CITY OF GREENFIELD

TUNZI (APPLE ROW) ANNEXATION AND VESTING TENTATIVE MAP

INITIAL STUDY/SUBSEQUENT MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF GREENFIELD
599 EL CAMINO REAL
GREENFIELD, CA 93927

Prepared by:

Michael Baker
INTERNATIONAL

60 GARDEN COURT, SUITE 230
MONTEREY, CA 93940

SEPTEMBER 2015

City of Greenfield

Tunzi (Apple Row) Annexation and Venting Tentative Map

Initial Study/Subsequent Mitigated Negative Declaration

Prepared for:

City of Greenfield
599 El Camino Real
Greenfield, CA 93927

Prepared by:

Michael Baker International
60 Garden Court, Suite 230
Monterey, CA 93940

September 2015

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CITY OF GREENFIELD, STATE OF CALIFORNIA
SUBSEQUENT MITIGATED NEGATIVE DECLARATION

Project Title:	Tunzi (Apple Row) Annexation and Vesting Tentative Map
Lead Agency:	City of Greenfield
Property Owner(s):	Marc Tunzi, et al.
Project Location:	Northwest of the intersection of Apple Avenue and Morris Way
Project Applicant(s):	Marc Tunzi, et al.
APN:	109-232-007
Permit Type:	***Vesting Tentative Map***
Project Description:	The proposed project involves the annexation of approximately 9.55 acres from Monterey County into the City of Greenfield. The proposed project includes 43 residential lots, a 0.2-acre percolation basin, a 0.45-acre park, and 0.18 acres of open space.
Public Review Period:	30 days: September 30, 2015, through October 30, 2015
Address where copy of Initial Study is Available for Public Review:	City of Greenfield Community Services Department 599 El Camino Real Greenfield, CA 93927
Address Where Written Comments Should Be Sent:	Mic Steinmann, Community Services Director City of Greenfield 599 El Camino Real 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 on the environment;
d. That said project would not cause substantial adverse effects on human beings, either directly or indirectly;
e. That said project would not result in new significant impacts or substantially increase the significance of impacts originally documented in the Initial Study/Mitigated Negative Declaration for the Villages Planned Development and Annexation Project.

MITIGATION MEASURES IDENTIFIED IN THE VILLAGES PLANNED DEVELOPMENT AND ANNEXATION PROJECT IS/MND (AND THEIR APPLICABILITY TO THE TUNZI SUBDIVISION)

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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).

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Not Applicable

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.

Status: Not Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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.

Status: Applicable

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 6 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.

Status: Not Applicable

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.

Status: Applicable

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.

Status: Not Applicable

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.

Status: Not Applicable

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).

Status: Applicable

MM 15-2 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:

- 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.

Status: Applicable

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.

Status: Applicable

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 toward the following improvements:

(PER VILLAGES IS/MND TABLE 23)
INTERSECTION IMPROVEMENTS

Intersection/Segment		GPBO with Project Conditions
1.	Hwy 101 NB On-Ramp and Livingston Road	Signalization and following geometry: NB: 2BT, 2NBR EB: 1EBT, 1EBT/R, 1EBR 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: NB: 1NBL, 1NBT, 2NBR SB: 2SBL, 1SBT, 1SBR EB: 1EBL, 1EBT, 1EBT/R 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: SB-Off Ramp: 2SBL, 1SBT/L, 1SBR SB-On Ramp: 2SBT EB: 3EBT, 1EBR 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: NB-Off Ramp: 1NBL/T, 2NBR NB-On Ramp: 2NBT EB: 2EBL, 3EBT WB: 2WBL, 1WBT, 2WBR
7.	El Camino Real and Cypress Avenue	Signalization, re-striping and following geometry: NB: 1NBL, 1NBT, 1NBT/R SB: 1SBL, 2SBT, 1SBR EB: 1EBL/T/R WB: 1WBL/T/R
8.	El Camino Real and Pine Avenue	Signalization, re-striping and following geometry: NB: 1NBL, 2NBT, 1NBR SB: 1SBL, 2SBT, 1SBR EB: 1EBL, 1EBT/R WB: 1WBL, 1 WBT, 1WBR
9.	El Camino Real and Cherry Avenue	Signalization, re-striping and following geometry: NB: 1NBL, 1NBT, 1NBT/R SB: 1SBL, 1SBT, 1SBT/R EB: 1EBL/T/R WB: 1WBL/T/R

Intersection/Segment	GPBO with Project Conditions
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): NB: 1NBL, 1NBT, 1NBL SB: 2SBL, 1SBT, 1SBR EB: 1 EBL, 1EBT/R WB: 1WBL, 1WBT, 1WBR
11. El Camino Real and Apple Avenue	Signalization, re-striping and following geometry: NB: 1NBL, 1NBT/R SB: 1SBL, 1SBT/R EB: 1EBL/T/R 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): NB: 1NBL, 1NBT/R SB: 1SBL, 1SBT/R EB: 1EBL, 1EB/T/R 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): NB: 1NBL, 1NBT, 1NBR SB: 1SBL, 1SBT/R EB: 1EBL, 1EB/T/R 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.

(PER VILLAGES IS/MND 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

Status: Applicable

MITIGATION MEASURES IDENTIFIED IN THE TUNZI (APPLE ROW) SUBSEQUENT MND

MM AG-1 The project applicant shall acquire a permanent conservation easement for agricultural land in the Greater Greenfield Area on a 1:1 basis per acre of farmland converted to nonagricultural use. The mitigation agricultural land shall be of equal or greater agricultural value. The easement must be provided to a nonprofit organization reasonably acceptable to the County. The acreage dedicated to the City as open space or parkland shall not be subject to this mitigation.

MM HAZ-1 Prior to approval of a grading permit, the project applicant shall include a detailed assessment of soil contamination associated with previous herbicide/pesticide use on the site, including soil sampling for potential herbicide/pesticide contamination. If substances are detected at concentrations that could pose a health hazard and/or violate local, state, or federal health standards, remediation of the affected areas shall be undertaken in accordance with the requirements of the City of Greenfield and Monterey County Hazardous Materials Management Services. Development of the site shall not commence until the site is deemed remediated and clear for development by the City in consultation with Monterey County Hazardous Materials Management Services.

City of Greenfield

PLANNING & BUILDING INSPECTION
599 EL CAMINO
GREENFIELD, CA 93927
PHONE: (831) 674-5591 FAX: (831) 674-3149

ENVIRONMENTAL INITIAL STUDY

Project Title:	Tunzi (Apple Row) Annexation and Vesting Tentative Map
Project Location:	Northwest of the intersection of Apple Avenue and Morris Way
Property Owner(s):	Marc Tunzi, et al.
Project Applicant(s):	Marc Tunzi, et al.
APN(s):	109-232-007
Acreage of Property:	9.55 acres
General Plan Designation(s):	Low Density Residential (LDR)
Zoning District(s):	R-1
Lead Agency:	City of Greenfield, Community Services Department 599 El Camino Real Greenfield, CA 93927
Contact:	Mic Steinmann, Community Services Director msteinmann@ci.greenfield.ca.us (831) 674-5591
Study Prepared by:	Tad Stearn, Project Director Patrick Hindmarsh, Senior Environmental Planner Michael Baker International
Date Prepared:	September 18, 2015
Description of Project:	The proposed project involves the annexation of approximately 9.55 acres from Monterey County into the City of Greenfield. The proposed project includes 43 residential lots, a 0.2-acre percolation basin, a 0.45-acre park, and 0.18 acres of open space.
Public Agency Comment Period:	30 days: September 30, 2015, through October 30, 2015

I. BACKGROUND INFORMATION

A. PURPOSE AND CONTEXT

The purpose of this Subsequent Initial Study/Mitigated Negative Declaration (IS/MND) is to evaluate the potential environmental effects associated with implementation of the project and to provide mitigation where necessary to avoid, minimize, or lessen those effects.

When an environmental impact report (EIR) has been certified or mitigated negative declaration has already been adopted for a project, California Environmental Quality Act (CEQA) Guidelines Section 15163(a) sets forth the criteria for determining whether a subsequent MND must be prepared in support of further agency action on the project.

Pursuant to State CEQA Guidelines Section 15162(a), a subsequent MND is appropriate if the following conditions are met:

(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alterative.

The Villages Planned Development and Annexation Project Initial Study/Mitigated Negative Declaration (IS/MND), adopted in 2008 (SCH No. 2008091099), evaluated the environmental effects of construction of residential uses on approximately 80 acres, including the Tunzi project site. The proposed Tunzi project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Villages Planned Development and Annexation Project IS/MND. Although the Villages project was approved by the City, the subject parcels have not yet been annexed to the City of Greenfield.

As discussed in this Subsequent IS/MND, the modifications proposed as part of the Tunzi project will not result in any new significant impacts, nor will any previously identified impact increase in significance from what was originally documented in the Villages Planned Development and Annexation Project IS/MND. Additionally, no mitigation identified in the Villages Planned Development and Annexation Project IS/MND that was found to be infeasible has been determined feasible, and the project proponent has accepted all mitigation measures that were previously adopted in the Villages Planned Development and Annexation Project IS/MND. The City of Greenfield has determined that only minor modification of the original IS/MND is necessary for the Subsequent IS/MND to adequately address the proposed project's impacts. Therefore, the City has prepared this environmental document.

B. 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 US 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 and project vicinity are illustrated in **Figure 1**. The project site is located north of Apple Avenue and generally west of the intersection with Morris Way. The site is located adjacent to the Greenfield city limits to the south and east.

Surrounding Land Uses

Surrounding land uses include farmland, rural residential, and single-family residential neighborhoods. Low-density single-family neighborhoods located in the City of Greenfield border the project site on the south. Much of the site and surrounding areas to the north and west are considered to be prime farmland. Land to the north of Walnut Avenue is currently used as a vineyard.

C. PROJECT DESCRIPTION AND BACKGROUND

The proposed project involves development of approximately 9.55 acres in the City of Greenfield. The proposed project site consists of Assessor's Parcel Number (APN) 109-232-007. The project includes the following requested City actions: Vesting Tentative Map.

