applicant will consider the mitigation recommendations of the qualified archaeologist. The City and the Applicant shall consult and agree upon implementation of a measure or measures that the City and the Applicant deem feasible and appropriate. Such

measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

**MM 5-2** As a condition of project approval, and implemented during construction activities, if any paleontological resources (i.e., fossils) are found once project construction is underway, all work in the immediate vicinity must stop and the City of Greenfield Building and Planning Department shall be immediately notified. A qualified paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered paleontological resources. The City and the Applicant will consider the mitigation recommendations of the qualified paleontologist. The City and the Applicant shall consult and agree upon implementation of a measure or measures that the City and the Applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation or other appropriate measures.

**MM 5-3** As a condition of project approval, and implemented during construction activities, if human remains are discovered, all work must stop in the immediate vicinity of the find, the City of Greenfield Building and Planning Department must be notified and the County Coroner must be notified, according to Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) shall be followed.

**MM 6-1** Prior to Final Map approval, the Applicant shall incorporate the structural design recommendations of the *Geotechnical Investigation* prepared by Stevens, Ferrone & Bailey Engineering Company, Inc. (August 3, 2005) and the Geotechnical Engineering Report prepared by Earth Systems Pacific (July 22, 2006), including requirements for site preparation and grading, engineered fill, trench backfill, foundations, slab design and pavement design. Recommendations of the reports shall be incorporated into the final improvement plans subject to review and approval by the Greenfield Building and Planning Department.

**MM 7-1** The drums and buckets containing used motor oil and the automotive batteries should be removed from the site and disposed of in accordance with Monterey County regulations. Samples should be collected for laboratory testing if soil staining is present at depths greater than about one-foot in the area of the drums and buckets.

**MM 7-2** Prior to approval of demolition permits for existing onsite structures, the City of Greenfield shall require that the Applicant contract with a qualified professional to conduct an asbestos and lead-based paint survey for the presence of these materials within existing structures prior to demolition. If these materials are encountered during the survey, the Applicant shall have it removed, transported and disposed of in accordance with the State and local regulations.

**MM 8-1** Project Applicant(s) for near-term and future development within the project site shall identify, as part of Tentative Map submittal, a detailed drainage plan designed to contain stormwater runoff from the 100-year storm event onsite and shall include: detailed hydrologic modeling; existing facilities; soil and

topographic data; erosion control and best management practices; descriptions of proposed flood control facilities; compliance with waste discharge requirements; phasing and implementation; identification of the entity that is responsible for facility design and construction; Clean Water Act compliance; and facility maintenance. Proposed retention basins shall be designed to contain stormwater runoff onsite from the 100-year storm event. Where feasible, project Applicant(s) shall design a detailed drainage plan which utilizes a single, adequately sized retention pond to serve the remainder of the project site. Drainage improvements shall be subject to review and approval by the City Engineer and Public Works Director.

**MM 8-2** All drainage and erosion control plans submitted shall incorporate temporary measures effective from October 1 through March 31 that ensure eroded or exposed soils are maintained on-site during construction.

**MM 10-1** Construction Noise

- Noise-generating construction operations shall be limited to the hours between 7:00 AM to 6:00 PM Monday through Friday. The Applicant may request permission from the City to continue with construction through the weekend. If made, said request shall be submitted in writing for review and approval by the Director of Public Works and shall be pursuant to the limitations that the Public Works Director determines are appropriate;
- Construction equipment and equipment staging areas shall be located at the furthest distance possible from nearby noise-sensitive land uses;
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation;
- When not in use, motorized construction equipment shall not be left idling.

**MM 10-2** Increased Exposure of Noise-Sensitive Receptors to Stationary-Source Noise

The Applicant or Contractor shall include the following in the building design and park facilities operation**:**

*Proposed Residential Land Uses*

- Residential dwellings shall be equipped with central heating and air conditioning systems to allow closure of windows during inclement weather conditions.
- Exterior air conditioning units for proposed residential dwellings shall be located at a minimum distance of 10 feet from adjacent outdoor activity areas or shielded from direct line-of-sight.

*Proposed Parks*

- Use of proposed park facilities shall be limited to between the daytime hours of 7:00 a.m. and 10:00 p.m.
- Landscape maintenance activities at the proposed park shall be limited to between the daytime hours of 7:00 a.m. and 10:00 p.m.
- Use of amplified public address/sound systems within the proposed park shall be prohibited.

**MM 10-3** Compatibility of Proposed Land Uses with Projected Ambient Noise Levels

The Applicant or Contractor shall include the following on Final Map or building design as appropriate:

- Implement Mitigation Measure 10-2(a).
- A noise barrier shall be constructed sufficient to shield the outdoor activity areas of proposed single-family residential dwellings that are located adjacent to Walnut Avenue. The barrier shall be constructed to a minimum height of six feet. The barrier shall be constructed of a solid material (e.g., earthen berm, wood, concrete, masonry, or combination thereof) with no visible air gaps at the base or between construction materials. If wood materials are used, materials shall be overlapped or tightly fitted (e.g., tongue and groove) to ensure that visible air gaps do not occur due to material shrinkage resulting from changes in ambient temperature/moisture content of the material.

**MM 11-1a** As a condition of project approval, the project Applicant will be required to pay in-lieu Community Facility Impact Fees for the portion of community park space at a rate consistent with General Plan **Policy 7.2.19** and **Program 7.2.A.iv** of the City's General Plan (currently 2 acres of community parks per 1,000 residents). This fee shall be calculated based on the fee rate in place at the time of building permit issuance. This fee is required to be paid prior to occupancy permit issuance.

**MM 11-1b** The Applicant shall incorporate improved neighborhood parkland beyond areas used for recreation in buffer and drainage areas at a rate of *1.5 acres of neighborhood parks per 1,000 residents* consistent with General Plan **Policy 7.2.19** and **Program 7.2.A.iv** of the City's General Plan. This will include incorporation of neighborhood park in the currently proposed PD areas as follows:

- A minimum of 1.01 acres of neighborhood parkland shall be incorporated into the Mira Monte PD area.

- A minimum of 0.52 acres of neighborhood parkland shall be incorporated into the Willow Glen PD area.

**MM 15-1a** The Final Map for the project shall indicate that that with construction of the project, Walnut Avenue will be widened along the project frontage and will be a two-lane collector street (82' ROW and 48' FC-FC). As a component **MM 15-2** below, Walnut Avenue will be re-striped to a two-lane divided collector with a two-way left-turn lane.

**MM 15-1b** The Final Map for the project shall indicate that with construction of the project, Apple Avenue will be widened along the project frontage and will be a two-lane collector street (68' ROW and 62' FC-FC).

**MM 15-2** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee[1] prior to the issuance of building permit.

[1] The City of Greenfield adopted the new Traffic Impact Fee Program in January 2007. The current fee for residential units is $9,967.00 per single family dwelling unit. Thus the project would contribute $2,511,684.00 (252 units x $9,967.00) to the fee. Future development on the remainder parcels would contribute based on the proposed land use of any future development proposal. Detail of the required improvements is indicated in the City's General Plan.

Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

- With signalization and coordination of the signals at the two Walnut Avenue/Highway 101 terminals, as well as providing an exclusive westbound right turn lane and a separate northbound right turn lane at the Walnut Avenue/Highway 101 NB Ramp terminal, the intersections would operate at LOS C or better.
- The intersection of 10th Street/Walnut Avenue will operate at LOS A during both the AM and PM peak hours with signalization and re-striping of eastbound and westbound legs to accommodate left-turn lanes. On-street parking would have to be removed.

**MM 15-3** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee prior to the issuance of building permit.
Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

- The streets on the project frontage will all be upgraded to standards that will insure acceptable operating conditions.
- Walnut Avenue between 10th Street and El Camino Real will have to be restriped to include left-turn lanes or a two-way left turn lane. On-street parking may have to be removed. The project should implement this improvement.

**MM 15-4** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee prior to the issuance of building permit.

Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

**TABLE 23**
**INTERSECTION IMPROVEMENTS**

| | Intersection/Segment | GPBO with Project Conditions |
|---|---|---|
| 1. | Hwy 101 NB On-Ramp and Livingston Road | Signalization and following geometry:<br>NB: 2BT, 2NBR<br>EB: 1EBT, 1EBT/R, 1EBR<br>WB: 2WBL, 2WBR |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | Construction of new interchange with new Highway 101 overpass connecting to Thorne Road and following geometry:<br>NB: 1NBL, 1NBT, 2NBR<br>SB: 2SBL, 1SBT, 1SBR<br>EB: 1EBL, 1EBT, 1EBT/R<br>WB: 1WBL, 1WBT, 1WBR |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | No intersection—new interchange |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | No intersection—new interchange |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | Construction of a new Walnut Avenue bridge. The City is currently conducting a PSR for this interchange project. Geometry:<br>SB-Off Ramp: 2SBL, 1SBT/L, 1SBR<br>SB-On Ramp: 2SBT<br>EB: 3EBT, 1EBR<br>WB: 2WBL, 1WBT |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | Construction of a new Walnut Avenue bridge. The City is currently conducting a PSR for this interchange project. Geometry:<br>NB-Off Ramp: 1NBL/T, 2NBR<br>NB-On Ramp: 2NBT<br>EB: 2EBL, 3EBT<br>WB: 2WBL, 1WBT, 2WBR |
| 7. | El Camino Real and Cypress Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 1NBT, 1NBT/R<br>SB: 1SBL, 2SBT, 1SBR<br>EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 8. | El Camino Real and Pine Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 2NBT, 1NBR<br>SB: 1SBL, 2SBT, 1SBR<br>EB: 1EBL, 1EBT/R<br>WB: 1WBL, 1 WBT, 1WBR |
| 9. | El Camino Real and Cherry Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 1NBT, 1NBT/R<br>SB: 1SBL, 1SBT, 1SBT/R |

| | | |
|---|---|---|
| | | EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 10. | El Camino Real and Walnut Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT, 1NBL<br>SB: 2SBL, 1SBT, 1SBR<br>EB: 1 EBL, 1EBT/R<br>WB: 1WBL, 1WBT, 1WBR |
| 11. | El Camino Real and Apple Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 1NBT/R<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 12. | El Camino Real and Oak Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT/R<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL, 1EB/T/R<br>WB: 1WBL, 1WBT/R |
| 13. | El Camino Real and Elm Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT, 1NBR<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL, 1EB/T/R<br>WB: 1WBL, 1WBT/R |
| 14. | 10th Street and Cherry Avenue | No intersection improvements necessary. |
| 15. | 10th Street and Walnut Avenue | Signalization and re-striping for separate eastbound left and separate westbound left-turn lanes. |
| 16. | 12th Street and Cherry Avenue | No intersection improvements necessary. |
| 17. | 12th Street and Walnut Avenue | No intersection improvements necessary. |
| 18. | 12th Street and Apple Avenue | No intersection improvements necessary. |
| 19. | 12th Street and Elm Avenue | No intersection improvements necessary. |
| 20. | 13th Street and Walnut Avenue | No intersection improvements necessary. |
| 21. | 13th Street and Apple Avenue | No intersection improvements necessary. |

**TABLE 4**
**RECOMMENDED SEGMENT MITIGATIONS FOR THE GPBO CONDITIONS**

| Street | Existing Lanes | Mitigated Lanes for GPBO with Project | Mitigated LOS for GPBO with project |
|---|---|---|---|
| Walnut Avenue between 13th Street and 12th Street | 2-Lane Collector | 2-Lane Arterial | A |
| Walnut Avenue between 12th Street and 10th Street | 2-Lane Collector | 2-Lane Arterial | A |
| Walnut Avenue between 10th Street and El Camino Real | 2-Lane Collector | 2-Lane Arterial | C |
| Walnut Avenue between El Camino Real and Hwy 101 SB Ramps | 2-Lane Arterial | 4-Lane Divided Arterial | B |
| Walnut Avenue between Hwy 101 NB Ramps 3rd Street | 2-Lane Collector | 4-Lane Divided Arterial | C |
| El Camino Real between Thorne Road and Pine Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Pine Avenue and Cherry Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Cherry Avenue and Walnut Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Walnut Avenue and Apple Avenue | 2-Lane Collector | 2-Lane Arterial | A |
| El Camino Real between Apple Avenue and Oak avenue | 2-Lane Collector | 2-Lane Arterial | A |
| Apple Avenue between 13th Street and 12th Street | 2-Lane Local Street | 2-Lane Collector Street (Improved FC-FC) | A |

# INITIAL STUDY

# CITY OF GREENFIELD

**COMMUNITY DEVELOPMENT DEPARTMENT**
45 El CAMINO REAL
PO BOX 127
GREENFIELD, CA 93927
PHONE: (831) 674-5591 FAX: (831) 674-3149


# ENVIRONMENTAL INITIAL STUDY

## I. BACKGROUND INFORMATION

| | |
|---|---|
| **Project Title:** | The Villages Planned Development (PD) and Annexation Project |
| **Project Location:** | Southwest of Walnut Avenue and 12th Street intersection |
| **Property Owner(s):** | Montana Skies, LLC; Thorp & Panziera, et al; Harold & Donna Riva; Stanley Visoria, et al; Marc Tunzi, et al; William Petrovic, et al; Joe & Helen Zamora |
| **Project Applicant(s):** | Geary Coats/Coats Consulting |
| **APN(s):** | Montana Skies Parcels: 109-232-001 and 109-232-008;<br>Thorpe/Riva Parcels: 109-232- 006 and 109-232-012;<br>Remainder Parcels: 109-232-004, -007,013, -014 and -015 |
| **Acreage of Property:** | 75.67 acres |
| **General Plan Designation(s):** | City of Greenfield: Low Density Residential (LDR)<br>County of Monterey: Farmland |
| **Zoning District(s):** | County of Monterey: Farmland (F/40), 40 acre minimum |
| **Lead Agency:** | City of Greenfield, Community Development Department<br>45 El Camino Real<br>Greenfield, CA 93927 |
| **Contact:** | Brent Slama, Community Development Director<br>bslama@ci.greenfield.ca.us<br>(831) 674-5591 |
| **Study Prepared By:** | PMC<br>Barb Kinison Brown, Project Manager<br>Ashley Hefner, Assistant Planner |
| **Date Prepared:** | September 18, 2008 |
| **Description of Project:** | The proposed project involves the annexation of approximately 80 acres from Monterey County into the City of Greenfield, consisting of two separate PD areas: Mira Monte and Willow Glen. Mira Monte proposes 166 dwelling units and 2.76 acres of open space/parkland on 28.08 acres. Willow Glen proposes 86 dwelling units with 1.13 acres of open space/parkland on 14.05 acres (with a proposed adjusted lot line of the current 13.64 acre property). The proposed project also includes two neighborhood parks within two percolation basins. No new development is currently proposed on the five remaining parcels (APN's 109-232-004, -007,013, -014 and -015). |
| **Public Agency Comment Period:** | 30 days: September 18, 2008 through October 18, 2008 |

## A. PROJECT LOCATION AND ENVIRONMENTAL SETTING

### Project Location

The project site is located in the City of Greenfield, situated in the Salinas Valley in central Monterey County. The City is located along Highway 101 approximately 40 miles southeast of Monterey Bay, 35 miles south of Salinas and 60 miles north of Paso Robles. Neighboring communities within 25 miles include the cities of Gonzales and Soledad to the north and King City to the south. The project's regional location is illustrated in **Figure 1**. The project site is bound by Walnut Avenue on the north, Apple Avenue on the South, 12th Street on the east and 13th Street on the west. The site is located adjacent to the Greenfield City limits to the south and east. A map of the project vicinity is shown in **Figure 2**.

### Surrounding Land Uses

Surrounding land uses include farmland, rural residential and single-family residential neighborhoods, as shown in **Figure 3**. Agricultural land located in unincorporated Monterey County borders the project site on the north and west, across Walnut Avenue and 13th Street, respectively. Low density, single-family neighborhoods located in the City of Greenfield border the project site on the south and east and a few rural residential dwellings are located adjacent to project site at the corner of Apple Avenue and 13th Street. Much of the site and surrounding areas to the north and west are considered to be prime farmland, as shown in **Figure 4**. Land adjacent to the north across Walnut Avenue is currently used as a vineyard. This area is located in Monterey County but a residential development project (Amaral Annexation) is being proposed for this site. **Figures 5a** and **5b** provide site photos of the project site and surrounding area.

### Site Ownership and Conditions

The project site consists of approximately 76 acres of agricultural land and rural residential uses. **Table 1** summarizes the ownership, approximate size and describes the current and proposed uses on each parcel.

**TABLE 1**
**PARCEL OWNERSHIP AND USE**

| Parcel | Owner | Size (acres) | Current Use | Proposed Use |
|---|---|---|---|---|
| 109-232-001 | Montana Skies LLC | 25.00 | Agriculture & farm buildings | Mira Monte PD |
| 109-232-008 | Montana Skies LLC | 3.08 | Agriculture | Mira Monte PD |
| 109-232-006 | Thorp & Panziera, et al | 10.00 | Agriculture | Willow Glen PD |
| 109-232-012 | Harold & Donna Riva | 4.52 | Agriculture (vineyard) & rural residential | Willow Glen PD |
| 109-232-004 | Stanley Visoria, et al | 4.00 | Agriculture & rural residential | None Proposed |
| 109-232-007 | Marc Tunzi, et al | 9.55 | Agriculture | None Proposed |
| 109-232-013 | William Petrovic, et al | 4.52 | Agriculture (vineyard) | None Proposed |
| 109-232-014 | Joe & Helen Zamora | 6.00 | Agriculture & rural residential | None Proposed |
| 109-232-015 | Joe & Helen Zamora | 9.00 | Agriculture & rural residential | None Proposed |

*Source: Project Application, August 2008.*

## B. PROJECT DESCRIPTION AND BACKGROUND

The proposed Villages Planned Development (PD) and Annexation Project, involves the reorganization of the incorporated City limits of Greenfield to include the annexation of approximately 76 acres from Monterey County into the City of Greenfield. The proposed project is located entirely within the City's Sphere of Influence (SOI) recently approved by the Monterey County Local Agency Formation Commission (LAFCO) and consists of Assessor's Parcel Numbers (APN) 109-232-001, -004, -006, -007, -008, -012, -013, -014 and -015. The project is being proposed by Geary Coats/Coats Consulting (hereinafter "Applicant") representing Montana Skies LLC, Bud Thorpe and Herald Riva. The Applicant has applied to the City of Greenfield for the following requested actions: Planned Development (PD) Permit, Prezoning, Vesting Tentative Map and Annexation.

The project was originally proposed in early 2007 as an Annexation consisting of three separate PD areas: Apple Row, Mira Monte and Willow Glen known collectively as "The Greenfield Villages" or "The Villages." Apple Row proposed 65 low-density single-family units, including 54 market rate and 11 inclusionary units on approximately 9.55 acres, with 0.73 acres of open space/parkland. Mira Monte proposed 234 dwelling units on 28.08 acres, including 195 market rate units and 39 inclusionary low-density single-family to high-density apartments, with 2.35 acres of open space/parkland. Willow Glen proposed 134 low-density single-family units on approximately 15 acres and approximately 2.75 acres of cluster housing (approximately 60 units) with 4.63 acres of open space/parkland. The proposed project also includes a 14-acre site reserved for a future elementary school, a neighborhood park, a paseo/open space and a retention basin.

The current proposal still involves annexation of the 76-acre area, but now consists of just two separate PD areas: Mira Monte and Willow Glen. The elementary school is no longer anticipated at this location. In addition, in response to staff comments on the previous proposal, the two PDs have been significantly reduced in size: Mira Monte proposes 166 dwelling units and 2.76 acres of open space/parkland on 28.08 acres. Willow Glen proposes 86 dwelling units with 1.13 acres of open space/parkland on approximately 14.05 acres (with a proposed adjusted lot line of the current 13.64 acre property). The proposed PD areas also include two neighborhood parks situate within two percolation basins. The remaining parcels ("Remainder Parcels") are included in the annexation but are not proposed for development at this time. For the purposes of the environmental analysis, it is assumed that these remainder parcels will build out maximum allowable buildout potential in accordance with the underlying land use designation of LDR in the City of Greenfield General Plan at 7 units per acre. Please refer to **Figure 6** for an illustration of the project area and PD areas.

Several technical studies have been completed to evaluate the potential environmental effects that may result from implementation of the proposed project, including: biological resource assessment, cultural resource evaluation, Phase I and Phase II Environmental Site Assessments (ESA), Transportation Impact Analysis (TIA), air quality analysis, noise impact assessment and a geotechnical investigation. Since the current proposal has reduced the intensity of development assumed in the technical reports, the findings contained in the reports remain a valid, albeit conservative, analyses of potential impacts associated with the proposal. The technical studies are available for review at the City of Greenfield Community Development Department at 45 El Camino Real.

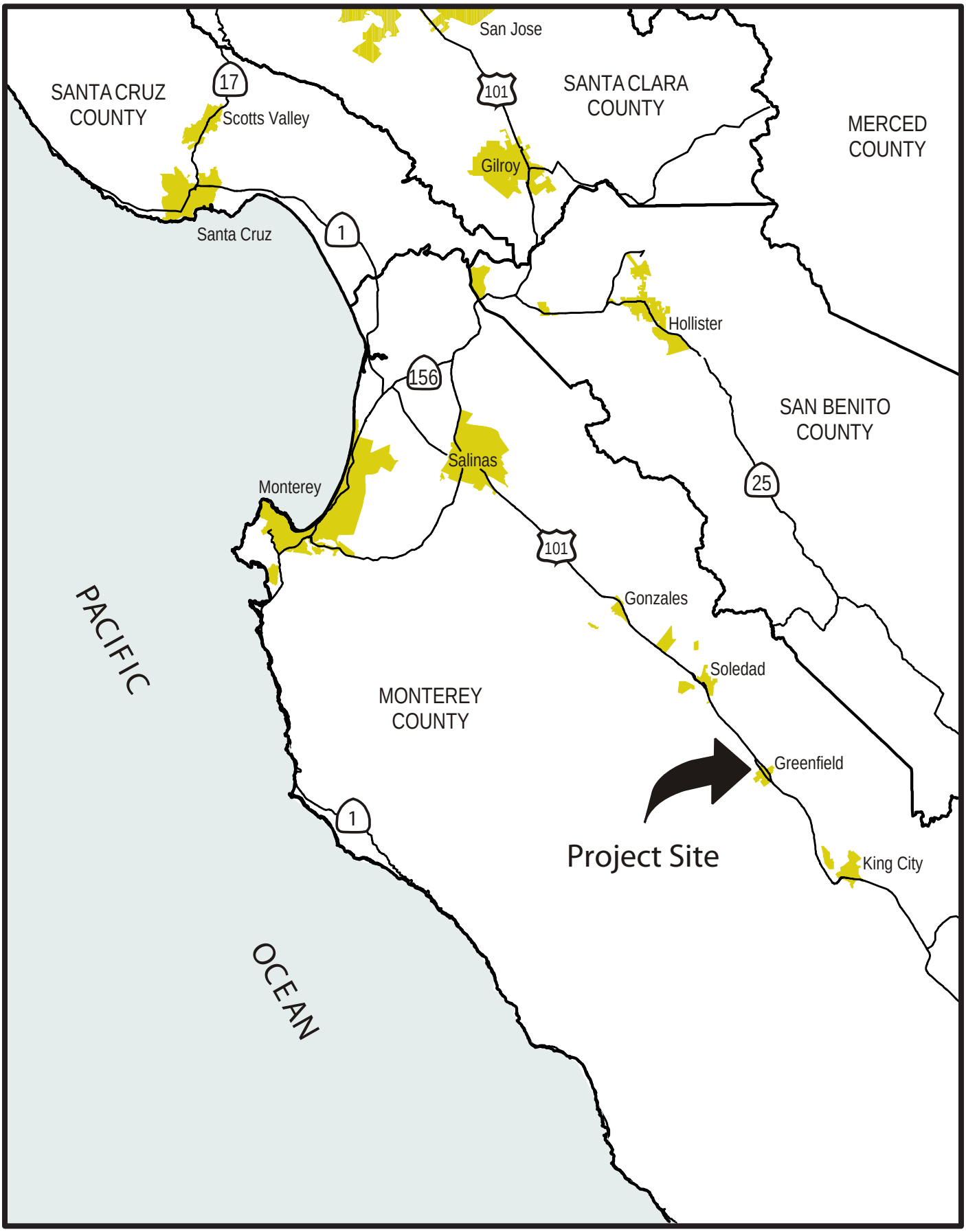


**Figure 1**
**Regional Location**

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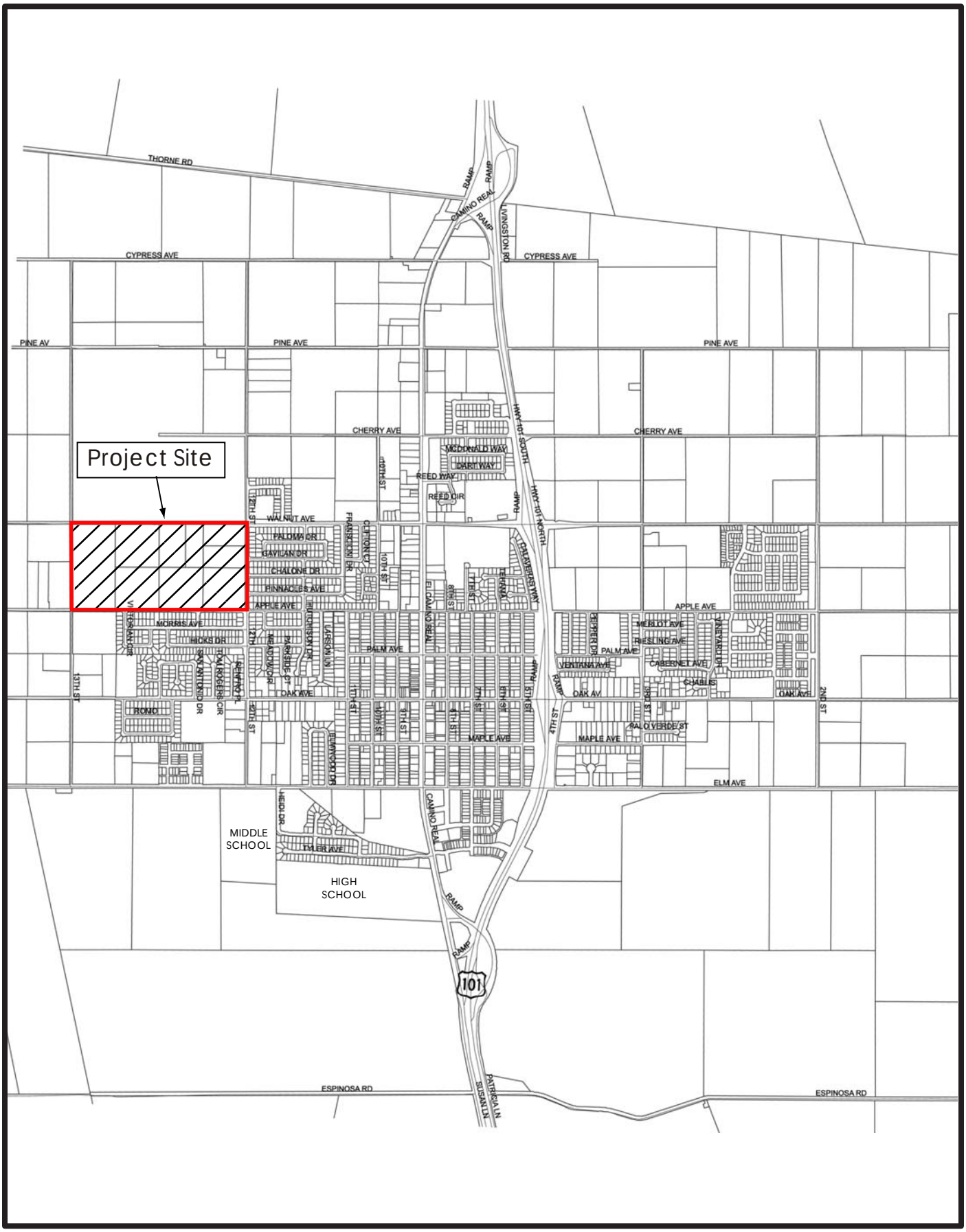


**FIGURE 2**
**PROJECT VICINITY**

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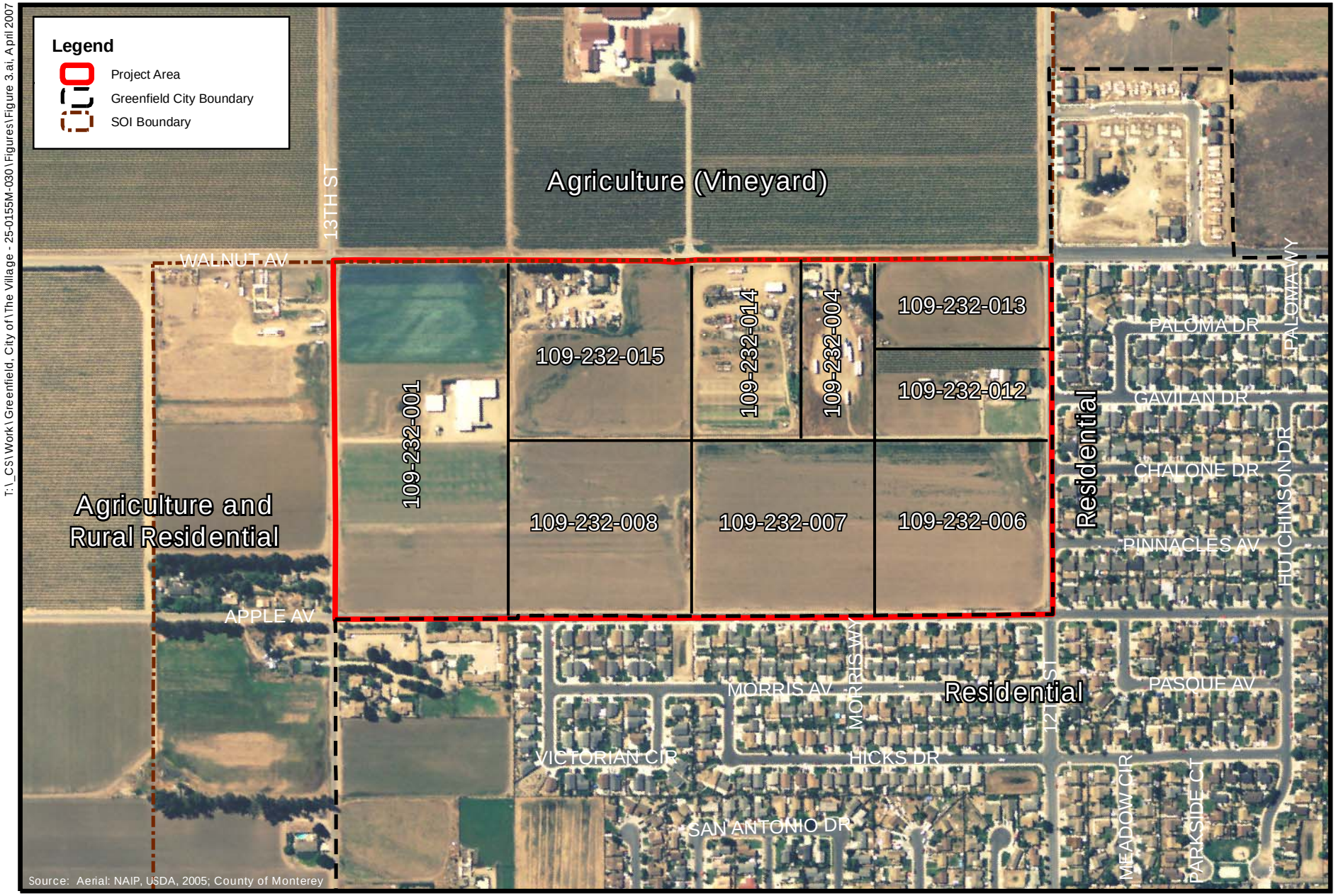


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**Figure 3**
**Surrounding Land Uses and APN Map**

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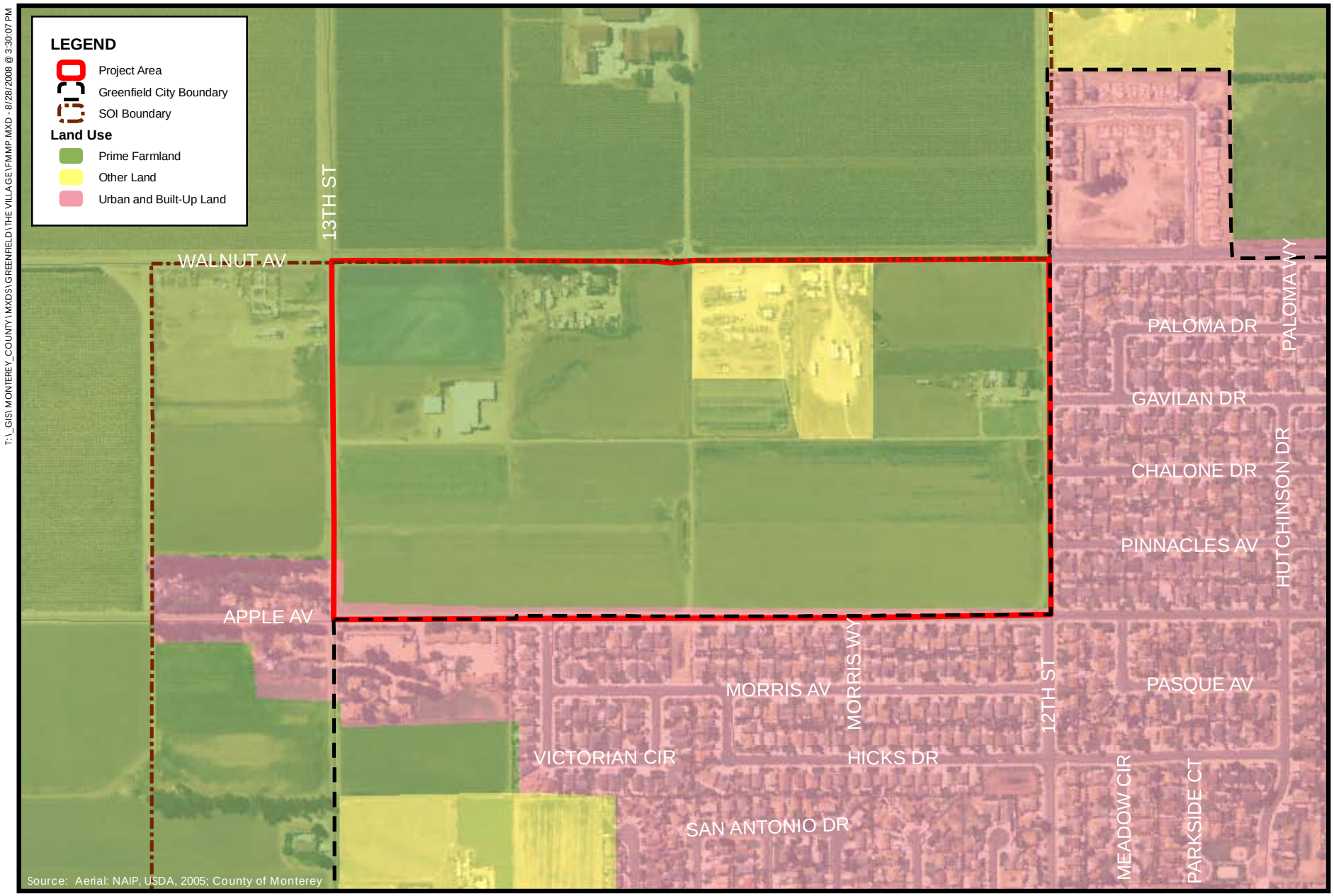


Figure **4**
Prime Farmland

PMC

*Project Site looking west.*

*Project Site looking north.*

Photos taken April 2007

**FIGURE 5A**
**SITE PHOTOS**

PMC

*Project Site farm buildings.*

*Project Site looking east.*

Photos taken April 2007

**FIGURE 5B**
**SITE PHOTOS**

PMC

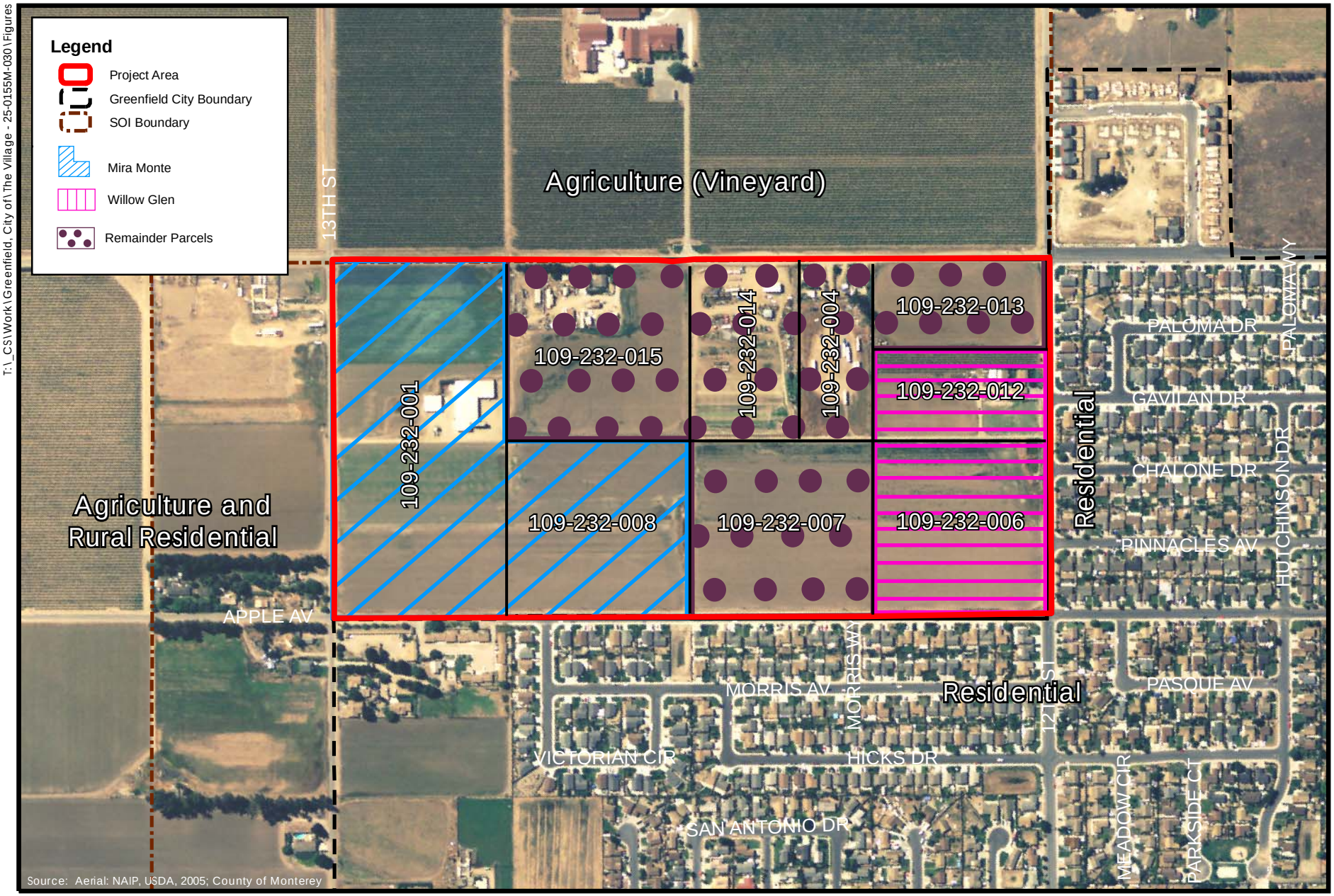


**Figure 6**
**Project Boundary and PD Areas**

PMC

**Relationship to Existing Planning Documents**

Monterey County General Plan (Central Salinas Valley Area Plan)

The entire project site is currently under Monterey County jurisdiction and has a *Monterey County General Plan* (2007) land use designation of Farmland and is zoned "F" (Farmland)/40 acre minimum.

City of Greenfield General Plan

The City of Greenfield Planning Area, as identified within the *Greenfield General Plan* (2005), includes land within the incorporated City limits of Greenfield and unincorporated areas of Monterey County surrounding the City. The incorporated City limits include approximately 1,123 acres, while the Planning Area as adopted by the City includes 1,420 additional acres (all lands within the City's existing and SOI). The General Plan was adopted in May 2005, with a significant amendment adopted in August 2006. The City's adopted General Plan designates the site for Low Density Residential (LDR) use, as shown in **Figure 7**.

The boundary of the General Plan Planning Area constitutes and in coterminous with the City's SOI boundary. The SOI is a planning tool adopted and used by the City and the Monterey County Local Agency Formation Commission (LAFCO) to designate the future incorporated boundary and service area for a city or special district within a specific period of time. Within the SOI, the municipality is empowered to plan and annex land for future uses, services and facility improvements, pending LAFCO approval.

In March 2007, LAFCO approved Resolution No. 07-04 that significantly modified and reduced the size of the City's proposed SOI boundary. The Sphere area adopted and now recognized by LAFCO excluded significant land area in the northeast corner of the General Plan, and identified "Urban Service Areas." Urban Service Areas consists of existing developed and undeveloped land within the SOI that is currently served by existing urban facilities, utilities and services or is proposed to be served within five years. The project site is located entirely within the City of Greenfield's SOI and is identified as an Urban Service Area, as shown in **Figure 8**.

**Project Characteristics**

Proposed Land Uses

The proposed project consists of the annexation of approximately 76 acres into the City of Greenfield and features two separate PD's: Mira Monte and Willow Glen, known collectively as "The Villages," shown in **Figures 9** and **10**. Proposed residential uses on the combined 50-acre PD area consist of 252 medium-density, single-family units. The PD areas also include three permanent stormwater retention basins.

**Table 2**, below, provides a summary of proposed land uses, acreage and dwelling units.

**TABLE 2**
**APPLICANT'S PROPOSED LAND USES**

| Proposed Use | Density | Gross Acres | Dwelling Units |
|---|---|---|---|
| ***Near-Term (PD)*** | | | |
| Mira Monte | 5.9 | 28.08 | 166 |
| Willow Glen | 6.1 | 14.05 | 86 |
| ***PD Residential Subtotal*** | **6.0** | **42.13**[1] | **252** |
| ***Long-Term***[2] ***(Remainder Parcels)*** | | | |
| Low Density Single-Family Residential | 7.0 | 33.54[3] | 235 |
| ***Total*** | **6.4** | **75.67** | **487** |

*Source: Project Application August 2008*

*Notes: 1. Includes requested lot line adjustment; 2. Long-term development assumes maximum allowable buildout potential in accordance with the underlying land use designation of LDR in the City of Greenfield General Plan at 7 units per acre; 3. Approximate acreage.*

Mira Monte PD

The Mira Monte PD is located on the western end of the project site on APN's 109-232-001 and 109-232-008. This area is approximately 28 acres in size and is bounded by Walnut Avenue, 13th Street and Apple Avenue. Mira Monte proposes 166 single-family homes on lots ranging in size from 3,880 -7,443 ft² at a net density of 5.9 dwelling units per acre (du/ac). The Applicant proposes 27 units (approximately 16%) as inclusionary housing, with 0.8 of a unit to be paid as an Inclusionary Fee. The inclusionary units would have the same architectural features and designs as the other 139 market-rate homes; but would be somewhat smaller in size. They will be located in the smaller lots of the subdivision adjacent to open space (lots 18, 24, 25, 31, 38, 45-54, 64, 75 and 59-166 as shown on **Figure 9**).