The project site was included as part of the Villages Planned Development and Annexation Project (Villages project), which included annexation of 76 acres with two separate PD areas that included 166 dwelling units and 86 dwelling units, respectively. The project also included four "Remainder Parcels," one of which being the Tunzi property. The Remainder Parcels were assumed to be developed at the

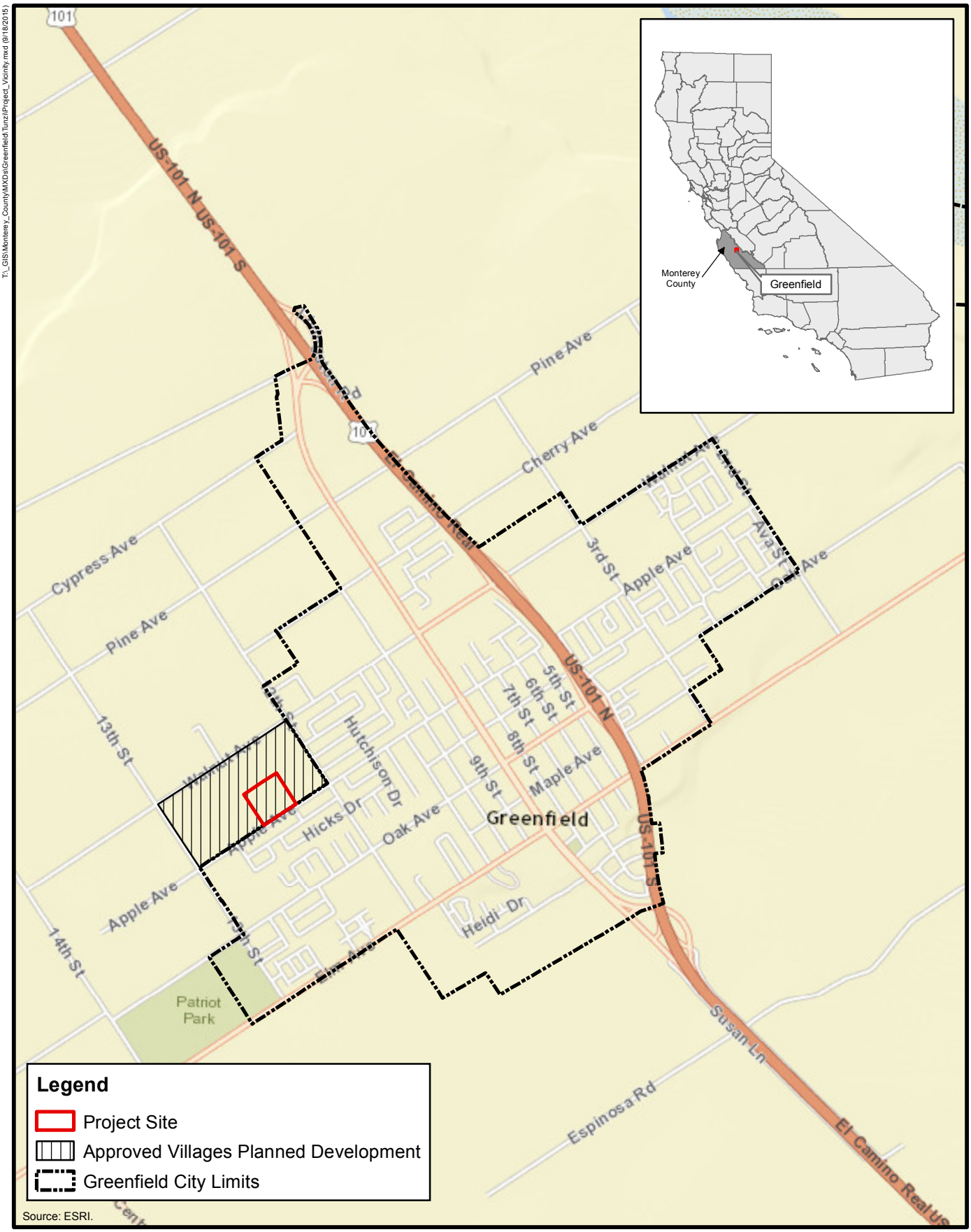
maximum allowable buildout potential in accordance with the underlying land use designation of Low Density Residential (LDR) in the City of Greenfield General Plan at 7 units per acre. At 7 units per acre, the Tunzi site was assumed for development of up to 67 units. Although the Villages project was approved by the City, the subject parcels have not been annexed.

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 (2010) land use designation of Farmland 40-acre minimum with an Urban Reserve overlay. The Urban Reserve overlay is applied in areas where an incorporated city may expand (annex) or provide the necessary infrastructure to a proposed project. The parcel is zoned F/40 (Farmland/40-acre minimum).

T:_GIS\Monterey_County\MXDs\Greenfield\Tunzi\Project_Vicinity.mxd (9/18/2015)



N

0 1,000 2,000
Feet

Figure 1
Regional Vicinity

Michael Baker
INTERNATIONAL

City of Greenfield General Plan

The City of Greenfield Planning Area, as identified in 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 proposed sphere of influence (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.

The boundary of the General Plan Planning Area constitutes and is coterminous with the City's SOI boundary. The SOI is a planning tool adopted and used by the City and the Local Agency Formation Commission (LAFCO) of Monterey County 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 SOI 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 consist 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.

In 2013, the City of Greenfield, County of Monterey, and Local Agency Formation Commission of Monterey County adopted the Greater Greenfield Area Memorandum of Agreement (MOA). The terms of the MOA serve as a baseline by which the City, County, and LAFCO can evaluate future annexation proposals for properties included in the March 2007 Sphere of Influence Amendment or in future amendments to the Greenfield SOI.

Project Characteristics

Proposed Land Uses

The proposed project consists of the annexation of approximately 9.55 acres into the City of Greenfield. The project proposes 43 residential lots, a 0.2-acre percolation basin, a 0.45-acre park, and 0.18 acres of open space. Internal streets would occupy 2.53 acres. The project's site plan is shown in **Figure 2**.

Table 1 provides a summary of proposed land uses, acreage, and dwelling units.

TABLE 1
PROPOSED LAND USE

Proposed Use	Acres
Residential	6.19
Streets	2.53
Percolation Basin	0.20
Park	0.45
Open Space	0.18
Total	**9.55**

Source: Creegan & D'Angelo 2010

The project proposes an internal street network that would connect to the streets in the approved (future) Mira Monte and Willow Glen projects. The project would connect to the Mira Monte project in the northwest portion of the site, and the roadway on the eastern portion of the project site is the same as indicated on plans for the Willow Glen project.

Traffic and Circulation Improvements

Primary access to the project site would be from Apple Avenue, and interior streets would provide circulation within the project site. Right-of-way widths for interior streets would be 56 feet (including 5-foot planters, 5-foot sidewalks, and a 6-foot public utility easement) and would also allow for on-street parking. Improvements on Apple Avenue would also include 5-foot planters, 5-foot sidewalks, a 6-foot public utility easement, and 8-foot on-street parking. Requirements for a 5-foot planter strip between the street and sidewalk could be eliminated due to drought restrictions and water conservation efforts. Future design standards may be for sidewalks to be immediately adjacent to the street.

Construction/Site Preparation/Phasing

Clearing/grading typical for construction of an urban residential neighborhood would be necessary. The project does not propose a phasing plan; however, the project site could be developed in phases.

Public Services and Infrastructure

Public services and facilities, such as water, wastewater, gas, and electricity, would be extended from the city of Greenfield to the project site. Electrical and natural gas service would be provided by the Pacific Gas and Electric Company (PG&E). Telecommunications services would be provided by SBC (or current provider), and cable television would be provided by Charter Communications. The Greenfield Police Department would provide law enforcement services to the development upon annexation and firefighting and emergency response services would be provided by the Greenfield Fire Protection District.

T:_CS\Work\Greenfield_City of\Tunzi\Figures

SHEET INDEX

1 COVER SHEET
2 SITE AND UTILITY PLAN
3 GRADING AND DRAINAGE PLAN

DEVELOPER'S STATEMENT

APPLICANT:
GEARY COATS/COATS CONSULTING
P.O. BOX 1356
CARMEL, CA 93921

OWNER:
MARC & DANIELLE TUNZI
19540 REDDING DRIVE
SALINAS, CA 93908

ASSESSOR'S PARCEL NO: 109-232-007

GENERAL PLAN DESIGNATION: LOW DENSITY RESIDENTIAL

EXISTING ZONING: MONTEREY COUNTY AGRICULTURAL

PROPOSED ZONING: RESIDENTIAL R-1

PROPERTY LOCATION: CITY OF GREENFIELD

GROSS PROPERTY SIZE:

9.55 ACRES (CURRENT BOUNDARY/PROPERTY LINE)

PROPOSED DEVELOPMENT AREA:

RESIDENTIAL LOTS	6.19 ACRES
STREETS	2.53 ACRES
PERCOLATION BASIN	0.20 ACRES
PARK	0.45 ACRES
OPEN SPACE	0.18 ACRES

NET DENSITY – 43 LOTS / 9.55 ACRES = 4.5 LOTS/ACRE
MINIMUM LOT SIZE 6,000 SF
AVERAGE LOT SIZE 6,270 SF

PROPOSED USE:
SINGLE FAMILY RESIDENTIAL LOTS – 43 LOTS
TEMPORARY PERCOLATION BASIN – 1 PARCEL
PARK – 1 PARCEL

PROPOSED DEVELOPMENT:
FULLY DEVELOPED LOTS AND HOUSES

PHASING: MAY BE DEVELOPED IN PHASES

STRUCTURES TO BE DEMOLISHED: NONE

PAST AND RECENT USE: AGRICULTURAL/RURAL RESIDENTIAL

CURRENTLY USED FOR OPEN LAND

SANITARY SEWER SERVICE: CITY OF GREENFIELD SYSTEM CONNECTING TO THE SEWER MAIN IN APPLE AVENUE.

PROPOSED PROPERTY ACCESS: STREET CONNECTIONS TO APPLE AVENUE AND ADJACENT FUTURE SUBDIVISIONS.

STORM WATER SYSTEM: A SERIES OF STORM DRAIN PIPES FOR THE SUBDIVISION. STORM WATER PERCOLATION BASIN LOCATED IN PARCEL A.

WATER SERVICE: CITY OF GREENFIELD WATER SYSTEM WITH SERVICE FROM APPLE AVENUE.

GAS & ELECTRIC SERVICE FROM P.G.&E.

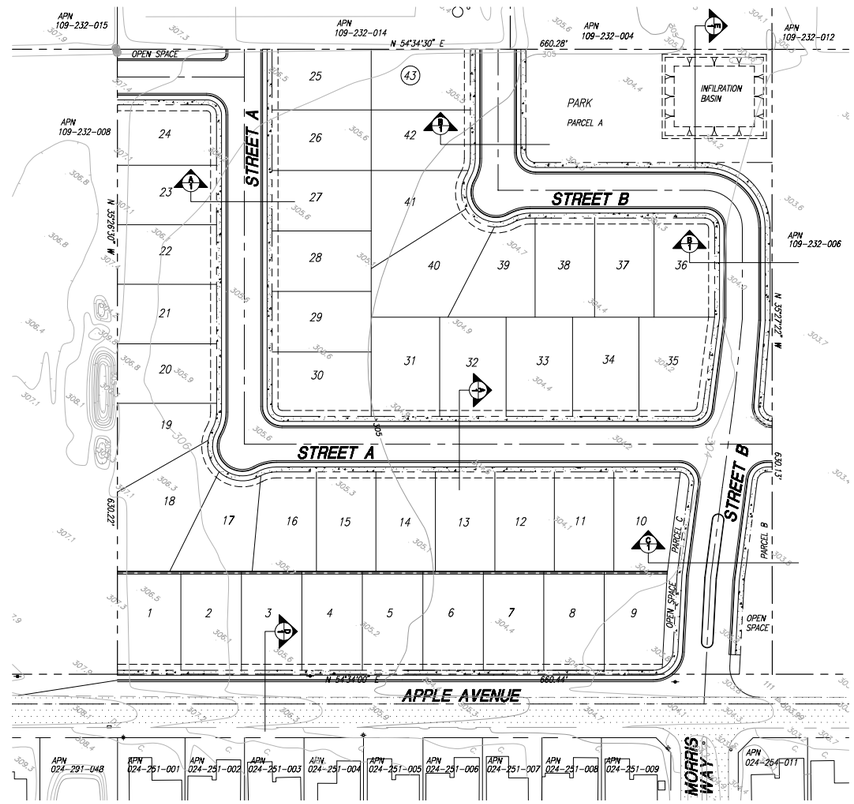
CABLE TELEVISION SERVICE FROM CHARTER COMMUNICATIONS

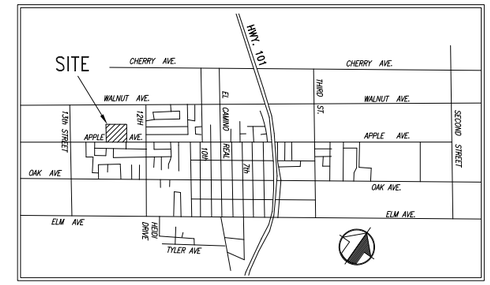
TELEPHONE SERVICE FROM AT&T

GRADING: IMPORT

EARTHWORK: ALL EARTHWORK NUMBERS ARE UNADJUSTED FOR SHRINKAGE OR SWELLING.