Access to the Mira Monte PD from 13th Street would include a landscaped median and a pedestrian pathway would be located on Apple Avenue. A stormwater retention basin is proposed at the northeastern corner of the Mira Monte site. Another temporary percolation basin is included within the park.

Proposed land uses for the Mira Monte PD are summarized below in **Table 3**.

**TABLE 3**
**APPLICANT'S PROPOSED LAND USE - MIRA MONTE**

| Proposed Use | Acres |
|---|---|
| Residential | 17.03 |
| Right of Way | 8.20 |
| Retention (Percolation )Basin/Park | 1.31 |
| Percolation Basin/Open Space | 0.44 |
| Open Space | 1.10 |
| ***Total*** | **28.08** |

*Source: Project Application August 2008*

Willow Glen PD

The Willow Glen PD is located southeastern portion of the annexation area and consists of APN's 109-232-006 and -012 and 109-232-013. This site is bounded by 12th Street to the east and Apple Avenue to the south. The Applicant is proposing a lot line adjustment that would increase the current 13.64-acre property to 14.05 acres and development of 86 single-family homes on approximately nine acres. Lot sizes for the single-family homes would range from 3,200 - 7,407 $ft^2$ for a net density of 6.1 of du/ac. The Applicant proposes construction of 14 of these housing units as inclusionary housing units and payment of an inclusionary fee equivalent to a 0.4 unit. The inclusionary housing design and construction materials will be compatible with the market-rate homes. They will be located throughout the project site on lots (12-16, 19, 22, 37-39 and 43-46).

An approximate one-acre percolation basin would be devoted to parks and open space. A landscaped median is also included at the entranceway to the PD from 12th Street. Proposed land uses are illustrated on **Figure 10** and summarized in **Table 4**, below.

**TABLE 4**
**APPLICANT'S PROPOSED LAND USE - WILLOW GLEN**

| Proposed Use | Acres |
|---|---|
| Residential | 9.15 |
| Right of Way | 3.77 |
| Percolation Basin/Park | 0.72 |
| Retention (Percolation) Basin/Open Space | 0.28 |
| Open Space | 0.13 |
| ***Total*** | **14.05** |

*Source: Project Application August 2008*

Remainder Area

The remaining parcels included in the annexation are not proposed for development in the near term, and are not controlled by the Applicant. However, for analysis purposes, these parcels have been assumed to develop at the maximum density allowed under the General Plan.

Planned Development (PD)

The City of Greenfield established a Planned Development (PD) zoning classification as a means to apply more flexible regulations on development than those pertaining to the zoning district in which the land is located, where more diversified style of development is desirable. It is intended to encourage more creative and imaginative approaches to development, which will take full advantage of a particular site, conserve natural features and resources, and promote more aesthetic and efficient use of the land, (City of Greenfield Zoning Ordinance, Article II, Section 17.16.080, September 2006).

The Applicant is seeking approval of a PD permit to allow variations from the standard zoning requirements. Requested variations from the base R-L zoning requirements include reduced lot sizes, increased setback and reduced driveway widths. As stated by the Applicant, the Developer's justification for seeking PD approval is to allow coordination with adjacent property owners to develop a comprehensive land use plan to coordinate overall provision of utilities and circulation plans. The reduced lot sizes will also make the project more affordable and affords the opportunity to provide more parks and open space areas.

### Landscaping and Parks Plan

The proposed project includes typical front yard design studies and park landscape plans for both Mira Monte and Willow Glen. Landscaping would feature a variety of trees, shrubs, groundcover, perennials and vines along project streets as well as residential areas, as shown in **Figures 11a, b** and **12a, b.**

### Traffic and Circulation Improvements

Primary access to the project site would be from Apple Avenue, Walnut Avenue, and 12th and 13th Streets. Interior streets would provide circulation within the project site. Right-of-way widths for interior streets would be 56 feet (including 5' planters, 5' sidewalks and 6' Public Utility Easement). These streets would also include on-street parking. Exterior streets (Apple Avenue, Walnut Avenue, and 12th and 13th) would include 5-foot wide meandering sidewalks and 4-foot wide bike lanes.

### Parking

The current application does not include a Parking Plan however, the Applicant has indicated that all 252 single-family homes proposed for near-term development as components of the Mira Monte and Willow Glen PD will include parking for two cars in a covered garage and two more spaces in driveways. The Applicant has also indicated adequate parking on interior streets and along exterior streets in compliance with City of Greenfield Code will be provided.

### Construction/Site Preparation

Implementation of the proposed project would necessitate demolition of the existing rural residential and ancillary structures. Clearing/grading typical for construction of an urban residential neighborhood would also be necessary.

### Project Phasing

The Mira Monte PD and Willow Glen PD's are proposing phasing if necessary, i.e., upon market demand, but this has not yet determined. If phasing would be necessary, not more than three phases are anticipated.

### Public Services and Infrastructure

Public services and facilities, including water, wastewater services, gas, electricity, police and fire protection, etc., would be extended from the City of Greenfield to the project site. Electrical and gas would be provided by PG & E. Telephone would be provided by ATT and cable television would be provided by Charter Communications.

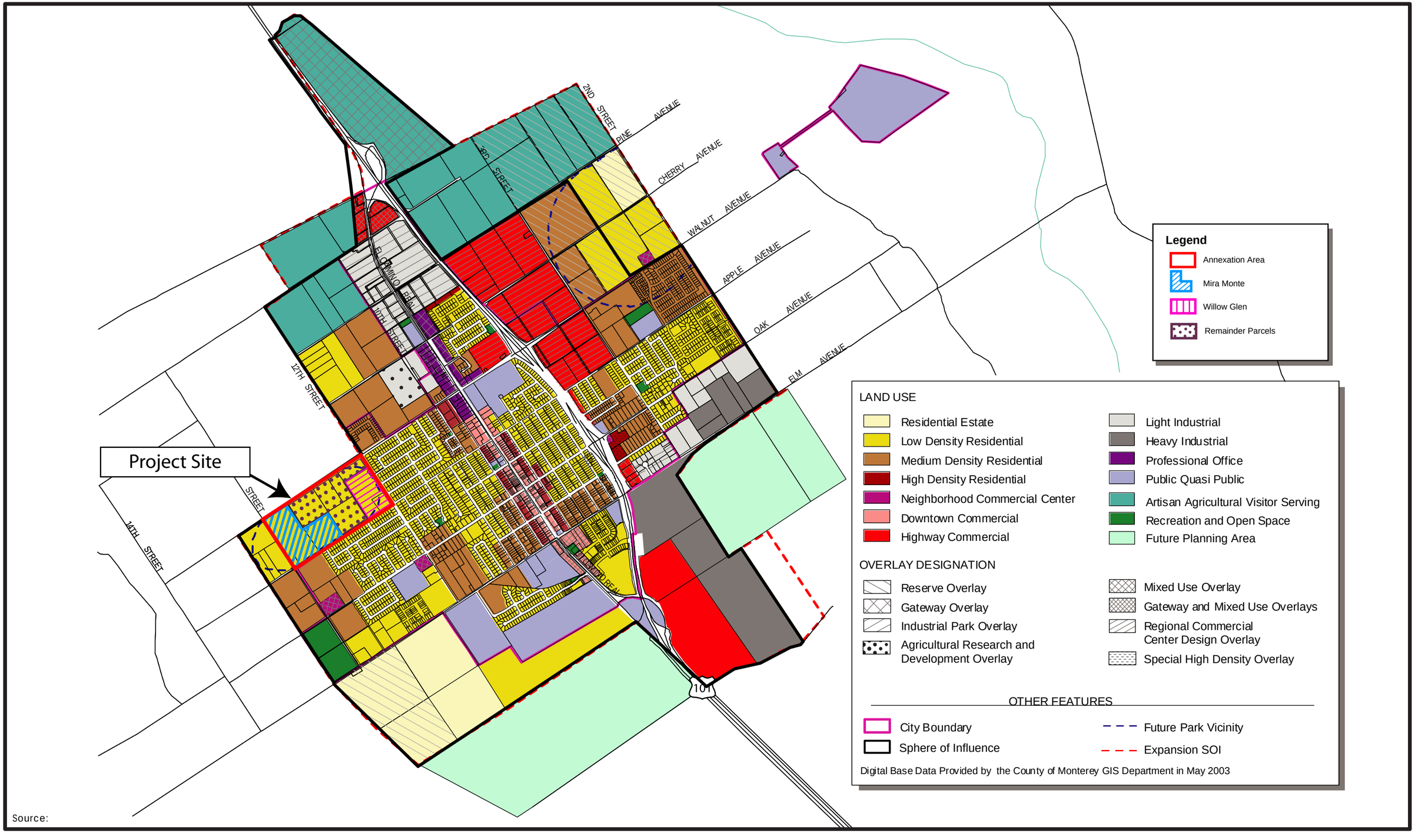


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**Figure 7**
**City of Greenfield Land Use Designations**

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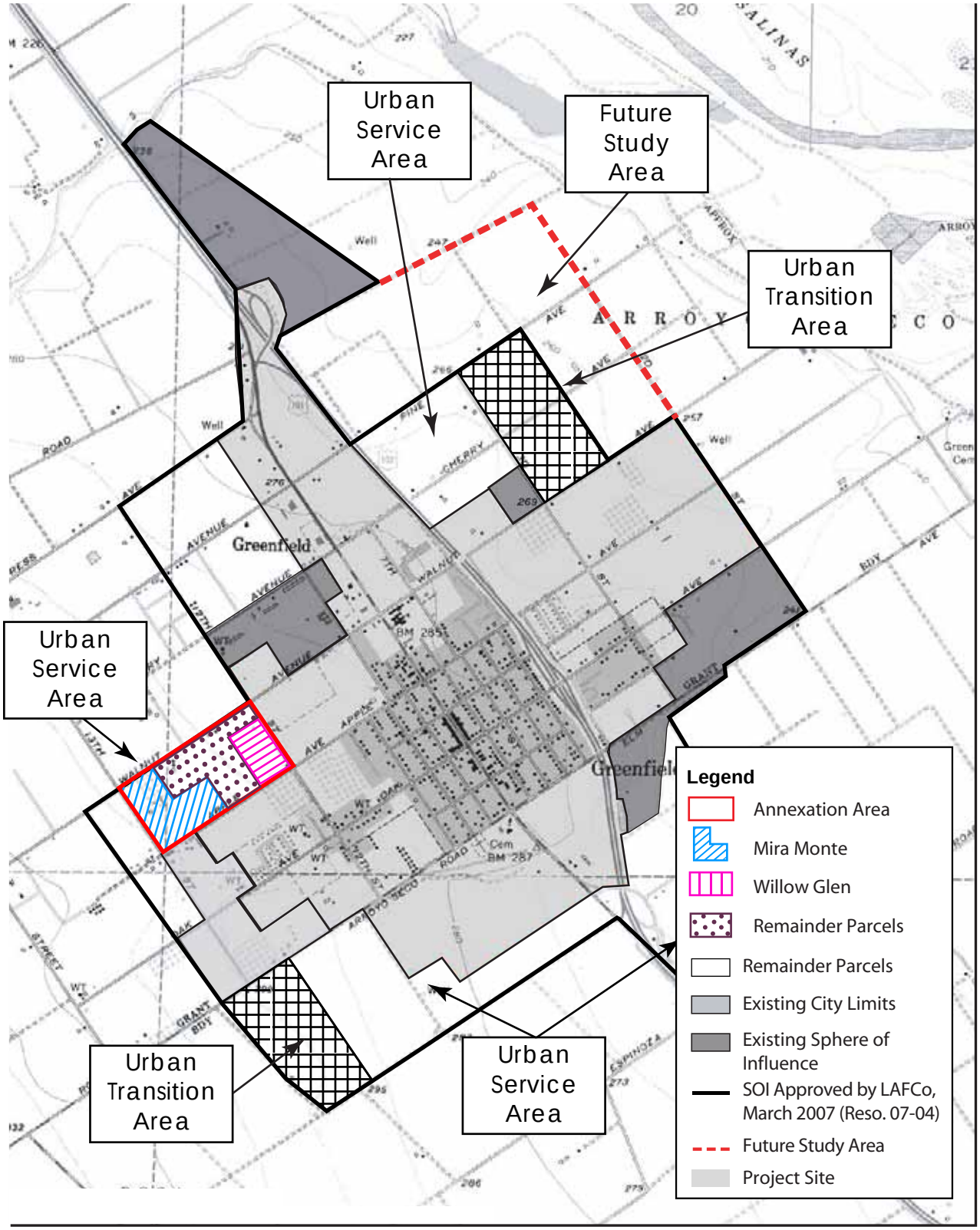


Source: USGS 7.5 Min. Paraiso Springs and Greenfield Quads/City of Greenfield General Plan

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Scale in Feet

**Figure 8**

**Sphere of Influence Boundaries**

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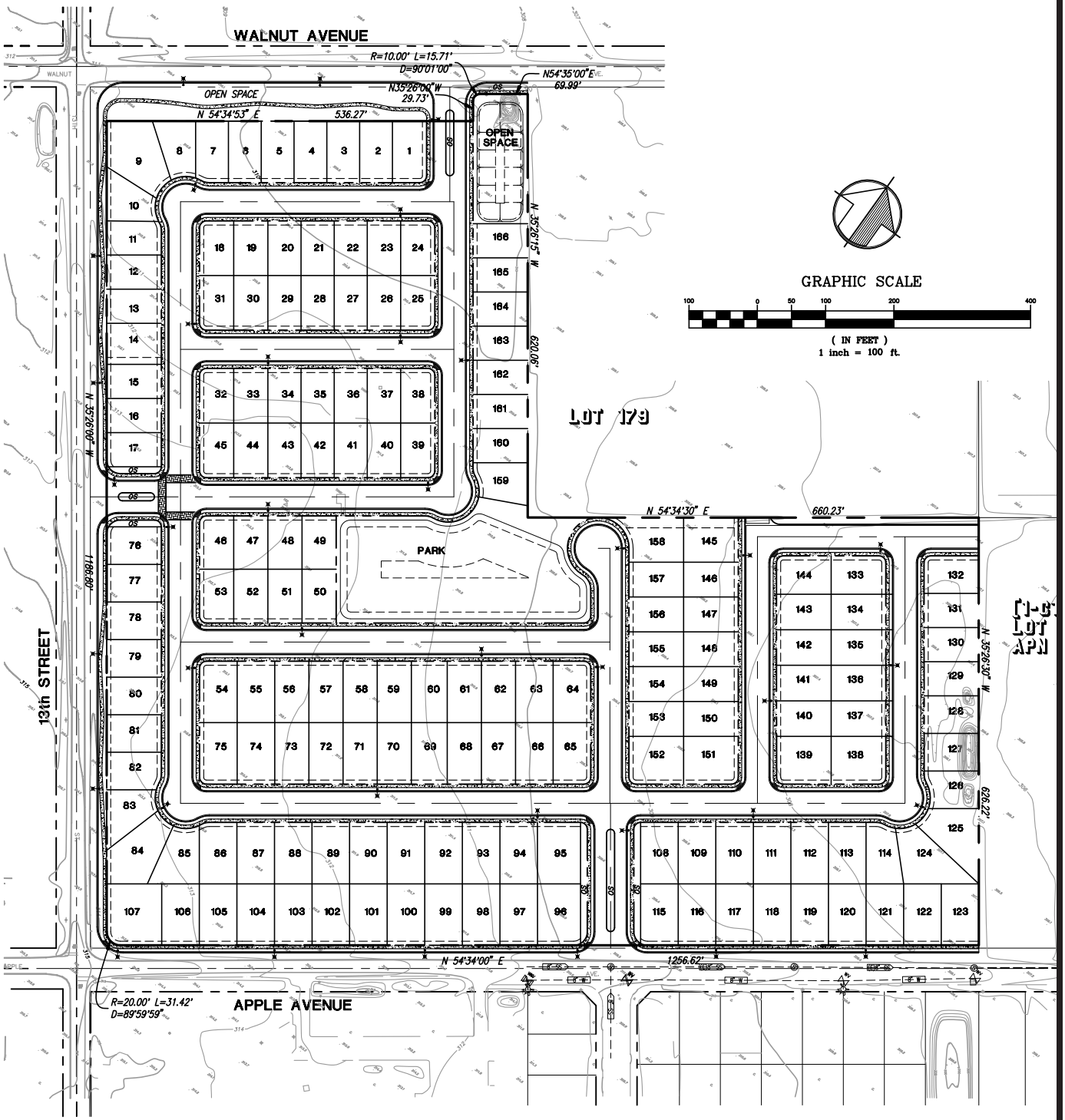


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**FIGURE 9**

**PD SITE PLAN-MIRA MONTE**

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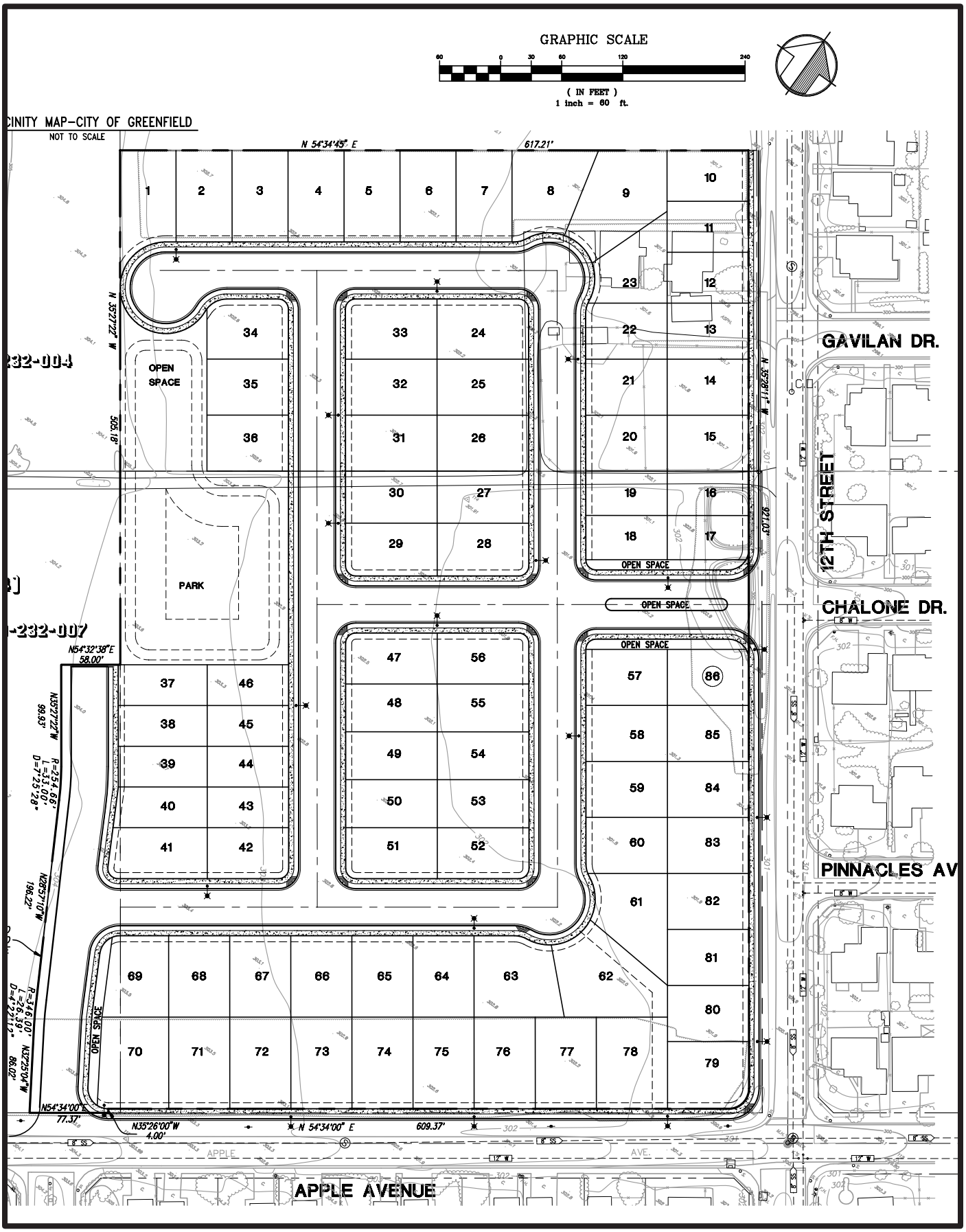


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**Figure 10**

**PD Site Plan-Willow Glen**

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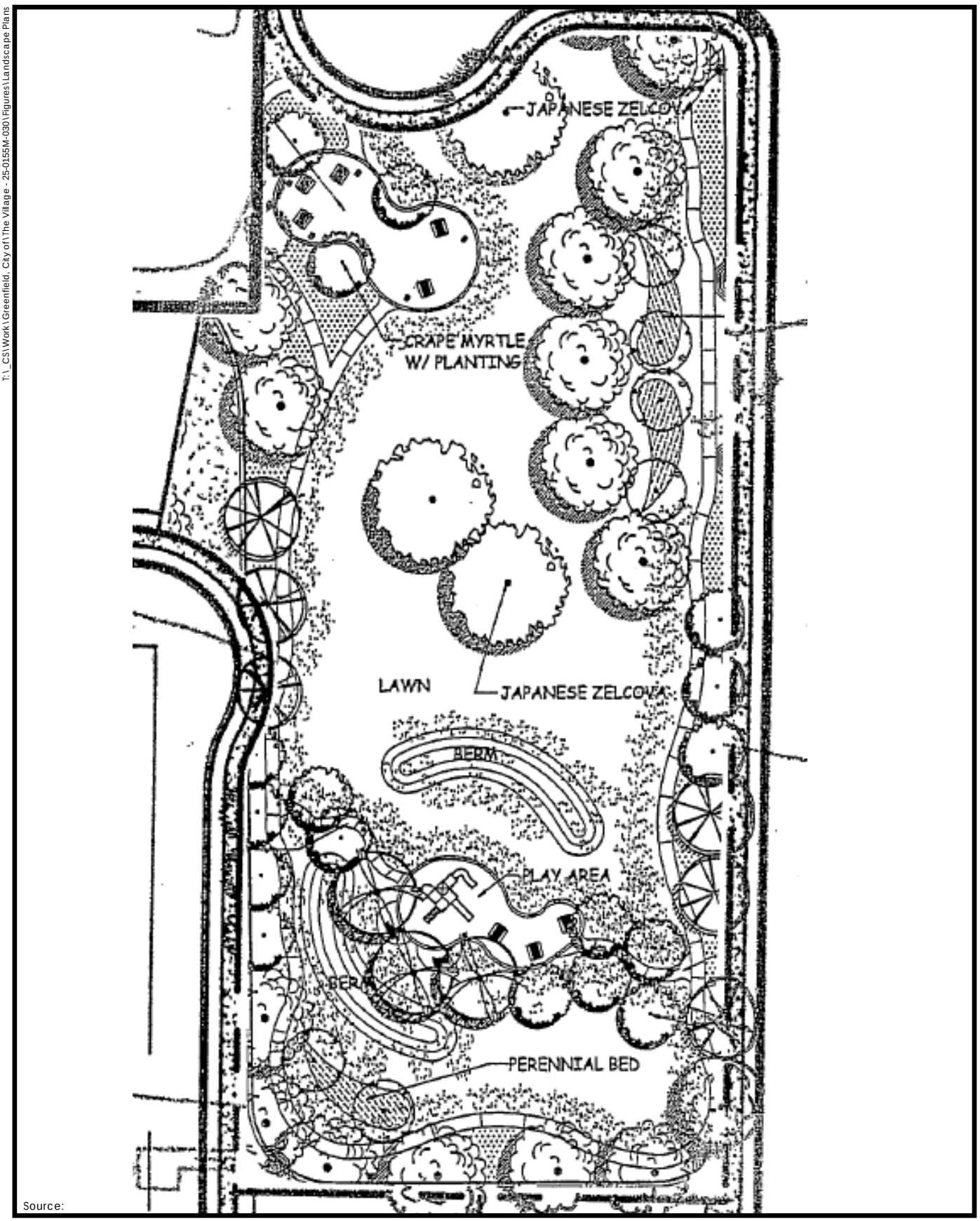


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**FIGURE 11A**
**LANDSCAPE PLAN, PARK-MIRA MONTE**

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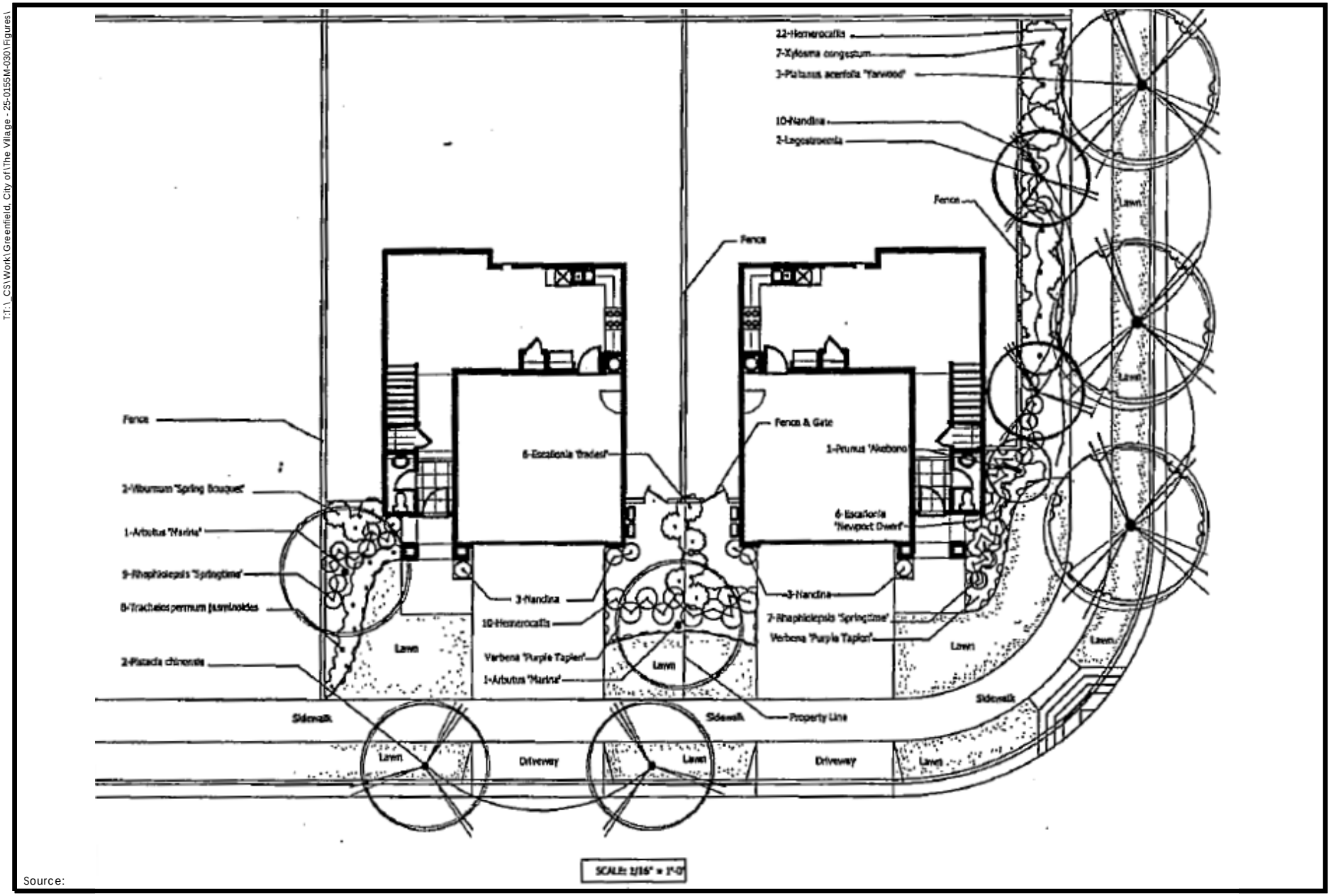


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**FIGURE 11B**

**LANDSCAPE PLAN, TYPICAL FRONT YARD-MIRA MONTE**

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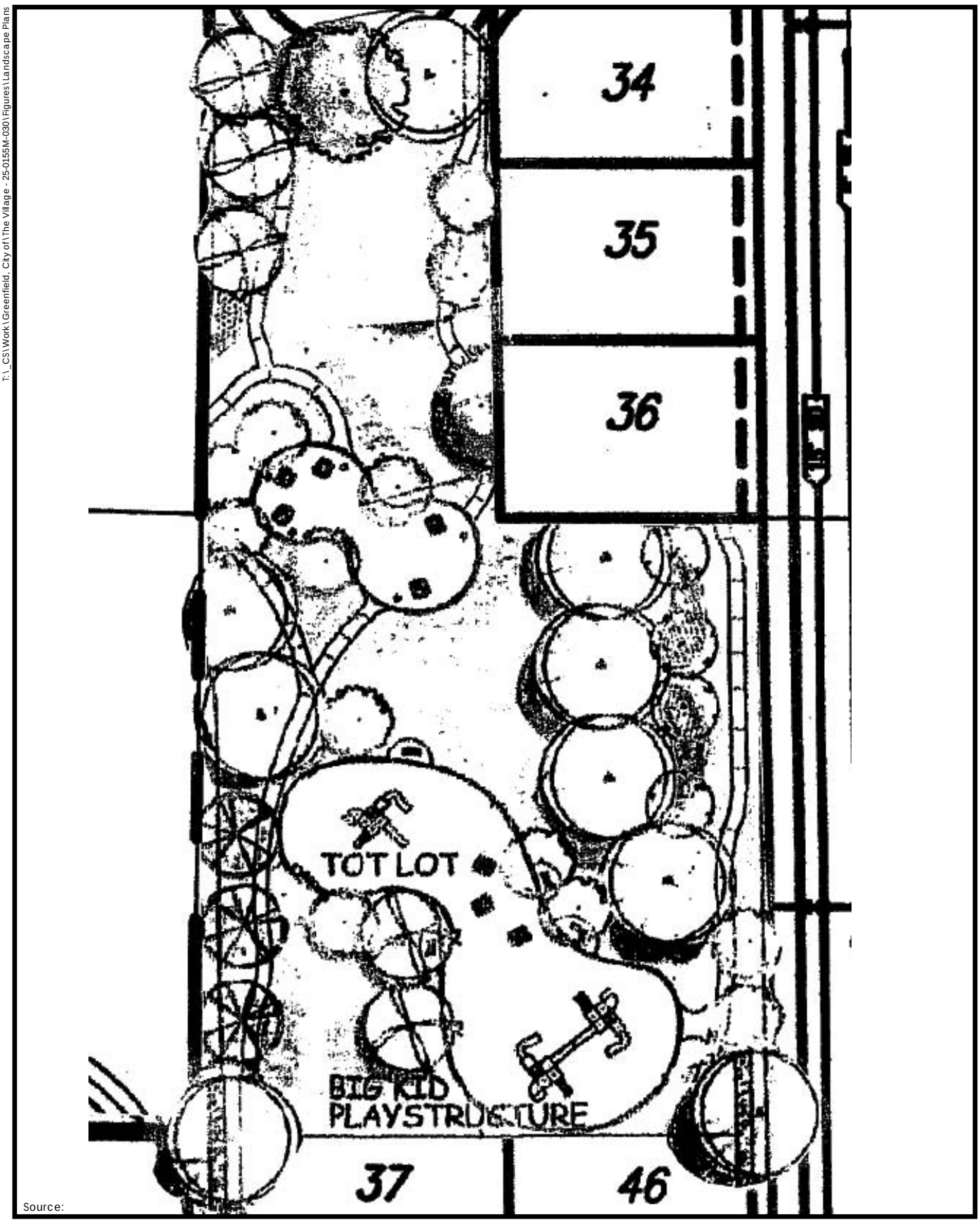


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**FIGURE 12A**
**LANDSCAPE PLAN, PARK-WILLOW GLEN**

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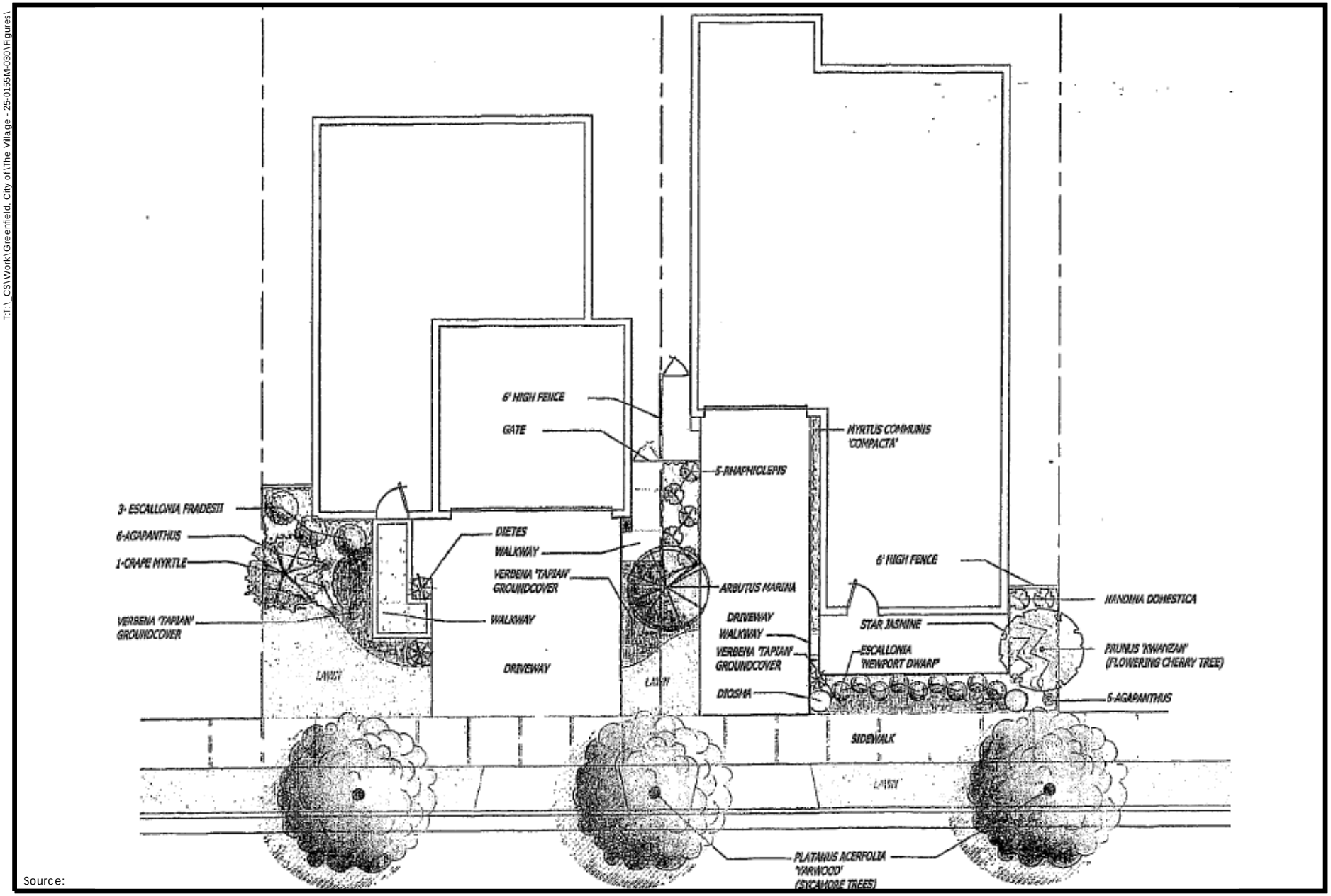


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**FIGURE 12B**

**LANDSCAPE PLAN, TYPICAL FRONT YARD-WILLOW GLEN**

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## C. REQUESTED ENTITLEMENTS AND PROJECT APPROVALS

This Initial Study/Mitigated Negative Declaration provides the environmental information and analysis and primary CEQA documentation necessary for the City of Greenfield and Monterey County LAFCO to adequately consider the effects of the proposed project. The City, as the lead agency, will consider the project at the local level. Approvals being sought include annexation of approximately 76 acres into the City of Greenfield. LAFCO is a responsible agency and has approval authority for annexation of the project site. Upon LAFCO approval of the annexation, the City of Greenfield would have approval authority and responsibility for considering the environmental effects of the whole of the project. In order to implement the proposed project, an application has been submitted to the City. Actions that would be taken relative to the project evaluated in this document are described below.

### Prezoning Designation Approval

The requested entitlements would include prezoning of Single Family Residential (R-L) to the site.

### Planned Development (PD) Approval

The proposed project includes a request for approval of a PD permit for approximately 42.13 acres consisting of two separate PD's: Mira Monte and Willow Glen. The PD applications submitted to the City for approval include design features such as reduced lot sizes and setbacks to allow for development of "for sale" small lot single-family homes. The Applicant has also stated that using the City's PD will allow coordination with adjacent property owners to develop a comprehensive land use plan to coordinate overall provision of utilities and circulation plans. **Table 5**, below, highlights the specific manner in which the proposed PD's deviate from City standards.

**TABLE 5**
**REQUESTED VARIATIONS**

| Component | City R-L Zoning Standard | The Villages PD | |
|---|---|---|---|
| | | Mira Monte | Willow Glen |
| Minimum Lot Size | 6,000′² | 3,880² minimum | 4,400² for Market Rate Housing<br>3,200² for Inclusionary Housing |
| Setbacks | Front: 15′<br>Side: 5′<br>Rear: 10′ | Front: 10′ to House<br>18′ to Garage<br>8′ to front porch<br>Side: 4′<br>Rear: 10′ | Front: 10′ to House<br>18′ to Garage<br>Side: 3′ on one side 4′ on the other<br>Corner: 8′ to Street<br>Rear: 5′ to Garage; 10′ to House |
| Max. Height | 35′ | 35′ | 35′ |
| Driveways | 20′ Wide | 18′ Wide | 18′ Wide |
| Streets | Public Streets:<br>60′ R/W<br>40′ CF to CF | Public Streets (Interior):<br>56′ R/W<br>36′ CF to CF | Public Streets (Interior):<br>56′ R/W<br>36′ CF to CF |
| Curb Radius | Public Streets:25′<br>Interior Curb Radius | Public Streets:25′<br>Interior Curb Radius | |

*Source: Project Application, August 2008.*

### Vesting Tentative Subdivision Map Approval

The Applicant is requesting approval of Vesting Tentative Maps for the PD portions of the proposed annexation.

### Annexation Approval

The proposed project would involve the reorganization of the incorporated City limits of Greenfield to include the annexation of the approximately 76-acre project site into the City.

### Future Approvals

Future approvals within the annexation area would require additional site planning and related permits; CEQA compliance separate from this environmental review; and may include, but are not limited to the following:

- Approval of Subdivision Map, *pursuant to the Subdivision Map Act*;
- Tentative Maps;
- Site Development Plans;
- Demolition Permits;
- Final Improvement Plans;
- Utility Plans;
- Construction Phasing and Duration;
- Architectural and Site Plan Review;
- Landscaping and Lighting Plans;
- Grading and Building Permits;
- All other related development permits.

Future approvals would require all related subsequent actions to any process described above.

## D. BACKGROUND AND PRIOR ENVIRONMENTAL DOCUMENTATION CONSIDERED

For the purposes of this Initial Study, the following technical reports have been prepared and are incorporated into this document. These reports are available for review at the City of Greenfield, Community Development Department, located at 45 El Camino Real, Greenfield, California.

- *Air Quality Impact Analysis,* AMBIENT, August 14, 2007 updated August 25, 2008.
- *Noise Impact Analysis,* AMBIENT, August 14, 2007.
- *Biological Resource Assessment*, PMC, February 2007.
- *Archaeological and Historical Investigations,* PMC, February 2007.
- *Geotechnical Investigation, Greenfield Village Residential Development, Greenfield, California*, Stevens, Ferrone & Bailey Engineering Company, Inc., August 3, 2005.
- *Geotechnical Engineering Report, Nino 12th and Apple Development, APN 109-232-004, -006 and -012*, Earth Systems Pacific. July 22, 2006.
- *Phase I ESA* (Apple Row, APN 109-232-007), Lee & Pierce Inc., April 19, 2006.
- *Phase I ESA* (Mira Monte, APN 109-232-001), D&M Consulting Engineers, Inc., March 2003.
- *Phase II ESA* (Mira Monte, APN 109-232-001), D&M Consulting Engineers, Inc., May 1, 2003.
- *Phase I and II ESA* (Willow Glen, APN 109-232-004, -012, and-006), Earth Systems Pacific, August 18, 2006.
- *Water Supply Assessment,* Wood Rodgers, March 2008.
- *Traffic Impact Study,* Higgins Associates, October 5, 2007.
- *Traffic Impact Study Peer Review,* PMC, August 20, 2008.

The list below indicated the plan's applicable to the project:

| | | | |
|---|---|---|---|
| General Plan | ☒ | Air Quality Mgmt. Plan | ☒ |
| Specific Plan | ☐ | Airport Land Use Plans | ☐ |
| Water Quality Control Plan | ☒ | LAFCO Annexation Policy | ☒ |

The proposal was reviewed for consistency with the *City of Greenfield General Plan* as well as other applicable plans and policy documents. Plan consistency is discussed below.

### City of Greenfield General Plan

The project site is located completely within the City of Greenfield's Sphere Of Influence (SOI) and is designated as Low Density Residential (LDR) by the General Plan. The Applicant proposes Annexation of the site into the City of Greenfield with concurrent Zoning Amendments (Prezone) which will zone the PD portions of the project site as Single Family Residential (R-L). In order to be consistent with the General Plan, the proposed type of development must be consistent with the General Plan land use map, or an application for the necessary amendment must be processed simultaneously. The proposed single-family residential development is consistent with the City's General Plan LDR designation of the site.

### Water Quality Control Plan

The proposed project is located within the Central Coast Basin of the Central Coast Regional Water Quality Control Board (RWQCB). Project consistency with the water quality control plan for the project area is determined through a permitting process with the RWQCB. The City of Greenfield has received permit authorization from the RWQCB to increase capacity of its wastewater treatment facility from 1.0 million gallons per day (MGD) to 2.0 MGD under Waste Discharge Requirements Order No. R3-2002-0062. The City of Greenfield completed an environmental analysis of the permitted wastewater treatment plant and RWQCB permits, which determined that all impacts would be less than significant or could be reduced to a less than significant level with mitigation. Therefore, the proposed project would be consistent with the Water Quality Control Plan.

### Air Quality Management Plan

The proposed project is subject to the 2004 Air Quality Management Plan (AQMP) for the Monterey Bay Area as adopted by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) in 1991. The AQMP is based on the Association of Monterey Bay Area Government's (AMBAG) projected population and employment forecasts. In general, a project is deemed consistent with the MBAPCD AQMP if the potential growth represented by the project is within the envelope of growth envisioned for the jurisdiction by AMBAG's population and employment forecast. The AQMP is based on AMBAG projections; therefore, if growth associated with the proposed project is consistent with AMBAG projections, then it is also consistent with the AQMP.

As discussed in **Section VI.3 Air Quality** of this document, the number of housing units associated with the proposed project is below the regional forecast; therefore, the proposed project is consistent with AMBAG projections and the AQMP.

The General Plan EIR notes that expected population growth resulting from implementation of the General Plan may someday exceed the City population growth projections used in the AQMP. Policies listed in the General Plan and mitigation measures included in the General Plan EIR will reduce this impact, however, the air quality impact of General Plan buildout was still found to be significant and unavoidable.

### LAFCO Annexation Policy

The Monterey County Local Agency Formation Commission (LAFCO) controls boundary changes for local jurisdictions and special districts in Monterey County, including annexations and amendments to a jurisdiction's Sphere of Influence (SOI). As such, it is a responsible agency in considering the proposed project, and the decision making body for the annexation. Monterey County LAFCO has adopted policies to guide the agency in its decision-making process, which is set forth in *Standards for the Evaluation of Proposals* (September 2006). According to these standards, the underlying purpose of Monterey County LAFCO is to discourage urban sprawl and encourage the orderly formation and development of local agencies. A summary of CEQA-relevant LAFCO policy and an analysis of the proposed project vis-à-vis this policy is presented below in **Table 6**.

**TABLE 6**
**LAFCO POLICY ANALYSIS**

| Policy Summary | Discussion |
|---|---|
| ***Conformance with General Plans*** | |
| The proposal should be consistent with the appropriate city or county general and specific plans. | The proposed project, with incorporation of mitigation measures included in this document, would be consistent with the *Greenfield General Plan* (2005). |
| ***Spheres of Influence*** | |
| The proposal shall be consistent with the Sphere of Influence (SOI) for the affected local agency. | The proposed project is located entirely within the City of Greenfield's SOI. |
| Proposals involving annexation shall comply with the Urban Service Area and Urban Transition Area designations. | The project site is located entirely within the City's SOI and the Urban Service Area. The Urban Service Area consists of existing developed and undeveloped land within the SOI that is currently served by existing urban facilities, utilities and services or is proposed to be served within five years. |
| The Commission shall not have the power to disapprove an annexation of contiguous territory if it is located within the Urban Service Area, is not prime agricultural land, and is designated for urban growth by the annexing City's General Plan. | The proposed project area is within the City's existing SOI/Urban Service Area and is designated for urban growth in the General Plan. However, the annexation area is prime agricultural land. The loss of prime agricultural land was previously considered in the General Plan EIR and determined to be a significant, unavoidable impact. As such, the City adopted a Statement of Overriding Considerations in their certification of the EIR and approval of the General Plan. |
| For annexations and Spheres of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the city in which the annexation or Spheres of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourages mixed-uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourage and provide planned, well-ordered, efficient urban development patters.[1] | The City of Greenfield has adopted goals and policies, which encourages compact city growth. Policies 2.1.9, 2.1.14, 2.2.3, 2.2.4, 2.3.3, 2.3.9, 2.3.10 2.6.1, 2.6.2, and 2.8.2 establish compact and efficient growth patterns by encouraging infill and intensification of land uses through the reuse or redevelopment of vacant or underutilized land; by encouraging Traditional Neighborhood Development (TND) and New Urbanist design principles; by preserving the areas planned for multi-family residential development; |

| Policy Summary | Discussion |
|---|---|
| | by enhancing the City's downtown by concentrating business services and public buildings and spaces in a functional and efficient manner; and by promoting compact city growth and phased extension of urban services to discourage sprawl.<br><br>The proposed project is within the City's Urban Service Area and in a location identified for residential growth in the General Plan. The proposal includes a variety of single-family homes with a mix of market-rate and inclusionary units, open space/parks and optional resource efficiency features. |
| ***Transportation*** | |
| For annexations and Spheres of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency of Monterey County or otherwise. [1] | There is no adopted fee or collection mechanism currently in place by the City, TAMC or Caltrans for funding Highway 101 widening within or outside the City of Greenfield, and no cost estimates have been developed by TAMC for such a project in order to assess a fee with the required nexus.<br><br>TAMC has completed a nexus study for a Regional Development Impact Fee Program for Monterey County to address regional traffic impacts. The TAMC Regional Development Impact Fee Program is one element of TAMC's proposed *14-Year Improvement Plan*. The Regional Development Impact Fee Program has recently been approved by the TAMC Board. Ten of the County's cities and the County have adopted the fees. Soledad and Greenfield have not yet adopted fees. A Joint Powers Agreement (JPA) between the adopting jurisdictions went into effect August 27, 2008 (personal communication with Mike Zeller, Transportation Planner with TAMC, August 25, 2008).<br><br>The City of Greenfield's Traffic Impact Fee (TIF) program has identified $90 million of new local improvements, including major interchanges and freeway ramp improvements. The City's new TIF is approximately $9,000 per dwelling unit to provide this comprehensive menu of improvements, many of which include "regional" improvements because they improve access and operations along Highway 101 within the City.<br><br>The City of Greenfield supports the concept of shared responsibility for regional and cumulative impacts, as evidenced by the adopted General Plan policies that support such an approach. The City of Greenfield adopted a Notice of Intent (NOI) to establish a regional development impact fee (Resolution Number 2006-82) and to condition all new development projects with payment of the regional impact fee on a project-by-project basis, pending approval of the fee program by |

| Policy Summary | Discussion |
|---|---|
| | the TAMC Board and Joint Powers Agreement.<br>If a regional impact fee has been established at the time building permits are pulled for the proposed project, then they may be subject to such a fee at that time. |
| ***Open Space and Agricultural Land*** | |
| In determining whether a proposal affects prime agricultural land, LAFCO shall apply the definition established under Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, §56064. | According to Cortese-Knox criteria, a portion of the proposed project site is considered to be prime agricultural land. See **Table 6-1**, **Section VI.2 Agricultural Resources** for further discussion. |
| LAFCO shall consider the agricultural significance of the proposal area (soil, climate and water factors) relative to other agricultural land in the region. | Part of the project site consists of Elder loam soil, gravelly substratum (EcA), a Class II (or Grade One) soil. The rest of the site consists of Arroyo Seco Gravelly Sandy Loam (AsA) soil, which is considered a Class III (or Grade Three) soil. These types of soils are fairly common in the Greenfield area and throughout the Central Valley. The *Monterey County Important Farmlands 2006, Sheet 2 of 2 [Map]* classifies the project site and much of the surrounding area as Prime Farmland The Monterey County Farmland Mapping and Monitoring Program (2006) identifies the project site, as well as all the surrounding lands of the City as Prime Farmland. |
| LAFCO shall consider the use value of the proposal area and the surrounding parcels. | Parts of the annexation area are currently under agricultural production and are surrounded by agricultural farmlands of similar productivity, rural residential and single family residential uses. Areas to the north and further to the west are not included in the SOI and are designated by the County for agricultural use. Adjacent parcels to the south and east are within the City limits and are designated for urban uses. By inclusion in the SOI, the project site has been anticipated to accommodate future growth of the City. The SOI was established by the City and LAFCO to ensure an orderly and rational expansion to preserve Prime Farmlands in the region as a whole. |
| LAFCO shall determine if the area is designated for agricultural preservation. | No portion of the project area is designated for agricultural preservation. Inclusion in the existing SOI has designated this land for eventual conversion to urban uses. |
| LAFCO shall consider whether public facilities would be extended through or adjacent to other agricultural land. | The project would not result in public facilities being extended through off-site agricultural land. The project area is adjacent to existing public roads, and sewer and potable water lines already exist or are planned for installation within the road right of way. |
| LAFCO shall consider whether the area is adjacent to or surrounded by existing urban development. | The project site is located adjacent to existing urban areas within the City limits, to the south and east. A residential development project (Amaral) currently being evaluated by the City would incorporate the land to the north into the City's SOI and City limits. |

| Policy Summary | Discussion |
|---|---|
| LAFCO shall consider whether surrounding parcels may be expected to develop within five years. | The project site is located adjacent to existing urban areas within the City limits, to the south and east. Land to the west is within the City's SOI; a residential development annexation for land to the north is pending with the City. These areas could potentially be developed within five years. |
| LAFCO shall consider whether natural or man-made barriers would buffer the proposal area from existing urban uses. | There are no barriers, natural or man-made, that separate or buffer the project site from existing urban uses. |
| ***Groundwater Standards*** | |
| LAFCO will encourage proposals that use reclaimed wastewater, minimize nitrate contamination, and provide beneficial use of storm water. | Development of the proposed project area would reduce nitrate contamination by utilizing the City Wastewater Treatment Facilities rather than septic systems. |
| LAFCO will encourage proposals that incorporate water conservation measures. | Future development of the proposed project area would be subject to Greenfield Municipal Code §13.09 regarding water conservation as a condition of approval of any tentative map. |
| LAFCO will encourage proposals that comply with adopted water allocation plans. | There is no adopted water allocation plan that affects the proposed project. |
| LAFCO will encourage proposals in jurisdictions that have achieved water savings or new water sources that will off-set increases in water usage attributable to the project. | The City of Greenfield uses a progressive pricing structure for water to encourage water savings. |
| LAFCO will discourage proposals that contribute to the cumulative adverse impact on the groundwater basin unless it can be found that the proposal promotes the planned and orderly development of the area. | While the Central Salinas Valley groundwater basin is experiencing overdraft, the Upper Salinas Valley Subbasin, where Greenfield is located, has extremely deep and productive alluvium with excellent storage and recharge capability. Based upon the City's total projected water supplies, the City will have sufficient water to meet projected water demands for the proposed project in addition to meeting the existing service area's planned future demands. (Ref. 13) Additionally, the proposal may use less water than agriculture and contributes to the planned and orderly development of the area by implementing the General Plan. The proposal is also consistent with the adopted LAFCO SOI and Urban Service Area Boundary. |
| LAFCO will discourage proposals which, when considered individually and after taking into account all mitigation measures to be implemented with the project, still cause an unavoidable significant adverse impact on the groundwater basin. | As discussed in the above policy discussion and in **Section VI.8 Hydrology/Water Quality** of this document, the project, with mitigation incorporated, would not result in a significant and unavoidable impact on the groundwater basin. |

*Source (Of Policy): LAFCO Evaluation of Proposals, September 2006.*

*Notes: [1.] This policy is not formalized in LAFCO's Evaluation of Proposals but, has been identified as areas of concern in evaluations of other proposals in Greenfield (e.g. Sundance).*

## A. FACTORS

The environmental factors checked below would be potentially affected by this project, as discussed within the checklist on the following pages.

| | | |
|---|---|---|
| ☒ Aesthetics | ☒ Agriculture Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Geology/Soils |
| ☒ Hazards and Hazardous Materials | ☒ Hydrology/Water Quality | ☒ Land Use/Planning |
| ☐ Mineral Resources | ☒ Noise | ☒ Population/Housing |
| ☒ Public Services | ☒ Recreation | ☒ Transportation/Traffic |
| ☒ Utilities/Service Systems | | |

Some proposed applications that are not exempt from CEQA review may have little or no potential for adverse environmental impact related to most of the topics in the Environmental Checklist; and/or potential impacts may involve only a few limited subject areas. These types of projects are generally minor in scope, located in a non-sensitive environment, and are easily identifiable and without public controversy. For the environmental issue areas where there is no potential for significant environmental impact (and not checked above), the following finding can be made using the project description, environmental setting or other information as supporting evidence.

☐ Check here if this finding is not applicable

**FINDING**: For the above referenced topics that are not checked off, there is no potential for significant environmental impact to occur from construction, operation or maintenance of the proposed project and no further discussion in the Environmental Checklist is necessary.

**EVIDENCE**: This project will not affect the categories not checked above, as follows:

**Mineral Resources**

The General Plan EIR determined that no known mineral resources, which would be of value to the region or state, were located within the General Plan Area. (Ref. 1, 2, 16)

## B. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| | **September 18, 2008** |
| Signature | Date |
| **Brent Slama** | **Community Development Director** |
| Printed Name | Title |

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the City has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to previously prepared or outside documents should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **1. AESTHETICS** | | | | |
| *Would the project:* | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Ref. 16) | ☐ | ☐ | ☐ | ☒ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | ☐ | ☒ | ☐ | ☐ |

DISCUSSION OF IMPACTS

*a) Would the project have a substantial adverse effect on a scenic vista?*

*c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

A scenic vista is generally described as a clear, expansive view of significant regional features possessing visual and aesthetic qualities of value to the community. Scenic resources in the City include agricultural and other open space lands, as well as views of the Santa Lucia Mountains to the west and the Gabilan Mountains to the east. Although the proposed development would be visible from surrounding properties, there is not an identifiable viewpoint or elevated vista on these adjacent properties from which the proposed project would detract in a significant way.

Surrounding land uses include farmland, rural residential and single-family residential neighborhoods in the City of Greenfield. Agricultural land borders the project site on the north and west, across Walnut Avenue and 13th Street, respectively. Low density, single-family neighborhoods in the City of Greenfield border the project site on the south and east and a few rural residential dwellings are located adjacent to project site at the corner of Apple Avenue and 13th Street. Land adjacent to the north across Walnut Avenue is currently used as a vineyard. This area is located in Monterey County but a residential development project (Amaral Annexation) is being proposed for this site. The project site has historically been utilized for agricultural purposes and rural residential uses. None of the private residences found onsite meet the eligibility criteria for inclusion in the California Register of Historical Resources (CRHR). See **Section VI.5 Cultural Resources** for further discussion of cultural resources.

Urbanization of the project site would result in permanent land use changes and the loss of the rural, agricultural character. The City of Greenfield identifies the agricultural landscape as an important visual resource to maintain the rural community character of the City. However, the General Plan has designated this area for residential use and development of the property would continue the residential pattern established by existing neighborhoods adjacent to the project site on the south and east. The proposed project features a variety of housing types, open space, parks and landscaping.

The City's General Plan and EIR identified areas of agricultural land and rural residential uses on the periphery of the City (such as the proposed project site) as important sources of the City's identity as an agricultural community. Implementation of land use changes described in the General Plan would result in conversion of agricultural areas to urban land uses throughout the City's Planning Area. Although changes in visual character caused by urban development is somewhat subjective, the impact to the City's overall visual and rural character was identified as a significant and unavoidable impact in the General Plan EIR.

Consistent with CEQA Guidelines Section 15063, the analysis for the specific land use proposed by the project has been considered in the previous environmental documentation prepared and adopted for the General Plan as a "first tier" document, and the issues of impacts to scenic vistas and/or to the existing visual character or quality of the site and its surroundings has been adequately disclosed and recognized by the City of Greenfield. For these reasons, as a site previously approved, considered and recognized for conversion from agriculture to urban use, the proposed project will have a **less than significant** impact.

*b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The General Plan indicates that there are no designated scenic highways within the City's designated Planning Area. The County has identified Road G16 (which runs from Greenfield to the Coast, via Elm Avenue turning into Arroyo Seco Road, into Carmel Valley Road) as a local scenic route. However, the area of development within the Planning Area (which includes the proposed annexation area) would not affect Road G16 or compromise its visual resource as discussed in the General Plan. The project site is comprised primarily of agricultural and rural residential uses. The project site is not located within a scenic highway and there are no significant trees, rock outcroppings or other scenic resources onsite. Therefore, **no impact** to scenic resources within a scenic highway is anticipated.

*d) Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Development of the proposed project would result in the installation of new sources of light to an area that otherwise contains few light sources. These sources include street lighting and light generated by vehicles accessing the project site. New light sources would result in an incremental increase in ambient nighttime light in the area. Stationary light sources have the potential to adversely affect adjacent properties through a "spillover" effect. New light sources would result in a greater overall level of light at night, thus reducing night sky visibility and affecting the general character of the area. The following mitigation is required to ensure that lighting impacts due to implementation of the proposed project are kept to a minimum.

**Mitigation Measure**

**MM 1-1** Prior to Final Map approval, the Applicant shall prepare and submit to the City of Greenfield a detailed exterior lighting plan and photometric study that indicates the location and type of lighting that will be used. Exterior lighting shall specify type and maker, and demonstrate a non-intrusive quality through incorporation of baffles and lens cut-offs to direct lighting downward, while still providing an adequate amount of light for safety and/or security.

Implementation of the above mitigation measure would ensure that light and glare impacts are reduced to a **less than significant** level by requiring that lighting be non-intrusive and requiring lighting plans be reviewed and approved by the City of Greenfield.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **2. AGRICULTURE RESOURCES** | | | | |
| *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.* | | | | |
| *Would the project:* | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☒ | ☐ |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | ☐ | ☒ | ☐ | ☐ |

DISCUSSION OF IMPACTS

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

According to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, agricultural land is considered prime if it meets any one of five criteria listed below in **Table 7**. As shown below, a portion of the project site meets one or more of the Cortese-Knox-Hertzberg criteria and therefore would be considered prime agricultural land under that definition. The *Important Farmlands Map of Monterey County* (2006) also classifies the project site as Prime Farmland (see **Figure 4**, presented earlier).

**TABLE 7**
**CORTESE-KNOX-HERTZBERG PRIME AGRICULTURAL LAND**

| Cortese-Knox-Hertzberg Criteria | Discussion |
|---|---|
| Does the land, if irrigated, qualify for rating as Class I or Class II in the Natural Resources Conservation Service land use classification system? | Yes, part of the project site consists of Elder loam soil, gravelly substratum (EcA), a Class I (now referred to by the NRCS as Grade One[1]) soil. The remainder of the site consists of Arroyo Seco Gravelly Sandy Loam (AsA), a Class III (Grade Three[1]) soil. |
| Does the land qualify for rating 80 through 100 Storie Index Rating? | Yes, Elder loam has a Storie Index Rating of 90 ( Grade One[1]) and Arroyo Seco loam has a rating of 63 (Grade Three[1]). |

| Cortese-Knox-Hertzberg Criteria | Discussion |
|---|---|
| Does the land support livestock used for the production of food and which has an annual carry capacity of at least one animal per acre? | No, the project site is not supporting livestock. |
| Is the land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a non-bearing period of less than five years and which will return on an annual basis not less than $400 per acre? | Yes, part of the project site is planted with vineyards and row crops that likely return more than $400 per acre on an annual basis. |
| Has the land returned from production an annual gross value of not less than $400 per acre for three of the last five years? | Yes, part of the project site is planted with vineyards and row crops that likely returned more than $400 per acre for the last five years. |

*Source (of Criteria): Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Section 56064)*
*Notes: [1]. Natural Resources Conservation Service-USDA, Web Soil Survey 2.0, August 2008.*

The City of Greenfield considered the conversion of agricultural land during buildout of the General Plan and made findings that, as a community surrounded by farmland, there are few options in terms of the preferred "direction" of growth based on the quality of farmland. The City's planned land use scenario creates logical boundaries that expand upon the existing land use pattern. The project site is located entirely within the City's Sphere of Influence (SOI) and the City has identified the project site as appropriate for future urban growth.

The General Plan Environmental Impact Report (EIR) acknowledged the conversion of Important Farmlands within the City's SOI as a Significant and Unavoidable impact and adopted a Statement of Overriding Consideration.

However, as part of the recent City of Greenfield SOI approval, LAFCO requires that a Memorandum of Understanding (MOU) must be negotiated between the City and LAFCO prior to future annexations (LAFCO Resolution No. 07-04, March 2007). One subject to be addressed in the MOU is agricultural land conversion. LAFCO has identified several potential methods to mitigate for agricultural land conversion. Such methods include, but are not limited to: acquisition and transfer of ownership of agricultural land, conservation easements or the payment of in-lieu fees to an agricultural conservation entity to compensate for loss of agricultural land. At this time however, no such mitigation program has been analyzed or adopted by the City or LAFCO for its feasibility or applicability to Greenfield. Nonetheless, the City wishes to acknowledge the on-going process and requires the following mitigation measure:

**Mitigation Measure**

**MM 2-1** As a condition of the annexation of this property into the City, the Applicant shall be subject to any agriculture preservation program, agricultural mitigation fee, or other agricultural mitigation mechanisms adopted by the City of Greenfield. Participation in any such adopted program must be demonstrated by the Applicant following LAFCO's approval of the annexation and prior to obtaining grading permits. Any program adopted by the City up to the point of obtaining building permits shall be enforceable and applicable to this project.

Consistent with CEQA Guidelines Section 15063, analysis for the specific use identified by the proposed project has considered the previous environmental documentation prepared and adopted for the project site, specifically the *General Plan EIR* (2005), and impacts resulting from the loss of farmland has been adequately disclosed and recognized by the City of Greenfield. Therefore, as a site previously approved, considered and recognized for conversion from

agricultural to urban use, the impact is considered **less than significant** based upon findings made by the City.

*b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The project site is currently under jurisdiction of Monterey County and zoned Farmland, 40-acre minimum (F/40). However, the site is within the City of Greenfield's Sphere of Influence (SOI) and has been designated as Low Density Residential in the City's General Plan. As such, the site has been anticipated for residential development by both the City and Monterey County LAFCO. As part of the annexation process, the PD portions of the project site will be prezoned by the City of Greenfield as Single Family Residential (R-L) with a Planned Development (PD) permit. The remainder parcels would be prezoned as Single Family Residential (R-L). There are no Williamson Act contracts on any of the parcels within the project site. The impact is considered **less than significant**.

*c) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

The project site is adjacent to farmland along the site's northern and western boundaries. Land to the north is not currently located in the City's SOI, but a residential development project and annexation is being proposed for this area (Amaral Annexation). The area immediately west of the project site is within the City's SOI and has been designated for Low Density Residential use by the City's General Plan.

Development of residential uses in proximity to agricultural operations could result in compatibility impacts, encroachment and restrictions on farming operations. The further conversion of agricultural land to non-agricultural uses due to increasing property values may be a secondary effect of these conflicts.

Agricultural land to the north is currently proposed for residential development (Amaral Annexation project). Development of this property would require an SOI amendment. This requirement and other impacts specific to this particular site may delay actual development of this property. However, urban-agricultural impacts would still be generally considered short-term in duration.

The General Plan EIR indicates a number of methods for minimizing potential land use conflicts along the urban/agriculture interface, including the incorporation of land use buffers and implementation of a Right-to-Farm Ordinance. The City has established a 200-foot buffer requirement on the east side of the City; however, on the south and west sides, land use buffers are more flexible and are typically 100 feet. The City does not currently have an adopted Right-to-Farm Ordinance. Individual projects near agricultural lands have contained notification statements that run with the property deed. These notices inform new residences of the presence and potential nuisance associated with nearby agricultural operations.

As part of the recent City of Greenfield SOI approval, LAFCO requires that a MOU must be negotiated between the City and LAFCO prior to future annexations (LAFCO Resolution No. 07-04, March 2007) as discussed under impact "a," above. In addition to agricultural land mitigation, agricultural land use buffers must be addressed in the MOU, but a specific mechanism by which agricultural buffers will be implemented has not been determined. Currently, the City of Greenfield has policies regarding buffer standards, which are outlined below. The project will be required to incorporate any and all provisions outlined in the MOU prior to annexation.

The following mitigation measures would reduce impacts along the urban/agricultural interface to less than significant levels.

**Mitigation Measures**

**MM 2-2** 1) The Applicant shall demonstrate adequate land use separation on all site plans and applications for subdivision. Consistent with the City of Greenfield policies regarding land use buffers, final site plans shall include a 100-foot minimum land use buffer along the northern boundary of the project site. The buffer distance shall be measured from the edge of active agricultural fields or vineyards and the nearest residential building line. Distances comprising the buffer may include roadway rights-of-way, easements, landscaping and other uninhabited uses. Ultimate design and consideration of setbacks will be subject to review and approval by the City of Greenfield.

**or**

2) Contribution or participation in any mitigation adopted by the City of Greenfield and in place at the time that LAFCO considers the annexation.

**MM 2-3** The City of Greenfield shall require a Right-to-Farm notification statement to run with the title as disclosure and notice in deeds at the time of transfer or sale of all properties on the project site. The statement shall inform any future property owners of the continuation of agricultural activities in the area and shall disclose the potential effects of agricultural activities on adjacent land uses to future residents.

Implementation of the above mitigation measures would reduce the impacts associated with agricultural and urban land use conflicts to a **less than significant** level by requiring land use buffers between future residential development and agricultural areas and by ensuring that new property owners near agricultural land are properly notified of adjacent agricultural practices.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **3. AIR QUALITY** | | | | |
| Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. | | | | |
| *Would the project:* | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☒ | ☐ | ☐ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | ☐ | ☒ | ☐ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

DISCUSSION OF IMPACTS

The analysis in this section is based on the *Air Quality Impact Analysis* prepared by AMBIENT Air Quality & Noise Consulting (August 14, 2007 and revised August 25, 2008), the *Traffic Impact Study* (TIS) prepare by Higgins Associates (October, 2007) and TIS Peer Reviews (Fehr & Peers October, 2007 and PMC, August 2008). The *Air Quality Impact Analysis* was prepared with respect to the guidelines set forth in the Health and Safety Element of the *City of Greenfield General Plan* (2005). The conclusions of the *Air Quality Impact Analysis* are incorporated herein and the report is available for review at the City of Greenfield Community Development Department at 45 El Camino Real.

The 2007 *Air Quality Impact Analysis*)analyzed the potential environmental air quality impacts of the proposed project, including short-term construction emissions, odors and long-term operational impacts (primarily vehicle emissions) of the originally proposed project. As originally proposed, the project included annexation of 68 acres and the construction of 450 single-family dwelling units and 40 multi-family dwelling units within three separate Planned Development (PD) areas. The proposed project also included a 14-acre site reserved for a future elementary school, a neighborhood park, open space areas and a percolation basin.

The current proposal still includes annexation of 68 acres, however only proposes a total of Single-Family 252 dwelling units within two PD areas. The PD areas still include development of open space, park areas and percolation basins. The proposed elementary school would no

longer be included as part of the proposed project. The remaining parcels within the annexation area are not proposed for development at this time. However, for the purposes of the environmental analysis, it is assumed that these remainder parcels will build out maximum allowable density, which would result in the future development of approximately 235 additional residential dwelling units. In total, the revised proposed project would result in the development of approximately 487 dwelling units at full buildout, consistent with the number of units originally proposed and analyzed in the 2007 Air Quality Analysis and TIS. However, the multi-family units and the elementary school are no longer components of the proposal – reducing the overall intensity of the development.

AMBIENT Air Quality & Noise Consulting reviewed the current proposal In August 2008 and prepared a "Revised Greenfield Villages Project" memo. As stated in the memo, as revised the project would result in an overall reduction in development intensity, reduced emissions from area sources (e.g., natural gas use, landscape maintenance, etc.) would also be anticipated for the revised project. For these reasons, the findings contained in the previously prepared air quality analysis would remain valid. The 2007 TIS can be considered a conservative analysis of potential impacts of the proposed project.

It is understood that future development proposals within the project area would require CEQA compliance separate from this environmental review.

*a) Would the project conflict with or obstruct implementation of the applicable air quality plan?*

A project would be considered to conflict with or obstruct implementation of the regional air quality plans if it would be inconsistent with the emissions inventories contained in the regional air quality plans. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region. Project-generated increases in population or VMT could, therefore, potentially conflict with regional air quality attainment plans.

The Association of Monterey Bay Area Governments (AMBAG) has evaluated the proposed project to determine its consistency with the regional population forecasts used for development of the Air Quality Management Plan for the Monterey Bay Region (AQMP). A copy of this letter is available for review at the City of Greenfield Community Development Department, 45 El Camino Real. Based upon the population forecast analysis conducted, the proposed project would be considered consistent with the AQMP. As a result, this impact is considered **less than significant**.

*b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Implementation of the proposed project would result in short-term increases in criteria air pollutants associated construction of the proposed project. Short-term construction activities could contribute to localized increases in $PM_{10}$ concentrations at nearby receptors. . As a result, short-term emissions of $PM_{10}$ would be considered **potentially significant**, subject to mitigation.

Refer to the analysis below under item "c" for more detailed discussion of short-term and long-term air quality impacts attributable to the proposed project. With implementation of proposed mitigation measures for the reduction of construction-generated emissions, as noted under item "c" this impact would be considered **less than significant**.

*c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

Increases in emissions attributable to the proposed project would occur during construction and long-term operation of the proposed project. Short-term construction and long-term operational emissions are discussed separately, as follows:

**Short-term Construction Impacts**

As noted above, the revised project would result in an overall reduction in the intensity of development within the project area and a corresponding reduction in maximum daily construction-generated emissions, in comparison to the estimated emissions generated by the previously proposed project. For this reason, the findings contained in the previously prepared air quality analysis would present a conservative analysis of potential impacts associated with the revised proposed project.

Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but possess the potential to represent a significant air quality impact. The construction and development of residential, commercial, and industrial uses would result in the temporary generation of emissions resulting from site grading and excavation, road paving, the application of architectural coatings, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities. For instance, the MBUAPCD has determined that construction activities that involve minimal earth moving over an area of 8.1 acres, or more, could result in a potentially significant temporary air quality impacts, if not mitigated. Construction activities that require more extensive site preparation (e.g., grading and excavation) may result in significant unmitigated impacts if the area of disturbance were to exceed 2.2 acres per day (MBUAPCD 2004).

Estimated daily increases in emissions associated with the proposed project estimated using the ARB-approved URBEMIS2002 (version 8.7) computer program based on default assumptions contained in the model. Emissions were calculated assuming that 25 percent of the project area (i.e., approximately 15 acres) would be disturbed on any given day and that all proposed land uses would be developed over an approximate 60-month construction period (SJVAPCD 2006). Predicted daily emissions of $PM_{10}$ are summarized below in **Table 8**.

**TABLE 8**
**CONSTRUCTION-GENERATED EMISSIONS WITHOUT MITIGATION**

| Source | Estimated $PM_{10}$ Emissions (lbs/day) |
|---|---|
| Demolition: | 11.46 |
| Site Grading: | 158.84 |
| Building Construction: | 3.03 |
| **Maximum Daily Emissions:** | **158.84** |
| **MBUAPCD THRESHOLDS (lbs/day)** | **82** |

*Source: AMBIENT, Air Quality Impact Analysis, August 14, 2007 and updated August 25, 2008. Emissions were estimated based on default model settings recommended by the MBUAPCD and construction equipment fleet and area of disturbance data recommended for the URBEMIS computer program for similar projects (MBUAPCD 2004, SJVAPCD 2006, SMAQMD 2005).*

As depicted, development of the proposed project would result in maximum uncontrolled emissions of approximately 159 lbs/day of $PM_{10}$. Predicted emissions of $PM_{10}$ would exceed the

MBUAPCD's emissions threshold of 82 lbs/day. As a result, this impact is considered **significant**. Therefore, compliance with the following mitigation measure would be required to reduce any potentially significant impacts to **less-than-significant** levels.

**Mitigation Measure**

**MM 3-1** Best-available control measures (BACM) shall be required during site preparation and construction of proposed land uses. When tentative subdivision maps are submitted and prior to approval of building permits, a construction emissions reduction plan (CERP) shall be prepared, for endorsement by the MBUAPCD, to reduce construction-generated fugitive and mobile-source emissions. The MBUAPCD shall be consulted to determine BACM to be implemented to minimize impacts to nearby sensitive receptors. Measures to be included in the CERP prepared for this project, as currently recommended by the MBUAPCD, include but are not limited to the following:

Fugitive Dust

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure;
- Prohibit all grading activities during periods of high wind (over 15 mph);
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- Replant vegetation in disturbed areas as quickly as possible.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles, such as dirt, sand, etc.
- Sweep daily, with water sweepers, all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily, with water sweepers, if visible soil materials are carried onto adjacent public streets.
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Limit areas of active disturbance to no more than 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (grubbing, excavation, rough grading), or 8.1 acres per day for activities that involve minimal earth moving (e.g., finish grading).

Mobile/Stationary-Source Emissions

- *Title 13. §2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (a) Purpose.* The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. (b) Applicability. This section applies to diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes: (1) California-

based vehicles; and (2) Non-California-based vehicles. (c) Requirements. On or after February 1, 2005, the driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location, except as noted in Subsection (d); and (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d).

- Stationary Sources shall comply with all applicable rules and requirements of the Monterey Bay Unified Air Pollution Control District, and State and federal law.
- Construction activities shall be scheduled so that major onsite construction activities (e.g., grading, demolition) do not occur simultaneously on any given day.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding emissions-related complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).

Implementation of the above mitigation measures would reduce fugitive dust emissions associated with individual construction activities/components by approximately 4 to 90 percent, with overall fugitive dust emission reductions in exceed of approximately 50 percent, depending on the activities conducted (MBUAPCD 2004). Implementation of the above mitigation measure would require the project Applicant to prepare a Construction Emissions Reduction Plan (CERP) that would sufficiently reduce short-term construction-generated emissions to within acceptable levels. The CERP would be reviewed by the MBUAPCD, prior to issuance of a building permit. With implementation of the above mitigation measures, maximum construction-generated emissions associated with individual activities (i.e., demolition, grading, building construction) would be reduced to approximately 62 lbs/day. Mitigated construction-generated emissions would not exceed the MBUAPCD's significance threshold of 82 lbs/day.

Mitigation has also been incorporated to ensure that onsite ground-disturbing activities do not exceed the screening thresholds identified by the MBUAPCD as typically having a potential to exceed local ambient air quality standards (i.e., 2.2 acres per day for initial site preparation activities or 8.1 acres per day for activities that involve minimal earth moving.) It is important to note that the MBUAPCD's screening thresholds are based on uncontrolled emissions of $PM_{10}$. As noted above, mitigation measures have been incorporated that would substantially reduce construction-generated emissions of $PM_{10}$. With restriction of onsite areas of disturbance and implementation of recommended dust-control measures, predicted concentrations at nearby receptors are, therefore, not anticipated to exceed applicable standards. With mitigation, this impact would be considered **less than significant**.

Construction activities would involve the use of diesel-powered equipment that may result in localized concentrations of mobile source TACs at nearby receptors. The Air Quality Impact Analysis found that short-term exposure to localized concentrations of TACs (primarily acrolien) could exceed applicable air quality thresholds and that the impact was considered significant. However, the MBUAPCD Air Board has suspended analysis of acute impacts of acrolein emissions from diesel equipment, and chronic impacts from operation of diesel equipment become significant only if the construction project extends more than a year.

The Air District has indicated that the Board may consider reinstatement of the Reference Exposure Level (REL) for acrolein that is being revised by the State Office of Environmental Health Hazard Assessment. The District has provided the following diesel equipment scenarios as guidance should the Board reinstate the REL for acrolein:

> *The MBUAPCD advises that following equipment may be used without control devices or additional mitigation measures, without causing acute adverse health effects:*
>
> *No engines greater than 750 HP are used; and*
> *Engines between 501 and 750 HP are model years 2002 and newer; and*
> *Engines between 251 HP and 500 HP are model years 1996 or newer; and*
> *Engines between 175 HP and 250 HP are model years 1985 or newer.*
>
> *The following equipment may be used without causing acute adverse health effect, if retrofitted with a catalyzed diesel particulate filter (CDPF):*
>
> *Engines greater than 750 HP, if model year 2006 and newer; and*
> *All engines less than 749 HP, regardless of the model year.*
>
> *If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:*
>
> *Engines between 501 HP and 750 HP, if the model years 2002 or newer; and*
> *Engines between 250 HP and 500 HP, if model years 1996 and newer; and*
> *Any engine less than 250 HP.*
>
> *Source: Jean Getchell, Supervising Planner, in a letter dated July 1, 2008, at the Monterey Bay Unified Air Pollution Control District (MBUAPCD) in response to the Don Chapin Batch Plant CUP/Industrial Annexation Initial Study, also located in the City of Greenfield, CA.*

Since there is currently no standard for acrolein, there is no impact requiring mitigation in terms of CEQA. However, as implementation of the proposed project would result in the generation of diesel PM emissions during construction from the use of off-road diesel equipment for site grading and excavation, paving, and other construction activities, and particulate exhaust emissions from diesel-fueled engines (diesel-exhaust PM) were identified as a TAC by the ARB in 1998, the City may consider adding the above guidance measures to the Conditions of Approval for the project.

Construction activities associated with the project site would occur over multiple years and would be spread over a large area, and therefore; would be considered significant. Use of diesel-powered construction equipment in any one area would be temporary and episodic and would cease when construction is completed in that area. For these reasons, diesel PM generated by project construction, in and of itself, would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors. However, short-term health effects may occur. Such short-term health risks commonly include, but are not limited to, eye and respiratory tract irritation and increases in asthma occurrences. Short-term health risks, occurring during construction phases over multiple years, associated with emissions of TACs from construction equipment are, therefore, considered potentially **significant.**

Implementation of **Mitigation Measure 3-1** would substantially reduce diesel-exhaust emissions from onsite construction equipment. For instance, use of diesel oxidation catalysts, particulate filters, and alternative fuels such as biodiesel, can reduce diesel-exhaust constituent emissions by approximately 90 percent or more (AMBIENT 2008). Implementation of **Mitigation Measure 3-1** would require the project Applicant to prepare a Construction Emissions Reduction Plan (CERP) that would sufficiently reduce short-term construction-generated emissions. The CERP would be

reviewed and endorsed by the MBUAPCD prior to issuance of a building permit. With implementation of the above mitigation measure, this impact would be considered **less than significant**.

**Long-term Operational Impacts**

Based on the modeling conducted, the previously analyzed project would result in an estimated 4,540 daily vehicle trips. Assuming that the trip-generation rates for residential land uses that were developed for the previous project would be applicable to the revised project, near-term development of the PD areas would result in an estimated 2,024 daily vehicle trips. Future buildout of the revised project, including the remaining parcels, would result in an estimated 3,911 daily vehicle trips. Furthermore, given that the revised project would result in an overall reduction in development intensity, reduced emissions from area sources (e.g., natural gas use, landscape maintenance, etc.) would also be anticipated for the revised project. For these reasons, the findings contained in the previously prepared analysis would remain valid.

Operational emissions associated with buildout of the proposed land uses would result in emissions of criteria air pollutants. Project-generated emissions of CO would exceed MBUAPCD's significance thresholds. This impact is considered **significant**. Implementation of the proposed project would include development of approximately 450 single-family dwellings, 40 multi-family cluster dwelling units, and an elementary school. A neighborhood park system would be centrally located within the site, which would provide a link between the proposed dwelling units and the proposed elementary school.

Regional area- and mobile-source emissions associated with the proposed land uses were estimated using the ARB-approved URBEMIS2002 (version 8.7) computer program, which includes options for the estimation of operational emissions for land use development projects. The vehicle trip characteristics for the North Central Coast Air Basin, as identified in the MBUAPCD's *CEQA Air Quality Guidelines*, were included in the model. Vehicle trip generation rates for proposed land uses were based on data obtained from the transportation analysis prepared for this project (Higgins, 2007). In accordance with MBUAPCD recommendations, long-term operational emissions attributable to the proposed project were quantified assuming full buildout for both summer and winter conditions. As depicted in **Table 9**, implementation of the proposed project would result in increased emissions of approximately 68 lbs/day of ROG, 31 lbs/day $NO_X$, 792 lbs/day of CO, 0.4 lbs/day $SO_X$, and 50 lbs/day of $PM_{10}$.

**TABLE 9**
**OPERATIONAL EMISSIONS AT BUILDOUT WITHOUT MITIGATION**

| Source | Estimated Emissions (lbs/day) | | | | |
|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO[(1)] | $SO_X$ | $PM_{10}$ |
| Area sources (Direct Sources) | 42.81 | 6.53 | 511.49 | 0.09 | 0.06 |
| Mobile source (Indirect Sources): | 25.14 | 24.00 | 280.03 | 0.35 | 50.34 |
| **TOTAL:** | **67.95** | **30.53** | **791.52** | **0.44** | **50.39** |
| **MBUAPCD THRESHOLDS (lbs/day)** | **137** | **137** | **550**[(3)] | **150**[(3)] | **82** |

*Source: AMBIENT. Air Quality Impact Analysis. August 14, 2007 and updated August 25, 2008. Emissions were estimated using the URBEMIS2002 (v8.7) computer program, based on default model settings recommended by the MBUAPCD and trip generation rates obtained from the traffic analysis prepared for this project (Fehr & Peers 2006).*
*Notes: [1]. Area source emissions of CO are based on winter operating conditions. [2.] Based on winter operating conditions, and assumes use of wood-burning hearth and stoves based on default model assumptions (i.e., 35 percent wood stoves, 10 percent wood fireplaces, 55 percent natural gas fireplaces). [3]. Applies to Direct Source Emissions Only.*

Based on the modeling conducted, predicted long-term direct and indirect operational emissions of ROG, $NO_X$, and $PM_{10}$ would not exceed MBUAPCD significance thresholds. Long-term operational emissions of CO and $SO_X$ from direct sources (i.e., 511.49 and 0.09 lbs/day, respectively) would not exceed corresponding MBUAPCD significance thresholds. It is important to note, however, that the CO emissions threshold applies to winter emissions only. The estimated emissions for area sources presented in **Table 9** were calculated based on default modeling assumptions, which assumes a combined total of 45 percent wood-burning devices within proposed residential dwellings.

Based on these assumptions, as noted in **Table 9**, predicted winter emissions of CO from area sources would approach, but would not exceed, the MBUAPCD threshold of 550 lbs/day. However, in the event that a higher percentage of residential dwellings were to include wood-burning heating devices, predicted emissions of CO could potentially exceed the MBUAPCD daily significance threshold. The proposed project does not identify whether or not wood-burning heating devices would be installed within proposed residential dwelling units. As a result, this impact would be considered **potentially significant**. Therefore, compliance with the following mitigation measure would be required to reduce any potentially significant impacts to **less-than-significant** levels.

**Mitigation Measure**

**MM 3-2** The Applicant and/or Contractor shall include the following as components of Final Map and Building Design/Construction:

*Residential Uses*

- Provide pedestrian sidewalks and bicycle paths that link to adjacent land uses and external networks.
- Incorporate energy-efficient appliance into residential uses

*All Uses*

- Use of wood-burning fireplaces shall be prohibited. Any fireplaces proposed for use within onsite structures shall be gas-fired and meet U.S. EPA-certification requirements.
- Orient buildings to minimize heating and cooling needs
- Provide shade trees to reduce cooling needs
- Include energy-efficient lighting systems
- Include solar water heaters or centralized water heating systems
- Increase insulation beyond Title 24 requirements to minimize heating and cooling needs

With implementation of the above mitigation measure, which would prohibit the use of wood-burning heating devices, operational emissions of CO would not be anticipated to exceed the MBUAPCD significance threshold of 550 lbs/day. Incorporation of additional measures, as recommended by the MBUAPCD, would result in further reductions in long-term operational emissions attributable to proposed land uses. With mitigation, project-generated operational emissions would not exceed MBUAPCD's significance thresholds. As a result, increases in long-term regional emissions attributable to the proposed project would be considered **less than significant**.