RAW CUT= 8,180± CUBIC YARD
RAW FILL= 14,030± CUBIC YARD
NET= 5,850± CUBIC YARD IMPORT





VICINITY MAP-CITY OF GREENFIELD
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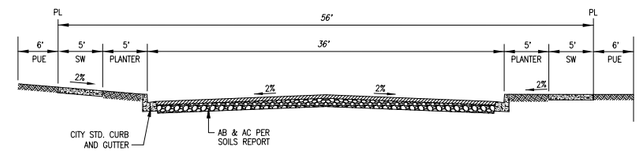
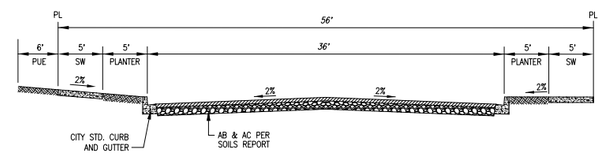
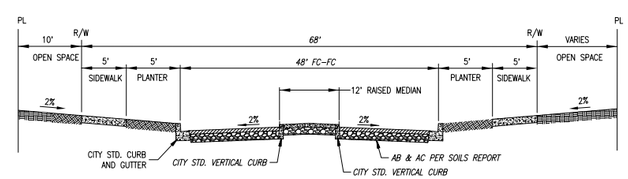


A INTERIOR STREET
NTS
STREET A



B INTERIOR STREET
NTS
STREET B



C INTERIOR STREET/MEDIAN
NTS
STREET B

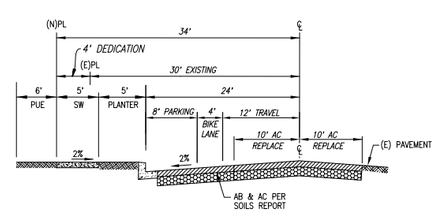
LEGEND

BOUNDARY LINE	CURB AND GUTTER
PROPERTY LINE/ROW	FINISH GRADE CENTERLINE
CONTROL LINE/CENTER OF ROW	EXISTING ELEVATION
LOT LINE	GRADE/DIRECTION OF DRAINAGE
EASEMENT LINE	GRADE BREAK (HIGH POINT/LOW POINT)
WATER LINE	PAD ELEVATION
STORM DRAIN	RETAINING WALL
SANITARY SEWER	
(E) UTILITIES	
(E) SSMH/SDMH (as noted)	
(E) UTILITY/POWER POLE	
(E) MAJOR CONTOUR	
(E) MINOR CONTOUR	
(N) MAJOR CONTOUR	
(N) MINOR CONTOUR	
CATCH BASIN	
WATER VALVE (BLOW-OFF)	
SS/SD MANHOLE	
SS CLEANOUT (FLUSHING INLET)	

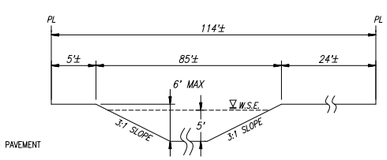
6" W	(E)
15" SD	(N)
6" SS	FC
8" SS	PL
300	PUE
	ROW, R/W
300	W.L.E.
	W.S.E.

308.0
(E)305.0
0.4%
GB HP LP
P313.1

EXISTING
NEW
FACE OF CURB
PROPERTY LINE
PUBLIC UTILITY EASEMENT
RIGHT OF WAY
WATER LINE EASEMENT
WATER SURFACE ELEVATION



D APPLE AVENUE
NTS



E POND SECTION
NTS

Source: Creegan + D'Angelo

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FEET

Figure 2
Site Plan

Michael Baker INTERNATIONAL

D. REQUESTED ENTITLEMENTS AND PROJECT APPROVALS

This Subsequent 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. Actions that would be taken relative to the project evaluated in this document include approval of the Vesting Tentative Map and all City-issued permits for construction and occupation. Prior to construction, annexation of the project area must be approved by LAFCO.

E. BACKGROUND AND PRIOR ENVIRONMENTAL DOCUMENTATION CONSIDERED

The Initial Study is based on the analysis in the Villages Planned Development and Annexation Project IS/MND, which was based on the following technical reports prepared for the Villages project. These reports and the Villages Planned Development and Annexation Project IS/MND are available for review at the City of Greenfield, Planning and Building Department, located at 599 El Camino Real, Greenfield, California.

- *Air Quality Impact Analysis, Ambient Air Quality & Noise Consulting, August 14, 2007, updated August 25, 2008*
- *Noise Impact Analysis,* Ambient Air Quality & Noise Consulting, 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 following plans are 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 designated as Low Density Residential (LDR) by the General Plan. The applicant proposes single-family residential development, which is consistent with the City's General Plan LDR designation for the site.

Water Quality Control Plan

The proposed project is located in the Central Coast Basin under the jurisdiction 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 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 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 Governments' (AMBAG) projected population and employment forecasts. In general, a project is deemed consistent with the MBUAPCD Air Quality Management Plan 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, it is also consistent with the AQMP.

As discussed in subsection 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 Air Quality Management Plan.

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.

F. FACTORS

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Mitigation measures identified in the Villages Planned Development (PD) and Annexation Project Mitigated Negative Declaration or in this Subsequent Mitigated Negative Declaration would reduce these impacts to a less than significant level.

☒ Aesthetics	☒ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☒ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Public Services	☐ Recreation
☒ Transportation/Traffic	☒ Utilities and Service Systems	☒ Mandatory Findings of Significance

II. 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 in this Subsequent MITIGATED NEGATIVE DECLARATION, nothing further is required.

Signature	September 24, 2015 Date
Michael A Steinmann Printed Name	Community Services Director Title

The following checklist includes check boxes that indicate the level of significance of an impact relative to the former analysis outlined in the Villages Planned Development and Annexation Project IS/MND (Villages IS/MND). As noted herein, where the impact has been adequately addressed in the Villages IS/MND, no further analysis is required. For environmental impacts where the conclusion differs from that in the Villages IS/MND, the new level of significance, from no impact to potentially significant impact, is indicated.

1. 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).

2. "Less Than Significant Impact" applies when the proposed project will not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

3. "New Less Than Significant Impact With Mitigation Incorporated" applies when the proposed project will not result in a substantial and adverse change in the environment after additional mitigation measures are applied.

4. "Potentially Significant Impact" is noted where an impact could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

5. "New Impact or Increase Severity of Previous Significant Impact?" A "No" indicates there would be no new significant impact or no increase in severity of an impact identified as significant in the previous IS/MND. This is marked "Yes" if the proposed project will result in an increase in the severity of an impact disclosed in the previous IS/MND or if it could result in a new significant impact. If this is marked "Yes," an EIR will be required.

1. AESTHETICS

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

Discussion/Conclusion/Mitigation

a, c) **No new or more severe significant impacts**. The Villages IS/MND identified scenic resources in the city as including 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. In addition, although development on the site would be visible from surrounding properties, there is not an identifiable viewpoint or elevated vista on the adjacent properties from which the project would detract in a significant way. Impacts on scenic vistas were determined to be less than significant. The Villages IS/MND also determined that because the General Plan considered impacts of the conversion of the site from agricultural to developed, there would be a less than significant impact related to changes to the visual character.

The proposed project includes development of a portion of the site previously considered for development. The project would be less dense than previously assumed; however, the reduction in density would not substantially reduce the impact compared to that analyzed in the Villages IS/MND. The proposed project would also result in a less than significant impact.

b) **No new or more severe significant impacts**. The Villages IS/MND determined that the site is not located within a scenic highway, and there are no significant trees, rock outcroppings, or other scenic resources on-site. Therefore, there was no impact on scenic resources within a scenic highway. The proposed project would occur in the area analyzed in the previous document and would result in development generally consistent with that previously analyzed. The project would result in no impact.

d) **No new or more severe significant impacts**. The Villages IS/MND found that the installation of new sources of light to an area that otherwise contains few light sources could result in a potentially significant impact. The IS/MND identified mitigation measure MM 1-1 that reduced light and glare impacts to a less than significant level by requiring that lighting be non-intrusive and that lighting plans be reviewed and approved by the City of Greenfield. The proposed project would be subject to mitigation measure MM 1-1, which would have the same mitigating effect on the current project. Therefore, this would be a less than significant impact.

2. AGRICULTURE AND FOREST 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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 nonagricultural use?	☐	☒	☐	☐	No
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	No
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526 and by Government Code Section 51104(f)), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	No
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒	No
c) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	☐	☒	☐	☐	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. 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 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 1 acre of equal or greater agricultural land for every acre developed. To comply with the terms of the MOA, mitigation measure AG-1 is required. This would be a less than significant impact.

MM AG-1 The project applicant shall acquire a permanent conservation easement for agricultural land in the Greater Greenfield Area on a 1:1 basis per acre of farmland converted to nonagricultural use. The mitigation agricultural land shall be of equal or greater agricultural value. The easement must be provided to a nonprofit organization reasonably acceptable to the County. The acreage dedicated to the City as open space or parkland shall not be subject to this mitigation.

Timing/Implementation: *Prior to approval of grading permit*

Enforcement/Monitoring: *City of Greenfield Community Services Department*

b) **No new or more severe significant impacts.** The Villages IS/MND found that there would be a less than significant impact due to conflicts with agricultural zoning and that no parcels under Williamson Act contract would be converted. The project site is within the city's sphere of influence and is designated and zoned for residential use. The site is not under Williamson Act contract. There would be no impact.

c,d) **No new or more severe significant impacts.** The project site does not contain any forestland or land zoned for forestland, timberland, or timberland production. Therefore, no impact would occur.

e) **No new or more severe significant impacts.** As noted above, 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 MM 2-2 requires that the Villages project provide a 100-foot buffer on the northern portion of the project 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 2nd Street throughout the Planning Area for all future development.

The proposed project does not include buffers; however, the project site is surrounded by property that was analyzed for conversion to residential use in the Villages IS/MND. The project's site plan is designed to tie into adjacent approved development, with connections for internal roads and infrastructure. Further, due to the size of the project site (approximately 630 feet by 660 feet), the provision of buffers within the site would eliminate the ability to connect to adjacent parcels and make the project site infeasible for development. With respect to the potential for additional impacts related to development of the site without buffers, while some agricultural activity could occur on adjacent sites prior to development, the conversion of those sites from agricultural use were already considered in the IS/MND, as those sites are part of the previous project. Consequently, there would be no new 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:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	No
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐	No
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐	No
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	No
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. 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. Therefore, the proposed project would generate fewer emissions than assumed in the previous document and would not conflict with the AQMP.

b, c, d) **No new or more severe significant impacts**. The Villages IS/MND found that the previous project would result in construction-related emissions of criteria pollutants (particulate matter–PM_{10}) and toxic air contaminants that could exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds. This was determined to be a potentially significant impact. The IS/MND identified mitigation measure MM 3-1, which requires use of best available control measures during site preparation and construction, preparation of a construction emissions

reduction plan that sufficiently reduces short-term construction-generated emissions to within acceptable levels, and additional measures to reduce dust. These measures would reduce particulate matter and substantially reduce diesel-exhaust emissions from on-site construction equipment such that this would be a less than significant impact. The proposed project would result in the same amount of grading, but would include fewer units, so grading impacts would be similar, but construction impacts would be reduced. Mitigation measure MM 3-1 would have the same mitigating effect on the proposed project, and construction impacts of the project would also be less than significant.

Operational impacts were identified as potentially significant in the Villages IS/MND, and mitigation measure MM 3-2 was identified to reduce impacts to a less than significant level. Mitigation measure MM 3-2 requires measures such as providing sidewalks and bicycle paths, incorporating energy-efficient appliances, and prohibiting wood-burning fireplaces. This measure would also apply to the proposed project and, as noted above, the project would include fewer units than previously assumed. Therefore, the project's operational emissions would be less than previously assumed and would also be reduced to less than significant with mitigation.

e) **No new or more severe significant impacts**. The Villages IS/MND found that residential uses on the site 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 on-site or existing off-site land uses. In addition, there were no odor sources in the project vicinity that would expose the project site to substantial odors. The proposed project includes residential uses such as previously assumed, so it would not generate objectionable odors. Odor generators in the project vicinity have not changed and would not expose the project to substantial objectionable odors.

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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 Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐	No
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 Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	No
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?	☐	☐	☒	☐	No
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?	☐	☐	☐	☒	No
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	No
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?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a, e) **No new or more severe significant impacts**. 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.

b, d) **No new or more severe significant impacts**. The Villages IS/MND found that the project site contains no sensitive natural communities or riparian habitat and it would not affect the movement of any fish or wildlife species or impede the use of native nursery sites or corridors. There would be no impact. The proposed project site is disturbed agricultural land that contains no sensitive habitat. The proposed project would result in no impact.

c) **No new or more severe significant impacts**. The Villages IS/MND identified pools on the Villages Planned Development site that were associated with the irrigation of fields, but these features were man-made and did not contain substantial wetland vegetation. For these reasons, the IS/MND determined there would be no impact. The proposed project site has historically been used for agriculture and does not contain the irrigation features described in the IS/MND. The proposed project would not result in wetland impacts.

f) **No new or more severe significant impacts**. There are 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. No impact would occur with project development.

5. CULTURAL RESOURCES

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

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. The historical investigation conducted for the previous project identified several private residences on the site that are over 50 years old; however, none of these residences meet the eligibility criteria for inclusion in the California Register of Historical Resources. There are no structures on the Tunzi property. Therefore, there would be no impact on historical resources.

b, d) **No new or more severe significant impacts**. Archaeological and historical investigations for the previous project did not identify any unique archaeological resources within the project boundaries. However, the Villages IS/MND disclosed the possibility of unanticipated or accidental archaeological discoveries, including the potential for human remains, during ground-disturbing activities. This was determined to be a potentially significant impact. The MND identified mitigation measures MM 5-1 and MM 5-3, which require construction work to stop in the event any archeological artifact or human remains are encountered. Mitigation measure MM 5-1 requires that a qualified archeologist evaluate any artifact and implementation of measures to reduce impacts on the resource, such as avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Mitigation measure MM 5-3 requires notification of the County Coroner and compliance with CEQA Guidelines Section 15064.5. The IS/MND determined that these measures would reduce impacts on archeological resources, including human remains, to a less than significant level. Mitigation measures MM 5-1 and MM 5-3 would apply to the proposed project and would have the same mitigating effect. This would also be a less than significant impact for the project.

c) **No new or more severe significant impacts**. The Villages IS/MND did not identify any formally documented paleontological sites within the Villages project boundaries. However, the IS/MND disclosed the possibility of unanticipated and accidental paleontological discoveries during ground-disturbing project-related activities. The IS/MND determined that any unanticipated paleontological discoveries during project implementation would be a potentially significant impact. The MND found that mitigation measure MM 5-2 would reduce impacts on paleontological resources to a less than significant level by requiring that work stop immediately if any paleontological resources are encountered during construction and that any such find be evaluated and mitigated by a qualified paleontologist. There are no known paleontological resources on the project site and mitigation measure MM 5-2 would reduce impacts on any paleontological resources encountered during construction of the project. This would be a less than significant impact.

6. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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 Special Publication 42.	☐	☐	☐	☒	No
ii) Strong seismic ground shaking?	☐	☒	☐	☐	No
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	No
iv) Landslides?	☐	☐	☐	☒	No
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	No
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?	☐	☒	☐	☐	No
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?	☐	☐	☒	☐	No
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?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a)

i) **No new or more severe significant impacts**. 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. Development of the proposed project would not expose people or property to ground rupture. There would be no impact related to ground rupture.

ii) **No new or more severe significant impacts**. Because 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) **No new or more severe significant impacts**. 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 noted in the Villages IS/MND, 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) **No new or more severe significant impacts**. The project site and its surroundings are flat. There are no slopes or mapped landslides in the vicinity that possess significant landslide potential, as a result of either strong seismic activity or site construction, and there is very low potential for landslides or slope stability problems. There would be no impact related to landslides.

b) **No new or more severe significant impacts**. 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) **No new or more severe significant impacts**. The Villages IS/MND found that previous mechanical tilling of the near surface soils and other agricultural activities has resulted in loosening of the soils that could result in differential settlement of overlying improvements. This was considered a potentially significant impact. The IS/MND found that compliance with mitigation measure MM 6-1, which requires incorporation of design recommendations contained in a site-specific geotechnical report, would reduce potential impacts to less than significant. As noted above, the proposed project would be designed and constructed in

accordance with the CBC, which would ensure that risks associated with unstable soils are reduced to less than significant.

d) **No new or more severe significant impacts**. The Villages IS/MND found that the soil types on the project site—Elder Loam, Gravelly Substratum, and Arroyo Seco Gravelly Sandy Loam—have low shrink-swell potential; therefore, shrink swell potential on the site was determined to be less than significant. Because the IS/MND considered soil types on the proposed project site, this impact would also be less than significant for the proposed project.

e) **No new or more severe significant impacts**. The project site would be served by the City of Greenfield sewer system and would not include the use of septic systems. There would be no impact.

7. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	No
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. The Villages IS/MND acknowledged that the Villages project would contribute to cumulative increases in greenhouse gas (GHG) emissions, which would be primarily associated with increases of carbon dioxide (CO_2) from mobile sources. Estimated increases of CO_2 emissions associated with the Villages project at buildout were estimated using the URBEMIS2007 computer program. This computer program was limited in that it only accounted for the single GHG species, CO_2, as sourced from construction activities, area sources, and mobile sources. Modeling software is now able to account for the GHG emission types methane (CH_4) and nitrous oxide (N_2O), in addition to CO_2. Preliminary guidance from the Office of Planning and Research (OPR) and recent letters from the Attorney General indicate that lead agencies should calculate, or estimate, emissions from not only construction activities, area sources, and vehicular traffic, but also energy consumption, water conveyance and treatment, and waste generation. Therefore, the City has determined that an updated analysis of the potential impacts associated with the generation of GHG emissions is warranted in light of the availability of advanced emissions modeling software.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 21 times more heat per molecule than CO_2, and N_2O absorbs 310 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. CO_2e emissions associated with the proposed project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term regional CO_2e emissions associated with project-related new vehicular trips and indirect source emissions, such as electricity usage for lighting.

The resultant CO_2e emissions of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2, computer program (see **Appendix A**) and compared with a threshold of significance. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for the use of government agencies,

land use planners, and environmental professionals. Thresholds of significance illustrate the extent of an impact and are a basis from which to determine the appropriate definition of "negligible" GHG emissions. Significance thresholds for GHG emissions resulting from land use development projects have not been established in Monterey County. In the absence of any GHG emissions significance thresholds, the projected emissions are compared to the San Luis Obispo Air Pollution Control District's (SLOAPCD) adopted threshold of 1,150 metric tons of CO_2e per year. While significance thresholds used in San Luis Obispo County are not binding on the City of Greenfield, they are instructive for comparison purposes. In accordance with the SLOAPCD threshold determination, projected CO_2e emissions from site preparation (i.e., vegetation removal, grubbing) and construction activities have been quantified and amortized over the life of the project (30 years). The amortized site preparation and construction emissions are added to the annual average operational emissions. The project operational CO_2e emissions resulting from the proposed project are identified in **Table 2**.

TABLE 2
PROJECT GREENHOUSE GAS EMISSIONS – PROJECT OPERATION (METRIC TONS PER YEAR)

Emissions Source	CO_2e
Construction Amortized over 30 Years	13
Area Source (landscaping, hearth)[1]	31
Energy[2]	141
Mobile[3]	518
Waste[4]	8
Water Wastewater[5]	16
Total	**727**
SLOAPCD Significance Threshold	1,150
Exceed Threshold?	**No**

*Source: CalEEMod version 2013.2.2. See **Appendix A** for emission model outputs.*
Notes:
1. *Emissions projections account for Villages IS/MND mitigation measure MM 3-2, specifically the prohibition against wood-burning fireplaces.*
2. *Emissions projections account for PG&E's most current (2012) CO_2 emission intensity factor of 445 pounds of CO_2 per megawatt of energy generated (PG&E 2014). Projections account for Villages IS/MND mitigation measure MM 3-2, specifically the requirement that the applicant incorporate energy-efficient appliances into the proposed residential units.*
3. *Emissions projections are based on CalEEMod trip generation rates defaults that are derived from the ITE Trip Generation Manual, which was also used in the traffic analysis prepared for the Villages IS/MND. Projections account for Villages IS/MND mitigation measure MM 3-2, specifically the requirement to link on-site pedestrian pathways to off-site land uses and external pedestrian facility networks.*
4. *Solid waste generation estimates derived from the Villages IS/MND.*
5. *Wastewater generation estimates derived from the Villages IS/MND.*

Consequently, the proposed project's contribution of CO_2e emissions would not be considered substantial and would not result in a significant impact. The project's contribution to GHG emissions would be a less than significant impact.

b) **No new or more severe significant impacts**. The California Global Warming Solutions Act of 2006 (AB 32) (Health and Safety Code Sections 38500 et seq.) requires that statewide GHG

emissions be reduced to 1990 levels by 2020. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. Since AB 32 is the only statutory regime for the reduction of GHGs, it can be used as the basis on which the agency can develop its standard to determine whether a project's impacts are cumulatively considerable.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan to achieve the goals of AB 32, which determined that achieving the 1990 emission level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual" or BAU).[1] However, in 2012 CARB released revised estimates of the expected 2020 emissions reductions, which were updated to account for the economic downturn since 2008 as well as reduction measures already approved and put in place. This reduced the projected 2020 emissions and thereby revised the BAU reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 to 21.7 percent. CARB also provided a lower 2020 inventory forecast that took credit for certain State-led GHG emission reduction measures already in place. When this lower forecast is considered, the necessary reduction from BAU needed to achieve the goals of AB 32 is approximately 16 percent.

For the purposes of evaluating the proposed project's potential to conflict with the implementation of an applicable GHG-reducing regulation, the proposed project is compared to AB 32's goal to achieve at least a 16 percent reduction in GHG emissions as compared to business as usual. This reduction is consistent with the GHG emissions reduction targets established in CARB's AB 32 Scoping Plan. Projects demonstrated to have reduced or mitigated project-specific GHG emissions by at least 16 percent compared to BAU, consistent with GHG emissions reduction targets established in the AB 32 Scoping Plan, would be determined to have a less than significant individual and cumulative impact on global climate change.

As shown in **Table 3**, the project could produce 887 metric tons of CO_2e annually under BAU conditions, primarily from motor vehicles that travel to and from the site. This would contribute to a net increase in GHGs from the proposed project. For purposes of this analysis, the total emissions of 887 metric tons of CO_2e per year are considered the BAU figure.