*d) Would the project expose sensitive receptors to substantial pollutant concentrations?*

**Short-term Construction Impacts**

Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. Under specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels. For this reason, modeling of CO concentrations is typically recommended for sensitive land uses located near signalized roadway intersections that are projected to operate at unacceptable levels of service (i.e., LOS E or F). Unsignalized intersections projected to operate at unacceptable levels of service do not typically have sufficient traffic volumes, such that projected unacceptable levels of service at these intersections would typically result in localized concentrations of CO that would exceed applicable standards.

Implementation of the proposed project would not result in unacceptable levels of service at existing nearby signalized intersections under near-term conditions. In addition, existing stop-controlled intersections that are proposed for signalization, with implementation of proposed traffic mitigation, are not projected to operate at unacceptable levels of service (Higgins, 2007). For this reason, and given the historically low background concentrations of CO within the project area, as shown in Table 10, predicted localized concentrations of CO would not be anticipated to exceed ambient air quality standards. As a result, the project's contribution to localized concentrations of mobile-source CO would be considered **less than significant**.

**TABLE 10**
**SUMMARY OF AMBIENT AIR QUALITY DATA**

| Pollutant Standards | 2004 | 2005 | 2006 |
|---|---|---|---|
| **King City-750 Metz Road Air Monitoring Station** | | | |
| **Ozone ($O_3$)** | | | |
| Maximum concentration, 1-hr/8-hr period (ppm) | 0.078/0.070 | 0.067/0.059 | 0.093/0.078 |
| Number of days state standard exceeded | 0 | 0 | 0 |
| Number of days federal standard (1-hr/8-hr) exceeded | 0/0 | 0/0 | 0/0 |
| **Suspended Particulates ($PM_{10}$)** | | | |
| Maximum 24-hour concentration ($\mu g/m^3$) | 46.1 | 38.5 | 49.0 |
| Number of days state standard exceeded | - - | 0 | 0 |
| Number of days federal standard exceeded | 0 | 0 | 0 |
| **Salinas #3 Air Monitoring Station** | | | |
| **Carbon Monoxide (CO)** | | | |
| Maximum concentration, 1-hr/8-hr period (ppm) | 1.9/1.21 | 2.1/0.86 | 2.5/1.04 |
| Number of days state (1-hr/8-hr) standard exceeded | 0/0 | 0/0 | 0/0 |
| Number of days federal (1-hr/8-hr) standard exceeded | 0/0 | 0/0 | 0/0 |
| **Nitrogen Dioxide ($NO_2$)** | | | |
| Maximum 1-hour concentration (ppm) | 0.139 | 0.052 | 0.067 |
| Number of days state standard exceeded | 0 | 0 | 0 |
| Annual arithmetic mean (AAM) | 0.007 | 0.008 | 0.007 |
| AAM exceed federal standard? | 0 | 0 | 0 |
| **Fine Particulate Matter ($PM_{2.5}$)** | | | |
| Maximum 24-hour concentration ($\mu g/m^3$) | 22.3 | 16.2 | 13.0 |
| Number of days federal standard exceeded * | 0 | 0 | 0 |

*Source: ARB 2007. Ambient data for ozone and PM10 obtained from the King City-750 Metz Road air monitoring station. Ambient data for CO, NO2 and PM2.5 obtained from the Salinas-#3 air monitoring station.*
*Notes: AAM = Annual Arithmetic Mean, µg/m3= Micrograms per Cubic Meter, ppm = Parts per Million, - - = Not Calculated or Insufficient Data Available*

**Long-term Operational Impacts**

Long-term increases in localized concentrations of pollutants attributable to the proposed project may occur due to localized increases in stationary and mobile source emissions. Local air quality impacts associated with stationary and mobile sources are discussed separately, as follows:

Stationary Sources

No major existing stationary or area sources of toxic air contaminants (TACs) were identified in the vicinity of the proposed project site (Searson 2006, CHAPIS 2007). As noted earlier in this section, the proposed project includes development of residential land uses. Residential land uses are not considered TAC sources of potential concern. No industrial or commercial land uses would be developed as part of the proposed project. As a result, implementation of the proposed project would not result in increased exposure of sensitive land uses to localized concentrations of TACs that would exceed MBUAPCD's recommended significance thresholds. This impact would be considered **less than significant**.

Mobile Sources

Carbon monoxide (CO) is the localized mobile-source pollutant of primary concern associated with the proposed project. Under specific meteorological and operational conditions, CO concentrations near some intersections may reach unhealthy levels. Mobile-source emissions of CO near roadway intersections are a direct function of traffic volume, speed and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. For this reason, modeling of CO concentrations is typically recommended for sensitive land uses located near signalized roadway intersections that are projected to operate at unacceptable levels of service (i.e., LOS E or F). Unsignalized intersections projected to operate at unacceptable levels of service do not typically have sufficient traffic volumes, such that projected unacceptable levels of service at these intersections would typically result in localized concentrations of CO that would exceed applicable standards.

With implementation of the proposed project, signalized intersections in the vicinity of the project site are projected to operate at acceptable levels (i.e., LOS C or better) (Higgins 2006). For this reason and given the relatively low background concentrations of CO in the project area, implementation of the proposed project would not be predicted to result in a significant contribution to localized mobile-source CO concentrations that would exceed applicable air quality standards. Long-term operation of the proposed project is not anticipated to result in an increased exposure of sensitive receptors to substantial pollutant concentrations that would exceed applicable air quality standards. Long-term exposure of sensitive receptors to localized pollutant concentrations would, therefore, be considered **less than significant**.

*e) Would the project create objectionable odors affecting a substantial number of people?*

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any major odor emission sources that would result in a potentially significant impact to the occupants of the proposed onsite or existing offsite land uses.

Construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Some people may consider exhaust fumes, particularly diesel-exhaust, objectionable. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly within increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions.

Existing sources of odors identified in the project vicinity include the Cream of Crop Carrot Shed facility, which is located approximately 700 feet north of the project site, and the Sensient Flavors Dehydration facility, which is located approximately 3,200 feet to the northwest.

According to the MBUAPCD, a total of three odor-related complaints have been filed within the project area during the last approximately nine years. Two odor complaints were filed in September 2005 for the Cream of Crop Carrot Shed and one odor complaint was filed in June 2003 for the Sensient Flavors dehydration facility (Searson 2006). Based on investigations conducted by the MBUAPCD at these facilities, odors from the Cream of Crop Carrot Shed were primarily associated with an onsite wastewater pond. A chemical injection program was initiated to reduce odors from this source. No additional odor complaints have been received by the MBUAPCD since October 2005 (Searson 2006).

Given the distance between the project site and the Sensient Flavors dehydration plant (i.e., approximately 3,200 feet (0.60 miles) and given that no odor complaints have been filed with the MBUAPCD since 2005, following implementation of corrective actions at the Cream of Crop Carrot Shed facility, exposure of onsite receptors to nearby existing sources of odors would be considered **less than significant**.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **4. BIOLOGICAL RESOURCES** | | | | |
| *Would the project:* | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Ref. 5) | ☐ | ☐ | ☐ | ☒ |
| c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means? (5) | ☐ | ☐ | ☐ | ☒ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Ref. 5) | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☒ | ☐ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? (Ref. 5, 16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

The analysis in this section is based on the *Biological Resource Analysis* prepared by PMC (February 2007). On January 26, 2007, a PMC biologist performed a pedestrian reconnaissance-level survey of the project site. The purpose of this biological resources assessment was to describe on-site vegetation communities, identify potentially jurisdictional waters of the U.S. and assess the potential for occurrence of special-status plant and wildlife species. Prior to the a field survey, a background information search for previously documented occurrences of special-status species within the project vicinity was conducted utilizing the California Natural Diversity

Data Base (CNDDB), CNDDB QuickViewer for unprocessed data, the U.S. Fish and Wildlife Service (USFWS) and the California Native Plant Society online species list for the Greenfield United States Geological Survey (USGS) 7.5-minute topographical quadrangle map and surrounding quadrangles (San Lucas, Thompson Canyon, Paraiso Springs, Soledad, Reliz Canyon, Pinalito Canyon, Topo Valley and North Chalone Peak. Urban and ruderal cropland vegetation communities dominated the project site. The majority of the ruderal cropland was recently tilled making it impossible to know what crop type had been previously planted.

In light of the revised proposed land use configuration presented in the current Project Description, a letter dated August 20, 2008, was provided by PMC biologist Jeannette Owen, which evaluated the applicability and soundness of the Final Biological Resources Assessment (BRA) of February 2007. The evaluation found the following:

Being that the BRA assessed the entire 80-acre site (the "Project Study Area"/"PSA") and that potential impact area has not changed under the current proposal, and that site conditions are likely unchanged since the date of the BRA, there is no reason to assume that the change in the Proposed Project (essentially, reduced development densities) would result in a substantially different or greater impact to biological resources and/or sensitive/regulated habitat types on the PSA. The findings and suggested impact avoidance and minimization measures presented in the BRA are applicable and appropriate to the current Project as Proposed. The letter is available for review at the City of Greenfield Community Development Department at 45 El Camino Real.

a) *Would the project have substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)?*

There is no suitable habitat for special-status plant or animal species within the project site and no special-status plant or animal species were observed during the site inspection. However, trees in and around the project site may provide nesting habitat for migratory birds. Habitat at the site also provides some suitable foraging opportunities for many avian species, including some raptors and migratory birds. Raptors and raptor nests are considered to be special resources by federal and state agencies and are protected under the Migratory Bird Treaty Act (MBTA) and California Code of Regulations. Migratory birds are also protected under the MBTA. Project implementation could impact trees that provide suitable habitat for these avian species.

Construction activities that require the disturbance of trees and vegetation could cause direct impacts to nesting raptors and migratory birds if they are present at the time of construction. Removal of habitat at the project site would be considered a direct and significant impact if bird species were taken or deterred from traditional nesting locations. Construction could also result in noise, dust, increased human activity and other indirect impacts to nesting bird species in the project vicinity. Potential nest abandonment, mortality to eggs and chicks, as well as stress from loss (although likely temporary) of foraging areas would also be considered **potentially significant** impacts unless mitigated.

**Mitigation Measure**

**MM 4-1** If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the Applicant shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the construction area no more

than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys DFG shall be notified regarding the status of the nests. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with the USFWS and/or DFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the non-breeding season (generally September 1st through February 28th).

If there is any significant lapse in construction activities, and construction resumes during the nesting season, new surveys shall be conducted no more that 30 days prior to the re-initiation of construction activities.

Implementation of the above mitigation measure would reduce potential impacts to nesting raptors and migratory birds to a **less than significant** level by requiring that appropriate measures be taken to identify potential impacts and, if necessary, reduce impacts to a less than significant level prior to any site preparation activity occurring within the project area.

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The project site consists of agricultural land and urban habitats, which are not considered to be sensitive natural communities. Therefore, **no impact** to riparian habitat or other sensitive natural communities would occur with implementation of the proposed project.

c) *Would the project have an adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means?*

Several fenced off depressions that appeared to be holding ponds and were probably used in aspects of irrigation to the fields were observed sporadically on the project site. Little or no vegetation was observed within these depressions at the time of the site inspection. It is unlikely that these pools would be considered jurisdictional water features per the U.S. Army Corp of Engineers regulations because of their man-made nature and the lack of substantial wetland vegetation. Therefore, **no impact** to wetlands would occur with implementation of the proposed project.

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Implementation of the proposed project would not likely interfere with the movement of any fish or wildlife species or impede the use of native nursery sites or corridors; therefore, **no impact** to migratory wildlife would occur with implementation of the proposed project.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

As discussed above, the project site includes habitat that could potentially support special status species. Implementation of the proposed project would result in disturbance and possible loss of these areas, which (without mitigation) would conflict with *Greenfield General Plan* policies

regarding biological resources. Therefore, conflict with local policy through implementation of the proposed project is considered a **potentially significant** impact. However, with implementation of **Mitigation Measure 4-1**, the *Greenfield General Plan* policies are enforced, thereby reducing impacts to a **less than significant** level.

*f) Would the project conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?*

This investigation revealed no adopted Habitat Conservation Plans (HCP) for Monterey County or conservation plans related to the project location; therefore, the project would not conflict with such plans and **no impact** would occur with project development.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **5. CULTURAL RESOURCES** | | | | |
| *Would the project:* | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? (Ref. 6) | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? | ☐ | ☒ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

DISCUSSION OF IMPACTS

PMC conducted archaeological and historical investigations of the proposed project in February of last year (Nadolski 2007). Investigations included: a records search at the Northwest Information Center at Sonoma State University, Rohnert Park; a sacred lands search conducted by the Native American Heritage Commission (NAHC); consultation with the Native American community; and pedestrian surface survey. These investigations did not identify any historical resources or unique archaeological resources in the project Area of Potential Effect (APE), but did identify several private residences that are over 50 years old. None of these residences meet the eligibility criteria for inclusion in the California Register of Historical Resources.

A search of the University of California Museum of Paleontology collections database for the project area did not identify any significant paleontological resources either within or near the project APE. In addition, pedestrian surface survey across the project APE did not identify any paleontological resources, and the geology of the area suggests that it is not sensitive for paleontological resources.

Since the archaeological and historical investigations assessed the entire project study area, the potential impact area has not changed under the current proposal and the site conditions are

unchanged since the date of the investigations, there is no reason to assume that the change in the proposed project (essentially, reduced development densities) would result in a substantially different or greater impact cultural resources. The findings and suggested impact avoidance and minimization measures presented are applicable and appropriate to the current project as proposed.

*a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guideline?*

Archaeological and historical investigations for the proposed project did not identify any historical resources within project boundaries; therefore, **no impact** is anticipated.

*b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*

Archaeological and historical investigations for the proposed project did not identify any unique archaeological resources within project boundaries. There is a possibility, however, of unanticipated and accidental archaeological discoveries during ground-disturbing project-related activities. Any unanticipated and accidental archaeological discoveries during project implementation have the potential to affect unique archaeological resources. This is considered a **potentially significant** impact requiring the following mitigation.

**Mitigation Measure**

**MM 5-1** As a condition of project approval, and implemented during construction activities, if any prehistoric or historic artifacts, or other indications of archaeological resources are found once project construction is underway, all work in the immediate vicinity must stop and the City of Greenfield Building and Community Development shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The City and the Applicant will consider the mitigation recommendations of the qualified archaeologist. The City and the Applicant shall consult and agree upon implementation of a measure or measures that the City and the Applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Implementation of the above mitigation would reduce impacts on archaeological resources to a **less than significant** level by requiring that work stop immediately should any archaeological resources be uncovered during construction, and that any such find be evaluated and mitigated by a qualified archaeologist.

*c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

A search of the database at the University Of California Museum Of Paleontology did not identify any formally documented paleontological sites within project boundaries. There is a possibility, however, of unanticipated and accidental paleontological discoveries during ground-disturbing project-related activities. Any unanticipated and accidental paleontological discoveries during project implementation have the potential to affect significant paleontological resources. Implementation of the proposed project could result in potential

damage or destruction of undiscovered paleontological resources. This is considered a **potentially significant** impact requiring the following mitigation.

**Mitigation Measure**

**MM 5-2** As a condition of project approval, and implemented during construction activities, if any paleontological resources (i.e., fossils) are found once project construction is underway, all work in the immediate vicinity must stop and the City of Greenfield Community Development Department shall be immediately notified. A qualified paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered paleontological resources. The City and the Applicant will consider the mitigation recommendations of the qualified paleontologist. The City and the Applicant shall consult and agree upon implementation of a measure or measures that the City and the Applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation or other appropriate measures.

Implementation of the above mitigation would reduce impacts on paleontological resources to a **less than significant** level by requiring that work stop immediately should any paleontological resources be uncovered during construction, and that any such find be evaluated and mitigated by a qualified paleontologist.

*d) Would the project disturb any human remains, including those interred outside formal cemeteries?*

Archaeological and historical investigations for the proposed project did not identify any human remains or evidence to suggest that human remains may be present within project boundaries. There is a possibility, however, of the unanticipated and accidental discovery of human remains during ground-disturbing project-related activities. This is considered a **potentially significant** impact requiring the following mitigation.

**Mitigation Measure**

**MM 5-3** As a condition of project approval, and implemented during construction activities, if human remains are discovered, all work must stop in the immediate vicinity of the find, the City of Greenfield Community Development Department must be notified and the County Coroner must be notified, according to Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) shall be followed.

Implementation of the above mitigation measure would reduce impacts on human remains to a **less than significant** level by requiring that proper persons be contacted and that appropriate procedures shall be followed should there be an unanticipated human discovery during construction.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **6. GEOLOGY/SOILS** | | | | |
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Ref. 1,16) | ☐ | ☐ | ☐ | ☒ |
| ii) Strong seismic ground shaking? | ☐ | ☒ | ☐ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? (Ref. 1,2,16) | ☐ | ☐ | ☐ | ☒ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☒ | ☐ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (Ref. 1,16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

The environmental analysis contained in this section is based primarily on the findings of the following reports conducted to analyze potential hazards and hazardous materials associated with the proposed project:

- Stevens, Ferrone & Bailey Engineering Company, Inc. *Geotechnical Investigation, Greenfield Village Residential Development, Greenfield, California*. August 3, 2005.
- Earth Systems Pacific. *Geotechnical Engineering Report, Nino 12th and Apple Development, APN 109-232-004, -006 and -012*. July 22, 2006.

a) *Would the project expose people or structures to potential substantial adverse effects, adverse effects including, risk of loss, injury or death involving:*

*i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The project site is not located within an Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist. There are no known or potentially active faults located within the project site; therefore, the potential for surface ground rupture at the project site is considered low. Development of the proposed project would not expose people or property to ground rupture; **no impact** is expected.

*ii) Strong seismic ground shaking?*

The closest active fault to the project site is the Reliz/Rinconada Fault, located approximately four miles to the southwest. The San Andreas Fault is located approximately 15 miles to the northeast. Earthquake intensities will vary throughout the Salinas Valley, depending upon numerous factors including the magnitude of earthquake, distance of the site from the causative fault and the type of materials underlying the site. According to the U.S. Geological Survey and the California Geological Survey, Probabilistic Seismic Hazards Assessment Model, the project site has a 10 percent probability of exceeding a peak ground acceleration of about 0.32g in 50 years. The actual ground surface acceleration might vary depending upon the seismic characteristics of the onsite bedrock and overlaying unconsolidated soils. The project site will probably be subjected to at least one moderate to severe earthquake that could expose people and/or property to severe seismic ground shaking. This is considered a **potentially significant** impact requiring the following mitigation.

**Mitigation Measure**

**MM 6-1** Prior to Final Map approval, the Applicant shall incorporate the structural design recommendations of the *Geotechnical Investigation* prepared by Stevens, Ferrone & Bailey Engineering Company, Inc. (August 3, 2005) and the Geotechnical Engineering Report prepared by Earth Systems Pacific (July 22, 2006), including requirements for site preparation and grading, engineered fill, trench backfill, foundations, slab design and pavement design. Recommendations of the reports shall be incorporated into the final improvement plans subject to review and approval by the Greenfield Community Development Department.

Implementation of **MM 6-1** would reduce the impact of ground shaking to a **less than significant** level by requiring the project to comply with engineering recommendations of the geotechnical reports prepared for the project site, subject to review and approval by the City of Greenfield.

*iii) Seismic-related ground failure, including liquefaction?*

Liquefaction is the temporary transformation of saturated, cohesionless soils into a viscous liquid during strong ground shaking from a major earthquake. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. The project site is characterized as having low liquefaction susceptibility. Based on the combined results of the borings, in-situ penetration resistance tests and laboratory tests, the potential for ground surface damage resulting from liquefaction is low. Therefore, the risk of liquefaction at the project site is considered **less than significant**.

*iv) Landslides?*

The project site and its surroundings are flat and nearly level. There are no slopes or mapped landslides in the vicinity that possess significant landslide potential either as a result of strong seismic activity or site construction and there is very low potential for landsliding or slope stability problems. **No impact** is expected.

*b) Would the project result in substantial soil erosion or the loss of topsoil?*

There is no evidence of significant soil erosion at the project site due primarily to the level topography. However, soil erosion and loss of topsoil may occur with the construction of improvements during development of the project site. As discussed in **Section VI.8 Hydrology/Water Quality**, the Applicant will be required to obtain a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity. Coverage under this permit includes preparation of a Stormwater Pollution Prevention Plan (SWPPP) which lists sediment and erosion control measures to be implemented during project construction. Acquisition of this permit would ensure that the proposed project would not result in substantial soil erosion or loss of topsoil during construction activities. This impact is considered **less than significant**.

*c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Due to previous and ongoing mechanical tilling of the near surface soils for agricultural purposes, the upper approximately one foot of soil on the project site is loose and weak. In addition, part of the project site was previously utilized as an orchard. The subsequent removal of the trees has resulted in loosening of the soils in the upper three to four feet of this area. The loosened soils are weak, potentially compressible and probably contain abundant root structures. Therefore the potential for damaging differential settlement of overlying improvements is considered a **potentially significant** impact.

**Mitigation Measure**

Implementation of **Mitigation Measure 6-1**, above, would require that development of the project site incorporate design recommendations of the geotechnical reports prepared for the proposed project. Adherence to the requirements of these reports would reduce the potential for differential settlement to a **less than significant** level.

*d) Would the project be located on expansive soil, as defined in Table 18-1-B of the California Building Code (1994), creating substantial risks to life or property?*

The soils on the project site consist of Elder Loam, Gravelly Substratum (EcA) and Arroyo Seco Gravelly Sandy Loam (AsA), both of which have low shrink-swell potential, according to the *Soil Survey for Monterey County* (1978). Therefore, soil expansion at the project site is considered a **less than significant** impact.

*e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project site would be served by the City of Greenfield sewer system. Consequently, no septic system or alternative disposal system is needed or proposed. Therefore, **no impact** regarding septic systems is anticipated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **7. HAZARDS AND HAZARDOUS MATERIALS** | | | | |
| *Would the project:* | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☒ | ☐ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☒ | ☐ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☒ | ☐ |
| g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? (Ref. 1,16) | ☐ | ☐ | ☐ | ☒ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Ref. 1,16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

The environmental analysis contained in this section is based primarily on the findings of the reports listed below, which are available for review at the City of Greenfield Community Development Department. Since the investigations listed above assessed both PD areas as well as the southern remainder parcels (formerly known as the Nino PD, the potential impact area has not changed under the current proposal and the site conditions are unchanged since the

date of the investigations, there is no reason to assume that the change in the proposed project (essentially, reduced development densities) would result in a substantially different or greater impact in regard to hazardous materials. In order to analyze potential hazards and hazardous materials associated with proposed development of the project site, the following environmental studies were conducted:

- D&M Consulting Engineers, Inc. *Phase I Environmental Site Assessment, 13th Street and Walnut Avenue, APN 109-232-001, Greenfield, California*. March 31, 2003.
- D&M Consulting Engineers, Inc. *Limited Phase II Soil Sampling and Analysis Report, 13th Street and Walnut Avenue, APN 109-232-001, Greenfield, California*. May 1, 2003.
- D&M Consulting Engineers, Inc. *Letter Report for Remediation of Petroleum-Hydrocarbon Impacted Soil, 13th Street and Walnut Avenue, APN 109-232-001, Greenfield, California*. September 16, 2003.
- ATC Associates, Inc. *Summary Report for Phase II Environmental Site Assessment for Pacific Union Homes, APN 109-232-001 and -008, Greenfield, California*. August 20, 2004.
- Earth Systems Pacific. *Phase I Environmental Site Assessment and Limited Phase II Soil Testing, Nino 12th Street and Apple Avenue Development, APN 109-232-004, -006 and -012, Greenfield, Monterey County, California*. August 18, 2006.

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?*

The proposed project will result in the development of a typical residential neighborhood, which would not involve the transport, use or disposal of hazardous materials. The proposed project would not emit hazardous emissions or handle hazardous materials, substances or waste; therefore, these impacts are considered **less than significant**.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Potential hazardous materials impacts are assessed and mitigated on a parcel-by-parcel basis consistent with the various environmental assessments conducted for the project site.

The following environmental studies were conducted on APN's 109-232-001 and -008 (the Mira Monte PD parcels):

- Phase I Environmental Site Assessment (ESA)—D&M Consulting Engineers, Inc. Site reconnaissance conducted on March 13, 2003.
- Limited Phase II Soil Sampling and Analysis Report—D&M. Sampling conducted on April 9, 2003.
- Letter Report for Remediation of Petroleum-Hydrocarbon Impacted Soil—D&M. Remediation conducted August 29, 2003.
- Phase II ESA—ATC Associates, Inc. Sampling conducted July 27, 2004.

APN 109-232-001 and -008 (Mira Monte PD parcels)

The majority of this approximately 25-acre site is agricultural land with approximately five acres used for a residence and crop processing/storage. The site has been used for growing, processing, cleaning and storing corn along with farm equipment and storage/maintenance for the past 25 years. Two irrigation wastewater ponds are also located on this site, one along the northeastern boundary adjacent to Walnut Avenue and one along the east to southeastern boundary. The Walnut Avenue pond contained standing water with bright green discoloration at the time of the Phase I ESA site reconnaissance; the other pond was dry.

Other site improvements include a house with attached garage and detached utility shed, two warehouse structures, a small hazardous materials storage shed and a storage trailer. An active water well, well pump and a 5,000-gallon steel holding tank for water were observed near the driveway southeast of the residence. The well provides both potable and irrigation water. The source of heat for the site is propane or electrical heat pumps. There are two septic systems onsite: one located just north of the residence and another of unknown location.

Various herbicides, pesticides and fungicides were stored inside a large warehouse and in steel containers on an unpaved area southeast of the warehouse for twenty years. It is likely that residual concentrations of the more persistent agricultural chemicals remain in the soil where they were applied for corn production. Higher concentrations would be expected to be accumulated in the irrigation wastewater ponds. If there were historic spills or leaks of these chemicals, it is also possible that the soils in storage and mixing areas have been impacted. However, no significant surface staining or vegetation distress was observed that would indicate any specific sites of such discharges.

Liquid and solid wastes from cleaning processes in a former farm equipment cleaning area washed to a drain which leads to a buried concrete settling tank and leach field area located in the agricultural field north of the structures. It is likely that this waste stream contained potential contaminants of concern such as petroleum projects, heavy metal and agricultural chemicals.

The dispensing, transfer and spillage of petroleum products, including waste oil and fuels, in unpaved areas constitute a material threat of a release. Therefore, heavy oil staining around the well pump, the five-gallon open tin can containing an oily substance and the former waste oil aboveground storage tank (AST) area, where poor housekeeping was noted by the Monterey County Department of Environmental Health (MCDEH), are considered recognized environmental conditions.

A limited Phase II investigation was conducted due to the identification of the following areas of "known or suspect environmental conditions": the two irrigation wastewater ponds; the buried concrete settling tank and leach field area; and the unpaved areas around the former waste oil AST area, the water well pump area and the vicinity of the open five-gallon tin can.

The Phase II determined that all of the detected concentrations of metal can be attributable to natural occurrence in the soil. Trace amounts of DDE and dieldrin that were detected are within the range normally expected for agricultural soil. No further investigative work is warranted for the irrigation wastewater ponds; the buried settling tank and leach field; the former AST area; the water well area; or the oily tin can area.

One sample of petroleum hydrocarbons exceeded the MCDEH maximum allowable concentration (MAC) of 100 parts per million (ppm) for TPH. To satisfy potential MCDEH

directives, it was recommended that a workplan for remediation of the petroleum hydrocarbon-impacted soil be submitted to the MCDEH.

In accordance with this workplan, approximately one cubic yard of impacted soil was removed and three confirmation soil samples were collected from the sidewalls of the excavation surface. Analysis of the soil samples indicated that TPH as diesel and motor oil were detected at concentrations of 30 ppm and 130 ppm, respectively. The aggregate concentration of TPH in the sample area was removed to below the MCDEH clean-up level of 100 ppm. The remediation was considered successful and no further actions were required.

Another Phase II ESA was conducted by ATC Associates, Inc. to evaluate potential impacts from historical agricultural operations. This Phase II detected the chemical Dursban or chlorpyrifos in soil samples from test pits. According to the U.S. Environmental Protection Agency (EPA) Region 9, Preliminary Remediation Goals (PRG), the PRG for chlorpyrifos concentration of the onsite soils was approximately five percent of the approved remediation goal. ATC concluded that historical usage of agricultural chemicals has not affected the site and the property is suitable for residential use.

Finally, the existing well, septic systems and buried concrete settling tank located onsite are considered potential hazards. The proper abandonment or destruction of these features in accordance with Monterey County regulations would result in a **less than significant** impact.

The following environmental study was conducted on APN 109-232-004 (remainder parcel), and APN's 109-232-006 and -012 (Willow Glen PD parcels):

- Phase I ESA and Limited Phase II Soil Testing—Earth Systems Pacific.
- Site reconnaissance conducted on June 20, 2006.

APN 109-232-004 (remainder parcel)

This parcel is occupied by several mobile homes, a shed containing small quantities of gardening supplies and automotive fluids, a water well and several dilapidated vehicles. Debris piles containing household and construction waste were also observed. There were small areas of staining in the vicinity of the vehicles; no obvious staining was present in the shed or around the debris piles. A pole mounted electrical transformer is also present on this area. No capacitors or electrical switches are present onsite. The remaining portion of the property consists of a fallow field. Abandonment or destruction of the onsite water well in accordance with Monterey County regulations would result in a **less than significant** impact.

APN 109-232-006 (Willow Glen PD parcel)

This area appears to have been in recent agricultural use. Two surface water detention ponds are present at the northeastern corner along 12th Street. There was no water observed in the ponds and no obvious staining or unusual odors were detected during the site reconnaissance.

APN 109-232-012 (Willow Glen PD parcel)

The northeastern area of this parcel is occupied by a residence, workshop, equipment storage area and a small vineyard. Several empty and damaged fertilizer/pesticide spray tanks, several 55-gallon drums and five-gallon buckets, automotive batteries and bins containing automotive parts and discarded water pipes were observed in the equipment storage area. The spray tanks did not appear to contain liquids and there was no obvious staining in their vicinity. The batteries

did not appear to be leaking and there was no obvious staining in their vicinity. The drums, buckets and the wooden pallets on which they are stored were stained with oil, but no obvious staining was present on the ground surface in the vicinity of the drums and buckets.

Based on research conducted by Earth Systems Pacific, the site has been fallow or in agricultural use since at least 1956. Due to this historical use as agricultural land, a limited Phase II soil study was conducted. Trace levels of the pesticides DDT, DDE and dieldrin as well as low levels of arsenic and lead were discovered. The DDE, DDT, dieldrin and lead concentrations were below their individual PRG thresholds for residential settings and State of California Total Threshold Limit Concentrations (TTLC) for consideration as hazardous waste. Arsenic concentrations were above the California-modified PRG for residential settings and below California TTLC concentration. The Phase II determined that based on other sites in similar geographic locations in the Salinas Valley, the reported arsenic concentrations are within background levels. In addition, the arsenic levels are below or within the range of values found to naturally occur in the Salinas Valley.

The following mitigation is required regarding the oil-stained drums and buckets and automotive batteries found on APN 109-232-012 (Willow Glen PD area).

**Mitigation Measure**

**MM 7-1** The drums and buckets containing used motor oil and the automotive batteries should be removed from the site and disposed of in accordance with Monterey County regulations. Samples should be collected for laboratory testing if soil staining is present at depths greater than about one-foot in the area of the drums and buckets.

Implementation of the above mitigation will reduce the impact to a **less than significant** level by requiring proper removal and disposal of onsite hazardous materials.

*Asbestos-Containing Building Materials and Lead Paint*

Due to the age of various structures found on the project site, it is possible that some may have been constructed with asbestos-containing building materials (ACBM) and/or lead-based paint. Demolition of structures containing ACBM and lead-based paint would create a hazardous work environment that would be considered a **potentially significant** impact. In order to reduce this potential impact, the following mitigation shall be required.

**Mitigation Measure**

**MM 7-2** Prior to approval of demolition permits for existing onsite structures, the City of Greenfield shall require that the Applicant contract with a qualified professional to conduct an asbestos and lead-based paint survey for the presence of these materials within existing structures prior to demolition. If these materials are encountered during the survey, the Applicant shall have it removed, transported and disposed of in accordance with the State and local regulations.

Implementation of the above mitigation would reduce the impact of asbestos and lead-based paint in the existing structures to a **less than significant** level by requiring removal and disposal in accordance with State and local regulations.

*d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

According to the Phase I ESA's, the proposed project is not identified as a site, or in the vicinity of a site, that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, this impact is considered **less than significant**.

*e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?*

*f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

There are no public airports within the immediate vicinity of the project site, nor is the project site within the jurisdiction of an airport land use plan or similar plan. The Yanks Air Museum project and private airstrip will be located in the northern end of the City, about one to two miles from the project site. According to the *Greenfield General Plan EIR*, the flights into and out of the airstrip are expected to be infrequent, and the flight pattern is anticipated to occur north of Pine Avenue. Therefore, this impact is considered **less than significant**.

*g) Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

The proposed project will not interfere with the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Connections to exterior roadways will provide adequate access to the project site and all interior streets will be constructed to satisfy emergency, fire and police specifications. Therefore, **no impact** is anticipated.

*h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**No Impact.** The project site is located in a transition area between the urbanized City of Greenfield and agricultural land. The site is not located in a wildland area prone to wildfires.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **8. HYDROLOGY/WATER QUALITY** | | | | |
| *Would the project:* | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☒ | ☐ | ☐ |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☒ | ☐ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☒ | ☐ | ☐ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Ref. 1, 16) | ☐ | ☐ | ☐ | ☒ |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? (Ref. 1, 16) | ☐ | ☐ | ☐ | ☒ |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam? (Ref. 1, 16) | ☐ | ☐ | ☐ | ☒ |
| j) Inundation by seiche, tsunami or mudflow? (Ref. 1, 16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

*a) Would the project violate any water quality standards or waste discharge requirements?*

Potential non-point source pollution from project driveways and streets could enter the stormwater system and negatively affect water quality. Such discharge could violate the standards of the Federal Clean Water Act if not mitigated properly. In addition, construction activities, particularly earth moving activities, can affect water quality. The project site is within the jurisdiction of the Central Coast Regional Water Quality Control Board (RWQCB), which develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources.

The RWQCB requires all construction projects that disturb one acre or more to obtain a General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ), as required by the National Pollutant Discharge Elimination System (NPDES). Coverage under this permit requires an applicant to file a Notice of Intent (NOI) with the State through the RWQCB and prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must list Best Management Practices (BMP), which specifies how the discharger will protect water quality during the course of construction.

Acquisition of the NPDES permit from the RWQCB and its associated SWPPP would ensure that potential impacts to stormwater drainage generated during construction and operation of the proposed project will be **less than significant** and that the proposed project will not violate any water quality standard or waste discharge requirement.

*b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?*

Since the City of Greenfield provides water to more than 3,000 customers, the City is required to prepare an Urban Water Management Plan (UWMP) pursuant to the Urban Water Management Planning Act (California Water Code, §10610 -10656). The City adopted its UWMP (Wood Rodgers January 2008) on March 17, 2008 (Resolution 2008-5), and has included the proposed project in calculations for its future demand and supply reliability analysis. Senate Bill (SB) 610 requires the preparation of a Water Supply Assessment (WSA) for projects within cities and counties that propose to construct more than 500 residential units or that will use an amount of water equivalent to that used by 500 residential units (California Water Code, §10910 -10915). Wood Rogers prepared a WSA for the proposed project in March 2008, incorporating by reference, the City's UWMP.

The WSA evaluated residential development on approximately 60 acres of the project site. The remaining 16 acres was assumed to develop as an elementary school and was not included in the study. However, the WSA evaluated development of 493 dwelling units, which is slightly higher than the current proposal's anticipated development of 487 dwelling units. Therefore, the WSA is considered to be an adequate (if not slightly conservative) analysis of the City's ability to provide water to the proposed project.

Water supply for the City of Greenfield is drawn solely from the Salinas Valley Groundwater Basin, which, as a whole, is currently experiencing overdraft conditions. However, the Forebay Aquifer Subbasin of the Salinas Valley Groundwater Basin, from which the City of Greenfield withdraws its water supply, has an extremely deep and productive alluvium and overdraft has never been identified as a problem. According to the WSA, the Forebay Aquifer Subbasin has been proven reliable in the past regardless of climatic conditions. The City plans to continue to draw from the

Forebay Aquifer Subbasin for future water needs. An evaluation of the entire basin indicates the increase demands from the City's projected growth will have minimal impact on the basin and other private and public water users of the basin.

Development of the proposed project would increase demand for water in the City of Greenfield, thereby incrementally increasing demand on the groundwater basin. The existing rural residential homes and agricultural areas within the project site do not use the City of Greenfield's municipal water infrastructure; however, groundwater is drawn for irrigation and domestic purposes through private onsite wells from the same subbasin.

As demonstrated by the WSA and also the City's Urban Water Management Plan (UWMP), which is in the process of being adopted, the City of Greenfield has the capacity to serve 17.8 acre-feet per day, which equates to a total annual capacity of 6,500 acre-feet annually. Based on the City of Greenfield's total projected water supplies for normal, single-dry, and multiple dry years over a 20-year projection, the City will have sufficient water to meet projected water demands for the proposed project in addition to meeting the existing service area's planned future demands. Impacts to groundwater resources or the existing supply associated with the buildout of the proposed project are expected to be **less than significant**.

c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?*

d) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

e) *Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Development of the project site will involve grading activities typical of a residential subdivision located on relatively flat terrain. The project site would be converted from farmland and rural residential uses to a single-family residential neighborhood within the City of Greenfield. The conversion of land would increase the amount of surface area impervious to water, such as pavement, roofing and walkways, increasing stormwater runoff from the project site. Grading activities could alter existing drainage patterns and lead to erosion, siltation and/or flooding on- or off-site.

New development projects in the City of Greenfield are required to store and percolate 100 percent of the stormwater runoff from a 100-year storm event. Projects typically utilize retention ponds to store and percolate stormwater runoff. Runoff that exceeds the quantity of a 100-year event is allowed to back into the street to a depth not deeper than the curb, which is approximately eight inches. Each of the two PD's includes retention facilities to accommodate stormwater runoff. The Willow Glen PD retention basin is located immediately north of Lots 37 and 46, is situated on 0.72 acre and has a storage volume of 52,323 cubic feet. Two basins are included on the Mira Monte PD, one south of Walnut Avenue and north of Lot 166 and a second east of Lots 49 and 50. The "Northeast Basin" is situated on 0.44 acres with 95,828 cubic feet of storage volume. The "Central Park Basin" is situated on 1.31 acres with 59,399 cubic feet of storage volume. All of the basins are designed to accommodate runoff from the 100-year storm event. Future development of the remainder parcels would also be required to design and install a stormwater collection system. In order to ensure that stormwater improvements meet City of Greenfield standards, the following mitigation measures shall be required.

**Mitigation Measures**

**MM 8-1** Project Applicant(s) for near-term and future development within the project site shall identify, as part of Tentative Map submittal, a detailed drainage plan designed to contain stormwater runoff from the 100-year storm event onsite and shall include: detailed hydrologic modeling; existing facilities; soil and topographic data; erosion control and best management practices; descriptions of proposed flood control facilities; compliance with waste discharge requirements; phasing and implementation; identification of the entity that is responsible for facility design and construction; Clean Water Act compliance; and facility maintenance. Proposed retention basins shall be designed to contain stormwater runoff onsite from the 100-year storm event. Where feasible, project Applicant(s) shall design a detailed drainage plan which utilizes a single, adequately sized retention pond to serve the remainder of the project site. Drainage improvements shall be subject to review and approval by the City Engineer and Public Works Director.

**MM 8-2** All drainage and erosion control plans submitted shall incorporate temporary measures effective from October 1 through March 31 that ensure eroded or exposed soils are maintained on-site during construction.

Implementation of the above mitigation measures would reduce pre- and post construction stormwater drainage system impacts to a **less than significant** level by requiring drainage systems be designed with adequate capacity to handle stormwater generated by the proposed project, including drainage and erosion control plans with special measures for activities conducted during the rainy season, in accordance with City of Greenfield standards.

*f) Would the project otherwise substantially degrade water quality?*

Acquisition of an NPDES permit as described above in item a) will ensure that the proposed project will not substantially degrade water quality; therefore, the impact is considered **less than significant**.

*g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

*h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

*i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?*

*j) Would the project be subject to inundation by seiche, tsunami, or mudflow?*

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, the project site is not located within a 100-year flood zone. The project site would not be affected by inundation resulting from the failure of either the Nacimiento or San Antonio Reservoir Dams, according to the Greenfield General Plan. The project area is not located in a coastal area and is therefore not subject to tsunami. There are no bodies of water in the vicinity that might present a threat of seiche. The area is relatively flat and not subject to mudflow. Therefore, implementation of the proposed project would have **no impact** associated with exposing people to the risk of a 100-year flood event, dam failure, tsunami, seiche, or mudflows.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **9. LAND USE/PLANNING** | | | | |
| *Would the project:* | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Ref. 16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

*a) Would the project physically divide an established community?*

The proposed project would involve the annexation of approximately 80 acres into the City of Greenfield and the development of two separate PD areas. The project site borders the existing City limits on the south and east and is located entirely within the City's Sphere of Influence (SOI). The *Greenfield General Plan* (2005) designates the project site for Low Density Residential uses. Surrounding land uses include farmland, rural residential and single-family residential neighborhoods. The proposed project would continue the existing residential development pattern established adjacent to the project site on the east and south. In addition, another residential project is currently being proposed across Walnut Avenue (Amaral Annexation). Development of the project site for residential uses would not disrupt or divide an established community; therefore, the impact is considered **less than significant**.

*b) Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?*

As discussed in Section III, the proposed annexation and development of the project site would be consistent with the *Greenfield General Plan* (2005). The project site is located entirely within the City's SOI and has been designated by the General Plan for Low Density Residential (LDR) uses. The Applicant proposes Annexation by the City of Greenfield with concurrent General Plan and Zoning Amendments (Prezone) which will zone the PD portions of the project site as Single Family Residential (R-L) with a Planned Development (PD) permitting process. The remainder parcels would also be prezoned as R-L consistent with the underlying General Plan designation.

The proposed project includes two separate PD's. According to Section 17.16.080 of the City's Zoning Ordinance, a PD contains land use regulations and development standards that replace certain provisions of the Zoning Ordinance. Residential density under the PD must correspond to density ranges established by the General Plan. The average density may not exceed that

allowed under the General Plan for the specific land use. As proposed, the Mira Monte PD would have a density of 5.9 units per gross acre (166 units on 28.08 acres) and the Willow Glen PD would have a density of 6.1 units per gross acre (86 units on 14.05 gross acres). Both of these proposed developments have densities below the maximum Low Density Residential land use designation of seven units per acre.