[1] *Business as usual (BAU) is the project's projected GHG emissions level in 2020 under the assumption that consumption patterns and efficiencies are maintained at their 2005 levels. Under a BAU scenario, state, regional, and project-level efforts to reduce GHG emissions are not taken into consideration; rather, the BAU assumes the Year 2005 status quo.*

TABLE 3
ESTIMATED GREENHOUSE GAS EMISSIONS UNDER BAU OPERATIONS (METRIC TONS PER YEAR)[1]

Emissions Source	CO_2e
Construction Amortized over 30 Years	15
Area Source (landscaping, hearth)	66
Energy[2]	158
Mobile[3]	623
Waste[4]	8
Water/Wastewater[5]	17
Total	**887**

*Source: CalEEMod version 2013.2.2. See **Appendix A** for emission model outputs.*

Notes:
1. *BAU emissions projections account for development-generated emissions without any greenhouse gas reduction measures; i.e., emissions presented are not adjusted for future improved CAFE standards (Pavley I) and Low Carbon Fuel Standards, the 2011 Renewables Portfolio Standard, or the 2013 Building energy Efficiency Standards.*
2. *The Pacific Gas & Electric Year 2005 emissions factor of 489 pounds of CO_2 per megawatt of energy generated (PG&E 2014) was used to account for energy-related BAU CO_2e emissions.*
3. *Emissions projections are based on CalEEMod trip generation rates defaults that are derived from the ITE Trip Generation Manual, which was also used in the traffic analysis prepared for the Villages IS/MND.*
4. *Solid waste generation estimates derived from the Villages IS/MND.*
5. *Wastewater generation estimates derived from the Villages IS/MND.*

The proposed project would be required to implement Villages IS/MND mitigation measure MM 3-2. As described above, mitigation measure MM 3-2 requires the provision of pedestrian sidewalks and bicycle paths that link to adjacent land uses and external networks and the incorporation of energy-efficient appliances into residential uses. The mitigation measure also prohibits the use of wood-burning fireplaces. Adherence to mitigation measure MM 3-2 results in 11 fewer metric tons per year of CO_2e from mobile sources, 35 fewer metric tons per year from area sources, and 2 fewer metric tons per year of CO_2e from energy consumption, as shown in **Table 4**.

Several State-led GHG emissions–reducing regulations have recently taken effect, and changes to regulations will continue to take effect in the near future that will substantially reduce GHG emissions. For instance, the anticipated reduction associated with the Pavley Standard and the Low Carbon Fuel Standards represent 95 fewer metric tons per year of GHGs attributed to the proposed project (see **Table 4**). Pacific Gas and Electric Company (PG&E), the electricity provider for Greenfield, is subject to California's Renewables Portfolio Standard (RPS). Because of the RPS, the proposed project would generate 7 fewer metric tons per year of GHGs (1 fewer metric ton per year attributed to water conveyance), as shown in **Table 4**. In addition, the California Energy Commission recently adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, resulting in standards that are 25 percent more efficient than previous standards for residential construction. Because of the 2013 Building Energy Efficiency Standards, the project would generate 8 fewer metric tons per year of CO_2e, as shown in **Table 4**.

Implementation of Villages IS/MND mitigation measure MM 3-2 in conjunction with State-led GHG reduction measures such as Pavley, the Low Carbon Fuel Standard, and the State RPS would reduce project greenhouse gas emissions by 17.3 percent compared with BAU, which is beyond the 16 percent reduction threshold. **Table 4** provides a summary of project GHG reductions attributable to state regulations enacted subsequent to CARB determining the 16 percent reduction needed to achieve compliance with AB 32.

TABLE 4
SUMMARY OF GHG REDUCTIONS

Emissions Reduction Summary	CO_2e Emissions (Metric Tons/Year
Total Business-as-Usual (BAU) Emissions	**887**
State-Led Regulatory Reduction	-110
Villages IS/MND Mitigation Measure MM 3-2	-48
Construction Equipment Efficiencies from Engine Modernization	-2
Project Emissions After Reductions	**727**
Percentage Reduction from Business As Usual	18.0
Percentage Reduction Threshold for Less than Significant Determination	16

Source: CalEEMod version 2013.2.2. See Appendix A for emission model outputs.

The CO_2e emissions from implementation of the proposed project are projected to result in 727 metric tons of CO_2e per year (**Tables 2** and **4**). As projected, BAU emissions would be reduced by 18 percent from BAU, which is greater than the 16 percent threshold, so the development is considered consistent with the State of California's ability to meet its GHG reduction goals. This impact is less than significant.

8. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	No
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?	☐	☒	☐	☐	No
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	No
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?	☐	☐	☐	☒	No
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 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?	☐	☐	☒	☐	No
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
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	No
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?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a, c) **No new or more severe significant impacts**. 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) 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.

MM HAZ-1 Prior to approval of a grading permit, the project applicant shall include a detailed assessment of soil contamination associated with previous herbicide/pesticide use on the site, including soil sampling for potential herbicide/pesticide contamination. If substances are detected at concentrations that could pose a health hazard and/or violate local, state, or federal health standards, remediation of the affected areas shall be undertaken in accordance with the requirements of the City of Greenfield and Monterey County Hazardous Materials Management Services. Development of the site shall not commence until the site is deemed remediated and clear for development by the City in consultation with Monterey County Hazardous Materials Management Services.

Timing/Implementation: *Prior to approval of grading permit*

Enforcement/Monitoring: *City of Greenfield Community Services Department; Monterey County Hazardous Materials Management Services*

d) **No new or more severe significant impacts**. The Villages IS/MND did not identify any of the parcels as being included on a list of hazardous material sites and determined there would be a less than significant impact. A current database search also found that the proposed project site is not included on a list of hazardous material sites (DTSC 2015). There would be no impact.

e, f) **No new or more severe significant impacts**. The Villages IS/MND disclosed that there are no public airports in 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 IS/MND recognized the future development of the Yanks Air Museum and private airstrip, located in the northern end of the city, about 1–2 miles from the project site. Because the airstrip would not be for general use and the flights into and out of the airstrip are expected to be infrequent, the IS/MND found the

impact to be less than significant. The Yanks Air Museum has not yet begun operation, but even when operations commence at the museum, the potential hazards at the proposed project site would not change from those previously disclosed.

g) **No new or more severe significant impacts**. 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, including those planned as part of the Villages Planned Development project, would provide adequate access to the project site. All interior streets will be constructed to satisfy emergency, fire, and police specifications. There would be no impact.

h) **No new or more severe significant impacts**. The project site is located in a transition area between the urbanized city and agricultural land and will ultimately be surrounded by residential development. The site is not located in a wildland area prone to wildfires. There would be no impact.

9. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	No
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)?	☐	☐	☒	☐	No
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?	☐	☒	☐	☐	No
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 that would result in flooding on- or off-site?	☐	☒	☐	☐	No
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?	☐	☒	☐	☐	No
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐	No
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?	☐	☐	☐	☒	No
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒	No

9. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
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?	☐	☐	☐	☒	No
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. The Villages IS/MND concluded that compliance with the NPDES General Construction Storm Water Permit and measures contained in an approved SWPPP would ensure that water quality impacts would be less than significant. As noted in subsection 6, Geology and Soils, issue a, the proposed project would also be required to comply with the NPDES General Construction Storm Water Permit. Compliance with existing regulations, including the requirements of the NPDES permit and any subsequent requirements as adopted, would ensure the proposed project's impact on water quality would be less than significant.

b) **No new or more severe significant impacts**. Based on the Water Supply Assessment prepared for the Villages project and the City's 2005 draft Urban Water Management Plan (UWMP), the Villages IS/MND determined there would be adequate water to supply the project without depleting groundwater supplies. The City adopted a new UWMP in 2013 (City of Greenfield 2013). The City uses groundwater from the Salinas Valley Groundwater Basin (SVGB) as its sole potable water supply source. Infiltration in the Salinas River channel is the principal source of groundwater recharge for the Salinas Valley Groundwater Basin. Overdraft in the basin has caused saltwater intrusion in areas closer to the coast, but has never been identified as a problem in the Forebay Subarea, which is the area from which Greenfield obtains water. Agricultural irrigation accounts for 91 percent of SVGB water use and 95 percent of the water use in the Forebay Subarea. Urban use accounts for the remaining 5 percent in the Forebay Subarea. The 2013 UWMP disclosed that demand from projected city growth through 2030 could be provided while maintaining a sustainable yield in the Forebay Subarea. The UWMP also considered that the total use of groundwater in the Salinas Valley is projected to decrease as agricultural land is converted to urban use, which has a lower per acre water demand. In addition, agricultural water demand is declining due to implementation of conservation methods. Consequently, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

c, d, e) **No new or more severe significant impacts**. The Villages IS/MND noted that although the project would increase the impervious surfaces on the project site, new development projects in Greenfield are required to store and percolate 100 percent of the stormwater runoff from a

100-year storm event. The IS/MND includes mitigation measures MM 8-1 and MM 8-2 to ensure that stormwater improvements meet City of Greenfield standards. Mitigation measure MM 8-1 requires a detailed drainage plan designed to contain stormwater runoff from the 100-year storm event on-site with hydrologic modeling and erosion control and best management practices. Mitigation measure MM 8-2 requires drainage and erosion control plans to incorporate temporary measures effective from October 1 through March 31 that ensure eroded or exposed soils are maintained on-site during construction. These measures would ensure that the proposed project would not substantially alter the existing drainage pattern of the area such that substantial erosion, siltation, or flooding on- or off-site would occur, or create runoff that would exceed the capacity of stormwater drainage systems or create substantial additional sources of polluted runoff.

f) **No new or more severe significant impacts**. In addition to measure mitigation measure MM 8-2, discussed above, the proposed project would be required to obtain and comply with requirements of the NPDES permit, described previously. This would ensure that the proposed project would not substantially degrade water quality.

g–j) **No new or more severe significant impacts**. According to the Villages IS/MND, the project site is not located within a 100-year flood zone. The Greenfield General Plan does not designate the project site as an area affected by inundation resulting from the failure of either the Nacimiento or San Antonio reservoir dams. 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, the Villages IS/MND determined that there would be no impact associated with exposing people to the risk of a 100-year flood event, dam failure, tsunami, seiche, or mudflows. There would be no change in risk for the proposed project under current conditions.

10. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Physically divide an established community?	☐	☐	☒	☐	No
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?	☐	☒	☐	☐	No
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. The Villages IS/MND determined that the Villages project would not disrupt or divide an established community and the impact was considered less than significant. The physical conditions at the project site are the same as previously assumed. The proposed project would not divide an established community.

b) **No new or more severe significant impacts**. 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 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 1 acre of equal or greater agricultural land for every acre developed. Mitigation measure MM AG-1, identified above, 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 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 change in conflicts with applicable plans or policies.

c) **No new or more severe significant impacts**. No habitat conservation plans or natural community conservation plans are applicable to the proposed project. Therefore, there would be no impact.

11. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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?	☐	☐	☐	☒	No
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?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a, b) **No new or more severe significant impacts**. The General Plan EIR determined that the General Plan Planning Area, which includes the project site, is not located within any designated Mineral Resource Zones. Therefore, the proposed project would not result in the loss of access to or availability of a known mineral resource that would be of value to the city, region, or state. There would be no impact.

12. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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 of applicable standards of other agencies?	☐	☒	☐	☐	No
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	No
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	No
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☒	☐	No
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 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?	☐	☐	☒	☐	No
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

Discussion/Conclusion/Mitigation

a, d) **No new or more severe significant impacts**. The Villages IS/MND considered short-term (construction) and long-term (operational) noise. The IS/MND determined that construction noise could result in potentially significant noise impacts at nearby noise-sensitive land uses and identified mitigation measure MM 10-1 to reduce the impact to a less than significant level. Mitigation measure MM 10-1 limits construction hours to 7:00 AM to 6:00 PM Monday through Friday, requires methods to reduce engine noise in construction equipment, and limits idling of equipment. Implementation of this measure would have the same mitigating effect on the proposed project, and this impact would also be less than significant.

Operational noise was also determined to be potentially significant due to operation of air conditioning units, activities at the neighborhood park, and increased traffic. Mitigation measure MM 10-2 requires external air conditioning units to be a minimum of 10 feet from

adjacent outdoor activity areas or shielded from direct line-of-sight and limits park hours and maintenance activities to between 7:00 AM and 10:00 PM. The Villages IS/MND found that this measure would reduce impacts to less than significant. The measure would have the same mitigating effect for the proposed project. With respect to traffic noise, the IS/MND determined that residences adjacent to Walnut Avenue could be exposed to noise levels that exceed City standards; however, noise levels along Apple Avenue would not exceed standards. Because the proposed project includes fewer residences than previously assumed, noise levels would be less than previously disclosed. Because the project is not located adjacent to Walnut Avenue, mitigation measure MM 10-3 would not be required to implement the proposed project.

b) **No new or more severe significant impacts**. The Villages IS/MND found that short-term construction-generated vibration levels would not exceed commonly applied thresholds for the prevention of structural damage or human annoyance, so groundborne vibration levels associated with construction activities would be less than significant. Because the uses proposed for the Villages would not involve the long-term use of any equipment or processes that would result in potentially significant levels of ground vibration, the long-term impact was also found to be less than significant. The proposed project includes fewer residential units than previously assumed, so construction vibration would be less. Because the proposed project includes residential units as previously assumed, it too would not generate vibration at substantial levels.

c) **No new or more severe significant impacts**. The Villages IS/MND determined that traffic generated by the Villages project would not contribute to a substantial increase in ambient noise levels through traffic or stationary sources. Because the proposed project includes fewer residential units than previously assumed, it would generate less stationary noise and less noise associated with automobile trips. This would also be a less than significant impact.

e, f) **No new or more severe significant impacts**. The Villages IS/MND disclosed that there are no public airports in 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 IS/MND recognized the future development of the Yanks Air Museum and private airstrip, located in the northern end of the city, about 1–2 miles from the project site. Because the airstrip would not be for general use and the flights into and out of the airstrip are expected to be infrequent, the IS/MND found the potential noise impact to be less than significant. The General Plan EIR found that the area in the area immediately around the future facility could be affected by noise from the Yanks Air Museum. Given the project site's distance from the museum and the infrequent flights, noise levels at the project site would not exceed City standards due to flights from this facility.

13. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐	No
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	No
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. The Villages IS/MND assumed the project site would include development of up to 67 units, which, assuming 4.0 persons per household consistent with the IS/MND, would result in 268 new residents. The IS/MND found population impacts related to growth from the Villages project to be less than significant. The proposed project includes development of 43 residential units, which would result in 172 new residents. Therefore, the proposed project's growth effects would be less than previously assumed.

b, c) **No new or more severe significant impacts**. There is currently no housing on the proposed project site. There would be no impact related to displacement of housing or people.

14. 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:

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Fire protection?	☐	☐	☒	☐	No
b) Police protection?	☐	☐	☒	☐	No
c) Schools?	☐	☐	☒	☐	No
d) Parks?	☐	☒	☐	☐	No
e) Other public facilities?	☐	☐	☒	☐	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impacts**. 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. As discussed previously, the proposed project includes fewer units than previously assumed, so demand for fire protection services would be reduced compared to that previously assumed. Development to the south of the site is currently served by fire protection services, so the proposed project would not represent a substantial extension of services. This would be a less than significant impact.

b) **No new or more severe significant impacts**. 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. Because the proposed project includes fewer units than previously assumed, demand for law enforcement services would be reduced compared to that previously assumed and this would be a less than significant impact.

c) **No new or more severe significant impacts**. The proposed project includes fewer units than previously assumed, so the number of students attending local schools would be less. The Villages IS/MND assumed that approximately 57 kindergarten through 12th grade (K–12) students would be generated on the Tunzi portion of the Villages site. Using the same student generation rates as the Villages IS/MND (0.558 kindergarten through 6th grade students per unit; 0.176 7th and 8th grade students per unit; and 0.12 students per unit for grades 9–12), the proposed project would include approximately 37 students. The proposed project would be required to pay applicable school impact fees, which would reduce the proposed project's impact to less than significant.

d) **No new or more severe significant impacts**. The Villages IS/MND considered the potential for a shortage of parkland for the individual parcels and noted General Plan Program 7.2.B, which 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 IS/MND includes mitigation measure 11-1a, which requires project applicants to pay in-lieu Community Facility Impact Fees for the portion of community park space at a rate consistent with the General Plan. As discussed above, the proposed project would generate approximately 172 residents and, using the General Plan goal of 3.9 acres of park per 1,000 residents, would generate demand for approximately 0.67 acres of parkland. The proposed project includes 0.45 acre of park and 0.18 acre of open space, so it does not meet the City's goals for parkland. The project includes a 2-acre detention basin/percolation pond, which could be incorporated into the adjacent park to serve a dual purpose as parkland and detention basin. This would satisfy the City requirement for parkland. Alternatively, compliance with mitigation measure MM 11-1a would satisfy the City's requirements for parkland and this would be a less than significant impact.

e) **No new or more severe significant impacts**. The Villages IS/MND found that no other public facilities would be affected by the Villages project. Similarly, the proposed project would not substantially affect any other public facilities.

15. RECREATION

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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?	☐	☐	☒	☐	No
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?	☐	☐	☒	☐	No

Discussion/Conclusion/Mitigation

a, b) **No new or more severe significant impacts**. As noted above, the proposed project would be required to pay in-lieu Community Facility Impact Fees for the portion of community park space at a rate consistent with the General Plan, which would ensure that adequate park facilities are provided. The Villages IS/MND disclosed that development of the project site was anticipated in the City's General Plan and is less than 1 mile from 19-acre Patriot Park. In addition, the City has 19 acres of soccer fields immediately adjacent to Patriot Park. Because the park and open space 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, the impact was considered less than significant. The proposed project would generate fewer residents who would use local parks, so the proposed project's impact would be less than assumed in the IS/MND.

16. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Cause an increase in traffic that 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)?	☐	☒	☐	☐	No
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐	No
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that causes substantial safety risks?	☐	☐	☐	☒	No
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐	No
e) Result in inadequate emergency access?	☐	☐	☒	☐	No
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒	No

Discussion/Conclusion/Mitigation

a, b) **No new or more severe significant impacts**. 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.

c) **No new or more severe significant impacts**. Like the Villages project disclosed in the IS/MND, the proposed project would not result in a change in air traffic patterns. Therefore, there would be no impact.

d, e) **No new or more severe significant impacts**. The Villages IS/MND determined that standard City of Greenfield conditions of project approval would ensure that design of proposed roadways is sufficient and adequate emergency access to the project site is available. The proposed project includes connections to planned development in the vicinity and access to Apple Avenue. The proposed project would similarly have a less than significant impact related to design features and emergency access.

f) **No new or more severe significant impacts**. The Villages IS/MND noted that the existing transit system in the city does not provide a bus route with a direct connection to the proposed project site, so the number of new transit riders that could be expected from this development would be minimal. Proposed street improvements with sidewalks and bike lanes were determined to result in a less than significant impact. The proposed project would also include sidewalks on internal streets and a bike lane on the north side of Apple Avenue. The proposed project would not conflict with alternate modes of transportation.

17. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	No
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?	☐	☐	☒	☐	No
c) 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?	☐	☒	☐	☐	No
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	No
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?	☐	☐	☒	☐	No
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	No
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	No

Discussion/Conclusion/Mitigation

a, b, e) **No new or more severe significant impacts**. The Villages IS/MND found that there was adequate treatment capacity at the City's wastewater treatment plant to accommodate flows from the Villages project; however, it determined that flows from the Villages project in addition to cumulative growth in the city could exceed the wastewater treatment plant's capacity of 2 million gallons per day. All projects in the city would be required to pay the Capital Improvement and Development Impact Fee, which would assist in the wastewater treatment plant's expansion. As noted previously, the proposed project includes fewer residential units than assumed in the IS/MND, so the proposed project's wastewater generation would be less

than assumed for the site in the IS/MND. In addition, the project applicant's contribution of fees for wastewater treatment plant expansion would reduce the project's contribution to cumulative impacts on the plant capacity and the project would meet waste discharge requirements.

c) **No new or more severe significant impacts**. As discussed in the Villages IS/MND and above in subsection 9, Hydrology and Water Quality, new development projects in Greenfield are required to store and percolate 100 percent of the stormwater runoff from a 100-year storm event. The IS/MND includes mitigation measures MM 8-1 and MM 8-2 to ensure that stormwater improvements meet City of Greenfield standards. Mitigation measure MM 8-1 requires a detailed drainage plan designed to contain stormwater runoff from the 100-year storm event on-site with hydrologic modeling and erosion control and best management practices. Mitigation measure MM 8-2 requires drainage and erosion control plans to incorporate temporary measures effective from October 1 through March 31 that ensure eroded or exposed soils are maintained on-site during construction. The physical effects of these on-site facilities were considered in the original IS/MND. Compliance with these mitigation measures would ensure that there would be no impact to any existing stormwater infrastructure and no additional infrastructure would be required.

d) **No new or more severe significant impacts**. As discussed in the Villages IS/MND and above in Section 9, Hydrology and Water Quality, the Water Supply Assessment prepared for the Villages project and the City's 2005 draft Urban Water Management Plan (UWMP), the IS/MND determined there would be adequate water to supply the project without depleting groundwater supplies. The IS/MND found that the City would have sufficient water supplies available to serve the Villages project from existing entitlements and resources, and no new or expanded entitlements would be needed. As previously discussed, the proposed project includes fewer residential units and would therefore create less demand for potable water. Consequently, this would be a less than significant impact for the proposed project.

f, g) **No new or more severe significant impacts**. The Villages IS/MND identified Johnson Canyon Landfill, a privately owned facility covering 163 acres operated by Salinas Valley Solid Waste Authority, as the landfill that serves Greenfield. The landfill has a maximum permitted capacity of 13,834,328 cubic yards and a remaining capacity of 6,923,297 cubic yards, with an estimated closure date of 2040 (CalRecycle 2015). Assuming a solid waste generation factor of 8 pounds per residential unit per day, the proposed project would result in a 34 ton per year (tpy) reduction in solid waste generation compared to the analysis in the IS/MND (95.4 tpy vs. 61.2 tpy). The City of Greenfield also has a recycling program to reduce the volume of solid waste sent to the landfill. Therefore, the project would not negatively affect the capacity of the landfill. This impact is considered less than significant.

18. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant 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 wild-life population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	No
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.	☐	☐	☒	☐	No
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	No

Discussion/Conclusion/Mitigation

a) **No new or more severe significant impact.** The Villages IS/MND determined that the Villages project could degrade or diminish the quality of the environment and important habitat areas, but identified mitigation measure MM 4-1 to reduce potential impacts to less than significant levels. This measure would have the same mitigation effect for the proposed project, and this impact would also be less than significant.

The IS/MND found no evidence that the project site is located within an archaeologically sensitive area. However, mitigation measures MM 5-1, MM 5-2, and MM 5-3 were included to ensure that if prehistoric or historic cultural resources are discovered during construction activities, any cultural resources or human remains would not be adversely affected. Implementation of these mitigation measures would ensure that the proposed project would

not eliminate important examples of the major periods of California history or prehistory and reduce potential impacts to a less than significant level.

b) **No new or more severe significant impact.** The impacts associated with the Villages project, including those related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards, noise, and traffic and circulation were found to have been mitigated to a less than significant level. The Villages IS/MND further determined that the Villages project would not result in additional impacts beyond those evaluated in the City of Greenfield General Plan EIR. The MND concluded that the Villages project would not result in significant unavoidable cumulative impacts. As discussed in the previous sections of this Initial Study, the proposed project includes fewer residential units than assumed in the previous IS/MND and would therefore result in less severe impacts compared to the previous analysis. Because the project would result in less severe impacts, its contribution to cumulative impacts would be less than previously disclosed.

c) **No new or more severe significant impact.** The Villages IS/MND determined that with implementation of mitigation measures MM 1-1 through MM 15-4, any potential impacts with the potential to have a substantial adverse effect on human beings would be reduced to a less than significant level. As discussed above, the mitigation measures identified in the Villages IS/MND would have the same mitigating effect on the proposed project and effects on human beings would also be reduced to less than significant.