The proposed project also incorporates a Planned Development (PD) permit request to allow a variance from the Zoning Code including reduced lot sizes, setbacks, and interior street widths. The proposed project would provide all necessary improvements and appropriate park and recreation space or in lieu fees in accordance with the City's standards. As the Zoning Code outlines the PD application process, the review of these variations may occur within the parameters of the Zoning Code.

In order to meet the City's Inclusionary Housing Ordinance (March 2003), both PD's have dispersed Inclusionary units throughout. As previously outlined in the Project Description, the Applicant proposes 27 units as inclusionary housing in the Mira Monte PD, with 0.8 of a unit to be paid as an Inclusionary Fee and 14 units as inclusionary housing in the Willow Glen PD with 0.4 of a unit to be paid as an Inclusionary Fee.

In order to be in compliance with Section 17.55 Resource Efficiency of the Zoning Code, Mira Monte and Willow Glen will offer each home a complete "photo voltaic accessibility" option, which is designed to achieve "Net Metering" with PG&E. The system will be sized to provide an equal amount of usage and savings so that a "net 0" on the PG&E meter can be achieved. Lots and homes have been designed with either a direct southern exposure, or at minimum a south/western orientation. This design will accommodate active and passive solar opportunities for all proposed homes that may desire the option.

Energy conservation will be accommodated by encouraging alternatives to automobile transportation by providing a perimeter hiking and biking trail along 13th Street and Walnut Avenue, on the project frontage. It is suggested that a "Mom and Pop" convenience store be located at the corner of Walnut Avenue and 12th Street, as a part of future development.

Other requirements of the PD include a description of the capacity and means of providing public utilities and services and a circulation plan. These issues are addressed in the following sections of this document: **Section VI.11 Public Services, Section VI.12 Transportation/Traffic** and **Section VI.13 Utilities/Service Systems**.

As proposed, the residential land use is consistent with the City's General Plan. LAFCO has approval authority over the request for annexation. Based upon the analysis of LAFCO policies in **Section III. Project Consistency with Other Applicable Local and State Plans and Mandated Laws**, the proposed project is consistent with LAFCO's *Standards for the Evaluation of Proposals*. The proposed project will not conflict with the General Plan, Zoning Ordinance or LAFCO annexation policies; therefore, the impact is considered **less than significant**.

*c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

No habitat conservation plans or natural community conservation plans are applicable regarding the proposed project. Therefore, **no impact** is expected.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **10. MINERAL RESOURCES** | | | | |
| *Would the project:* | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Ref. 3) | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (Ref. 3) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS See Discussion in Section IV.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **11. NOISE** | | | | |
| *Would the project result in:* | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

DISCUSSION OF IMPACTS

The analysis in this section is based on a *Noise Impact Analysis* prepared by AMBIENT Air Quality & Noise Consulting (August 14, 2007 and revised August 25, 2008) and the *Traffic Impact Study* (TIS) prepared by Higgins Associates (October, 2007) and peer reviewed by PMC (August 20, 2008). The *Noise Impact Analysis* analyzed the potential environmental noise impacts (including operational noise impacts, traffic noise impacts, stationary source noise impacts and construction noise impacts) on the development of the proposed project. The noise analysis was prepared with respect to the guidelines set forth in the Noise Element of the *General Plan*. The conclusions of the *Noise Impact Analysis* are incorporated herein and the report is available for review at the City of Greenfield Community Development Department at 45 El Camino Real.

As originally proposed, the proposed project included the proposed construction of a total of 450 single-family dwelling units, 40 multi-family dwelling units. The proposed project also includes a 14-acre site reserved for a future elementary school, a neighborhood park, park and open space area, and a percolation basin. In comparison to the previous proposal, the proposed Planned Development areas would result in a significant reduction in the overall number of residential dwelling units to a revised total of 252 dwelling units. The project would still include development of open space and park areas and percolation basins. Although the overall size of the annexation area would remain the same, the proposed elementary school would no longer be included as part of the proposed project. The remaining parcels would still be included in the annexation but, are not proposed for development at this time. For the purposes of the environmental analysis, it was assumed that these remainder parcels would build out maximum allowable density, which could result in the future development of approximately 235 additional residential dwelling units. In total, the revised proposed project would result in the development of approximately 487 dwelling units at full buildout.

Based on the modeling conducted, the previously analyzed project would result in an estimated 4,540 daily vehicle trips. Assuming that the trip-generation rates for residential land uses that were developed for the previous project would be applicable to the revised project, near-term development of the PD areas would result in an estimated 2,024 daily vehicle trips. Future buildout of the revised project, including the remaining parcels, would result in an estimated 3,911 daily vehicle trips. Given the anticipated reduction in vehicle trips, the revised project would not result in an anticipated increase in vehicle traffic noise, beyond that already evaluated for the previously proposed project. Short-term construction generated noise levels and associated impacts to nearby residential dwellings would be similar to those discussed for the previously proposed project. As a result, the findings contained in the previously prepared noise analysis would remain valid.

*a) Would the project exposure of residents to or generate noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?*

Noise generated by the proposed project would occur during short-term construction and long-term operation of proposed land uses. Noise-related impacts associated with short-term construction and long-term operation of proposed land uses are discussed separately, as follows.

**Short-term Construction Impacts**

The proposed project could result in construction-related noise that may result in increased levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings. This impact is considered **significant**; however, with mitigation this impact would be considered **less**

**than significant**. Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, erection) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels for individual pieces of construction equipment are summarized in **Table 11**. As depicted, individual equipment noise levels (in dBA) typically range from the mid-70's to the upper 80's at 50 feet (FTA 2006). Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Depending on the activities performed and equipment usage requirements, combined average-hourly noise levels at construction sites typically range from approximately 65 to 89 dBA Leq at 50 feet (EPA 1971).

**TABLE 11**
**TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS**

| Type of Equipment | Typical Noise Level (dBA) at 50 Feet | Type of Equipment | Typical Noise Level (dBA) at 50 Feet |
|---|---|---|---|
| Air Compressor | 81 | Generator | 81 |
| Backhoe | 80 | Grader | 85 |
| Compactor | 82 | Jack Hammer | 88 |
| Concrete Mixer | 85 | Paver | 89 |
| Concrete Vibrator | 76 | Roller | 74 |
| Crane (Mobile) | 83 | Saw | 76 |
| Dozer | 85 | Truck | 88 |

*Source: AMBIENT, Noise Impact Analysis, 2008.*

Assuming a maximum construction noise level of 89 dBA Leq and an average attenuation rate of six dBA per doubling of distance from the source, construction activities occurring within approximately 1,500 feet of noise-sensitive receptors could reach levels of approximately 60 dBA Leq. Construction activities occurring during the more noise-sensitive nighttime hours may result in increased levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings. Construction-generated noise would, therefore, be considered to result in a **potentially significant** short-term noise impact to nearby noise-sensitive land uses requiring the following mitigation:

***Mitigation Measure***

**MM 10-1** Construction Noise

- Noise-generating construction operations shall be limited to the hours between 7:00 AM to 6:00 PM Monday through Friday. The Applicant may request permission from the City to continue with construction through the weekend. If made, said request shall be submitted in writing for review and approval by the Director of Public Works and shall be pursuant to the limitations that the Public Works Director determines are appropriate;
- Construction equipment and equipment staging areas shall be located at the furthest distance possible from nearby noise-sensitive land uses;
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation;
- When not in use, motorized construction equipment shall not be left idling.

Implementation of the above mitigation measures would limit construction operations to daytime hours, in accordance with City of Greenfield requirements, which would reduce levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings. Because construction activities would occur on an intermittent and short-term basis and would be limited to daytime hours, this impact would be considered **less than significant**, with mitigation incorporated.

**Long-term Operational Impacts**

The proposed project would result in exposure of nearby existing and proposed residential land uses to noise levels that could exceed applicable City noise standards. This impact would be considered **significant**; however, with mitigation described below in **Mitigation Measure 10-2**, this impact would be considered **less than significant**. The proposed project consists of residential dwellings, and neighborhood parks. These land uses would result in new stationary noise sources that could potentially exceed the City's applicable noise standards at nearby noise-sensitive land uses. Noise levels typically associated with these land uses and associated noise impacts are discussed separately below.

Proposed Residential Land Uses

Noise from proposed residential dwellings would expose other nearby residences (both existing and project related) to minor increases in ambient noise levels. Noise typically associated with such development includes lawn and garden equipment, voices and amplified music. Activities associated with these land uses would result in only minor increases in ambient noise levels, primarily during the day and evening hours and less frequently at night, as perceived at the closest residential receptors.

Noise levels generated by stationary sources, primarily residential central air conditioning units, average approximately 60 dBA $L_{eq}$ at three feet from the source (EPA 1971). Depending on the distance between proposed residential dwellings, noise levels associated with air conditioning units located in side-yard areas could potentially exceed the City's exterior noise standards at neighboring residences. As a result, increased noise levels associated with proposed residential land uses would be considered **potentially significant**.

Proposed Park Facilities

**Mitigation Measure 11-1** below in Section VI.13, would require the Applicant to provide at least 1.01 acres of neighborhood parkland into the Mira Monte PD area and at least 0.52 acres of neighborhood parkland into the Willow Glen PD area. However, the specific uses to be included in the proposed park have not yet been identified.

Park uses typically include children's play areas, parking areas, and recreational uses such as ball fields. Noise typically associated with play areas and associated vehicle parking areas include the voices of adults and children and the occasional opening and closing of vehicle doors. Noise events typically associated with such uses, excluding larger recreational uses, are often intermittent and do not typically result in substantial increases in daytime ambient noise levels. However, recreational uses involving use of amplified sound systems or activities occurring during the more noise-sensitive evening, nighttime, and early morning hours may result in substantial increases in ambient noise levels at nearby residences, resulting in potential increases in annoyance and sleep disruption. As a result, noise events associated with the proposed park would be considered **potentially significant**, and compliance with the following mitigation measure would be required.

**Mitigation Measures**

**MM 10-2** Increased Exposure of Noise-Sensitive Receptors to Stationary-Source Noise

The Applicant or Contractor shall include the following in the building design and park facilities operation:

*Proposed Residential Land Uses*

- Residential dwellings shall be equipped with central heating and air conditioning systems to allow closure of windows during inclement weather conditions.
- Exterior air conditioning units for proposed residential dwellings shall be located at a minimum distance of 10 feet from adjacent outdoor activity areas or shielded from direct line-of-sight.

*Proposed Parks*

- Use of proposed park facilities shall be limited to between the daytime hours of 7:00 a.m. and 10:00 p.m.
- Landscape maintenance activities at the proposed park shall be limited to between the daytime hours of 7:00 a.m. and 10:00 p.m.
- Use of amplified public address/sound systems within the proposed park shall be prohibited.

Implementation of the above mitigation measure would limit noise-generating activities associated with the use of the proposed park facilities to the least noise-sensitive daytime hours. Central heating and air conditioning systems would also be required for installation in proposed residential dwellings to allow windows to remain closed. With windows closed, the proposed residential dwellings would be anticipated to achieve an average exterior-to-interior noise reduction of approximately 25 dBA.

Based on this noise-reduction and assuming a maximum exterior noise level of approximately 60 dBA $L_{eq}$ for exterior air conditioning units located adjacent to proposed residential structures, predicted interior noise levels of dwelling units would be approximately 35 dBA $L_{eq}$, or less, with windows closed. Predicted noise levels within exterior activity areas would be approximately 50 dBA $L_{eq}$, or less. With mitigation, predicted noise levels at onsite land uses would not be anticipated to exceed the City's noise standards. With implementation of the above mitigation measure, this impact would be considered **less than significant**.

Land Use Compatibility

For determination of land use compatibility, predicted traffic noise contours (in dBA Ldn/CNEL) for adjacent roadways were modeled for future cumulative General Plan buildout conditions, with implementation of the proposed project. Traffic noise levels were modeled using the FHWA traffic noise prediction model, based on data obtained from the traffic analysis prepared for this project. **Table 12***,* below, summarizes predicted distances to the 60 dBA Ldn/CNEL contours, as well as the predicted traffic noise levels within the exterior activity areas of proposed land uses.

**TABLE 12**
**PREDICTED TRAFFIC NOISE LEVELS GENERAL PLAN BUILDOUT CONDITIONS**

| Roadway Segment | Predicted Noise Level at 50 feet from Near-Travel-Lane Centerline (dBA CNEL) [1] | Predicted Noise Level at Outdoor Activity Area (dBA CNEL) [1] |
|---|---|---|
| Walnut Avenue, 12th Street to 13th Street [2] | 60.48 | 64.28 |
| Apple Avenue, 12th Street to 13th Street [3] | 58.88 | 46.24 |
| 13th Street, Walnut Avenue to Apple Avenue [3] | 59.39 | 46.75 |
| 12th Street, Walnut Avenue to Apple Avenue [3] | 62.4 | 49.76 |

*Source: Ambient 2008.*

*Notes: 1. Traffic noise levels were predicted using the FHWA roadway noise prediction model based on traffic information obtained from the traffic analysis prepared for this project. Modeled estimates assume no natural or man-made shielding (e.g., vegetation, berms, walls, buildings). 2. Based on an estimated set-back of 28 feet from the near-travel-lane centerline (Creegan+D'Angelo 2007). 3. Based on an estimated average set-back of 75 feet from the near-travel-lane centerline. Predicted noise levels assume a minimum noise reduction of 10 dB for shielding due to intervening proposed residential structures.*

As currently proposed, residential dwellings located along Walnut Avenue would be primarily accessed by proposed interior roadways, with the outdoor activity areas located adjacent to Walnut Avenue. Based on the modeling conducted, predicted traffic noise levels at residential land uses located within approximately 50 feet of Walnut Avenue would be anticipated to exceed the City's "normally acceptable" exterior noise standard of 60 dBA CNEL. Assuming an average set-back distance of approximately 28 feet, predicted traffic noise levels at the outdoor activity areas of these residences would be approximately 64 dBA CNEL. Predicted traffic noise levels within the exterior activity areas and at the nearest façade of residential land uses located along Walnut Avenue would be predicted to exceed the City's exterior noise standard of 60 dBA CNEL. Without implementation of noise-control measures, proposed land uses located along Walnut Avenue would be considered potentially incompatible with projected future traffic noise levels.

The outdoor activity areas of residential land uses located along Apple Avenue, 12th Street, and 13th Street would be predominantly shielded from direct line-of-sight of the adjacent roadway by the proposed dwelling unit. Due to the anticipated shielding provided by the residential structures and increased setback from the roadway, predicted noise levels within the outdoor activity areas of these residences would not be anticipated to exceed the City's exterior noise standard.

The specific design and setback distances of proposed residential dwellings is not yet available and would likely vary by location. However, as noted in **Table 10**, presented earlier, predicted traffic noise levels within approximately 50 feet of area roadways would be anticipated to approach or exceed the City's "normally acceptable" noise standard of 60 dBA CNEL. Assuming that exterior traffic noise levels at the nearest building facades were to exceed 60 dBA CNEL and assuming an average exterior-to-interior noise reduction of 15 dBA (with windows open), predicted interior noise levels of proposed residential dwellings could potentially exceed the City's corresponding interior noise standard of 45 dBA CNEL. Without implementation of noise-control measures, proposed residential land uses located along Apple Avenue, 12 Street, and 13th Street would be considered potentially incompatible with projected future traffic noise levels.

As noted above, predicted noise levels at proposed land uses located along the adjacent roadway segments of Walnut Avenue, Apple Avenue, 12th Street, and 13th Street would be

anticipated to exceed the City's "normally acceptable" noise standards. As a result, this impact would be considered **potentially significant** impact. The following mitigation would be required to reduce impacts to community park space to a **less than significant** level.

**Mitigation Measure**

**MM 10-3** Compatibility of Proposed Land Uses with Projected Ambient Noise Levels

The Applicant or Contractor shall include the following on Final Map or building design as appropriate:

- Implement Mitigation Measure 10-2(a).
- A noise barrier shall be constructed sufficient to shield the outdoor activity areas of proposed single-family residential dwellings that are located adjacent to Walnut Avenue. The barrier shall be constructed to a minimum height of six feet. The barrier shall be constructed of a solid material (e.g., earthen berm, wood, concrete, masonry, or combination thereof) with no visible air gaps at the base or between construction materials. If wood materials are used, materials shall be overlapped or tightly fitted (e.g., tongue and groove) to ensure that visible air gaps do not occur due to material shrinkage resulting from changes in ambient temperature/moisture content of the material.

With mitigation, predicted traffic noise levels at proposed residential land uses would not exceed the City's "normally acceptable" exterior noise standard of 60 dBA $L_{dn}$/CNEL. Assuming an average exterior-to-interior noise reduction of 20 dBA for newer construction (with windows closed), predicted interior noise levels of proposed onsite land uses would be approximately 40 dBA CNEL, or less. With mitigation, predicted exterior and interior noise levels would not be anticipated to exceed the City's corresponding noise standards. This impact is considered **less than significant**, with mitigation incorporated.

*b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Construction of the proposed land uses could result in groundborne vibration. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely result in structural damage.

There are no federal, state, or local regulatory standards for vibration. However, various criteria have been established to assist in the evaluation of vibration impacts. For instance, the California Department of Transportation (Caltrans) has developed vibration criteria based on human perception and structural damage risks. For most structures, Caltrans considers a peak particle velocity (ppv) threshold of 0.2 inches per second to be the level at which architectural damage (i.e., minor cracking of plaster walls and ceilings) to normal structures may occur.

Below 0.10 inches per second there is "virtually no risk of 'architectural' damage to normal buildings. Levels above 0.4 inches per second may possibly cause structural damage "(Caltrans, 2002). In terms of human annoyance, continuous vibrations in excess of 0.1 inches per second ppv are identified by Caltrans as the minimum level perceptible level for ground vibration. Short periods of ground vibration in excess of 0.2 inches per second can be expected to result in increased levels of annoyance to people within buildings (Caltrans, 2002).

Site preparation and building construction activities associated with the proposed project are anticipated to require the use of various types of off-highway equipment (e.g., graders, backhoes, off-highway trucks) that would be expected to result in minor intermittent increases in ground vibration. The ground vibration levels associated with construction equipment are depicted in **Table 13**.

**TABLE 13**
**REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT**

| Equipment | Peak Particle Velocity at 25 feet (in/sec) |
|---|---|
| Large Bulldozer | 0.089 |
| Loaded Trucks | 0.076 |
| Jackhammer | 0.035 |
| Small Bulldozer | 0.003 |
| Caisson Drilling | 0.089 |

*Source: Ambient, 2008*

Ground vibration levels associated with site preparation and building construction, as noted in **Table 11**, would result in maximum vibration levels of approximately 0.09 inches per second ppv at 25 feet. Construction activities would not be anticipated to occur within 25 feet of existing structures. Based on the vibration levels noted in **Table 13**, predicted ground vibration levels at nearby structures would, therefore, not be anticipated to exceed the commonly applied minimum thresholds of 0.2 in/sec ppv for structural damage or 0.1 in/sec ppv human annoyance. As a result, short-term construction-generated vibration levels would not exceed commonly applied thresholds for the prevention of structural damage or human annoyance. Therefore, ground-borne vibration levels associated with construction activities would be considered **less than significant**.

In addition, the proposed project would not involve the long-term use of any equipment or processes that would result in potentially significant levels of ground vibration. Therefore the long-term operation of the proposed project would not include any major sources of vibration and this would be a **less than significant** impact. No mitigation would be necessary.

c) *Would the project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

The increase in daily traffic volumes resulting from implementation of the proposed project would generate increased noise levels along nearby roadway segments. The FHWA roadway noise prediction model was used to predict traffic noise levels along affected roadway segments. Predicted noise levels were calculated for both background and general plan buildout conditions, with and without implementation of the proposed project, based on traffic volumes obtained from the traffic analysis prepared for this project (Higgins Associates 2007). Predicted traffic noise levels for background conditions, with and without implementation of the proposed project, are summarized below in **Table 14**.

**TABLE 14**
**PREDICTED TRAFFIC NOISE LEVELS - BACKGROUND CONDITIONS**

| Roadway Segment | Predicted Noise Level at 50 ft from Centerline of Near Travel Lane (dBA $L_{dn}$/CNEL) | | | |
|---|---|---|---|---|
| | Background Without Project | Background With Project | Increase | Significant? |
| Walnut Avenue, West of 12th Street | 56.67 | 60.00 | 3.33 | No |
| Walnut Avenue, East of 12th Street | 59.58 | 62.13 | 2.55 | No |
| Apple Avenue, West of 12th Street | 55.65 | 58.60 | 2.95 | No |
| Apple Avenue, East of 12th Street | 58.83 | 59.46 | 0.63 | No |
| 13th Street, North of Walnut Avenue | 49.25 | 53.22 | 3.97 | No |
| 13th Street, Walnut Avenue to Apple Avenue | 55.56 | 57.58 | 2.02 | No |
| 13th Street, South of Apple Avenue | 56.87 | 57.50 | 0.63 | No |
| 12th Street, North of Walnut Avenue | 54.45 | 55.37 | 0.92 | No |
| 12th Street, Walnut Avenue to Apple Avenue | 58.16 | 59.85 | 1.69 | No |
| 12th Street, South of Apple Avenue | 60.60 | 61.33 | 0.73 | No |

*Source: AMBIENT, Noise Impact Analysis, 2008. As noted in the report, traffic noise levels were predicted using the FHWA roadway noise prediction model based on traffic information obtained from the traffic analysis prepared for this project. Modeled estimates assume no natural or man-made shielding (e.g., vegetation, berms, walls, buildings).*

Based on the modeling conducted, implementation of the proposed project would result in predicted increases in traffic noise levels of approximately 3 dBA along portions of Walnut and Apple Avenues located west of 12th Street. The highest predicted increase of approximately 4 dBA would occur along 13th Street, between Walnut and Apple Avenues. Although predicted increases in traffic noise levels may be noticeable, implementation of the proposed project would not result in a significant increase (i.e., 5 dBA or greater) in ambient traffic noise levels along area roadways. Implementation of the proposed project would not contribute to a substantial increase in ambient noise levels. As a result, this impact would be considered **less than significant**. No mitigation is necessary.

*d) Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Implementation of the proposed project would not contribute to a substantial increase in traffic noise levels. Implementation of the proposed project would not result in the long-term operation of any manor onsite stationary sources of noise. As a result, this impact is considered **less than significant**. No mitigation is necessary.

Noise generated by the proposed residential land uses, as perceived at nearby land uses, would be primarily associated with increases in vehicle traffic on area roadways. The FHWA roadway noise prediction model was used to predict traffic noise levels along affected roadway segments. Predicted noise levels were calculated for general plan buildout conditions, with and without implementation of the proposed project, based on traffic volumes obtained from the traffic analysis prepared for this project (Fehr & Peers 2006). Predicted increases in traffic noise levels along nearby roadway segments are summarized in **Table 14**.

As discussed in item a), buildout of the proposed project would not result in a significant increase in ambient noise levels. In addition, implementation of the proposed project would not include the long-term operation of any major stationary noise sources. As a result, the project's contribution to cumulative noise levels would be considered **less than significant**.

*e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? and/or;*

*f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

There are no public airports within the immediate vicinity of the project site, nor is the project site within the jurisdiction of an airport land use plan or similar plan. The Yanks Air Museum project and private airstrip will be located in the northern end of the City, about one to two miles from the project site. According to the *Greenfield General Plan EIR*, the flights into and out of the airstrip are expected to be infrequent, and the flight pattern is anticipated to occur north of Pine Avenue. This impact is considered **less than significant**.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **12. POPULATION/HOUSING** | | | | |
| *Would the project:* | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b) Displace substantial amount of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☒ | ☐ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☒ | ☐ |

DISCUSSION OF IMPACTS

*a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Implementation of the proposed project would result in the near-term construction of 252 single-family homes including inclusionary housing in accordance with the standards set in the City of Greenfield Inclusionary Housing Ordinance. Approval of the annexation would allow for the future development of the remainder parcels, assuming full buildout, at 235 single-family homes. According to the General Plan, an assumption of 4.0 persons per household is used for single-family units. Therefore, the project would generate approximately 1,008 persons with implementation of the proposed Mira Monte and Willow Glen PD's and an additional future

generation of approximately 940 persons, for a total of 1,948 persons generated for the annexation area upon full buildout.

According to *2004 Regional Population and Employment Forecast for Monterey, San Benito and Santa Cruz Counties* (AMBAG 2004), the City of Greenfield had a projected population of 15,097 by 2005, to 18,267 by 2010, 21,570 by 2015 and to 24,512 by 2020. According to the California Department of Finance, Greenfield had a population of 13,136 on January 1, 2005 – almost 2,000 less persons than projected by AMBAG in 2004. The addition of 1,948 would increase the City's total population to 15,084, well within the projected population for 2015. The near-term development of the two Tentative Subdivision Maps would increase the City's total population by 1,008 within the next few years, and the existing population projection for 2005 has the capacity to support the increase in population by 1,008 persons. Therefore, although the proposed project would directly induce population growth as it is creating additional housing units, the growth has been anticipated through the City's General Plan resulting in a **less than significant** impact.

*b) Displace substantial amount of existing housing, necessitating the construction of replacement housing elsewhere?*

*c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

There are currently rural residential land uses on APN 109-232-012 which would require demolition in the Willow Glen PD area. A residence, workshop, equipment storage area and a small vineyard occupy the northeastern area of this parcel. However, the abandonment of one residence would not be considered a substantial number of existing housing or people that would be displaced and would necessitate the construction of replacement housing due to the City's existing available supply of housing. Therefore, impacts would be considered **less than significant**.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **13. PUBLIC SERVICES** | | | | |
| *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:* | | | | |
| a) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| b) Police protection? | ☐ | ☐ | ☒ | ☐ |
| c) Schools? | ☐ | ☐ | ☒ | ☐ |
| d) Parks? | ☐ | ☒ | ☐ | ☐ |
| e) Other public facilities? (Ref. 1,2,16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

Implementation of the proposed project would result in the near-term construction of 252 single-family homes. The remaining parcels ("Remainder Parcels") are included in the annexation but are not proposed for development at this time. For the purposes of the environmental analysis, it is assumed that these remainder parcels will build out maximum allowable buildout potential in accordance with the underlying land use designation of LDR in the City of Greenfield General Plan at 7 units per acre for an additional 235 homes. Thus the proposed project would potentially generate a total of 487 new homes.

According to the General Plan, an assumption of 4.0 persons per household is used for single-family units. Therefore, the proposed project would generate approximately 1,008 persons with implementation of the proposed Mira Monte and Willow Glen PD's and an additional future generation of approximately 940 persons (with development of the remainder parcels), for a total of 1,948 persons. This growth would require additional public services as described below.

*a) Fire protection?*

The proposed project includes 252 dwelling units within two PD areas. The remainder parcels have the potential to develop an additional 235 units (assuming maximum allowable buildout potential in accordance with the City's General Plan) for a total of 487 housing units. Based on a population estimate of 4.0 persons per household according to the *Greenfield General Plan* (2005), development of the annexation area would result in approximately 1,948 new residents added to the City. Development of the proposed project and associated increase in population would, in turn, increase the demand for fire protection services. The Greenfield Fire Protection District would provide service to the project site from the Greenfield Volunteer Fire Department Station. This station is located at the corner of Oak Avenue and 4th Street, approximately one mile from the project site.

Emergency response to the project site is dependent on adequate emergency access and water flows for fire protection services. Access to the development would be provided via multiple entranceways on all four streets surrounding the project site.

The proposed project would not result in the need for a new, or physically altered, facility and would not result in direct environmental impacts; however, the project would increase the demand for fire protection services. The Applicant would be required to extend water mains to the project site and pay fire impact fees charged by the Greenfield Fire Protection District. In addition, the proposed project would be required to implement current fire safety codes in compliance with the California Building Code, Uniform Fire Code and obtain approval from the City of Greenfield for design features such as project access and turning radii, road grades and road widths adequate for emergency equipment access. Payment of fire impact fees and adherence to applicable regulations required by the City of Greenfield will reduce fire protection services impacts to a **less than significant** level.

*b) Police protection?*

The proposed project would accommodate approximately 1,948 new residents in the City of Greenfield. The project site would be served by the Greenfield Police Department (GPD) and its station located at the intersection of El Camino Real and Oak Avenue, which is slightly less than one mile from the project site.

The new residents anticipated with development of the residential neighborhood will place additional demand on the GPD for law enforcement services. Types of crime anticipated with

the increased population include domestic disturbances as well as residential and automobile burglaries. The GPD currently consists of 17 sworn police officers. Based on the estimated current population of 13,330, there are approximately 1.28 officers per 1,000 residents in the City of Greenfield. The City's goal is to maintain at least 1.25 officers per 1,000 residents. To maintain this level of service, the City would need to add the approximately 2.4 officers to accommodate the projected population increase of 1,948.

The cost of providing police service to the project site is funded through the City's General Fund, which relies on property taxes, sales taxes and other annual revenues. According to the City's General Plan, development of the proposed project would require the payment of fair share financing to offset the additional law enforcement services needed. The Applicant would be required to pay police impact fees to assist in covering the costs of additional police coverage. Payment of this fee would ensure that police service is maintained at an acceptable level. The proposed project would not result in the need for a new or physically altered facility; therefore, the impact of the proposed project on law enforcement services would be considered **less than significant**.

*c) Schools?*

The project site is located within the jurisdiction of the Greenfield Union Elementary School District (GUSD) and the King City Joint Union High School District (KCHSD). The number of students anticipated to be generated on a per-unit basis for single-family and multi-family units is 0.558 Kindergarten through 6th grade students and 0.176 7th and 8th grade students, according to the GUSD. The KCHSD estimates that each new dwelling unit will generate 0.12 students for grades 9-12.

Therefore, based upon buildout conditions of approximately 487 dwelling units, the proposed project would be expected to generate approximately 272 Kindergarten through 6th grade students, 86 7th and 8th grade students and 59 high school students, creating additional demand for school services. According to the City's General Plan, buildout of the Planning Area (which includes the project site) would require construction of three additional elementary schools and one additional middle school. In addition, the existing Greenfield High School would require expansion.

Future residential development on the project site would be subject to payment of school impact fees as calculated by the school districts, per statute, and payable prior to issuance of occupancy permits. State law prohibits a local agency from either denying approval of a land use project because of inadequate school facilities or imposing school impact measures other than designated fees. Pursuant to Government Code Section 65995(3)(h), payment of these fees "is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization… on the provision of adequate school facilities." The school impact fees would contribute to development, expansion and modifications to existing and proposed public school facilities that would serve the new students generated by the proposed project. Therefore, this impact is considered **less than significant**.

*d) Parks?*

The proposed annexation area would accommodate approximately 1,948 new residents in the City of Greenfield, generating the need for additional park space. In the near term, the project proposes 252 units on approximately 42 gross acres, accommodating 1,008 new residents in the

City (based on 4.0 persons per single-family dwelling unit). Future development on the remainder parcels would require compliance separate from this review.

**Policy 7.2.20** of the General plan requires that, *"Subdivisions with 50 or more residential units shall be required to incorporate improved parkland with the subdivision."*

**Program 7.2.A** of the General Plan applies guidelines to achieve a ratio of 3.9 acres of park per 1,000 development residents. The ratio quantifies a *"minimum of 2 acres of community parks, 1.5 acres of neighborhood parks, and 0.4 acre of open space and greenbelt per 1,000 residents."* Using this standard, the proposed PD areas will generate demand for a total of approximately 3.93 acres of new parkland (1008 new residents/1000 = 1.008 X 3.9 acres park per thousand residents).

The PD site plans and Open Space plans, as shown in **Figures 13** and **14 below**, show that the Applicant is proposing neighborhood park spaces on top of the infiltration basins for both PD areas (1.31 acres of neighborhood park for Mira Monte and 0.72 acres of neighborhood park for Willow Glen). However, General Plan **Policy 7.2.19** limits drainage areas to open space uses, as follows: *"...Buffer zones and drainage areas that are also used for recreation uses shall not count towards a development's required park dedication, but can count toward open space requirements."* Therefore, **Table 15** and **Table 16**, below, summarize the proposed and required acreages of parks and open space for the each of the PD project sites consistent with the General Plan.

**TABLE 15**
**PARK AND OPEN SPACE REQUIREMENTS AND DEMAND-MIRA MONTE**

| Land Use | Required Acreage[1] | Proposed Acreage | Excess(+)/Deficient(-) Acreage |
|---|---|---|---|
| Community Park | 1.32 | 0.00 | (-) 1.32 |
| Neighborhood Park | 1.01 | 0.00 | (-) 1.01 |
| Open Space | 0.26 | 2.85 | (+) 2.59 |
| ***Total*** | **2.59** | **2.85** | **(-) 0.26** |

*Note: 1. Based on proposed 166 dwelling units accommodating an additional 664 new residents (at 4.0 persons per dwelling unit).*

**TABLE 16**
**PARK AND OPEN SPACE REQUIREMENTS AND DEMAND-WILLOW GLEN**

| Land Use | Required Acreage[1] | Proposed Acreage | Excess(+)/Deficient(-) Acreage |
|---|---|---|---|
| Community Park | 0.68 | 0.00 | (-) 0.68 |
| Neighborhood Park | 0.52 | 0.00 | (-) 0.52 |
| Open Space | 0.13 | 1.13 | (+) 1.00 |
| ***Total*** | **1.34** | **1.13** | **(+) 0.21** |

*Note: 1. Based on proposed 86 dwelling units accommodating an additional 344 new residents (at 4.0 persons per dwelling unit).*

As outlined in **Tables 15** and **16**, the proposed both PD areas would be deficient in community park and neighborhood park acreage. However, the PD areas provide more than the required acreage of open space. According to the information provided in **Tables 15** and **16**, the proposed project does not satisfy the City's requirements for community park space (a total of 2.00 acres for both PD areas), nor for neighborhood park space (a total of 1.53 acres for both PD areas) resulting in a **potentially significant** impact.


| | Willow Glen Project | | |
|---|---|---|---|
| | Area Required (ac) | Proposed Area (ac) | Percentage of Requirement |
| Total Open/Park (ac) | 1.34 | 1.13 | 84% |
| Community park (ac) | 0.69 | Pay in Fee | - |
| Neighborhood park (ac) | 0.52 | 0.72 | 140% |
| Open space (ac) | 0.14 | 0.41 | 298% |

THORP – RIVA
EXHIBIT
WILLOW GLEN AT GREENFIELD VILLAGE
OPEN SPACE & PARK AREAS
Greenfield Monterey County California

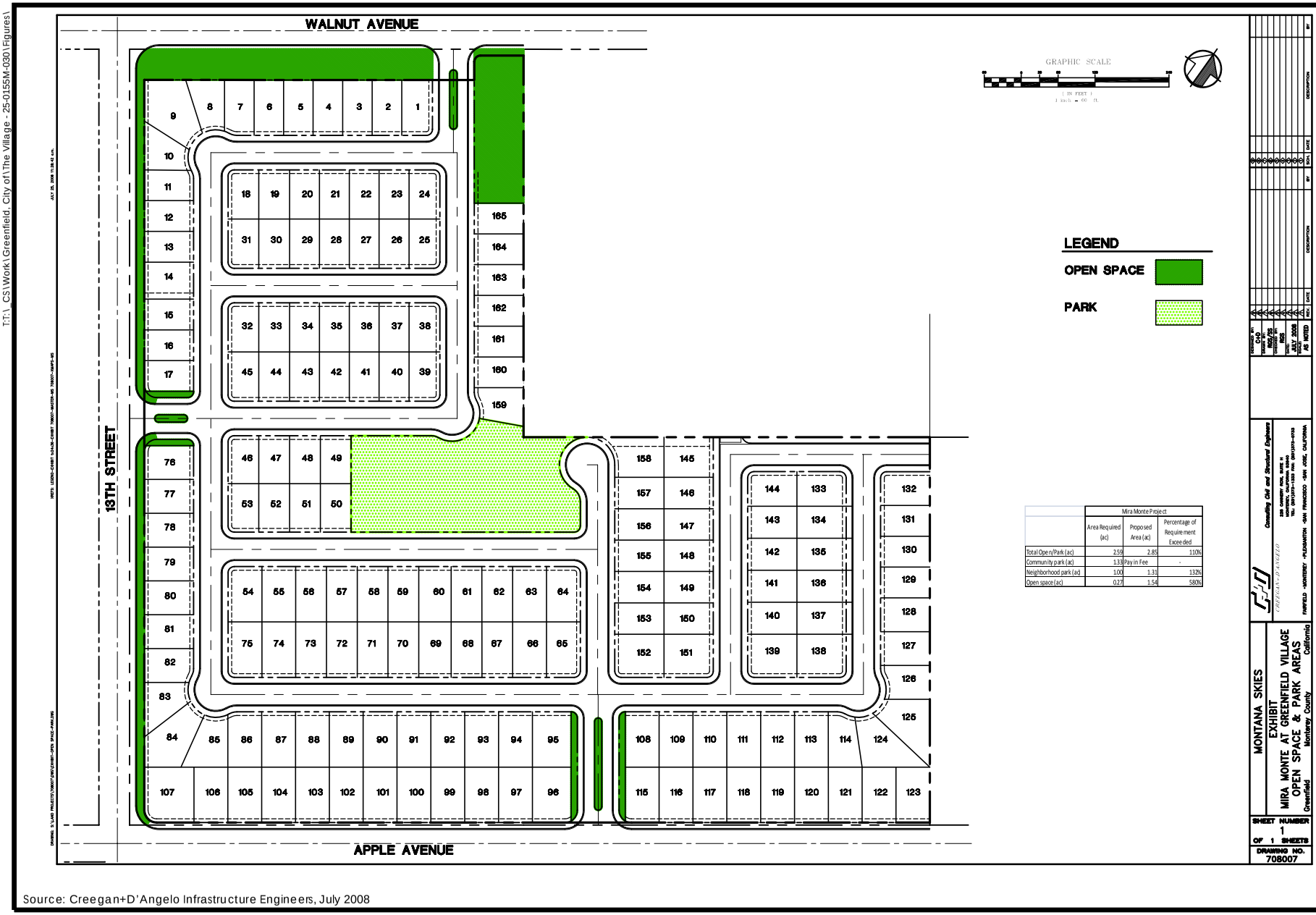
Creegan+D'Angelo Infrastructure Engineers

SHEET NUMBER 1 OF 1 SHEETS
DRAWING NO. 707017

Source: Creegan+D'Angelo Infrastructure Engineers, July 2008

**FIGURE 13**
**OPEN SPACE AND PARKS PLAN-MIRA MONTE**

PMC®




| | Mira Monte Project | | |
|---|---|---|---|
| | Area Required (ac) | Proposed Area (ac) | Percentage of Requirement Exceeded |
| Total Open/Park (ac) | 2.59 | 2.85 | 110% |
| Community park (ac) | 1.33 | Pay in Fee | - |
| Neighborhood park (ac) | 1.00 | 1.31 | 132% |
| Open space (ac) | 0.27 | 1.54 | 580% |

Source: Creegan+D'Angelo Infrastructure Engineers, July 2008

**FIGURE 14**

**OPEN SPACE AND PARKS PLAN-WILLOW GLEN**

General Plan **Program 7.2.B** allows a development to fulfill the community park requirement, when unable to provide dedicated acreage, with in-lieu fees to be *"used for land acquisition and improvements that directly serve the subdivision project area unless a finding is made that the area is already served by existing neighborhood facilities. Fees may then be used for acquisition and development of community-wide facilities."* The following mitigation would be required to reduce impacts to community park space to a less than significant level.

**Mitigation Measure**

**MM 11-1a** As a condition of project approval, the project Applicant will be required to pay in-lieu Community Facility Impact Fees for the portion of community park space at a rate consistent with General Plan **Policy 7.2.19** and **Program 7.2.A.iv** of the City's General Plan (currently 2 acres of community parks per 1,000 residents). This fee shall be calculated based on the fee rate in place at the time of building permit issuance. This fee is required to be paid prior to occupancy permit issuance.

Implementation of **Mitigation Measure 11-1a** would reduce the impacts of insufficient community park requirements for the proposed project to a less than significant level by requiring the project Applicant to pay in-lieu Community Facility impact fees to be utilized by the City towards community park facilities prior to the issuance of occupancy permits.

As the proposed project does not include neighborhood parkland acreage, and **Program 7.2.A.iv** requires that *"All projects with 50 or more units shall include improved parkland within project boundaries,"* implementation of the proposed project would result in a **potentially significant** impact to neighborhood parklands. Therefore, the following mitigation measure would be required to reduce impacts to community parklands to a **less than significant** level.

**Mitigation Measure**

**MM 11-1b** The Applicant shall incorporate improved neighborhood parkland beyond areas used for recreation in buffer and drainage areas at a rate of *1.5 acres of neighborhood parks per 1,000 residents* consistent with General Plan **Policy 7.2.19** and **Program 7.2.A.iv** of the City's General Plan. This will include incorporation of neighborhood park in the currently proposed PD areas as follows:

- A minimum of 1.01 acres of neighborhood parkland shall be incorporated into the Mira Monte PD area.
- A minimum of 0.52 acres of neighborhood parkland shall be incorporated into the Willow Glen PD area.

Implementation of the above mitigation measure would reduce the impacts of insufficient neighborhood park requirements for the proposed project to a **less than significant** level by requiring the project Applicant include neighborhood parklands consistent with the City of Greenfield General Plan.

*e) Other Public Facilities?*

There are no other public facilities that will be affected by the proposed project. Therefore, **no impact** is anticipated.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **14. RECREATION** | | | | |
| *Would the project:* | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☒ | ☐ | ☐ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Ref. 1,16) | ☐ | ☐ | ☐ | ☒ |

DISCUSSION OF IMPACTS

*a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

As identified previously in **Section VI.14 Public Services**, implementation of the proposed project would result in increased use of neighborhood parks, regional parks and other recreation facilities. According to the *City of Greenfield General Plan*, **Policy 7.2.20**, subdivisions of fifty (50) dwelling units or more shall be required to incorporate improved parkland with the subdivision. **Program 7.2.A of** the General Plan applies guidelines to achieve a ratio of 3.9 acres of park per 1,000 development residents using the most recent City of Greenfield population per household data published by the County of Monterey.

The Applicant will satisfy the deficiency in dedicated community parkland through payment of in-lieu fees and will be required, through **Mitigation Measure 13-1**, Section VI.14 above, to incorporate improved neighborhood parkland with the subdivision consistent with **Program 7.2.A.iv** of the City's General Plan.

**Mitigation Measure**

Implementation of **Mitigation Measure 13-1**, outlined in Section VI.14 above, would reduce potential impacts to recreational facilities to a **less than significant** level by ensuring that the Applicant's meet the City's park requirements which have been established to ensure that there are adequate recreational facilities to serve the population.

*b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project does not include construction of recreational facilities. Development of the proposed project was anticipated in the City's General Plan and is in close proximity to the 19-acre Patriot Park. In addition, the development would be required to meet General Plan park requirements as outlined above and in Section VI.14. All of these park and open space requirements would adequately serve the residents of the project site and the surrounding community and be consistent with the park and open space requirements of the General Plan and Zoning Code. Therefore, this impact would be considered a **less than significant**.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **15. TRAFFIC AND CIRCULATION** | | | | |
| *Would the project:* | | | | |
| a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | ☐ | ☒ | ☐ | ☐ |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☒ | ☐ | ☐ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks? (Ref.1,2,16) | ☐ | ☐ | ☐ | ☒ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |
| f) Result in inadequate parking capacity? | ☐ | ☐ | ☒ | ☐ |
| g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☒ | ☐ |

DISCUSSION OF IMPACTS

The analysis in this section is based on the Traffic Impact Study (TIS) prepared by Higgins Associates (October 5, 2007) in consultation with the City of Greenfield. The TIS identifies potential transportation impacts of the proposed project on the surrounding roadway system and recommends feasible improvements to mitigate significant impacts. The impacts of the proposed project were estimated following guidelines utilized by the City of Greenfield. Traffic conditions under the following scenarios were evaluated: Existing Conditions; Background Conditions; Background Plus Project Conditions; and General Plan Buildout Conditions. The TIS was prepared with respect to the guidelines set forth in the Circulation Element of the *City of Greenfield General Plan* (2005). Future development proposals within the project area would require CEQA compliance separate from this environmental review.

In light of the revised proposed land use configuration presented in the current Project Description, a peer review dated August 20, 2008, was provided by PMC engineer Douglas Kim, which evaluated the applicability and soundness of the TIS by analyzing the TIS and the Fehr and Peers Peer Review memo dated October 18, 2007 to determine whether they are adequate in

assessing the overall traffic impacts for the revised project. The evaluation found that the revised project buildout assumes construction of up to 487 residential units, while the previous study assumed 490 units and a 500-student elementary school. The Higgins traffic analysis studied the impacts of a project that is more intense than the scaled-down project from a traffic generation standpoint. As such, it provides a worst-case scenario assessment of the new project that could continue to be used in the updated environmental analysis. The peer review of the original TIS included the following comments which should be considered in the final traffic analysis.

Trip Generation

1. The proposed project will generate fewer average daily trips (ADT) than the original project for two reasons. First, the elimination of the elementary school could reduce net ADT by 645 (prior to any internal capture credits). Second, the remaining 487 dwelling units would be less than the original proposal of 490 units. Third, the composition of new housing would shift towards a balance of single and multi-family units (252 multi-family homes) than the original proposal. Since apartments tend to generate fewer vehicle trips per unit than single family homes, this will tend to further lower potential trips.
2. Page 5. The TIS indicates the project is located in TAZ 16 and 17, but there appear to be no trips generated within TAZ 16 for this project. Specifically, there are 115 units of single family homes generating trips in TAZ 16 that are outside of the scope of the 487 dwelling units associated with the Villages. The TIS should clarify that the project generates trips solely to and from TAZ 17.
3. Page 25. The discussion about the Village's proposed school site is now irrelevant.
4. Exhibit 9. Background Projects Trip Generation. The table identifies the trip rate for single-family residences, but should also identify the trip rates for the other land use types analyzed for the TAZs, if there are internal capture trips assumed.
5. Exhibit 19. The discussion about the Village's proposed 20% internal capture rate is now irrelevant.
6. Exhibit 11. The table should identify the unit of measurement for the ITE rates identified at the top of the table.

Circulation

7. Circulation issues from the revised project may be slightly different than those addressed in the Higgins report, though the difference is not expected to be significant. In particular, the impacts from residential buildout of the area between the Mira Monte and Willow Glen planned developments should be minimal.

Traffic Counts

8. Page 7. The traffic counts that are the basis of the TIS were taken from August 2005 through May 2006. The City should be consulted to ensure it is comfortable with the use of the traffic counts to represent existing conditions, as some of those counts are nearly three years old. If new counts are updated, the amount of pending development expected to generate future trips on the network would need to be updated to avoid double-counting. However, as noted by the City Engineer (memo 9/15/08), there has not been a significant change in the project area.

Level of Service Analysis

9. Exhibit 6. The LOS Summary identifies many intersections that have lower delay and better LOS in the cumulative setting than in the background setting. Given that the

cumulative setting does not identify infrastructure improvements above-and-beyond those in the background setting, the reasons for these counterintuitive results should be explained in the TIS and/or Appendices.

Mitigation Measures

10. Page 21. Since the project will incrementally contribute to cumulative impacts on the US-101 freeway, the City should be consulted to determine if the project should contribute to mainline improvements or widening of the US-101.
11. Page 22. The TIS indicates that the Apple and 12th Street cross sections pose problems and may not be feasible. The study should clarify whether any mitigation measures are affected by the potential issues with both street segments.
12. Page 27. The study indicates that the project should restripe Walnut Avenue between 10th Street and El Camino Real to include left-turn lanes or a two-way left-turn lane. The Applicant and City should be consulted to ensure that this improvement will be funded by the Applicant (as opposed to funded through the City's Traffic Impact Fee program).
13. Page 28. The TIS indicates that improvements to be funded through the Traffic Impact Fee will be constructed as warranted. It would be helpful to identify when the City's TIF program expects to construct the improvements that serve as required mitigation measures for this project.

The conclusions of the TIS and its associated peer reviews are incorporated herein and the report is available for review at the City of Greenfield Community Development Department at 45 El Camino Real.

**TIS Methodology**

The TIS included quantitative level of service analyses for key study intersections and roadway segments, as shown below in **Table 17**.

**TABLE 17**
**STUDY INTERSECTIONS AND SEGMENTS**

| Intersections | |
|---|---|
| ***STATE*** | |
| 1. | Hwy 101 NB On-Ramp and Livingston Road |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road |
| 3. | El Camino Real and Hwy 101 SB On-Ramp |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) |
| 5. | Hwy 101 SB Ramps and Walnut Avenue |
| 6. | Hwy 101 NB Ramps and Walnut Avenue |
| ***City*** | |
| 7. | El Camino Real and Cypress Avenue |
| 8. | El Camino Real and Pine Avenue |
| 9. | El Camino Real and Cherry Avenue |
| 10. | El Camino Real and Walnut Avenue |

| | |
|---|---|
| 11. | El Camino Real and Apple Avenue |
| 12. | El Camino Real and Oak Avenue |
| 13. | El Camino Real and Elm Avenue |
| 14. | 10th Street and Cherry Avenue |
| 15. | 10th Street and Walnut Avenue |
| 16. | 12th Street and Cherry Avenue |
| 17. | 12th Street and Walnut Avenue |
| 18. | 12th Street and Apple Avenue |
| 19. | 12th Street and Elm Avenue |
| 20. | 13th Street and Walnut Avenue |
| 21. | 13th Street and Apple Avenue |
| **Segments** | |
| Walnut Avenue between 13th Street and 3rd Street | |
| El Camino Real between Thorne Road and Espinosa Road | |
| Apple Avenue between 12th Street and El Camino Real | |

*Source: TIS, Higgins Associates, 2007.*

The TIS also included an evaluation of bicycle and pedestrian circulation, transit service in the vicinity of the project site, as well as an evaluation of site access and circulation around the access points of the annexation area.

Segments were analyzed by making use of planning level of service analysis, based on either peak hour of daily volumes for the different classes of roadways. Segments are rated based on a grading scale of "LOS A" through "LOS F", with "LOS A" representing free flowing conditions and "LOS F" representing forced flow conditions. AMBAG model volumes were used in analysis of freeway segments.

Quantitative Levels of Service (LOS) analyses were performed for the study intersections and highway segments, based on the *2000 Highway Capacity Manual* methodologies. Intersection operations were evaluated using the Traffix analysis software.

Intersection traffic flow operations were evaluated using a level of service (LOS) concept. Intersections are rated based on a grading scale of "LOS A" through "LOS F", with "LOS A" representing free flowing conditions and "LOS F" representing forced flow conditions. Caltrans and the City of Greenfield have established LOS C as the minimum acceptable LOS for overall intersection operations. The downtown area along El Camino Real and the future 3rd Street has LOS D as the minimum acceptable standard.

Generally, LOS F operations on the minor street approach of two-way or one-way stop controlled intersections are considered the threshold warranting improvements.

For signalized intersections, average control delay per vehicle is utilized to define intersection level of service. Delay is dependent on a number of factors including the signal cycle length, the roadway capacity (number of travel lanes) provided on each intersection approach and the traffic demand. The TRAFFIX 7.7 software program was utilized to calculate signalized intersection levels of service.

At one and two-way stop controlled intersections, the operating efficiency of vehicle movements that must yield to through movements were analyzed. The level of service for vehicle movements on the controlled approaches is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps. The 2000 HCM calculates the level of service of the minor street approaches. Using this data, an overall intersection level of service was calculated. Both are reported in this study because traffic on the minor street approaches has the lowest priority of right-of-way at the intersection and is the most critical in terms of delay. The TRAFFIX 7.7 software program was utilized to calculate intersection levels of service for intersections that are one and two-way stop controlled.

For all-way (or four-way) stop intersections, average control delay per vehicle is utilized to define intersection level of service. Delay is dependent on a number of factors including the roadway capacity (number of travel lanes) provided on each intersection approach and the traffic demand. The TRAFFIX 7.7 software program was utilized to calculate all-way stop intersection levels of service.

A Traffic Analysis Zone (TAZ) map was created for the City's General Plan. The City was divided into planning areas based on land use type, roads and other characteristics in order to determine trip generation for each zone. The project is located in TAZ 16 and TAZ 17. The TAZ data in the general plan were updated to reflect the site plan information and reflects a detailed and more accurate traffic distribution to and from the project site.

Existing Conditions

Many residents commute north and south from Greenfield on Highway 101 on a daily basis. Thus trips leave the area in the morning and return to the City in the afternoon. Travel patterns are thus different between the morning and afternoon peak periods, with a resulting difference in directional travel demand.

As such it has been decided to prepare an AM and PM analysis for the project to accurately incorporate characteristics of both peak hours. As such, AM and PM peak period manual traffic counts were conducted at the project intersections, between August 10-16, 2005 and in May 2-10, 2006. These volumes were balanced to represent more accurate turning movements and the AM peak hour volumes were adjusted to include school traffic.

**Table 18**, below, tabulates the average delays and LOS for study intersections during the AM and PM peak hours under Existing Conditions.

**TABLE 18**
**EXISTING CONDITIONS LOS[1]**

| Intersection | LOS Standard | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay | LOS | Delay | LOS |
| 1. Hwy 101 NB On-Ramp and Livingston Road | C (E) | 1.5 (9.4) | A (A) | 1.7 (9.5) | A (A) |
| 2. El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | C (E) | 3.4 (9.6) | A (A) | 3.0 (11.9) | A (B) |
| 3. El Camino Real and Hwy 101 SB On-Ramp | C (E) | 4.4 (9.7) | A (A) | 2.9 (11.3) | A (B) |
| 4. Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | C (E) | 2.7 (9.7) | A (A) | 3.7 (10.2) | A (B) |
| 5. Hwy 101 SB Ramps and Walnut Avenue | C (E) | 2.2 (10.3) | A (B) | 3.7 (10.3) | A (B) |
| 6. Hwy 101 NB Ramps and Walnut Avenue | C (E) | 6.8 (13.8) | A (B) | 5.1 (13.0) | A (B) |
| 7. El Camino Real and Cypress Avenue | C (E) | 0.9 (9.9) | A (A) | 0.9 (11.7) | A (B) |
| 8. El Camino Real and Pine Avenue | C | 2.2 (9.9) | A (A) | 0.9 (11.6) | A (B) |
| 9. El Camino Real and Cherry Avenue | C (E) | 2.8 (9.7) | A (A) | 1.4 (10.9) | A (B) |
| 10. El Camino Real and Walnut Avenue | D | 11.2 | B | 22.5 | C |
| 11. El Camino Real and Apple Avenue | D | 8.3 | A | 13.1 | B |
| 12. El Camino Real and Oak Avenue | D | 9.6 | A | 11.8 | B |
| 13. El Camino Real and Elm Avenue | D (E) | 9.8 | A | 10.0 | A |
| 14. 10th Street and Cherry Avenue | C (E) | 2.5 (8.4) | A (A) | 3.8 (8.5) | A (A) |
| 15. 10th Street and Walnut Avenue | C (E) | 7.8 | A | 9.6 | A |
| 16. 12th Street and Cherry Avenue | C (E) | 2.4 (8.9) | A (A) | 2.7 (9.0) | A (A) |
| 17. 12th Street and Walnut Avenue | C (E) | 7.3 | A | 7.8 | A |
| 18. 12th Street and Apple Avenue | C (E) | 4.1 (11.2) | A (B) | 4.0 (11.7) | A (B) |
| 19. 12th Street and Elm Avenue | C (E) | 8.8 | A | 8.3 | A |
| 20. 13th Street and Walnut Avenue | C (E) | 4.8 (9.4) | A | 4.4 (9.1) | A |
| 21. 13th Street and Apple Avenue | C (E) | 4.1 (9.6) | A | 4.6 (9.0) | A |

*Source: TIS, Higgins Associates, 2007.*
*Notes: 1. Worst Approach in parentheses.*

Traffix 7.7 software was utilized in evaluating the Existing operational levels of service at the study intersections. The intersection turning movement volumes described under Section 2.4 was used in the analysis. The analysis was performed for the weekday AM and PM peak hours using the *2000 Highway Capacity Manual* (HCM) methodology. Planning level of service analysis was used to analyze the street segments. LOS A depicts free flow condition and LOS F gridlock conditions.

Factors that may affect traffic flow conditions on roadway segments include intersection channelization design, type of traffic control devices, bicycle and pedestrian volumes, driveway activities, and on-street parking activities. All the intersections operate at LOS A or B and no improvements are required.

Planning level of service analysis was performed to determine the LOS for the study segments. All segments operate at acceptable levels of service. The City's standard is LOS C for all segments except for El Camino Real through downtown where it is D, thus no mitigation is required.

Background Conditions

A number of new projects have been approved throughout the City of Greenfield that have not yet been constructed or are currently under construction. The following is a list of background (approved) projects within the City.

- Gianolini Development
- Thorp Development
- Rava Subdivision
- Cherry Subdivision
- Walnut Subdivision
- Arroyo Seco Center
- Greenfield Annexation (Chispa Project)

City staff indicated that the following number of units was occupied for these background development projects at the time we conducted the counts and the trip generation were subsequently reduced to include only the remainder of single-family dwelling units that will be developed.

- Gianolini Development – 47 SF units occupied
- Thorp Development – 35 SF units occupied
- Rava Subdivision – 80 SF units occupied
- Cherry Subdivision – 36 SF units occupied
- Walnut Subdivision – 12 SF units occupied

Even though more units have been occupied at the date of this report, the actual Background Conditions are accurate because the "non"- occupied units are added to the total buildout of the respective development. The background projects are expected to impact the study street network prior to impacts being experienced by the proposed project. Background project traffic is calculated using rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 7th Edition, 2003. Exhibit 8 in the TIS indicates the location of the background projects listed above. The approved projects will generate an estimated total of 23,860 daily weekday vehicular trips with 1,879 vehicular trips during the morning peak hour 2,389 vehicular trips during the evening peak hour. The trip assignments of the approved projects are combined with the existing traffic volumes to obtain background traffic volumes.

**Table 19**, below, summarizes the average delays and LOS for study intersections during the AM and PM peak hours under the Background Conditions.

**TABLE 19**
**BACKGROUND CONDITIONS LOS[1]**

| Intersection | | LOS Standard | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. | Hwy 101 NB On-Ramp and Livingston Road | C (E) | 1.4 (9.5) | A (A) | 1.6 (9.5) | A (A) |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | C (E) | 3.4 (9.6) | A (A) | 2.9 (12.1) | A (B) |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | C (E) | 4.4 (9.7) | A (A) | 2.8 (11.4) | A (B) |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | C (E) | 2.6 (9.8) | A (A) | 3.6 (10.3) | A (B) |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | C (E) | 3.5 (12.6) | A (B) | 5.9 (14.5) | A (B) |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | C (E) | 7.7 (30.1) | A (D) | 5.5 (33.9) | A (D) |
| 7. | El Camino Real and Cypress Avenue | C (E) | 0.8 (10.2) | A (B) | 0.8 (12.3) | A (B) |
| 8. | El Camino Real and Pine Avenue | C | 1.9 (10.2) | B (B) | 0.8 (12.2) | A (B) |
| 9. | El Camino Real and Cherry Avenue | C (E) | 3.5 (10.0) | A (B) | 1.8 (11.4) | A (B) |
| 10. | El Camino Real and Walnut Avenue | D | 14.2 (26.6) | B (C) | 52.3 (29.3) | F (C) |
| 11. | El Camino Real and Apple Avenue | D | 9.0 | A | 19.8 | C |
| 12. | El Camino Real and Oak Avenue | D | 34.8 (18.7) | D (B) | 158.2 (21.7) | F (C) |
| 13. | El Camino Real and Elm Avenue | D (E) | 14.8 | B | 16.5 | C |
| 14. | 10th Street and Cherry Avenue | C (E) | 2.5 (8.4) | A (A) | 3.8 (8.5) | A (A) |
| 15. | 10th Street and Walnut Avenue | C (E) | 2.4 (8.9) | A (A) | 2.4 (8.9) | A (A) |
| 16. | 12th Street and Cherry Avenue | C (E) | 8.6 | A | 11.4 | B |
| 17. | 12th Street and Walnut Avenue | C (E) | 7.6 | A | 8.4 | A |
| 18. | 12th Street and Apple Avenue | C (E) | 4.7 (12.5) | A (B) | 6.7 (15.9) | A (C) |
| 19. | 12th Street and Elm Avenue | C (E) | 12.1 | B | 14.1 | B |
| 20. | 13th Street and Walnut Avenue | C (E) | 3.8 (9.7) | A (A) | 4.6 (9.6) | A (A) |
| 21. | 13th Street and Apple Avenue | C (E) | 3.4 (10.4) | A (B) | 3.7 (9.9) | A (A) |

*Source: TIS, Higgins Associates, 2007.*
*Notes: 1. Worst Approach in parentheses*

Most study intersections will operate at acceptable LOS; however, the all-way stop intersection of El Camino Real / Oak Avenue will operate at LOS D during the AM peak hour and LOS F during the PM peak hour, and the all-way stop intersection of El Camino Real / Walnut Avenue would operate at LOS B during the AM peak your and LOS F during the PM peak hour. It is recommended that a traffic signal be installed at these intersections along with re-striping to provide left turn lanes on all four legs. This would bring the El Camino Real / Oak Avenue intersection to LOS B during the AM peak hour and LOS C during the PM peak hour and the El Camino Real / Walnut Avenue intersection to LOS C during both the AM and PM peak hours. The PM peak hour signal warrants are met for these intersections under Background Conditions. A full traffic signal warrant analysis will have to be performed prior to installation of a traffic signal. All study segments will continue to operate at LOS A.

Project Trip Generation and Distribution

Project traffic was calculated using rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 7th *Edition, 2003*. The project is expected to generate 5,221 daily trips with 568 trips in the morning peak hour (205 in, 363 out) and 499 trips in the evening peak hour (309 in, 190 out). The project-generated trips were assigned over the area traffic network via the proposed access points off of Walnut Avenue, Apple Avenue, 10th Street, and 12th Street. Also, the trip distribution used for GPBO conditions is different because of the additional retail and industrial uses that would be located on the east side of town and which would attract employment trips. These trips are reflected in the trip generation for the retail uses and the industrial uses. The project trip generation from the project TAZ has subsequently been reduced to balance the total trip generation, and not to double count the trips to and from the zone. The study intersection volumes associated with the background projects were added to the project traffic to obtain background plus project conditions.

Existing Roadway System

**El Camino Real** is a primary access route in the City, running in the north-south direction, and provides access to Highway 101 to the north and south of the City, Greenfield Elementary School, and Greenfield High School. It is currently a two-lane arterial with left and right turn channelization throughout the City. It is planned to be a four-lane facility north of Walnut Avenue and south of Elm Avenue under GPBO conditions. In the downtown area it would be a two-lane facility with on street parking and low operational speeds.

**Pine Avenue** is currently a two-lane suburban road running in the east-west direction. In the west it commences to outside the City limits. To the east it ends just before it reaches Highway 101 and starts again on the other side of the highway. It is planned to be a two-lane divided arterial under GPBO conditions and is planned to be connected across Highway 101.

**Cherry Avenue** is a two-lane road running in the east-west direction. It commences outside of the City in the west and terminates as it approaches Highway 101 and starts again on the other side of the highway. It is planned to remain as a two-lane facility in the future, but be upgraded to City standards.

**Apple Avenue** is a two-lane road running in the east-west direction. It commences outside of the City in the west and terminates as it approaches Highway 101 and starts again on the other side of the highway. It is planned to remain as a two-lane facility in the future, but be upgraded to City standards.

**13th Street** is currently a two-lane road running in the north-south direction. This road currently begins at Cypress Avenue and ends at Elm Avenue.

**Walnut Avenue** is currently a two-lane road running in the east-west direction through the City. This road provides access to Highway 101, Greenfield Elementary School, and Santa Lucia Square. It is planned to be a four-lane divided arterial from El Camino Real to Highway 101, a four to six-lane divided arterial just east of Highway 101, a two-lane divided arterial west of 3rd Street and a two-lane divided arterial between 10th Street and El Camino Real. Along the project site it will be a two lane collector street.

**Oak Avenue** is currently a two-lane undivided road running in the east-west direction through the City. This road provides access to Highway 101. It is planned to be a two-lane divided facility between 12th Street and 3rd Street.

**10th Street** is a two-lane local street running in the north-south direction. This road begins at Cherry Avenue and ends at Elm Avenue.

**12th Street** is currently a two-lane road running in the north-south direction. This road currently begins at Cypress Avenue and ends at Elm Avenue. It is planned to be a two-lane divided arterial north of Oak Avenue and would extend up to Thorne Road under GPBO conditions.

**Elm Avenue** is currently a two-lane undivided arterial road running in the east-west direction traversing the southerly portion of the City. To the west of the town, Elm Avenue becomes Arroyo Seco Road and to the east it links to Metz Road.

Existing Transit Services

The City currently has a transit system called Auto Lift, which operates from 9:30 AM to 4:30 PM Monday through Friday. Riders are required to call within 20 minutes prior to their pick-up time.

MST Routes 23 and 53 currently travels through the City of Greenfield. Route 23 is a bus line that runs between 5:40 AM to 9:50 PM. Route 23 starts at the Northridge Mall in Salinas and loops around at King City. It includes stops in Chualar, Gonzales, Soledad, and Greenfield. Route 53 is an express bus line that runs twice a day, during the AM and PM peak hours only. In the morning, Route 53 begins at the Mee Memorial Hospital in King City at 5:45 AM and ends at The Lodge in Pebble Beach at approximately 7:45 AM. In the evening, Route 53 begins at The Lodge in Pebble Beach at 4:35 PM and ends at Mee Memorial Hospital in King City at approximately 6:55 PM. It includes stops in Pacific Grove, Monterey, Del Rey Oaks, Chualar, Gonzales, Soledad, and Greenfield. The project is located approximately half a mile from the bus route along El Camino Real.

Existing Bikeways

The City of Greenfield has included a Bike Plan in the new General Plan. The City adopted the Caltrans description for bicycle facilities in the city. Types of bikeways are described by Caltrans in the *Highway Design Manual* as follows:

- *Class I Bikeway* - Referred to as a "bike path" or "multi-use trail". Provides for bicycle travel on a paved ROW completely separated from any street or highway.
- *Class II Bikeway* - Referred to as a "bike lane". Provides striped lane for one-way travel on a street or highway.
- *Class III Bikeway* – Referred to as a "bike route". Provides for shared use with pedestrians or motor vehicle traffic and is identified only by signing.

Currently, within the project vicinity, there is an existing Class III Bike Lane on Walnut Avenue between 12th Street and Highway 101. El Camino Real is also a Class III bike facility from Apple Avenue to Walnut Avenue. El Camino Real is a Class II bike facility from Tyler Street south to the High School entrance.

a) *Would the project cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?*

b) *Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

**Background Plus Project Conditions**

**Table 20** summarizes the average delays and LOS for the study intersections during the AM and PM peak hours under Background Plus Project Conditions.

**TABLE 20**
**BACKGROUND PLUS PROJECT LOS[1]**

| Intersection | | LOS Standard | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. | Hwy 101 NB On-Ramp and Livingston Road | C (E) | 1.5 (9.8) | A (A) | 1.4 (9.7) | A (B) |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | C (E) | 3.1 (9.7) | A (A) | 2.6 (12.4) | A (B) |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | C (E) | 4.4 (9.7) | A (A) | 2.8 (11.4) | A (B) |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | C (E) | 2.2 (10.1) | A (B) | 3.3 (10.5) | A (B) |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | C (E) | 3.5 (13.7) | A (B) | 6.7 (15.7) | A (C) |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | C (E) | 16.4 (73.2) | C (F) | 20.2 (96.7) | C (F) |
| 7. | El Camino Real and Cypress Avenue | C (E) | 2.3 (10.7) | A (B) | 1.5 (12.9) | A (B) |
| 8. | El Camino Real and Pine Avenue | C | 1.9 (10.2) | A (B) | 0.8 (12.2) | A (B) |
| 9. | El Camino Real and Cherry Avenue | C (E) | 3.5 (10.0) | A (B) | 1.4 (10.9) | A (B) |
| 10. | El Camino Real and Walnut Avenue | D | 33.2 (25.7) | D (C) | 116.7 (30.9) | F (C) |
| 11. | El Camino Real and Apple Avenue | D | 9.0 | A | 21.7 | C |
| 12. | El Camino Real and Oak Avenue | D | 46.2 (18.6) | E (B) | 187.6 (22.2) | F (C) |
| 13. | El Camino Real and Elm Avenue | D (E) | 15.1 | C | 16.6 | C |
| 14. | 10th Street and Cherry Avenue | C (E) | 2.5 (8.4) | A (A) | 1.5 (10.3) | A (B) |
| 15. | 10th Street and Walnut Avenue | C (E) | 11.6 | B | 20.6 | C |
| 16. | 12th Street and Cherry Avenue | C (E) | 2.0 (9).0 | A (A) | 2.2 (9.2) | A (A) |
| 17. | 12th Street and Walnut Avenue | C (E) | 9.5 | A | 11.0 | B |
| 18. | 12th Street and Apple Avenue | C (E) | 6.2 (15.3) | A (B) | 9.6 (24.3) | A (C) |
| 19. | 12th Street and Elm Avenue | C (E) | 12.5 | B | 14.5 | B |
| 20. | 13th Street and Walnut Avenue | C (E) | 3.8 (10.9) | A (B) | 4.6 (10.7) | A (B) |
| 21. | 13th Street and Apple Avenue | C (E) | 3.4 (12.2) | A (B) | 4.1 (10.4) | A (B) |

*Source: TIS, Higgins Associates, 2007.*
*Notes: 1. Worst Approach in parentheses*

Intersections

Most of the study intersections will continue to operate at acceptable LOS under Background Plus Project Conditions, with the exception of the following, resulting in a **potentially significant** impact:

- The one-way stop intersection of Hwy 101 NB Ramps / Walnut Avenue would operate at overall LOS C during both the AM and the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an overall standard of LOS C and LOS standard of E on the worst approach for a one-way stop intersection, mitigation is required. The close spacing with the northbound ramp terminal will require mitigation at the southbound terminal as well.
- The all-way stop intersection of El Camino Real / Walnut Avenue would operate at LOS D during the AM peak hour and LOS F during the PM peak hour, thus with a LOS standard of D mitigation is required.
- The all-way stop intersection of El Camino Real / Oak Avenue would operate at LOS E during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of D, mitigation is required.

It is noted that significant deficiencies identified in the TIS and listed above, for the all-way stop intersection of El Camino Real / Walnut Avenue and El Camino Real / Oak Avenue have been resolved through improvements completed in March 2008 as components of the City's Traffic Signal Project (Mike Ranker, City Engineer memo 9/15/08). These improvements included the following:

- The intersection of El Camino Real/Oak Avenue was signalized and re-striped,
- the two Walnut Avenue/Highway 101 terminals were signalized and coordinated, and
- an exclusive westbound right turn lane and a separate northbound right turn lane at the Walnut Avenue/Highway 101 NB Ramp terminal was provided.

These improvements will ensure that the intersections will operate at LOS C or better. Therefore mitigation is no longer required for these improvements.

Road Segments

All study segments are expected to operate at LOS C or better except for the segments indicated below, resulting in a **potentially significant** impact:

- The segment on Walnut Avenue between 13th Street and 12th Street would operate at LOS F during both the AM and PM peak hour. The City's standard is LOS C, thus mitigation is required to improve the level of service for the segment on Walnut Avenue.
- The segment on Walnut Avenue between 10th Street and El Camino Real operates at LOS A during the AM peak hour and LOS D during the PM peak hour. The City's standard is LOS C, thus mitigation is required to improve the level of service.

The following mitigation measure is required to reduce identified impacts to a less than significant level.

**Mitigation Measure**

**MM 15-1a** The Final Map for the project shall indicate that that with construction of the project, Walnut Avenue will be widened along the project frontage and will be a two-lane collector street (82' ROW and 62 FC-FC). As a component **MM 15-2** below, Walnut Avenue will be re-striped to a two-lane divided collector with a two-way left-turn lane.

With construction of the project, Walnut Avenue will be widened along the project frontage and will be a two-lane collector street (82' ROW and 62 FC-FC), which would mitigate the operational impact to a less than significant level. In addition, Walnut Avenue will be re-striped to a two-lane divided collector with a two-way left-turn lane; reducing the impact to a **less than significant** level.

The segment on Apple Avenue between 13th Street and 12th Street operates at LOS E during the PM peak hour. The City's standard is LOS C, thus mitigation is required to improve the level of service for the segment on Walnut Avenue. This is a **potentially significant impact.**

**Mitigation Measure**

**MM 15-1b** The Final Map for the project shall indicate that with construction of the project, Apple Avenue will be widened along the project frontage and will be a two-lane collector street (68' ROW and 48' FC-FC).

With construction of the project, Apple Avenue will be widened along the project frontage and will be a two-lane collector street this will reduce the impact to a **less than significant** level. This cross section continues from the east and provides for two 12' travel lanes and two 8' parking along each side of the street. The section of 12th Street between Apple Avenue and Walnut Avenue will be widened to a two lane local street with 68' ROW and 48' FC-FC. This cross section corresponds with the existing cross section on 12th Street immediately south of the site. The east side of 12th Street adjacent to the project has already been constructed and is approximately 30 feet wide. The project would widen the road to 48 feet. The section of 13th Street between Apple Avenue and Walnut Avenue will have width of 62' FC-FC and a ROW of 82' per the City's General Plan.

### Cumulative Traffic Conditions With Known Projects

A number of other development projects are currently in process in the City. These projects have not yet been approved and are pending approval.

- Sundance Development
- Cornnuts Annexation
- YOP Annexation (Neighborhood Commercial)

The cumulative projects will generate an estimated total of 10,238 daily weekday vehicular trips with 679 vehicular trips during the morning peak hour 1,217 vehicular trips during the evening peak hour.

**Table 21**, below, summarizes the average delays and LOS for the study intersections during the AM and PM peak hours under Cumulative Conditions.

**TABLE 21**
**CUMULATIVE CONDITIONS LOS[1]**

| Intersection | | LOS Standard | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. | Hwy 101 NB On-Ramp and Livingston Road | C (E) | 1.0 (10.3) | A (B) | 1.7 (10.2) | A (B) |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | C (E) | 2.8 (9.9) | A (A) | 2.4 (13.5) | A (B) |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | C (E) | 4.1 (9.9) | A (A) | 3.9 (12.0) | A (B) |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | C (E) | 1.7 (10.7) | A (B) | 2.7 (11.1) | A (B) |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | C (E) | 3.7 (16.2) | A (C) | 10.0 (28.0) | B (D) |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | C (E) | 72.4 (*) | F (F) | 146.3 (*) | F (F) |
| 7. | El Camino Real and Cypress Avenue | C (E) | 1.9 (11.8) | A (B) | 1.4 (15.2) | A (C) |
| 8. | El Camino Real and Pine Avenue | C | 3.6 (11.5) | A (B) | 2.1 (15.2) | A (C) |
| 9. | El Camino Real and Cherry Avenue | C (E) | 6.1 (11.2) | A (B) | 4.7 (18.6) | A (C) |
| 10. | El Camino Real and Walnut Avenue | D | 100.9 (30.5) | F (C) | 270.4 (44.4) | F (D) |
| 11. | El Camino Real and Apple Avenue | D | 9.2 | A | 27.9 | D |
| 12. | El Camino Real and Oak Avenue | D | 48.8 (18.8) | E (B) | 207.7 (22.7) | F (C) |
| 13. | El Camino Real and Elm Avenue | D (E) | 15.7 | C | 17.8 | C |
| 14. | 10th Street and Cherry Avenue | C (E) | 1.5 (10.3) | A (B) | 2.5 (11.8) | A (B) |
| 15. | 10th Street and Walnut Avenue | C (E) | 17.8 (5.1) | C (A) | 65.5 (5.1) | F (A) |
| 16. | 12th Street and Cherry Avenue | C (E) | 2.7 (9.3) | A (A) | 2.8 (9.3) | A (A) |
| 17. | 12th Street and Walnut Avenue | C (E) | 9.8 | A | 11.8 | B |
| 18. | 12th Street and Apple Avenue | C (E) | 6.3 (16.1) | A (C) | 10.1 (25.7) | B (D) |
| 19. | 12th Street and Elm Avenue | C (E) | 13.0 | B | 15.4 | C |
| 20. | 13th Street and Walnut Avenue | C (E) | 3.8 (10.9) | A (B) | 4.5 (10.6) | A (B) |
| 21. | 13th Street and Apple Avenue | C (E) | 3.4 (12.2) | A (B) | 4.2 (10.3) | A (B) |

*Source: TIS, Higgins Associates, 2007.*
*Notes: 1. Worst Approach in parentheses, * = Delay exceeds 300 seconds (5 minutes)*

Several of the study intersections will operate at an unacceptable LOS under cumulative conditions, which would be considered a **potentially significant** impact:

- The one-way stop intersection of Hwy 101 NB Ramps / Walnut Avenue would operate at overall LOS F during both the AM and the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required. Even though the Traffix analysis indicates that the Highway 101 SB Ramps/Walnut Avenue will operate at acceptable levels of service, the queues from the northbound ramp terminal will overflow into the southbound intersection and both intersections will require improvements.

- The all-way stop intersection of El Camino Real / Walnut Avenue would operate at LOS F during both the AM and the PM peak hour, thus with an LOS standard of D, mitigation is required.
- The all-way stop intersection of El Camino Real / Oak Avenue would operate at LOS E during both the AM and LOS F during the PM peak hour, thus with an LOS standard of D, mitigation is required.
- The all-way stop intersection of 10th Street / Walnut Avenue would operate at LOS C during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of C, mitigation is required.

The following mitigation measure is required to reduce impacts to these intersections to a **less than significant** level.

**Mitigation Measure**

**MM 15-2** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee[1] prior to the issuance of building permit.

Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

- With signalization and coordination of the signals at the two Walnut Avenue/Highway 101 terminals, as well as providing an exclusive westbound right turn lane and a separate northbound right turn lane at the Walnut Avenue/Highway 101 NB Ramp terminal, the intersections would operate at LOS C or better.
- The intersection of 10th Street/Walnut Avenue will operate at LOS A during both the AM and PM peak hours with signalization and re-striping of eastbound and westbound legs to accommodate left-turn lanes. On-street parking would have to be removed.

As a component of the recently completed Traffic Signal Project, he intersection of El Camino Real/Walnut Avenue was signalized and re-striped to include separate left, through and right lanes on all approaches and operate at LOS C during the AM and LOS D during the PM peak hour. Also the intersection of El Camino Real/Oak Avenue was signalized and re-striped for protected left-turn phasing and will operate at LOS B during the AM peak hour and LOS C during the PM peak hour. Implementation of the remaining mitigation measures identified by the traffic consultant above would reduce impacts to these intersections to a **less than significant** level.

Some of the study segments will operate at unacceptable levels of service as indicated below. The City's standard is LOS C or D, which would be considered a **potentially significant** impact:

The following segments would operate at unacceptable LOS.

- Walnut Avenue between 13th Street and 12th Street (LOS F)

[1] The City of Greenfield adopted the new Traffic Impact Fee Program in January 2007. The current fee for residential units is $9,967.00 per single family dwelling unit. Thus the project would contribute $2,511,684.00 (252 units x $9,967.00) to the fee. Future development on the remainder parcels would contribute based on the proposed land use of any future development proposal. Detail of the required improvements is indicated in the City's General Plan.

- Walnut Avenue between 10th Street and El Camino Real (LOS D)
- Apple Avenue between 13th Street and 12th Street (LOS F)

The following mitigation measure is required to reduce impacts to these intersections to a **less than significant** level.

**Mitigation Measure**

**MM 15-3** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee prior to the issuance of building permit.

Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

- The streets on the project frontage will all be upgraded to standards that will insure acceptable operating conditions.
- Walnut Avenue between 10th Street and El Camino Real will have to be restriped to include left-turn lanes or a two-way left turn lane. On-street parking may have to be removed. The project should implement this improvement.

Implementation of the above mitigation measure would reduce impacts to these intersections to a **less than significant** level.

**GPBO Traffic Conditions**

The General Plan Traffix Model, which includes the Sphere-of-Influence (SOI) Buildout land use assumptions, was used for long-term analysis. The project traffic was included to the GPBO scenario and analyzed. **Table 22**, below, summarizes the average delays and LOS for the study intersections during the AM and PM peak hours under General Plan Buildout Conditions.

**TABLE 22**
**GPBO CONDITIONS LOS[1]**

| Intersection | | LOS Standard | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. | Hwy 101 NB On-Ramp and Livingston Road | C (E) | 374.5 (*) | F (F) | * (*) | F (F) |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | C (E) | 3.0 (59.7) | A (F) | * (*) | F (F) |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | C (E) | 382.7 (*) | F (F) | * (*) | F (F) |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | C (E) | 203.0 | F (F) | * (*) | F (F) |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | C (E) | * (*) | F (F) | * (*) | F (F) |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | C (E) | * (*) | F (F) | * (*) | F (F) |
| 7. | El Camino Real and Cypress Avenue | C (E) | 138.9 (*) | F (F) | * (*) | F (F) |
| 8. | El Camino Real and Pine Avenue | C | * (*) | F (F) | * (*) | F (F) |
| 9. | El Camino Real and Cherry Avenue | C (E) | 26.0 (127.0) | D (F) | 159.9 (*) | F (F) |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10. | El Camino Real and Walnut Avenue | D | 233.6 (30.3) | F (C) | * (44.2) | F (D) |
| 11. | El Camino Real and Apple Avenue | D | 10.6 (24.9) | B (C) | 73.1 (30.4) | F (C) |
| 12. | El Camino Real and Oak Avenue | D | 49.9 (26.3) | E (C) | 229.5 (34.7) | F (C) |
| 13. | El Camino Real and Elm Avenue | D (E) | 54.1 (24.1) | F (C) | 97.5 (27.1) | F (C) |
| 14. | 10th Street and Cherry Avenue | C (E) | 1.2 (10.5) | A (B) | 1.7 (12.0) | A (B) |
| 15. | 10th Street and Walnut Avenue | C (E) | 12.3 (4.4 | B (A) | 81.4 (4.8) | F (A) |
| 16. | 12th Street and Cherry Avenue | C (E) | 2.8 (11.2) | A (B) | 2.6 (13.9) | A (B) |
| 17. | 12th Street and Walnut Avenue | C (E) | 11.1 | B | 18.9 | C |
| 18. | 12th Street and Apple Avenue | C (E) | 4.5 (13.2) | A (B) | 5.3 (18.1) | A (C) |
| 19. | 12th Street and Elm Avenue | C (E) | 14.1 | B | 17.9 | C |
| 20. | 13th Street and Walnut Avenue | C (E) | 5.1 (11.4) | A (B) | 5.6 (12.5) | A (B) |
| 21. | 13th Street and Apple Avenue | C (E) | 3.6 (11.1) | A (B) | 4.7 (11.9) | A (B) |

*Source: TIS, Higgins Associates, 2007.*
*Notes: 1. Worst Approach in parentheses, * = Delay exceeds 300 seconds (5 minutes)*

As shown in the table above, the following intersections are projected to operate at unacceptable LOS under GPBO conditions, resulting in a **potentially significant** impact:

- The two-way stop intersection of Hwy 101 SB Ramps / Livingston Road would operate at overall LOS F during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.
- The one-way stop intersection of El Camino Real/Hwy 101 SB Ramps / Thorne Road would operate at overall LOS A during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.
- The two-way stop intersection of El Camino Real/Hwy 101 SB Ramps / Gas Station Driveway would operate at overall LOS F during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.
- The one-way stop intersection of Hwy 101 NB Ramps Overpass / Hwy 101 SB On-Ramp at El Camino (north) would operate at overall LOS F during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.
- The one-way stop intersection of Hwy 101 NB Ramps / Walnut Avenue would operate at overall LOS F during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.

- The one-way stop intersection of Hwy 101 SB Ramps / Walnut Avenue would operate at overall LOS F during the AM and LOS F during the PM peak hour and on the worst approach at LOS F during both the AM and the PM peak hour, thus with an LOS standard of C, intersection mitigation is required.
- The two-way stop intersection of El Camino Real / Cypress Avenue would operate at LOS F during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of C, mitigation is required.
- The two-way stop intersection of El Camino Real / Pine Avenue would operate at LOS F during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of C, mitigation is required.
- The two-way stop intersection of El Camino Real / Cherry Avenue would operate at LOS D during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of C, mitigation is required.
- The all-way stop intersection of El Camino Real / Walnut Avenue would operate at LOS F during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of D, mitigation is required.
- The all-way stop intersection of El Camino Real / Apple Avenue would operate at LOS B during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of D, mitigation is required.
- The all-way stop intersection of El Camino Real / Oak Avenue would operate at LOS E during the AM and LOS F during the PM peak hour, thus with an LOS standard of D, mitigation is required.
- The all-way stop intersection of 10th Street / Walnut Avenue would operate at LOS B during the AM peak hour and LOS F during the PM peak hour, thus with an LOS standard of C, mitigation is required.