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Appendix A: Greenhouse Gas (GHG) Emissions Model Outputs

Annual Project Emissions

Tunzi Subdivision Project

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	43.00	Dwelling Unit	8.72	77,400.00	123
City Park	0.65	Acre	0.65	28,314.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PGE 2012 CO2 Intensity Factor

Land Use - 8.72 acres = dwelling units & streets. 0.65 acre = park and drainage basin

Construction Phase -

Grading - Project site = 9.55 acres - 0.18 acre of open space = ground disturbance

Mobile Land Use Mitigation - Villages MND MM 3-2

Area Mitigation - Villages MND MM 3-2

Energy Mitigation - Villages MND MM 3-2

Water And Wastewater - Wastewater generation rate per Villages MND

Solid Waste - Solid waste generation per Villages MND

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	10.00	9.37
tblLandUse	LotAcreage	13.96	8.72
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2017
tblSolidWaste	SolidWasteGenerationRate	54.12	16.53
tblWater	IndoorWaterUseRate	2,801,623.10	6,278,000.00
tblWater	OutdoorWaterUseRate	774,462.88	23,725.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016											0.0000	345.6827	345.6827	0.0793	0.0000	347.3478
2017											0.0000	51.1338	51.1338	0.0125	0.0000	51.3954
Total											**0.0000**	**396.8165**	**396.8165**	**0.0918**	**0.0000**	**398.7432**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016											0.0000	345.6823	345.6823	0.0793	0.0000	347.3474
2017											0.0000	51.1338	51.1338	0.0125	0.0000	51.3954
Total											**0.0000**	**396.8161**	**396.8161**	**0.0918**	**0.0000**	**398.7428**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											44.4172	19.3523	63.7695	0.0417	3.4900e-003	65.7286
Energy											0.0000	142.3513	142.3513	5.5500e-003	2.3100e-003	143.1847
Mobile											0.0000	527.9656	527.9656	0.0279	0.0000	528.5513
Waste											3.3676	0.0000	3.3676	0.1990	0.0000	7.5471
Water											1.9917	8.1214	10.1131	0.2051	4.9400e-003	15.9515
Total											**49.7765**	**697.7906**	**747.5672**	**0.4793**	**0.0107**	**760.9631**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	31.2064	31.2064	1.3100e-003	5.6000e-004	31.4072
Energy											0.0000	140.3397	140.3397	5.4200e-003	2.2800e-003	141.1619
Mobile											0.0000	517.7018	517.7018	0.0274	0.0000	518.2770
Waste											3.3676	0.0000	3.3676	0.1990	0.0000	7.5471
Water											1.9917	8.1214	10.1131	0.2051	4.9300e-003	15.9484
Total											**5.3593**	**697.3694**	**702.7287**	**0.4382**	**7.7700e-003**	**714.3415**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**89.23**	**0.06**	**6.00**	**8.57**	**27.65**	**6.13**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
2	Grading	Grading	2/12/2016	3/10/2016	5	20	
3	Building Construction	Building Construction	3/11/2016	1/26/2017	5	230	
4	Paving	Paving	1/27/2017	2/23/2017	5	20	
5	Architectural Coating	Architectural Coating	2/24/2017	3/23/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 9.37

Acres of Paving: 0

Residential Indoor: 156,735; Residential Outdoor: 52,245; Non-Residential Indoor: 42,471; Non-Residential Outdoor: 14,157 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	27.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554
Total											**0.0000**	**18.4386**	**18.4386**	**5.5600e-003**	**0.0000**	**18.5554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6882	0.6882	5.0000e-005	0.0000	0.6893
Total											**0.0000**	**0.6882**	**0.6882**	**5.0000e-005**	**0.0000**	**0.6893**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553
Total											**0.0000**	**18.4385**	**18.4385**	**5.5600e-003**	**0.0000**	**18.5553**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6882	0.6882	5.0000e-005	0.0000	0.6893
Total											**0.0000**	**0.6882**	**0.6882**	**5.0000e-005**	**0.0000**	**0.6893**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2442
Total											**0.0000**	**28.0664**	**28.0664**	**8.4700e-003**	**0.0000**	**28.2442**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1470	1.1470	8.0000e-005	0.0000	1.1488
Total											**0.0000**	**1.1470**	**1.1470**	**8.0000e-005**	**0.0000**	**1.1488**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2441
Total											**0.0000**	**28.0664**	**28.0664**	**8.4700e-003**	**0.0000**	**28.2441**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1470	1.1470	8.0000e-005	0.0000	1.1488
Total											**0.0000**	**1.1470**	**1.1470**	**8.0000e-005**	**0.0000**	**1.1488**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	255.4720	255.4720	0.0634	0.0000	256.8026
Total											**0.0000**	**255.4720**	**255.4720**	**0.0634**	**0.0000**	**256.8026**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	20.0887	20.0887	1.7000e-004	0.0000	20.0923
Worker											0.0000	21.7817	21.7817	1.6000e-003	0.0000	21.8153
Total											**0.0000**	**41.8705**	**41.8705**	**1.7700e-003**	**0.0000**	**41.9076**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	255.4717	255.4717	0.0634	0.0000	256.8023
Total											**0.0000**	**255.4717**	**255.4717**	**0.0634**	**0.0000**	**256.8023**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	20.0887	20.0887	1.7000e-004	0.0000	20.0923
Worker											0.0000	21.7817	21.7817	1.6000e-003	0.0000	21.8153
Total											**0.0000**	**41.8705**	**41.8705**	**1.7700e-003**	**0.0000**	**41.9076**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	22.7505	22.7505	5.6000e-003	0.0000	22.8681
Total											**0.0000**	**22.7505**	**22.7505**	**5.6000e-003**	**0.0000**	**22.8681**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	1.7784	1.7784	1.0000e-005	0.0000	1.7787
Worker											0.0000	1.8870	1.8870	1.3000e-004	0.0000	1.8897
Total											**0.0000**	**3.6653**	**3.6653**	**1.4000e-004**	**0.0000**	**3.6684**

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	22.7505	22.7505	5.6000e-003	0.0000	22.8681
Total											**0.0000**	**22.7505**	**22.7505**	**5.6000e-003**	**0.0000**	**22.8681**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	1.7784	1.7784	1.0000e-005	0.0000	1.7787
Worker											0.0000	1.8870	1.8870	1.3000e-004	0.0000	1.8897
Total											**0.0000**	**3.6653**	**3.6653**	**1.4000e-004**	**0.0000**	**3.6684**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8266**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1035	1.1035	8.0000e-005	0.0000	1.1051
Total											**0.0000**	**1.1035**	**1.1035**	**8.0000e-005**	**0.0000**	**1.1051**

3.5 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8265**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1035	1.1035	8.0000e-005	0.0000	1.1051
Total											**0.0000**	**1.1035**	**1.1035**	**8.0000e-005**	**0.0000**	**1.1051**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total											**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3678	0.3678	3.0000e-005	0.0000	0.3684
Total											**0.0000**	**0.3678**	**0.3678**	**3.0000e-005**	**0.0000**	**0.3684**

3.6 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total											**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3678	0.3678	3.0000e-005	0.0000	0.3684
Total											**0.0000**	**0.3678**	**0.3678**	**3.0000e-005**	**0.0000**	**0.3684**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	517.7018	517.7018	0.0274	0.0000	518.2770
Unmitigated											0.0000	527.9656	527.9656	0.0279	0.0000	528.5513

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.03	1.03	1.03	2,206	2,162
Single Family Housing	411.51	433.44	377.11	1,180,383	1,156,775
Total	412.54	434.47	378.14	1,182,589	1,158,937

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.466577	0.039911	0.201733	0.176253	0.050904	0.007245	0.019183	0.021019	0.004490	0.001936	0.007540	0.000947	0.002261

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	59.3779	59.3779	3.8700e-003	8.0000e-004	59.7073
Electricity Unmitigated											0.0000	61.3895	61.3895	4.0000e-003	8.3000e-004	61.7301
NaturalGas Mitigated											0.0000	80.9618	80.9618	1.5500e-003	1.4800e-003	81.4545
NaturalGas Unmitigated											0.0000	80.9618	80.9618	1.5500e-003	1.4800e-003	81.4545

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.51717e+006											0.0000	80.9618	80.9618	1.5500e-003	1.4800e-003	81.4545
Total												**0.0000**	**80.9618**	**80.9618**	**1.5500e-003**	**1.4800e-003**	**81.4545**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.51717e+006											0.0000	80.9618	80.9618	1.5500e-003	1.4800e-003	81.4545
Total												**0.0000**	**80.9618**	**80.9618**	**1.5500e-003**	**1.4800e-003**	**81.4545**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	304136	61.3895	4.0000e-003	8.3000e-004	61.7301
Total		**61.3895**	**4.0000e-003**	**8.3000e-004**	**61.7301**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	294170	59.3779	3.8700e-003	8.0000e-004	59.7073
Total		**59.3779**	**3.8700e-003**	**8.0000e-004**	**59.7073**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	31.2064	31.2064	1.3100e-003	5.6000e-004	31.4072
Unmitigated											44.4172	19.3523	63.7695	0.0417	3.4900e-003	65.7286

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											44.4172	18.6279	63.0451	0.0410	3.4900e-003	64.9889
Landscaping											0.0000	0.7244	0.7244	7.3000e-004	0.0000	0.7396
Total											**44.4172**	**19.3523**	**63.7695**	**0.0417**	**3.4900e-003**	**65.7286**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	30.4821	30.4821	5.8000e-004	5.6000e-004	30.6676
Landscaping											0.0000	0.7244	0.7244	7.3000e-004	0.0000	0.7396
Total											**0.0000**	**31.2064**	**31.2064**	**1.3100e-003**	**5.6000e-004**	**31.4072**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.1131	0.2051	4.9300e-003	15.9484
Unmitigated	10.1131	0.2051	4.9400e-003	15.9515

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.023725	0.0168	0.0000	0.0000	0.0169
Single Family Housing	6.278 / 1.76624	10.0964	0.2051	4.9400e-003	15.9347
Total		**10.1131**	**0.2051**	**4.9400e-003**	**15.9515**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.023725	0.0168	0.0000	0.0000	0.0169
Single Family Housing	6.278 / 1.76624	10.0964	0.2051	4.9300e-003	15.9315
Total		**10.1131**	**0.2051**	**4.9300e-003**	**15.9483**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.3676	0.1990	0.0000	7.5471
Unmitigated	3.3676	0.1990	0.0000	7.5471

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Single Family Housing	16.53	3.3554	0.1983	0.0000	7.5198
Total		**3.3676**	**0.1990**	**0.0000**	**7.5471**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Single Family Housing	16.53	3.3554	0.1983	0.0000	7.5198
Total		**3.3676**	**0.1990**	**0.0000**	**7.5471**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Annual BAU Emissions

Tunzi Subdivision - Business As Usual

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.65	Acre	0.65	28,314.00	0
Single Family Housing	43.00	Dwelling Unit	8.72	77,400.00	123

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	489	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2005 CO2 intensity factor

Land Use - 8.72 acres = dwelling units & streets. 0.65 acre = park and drainage basin