Additionally, the following segments will operate at adverse levels of service:

- Walnut Avenue between 13th Street and 12th Street (LOS F)
- Walnut Avenue between 12th Street and 10th Street (LOS D)
- Walnut Avenue between 10th Street and El Camino Real (LOS F)
- Walnut Avenue between El Camino Real and Hwy. 101 SB Ramps (LOS F)
- Walnut Avenue between Hwy. 101 NB Ramps and 3rd Street (LOS F)
- El Camino Real between Thorne Road and Pine Avenue (LOS F)
- El Camino Real between Pine Road and Cherry Avenue (LOS F)
- El Camino Real between Cherry Avenue and Walnut Avenue (LOS F)
- El Camino Real between Walnut Avenue and Apple Avenue (LOS E)
- El Camino Real between Apple Avenue and Oak Avenue (LOS F)
- Apple Avenue between 12th Street and 10th Street (LOS F)

Several intersection and segments improvements are required for GPBO conditions. The project adds incrementally to the adverse levels of service at all the impacted segments and intersections listed below. The project would mitigate its impacts by paying the City's Traffic Impact Fees. Improvements would be constructed when warranted. The City is currently conducting a PSR for the Walnut avenue interchange.

The project will have to make street, curb and gutter, sidewalk and landscaping improvements on the property frontages along Walnut Avenue, Apple Avenue, 12th Street and 13th Street as indicated in the report.

The following are the intersection improvements required for GPBO conditions.

Cumulative traffic generated by the proposed project and buildout of the General Plan would decrease operations at study intersections and segments to unacceptable LOS. Therefore, the cumulative impact would be considered a **potentially significant cumulative** impact, requiring the following mitigation.

**Mitigation Measure**

**MM 15-4** The City of Greenfield requires that the Applicant pay the City's adopted Traffic Impact Fee prior to the issuance of building permit.

Payment of the fee shall represent the Applicant's fair share contribution towards the following improvements:

**TABLE 23**
**INTERSECTION IMPROVEMENTS**

| | Intersection/Segment | GPBO with Project Conditions |
|---|---|---|
| 1. | Hwy 101 NB On-Ramp and Livingston Road | Signalization and following geometry:<br>NB: 2BT, 2NBR<br>EB: 1EBT, 1EBT/R, 1EBR<br>WB: 2WBL, 2WBR |
| 2. | El Camino Real and Hwy 101 SB Off-Ramp – Thorne Road | Construction of new interchange with new Highway 101 overpass connecting to Thorne Road and following geometry:<br>NB: 1NBL, 1NBT, 2NBR<br>SB: 2SBL, 1SBT, 1SBR<br>EB: 1EBL, 1EBT, 1EBT/R<br>WB: 1WBL, 1WBT, 1WBR |
| 3. | El Camino Real and Hwy 101 SB On-Ramp | No intersection—new interchange |
| 4. | Hwy 101 NB On-Ramp and Hwy 101 SB On-Ramp (El Camino north) | No intersection—new interchange |
| 5. | Hwy 101 SB Ramps and Walnut Avenue | Construction of a new Walnut Avenue bridge. The City is currently conducting a PSR for this interchange project. Geometry:<br>SB-Off Ramp: 2SBL, 1SBT/L, 1SBR<br>SB-On Ramp: 2SBT<br>EB: 3EBT, 1EBR<br>WB: 2WBL, 1WBT |
| 6. | Hwy 101 NB Ramps and Walnut Avenue | Construction of a new Walnut Avenue bridge. The City is currently conducting a PSR for this interchange project. Geometry:<br>NB-Off Ramp: 1NBL/T, 2NBR<br>NB-On Ramp: 2NBT<br>EB: 2EBL, 3EBT<br>WB: 2WBL, 1WBT, 2WBR |
| 7. | El Camino Real and Cypress | Signalization, re-striping and following |

| | | |
|---|---|---|
| | Avenue | geometry:<br>NB: 1NBL, 1NBT, 1NBT/R<br>SB: 1SBL, 2SBT, 1SBR<br>EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 8. | El Camino Real and Pine Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 2NBT, 1NBR<br>SB: 1SBL, 2SBT, 1SBR<br>EB: 1EBL, 1EBT/R<br>WB: 1WBL, 1 WBT, 1WBR |
| 9. | El Camino Real and Cherry Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 1NBT, 1NBT/R<br>SB: 1SBL, 1SBT, 1SBT/R<br>EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 10. | El Camino Real and Walnut Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT, 1NBL<br>SB: 2SBL, 1SBT, 1SBR<br>EB: 1 EBL, 1EBT/R<br>WB: 1WBL, 1WBT, 1WBR |
| 11. | El Camino Real and Apple Avenue | Signalization, re-striping and following geometry:<br>NB: 1NBL, 1NBT/R<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL/T/R<br>WB: 1WBL/T/R |
| 12. | El Camino Real and Oak Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT/R<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL, 1EB/T/R<br>WB: 1WBL, 1WBT/R |
| 13. | El Camino Real and Elm Avenue | Signalization, re-striping and following geometry (completed in March 2008 as part of the on-going traffic signal project):<br>NB: 1NBL, 1NBT, 1NBR<br>SB: 1SBL, 1SBT/R<br>EB: 1EBL, 1EB/T/R<br>WB: 1WBL, 1WBT/R |
| 14. | 10th Street and Cherry Avenue | No intersection improvements necessary. |
| 15. | 10th Street and Walnut Avenue | Signalization and re-striping for separate eastbound left and separate westbound left-turn lanes. |

| | |
|---|---|
| 16. 12th Street and Cherry Avenue | No intersection improvements necessary. |
| 17. 12th Street and Walnut Avenue | No intersection improvements necessary. |
| 18. 12th Street and Apple Avenue | No intersection improvements necessary. |
| 19. 12th Street and Elm Avenue | No intersection improvements necessary. |
| 20. 13th Street and Walnut Avenue | No intersection improvements necessary. |
| 21. 13th Street and Apple Avenue | No intersection improvements necessary. |

**TABLE 24**
**RECOMMENDED SEGMENT MITIGATIONS FOR THE GPBO CONDITIONS**

| Street | Existing Lanes | Mitigated Lanes for GPBO with Project | Mitigated LOS for GPBO with project |
|---|---|---|---|
| Walnut Avenue between 13th Street and 12th Street | 2-Lane Collector | 2-Lane Arterial | A |
| Walnut Avenue between 12th Street and 10th Street | 2-Lane Collector | 2-Lane Arterial | A |
| Walnut Avenue between 10th Street and El Camino Real | 2-Lane Collector | 2-Lane Arterial | C |
| Walnut Avenue between El Camino Real and Hwy 101 SB Ramps | 2-Lane Arterial | 4-Lane Divided Arterial | B |
| Walnut Avenue between Hwy 101 NB Ramps 3rd Street | 2-Lane Collector | 4-Lane Divided Arterial | C |
| El Camino Real between Thorne Road and Pine Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Pine Avenue and Cherry Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Cherry Avenue and Walnut Avenue | 2-Lane Collector | 4-Lane Divided Arterial | A |
| El Camino Real between Walnut Avenue and Apple Avenue | 2-Lane Collector | 2-Lane Arterial | A |
| El Camino Real between Apple Avenue and Oak avenue | 2-Lane Collector | 2-Lane Arterial | A |
| Apple Avenue between 13th Street and 12th Street | 2-Lane Local Street | 2-Lane Collector Street (Improved FC-FC) | A |

Payment of applicable traffic impact fees and street improvements listed above would reduce the impacts to **less than significant** levels.

Walnut Avenue is planned to be widened to a four lane facility between El Camino Real and Highway 101. West of El Camino Real, Walnut Avenue requires a cross section that includes two through lanes and a median lane for left turn movements to adjacent properties. The City plans to upgrade El Camino Real to a four lane divided facility north of Walnut Avenue. The project adds incrementally to the adverse levels of service for all the segments listed. The project would mitigate the cumulative impacts by paying the City's Traffic Impact Fees through **Mitigation Measures 15-1** through **15-4** to reduce potentially significant impacts cause by implementation of the proposed project to a **less than significant** level.

Substantial growth is being forecasted in all the Cities in the Salinas Valley along the Highway 101 corridor over the next 20 to 25 years. Subsequently traffic is expected to grow along Highway 101 as well. Recent proposed developments in King City revealed some increased long-term traffic forecasts from the AMBAG regional model on Highway 101 and these traffic volumes were used to calculate the corresponding levels of service for Highway 101 north and south of Greenfield. There is an increase in Highway 101 volumes especially south of Greenfield based on the proposed King City Developments, which also impacts Highway 101 through the City of Greenfield. The most recent volumes are estimates only and have not been approved by any regional agency. The current Caltrans acceptable LOS threshold is C.

Traffic from the City of Greenfield commute north and south on Highway 101 on a daily basis during the AM and PM peak hour, primarily for employment in the Salinas Valley. Existing traffic data indicates that approximately 13% of the daily traffic occurs in the PM peak hour. The PM peak hour volumes for the project are assumed to be 13% of the daily traffic.

The data indicates that without the project, Highway 101 has to be widened to six lanes north of Thorne Road for General Plan Conditions. The segment between Thorne Road and Walnut Avenue also needs to be widened to six lanes. Increased volumes between Walnut Avenue and Oak Avenue and the short distance between these interchanges may also require widening to six lanes based on adverse operational conditions.

The new Espinosa Road interchange would be located approximately one mile south of the Oak Avenue interchange, and no widening is required between Espinosa Road and Oak Avenue. South of the Espinosa interchange, the freeway would be upgraded from a four-lane expressway to a four-lane freeway. None of these improvements are project related impacts, however the project adds incrementally to the adverse conditions.

The proposed project and cumulative urban development in the south Salinas Valley is predicted to constrain regional transportation systems (Highway 101) in the future. Yet, there is no adopted fee or collection mechanism currently in place by the City, TAMC or Caltrans for funding Highway 101 widening within or outside the City of Greenfield, and no cost estimates have been developed by TAMC for such a project in order to assess a fee with the required nexus.

TAMC has completed a nexus study for a Regional Development Impact Fee Program for Monterey County to address regional traffic impacts. The TAMC Regional Development Impact Fee Program is one element of TAMC's proposed *14-Year Improvement Plan.* The Regional Development Impact Fee Program has recently been approved by the TAMC Board. Ten of the County's cities and the County have adopted the fees. Soledad and Greenfield have not yet adopted fees. A Joint Powers Agreement (JPA) between the adopting jurisdictions will go into effect August 27, 2008 (personal communication with Mike Zeller, Transportation Planner with TAMC, August 25, 2008).

Project mitigation for widening the highway through the City (or contributing towards a regional widening project north of the City) is considered infeasible until such time that the City establishes an impact fee specifically to be used towards freeway mainline widening. The City of Greenfield adopted a Notice of Intent (NOI) to establish a regional development impact fee (Resolution Number 2006-82) and to condition all new development projects with a payment of the regional impact fee on a project-by-project basis pending approval of the fee program established by the TAMC Board and JPA. Last month the Greenfield City Council voted not to adopt a regional impact fee. However, the City will reconsider adopting the fee on September 9th. The project will be subject to all lawfully adopted and applicable traffic fees.

If an impact fee has been established at the time building permits are pulled for the site, then they may be subject to the fee.

*c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The proposed project will not result in a change in air traffic patterns; therefore, **no impact** is anticipated.

*d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

*e) Would the project result in inadequate emergency access?*

Standard conditions of project approval by the City of Greenfield will ensure that design of proposed roadways is sufficient and adequate emergency access to the project site is available. This is considered a **less than significant** impact.

*f) Would the project result in inadequate parking capacity?*

The proposed project will be required to provide sufficient parking to meet City of Greenfield standards. Compliance with City standards regarding on and off-street parking would ensure that the proposed project would have a **less than significant** impact on parking at the project site.

*g) Would the project conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

The existing transit system in the City of Greenfield is limited and does not provide a bus route with a direct connection to the proposed project site. Because of limited access to the transit facilities, the amount of new transit riders that could be expected from this development would be minimal. Proposed street improvements on Walnut Avenue, Apple Avenue, 12th and 13th Streets include 5-foot wide sidewalks and 4-foot bike lanes. Internal streets also include sidewalks as part of proposed improvements. Therefore, this is considered a **less than significant** impact.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **16. UTILITIES AND SERVICES** | | | | |
| *Would the project:* | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☒ | ☐ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☒ | ☐ | ☐ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g) Comply with federal, state and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

DISCUSSION OF IMPACTS

*a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

*b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

*e) Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?*

As discussed in Section III, the proposed project is consistent with the Regional Water Quality Control Board (RWQCB) wastewater treatment requirements. The proposed project would develop approximately 80 acres to include up to 487 residential units. Wastewater generation rates established by the *City of Greenfield 2005-2025 Wastewater System Capital Improvement Plan Update and Capacity Charge Study* (2005) are based on the underlying land uses. **Table 25** shows the projected wastewater generation for the proposed project.

**TABLE 25**
**PROJECTED WASTEWATER GENERATION**

| Land Use | Rate (GPD[1]/dwelling unit or acre) | Dwelling Units (du) or Acres (ac) | Project Generation (GPD) |
|---|---|---|---|
| Residential | 400 | 493 du | 194,800 |
| Recreation and Open Space | 100 | 4.12[2] ac | 412 |
| | | **Total** | **195,212 (0.19 MGD[2])** |

*Source: City of Greenfield 2005-2025 Wastewater System Capital Improvement Plan Update and Capacity Charge Study (2005).*
*Notes: 1. GPD = Gallons per Day; MGD = Million Gallons per Day. 2. Does not include land that may be associated with development of the remainder parcels.*

The proposed project is anticipated to generate approximately 195,212 GPD or approximately 0.19 MGD. In 2003, the City expanded its existing wastewater treatment plant (WWTP) to accommodate projected increases in permitted treatment quantity. According to the *City of Greenfield 2005-2025 Wastewater System Capital Improvement Plan Update and Capacity Charge Study* (2005), the average existing treatment volume of the wastewater system is 0.88 MGD. Development of the proposed project would increase the City of Greenfield's wastewater flows by approximately 0.19 MGD, from 0.88 MGD to 1.07 MGD.

The City is served by a municipal wastewater collection and treatment system. The system includes more than 110,000 feet of gravity sewer, ranging from six inches to 24-inches in diameter, and generally flows from west to east. Wastewater flow discharges into a treatment plant located at the end of Walnut Avenue approximately 1.5 miles east of 2nd Street. The existing monthly average and peak treatment volume of the wastewater system is 0.88 MGD and 1.42 MGD respectively. The City has received permit authorization from the RWQCB to increase capacity from 1.0 million gallons per day (MGD) to 2.0 MGD under Waste Discharge Requirements Order No. R3-2002-0062.

The City has recently completed Phase 3 improvements, verified at a May 7, 2008 final inspection by the City of Greenfield City Engineer, which included: the addition of a 1.0 MGD primary clarifier (Clarifier #3), the addition of a second aerobic digester, and the expansion of the spray irrigation fields, which have collectively increased the WWTP capacity from 1.0 to 2.0 MGD.

The City of Greenfield has completed an environmental analysis of their permitted wastewater treatment plant and RWQCB permits which determined that all impacts would be less than significant or could be reduced to a less than significant level with mitigation. The City stated that it is planning on increasing treatment capacity to 3.5 MGD in the near future.

With regard to cumulative impacts to the wastewater system, near-term and potential future development on the site in combination with future area growth and recently approved projects would increase the cumulative demand for wastewater treatment services and facilities beyond wastewater discharge permitted capacity. The City's Wastewater System Capital Improvement Plan indicates that future growth (buildout of the City planning area) would result in Greenfield's wastewater rising from 0.867 MGD to about 3.3 MGD. This increase would require

a treatment plant with a capacity of approximately 3.5 MGD. The annexation area is included as part of the future growth area, and therefore, would contribute to the increase in volume and usage of the wastewater treatment plant. This increase would occur as projects are developed over the next 10-20 years. The City requires Sewer Impact Fees that would pay for needed wastewater treatment capacity improvements. This fee is calculated based on the fee rate in place at the time of building permit issuance and paid prior to occupancy permit issuance. The environmental effect of constructing upgrades to the sewer system is considered an impact of the permit request in process, and not a consequence of this project, individually or cumulatively.

The Applicant would be required contribute applicable sewer impact fees and the installation of wastewater infrastructure necessary to serve the project site. This fee is to be calculated based on the fee rate in place at the time of building permit issuance and is to be paid prior to occupancy permit issuance. The Sewer Impact Fee along with the project Applicant's contribution to the Capital Improvement and Development Impact Fee will assist in the payment of expansion to the wastewater treatment plant. This Capital Improvement and Development Impact Fee is to be calculated based on the fee rate in place at the time of building permit issuance and is to be paid prior to occupancy permit issuance. Therefore, the cumulative impact regarding wastewater treatment services would be considered **less than significant**.

*c) Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Developers in the City are required to design storm water infiltration facilities for a 100-year storm event. Near-term and future developers of the project site would be required to include a design for a storm water infiltration facility with any development proposal. As discussed in **Section VI.8 Hydrology/Water Quality**, the proposed project includes three infiltration basins to accommodate stormwater flows from the PD portions of the project site. Other storm drainage improvements will consist of street gutters, inlets and drainage infrastructure to convey runoff water to the basin. Each of the two PD's includes infiltration facilities to accommodate stormwater runoff. The Willow Glen PD infiltration basin is located immediately north of Lots 37 and 46, is situated on 0.72 acres and has a storage volume of 52,323 cubic feet. Two basins are included on the Mira Monte PD, one south of Walnut Avenue and north of Lot 166 and a second east of Lots 49 and 50. The "Northeast Basin" is situated on 0.44 acres with 95,828 cubic feet of storage volume. The "Central Park Basin" is situated on 1.31 acres with 59,399 cubic feet of storage volume. All of the basins are designed to accommodate runoff from the 100-year storm event. Future development of the remainder parcels would also be required to design and install a stormwater collection system. In order to ensure that stormwater improvements meet City of Greenfield standards, the following mitigation measures shall be required.

Implementation of **Mitigation Measures 8-1** and **8-2** would reduce any potentially significant stormwater drainage system impacts to a **less than significant** level by requiring that stormwater drainage improvements be designed in accordance with City of Greenfield standards.

*d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

As discussed in **Section VI.8 Hydrology/Water Quality**, in January 2008 a *Water Supply Assessment (WSA)* was prepared for the Villages project pursuant to Senate Bill 610. The WSA evaluated residential development on approximately 60 acres of the project site. The remaining 16 acres was assumed to develop as an elementary school and was not included in the study. However, the WSA evaluated development of 493 dwelling units, which is slightly higher than the

current proposal's anticipated development of 487 dwelling units. Therefore, the WSA is considered to be an adequate (if not slightly conservative) analysis of the City's ability to provide water to the proposed project.

As demonstrated by the WSA and also the City's Urban Water Management Plan (UWMP), which was adopted on March 17, 2008 (Resolution 2008-5), the City of Greenfield has the capacity to serve 17.8 acre-feet per day, which equates to a total annual capacity of 6,500 acre-feet annually. Based on the City of Greenfield's total projected water supplies for normal, single-dry, and multiple dry years over a 20-year projection, the City will have sufficient water to meet projected water demands for the proposed project in addition to meeting the existing service area's planned future demands. As the project will have sufficient water supplies available to serve the project from existing entitlements and resources, no new or expanded entitlements needed. The impact is considered to be **less than significant**.

*f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

*g) Would the project comply with federal, state and local statutes and regulations related to solid waste?*

The Johnson Canyon Landfill, a privately owned facility covering 163 acres operated by Salinas Valley Solid Waste Authority (SVSWA), serves the City of Greenfield. According to the SVSWA, the current remaining refuse capacity of the landfill is approximately 2.9 million tons as of 1999. That capacity is projected to provide disposal capacity to the current jurisdictions served by the landfill through 2043. Assuming a solid waste generation factor of eight pounds per residential unit/day, the proposed project would generate approximately 3,896 pounds/day of solid waste, which is the equivalent of 711 tons/year.

The maximum projected solid waste generation (711 tons/year) extrapolated over the remaining life of the landfill (44 years) would use about one percent of the remaining landfill capacity. The City of Greenfield also has a recycling program in place to reduce the volume of refuse deposited in the landfill. Therefore, this impact is considered **less than significant**.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) Have possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects? | ☐ | ☒ | ☐ | ☐ |
| c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

DISCUSSION OF IMPACTS

*a) Have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory?*

Based upon the findings of this study, the proposed project could significantly degrade or diminish the quality of the environment and important habitat areas. However, **Mitigation Measure 4-1** has been provided in **Section VI.4 Biological Resources**, which reduce potential impacts to **less than significant** levels.

There is not evidence that the project site is located within an archaeological sensitive area. However, **Mitigation Measures 5-1** through **5-3** are incorporated herein, which would ensure that if prehistoric or historic cultural resources are discovered during construction activities, that the proposed project does not adversely affect any cultural resources or human remains buried outside of a cemetery. Implementation of these mitigation measures would ensure that the proposed project does not eliminate important examples of the major periods of California history or prehistory, which reduce potential impacts to **less than significant** levels.

*b) Have possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?*

**Cumulative Contribution to Global Warming**

The project would contribute to cumulative increases in greenhouse gas emissions. There is currently no basis for determining what level of increase in greenhouse gas emissions would be considered "cumulatively considerable." As a result, no conclusion of impact significance can be made at this time. Implementation of the proposed project would contribute to increases of greenhouse gas (GHG) emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide ($CO_2$) from mobile sources. Emissions of $CO_2$ are anticipated to constitute more than 90 percent of total mobile-source GHGs commonly associated with community development projects. To a lesser extent, other GHG pollutants, such as Methane ($CH_4$) generated by natural-gas combustion would typically have a minor contribution to overall GHG emissions (EPA 1996), or are not commonly associated with typical community development projects.

While scientific advances have been made in the past few years related to the assessment of future climate change and global warming, projections of future climate changes are still highly speculative and dependent on assumptions and generalizations that are most often applied at a global or national level. At the present time, there are currently no criteria or thresholds established under federal, state or local laws for the evaluation of increases in GHGs associated with individual development projects. It is also important to note that in order to accurately assess GHGs attributable to an individual project, when assessed in a global context, it would be necessary to differentiate between increased emissions created by a proposed project verses relocated emissions that can often occur due to shifts in population or a relocation of stationary sources. Such factors are often not accounted for when quantifying impacts of development projects at a local level.

Estimated increases of greenhouse gas (GHG) emissions associated with the revised project at buildout were estimated and are summarized in the following table. Emissions of CO2 were calculated using the URBEMIS2007 computer program, based on default parameters (i.e., emission factors, vehicle fleet, and trip distribution data) contained in the model. Estimated increases in vehicle miles traveled used in the calculation of GHG emissions were based on an estimated buildout of approximately 487 dwelling units, assuming a trip generation rate of 8.03 trips/dwelling unit, obtained from the traffic analysis prepared for the previously proposed project. Estimated increases in emissions associated with natural gas consumption and electricity use; as well as, emissions associated with area sources (e.g., woodburning fireplaces, landscape maintenance, etc.) were also included in the analysis. Emissions of CH4 an N2O were calculated using emission factors and usage rates derived from the Air Resources Board, the California Air Pollution Control Officer's Association, the California Climate Action Registry General Reporting Protocol, and the California Energy Commission. Emissions were converted to CO2 equivalents (i.e., CO2*e*), expressed in metric tons, based on the global warming potential of each pollutant. GHG emissions modeling assumptions, reference data, and result have been included as an appendix to this report.

Based on the modeling conducted, GHG emissions generated by the proposed project would total approximately 8,967 tons per year of CO2*e*, which equates to approximately 0.002 percent of the statewide GHG emissions inventory, as shown in **Table 26** below. A majority of the predicted increases of GHGs, approximately 64 percent (5,761 tons/year), would be attributable

to mobile sources. Increased emissions associated with energy use (i.e., electricity and natural gas consumption) constituted approximately 32 percent of the remaining GHG emissions.

**TABLE 26**
**ESTIMATED GREENHOUSE GAS EMISSIONS**

| Source | GHG Emissions (tons/year CO2e) |
|---|---|
| Motor Vehicles | 5,761 |
| Electricity Consumption | 1,548 |
| Natural Gas Consumption | 1,295 |
| Wood-Burning Hearth | 360 |
| Landscape Maintenance | 3 |
| *Total* | *8,967* |
| *Percent of Statewide Inventory* | *0.002* |

*Source: AMBIENT. Air Quality Impact Analysis. August 14, 2007 and updated August 25, 2008.*
*Based on URBEMIS2007 emissions modeling and electricity usage rates/emission factors derived from the California Energy Commission (2004) and California Climate Action Registry General Reporting Protocol (2007).*

The potential for all other cumulative effects have been identified and discussed throughout the Initial Study. The analysis concludes that project-specific Mitigation Measures will reduce cumulative effects to less than significant levels.

Specific impacts associated with the proposed project, including those related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards, noise, traffic and circulation can be mitigated to a less than significant level and do not represent additional impacts above and beyond the cumulative impacts that were evaluated in the City of Greenfield General Plan. Therefore, the proposed project would not result in significant unavoidable cumulative impacts.

*c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The proposed project will not have a substantial adverse effect on human beings. With the implementation of **Mitigation Measures 1-1** through **15-4**, any potential impacts will be mitigated to a level of non-significance. Therefore, adverse effects on human beings will be reduced to **less than significant** levels.

**Assessment of Fee:**

The State Legislature, through the enactment of Senate Bill (SB) 1535, revoked the authority of lead agencies to determine that a project subject to CEQA review had a "de minimis" (minimal) effect on fish and wildlife resources under the jurisdiction of the Department of Fish and Game. Projects that were determined to have a "de minimis" effect were exempt from payment of the filing fees.

SB 1535 has eliminated the provision for a determination of "de minimis" effect by the lead agency; consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the Department of Fish and Game determines that the project would have no effect on fish and wildlife resources.

To be considered for determination of "no effect" on fish and wildlife resources, development Applicants must submit a form requesting such determination to the Department of Fish and Game. Forms may be obtained by contacting the Department by telephone at (916) 631-0606 or through the Department's website at www.dfg.ca.gov.

**Conclusion:** The project **would be** required to pay the fee.

# IX. REFERENCES


1. Applicants. Project file and application materials. 2007
2. PMC. Project site reconnaissance. DATE, 2007.
3. AMBIENT. *Air Quality Impact Analysis.* August 14, 2007 and updated August 25, 2008.
4. AMBIENT. *Noise Impact Analysis.* August 14, 2007.
5. PMC. *Biological Resource Assessment*. February 2007.
6. PMC. *Archaeological and Historical Investigations.* February 2007.
7. Stevens, Ferrone & Bailey Engineering Company, Inc. *Geotechnical Investigation, Greenfield Village Residential Development, Greenfield, California*. August 3, 2005.
8. Earth Systems Pacific. *Geotechnical Engineering Report, Nino 12th and Apple Development, APN 109-232-004, -006 and -012*. July 22, 2006.
9. Lee & Pierce Inc. *Phase I ESA* (Apple Row, APN 109-232-007). April 19, 2006.
10. D&M Consulting Engineers, Inc. *Phase I ESA* (Mira Monte, APN 109-232-001). March 2003.
11. D&M Consulting Engineers, Inc. *Phase II ESA* (Mira Monte, APN 109-232-001). May 1 2003.
12. Earth Systems Pacific. *Phase I and II ESA* (Willow Glen, APN 109-232-004, -012, and-006). August 18, 2006.
13. Wood Rodgers. *Water Supply Assessment.* March 2008.
14. Higgins Associates. *Traffic Impact Study.* October 5, 2007 as updated.
15. PMC. *Traffic Impact Study Peer Review.* August 20, 2008.
16. City of Greenfield. *City of Greenfield General Plan and General Plan EIR*. 2005.
17. City of Greenfield. *City of Greenfield Zoning Ordinance*. 2007 as updated.
18. City of Greenfield. *2005-2025 Wastewater System Capital Improvement Plan Update and Capacity Charge Study*. 2005.
19. City of Greenfield. *2005-2025 Water System Capital Improvement Plan Update and Capacity Charge Study*. 2005.
20. County of Monterey. *Monterey County General Plan*. 1982.
21. County of Monterey. *Central Salinas Valley Area Plan*. 1986.
22. Monterey County Local Agency Formation Commission (LAFCO). *Standards for the Evaluation of Proposals*. 1992.
23. Governor's Office of Planning and Research, State of California. *Guidelines for Implementation of the California Environmental Quality Act,* as amended. 2006.
24. California Department of Conservation. Farmland Mapping and Monitoring Program. *Monterey County Important Farmlands Map*. 2004.
25. Governor's Office of Planning and Research, State of California. *Guidelines for Implementation of the California Environmental Quality Act,* as amended. 2006.
26. Monterey Bay Unified Air Pollution Control District (MBUAPCD). *CEQA Air Quality Guidelines*. February 2008.
27. MBUAPCD. *Air Quality Management Plan for the Monterey Bay Region*. August 2008.
28. U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/. Site accessed March 20, 2007.

29. Mike Ranker, City Engineer. Memo 9/15/08

30. Peer Review of Traffic Analysis. PMC. August 20, 2008.

# 2016 Addendum to Greenfield Villages
# Initial Study / Mitigated Negative Declaration

# The City of Greenfield
# and
# The Greenfield Union School District

California Environmental Quality Act (CEQA) Addendum
To The
Initial Study/Mitigated Negative Declaration

## Greenfield Union School District/Thorp Annexation

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*and*

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# 1 Introduction

Pursuant to the California Environmental Quality Act (CEQA; *Public Resources Code* Section 21000, et seq. and CEQA Guidelines) and in compliance with the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.), the City of Greenfield has prepared this Addendum to The Villages Planned Development and Annexation Project Initial Study/Mitigated Negative Declaration (IS/MND), and the Tunzi Annexation Subsequent Initial Study/Mitigated Negative Declaration (SMND) and Mitigation and Monitoring Reporting Program (MMRP), for the Annexation of 18.671 acres located on the north side of Apple Avenue and Morris Way (APNs: 109-232-006 and 109-232-007). The previous Villages IS/MND (2008) contemplated the potential for environmental impacts associated with the proposed annexation regarding the construction of residential uses on 76 acres. The Tunzi SMND (2016) contemplated the potential for environmental impacts associated with the proposed annexation regarding the construction of residential uses on approximately 9.553 acres. The Villages project was originally proposed in early 2007 as an Annexation consisting of three separate areas: Apple Row, Mira Monte and Willow Glen known collectively as "The Greenfield Villages" or "The Villages." The 2007 Villages project also included a 14-acre site reserved for a future elementary school, a neighborhood park, a paseo/open space and a retention basin.

The Greenfield Union School District/Thorp Annexation Addendum determined that although only minor technical changes or additions are necessary based on the previous project analyses, none of the conditions described in section 15162 of the CEQA Guidelines have occurred; therefore, the City of Greenfield prepared an Addendum to the Initial Study/Mitigated Negative Declarations (Draft IS/MND) that were previously prepared for both the Villages Planned Development and Annexation Project and the Tunzi Annexation Subsequent Mitigated Negative Declaration.

The two parcels proposed for annexation are APNs 109-232-006 (Thorp site) and 109-232-007 (Tunzi site).

An Environmental Impact Report (PMC, 2008) was previously prepared for The Villages Planned Development and Annexation Project which included 76 acres of land; 18.671-acres of that project are considered in this CEQA Addendum. In September 2015, a subsequent MND was completed using the PMC report for the Tunzi property. Since then, the report completed on the land for the Tunzi development has been changed from a Tentative Subdivision Map to a proposed use by the Greenfield Union School District as a New Elementary School.

The data used in those reports is applicable to this Addendum. This Addendum will consider the impacts of the annexation of the 18.671 acres of land. In addition to information herein regarding the annexation of the Thorp and Tunzi properties into the City of Greenfield, this Addendum presents a discussion regarding the Greenfield Union School District's intent to develop an Elementary School on the location of the Tunzi property.

This addendum is being completed in accordance to the Monterey County Local Agency Formation Commission (LAFCO) guidelines for annexation of property. The City of Greenfield is acting as Lead Agency for all planning aspects of the project, and the

Greenfield Union School District is acting as Lead Agency for the school construction portion of the project.

**Project Background:**

This Addendum discusses two components: the annexation of 18.671 acres of land, and the development of a New Elementary School site.

This project was first considered by the City of Greenfield in 2008. An Initial Study/Mitigated Negative Declaration (IS/MND) was completed and adopted in 2008 for The Villages Planned Development and Annexation Project (Villages Project), which evaluated the environmental effects of construction of residential uses on 76 acres, including the Tunzi and Thorp sites. Although the Villages Project was approved by the City, the subject parcels have not yet been annexed to the City of Greenfield. The proposed GUSD elementary school site will be included in the larger annexation activity for this project area.

The proposed Tunzi Subdivision and Annexation Project (Tunzi Annexation Project), including the 9.55-acre Tunzi site, was reviewed by the Greenfield City Council in 2016. The current use is "fallow agriculture" and the proposed use as described in the 2008 environmental study was for single family homes and a small park.

The City of Greenfield, acting as the Lead Agency, initially determined in 2008 that development could result in potentially significant adverse environmental effects. With that determination and in regard to the Tunzi Annexation Project, the City prepared an Initial Study and Subsequent Mitigated Negative Declaration (SMND) to evaluate the potentially significant adverse environmental impacts of the project. The SMND was circulated for public review from September 30, 2015 to October 30, 2015, and public comment was received. Public comments are addressed, and all final mitigation measures are contained in the Mitigation Monitoring Reporting Program (MMRP).

On January 11, 2016, the Greenfield City Council passed a Resolution to adopt the SMND and MMRP, approve the Tentative Subdivision Map, approve the prezoning of the property and direct staff to prepare and submit an annexation application to Monterey County LAFCO based upon these approvals.

Proposed Annexation:
The proposed project involves the reorganization of the incorporated City limits of Greenfield to include the annexation of 18.671 acres from Monterey County into the City of Greenfield. The proposed project is located entirely within the City's Sphere of Influence (SOI) approved in March of 2007 by the Monterey County LAFCO, and consists of Assessor's Parcel Numbers (APNs) 109-232-006 and 109-232-007, as described above. The project Applicant, Geary Coats, has applied to the City of Greenfield for the following requested actions: Annexation, Prezoning, Major Subdivision, and Vesting Tentative Map approval. The Monterey County LAFCO controls boundary changes (annexations) for local jurisdictions and special districts in Monterey County, including annexations and amendments to a jurisdiction's SOI. As such, it is a responsible agency in considering the project, and the decision-making body for the annexation. The annexation was analyzed as a part of the SMND for the proposal and contains specific mitigations to address potential impacts of the project.

The LAFCO has also adopted policies to guide the agency in its decision-making process, which is set forth in its policies and procedures. The purpose of this guidance is to encourage planned, well-ordered, efficient urban development patterns, with appropriate consideration of preserving open space and agricultural lands within those patterns.

The LAFCO has established the City of Greenfields's SOI, which identified Urban Service Areas that are currently served by existing urban facilities, utilities and services or are proposed to be served within five years. As described in the project description, the project site is located entirely within the City of Greenfield's SOI and is identified as an Urban Service Area.

Two parcels are proposed to be added to the City of Greenfield in accordance with the Monterey County LAFCO guidelines for annexation of property. One Property (Tunzi Site) will be used for the proposed new school, and the adjacent property (Thorp) will be developed for residential housing. The two parcels proposed for annexation are located south of Walnut Avenue, north of Apple Avenue, and west of 12th Street, in Monterey County, California ("the Site"). The Site is identified by APNs 109-232-006, and 109-232-007. Annexation of the two properties is consistent with the LAFCO MOA with mitigations.

With respect to agricultural land preservation, and in compliance with the Greater Greenfield Area Memorandum of Agreement, the City and the GUSD shall be required to participate in an agricultural land preservation program that will alleviate the loss of agricultural land (defined as land used for agricultural purposes within the last five years preceding annexation and considered Important Farmland per the California Department of Conservation Farmland Mapping and Monitoring Program) on an individual basis to the extent feasible, as determined through the California Environmental Quality Act process. Appropriate mitigation measures include measures that secure the voluntary dedication of easements, payment of a mitigation fee to be used to purchase easements through a mitigation bank, or other equally effective mechanisms that mitigate for the loss of Important Farmland. In the event a mitigation fee is to be charged, such a fee shall be sufficient to acquire a conservation easement(s) on agricultural land of equal or greater agricultural value at a 1:1 ratio. The GUSD and the City of Greenfield have committed to obtain a permanent conservation easement on a 1:1 basis per acre converted. A set aside of 20 acres of land for agricultural purposes will account for the 20 acres for this project.

New School Construction:

The District, acting as Lead Agency for the school construction and a Responsible Agency for the school planning, proposes to acquire a new school site to build the New Apple Avenue Elementary School for 650 students, to accommodate enrollment growth. The new school will be located within the attendance boundaries of the existing Mary Chapa Academy, to address current and future enrollment growth in the attendance area due to new development.

The District has identified a suitable site for the new school located on a 9.553 acre parcel near the corner of 12th Avenue and Apple Avenue near the City of Greenfield, in Monterey County, California, APN 109-232-007. The site is identified as the "Tunzi

Site". Since the proposed site is outside the City of Greenfield, annexation of the property is being proposed.

The use of the site for a school conforms to the proposed designation of the property as "Single Family Residential" since it is necessary public service infrastructure that supports the existing residential and future planned residential community within the boundaries of the Mary Chapa Academy.

This CEQA Amendment contains the following sections:

**Section 2** Addendum Explanation
**Section 3** Addendum Study Checklist
**Section 4** Supporting Information Sources

# 2 Addendum Explanation

**1. Project title:**
Greenfield School Site Annexation and Construction

**2. Lead Agency name and address:**
City of Greenfield (Lead Agency for planning aspects of the project)
920 Walnut Avenue
Greenfield, CA 93927

Greenfield Union School District (Lead Agency for school construction)
493 El Camino Real
Greenfield, CA 93927

**3. Contact person and phone number:**
City of Greenfield: Mic Steinmann – (831) 674-5591

Greenfield Union School District: Dr. Kimberly Berman – (831) 674-2840

**4. Project location:**
The property proposed for annexation includes two parcels (9.553 acres for the Tunzi Property and 9.118 acres for the Thorp Property, for a total of 18.671 acres) located south of Walnut Avenue north of Apple Avenue, west of 13th Street, Monterey County, California ("the Site"). The Site is identified by APN 109-232-006, 007, as shown in **Figures 1, 4,** and **5**

**5. Project sponsor's name and address:**
Same as Lead Agency

**6. General Plan designation:**
Low Density Residential BP

**7. Zoning:**
R-1 Low Density Residential

**8. Project Description for the Proposed Annexation:**

The proposed project consists of two parcels: APN: 109-232-006 and APN: 109-232-007

APN: 109-232-006 is comprised of 9.118 acres and consists of a 58 lots in a single family Planned Unit Development (PUD). In addition to the 58 single family residential lots, the PUD also proposes construction of a .63 acre public park. The park site is located at the properties' northwest corner with additional park areas planned to the north and west of the park, totaling 1.15 acres.

APN: 109-232-007 is comprised of 9.553 gross acres and previously received approval of a Vesting Tentative Map for 43 single family residential lots and .45 acres of improved land. This property is currently under a Purchase and Sales Agreement with the Greenfield Union School District. It is the intent of the School District to locate a 650 student elementary school on this site.

The Elementary School project will include a total of 45,611 square feet of new construction. A total of 83 parking spaces are planned, with 4 ADA stalls. The proposed master plan capacity will be 650 K-6 Students with 30 classrooms (24 upper grades, 6 Kindergarten). There are 38 planned restrooms divided equally for men and women. The school will have 53 staff/teachers for Master Plan Capacity. Project components include: library/media center, resource classroom, special day class, Multi-Purpose Room and cafeteria, warming and serving Kitchen, Administration offices, restrooms, storage rooms, blacktop play area, kindergarten play area, and field play area.

Traditional and rigorous academic curriculum based upon the Common Core State Standards. In addition to the general education classes, physical education, art and media/library programs will be provided. Classes will range in size from 24 to 31 students. Additional support will be provided to students with the assistance of an Intervention Specialist Teacher, an English Language Learner Specialist Teacher, a Speech and Language Pathologist, a Psychologist, a Resource Teacher, a Special Day Class teacher an Occupational Therapist, and a Counselor. Parent engagement will be supported through a Community Liaison, to increase parent access to information and District provided services.

A variety of additional enrichment activities will be offered to students to broaden their interests and growth. Examples include art, music, performing arts and band. The school will provide before and after school programs for students.

The construction schedule is planned for 16-18 months with an anticipated start date of May 2017.

9. **Original Project Description for the Proposed Tunzi and Thorp Annexation:**

The Tunzi/Thorp annexation is comprised of two parcels totaling 18.671 acres. Parcel 1 is APN 109-232-007, and is owned by Dr. Marc Tunzi; Parcel 2 is APN 109-232-006 and is owned by Bud Thorp, et al. The two parcels are located on the northwest corner of Apple Avenue and Twelfth Street. Access to the subject property is from Apple Avenue and Twelfth Street in the City of Greenfield. (**Figure 1)**

In 2008, the properties were included in the City of Greenfield's Sphere of Influence (SOI) and are subject to the Adopted MOA for the City of Greenfield. (**Figure 2)** The subject parcels have been designated Low Density Residential in the City's adopted General Plan. (**Figure 3)**

APN: 109-232-006 is comprised of 9.118 acres and received approval of a 58 lot single family Planned Unit Development (PUD), subject to annexation. In addition to the 58 single family residential lots, the PUD also proposes construction of a .63 acre public park. The park site is located at the properties' northwest corner with additional park areas planned to the north and west of the park, totaling 1.15 acres. (**Figure 4)**

APN: 109-232-007 is comprised of 9.553 acres and received approval of a Vesting Tentative Map for 43 single family residential lots and .45 acres of improved land. (**Figure 5)**

# EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-Project Site as well as on-Project Site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address Project Site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist

that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

# 3 Addendum Study Checklist

| I. AESTHETICS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | | | | X |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X |
| c) Substantially degrade the existing visual character or quality of the Project Site and its surroundings? | | | | X |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | X | |

*Environmental Setting*

The parcels of land proposed for the annexation for a future school site are located within the Villages Planned Development and Annexation Project. Annexing the land will not have a significant impact. The parcels are zoned for single family residences; under this zoning classification, school construction is approved.

*a) Would the project have a substantial adverse effect on a scenic vista?*

**No New Impact, No Impact.** The proposed project will not have an impact on the scenic vista. Scenic views of the mountains located approximately 15 miles east of the site are visible on clear days from all north/south roadways in the project area. Currently, rural residences, barns, windrows, houses and apartments, and other visual obstructions exist within and near the project site. The proposed residential and school project will provide a similar view to those proposed under the Villages IS/MND. Therefore, no substantial effect on a scenic vista will result from project implementation.

*b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No New Impact, No Impact.** The Site is not located near any designated State Scenic Highways. There are no rock outcroppings or historic buildings of significance within the proposed Site boundaries.

*c) Would the project substantially degrade the existing visual character or quality of the Project Site and its surroundings?*

**No New Impact, No Impact.** The Site, along with the adjacent properties, is planned for development. The land will be bordered by residential development on all adjacent properties.

*d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No New Impact, Less Than Significant Impact.** It is expected that the new school buildings will have some associated nighttime low voltage lighting for security purposes; however, fixtures will be designed and placed to minimize light or glare (e.g., shielded, directed downward). No lighted athletic facilities are planned as a part of this project. The proposed school site will be subject to mitigation measure 1-1 from the Villages September MND, which states *prior to final map approval, the applicant shall prepare and submit to the City of Greenfield a detailed exterior lighting plan and photometric study that indicates the location and type of lighting that will be used. Exterior lighting shall specify type and maker, and demonstrate a non-intrusive quality through incorporation of baffles and lens cut-offs to direct lighting downward, while still providing an adequate amount of light for safety and/or security*.

| II. AGRICULTURE AND FOREST RESOURCES—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | X | | |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |

| | | | | |
|---|---|---|---|---|
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | X |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion or forest land to non-forest use? | | X | | |

*Environmental Setting*

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**No Impact.** The Villages IS/MND determined that the site was previously approved, considered, and recognized for conversion from agricultural to urban use in the General Plan EIR, so the conversion from agricultural land was considered less than significant. Nonetheless, the Villages IS/MND recognized that LAFCO requires the negotiation of a Memorandum of Understanding (MOU) between the City and LAFCO prior to future annexations and included mitigation measure MM 2-1. The measure requires, as a condition of the annexation of property into the city, that the project applicant be subject to any agriculture preservation program, agricultural mitigation fee, or other agricultural mitigation mechanisms adopted by the City of Greenfield. Since approval of the Villages IS/MND, the City of Greenfield, County of Monterey, and Local Agency Formation Commission of Monterey County adopted the Greater Greenfield Area MOA. The MOA includes mitigation for agricultural land mitigation, which requires the City to adopt an agricultural mitigation program or, if the program has not been established, allows the developer to provide for mitigation at a ratio of 2 acres of equal or greater agricultural land for every acre developed. To

comply with the terms of the MOA, mitigation measure AG-1 is required. The Greenfield Union School District has committed to providing 40 acres of agricultural land to an agricultural preservation easement with Monterey County and the Agricultural Land Trust, consistent with the MOA. The District has a willing land donor for the conservation requirement.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
**No Impact.** As reported in the previous EIR and SMND, the land for this project is zoned for residential development. The land is not under Williamson Act.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*
**No Impact.** The Site is not located on or near forest lands or timberland of any kind.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*
**No Impact.** See response to c) above.

e) *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*
**Less Than Significant with Mitigation Incorporation.** As stated in the 2015 SMND, the project site does not contain any forestland or land zoned for forestland, timberland, or timberland production. Therefore, no impact related to forestland would occur. The Villages IS/MND considered development of residential uses in proximity to agricultural operations for the potential to result in compatibility impacts, encroachment, and restrictions on farming operations. This was determined to be a potentially significant impact. The IS/MND identified mitigation measures MM 2-2 and MM2-3 to reduce the impact to less than significant. Mitigation measure MM2-2 requires that the Villages project provide a 100-foot agricultural buffer on the northern portion of the proposed site, and mitigation measure MM 2-3 requires a Right-to-Farm notification statement to run with the title as disclosure and notice in deeds at the time of transfer or sale of all properties on the project site. It was determined that these measures would reduce agricultural and urban land use conflicts to a less than significant level. The buffer required by mitigation measure MM 2-2 would be on Walnut Avenue, so it would not apply to the project site. The Greater Greenfield Area MOA also calls for the provision of buffers in accordance with a countywide program adopted by the County and the cities of the Salinas Valley. Until such a program is adopted, the MOA requires buffers as described in MOA Appendix E, which refers to Greenfield General Plan Program 2.6.D. This program calls for establishing a permanent 200-foot agricultural buffer along the west side of 13th Street throughout the Planning Area for all future development.

The proposed school site plan will propose interim buffers along the north and west sides of the Tunzi property, and along the north side of the Thorp property. Upon development of the adjacent properties, the buffers will be eliminated. The change of use from residential development to a school site will not create new impacts. The District will be a participant regaring the agriculture to urban development conversion. **(See Appendix C)**

| III. AIR QUALITY—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | X | |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | X | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | X | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| e) Create objectionable odors affecting a substantial number of people? | | | X | |

*Environmental Setting*

*a) Would the project conflict with or obstruct implementation of the applicable air quality plan?*

**Less Than Significant Impact.** The Association of Monterey Bay Area Governments (AMBAG) evaluated the Villages Planned Development project to determine its consistency with the regional population forecasts used for

development of the Air Quality Management Plan for the Monterey Bay Region (AQMP) and determined the project would be considered consistent with the AQMP. As a result, the Villages IS/MND determined this impact would be less than significant. The proposed project would result in the same residential land use, but would be result in fewer units than previously assumed. The original MND, which considered the school site as residential housing, included an emissions estimator with a significantly larger impact than the school project would create. Thus the impact from the change of use for this document would not create a significant impact on air quality different than previously identified. Mitigation measures below will ensure impact on air quality will remain less than significant.

*b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

**Less Than Significant with Mitigation Incorporation.** Project construction activities would create short-term increases in emissions of particulate matter ($PM_{10}$) and ozone precursors ($NO_x$); however, the limited nature of ground disturbance indicates any air quality impact would be less than significant.

**MM-1: Best-available control measures (BACM) shall be required during site preparation and construction of proposed land uses. When tentative subdivision maps are submitted and prior to approval of building permits, a construction emissions reduction plan (CERP) shall be prepared, for endorsement by the MBUAPCD, to reduce construction-generated fugitive and mobile-source emissions. The MBUAPCD shall be consulted to determine BACM to be implemented to minimize impacts to nearby sensitive receptors. Measures to be included in the CERP prepared for this project, as currently recommended by the MBUAPCD, include but are not limited to the following:**

**Fugitive Dust**

- **Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure;**
- **Prohibit all grading activities during periods of high wind (over 15 mph);**
- **Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);**
- **Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas;**
- **Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.**
- **Replant vegetation in disturbed areas as quickly as possible.**
- **Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles, such as dirt, sand, etc.**
- **Sweep daily, with water sweepers, all paved access roads, parking areas and staging areas at construction sites.**

- **Sweep streets daily, with water sweepers, if visible soil materials are carried onto adjacent public streets.**
- **Limit traffic speeds on unpaved roads to 15 mph.**
- **Install sandbags or other erosion control measures to prevent silt runoff to public roadways.**
- **Limit areas of active disturbance to no more than 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (grubbing, excavation, rough grading), or 8.1 acres per day for activities that involve minimal earth moving (e.g., finish grading).**
- **Mobile/Stationary-Source Emissions**
  ***Title 13. §2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (a) Purpose.*** **The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. (b) Applicability. This section applies to diesel- fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes: (1) California-based vehicles; and (2) Non-California-based vehicles. (c) Requirements. On or after February 1, 2005, the driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location, except as noted in Subsection (d); and (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d**).
- **Stationary Sources shall comply with all applicable rules and requirements of the Monterey Bay Unified Air Pollution Control District, and State and federal law.**
- **Construction activities shall be scheduled so that major onsite construction activities (e.g., grading, demolition) do not occur simultaneously on any given day.**
- **Post a publicly visible sign which specifies the telephone number and person to contact regarding emissions-related complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).**

**MM-2: The Applicant and/or Contractor shall include the following as components of Final Map and Building Design/Construction:**

- **Provide pedestrian sidewalks and bicycle paths that link to adjacent land uses and external networks.**

c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

**Less Than Significant Impact.** See b.

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant with Mitigation Incorporation.** In the short-term, construction phase, there will be increased pollution concentration. The construction mitigations above should limit the impact to less than significant. The operation of the school would not expose any sensitive receptors to substantial pollutant concentrations.

e) *Would the project create objectionable odors affecting a substantial number of people?*

**Less Than Significant Impact.** The operation of the proposed Site as a K-8 school is not expected to create any objectionable odors. Odors that may be created during construction (e.g., exhaust) will be temporary and are not likely to affect a substantial number of people due to the relatively low population density in the immediate vicinity.

| IV. GREENHOUSE GAS EMISSIONS— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | X | |

*Environmental Setting*

The most common greenhouse gases are carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulfur hexafluoride

($SF_6$). Of these, fossil fuel combustion is by far the dominant source of $CO_2$; greenhouse gas emissions of all types are commonly analyzed in terms of equivalent emissions of carbon dioxide ($CO_{2E}$).

*a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Or;*

*b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Less Than Significant Impact.**

Greenhouse Gases analysis was completed for the Villages MND, the report was determined to have a less than significant impact. The addition of the school to the project site will not create any additional significant impacts on the emissions thresholds already identified in the previous MNDs. The operation of the site as an elementary school will not create significant emissions. The largest emission contributors associated with the school will be daily vehicle travel to and from the school. The School placement will allow for alternative transportation for neighboring residential developments. The District will adhere to the standards of the Monterey Bay Air Pollution Control District.

| V. BIOLOGICAL RESOURCES— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | X | |

| V. BIOLOGICAL RESOURCES—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | X |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery Project Sites? | | | X | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |

| V. BIOLOGICAL RESOURCES— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | X | |

*Environmental Setting*

*a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporation.** The Villages IS/MND found that there is no suitable habitat for special-status plant or animal species on the project site, and no special-status plant or animal species were observed during the site inspection. Based on current field observations, site conditions are essentially the same as previously documented. However, it was concluded that the site could provide some suitable foraging opportunities for many avian species, including some raptors and migratory birds, and trees in and around the project site were found to potentially provide nesting habitat for migratory birds. This was determined to be potentially significant. Mitigation measure MM 4-1 requires preconstruction surveys for nests 30 days prior to ground disturbance or tree removal to reduce impacts to less than significant. The IS/MND also found that implementation of mitigation measure MM 4-1 would ensure that the Villages Planned Development project would not conflict with local policies related to the protection of biological resources. There are no trees on the project site, but the project would be required to comply with mitigation measure MM 4-1 to ensure there would not be an impact on nesting birds.

**MM-3:**

**If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the Applicant shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100 feet outside project boundaries, where possible) the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys DFG shall be notified regarding the status of the nests. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with the USFWS and/or DFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at**

**a minimum radius of 100 feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the non- breeding season (generally September 1st through February 28th).**

**If there is any significant lapse in construction activities, and construction resumes during the nesting season, new surveys shall be conducted no more than 30 days prior to the re-initiation of construction activities.**

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

**No Impact.** There is no identified riparian habitat or significant natural communities within the project area; no wetlands or waters of the U.S. were observed within the Site. The District will pay all appropriate Department of Fish and Game fees upon filing the project Notice of Determination.

c) *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**No Impact.** The site does contain pools of water on site due to irrigation of fields as noted in the Villages Report. Due to these being man made pools, no new impacts are expected.

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery Project Sites?*

**No Impact.** The site was determined to not contain sensitive natural communities in previous studies. The project site is disturbed agriculture land and the project would not create any new impacts.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** See a).

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**Less Than Significant Impact.** Greenfield does not lay within any habitat conservation plans. The project and land will not conflict with such plans.

| VI. CULTURAL RESOURCES— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5? | | | | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? | | X | | |
| c) Directly or indirectly destroy a unique paleontological resource or Project Site or unique geologic feature? | | | | X |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | X | | |

*Environmental Setting*

*a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?*

**No Impact.** There are no historic Sites or buildings in proximity to the Site; no historical resources are observed within the Site. Construction of the new school site and annexation into the City will not have a significant impact on the site.

*b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?*

**Less Than Significant with Mitigation Incorporation.** Although no resources are identified within the Site, unidentified archaeological resources could be uncovered during construction. Similar mitigations were identified in the Villages MND (Mitigation 5-3).

Mitigation Measure

Implementation of the following mitigation measure will ensure that the impact to archaeological resources remains less than significant.

**MM-4:As a condition of project approval, and implemented during construction activities, if human remains are discovered, all work must stop in the immediate vicinity of the find, the City of Greenfield Building and Planning Department must be notified and the County Coroner must be notified, according to Section 7050.5 of the California Health and Safety Code. If the**

**remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) shall be followed.**

*c) Would the project directly or indirectly destroy a unique paleontological resource or Project Site or unique geologic feature?*

**No Impact.** There are no paleontological resources or unique geologic features identified or observed within the Site. If any resources were to be identified throughout the project, the appropriate mitigations would be instituted as noted above and below.

*d) Would the project disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant with Mitigation Incorporation.** The Site has not been identified as a burial location for human remains; however, should human remains be unexpectedly encountered, GUSD will follow the requirements of California *Health and Safety Code* and *Public Resources Code*, as applicable. If human remains were determined to be Native American in origin, GUSD would contact the NAHC to determine the most likely descendants, see **MM-4**.

| VII. GEOLOGY AND SOILS— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology | | | | X |

| VII. GEOLOGY AND SOILS— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Special Publication 42. | | | | |
| ii) Strong seismic ground shaking? | | | X | |
| iii) Seismic-related ground failure, including liquefaction? | | | X | |
| iv) Landslides? | | | | X |
| b) Result in substantial soil erosion or the loss of topsoil? | | | X | |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-Project Site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | X | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | X | |

| VII. GEOLOGY AND SOILS— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |

*Environmental Setting*

A site specific Geologic Hazards Assessment will be completed on site.

*a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

*i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

**Less Than Significant Impact.** The Villages IS/MND disclosed that the site is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no known or potentially active faults located on the project site. Therefore, the potential for surface ground rupture at the Site is considered low.

*ii) Strong seismic ground shaking?*

**Less Than Significant Impact.** The project site is located within 15 miles of the San Andreas fault, the Villages IS/MND determined that the risk related to seismic shaking was potentially significant. Mitigation measure MM 6-1 was identified to reduce impacts by complying with the recommendations of the geotechnical report for the site. It should also be noted that all proposed structures would be required to be designed and constructed in accordance with the California Building Code (CBC), adopted by the City of Greenfield in Municipal Code Section 15.04.010, to withstand the forces of significant ground shaking.

*iii) Seismic-related ground failure, including liquefaction?*

**Less Than Significant Impact.** The project site is characterized as having low liquefaction susceptibility. The previous Villages MND did not identify the site as having a liquefaction/ ground failure impact. Therefore, the risk of liquefaction at the project site is considered less than significant.

*iv) Landslides?*

**No Impact.** The project area is relatively flat and not considered susceptible to static slope instability or seismically induced landslides.

*b) Would the project result in substantial soil erosion or the loss of topsoil?*

**Less Than Significant Impact.** The Villages IS/MND disclosed that construction on the project site could result in erosion and loss of topsoil if not properly mitigated. As noted in the IS/MND, construction activities would be subject to coverage under the State's National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit. As part of the NPDES permit process, the project applicant would be required to prepare and comply with a stormwater pollution prevention plan (SWPPP) that specifies best management practices. Examples of typical construction best management practices in SWPPPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water. The discharger must also install structural controls, such as sediment control, as necessary, which would constitute Best Available Technologies to achieve compliance with water quality standards. Compliance with these requirements (and any current standards adopted subsequent to the prior approvals) will ensure that site development activities do not result in the movement of unwanted material into waters within or outside the project area. This would be a less than significant impact.

*c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-Project Site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant Impact.** As discussed above, the potential for landslide or liquefaction events on the Site is considered unlikely. Lurching and lateral spreading are also anticipated to be unlikely or insignificant. A Site specific geotechnical analysis will be completed to ensure impact will be less than significant.

*d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

**Less Than Significant Impact.** The Villages MND identifies the site as Elder Loam, Gravelly Substratum, and Arroyo Seco Gravelly Sandy Loam, which are all low shrink-swell potential. A site specific geotechnical report will be completed on the site.

*e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

**No Impact.** The project would connect to City infrastructure and would not utilize a septic system.

| VIII. MINERAL RESOURCES—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally-important mineral resource recovery Project Site delineated on a local general plan, specific plan or other land use plan? | | | | X |

*Environmental Setting*

*a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

**No Impact.** The Site does not have any known mineral deposits; the project would not result in the loss of availability of a known mineral resource.

*b) Would the project result in the loss of availability of a locally-important mineral resource recovery Project Site delineated on a local general plan, specific plan or other land use plan?*

**No Impact.** No locally-important mineral resource recovery Sites would be impacted by the project.

| IX. HAZARDS AND HAZARDOUS MATERIALS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

| IX. HAZARDS AND HAZARDOUS MATERIALS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | X | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | X | |
| d) Be located on a Project Site which is included on a list of hazardous materials Project Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | X | |

| IX. HAZARDS AND HAZARDOUS MATERIALS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |
| i) Be located within 1,500 feet of a high-pressure pipeline that can pose a safety hazard? | | | X | |

*Environmental Setting*

Due to the past and current use of the land for agricultural purposes the site will go through a Preliminary Environmental Assessment under Department of Toxic Substances Control per California Department of Education site approval standards.

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less Than Significant Impact.** The Villages IS/MND determined that because the Villages project will result in the development of a typical residential neighborhood, it would not involve the transport, use, or disposal of hazardous materials. Similarly, residential uses would not emit hazardous emissions or handle hazardous materials, substances, or waste; therefore, these impacts were considered less than significant. The proposed project would also develop residential uses that would result in hazardous materials use similar to that described in the IS/MND. This would be a less than significant impact for the proposed project.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Less Than Significant Impact.** A Phase I Environmental Site Assessment (ESA) for the proposed project site was conducted to determine the presence of potential hazardous materials associated with past use of the site (Lee & Pierce 2006). The ESA found no evidence of recognized environmental conditions on the site. However, due to historic agricultural use of the site, the ESA determined there is potential for the presence of persistent agricultural chemicals and pesticides in surface soils. The ESA recommends a soil sampling investigation to ensure that if persistent agricultural chemicals and pesticides are present in surface soils, the site is remediated to ensure levels do not exceed established standards.

Padre Associates completed a Preliminary Environmental Assessment under the oversight of the DTSC. Due to the previous use of the site as agriculture use the site was evaluated for the following chemicals of potential concern: OCPs (DDD, DDE, DDT and dieldrin) and arsenic. Concentrations of soil samples collected from the project site were similar to background concentrations and representative of ambient concentrations for the project site area. Based on the results of the PEA screening level risk assessment the site was determined to not be significantly impacted by historic agricultural practices. A No Further Action designation was recommended by Padre Associates. On September 13, 2016 the DTSC addressed a letter to the Greenfield Union School District confirming the PEA findings of a No Further Action.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Less Than Significant Impact.** The project itself will not emit hazardous air emissions or handle hazardous materials, substances or waste. The local air resource board will be contacted for a survey.

d) *Would the project be located on a Project Site which is included on a list of hazardous materials Project Sites compiled pursuant to Government Code Section*

*65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**Less Than Significant Impact.** No hazardous materials included on the list were identified.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact.** The Site is not located within 2 nautical miles of any airports.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact.** No private air strips are observed in the vicinity.

g) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** The project would not adversely affect an adopted emergency response plan or emergency evacuation plan. The school site will be designed in a manner to allow for adequate emergency response.

h) *Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**No Impact.** The Site is not located in or near wildlands.

i) *Would the project be located within 1,500 feet of a high-pressure pipeline that can pose a safety hazard?*

**Less than Significant Impact.** The Geologic Hazards Report identifies an 8-inch PG&E natural gas transmission pipeline located 1,300 feet west of the project site running north-south along 13$^{th}$ street. Also identified is a 4.5-inch natural gas service pipeline located beneath Oak Avenue. In addition, there are four large volume water pipelines within 1,500 feet of the school site. These pipelines are owned and operated by the City of Greenfield. A Pipeline Risk Assessment Study was completed in May 2016 by PlaceWorks; it was found that all the above pipelines would not pose a risk to the students or staff at the proposed school site if a rupture or leak were to occur. PlaceWorks did recommend that the school emergency response and evacuation plan address the possibility of natural gas or water pipeline release and identify evacuation routes.

| X. HYDROLOGY AND WATER QUALITY— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements? | | | X | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | X | |
| c) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Project Site? | | | X | |
| d) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-Project Site? | | | X | |

| X. HYDROLOGY AND WATER QUALITY— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | | | X | |
| f) Otherwise substantially degrade water quality? | | | | X |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | X |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | X | |
| j) Inundation by seiche, tsunami, or mudflow? | | | | X |

*Environmental Setting*

a) *Would the project violate any water quality standards or waste discharge requirements?*

**Less Than Significant Impact.** The project would be subject to the requirements of the *Clean Water Act*, including the National Pollutant Discharge Elimination System (NPDES) permit. Best Management Practices (BMPs) will be employed to minimize water quality impacts during the construction of the project; it is not expected that the operation of the Site as a school would impact water quality. Implementation of a Stormwater Pollution Prevention Plan (SWPPP) would also serve to ensure water quality standards and waste discharge requirements are not violated.

b) *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**Less Than Significant Impact.** Water will be conveyed to the Site by City water. The project architect and engineers will work with the City to determine what connections will be needed. The District will execute an agreement for the City to provide these services. The project is not expected to have a significant effect on the underlying aquifer. Conservation measures will be taken into consideration during design. Acquiring the land for future use will not have impact water supplies.

c) *Would the project substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Project Site?*

**Less Than Significant Impact.** Drainage for the Site will be designed by a qualified engineer; the implementation of BMPs during the construction phase of the project will reduce the potential for substantial erosion or siltation on- or off-Site. The project architect will determine if additional drainage control will be needed during design.

d) *Would the project substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-Project Site?*

**Less Than Significant Impact.** As discussed above, the drainage design and implementation of BMPs will reduce the potential for flooding on- or off-site. No streams or rivers are located on the Site.

e) *Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Less Than Significant Impact.** Implementation of a Stormwater Pollution Prevention Plan (SWPPP) would also serve to ensure water quality standards and waste discharge requirements are not violated.

f) *Would the project otherwise substantially degrade water quality?*

**No Impact.** The project is not expected to substantially degrade water quality.

*g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

**No Impact.** The project does not include housing as one of its components and is not within the 100-year flood hazard area according to FEMA.

*h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

**No Impact.** The Site is not located within the 100-year flood zone.

*i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

**Less Than Significant Impact.** The project will not increase the loss risk from that identified in the Villages MND.

*j) Would the project expose people or structures to a significant risk of loss, injury or death involving Inundation by seiche, tsunami, or mudflow?*

**No Impact.** Given the location of the Site being away from the significant bodies of water, the potential for impact from a seiche, tsunami or mudflow is considered very low.

| XI. LAND USE AND PLANNING— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | | | | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | X | | |
| c) Conflict with any applicable habitat conservation plan or natural community | | | | X |

| XI. LAND USE AND PLANNING—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| conservation plan? | | | | |

*Environmental Setting*

The project has been presented to the City Planning commission and motioned to approval. The land is appropriated zoned for a school site construction.

a) *Would the project physically divide an established community?*

**No Impact.** The construction of a new school site would not divide a community; rather establish a new community with the planned residential development. The surrounding land uses are planned for residential development or have been developed already. The school site will serve the students who currently live within the future attendance boundary and the future development.

b) *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

**Less Than Significant with Mitigation Incorporation.** The Villages IS/MND found that the Villages project would not conflict with the General Plan, Zoning Ordinance, or LAFCO annexation policies; therefore, the impact was considered less than significant. The proposed project includes the same land use, though at a decreased density, as assumed in the Villages IS/MND. Since approval of the Villages IS/MND, the City of Greenfield, County of Monterey, and Local Agency Formation Commission of Monterey County adopted the Greater Greenfield Area MOA. The MOA includes mitigation for the loss of agricultural land, which requires the City to adopt an agricultural mitigation program or, if the program has not been established, allows the developer to provide for mitigation at a ratio of 2 acres of equal or greater agricultural land for every acre developed. Mitigation measure MM AG-1 of the Villages IS/MND requires the project applicant to acquire a permanent conservation easement for 1 acre of agricultural land for every acre of farmland converted to nonagricultural use. The MOA also includes mitigation for agricultural buffers. However, the project site is adjacent to existing residential development to the south and approved residential development in the Villages project to the west, north, and east. Therefore, the conversion of those adjacent areas was previously considered with respect to reduction on agricultural production due to adjacency with incompatible uses. Therefore, even if buffers are not included on the project site, the impact on agricultural production would not exceed that assumed in the Villages IS/MND. Consequently, there has been no change that would result in a conflict with applicable plans or policies.

*c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

**Less Than Significant Impact.** The Site does not sit within a habitat conservation plan or natural community conservation plan.

| XII. NOISE— Would the project result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | X | | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | X | |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | X | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

| XII. NOISE— Would the project result in: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

*Environmental Setting*

*a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Less Than Significant with Mitigation Incorporation.** Although the operation of the Site as a school will not result in significant noise impacts, the construction of the project may result in a temporary increase in noise levels in the project vicinity. It is estimated that construction of the project will occur over an approximately 16—month period. Construction times will be designated during times which will cause the least impact.

Mitigation Measure

Implementation of the following mitigation measure will ensure that construction-related noise impacts remain less than significant.

**MM-5: The contractor shall employ appropriate noise suppression attachments (e.g., mufflers, etc.) on all equipment. Equipment idling shall be kept to a minimum and equipment turned off when not in use.**

- **Noise-generating construction operations shall be limited to the hours between 7:00 AM to 6:00 PM Monday through Friday. The Applicant may request permission from the City to continue with construction through the weekend. If made, said request shall be submitted in writing for review and approval by the Director of Public Works and shall be pursuant to the limitations that the Public Works Director determines are appropriate;**

- **Construction equipment and equipment staging areas shall be located at the furthest distance possible from nearby noise-sensitive land uses;**

- **Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation;**

- **When not in use, motorized construction equipment shall not be left idling.**

*b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant Impact.** During the construction of the project, the Site and immediate vicinity could be subject to groundborne vibration (e.g., from the movement of large pieces of equipment and loaded trucks); however, these impacts would be temporary and therefore less than significant.

*c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less Than Significant Impact.** Average ambient noise levels associated with the proposed elementary school are not expected to increase significantly as a result of the project.

*d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less Than Significant with Mitigation Incorporation.** As discussed above, the construction phase of the project would result in temporary increases in ambient noise levels. The implementation of **MM-5** would ensure that construction-related noise impacts remain less than significant.

*e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

**No New Impact, No Impact.** The Site is not located within 2 nautical miles of an airport.

*f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

**No New Impact, No Impact.** See e).

| XIII. POPULATION AND HOUSING—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or | | | | X |

| XIII. POPULATION AND HOUSING—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| other infrastructure)? | | | | |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |

*Environmental Setting*

a) *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact.** The proposed school project is a response to the need for additional study housing given the development within the district. The school is planned to be a community school with a majority of students using alternative transportation to the site.

b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**No New Impact, Less Than Significant Impact.** The project will be surrounded by new residential development. The site was previously planned for residential development of new units. A portion of the land used for the school was originally planned for residential housing. The replacement of the housing is not considered a significant impact.

*c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

**No New Impact, No Impact.** The two parcels that will be annexed and the location of the new school construction will not displace housing units. This project is in response to the need for adequate school housing for the current and planned student population.

| XIV. PUBLIC SERVICES— | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | | | X | |
| Police protection? | | | X | |
| Schools? | | | X | |
| Parks? | | | X | |
| Other public facilities? | | | | X |

*Environmental Setting*

*a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

*Fire Protection* – **Less Than Significant Impact.** The Villages IS/MND found that payment of fire impact fees and adherence to applicable City of Greenfield regulations would reduce impacts related to the provision of fire protection services to a less than significant level. The construction of a new school site would be in accordance to fire protection safety standards. It is not expected that the site would create significant amount of new emergency calls. The impact of the new school would not increase the impact of the previous MNDs. This would be a less than

significant impact.

*Police Protection* – **Less Than Significant Impact.** The Villages IS/MND found that the Villages project would not result in the need for a new or physically altered facility; therefore, the impact related to the provision of law enforcement services was considered less than significant. The new school construction would not create any new impacts on police protection. In general a school site operation does not create significant call volumes for police services.

*Schools* – **Less Than Significant Impact.** The new school is in response to planned growth within the project area and need for addition student housing.

*Parks* – **Less Than Significant Impact.** The school Site will include ball fields and hard courts for student use.

*Other Public Facilities* – **No Impact.** The project is not expected to increase demand for other public facilities.

| XV. RECREATION - Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | X | |

*Environmental Setting*

The new school Site is planned within a new residential subdivision. The proposed school includes the construction of playfields, which could provide recreational use outside of regular school hours.

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**No Impact.** Several parks and ball fields are within 1 mile of the planned school site. The school site itself will include ball fields for students to use during school hours and the community after school hours.

*b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**Less Than Significant Impact.** The construction of the new school site will not require new community recreation facilities. The project is expected to have play areas for students as a part of the project description.

| XVI. TRANSPORTATION/ TRAFFIC— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | | X | |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | | X | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | X |

| XVI. TRANSPORTATION/ TRAFFIC— Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | X | | |
| e) Result in inadequate emergency access? | | | | X |
| f) Result in inadequate parking capacity? | | | | X |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | X | |
| h) Be located within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor (as defined in Senate Bill 352, Chapter 668, Statutes of 2003)? | | | | X |
| i) Be located within 1,500 feet of a railroad easement? | | | | X |

*Environmental Setting*

*a) Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*

**Less Than Significant with Mitigation Incorporation.** The Villages IS/MND identified three road segments that would operate at unacceptable level of service

(LOS) with implementation of the Villages project (Walnut Avenue between 13th Street and 12th Street, Walnut Avenue between 10th Street and El Camino Real, and Apple Avenue between 13th Street and 12th Street). The MND also identified potentially significant cumulative impacts on the local streets. The MND provided mitigation measures MM 15-1a and MM 15-1b to mitigate project-specific impacts and mitigation measures MM 15-2, MM 15-3, and MM 15-4 for cumulative impacts. Mitigation measure MM 15-1a requires development along Walnut Avenue to provide adequate right-of- way to allow a two-lane divided collector with a two-way left-turn lane. The proposed project has no frontage on Walnut Avenue, so this requirement would not apply to the proposed project. Mitigation measure MM 15-1b requires a 68-foot right-of-way on Apple Avenue. The proposed project includes 34 feet of right-of-way on Apple Avenue, so it complies with the mitigation. With respect to cumulative impacts, mitigation measures MM 15-2, MM 15-3, and MM 15-4 require payment of the City's adopted Traffic Impact Fee to ensure that improvements are funded. This would mitigate the proposed project's contribution to cumulative impacts on level of service.

**MM-6: The District will contribute to all fair share traffic impact fees.**

After review of the previous traffic analysis completed for the original MND the mitigations included in the MND will allow for the construction of the school site to be less than significant impact on traffic and circulation of the surrounding areas. The school site circulation will be finalized with the inclusion of City recommendations where possible.

*b) Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

**Less Than Significant Impact.** The 2007 traffic study report for the property included a 500-student elementary school on Walnut Avenue (northern portion of Tunzi property). The current Greenfield Union School District (GUSD) proposal is for a 650 student elementary school on Apple Avenue (southern portion of Tunzi property). Although the currently proposed school could have as many as 150 more students as the previously proposed school, the traffic impact of the additional students would be negligible, as the additional traffic would be spread out over the surrounding neighborhoods.

The 2007 report found that few traffic improvements were necessary at area intersections from the development of the full site (including the school). Many of these improvements have been implemented, including traffic signals on El Camino Real at Walnut, Oak and Elm Avenues. Based upon the previous conclusions, the currently proposed school would not create any new traffic issues at Greenfield intersections that were not previously identified in the 2007 report. The 2007 report, therefore, fully addresses the regional traffic issues associated with the proposed new elementary school.

In summary, the 2007 traffic study report for the Tunzi property – which included a proposed school on Walnut Avenue – fully addresses the regional traffic issues associated with the currently proposed school on the Apple Avenue frontage of the Tunzi property. Traffic volumes in 2016 have not increased over 2006 volumes, and

the net change in traffic due to the differences in proposed student populations between the previous and currently proposed school would be negligible. The placement of the school on Apple Avenue would also have benefits over a Walnut Avenue school, including improved driveway operations, fewer potential pedestrian/vehicle conflicts, and a lesser effect on through traffic on Walnut Avenue.

*c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

**No Impact.** No airport runways are identified within 2.0 nautical miles of the Site.

*d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Less Than Significant Impact.** The school site design will be in manner where hazards are minimized.

*e) Would the project result in inadequate emergency access?*

**No Impact.** The project would provide adequate emergency access as determined by the Division of State Architects.

*f) Would the project result in inadequate parking capacity?*

**No Impact.** Adequate parking will be provided for the school site. Parking lots and drop off areas will be located on the south portion of the school site.

*g) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

**Less Than Significant Impact.** The school project is planned to be a community school which encourages walking and biking to school. It is the intentions of the district to encourage alternative transportation for students living within a close proximity to the school site. The District will not conflict with any policies supporting alternative transportation.

*h) Would the project be located within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor (as defined in Senate Bill 352, Chapter 668, Statutes of 2003)?*

**No Impact.** No major roads are identified within the 500 feet of the Site.

*i) Would the project be located within 1,500 feet of a railroad easement?*

**No Impact.** No railroad easements are located within 1,500 feet of the Site.

| XVII. UTILITIES AND SERVICE SYSTEMS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | X | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | X | |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | X | |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | X | |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | X | |

| XVII. UTILITIES AND SERVICE SYSTEMS—Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | X | |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | X | |

*Environmental Setting*

a) *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

**Less Than Significant Impact.** The new School construction will not exceed wastewater treatment requirements as established by the regional water quality control board.

b) *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

**Less Than Significant Impact.** Neither the school site construction nor the annexation of this property is expected to require new facility construction. The current facilities have the capacity to handle the new school construction.

c) *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

**Less Than Significant Impact.** Storm water management will be designed by a qualified engineer, as described in the Hydrology section of this addendum.

d) *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**Less Than Significant Impact.** Upon annexation the project would be served by water conveyed from the City, and is not expected to have a significant impact to the water supply. Prior to annexation, the district has received a "will serve" letter indicating availability of utilities to the project. **(Appendix B)**

*e) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**Less Than Significant Impact.** See response to b) above.

*f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

**Less Than Significant Impact.** Solid waste disposal at the Site would be limited to construction debris and typical school-related materials (e.g., papers, school supplies and food waste), which are not expected to have a significant impact on local landfills. Solid waste disposal will occur at permitted landfills in accordance with federal, state and local regulations.

*g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

**Less Than Significant Impact.** The project will comply with all applicable regulations for solid waste.

| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | X | | |

| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | X | | |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | X | | |

*a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Less Than Significant with Mitigation Incorporation.** As discussed in previous sections, the project is not expected to degrade the quality of the environment, substantially reduce or threaten natural habitat or eliminate important examples of the major periods of California history or prehistory. Implementation of mitigation measures will ensure that the project would not result in any significant impacts.

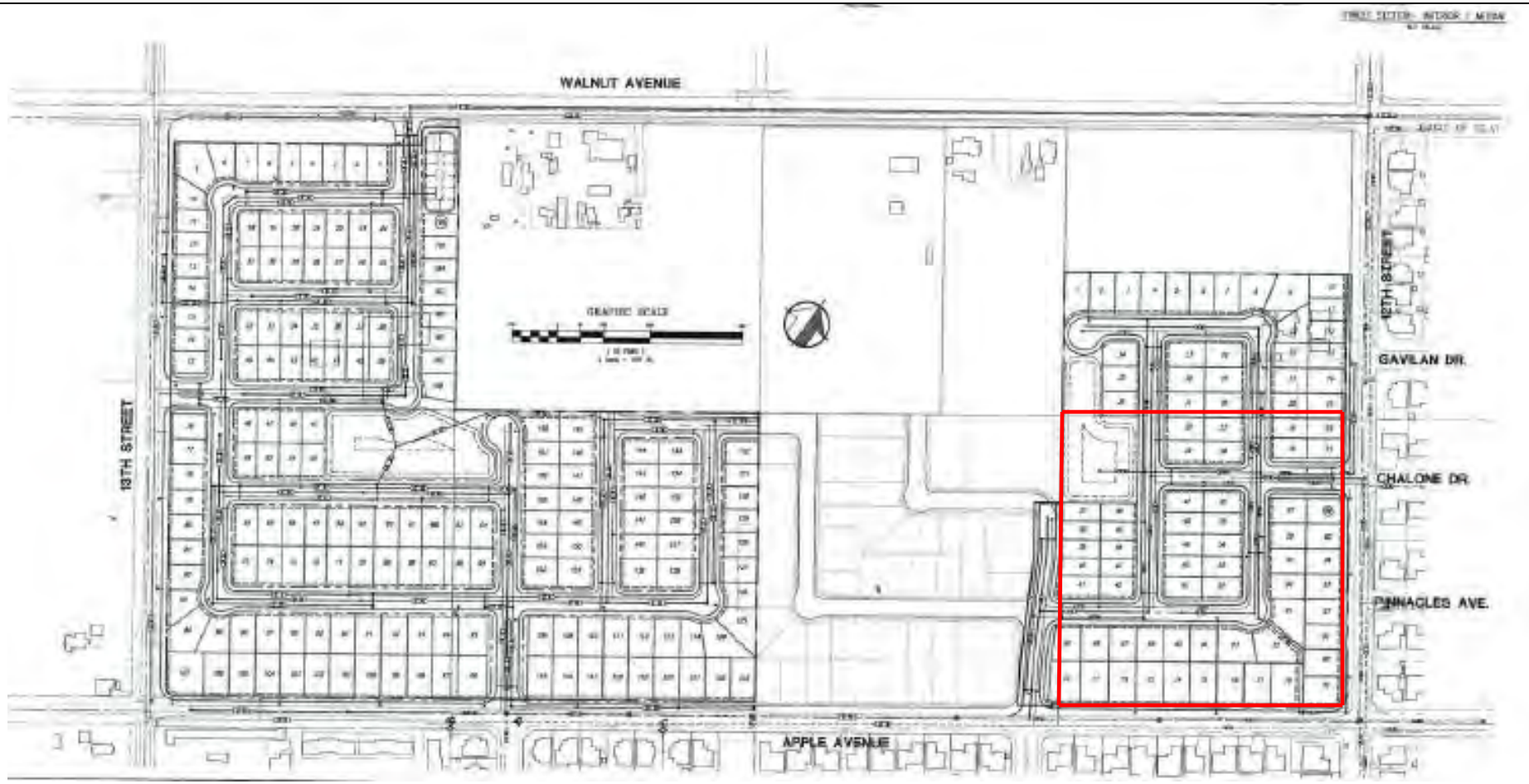
*b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less Than Significant with Mitigation Incorporation.** All of the potential impacts described in previous sections are considered less than significant or would be mitigated to a level that is less than significant. Implementation of mitigation measures would ensure that the project would not result in any significant impacts. The project could be characterized as having some cumulative impacts; however the

mitigation measures for this project reduce the project impact to a level that is less than significant.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Less Than Significant with Mitigation Incorporation.** The project with mitigation will not cause substantial adverse effects on human beings.




Not to scale.

SSS

**Thorp Property**
City of Greenfield and Greenfield Union School District
IS/MND Addendum

Figure
4

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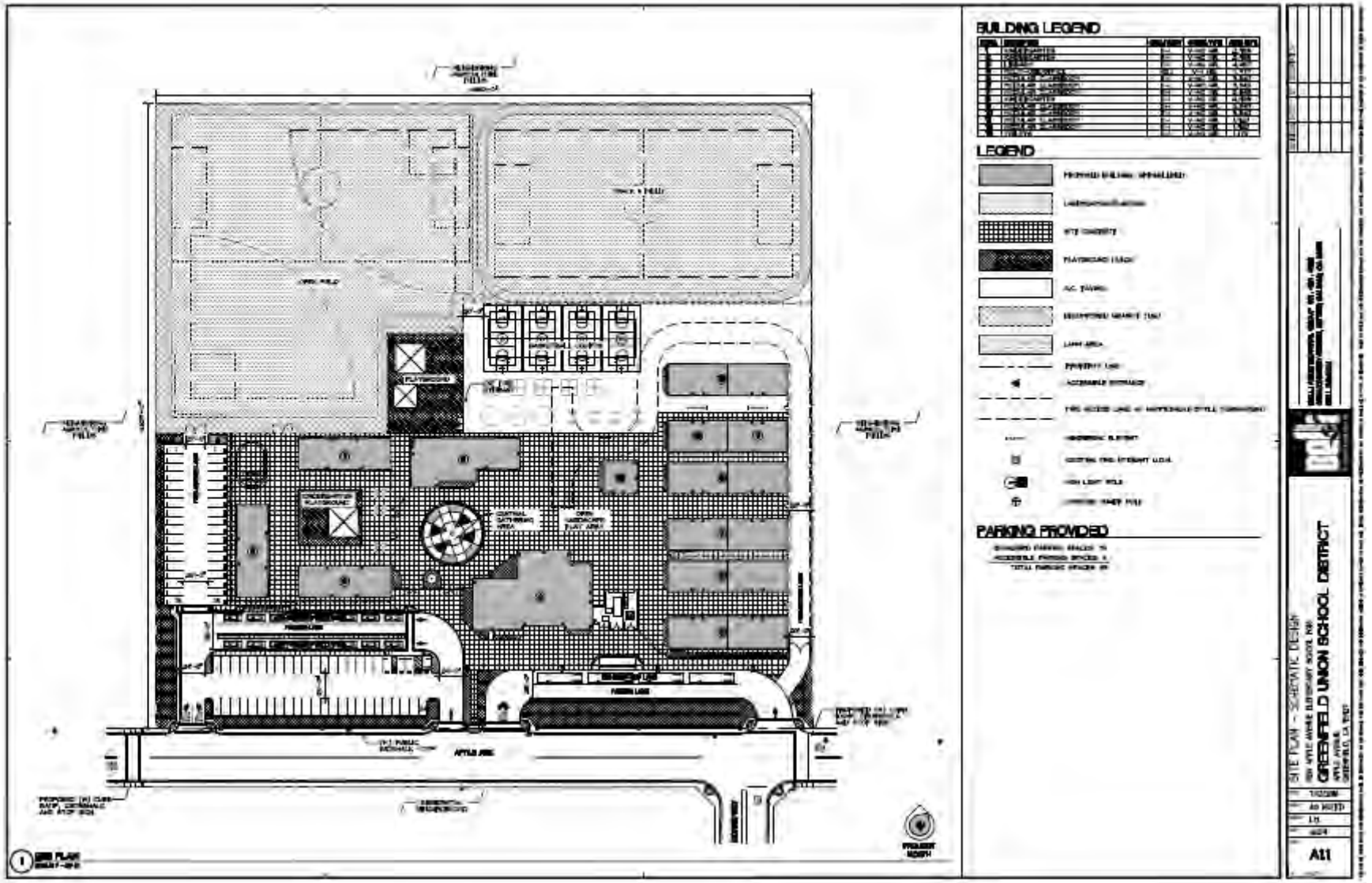


Source: Not to scale.

SSS

**School Site Plan**
City of Greenfield and Greenfield Union School District
IS/MND Addendum

Figure
6

N