Construction Phase -

Grading - Project site = 9.55 acres - 0.18 acre open space = ground disturbance

Water And Wastewater - Wastewater generation rate per Villages MND

Solid Waste - Solid waste generation per Villages MND

Energy Use - Using historical energy use data

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	1/27/2006	1/26/2006
tblConstructionPhase	PhaseStartDate	3/12/2005	3/11/2005
tblGrading	AcresOfGrading	10.00	9.37
tblLandUse	LotAcreage	13.96	8.72
tblProjectCharacteristics	CO2IntensityFactor	641.35	489
tblProjectCharacteristics	OperationalYear	2014	2005
tblSolidWaste	SolidWasteGenerationRate	54.12	16.53
tblWater	IndoorWaterUseRate	2,801,623.10	6,278,000.00
tblWater	OutdoorWaterUseRate	774,462.88	23,725.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005											0.0000	379.0599	379.0599	0.0800	0.0000	380.7400
2006											0.0000	57.2961	57.2961	0.0119	0.0000	57.5455
Total											**0.0000**	**436.3560**	**436.3560**	**0.0919**	**0.0000**	**438.2855**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005											0.0000	379.0595	379.0595	0.0800	0.0000	380.7396
2006											0.0000	57.2960	57.2960	0.0119	0.0000	57.5455
Total											**0.0000**	**436.3555**	**436.3555**	**0.0919**	**0.0000**	**438.2850**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											44.4172	19.3523	63.7695	0.0422	3.4900e-003	65.7377
Energy											0.0000	156.9512	156.9512	5.7600e-003	2.4600e-003	157.8353
Mobile											0.0000	621.2360	621.2360	0.0779	0.0000	622.8729
Waste											3.3676	0.0000	3.3676	0.1990	0.0000	7.5471
Water											1.9917	8.9244	10.9161	0.2051	4.9400e-003	16.7545
Total											**49.7765**	**806.4639**	**856.2404**	**0.5300**	**0.0109**	**870.7475**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											44.4172	19.3523	63.7695	0.0422	3.4900e-003	65.7377
Energy											0.0000	156.9512	156.9512	5.7600e-003	2.4600e-003	157.8353
Mobile											0.0000	621.2360	621.2360	0.0779	0.0000	622.8729
Waste											3.3676	0.0000	3.3676	0.1990	0.0000	7.5471
Water											1.9917	8.9244	10.9161	0.2051	4.9300e-003	16.7514
Total											**49.7765**	**806.4639**	**856.2404**	**0.5299**	**0.0109**	**870.7443**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.09**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2005	2/11/2005	5	10	
2	Grading	Grading	2/12/2005	3/11/2005	5	20	
3	Building Construction	Building Construction	3/11/2005	1/26/2006	5	230	
4	Paving	Paving	1/27/2006	2/23/2006	5	20	
5	Architectural Coating	Architectural Coating	2/24/2006	3/23/2006	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 9.37

Acres of Paving: 0

Residential Indoor: 156,735; Residential Outdoor: 52,245; Non-Residential Indoor: 42,471; Non-Residential Outdoor: 14,157 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	27.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	20.4388	20.4388	3.6100e-003	0.0000	20.5145
Total											**0.0000**	**20.4388**	**20.4388**	**3.6100e-003**	**0.0000**	**20.5145**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8416	0.8416	1.3000e-004	0.0000	0.8444
Total											**0.0000**	**0.8416**	**0.8416**	**1.3000e-004**	**0.0000**	**0.8444**

3.2 Site Preparation - 2005

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	20.4387	20.4387	3.6100e-003	0.0000	20.5145
Total											**0.0000**	**20.4387**	**20.4387**	**3.6100e-003**	**0.0000**	**20.5145**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8416	0.8416	1.3000e-004	0.0000	0.8444
Total											**0.0000**	**0.8416**	**0.8416**	**1.3000e-004**	**0.0000**	**0.8444**

3.3 Grading - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	31.1492	31.1492	5.7000e-003	0.0000	31.2688
Total											**0.0000**	**31.1492**	**31.1492**	**5.7000e-003**	**0.0000**	**31.2688**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4027	1.4027	2.2000e-004	0.0000	1.4074
Total											**0.0000**	**1.4027**	**1.4027**	**2.2000e-004**	**0.0000**	**1.4074**

3.3 Grading - 2005

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	31.1491	31.1491	5.7000e-003	0.0000	31.2688
Total											**0.0000**	**31.1491**	**31.1491**	**5.7000e-003**	**0.0000**	**31.2688**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4027	1.4027	2.2000e-004	0.0000	1.4074
Total											**0.0000**	**1.4027**	**1.4027**	**2.2000e-004**	**0.0000**	**1.4074**

3.4 Building Construction - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	276.1013	276.1013	0.0646	0.0000	277.4568
Total											**0.0000**	**276.1013**	**276.1013**	**0.0646**	**0.0000**	**277.4568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	22.4895	22.4895	1.5300e-003	0.0000	22.5217
Worker											0.0000	26.6369	26.6369	4.2600e-003	0.0000	26.7263
Total											**0.0000**	**49.1264**	**49.1264**	**5.7900e-003**	**0.0000**	**49.2480**

3.4 Building Construction - 2005

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	276.1010	276.1010	0.0646	0.0000	277.4565
Total											**0.0000**	**276.1010**	**276.1010**	**0.0646**	**0.0000**	**277.4565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	22.4895	22.4895	1.5300e-003	0.0000	22.5217
Worker											0.0000	26.6369	26.6369	4.2600e-003	0.0000	26.7263
Total											**0.0000**	**49.1264**	**49.1264**	**5.7900e-003**	**0.0000**	**49.2480**

3.4 Building Construction - 2006

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	24.8622	24.8622	5.8100e-003	0.0000	24.9843
Total											**0.0000**	**24.8622**	**24.8622**	**5.8100e-003**	**0.0000**	**24.9843**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.0251	2.0251	1.4000e-004	0.0000	2.0280
Worker											0.0000	2.3986	2.3986	3.8000e-004	0.0000	2.4066
Total											**0.0000**	**4.4237**	**4.4237**	**5.2000e-004**	**0.0000**	**4.4347**

3.4 Building Construction - 2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	24.8622	24.8622	5.8100e-003	0.0000	24.9842
Total											**0.0000**	**24.8622**	**24.8622**	**5.8100e-003**	**0.0000**	**24.9842**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.0251	2.0251	1.4000e-004	0.0000	2.0280
Worker											0.0000	2.3986	2.3986	3.8000e-004	0.0000	2.4066
Total											**0.0000**	**4.4237**	**4.4237**	**5.2000e-004**	**0.0000**	**4.4347**

3.5 Paving - 2006

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	23.5867	23.5867	4.6300e-003	0.0000	23.6839
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**23.5867**	**23.5867**	**4.6300e-003**	**0.0000**	**23.6839**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4027	1.4027	2.2000e-004	0.0000	1.4074
Total											**0.0000**	**1.4027**	**1.4027**	**2.2000e-004**	**0.0000**	**1.4074**

3.5 Paving - 2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	23.5867	23.5867	4.6300e-003	0.0000	23.6839
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**23.5867**	**23.5867**	**4.6300e-003**	**0.0000**	**23.6839**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4027	1.4027	2.2000e-004	0.0000	1.4074
Total											**0.0000**	**1.4027**	**1.4027**	**2.2000e-004**	**0.0000**	**1.4074**

3.6 Architectural Coating - 2006

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	6.2000e-004	0.0000	2.5662
Total											**0.0000**	**2.5533**	**2.5533**	**6.2000e-004**	**0.0000**	**2.5662**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4676	0.4676	7.0000e-005	0.0000	0.4691
Total											**0.0000**	**0.4676**	**0.4676**	**7.0000e-005**	**0.0000**	**0.4691**

3.6 Architectural Coating - 2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	6.2000e-004	0.0000	2.5662
Total											**0.0000**	**2.5533**	**2.5533**	**6.2000e-004**	**0.0000**	**2.5662**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4676	0.4676	7.0000e-005	0.0000	0.4691
Total											**0.0000**	**0.4676**	**0.4676**	**7.0000e-005**	**0.0000**	**0.4691**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	621.2360	621.2360	0.0779	0.0000	622.8729
Unmitigated											0.0000	621.2360	621.2360	0.0779	0.0000	622.8729

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.03	1.03	1.03	2,206	2,206
Single Family Housing	411.51	433.44	377.11	1,180,383	1,180,383
Total	412.54	434.47	378.14	1,182,589	1,182,589

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.433339	0.158464	0.202841	0.107283	0.019188	0.008877	0.022664	0.027255	0.003472	0.001361	0.010375	0.002131	0.002750

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	68.4919	68.4919	4.0600e-003	8.4000e-004	68.8378
Electricity Unmitigated											0.0000	68.4919	68.4919	4.0600e-003	8.4000e-004	68.8378
NaturalGas Mitigated											0.0000	88.4592	88.4592	1.7000e-003	1.6200e-003	88.9976
NaturalGas Unmitigated											0.0000	88.4592	88.4592	1.7000e-003	1.6200e-003	88.9976

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.65766e+006											0.0000	88.4592	88.4592	1.7000e-003	1.6200e-003	88.9976
Total												**0.0000**	**88.4592**	**88.4592**	**1.7000e-003**	**1.6200e-003**	**88.9976**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.65766e+006											0.0000	88.4592	88.4592	1.7000e-003	1.6200e-003	88.9976
Total												**0.0000**	**88.4592**	**88.4592**	**1.7000e-003**	**1.6200e-003**	**88.9976**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	308791	68.4919	4.0600e-003	8.4000e-004	68.8378
Total		**68.4919**	**4.0600e-003**	**8.4000e-004**	**68.8378**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	308791	68.4919	4.0600e-003	8.4000e-004	68.8378
Total		**68.4919**	**4.0600e-003**	**8.4000e-004**	**68.8378**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											44.4172	19.3523	63.7695	0.0422	3.4900e-003	65.7377
Unmitigated											44.4172	19.3523	63.7695	0.0422	3.4900e-003	65.7377

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											44.4172	18.6279	63.0451	0.0410	3.4900e-003	64.9889
Landscaping											0.0000	0.7244	0.7244	1.1600e-003	0.0000	0.7487
Total											**44.4172**	**19.3523**	**63.7695**	**0.0422**	**3.4900e-003**	**65.7377**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											44.4172	18.6279	63.0451	0.0410	3.4900e-003	64.9889
Landscaping											0.0000	0.7244	0.7244	1.1600e-003	0.0000	0.7487
Total											**44.4172**	**19.3523**	**63.7695**	**0.0422**	**3.4900e-003**	**65.7377**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.9161	0.2051	4.9300e-003	16.7514
Unmitigated	10.9161	0.2051	4.9400e-003	16.7545

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.023725	0.0184	0.0000	0.0000	0.0185
Single Family Housing	6.278 / 1.76624	10.8977	0.2051	4.9400e-003	16.7360
Total		**10.9161**	**0.2051**	**4.9400e-003**	**16.7545**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.023725	0.0184	0.0000	0.0000	0.0185
Single Family Housing	6.278 / 1.76624	10.8977	0.2051	4.9300e-003	16.7329
Total		**10.9161**	**0.2051**	**4.9300e-003**	**16.7514**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.3676	0.1990	0.0000	7.5471
Unmitigated	3.3676	0.1990	0.0000	7.5471

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Single Family Housing	16.53	3.3554	0.1983	0.0000	7.5198
Total		**3.3676**	**0.1990**	**0.0000**	**7.5471**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Single Family Housing	16.53	3.3554	0.1983	0.0000	7.5198
Total		**3.3676**	**0.1990**	**0.0000**	**7.5471**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation